

57-3.6.7-12

MAR 22 1974

MONTHLY CATALOG

UNITED STATES

GOVERNMENT PUBLICATIONS

DECEMBER 1973

Entries 31903-32609
and Annual Index



OAMGENPUB1260

DISTRIBUTION OF PUBLICATIONS

In ordering publications listed in this catalog, it should be noted that *only* those marked with an asterisk (*) are obtainable from the Superintendent of Documents.

Publications marked with a farad (Φ) are sold by the National Technical Information Service, Springfield, VA 22151.

Where a single dagger (†) is the distribution symbol, application should be made directly to the department or bureau issuing the document.

- * For sale by SUPERINTENDENT OF DOCUMENTS
- Φ For sale by National Technical Information Service, Springfield, VA 22151
- † Distribution made by Issuing Office. Not definitely available if unaccompanied by a price
- ‡ Not available for sale or distribution
- Sent to Depository Libraries

SIZES OF PUBLICATIONS

Symbols used to designate sizes of publications listed in this catalog are as follows:

4°-----	6-12 inches high and width more than $\frac{3}{4}$ of height
large 4°-----	over 12 inches high and width more than $\frac{3}{4}$ of height
small 4°-----	under 6 inches high and width more than $\frac{3}{4}$ of height
8°-----	8-10 inches in height (size not given in entry except where publication is narrow or oblong)
large 8°-----	10-12 inches in height
12°-----	7-8 inches in height
16°-----	6-7 inches in height
24°-----	5-6 inches in height
32°-----	4-5 inches in height
48°-----	up to 4 inches high
f°-----	above 12 inches in height
narrow-----	width less than $\frac{3}{5}$ of height
oblong-----	width more than height

MONTHLY CATALOG



**OF UNITED STATES
GOVERNMENT PUBLICATIONS**

DECEMBER 1973

Number 947

Entries 31903-32609

and Annual Index January-December 1973

Issued by the SUPERINTENDENT OF DOCUMENTS

U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 : 1973

L.C. Card 4-18088

FOR SALE BY THE SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT
PRINTING OFFICE, WASHINGTON, D.C. 20402. PRICE \$1.35 PER COPY
EXCEPT DECEMBER (INDEX) ISSUE, WHICH VARIES IN PRICE
SUBSCRIPTION PRICE \$19.35 PER YEAR (INCLUDING INDEX)
\$4.85 ADDITIONAL FOR FOREIGN MAILING
THIS ISSUE \$5.30

PREVIEWS

The following publications are in the process of being printed. Advance sales orders may be placed for these publications. Orders will be scheduled and copies mailed as soon as stocks are received. It is not possible to estimate the lapse of time before the publications will actually appear. All information in regard to title, series, classification, distribution, and price given in these listings is preliminary and subject to change when the publications actually come from the press. Those so marked will be sent to depository libraries, providing, that at the time of going to press, the libraries were on list to receive the items under which these publications will be distributed.

- Airborne chemical elements in Spanish moss. (Geological Survey, Professional paper 574-E.) \$1.25 ● I 19.16 :574-E
- American agricultural system: Domestic and foreign elements affecting U.S. agricultural policy. (Senate Agriculture and Forestry Committee.) 80c. ● Y 4.Ag 8/2: Am 3/2
- Appalachian National Scenic Trail. (National Park Service.) 15c ● I 29.6/5: Ap 4
- Baker's dozen: Abstracts of 13 doctoral dissertations completed under Manpower Administration research grants. (Labor Department, Manpower research monograph 27.) \$1.35. ● L 1.39/3: 27
- Citizen action guide to energy conservation. (Citizens' Advisory Committee on Environmental Quality.) \$1.75, 100 or more copies, \$1.31. ● Pr 37.8: En 8/C 49/3
- Considerations for the precise measurement of amplifier noise. (National Bureau of Standards, Technical note 640.) \$1.25. ● C 13.46: 640
- Correspondence management. (National Archives and Records Service, Records management handbook.) 65c. ● GS 4.6/2: C 81
- Data communications system throughout performance using high speed terminals on the dial telephone network. (National Bureau of Standards, Technical note 779.) 65c. ● C 13.46: 799
- Digest, Federal outdoor recreation programs and recreation-related environmental programs. (Outdoor Recreation Bureau.) \$1.35. ● I 66.2: P 94/970/digest
- Do I have a chronic cough? (National Heart and Lung Institute, DHEW pub. (NIH) 74-559.) 35c. ● HE 20.3202: C 83
- Early paleozoic brachiopods of the Moose River synclinorium, Maine. (Geological Survey, Professional paper 784.) \$1.75. ● I 19.16: 784
- Employment of scientists and engineers, 1950-70. (Labor Statistics Bureau, Bulletin 1781.) \$1.25. ● L 2.3: 1781
- Epidemiology of epilepsy: A workshop. (National Institute of Neurological Diseases and Stroke, NINDS monograph 14, DHEW pub. (NIH) 73-390.) \$2.40. ● HE 20.3510: 14
- Fun with the environment [puzzle book for children]. (Environmental Protection Agency.) 75c. ● EP 1.2: F 96
- Identical bidding in public procurement, 1972, report of the Attorney General under Executive Order 10936. (Justice Department.) \$2.00. ● J 1.31: 972
- Improving the age discrimination law, a working paper. (Senate Special Committee on Aging.) 50c. ● Y 4.Ag 4/5
- Individual child. (Child Development Services Bureau, Caring for children series 7, DHEW pub. (OCD) 74-1032.) 55c. ● HE 21.210: 7
- International financial crisis, hearings. (Senate Finance Committee.) \$1.65. ● Y 4.F 49: F 49/4
- Job analysis, key to better management. (Civil Service Commission, BIPP 152-32.) 30c. ● CS 1.2: J 57/7

- Legal bibliography for juvenile and family courts, a supplement.** (Youth Development and Delinquency Prevention Administration, DHEW pub. (SRS) 73-26001.) 40c. ● HE 17.809: C 83/supp.
- Model for training the disadvantaged: TAT [Training and Technology Program] at Oak Ridge, Tenn.** (Labor Department, Manpower research monograph 29.) 85c. ● L 1.39/3: 29
- Product performance and servicing, an examination of consumer problems and business responses.** (National Business Council for Consumer Affairs.) \$1.15. ● Y 3.N 21/27: 2 P 94
- Recommendations for change in the U.S. financial system (revised Sept. 24, 1973).** (Treasury Department.) 80c. ● T 1.2: F 49/3/973-2
- Safety in water activities.** (Army Department, DA PAM 385-6.) 40c. ● D 101.22: 385-6
- Skylab and the sun.** (National Aeronautics and Space Administration, NASA EP-119.) 85c. ● NAS 1.19: 119
- Skylab experiments, v. 6, Mechanics, information for teachers, including suggestions on relevance to school curricula.** (National Aeronautics and Space Administration, NASA EP-115.) 65c. ● NAS 1.19: 115
- Summary of emergency power statutes, a working paper.** (Senate Special Committee on the Termination of the National Emergency.) 70c. ● Y 4.N 21/9: Em 3/2
- Supplement to aids to media selection for students and teachers.** (Education Office, DHEW pub. (OE) 74-21001.) 95c. ● HE 5.234: 34045/supp.
- United States and Japan: Prime Minister Tanaka's Washington visit, July 31-August 1, 1973, and the Tokyo meeting of the Joint U.S.-Japan Committee on Trade and Economic Affairs, July 16-17, 1973.** (State Department, East Asian and Pacific Affairs series 210.) 50c. ● S 1.38: 210
- U.S. industrial outlook 1974, with projections to 1980.** (Competitive Assessment and Business Policy Bureau.) \$3.40. ● C 57.309: 974
- Utility staffing and training for nuclear power.** (Atomic Energy Commission, Research & development report WASH-1130.) \$1.10. ● Y 3.At 7:22/WASH-1130 (rev.)
- What is mongolism?** (National Institute of Child Health and Human Development, DHEW pub. (NIH) 73-537.) 25c. ● HE 20.3352: M 74
- Workbook for determining your disaster loss.** (Internal Revenue Service, IRS pub. 584.) 45c. ● T 22.44/2: 584
- Working for the Bureau of Outdoor Recreation.** (Outdoor Recreation Bureau.) 25c. ● I 66.2: W 89/973

Contents

	Page
Previews	III
Abbreviations, Explanation.....	VI
General Information.....	VII
How To Order Publications.....	VIII
New Classification Numbers Assigned	
January-December 1973.....	IX
Discontinued Series.....	XXII
Corrections for Previous Monthly	
Catalogs	XXIII
List of Government Authors.....	XXV
Monthly Catalog.....	1
Index January-December 1973.....	55

Abbreviations

add.....	addition, addendum, addenda.	n. d.....	no date.
amdt., amdt.....	amendment, amendments.	n. p.....	no place.
app.....	appendix, appendixes.	no., nos.....	number, numbers.
bk., bks.....	book, books.	p.....	page, pages.
chap.....	chapter, chapters.	p. of pl.....	pages of plates.
Cong.....	Congress.	par., pars.....	paragraph, paragraphs.
Dept.....	Department.	pl.....	plate, plates.
doc.....	document.	por.....	portrait, portraits.
facsim.....	facsimile, facsimiles.	pt., pts.....	part, parts.
fy.....	fiscal year.	rp.....	report.
G.H.A.....	Greenwich hour angle.	S.....	Senate, Senate bill.
H.....	House.	S. Con. Res.....	Senate concurrent resolution.
H. Con. Res.....	House concurrent resolution.	S. doc.....	Senate document.
H. doc.....	House document.	S. ex. doc.....	Senate executive document.
H. ex. doc.....	House executive document.	S. ex. rp.....	Senate executive report.
H. J. Res.....	House joint resolution.	S. J. Res.....	Senate joint resolution.
H. R.....	House of Representatives, House bill.	S. Res.....	Senate resolution.
H. Res.....	House resolution.	S. rp.....	Senate report.
H. rp.....	House report.	sec.....	section, sections.
il.....	illustration, illustrations.	sess.....	session, sessions.
in.....	inch, inches.	Stat. L.....	Statutes at large.
lat.....	latitude.	supp.....	supplement.
long.....	longitude.	tab.....	table, tables.
m.....	mile.	Treas.....	Treasury.
		v.....	volume, volumes.
		vs., v.....	versus.

Common abbreviations for the names of States, months, etc., are also used.
 An explanation of the symbols used to designate sizes of publications is given on the inside of the front cover.

Explanation

The individual issuing department, bureau, office, or agency is considered the publisher of Government publications.

Words and figures enclosed in brackets [] in titles are given for information, but do not appear on the title pages of the publications cataloged. Place and printer are not given for publications printed at the United States Government Printing Office, Washington, D.C., or at Government departmental and field printing plants. The dates given with Senate and House documents and reports are the dates on which they were ordered to be printed. Usually the printing promptly follows the ordering, but various causes sometimes make delays.

Under provisions of the Printing Act of January 12, 1895, all Government publications, except administrative and confidential (or restricted), are entered in the Monthly Catalog.

The L.C. card number appended to some of the entries is for those libraries ordering printed cards from the Library of Congress. The number at the extreme right of an entry indicates the classification of the publication in the Office of the Superintendent of Documents.

General Information

The Superintendent of Documents, Government Printing Office, Washington, D.C., is authorized by law to sell copies of Government publications and to allow a discount of 25 percent to book dealers and also to quantity purchasers of 100 or more copies of a single publication going to one address, on condition that they will adhere to the public sales price set by the Superintendent of Documents and that publications shall not be overprinted with any advertising matter.

Publications cannot be supplied free to individuals nor forwarded in advance of payment.

PRICE LIST

There is no general price list of public documents, but numerous lists have been prepared on special subjects and any of these will be furnished free, on application, by subject or subjects concerning which information is desired. It will also be noted that current publications which are for sale are listed in this catalog.

LIST OF SELECTED PUBLICATIONS

In addition to the price lists, the Documents Office issues a biweekly list of Selected United States Government publications for sale by the Superintendent of Documents. Each list contains annotations and prices, and may be obtained free upon application to the Superintendent of Documents.

CONGRESSIONAL BILLS, DOCUMENTS, AND REPORTS

More than 12,000 different bills are usually introduced during a Congress, and there are additional prints on many during the progress of the legislation. With the exception of a very few—such as revenue bills—the demand is an unknown quantity and on most of them we receive no orders, which makes it impossible to print a sales supply. It may be that a copy could be obtained from your Congressman.

A difficult problem is also presented in providing a supply of Congressional documents, hearings, and reports because there are approximately 6,000 of this class of publications issued during a Congress. Sales copies of a few of the more important ones are printed. The availability of those not for sale is indicated in the individual entries.

HOW TO ORDER PUBLICATIONS

Publications entered in this catalog that are for sale by the Superintendent of Documents are indicated by an asterisk (*) preceding the price. Those for sale by the National Technical Information Service are indicated by a farad (Φ) preceding the price. A black dot (●) indicates that the publication has been, or will be, sent to depository libraries. A dagger (†) indicates that application should be made to the department, bureau, or agency issuing the document. A double dagger (‡) indicates that the document is printed for official use and is not obtainable. When additional information concerning the method of procuring a document seems necessary, it will be found under the name of the bureau by which it was published.

In ordering a publication from the Superintendent of Documents, give the name of the publishing department, bureau, or agency, the title, the classification number which is added to the entry at the extreme right, and the stock number (if given following the price). Order Congressional documents and reports by the title, together with the document or report number and the Congress, e.g., H. Doc. 103, 88th Congress.

Do *not* use the L.C. card number in ordering a publication from the Superintendent of Documents.

HOW TO REMIT

Remittances for documents marked with an asterisk (*) should be made to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, by coupon, postal money order, express order, or check. Publications cannot be mailed in advance of receipt of remittance. Foreign remittances should be made by international money order, or draft on an American bank.

Foreign money, defaced or smooth coins, will not be accepted. Do not send postage stamps.

For the convenience of the general public, coupons in the denomination of 5¢ that are good until used in exchange for Government publications sold by the Superintendent of Documents, may be purchased from the office. Address the order to Superintendent of Documents, Government Printing Office, Washington, DC 20402.

Persons who make frequent purchases from the Superintendent of Documents may find a deposit account convenient. Deposits of \$25.00 or more are accepted against which orders may be placed without making individual remittances or first obtaining quotations. Order blanks are furnished for this purpose. After the handling of the order has been completed, it will be returned showing the publications supplied, explanations regarding those not sent, the amount of charge, and the balance on deposit.

No charge is made for postage on documents forwarded to points in United States and possessions, or to Canada, Cuba, Mexico, and certain Central and South American countries. To other countries the regular rate of postage is charged, and remittances must cover such postage. In computing foreign postage, add one-fourth of the price of the publication.

LIBRARY CLASSIFICATION IN DOCUMENTS OFFICE

The classification given at the right of entries for departmental publications is that used in the Library of the Public Documents Department. The *shilling* mark (/) separates what ordinarily would be superior or inferior numbers or letters. It is not practicable to print these numbers or letters as *superiors* or *inferiors* in the Monthly Catalog.

New Classification Numbers

Assigned January-December 1973

NOTE.—New classes appearing for the first time in this issue of the Monthly Catalog are listed in italics.

A 1.107: nos	Agriculture Department. Agricultural economic reports. NOTE.—See, for earlier class, A 93.28: (nos.)
A 13.66/12a: CT	Forest Service. Handbooks, manuals, guides (separates).
A 13.87: Reserved	
A 13.88: letters-nos	General technical reports.
A 17.21: CT	National Agricultural Library. Press releases.
A 21.31: date	Information Office. Catalyst for rural development.
A 93.37: nos	Economic Research Service. FDD field reports.
A 101.6/2: date	Animal and Plant Health Inspection Service. Meat and poultry inspection regulations.
A 101.6/3: date	Federal meat and poultry inspection, statistical summary. NOTE.—See, for earlier class, A 88.17/7: (date).
A 101.10/2: nos	APHIS series.
AA 1.11: nos	Action.
AA 1.11/2: nos	Action pamphlets. Action flyers.
C 1.54/2: date	Commerce Department. Catalog and index, Department of Commerce publications (annual). NOTE.—See, for earlier class, C 1.2: P 96.
C 1.57/4: date	Access. NOTE.—Formerly entitled <i>OMBE Outlook</i> and classified C 1.57/2: (date).
C 1.60/2: nos	OT special publication. OT-SP—(series).
C 1.60/3: nos	OT reports (numbered). NOTE.—Issued by Office of Telecommunications.
C 1.60/4: nos	OT bulletin.
C 1.62: CT	Technology Assessment and Forecast Office: Publications.
C 3.224/10: date/nos	Census Bureau. Housing characteristics household by composition, series HC (7).
C 13.55: date	National Bureau of Standards. Model weights and measures ordinance.
C 13.55/2: date	Model State weights and measures law.
C 13.55/3: date	Model State regulations [on various subjects].
C 13.56: nos	Overlap, measurement agreement through process evaluation.
C 13.57: CT	Experimental technology incentives program, program area descriptions.
	Maritime Administration.

- C 39.223/2 : date/nos----- Highlights of MarAd port activities. United States Travel Service.
- C 47.17 : date----- Festival USA (annual).
NOTE.—See, for earlier class, C 47.2 :F 42.
- National Technical Information Service.
Weekly government abstracts, WGA—(series) :
Environmental Pollution and Control.
Management practice & research.
Materials sciences.
Computers, control & information theory.
Transportation.
Building technology.
NASA earth resources survey program, weekly abstracts.
- National Oceanic and Atmospheric Administration.
C 55.11/a : CT----- Monthly weather review (separates).
NOTE.—See, for earlier class, C 30.14/a : (CT).
- C 55.21/2 : date----- International Field Year for Great Lakes :
News release.
- C 55.27 : date----- Summary report, weather modification, fiscal year.
NOTE.—See, for earlier class, NS 1.21 : (date).
- C 55.28 : nos----- Hydrometeorological reports.
NOTE.—See, for earlier class, C 30.44 : (nos.).
- National Weather Service.
C 55.108/4 : nos----- National Weather Service communications handbooks.
- C 55.110/2-2 : date----- River summary and forecast, New Orleans, Louisiana [area].
- C 55.122 : CT----- Maps and charts.
NOTE.—See, for earlier class, C 30.22 : (CT).
- Environmental Data Service.
C 55.214/48 : v.nos. & nos----- Climatological data : West Indies and Caribbean.
- C 55.216/44 : v.nos. & nos----- Hourly Precipitation Data : Puerto Rico.
- C 55.219/3 : nos----- Key to oceanographic records documentation.
- C 55.221/2 : nos----- Decennial census of U.S. Climate.
NOTE.—See, for earlier class, C 30.71/5 : (nos.).
- C 55.226 : date----- United States earthquakes.
NOTE.—See, for earlier class, C 55.417/2 : (date).
- C 55.227 : date----- International Decade of Ocean Exploration :
Progress report.
- National Marine Fisheries Service.
C 55.292 : CT----- National Oceanographic Data Center publications.
NOTE.—See, for earlier class, D 203.24/3 : (nos.).
- National Marine Fisheries Service.
C 55.320 : nos----- Fishery market development (series).
NOTE.—See, for earlier class, I 49.49/2 :
- C 55.321 : nos----- Test kitchen series.
NOTE.—See, for earlier class, I 49.39 : (nos.).
- C 55.322 : nos----- Fishery facts. FSHFA—(series).
Environmental Research Laboratories.
- C 55.615 : nos----- ERL program plan.
- Economic Analysis Bureau.
C 56.107 : nos----- Press releases.
NOTE.—See, for earlier class, C 43.7 : (nos.).
- C 56.109 : v.nos. & nos----- Survey of current business.
NOTE.—See, for earlier class, C 43.8 : (v.nos. & nos.).

- C 56.110 : date----- Defense indicators (monthly).
NOTE.—See, for earlier class, C 3.241 : (date).
- C 56.111 : date----- Business conditions digest (monthly).
NOTE.—See, for earlier class, C 3.226 : (date).
- C 56.112/2 : P-nos./nos----- International population reports series.
NOTE.—See, for earlier class, C 3.186 : P-(nos.) / (nos.).
- C 56.113 : nos----- Bureau of Economic Analysis staff papers, BEA-SP (series).
Census Bureau.
- C 56.203 :—206 : Reserved
- C 56.207 : date-nos----- Press releases.
NOTE.—See, for earlier class, C 3.209 : (date).
- C 56.21 : nos----- Construction reports: Housing completions, C 22-(series).
NOTE.—See, for earlier class, C 3.215/13 : (letters & nos.).
- C 56.211/3 : nos----- Construction reports: Housing starts, C 20-(series).
NOTE.—See, for earlier class, C 3.215/2 : (nos.).
- C 56.211/5 : nos----- Construction reports: Value of new construction put in place, C 30-(series).
NOTE.—See, for earlier class, C 3.215/3 : C 30-(nos.).
- C 56.211/6 : nos----- Construction reports: Authorized construction, Washington, D.C. area, C 41-(series) (monthly).
NOTE.—See, for earlier class, C 3.215/5 : (nos.).
- C 56.211/7 : nos----- Construction reports: Residential alterations and repairs, expenditures on residential additions, alterations, maintenance and repairs, and replacements, C 50-(series).
NOTE.—See, for earlier class, C 3.215/8 : (nos.).
- C 56.212/4 : nos----- Data access descriptions: Economic censuses printed reports series ECPR.
- C 56.212/5 : nos----- Data access descriptions: Census geography series, CG-(nos.).
NOTE.—See, for earlier class, C 3.240/6 : (nos.).
- C 56.213/2 : date----- Congressional district atlas.
NOTE.—See, for earlier class, C 3.62/5 : (date).
- C 56.214 : nos----- Current housing reports: Housing vacancies, series H-111 (quarterly).
NOTE.—See, for earlier class, C 3.215 : H-111 / (nos.).
- C 56.217 : v.nos.& nos----- Small-area data notes.
NOTE.—See, for earlier class, C 3.238 : (v. nos. & nos.).
- C 56.218/2 : nos----- Country demographic profiles, ISP-30 (series).
- C 56.219 : nos----- Current business reports: Monthly wholesale trade, sales and inventories, BW-(series).
NOTE.—See, for earlier class, C 3.133 : (nos.).
- C 56.219/2 : nos----- Current business reports: Green coffee, inventories, imports, roastings, BC (series).
- C 56.219/3 : nos----- Special current business reports: monthly department store sales in selected areas, BD-(series).
NOTE.—See, for earlier class, C 3.211/5 : BD (nos.).
- C 56.219/4 : nos----- Current business reports: Monthly retail trade, sales and accounts receivable, BR-(series).
NOTE.—See, for earlier class, C 3.138/3 : (nos.).

- C 56.219/4-2: date_____ Current business reports: Retail trade (annual).
NOTE.—See, for earlier class, C 3.138/3-2: (date).
- C 56.219/5: nos_____ Current business reports: Monthly selected service receipts. BS—(series).
NOTE.—See, for earlier class, C 3.239: (nos.).
- C 56.219/6: nos_____ Current business reports: Advance monthly retail, sales, CB—(series).
NOTE.—See, for earlier class, C 3.138/4: (date).
- C 56.219/7: nos_____ Current business reports: Weekly retail sales, CB—(series).
NOTE.—See, for earlier class, C 3.138/5: (date).
- C 56.220/2: date_____ Census use study research notes.
- C 56.222: date_____ Bureau of Census catalog.
NOTE.—See, for earlier class, C 3.163/3: (date).
- C 56.222/a: CT_____ Bureau of Census catalog (separates).
- C 56.222/2: date_____ Bureau of Census catalog, monthly supplement.
NOTE.—See, for earlier class, C 3.163/2: (date).
- C 56.223: nos_____ Construction expenditure of State and local governments, GC (series) (quarterly).
NOTE.—See, for earlier class, C 3.215.10: (nos.).
- C 56.224: nos_____ Holdings of selected public employee retirement systems, quarterly report, GR (series).
NOTE.—See, for earlier class, C 3.242: (date).
- C 56.231/2: date_____ Quarterly summary of state and local tax revenue, GT (series).
NOTE.—See, for earlier class, C 3.145/6: (date).
- C 56.234: nos_____ We the Americans (series).
- C 56.238: date_____ Foreign statistical publications, accessions list (quarterly).
NOTE.—See, for earlier class, C 3.199: (date).
- C 56.239: nos_____ Cotton ginnings, report on cotton ginnings by counties, A 20 (series).
NOTE.—See, for earlier class, C 3.20/3: (nos.).
- C 56.244/3: date/nos_____ Census of manufactures: Special reports, MC—(SR) series.
NOTE.—See, for earlier class, C 3.24/15: (date/nos.).
- C 56.246: CT_____ Census of transportation: General publications.
NOTE.—See, for earlier class, C 3.223: (CT).
- C 56.246/2: nos_____ Census of transportation: Final reports.
NOTE.—See, for earlier class, C 3.233/2: (nos.).
- C 56.247: Reserved
- C 56.247/2: date/v.nos.& nos_____ Census of governments.
NOTE.—See, for earlier class, C 3.145/: (date).
- Research documents.
- C 56.248: nos_____ Domestic and International Business Administration.
- C 57.1: date_____ Annual reports.
- C 57.2: CT_____ General publications.
- C 57.3:—8: Reserved
- C 57.9: CT_____ Addresses.
- C 57.10: date_____ United States exports of aluminum (annual).
NOTE.—See, for earlier class, C 41.112/2: (date).
- C 57.10/2: date_____ United States imports of aluminum (annual).
NOTE.—See, for earlier class, C 41.112/3: (date).
- C 57.11: nos_____ Overseas business reports.
NOTE.—See, for earlier class, C 1.50: (nos.).
- C 57.12: date_____ Overseas trade promotions calendar.

- C 57.101 : date_____ International Commerce Bureau.
Annual reports.
NOTE.—See, for earlier class, C 42.1:(date).
- C 57.102 : CT_____ General publications.
NOTE.—See, for earlier class, C 42.2:(CT).
- C 57.109 : CT_____ Global market survey.
NOTE.—See, for earlier class, C 42.33:(CT).
- C 57.111 : nos_____ Foreign economic trends and their implications
for United States.
NOTE.—See, for earlier class, C 42.30:(nos.).
- Competitive Assessment and Business Policy Bureau.
- C 57.301 : date_____ Annual reports.
NOTE.—See, for earlier class, C 41.1:(date).
- C 57.302 : CT_____ General publications.
NOTE.—See, for earlier class, C 41.2:(CT).
- C 57.303 :—308 : Reserved
- C 57.309 : date_____ U.S. Industrial Outlook.
NOTE.—See, for earlier class, C 41.42/4:(date).
- C 57.312/2 : nos_____ Copper industry reports, annual.
NOTE.—See, for earlier class, C 41.34/2:(nos.).
- C 57.314 : v.nos.& nos_____ Containers and packaging, quarterly industry
report.
NOTE.—See, for earlier class, C 41.33:(v.nos.&
nos.).
- East-West Trade Bureau.
- C 57.401 : date_____ Annual reports.
- C 57.402 : CT_____ General publications.
- C 57.409 : date_____ Export control regulations.
NOTE.—See, for earlier class, C 42.11:(date).
- Federal Communication Commission.
- CC 1.47 : nos_____ Cable television service applications, reports,
public notices.
- CC 1.47/2 : nos_____ Cable television relay service (car) applica-
tions, reports, public notices.
- CC 1.48 : nos_____ Type approval actions, reports, public notices.
- CC 1.48/2 : nos_____ Equipment certification and type acceptance
actions, reports, public notices.
- Defense Communications Agency.
- D 5.110 : nos_____ Technical memorandums.
- Defense Mapping Agency.
- D 5.301 : date_____ Annual reports.
- D 5.302 : CT_____ General publications.
- D 5.303 :—314 : Reserved
- D 5.315 : date/nos_____ Notice to mariners (weekly).
NOTE.—See, for earlier class, D 203.8:(date/
nos.).
- D 5.316 : date/nos_____ Memorandum for aviators.
NOTE.—See, for earlier class, D 203.11:(date/
nos.).
- D 5.317 : nos_____ Publications (numbered).
NOTE.—See, for earlier class, D 203.22:(nos.).
- Defense Civil Preparedness Agency.
- D 14.1/2 : date_____ Annual statistical report.
NOTE.—See, for earlier class, D 119.1/2:(date).
- D 14.8 : CT_____ Handbooks, manuals, guides.
NOTE.—See, for earlier class, D 119.8:(CT).
- D 14.8/3 : nos_____ [Handbook] H—(series).
NOTE.—See, for earlier class, D 119.8/2:(nos.).
- D 14.8/4 : nos_____ Instructor's guide, IG (series).
NOTE.—See, for earlier class, D 119.8/7:(nos.).

D 14.9:-.11: Reserved

D 14.12: nos..... Leaflets.

NOTE.—See, for earlier class, D 119.13:(nos.).

Army Department.

D 101.74: CT..... Vietnam studies.

D 101.75: nos..... General information leaflets.

NOTE.—Issued by Public Information Office, 3d U.S. Infantry (The Old Guard) Fort Myer, Va.

Engineers Corps.

D 103.55/2: CT..... Hydrologic Engineering Center: General publications.

D 103.58: date..... List of Illinois River terminals, docks, mooring locations, and warehouses.

NOTE.—Issued by St. Louis District, St. Louis, Mo.

D 103.58/2: date..... List of Mississippi River terminals, docks, mooring locations, and warehouses.

NOTE.—Issued by St. Louis District, St. Louis, Mo.

Naval Operations Office.

D 207.15: v.nos.& nos..... Lifeline, naval safety journal (bimonthly).

NOTE.—Issued by Naval Safety Center, Norfolk, Va. 23511.

Air Force Department.

D 301.80: nos..... Community College of the Air Force: General catalog.

Environmental Protection Agency.

EP 1.5/3: CT..... Legal compilation, statutes and legislative history, Executive orders, regulations, guidelines and reports.

EP 1.8/2: trans.no..... Grants administration manual (numbered).

EP 1.23: nos..... Ecological research series, EPA-R3-(nos.).

EP 1.23/2: nos..... Environmental protection technology series, EPA-R 2.

EP 1.23/3: nos..... Socioeconomic environmental studies series, EPA-R 5.

EP 1.23/4: nos..... Environmental health effects research series EPA-R1.

EP 1.23/5: nos..... Environmental monitoring series EPA-R4.

EP 1.24: v.nos.& nos..... EPA log (weekly).

EP 1.25: date..... Oil pollution research newsletter.

NOTE.—Issued by Edison Water Quality Research Laboratory, National Environmental Research Center, Edison, New Jersey 08817.

EP 1.26: CT..... Policies and trends in municipal waste treatment.

EP 1.27: v.nos.& nos..... Youth advisory board newsletter.

EP 1.28:-.28/4: Reserved

EP 1.28/5: date.....

EP 1.29: CT.....

EP 1.29/2: CT..... Region 5 public reports.

Water quality standards summary [for various States].

Water quality standards criteria digest, a compilation of Federal/State criteria on [various subjects].

EP 1.30: date..... Noise facts digest.

EP 1.32: date..... EXPRO, listing of extramural project to be funded in fiscal year.

EP 1.33: date..... Digest of State air programs, fiscal year.

EP 1.34: date..... Life-pass it on, President's environmental merit awards program.

NOTE.—Earlier publication classified EP 1.2: L 62.

EP 1.34/2: nos..... Life pass it on, PAO-(series).

NOTE.—Issued by the Rocky Mountain Prairie Region, Denver, Colorado.

- EP 1.39: date_____ Quarterly calendar of environmental meetings.
 EP 1.41: date_____ Inventory of interstate carrier water supply systems.
 Water Programs Office.
 EP 2.24: date_____ Fish kills caused by pollution (annual).
 NOTE.—See, for earlier class, I 67.9:(date).
 EP 2.25: nos_____ Pesticide study series.
 Solid Waste Management Office.
 EP 3.11: CT_____ Posters.
 Air Programs Office.
 EP 4.14: CT_____ Descriptions of [various] courses.
 EP 4.14/2: date_____ Chronological schedule, Institute for Air Pollution Training courses.
 Pesticides Programs Office.
 EP 5.10:—11/2: Reserved
 EP 5.11/3: date_____ EPA compendium of registered pesticides: v. 3, Insecticides, acaricides, molluscicides, and and antifouling compounds (monthly).
 EP 5.11/4: date_____ EPA compendium of registered pesticides: v. 4, Rodenticides and mammal, bird, fish, toxicants (quarterly).
 Radiation Office.
 EP 6.10/3: nos_____ ORP/CSD [Criteria and Standards Division] (series).
 Radiation Programs Office.
 EP 6.10/4: nos_____ EPA/ORP (series).
 Technology Transfer.
 EP 7.8: Reserved
 EP 7.8/2: CT_____ Process design manual for [various subjects].
 EP 7.10: nos_____ EPA Technology Transfer seminar publications (numbered).
 Federal Reserve System Board of Governors.
 FR 1.15/2: date_____ Reserve positions of major reserve city banks (weekly).
 NOTE.—Key number H.5
 General Accounting Office.
 GA 1.12/2: date_____ Federal financial management directory (annual).
 Consumer Product Information Coordinating Center.
 GS 11.9/2: nos_____ New for consumers, highlights of new federal consumer publications.
 Automated Data and Telecommunications Service.
 GS 12.1: date_____ Annual report.
 GS 12.2: CT_____ General publications.
 GS 12.3:—8: Reserved
 GS 12.9: date_____ Summary of Federal ADP activities for fiscal year.
 Health, Education, and Welfare Department.
 HE 1.23/6: date_____ Mental retardation source book of Department of Health, Education, and Welfare.
 HE 1.34/2: nos_____ Consumer information series.
 HE 1.42: CT_____ Synchronism: The dynamics of health (series).
 Aging Administration.
 HE 1.202: CT_____ General publications.
 NOTE.—See, for earlier class, HE 17.302:(CT).
 HE 1.211: CT_____ Patterns for progress in aging.
 NOTE.—See, for earlier class, HE 17.313:(CT).
 Education Office.
 HE 5.91: nos_____ Parents and beginning readers (series).
 NOTE.—Published by the National Reading Center.
 HE 5.92/4: date_____ Institutions of higher education, index, by State and Congressional district.
 NOTE.—See, for earlier class, HE 5.250:50060—

HE 5.92/5 : date-----	Earned degrees conferred. NOTE.—See, for earlier class, HE 5.254 : 54013— (nos.).
HE 5.93 : date-----	Elementary and secondary education : Statistics of public elementary and secondary day schools. NOTE.—See, for earlier class, HE 5.220 : 20007— 70.
HE 5.93/3 : date-----	Elementary and secondary education : Expenditures and revenues for public ele- mentary and secondary education. NOTE.—Earlier publications classified HE 5.222 : 22026.
HE 5.93/4 : date-----	Elementary and secondary education : Preliminary statistics of State school sys- tems. NOTE.—See, for earlier class, HE 5.220 : 20006— (nos.).
HE 5.93/6 : date-----	Pupil mobility in public elementary and second- ary schools during the school year. NOTE.—See, for earlier class, HE 5.224 : 24018— nos.
HE 5.93/7 : date-----	Preprimary enrollment. NOTE.—See, for earlier class, HE 5.220 : 20079 (nos.).
HE 5.93/8 : date-----	Statistics of local public school systems, staff. NOTE.—See, for earlier class, HE 5.220 : 20112— 69.
HE 5.94 : CT-----	Recent educational policy and legislative devel- opments abroad. NOTE.—See, for earlier similar publications, HE 5.214 : (nos.).
HE 5.95 : date-----	Annual report of Advisory Council on Envi- ronmental Education.
HE 5.96 : date-----	Vocational education : Directory of secondary schools with occupational curriculums, pub- lic-nonpublic.
HE 5.96/2 : date-----	Directory of postsecondary schools with occu- pational programs, public and private.
HE 5.97 : date-----	Adult basic education program statistics, stu- dents and staff data, and selected summaries of fiscal years. NOTE.—See, for earlier class, HE 5.213 : 13037.
HE 5.98 : date-----	Digest of educational statistics (annual). NOTE.—See, for earlier class, HE 5.210 : 10024— (nos.).
HE 5.99 : date-----	Research and training opportunities abroad ; educational programs in foreign language and area studies. NOTE.—See, for earlier class, HE 5.214 : 14134— 74.
HE 5.99/2 : date-----	Opportunities abroad for teachers. NOTE.—See, for earlier publication, HE 5.214 : 14047—74.
HE 17.26 : v.nos.& nos-----	Social and Rehabilitation Service. Human needs (monthly).
HE 17.26/a : CT-----	Human needs (separates).
HE 17.308/2 : CT-----	Aging Administration. Information and referral services (series).
HE 17.639/4 : date-----	National Center for Social Statistics. Findings of AB study.
HE 17.646 : date-----	Adoptions in [calendar year], NCSS report E-10. National Institute of Education.

HE 18.1 : date-----	Annual report.
HE 18.2 : CT-----	General publications.
HE 18.3 :-.8 : Reserved	
HE 18.9 : nos-----	Prep reports.
	NOTE.—See, for earlier class, HE 5.89 : (nos.).
HE 18.10 : v.nos.& nos-----	Research in education (monthly).
	NOTE.—See, for earlier class, HE 5.77 : (v. nos. & nos.).
HE 18.11 : nos-----	Center for Vocational and Technical Education, Ohio State University: Research and Development series.
	NOTE.—Earlier publications classified in HE 5.2 : (CT) class.
HE 18.11/2 : nos-----	Center for Vocational and Technical Education, Ohio State University: Information series.
	NOTE.—Earlier publications classified in HE 5.2 : class.
HE 18.12 : CT-----	Model programs, Title III-Elementary and secondary Education Act.
HE 18.13 : nos-----	ERIC Clearinghouse for Social Studies, Social Science Education : Interpretive series.
	NOTE.—See, for earlier publications, HE 5. classes.
	Health Services and Mental Health Administration.
HE 20.2010/a : CT-----	Public health reports (separates).
	Health Maintenance Organization Service.
HE 20.2058 : CT-----	Handbooks, manuals, guides.
	National Center for Health Services Research and Development.
HE 20.2116 : date-----	Summary of grants and contracts administered by National Center for Health Services Research and Development.
	National Clearinghouse for Smoking and Health.
HE 20.2316 : date-----	Smoking and health bulletin.
	NOTE.—See, for earlier class, HE 20.2609 : (date).
	National Institute of Mental Health.
HE 20.2420/4 : nos-----	Center for Studies of Crime and Delinquency : Research reports (numbered).
HE 20.2427 : Reserved	
HE 20.2428 : date-----	Alcohol & health notes (monthly).
HE 20.2429 : CT-----	National Clearinghouse for Mental Health Information : Abstracts.
HE 20.2430 : v.nos. & nos-----	Alcohol health and research world (quarterly).
	NOTE.—Issued by National Institute on Alcohol Abuse and Alcoholism.
HE 20.2430/2 : date-----	Proceedings of annual alcoholism conference of the National Institute on Alcohol Abuse and Alcoholism.
	Health Care Facilities Service.
HE 20.2512 : CT-----	Bibliographies and lists of publications.
	Comprehensive Health Planning Service.
HE 20.2581 : date-----	Annual report.
HE 20.2582 : CT-----	General publications.
	Federal Health Program Service.
HE 20.2711 : date-----	Alcohol and you, HSMHA employee health program on alcoholism.
	Community Environmental Management Bureau.
HE 20.2860 : CT-----	Posters.
	Health Manpower Education Bureau.
HE 20.3114/4 : CT-----	DMI [Division of Manpower Intelligence] analytic studies.
	National Institute of Allergy and Infectious Diseases.

- HE 20.3260 : CT----- Addresses.
National Institute of Arthritis and Metabolic Diseases.
- HE 20.3315 : v.nos.& nos----- Index of dermatology (monthly).
National Institute of Child Health and Human Development.
- HE 20.3362/4 : date----- Annual summary progress reports of population research centers and program projects supported by Centers for Population Research.
National Institute of Environmental Health Sciences.
- HE 20.3559 : Issue no----- Environmental health perspectives.
National Library of Medicine.
- HE 20.3612/3-2 : date----- Cumulated list of new medical subject headings.
- HE 20.3617 : v.nos.& nos----- Current bibliography of Epidemiology.
- HE 20.3617/2 : v.nos----- Current bibliography of epidemiology, annual cumulative.
- HE 20.3618 : date----- Index of NLM serial titles.
John E. Fogarty International Center for Advanced Study in the Health Sciences.
- HE 20.3711 : CT----- Bibliographies and lists of publications.
- HE 20.3712 : date----- Statistical reference book of international activities.
National Institute of Mental Health.
- HE 20.3809 : CT----- Crime and delinquency issues, monograph series.
NOTE.—See, for earlier class, HE 20.2420/2 : (CT).
- HE 20.4010/a : CT----- Food and Drug Administration.
FDA papers (separates).
NOTE.—See, for earlier class, FS 13.128/a : (CT).
- HE 20.4024 :-.4025 : Reserved
- HE 20.4026 : date----- Product Safety NEISS news.
- HE 20.4027 : date----- FDA compilation of case studies of drug recalls.
Radiological Health Bureau.
- HE 20.4108 : CT----- Handbooks, manual, guides.
NOTE.—See, for earlier class, HE 20.1508 : (CT).
- HE 20.4114 : nos----- BRH/DBE (series).
NOTE.—See, for earlier class, HE 20.1514 : (nos.).
- HE 20.7001 : date----- Center for Disease Control.
Annual report.
NOTE.—See, for earlier class, HE 20.2301 : (date).
- HE 20.7002 : CT----- General publications.
NOTE.—See, for earlier class, HE 20.2302 : (CT).
- HE 20.7011/4 : date----- Center for Disease Control trichinosis surveillance, annual summary.
NOTE.—See, for earlier class, HE 20.2309/12 : (date).
- HE 20.7011/5 : CT----- Center for Disease Control neurotropic diseases surveillance [reports].
NOTE.—See, for earlier class, HE 20.2309/8 : (CT).
- HE 21.12 : date----- Child Development Office.
Annual report of U.S. Department of Health, Education, and Welfare to Congress of United States on services provided to handicapped children in Project Head Start.
- HH 1.6/6-2 : nos----- Housing and Urban Development Department.
HUD training handbook.
- HH 1.23/4 : nos----- Foreign publications accessions list.
- HH 1.40/3-2 : nos----- HUD international special supplements.
- HH 1.46/2 : v.nos.& nos----- Community development.
Federal Insurance Administration.

- HH 10.8: CT----- Handbooks, manuals, guides.
Interior Department.
- I 1.88/2: date----- Catalog of research projects.
NOTE.—Issued by Office of Saline Water.
- I 1.97: nos----- Water Resources Scientific Information Center: WRSIC (series).
- I 1.97/2: date----- Research reports supported by Office of Water Resources Research under Water Resources Research act (quarterly).
Geological Survey.
- I 19.3/3: date----- Water-resources bulletins.
- I 19.3/4: date----- Water Resources Division bulletin of training.
- I 19.61: v.nos.& nos----- Journal of research (bimonthly).
- I 19.62: nos----- Basic-data contributions.
- I 20.51/2: CT----- Indian Affairs Bureau.
Indians [various subjects].
- I 27.62: CT----- Reclamation Bureau.
Annual operating plans.
- I 28.32/2: date----- Mines Bureau.
Gypsum, annual advance summary.
- I 28.45/3: date----- District 5 petroleum statement, monthly.
- I 28.45/4: date----- Fuel oils by sulfur content, monthly.
- I 28.63/3: date----- Sulfur, advance summary.
- I 28.116: date----- Abrasive materials, annual advance summary.
- I 28.117: date----- Gem stones, annual advance summary.
- I 28.119: date----- Phosphate rock, calendar year, advance summary.
- I 28.120: date----- Potash, calendar year, advance summary.
- I 28.121: date----- Minor nonmetals, annual advance summary.
- I 29.58/3: CT----- National Park Service.
Historic resource studies.
- I 29.79: CT----- Wilderness recommendation (series).
- I 29.79/2: CT----- Interpretive prospectus (series).
NOTE.—Earlier publications classified in I 29.2: class.
- I 29.79/3: CT----- Development concept (series).
- I 49.1/4: date----- Sport Fisheries and Wildlife Bureau.
Annual report, Bureau of Sport Fisheries and Wildlife, Region 4.
- I 49.47/4: nos----- Wildlife research reports.
- I 49.71/2: CT----- Posters.
- I 64.10: nos----- Oil and Gas Office.
Office of Oil and Gas technical reports.
- J 1.20/3: date/sec.nos----- Justice Department.
Library book catalog.
- J 1.32/2: date----- Attorney General's annual report, Federal law enforcement and criminal justice assistance activities.
- J 1.32/3: CT----- Criminal justice monographs.
NOTE.—Issued by National Institute of Law Enforcement and Criminal Justice.
- J 1.41/2: nos----- Law Enforcement standards program, NILE CJ-STD (series).
- J 1.42: v.nos.& nos----- Document retrieval index.
NOTE.—Issued by the National Criminal Justice Reference Service, Washington, D.C. 20530.
- J 1.42/2: nos----- Selected topic digests.
NOTE.—Published periodically by National Criminal Justice Reference Service.
- J 1.43: date----- List of participating institutions, fiscal year.
NOTE.—Issued by the Law Enforcement Assistance Administration.
- Ju 13.1: date----- Federal Judicial Center.
Annual report.
- Ju 13.2: CT----- General publications.
Labor Department.

- L 1.20/8: date_____ Women & work (monthly).
 L 1.51/4: v.nos./date_____ Decisions and reports on rulings of the Assistant Secretary of Labor for labor-management relations, pursuant to Executive Order 11491.
- L 1.68: date_____ Public employment program, annual report to Congress.
 Labor Statistics Bureau.
- L 2.99/2: date_____ Digest of selected health and insurance plans.
 NOTE.—See, for earlier publication, L 2.3: 1629.
- L 2.101: date_____ U.S. Department of State indexes of living costs abroad and living quarters allowances (quarterly).
- L 2.103: date_____ Conventions, National and International Unions, State Labor Federations, Professional Associations, State Employee Associations.
 Occupational Safety and Health Administration.
- L 35.6/1: Reserved
 L 35.6/2: date_____ Occupational safety and health: v. 2, Maritime standards and interpretations.
- L 35.6/3-3: Reserved
 L 35.6/3-4: date_____ Occupational safety and health: v. 4, Other regulations and procedures.
 Employment Standards Administration.
- L 36.3: nos_____ Bulletins.
 NOTE.—Earlier publications numbered in Labor Standards Bureau bulletin series L 16.3: (nos.).
- L 36.301: date_____ Federal Employees' Compensation Office.
 Annual report.
 L 36.302: CT_____ General publications.
 NOTE.—See, for earlier class, L 26.2: (CT).
- L 36.303: -308: Reserved
 L 36.309: letters-nos_____ Pamphlets.
 NOTE.—See, for earlier publications, L 26. classes.
- LC 1.30/9: v.nos_____ Library of Congress.
 Accessions list: Bangladesh.
 NOTE.—Published twice yearly, June and December.
- LR 1.8/6: date_____ National Labor Relations Board.
 Classified index of National Labor Relations Board decisions and related court decisions.
 LR 1.8/7: date_____ Classification outline for decisions of the National Labor Relations Board and related court decisions.
- NAS 1.7/3: date_____ National Aeronautics and Space Administration.
 Aeronautics update.
- NF 2.8: CT_____ National Endowment for the Arts.
 Handbooks, manuals, guides.
- NS 1.30/2: date_____ National Science Foundation.
 Federal support to universities, colleges, and selected nonprofit institutions, fiscal year.
- Pr 37.12: date_____ President of United States.
 Federal advisory committees, annual report of the President.
- PrEx 3.10/4: CT_____ Central Intelligence Agency.
 Maps and atlases.
- PrEx 13.12: v.nos.& nos_____ National Clearinghouse for Drug Abuse Information.
 DAGAS, drug abuse current awareness system.
- PrEx 16.11: date_____ Consumer Affairs Office.
 Consumer legislative monthly report.
 NOTE.—See, for earlier class, Pr 36.8: C 76/ L 52/ (date).

PrEx 17.10: nos-----	Cost of Living Council. Economic stabilization program (series).
PrEx 18.8: CT-----	Telecommunications Policy Office. Handbooks, manuals, guides.
S 1.86/2: nos-----	State Department. Near East and South Asian series.
S 18.43: v.nos.& nos-----	International Development Agency. A.I.D. memory documents (quarterly).
SE 1.11/2: date-----	Securities and Exchange Commission. Index to Commission decisions.
SI 1.37: nos-----	Smithsonian Institution. Research reports.
T 70.1: date-----	Alcohol, Tobacco, and Firearms Bureau. Annual report.
T 70.2: CT-----	General publications.
T 70.3: -4: Reserved	
T 70.5: CT-----	Laws.
T 70.6: CT-----	Regulations, rules, and instructions.
T 70.6/2: nos-----	Regulations (Part nos. of Title 26 of Code of Federal Regulations). NOTE.—See, for earlier class, T 22.17/3: (pt. nos.)
TD 1.25: v.nos.& nos-----	Transportation Department. Transportation topics for consumers, from Of- fice of Consumer Affairs (quarterly).
TD 2.30: nos-----	Federal Highway Administration. Report FHWA-RD—(series).
TD 2.32: v. nos-----	Water supply and waste disposal series.
TD 3.110/3: nos-----	Safety Office. Railroad employee accident investigation re- ports.
Y 1.2/4: nos-----	House of Representatives. Annual reports of political committees sup- porting candidates for House of Representa- tives.
Y 3.Am 3/6: 8 CT-----	American Revolution Bicentennial Commission. Handbooks, manuals, guides.
Y 3.Am 3/6: 9 CT-----	Posters.
Y 3.Av 5: 1/date-----	Aviation Advisory Commission. Report.
Y 3.C 86: 1/date-----	National Advisory Commission on Criminal Jus- tice Standards and Goals. Report.
Y 3.C 86: 2 CT-----	General publications.
Y 3.Ex 8: 1/date-----	National Advisory Council on Extension and Con- tinuing Education. Report.
Y 3.Ex 8: 2 CT-----	General publications.
Y 3.F 31/16: 14/date-----	Federal Council for Science and Technology. Federal excavation technology program, annual report.
Y 3.F 51: 1/date-----	National Commission on Fire Prevention and Con- trol. Report.
Y 3.J 98: 1/date-----	Interdepartmental Council to Coordinate All Fed- eral Juvenile Delinquency Programs. Annual report.
Y 3.J 98: 2 CT-----	General publications.
Y 3.M 41: 1/date-----	National Commission on Materials Policy. Reports.
Y 3.M 41: 2 CT-----	Publications.
Y 3.N 21/24: 2 CT-----	National Water Commission. General publications.
Y 3.N 21/27: 1/date-----	National Business Council for Consumer Affairs. Annual report.

Y 3.N 21/27 : 2 CT-----	General publications.
Y 3.N 21/27 : 3-7 : Reserved	
Y 3.N 21/27 : 8 CT-----	Handbooks, manuals, guides.
	National Advisory Committee on Oceans and Atmosphere.
Y 3.Oc 2 : 1/date-----	Report.
Y 3.Oc 2 : 2 CT-----	General publications.
	Population Growth and American Future, Commission on.
Y 3.P 81 : 9/nos-----	Research reports.
	Price Commission.
Y 3.P 93/4 : 1/date-----	Report.
Y 3.P 93/4 : 2 CT-----	General publications.
	Interagency Racial Data Committee.
Y 3.R 11 : 1/date-----	Report.
Y 3.R 11 : 2 CT-----	General publications.
	Railroad Retirement Commission.
Y 3.R 13/3 : 1/date-----	Report.
Y 3.R 13/3 : 2 CT-----	General publications.
	Souris-Red-Rainey River Basin Commission.
Y 3.So 8 : 1/date-----	Annual report.
Y 3.So 8 : 2 CT-----	General publications.
	Cabinet Committee on Opportunities for Spanish Speaking People.
Y 3.Sp 2/7 : 9/v.nos.& nos-----	HOY, a newsletter from Cabinet Committee on Opportunities for Spanish Speaking People.
	Strategy Council on Drug Abuse.
Y 3.St 8 : 1/date-----	Report.
Y 3.St 8 : 2 CT-----	General publications.
	Tennessee Valley Authority.
Y 3.T 25 : 3/letters-nos-----	Bulletins.
Y 3.T 25 : 41 CT-----	Tennessee Valley streams, their fish, bottom fauna, and aquatic habitat [by area].
Y 3.T 25 : 42/nos-----	Research papers (numbered).
	National Tourism Resources Review Commission.
Y 3.T 64 : 1/date-----	Annual report.
Y 3.T 64 : 2 CT-----	General publications.
	National Commission on State Workmen's Compensation laws.
Y 3.W 89/3 : 1/date-----	Reports.
Y 3.W 89/3 : 2 CT-----	Publications.
	Presidential Campaign Activities, Select Committee on, Senate.
Y 4.P 92/4 : CT-----	Publications.

Discontinued Series

	Information Office.
A 21.25/3 : nos-----	Rural development newsletter (irregular).
	NOTE.—Discontinued with no 119, dated Sept. 1971.
	ACTION
AA 1.9 : date-----	Vista fact book (monthly).
	NOTE.—Discontinued with May 1972 issue.
	Domestic Commerce Bureau.
C 41.35 : v.nos.& nos-----	Chemicals, quarterly industry report.
	NOTE.—Discontinued with v. 19, no. 1 Dec. 1971-Mar. 1972 issue.
	National Marine Fisheries Service.
C 55.309/2 : nos-----	Michigan, Ohio & Wisconsin landings, (monthly).
	NOTE.—Discontinued with the annual 1971 issue.
	Defense Department.
D 1.3/2 : v.nos.& nos-----	Defense industry bulletin (quarterly).
	NOTE.—Discontinued with v. 8, no. 1 Merged with Defense management journal.

- D 204.7: v.nos.& nos----- Navy Department.
Safety review (monthly).
NOTE.—Discontinued with v. 29, no. 7, July 1972.
- D 208.7: date----- Naval Personnel Bureau.
Naval training bulletin (quarterly).
NOTE.—Discontinued with the Spring 1972 issue.
- HE 17.9: v.nos.& nos----- Social and Rehabilitation Service.
Welfare in review (issued 6 times a year).
NOTE.—Discontinued with v. 10, no. 3, dated May-June 1972 issue.
- HE 20.3160/4: v.nos.& nos----- National Cancer Institute.
Cancer chemotherapy abstracts (bimonthly).
NOTE.—Discontinued with completion of v. 12.
- HE 20.3167: v.nos.& pt.nos----- Viral tumorigenesis report (semiannual).
NOTE.—Discontinued with v. 10, pt. 2, covering last half of 1972.
- I 29.63: date----- National Park Service.
Public use of national parks (monthly).
NOTE.—Discontinued as a monthly publication with the Dec. 1972 issue. Issued twice a year beginning with fiscal year report, 1973.
- L 1.60: date----- Labor Department.
Employment service statistics (monthly).
NOTE.—Discontinued with Mar. 1972 issue.
- I. 2.32/2: v.nos.& nos----- Labor Statistics Bureau.
Labor developments abroad (monthly).
NOTE.—Discontinued with v. 17, no. 1, Jan. 1972 issue.
- PrEx-10.13: v.nos.& nos----- Economic Opportunity Office.
Vista volunteer (monthly).
NOTE.—Discontinued with v. 6, no. 9, June 1971. Publication will be combined with another Action publication under different title.
- Y 3.At 7: 36/v.nos.& nos----- Atomic Energy Commission.
Reactor technology (quarterly).
NOTE.—Discontinued with issue dated Winter 1972.
- Y 3.At 7: 52: v.nos.& nos----- Isotopes & radiation technology, quarterly technical progress review.
NOTE.—Discontinued with v. 9, no. 4, Summer 1972 issue.
- Y 3.Se 4: 7/nos----- Selective Service System.
Selective service regulations (irregular).
NOTE.—Discontinued with issue dated June 28, 1971.
- Y 3.Se 4: 13-3nos----- Local board memorandum (irregular).
NOTE.—Discontinued with issue dated June 25, 1971.

Corrections for Previous Monthly Catalogs

- Apr. 1972. Entry 5631, Statistics of income 1970: Individual income tax returns.
Correct class to read T 22.35/3:In 2/970.
- Mar. 1973. Entry 20876, Water resources regions and subregions for national assessment of water and related land resources. Add class Y 3.W 29:2 R 26. at end of entry.
- Apr. 1973. Entry 21320, Securities industry study, report of Subcommittee on Securities. Correct class to read Y 4.B 22/3:Se 2/15/973.
- May 1973. Entry 23211, Obstruction marking and lighting. Correct class to read TD 4.8:Ob 7/972-2.
- June 1973. Entry 25799, Urban mass transportation abstracts. Delete Item 982-C-1 from entry.

- July 1973. Entry 26639, Manual of Medical Department [1952], Change 78. Correct class to read D 206.8/2 : 972/ch.78.
- Aug. 1972. Entry 11244, Manual of Medical Department [1972], Change 74. Correct class to read D 206.8/2 : 970/ch.74.
- Sept. 1973. Page x, HE 20.3760 : date, Statistical reference book of international activities. Correct class to read HE 20.3712 : date.
- Entry 28265, AEC authorizing legislation, fiscal year 1974, hearings. Add ● Item 999.
 - Entry 28391, HUD-space-science-veterans appropriations for 1974, hearings, pt. 3. Change class to read Y 4.Ap 6/1 : H 81/2/974/pt.3.
 - Entry 29125, Statistical reference book of international activities. Correct class to read HE 20.3712 : 972.
 - Entry 29445, EPA compendium of registered pesticides, v. 3. Correct class to read EP 5.11/3 : 972/supp. (nos.).
 - Entry 29502, Monthly benefit statistics : Old-age, survivors, disability, and health insurance, summary benefit data. Add Number 4, 1973 to parentheses statement ; correct class to read HE 3.28/6 : 973/4.
- Oct. 1973. Entry 29697, 1970 census of population : v. 1, Characteristics of population. Correct class to read C 3.223/9 : 970/v.1/pt. (nos.).
- Entry 29899, Education of handicapped act amendments, hearings before Select Subcommittee on Education. Correct class to read Y 4.Ed 8/1 : H 19/6 ; correct L.C. card to read 73-602372.
 - Entry 29998, Economics of aging. Correct class to read Y 4.Ag 4 : Ec 7/ind.
 - Entry 30499, Pollution control costs and research priorities in animal slaughtering and processing industries. Correct class to read Y 3.In 2/8 : 2 An 5/3/973-2.

List of Government Authors

	Beginning Entry
Advisory Commission on Information.....	31903
Agriculture Department	31911
Agricultural Marketing Service.....	31906
Agricultural Research Service.....	31908
Animal and Plant Health Inspection Service.....	31929
Communication Office.....	31991
Economic Research Service.....	32187
Food and Nutrition Service.....	32304
Forest Service.....	32307
Soil Conservation Service.....	32559
Canal Zone Government.....	31938
Central Intelligence Agency.....	31975
Civil Aeronautics Board.....	31977
Civil Rights Commission.....	31979
Civil Service Commission.....	31980
Commerce Department.....	31987
Domestic and International Business Administration.....	32183
Competitive Assessment and Business Policy Bureau.....	31994
International Commerce Bureau.....	32394
National Bureau of Standards.....	32481
National Oceanic and Atmospheric Administration.....	32509
Environmental Data Service.....	32245
National Ocean Survey.....	32505
National Oceanographic Instrumentation Center.....	32511
National Technical Information Service.....	32520
Patent Office.....	32528
Social and Economic Statistics Administration	
Census Bureau.....	31939
Congress	31995
Congressional Operations Joint Committee.....	32018
Economic Joint Committee.....	32020
House of Representatives.....	32024
Agriculture Committee.....	32071
Appropriations Committee.....	32073
Armed Services Committee.....	32074
Crime, Select Committee on.....	32075
Education and Labor Committee.....	32076
Foreign Affairs Committee.....	32079
Government Operations Committee.....	32081
Interior and Insular Affairs Committee.....	32082
Interstate and Foreign Commerce Committee.....	32085
Merchant Marine and Fisheries Committee.....	32088
Post Office and Civil Service Committee.....	32088
Public Works Committee.....	32092

	Beginning Entry
Congress—Continued	
House of Representatives—Continued	
Science and Astronautics Committee.....	32093
Ways and Means Committee.....	32095
Senate	32097
Aging, Special Committee on.....	32124
Agriculture and Forestry Committee.....	32126
Appropriations Committee.....	32131
Armed Services Committee.....	32126
Banking, Housing, and Urban Affairs Committee.....	32137
Commerce Committee.....	32141
District of Columbia Committee.....	32143
Finance Committee.....	32145
Government Operations Committee.....	32146
Interior and Insular Affairs Committee.....	32147
Judiciary Committee.....	32148
Nutrition and Human Needs, Select Committee on.....	32151
Post Office and Civil Service Committee.....	32152
Public Works Committee.....	32153
Small Business, Select Committee on.....	32155
Defense Department.....	32161
Air Force Department.....	31923
Army Department.....	31931
Army Medical Department.....	31937
Engineers Corps.....	32198
Military History, Office of Chief of.....	32445
Defense Mapping Agency.....	32182
National Guard Bureau.....	32492
Navy Department	
Marine Corps.....	32442
Medicine and Surgery Bureau.....	32443
Naval Operations Office.....	32524
Naval Observatory.....	32523
Naval Research Office.....	32525
Environmental Protection Agency.....	32246
Air and Water Programs Office.....	31922
Pesticides Programs Office.....	32529
Water Program Operations Office.....	32608
Export-Import Bank of United States.....	32274
Farm Credit Administration.....	32275
Federal Communications Commission.....	32279
Federal Maritime Commission.....	32286
Federal Reserve System Board of Governors.....	32290
Foreign Scholarships Board.....	32306
General Accounting Office.....	32348
General Services Administration	
Federal Supply Service.....	32299
National Archives and Records Service.....	32480
Federal Register Office.....	32287

	Beginning Entry
Health, Education, and Welfare Department.....	32366
Human Development Office.....	
Aging Administration.....	31904
Child Development Office.....	31976
Education Office.....	32194
National Institute of Education.....	32495
Public Health Service.....	32539
Center for Disease Control.....	31973
Food and Drug Administration.....	32301
Health Services and Mental Health Administration.....	32370
Community Environmental Management Bureau.....	31993
National Center for Health Services Research and Develop- ment.....	32487
National Center for Health Statistics.....	32488
National Institute for Occupational Safety and Health.....	32493
National Institutes of Health.....	32500
Health Manpower Education Bureau.....	32369
National Cancer Institute.....	32485
National Institute of Dental Research.....	32494
National Institute of Mental Health.....	32497
National Library of Medicine.....	32504
Social and Rehabilitation Service.....	32553
Rehabilitation Services Administration.....	32544
Social Security Administration.....	32555
Housing and Urban Development Department.....	32371
Interior Department.....	32388
Fish and Wildlife Service.....	
Sport Fisheries and Wildlife Bureau.....	32566
Geological Survey.....	32359
Land Management Bureau.....	32435
Mines Bureau.....	32446
National Park Service.....	32512
Oil and Gas Office.....	32527
Reclamation Bureau.....	32540
Joint Publications Research Service.....	32401
Justice Department.....	32409
Drug Enforcement Administration.....	32186
Immigration and Naturalization Service.....	32387
Labor Department.....	32415
Labor Statistics Bureau.....	32431
Library of Congress.....	32437
Copyright Office.....	32156
Marihuana and Drug Abuse Commission.....	32440
National Advisory Council on Extension and Continuing Education.....	32453
National Aeronautics and Space Administration.....	32454
National Foundation on the Arts and the Humanities.....	
National Endowment for the Arts.....	32491
National Labor Relations Board.....	32501

	Beginning Entry
National Science Foundation.....	32516
Population Growth and the American Future, Commission on.....	32532
President of United States.....	32533
Executive Office of the President	
Cost of Living Council.....	32157
Council on Environmental Quality.....	32158
Special Action Office for Drug Abuse Prevention.....	32565
Telecommunications Policy Office.....	32600
Securities and Exchange Commission.....	32548
Small Business Administration.....	32549
Smithsonian Institution.....	32552
Souris-Red-Rainy River Basins Commission.....	32564
State Department.....	32567
Tariff Commission.....	32583
Transportation Department.....	32601
Coast Guard.....	31984
Federal Aviation Administration.....	32278
Air Traffic Service.....	31928
Federal Highway Administration.....	32280A
Motor Carrier Safety Bureau.....	32452
Federal Railroad Administration	
Safety Office.....	32545
National Transportation Safety Board.....	32521
Treasury Department.....	32604
Customs Bureau.....	32160
Mint Bureau.....	32451
United States Postal Service.....	32605

Monthly Catalog

NO. 947 • DECEMBER 1973

ADVISORY COMMISSION ON INFORMATION Washington, DC 20006

- 31903 26th report, Advisory Commission on Information, Jan. 1973. cover title, [3]+ii+48+[2] p. [Also issued as H.doc.50, 93d Cong., 1st sess. See Entry 24815, June 1973 Monthly Catalog.] † • Item 1049-B
Y 3.Ad 9/7: 1/972

AGING ADMINISTRATION, Health, Education, and Welfare Dept. Washington, DC 20201

- 31904 New facts about older Americans. [June 1973.] [12] p. il. narrow 8° ([DHEW publication (SRS) 73-20006]; Office of Human Development.) * Paper, 25c. • Item 447-A-1
HE 1.202: F 11
- 31905 Project Helping Wheels. [1973.] cover title, 12 p. il. ([DHEW publication (SRS) 73-20102; Office of Human Development.]) [Text on p. 2-3 of cover.] * Paper, 25c. (S/N 1762-00078). • Item 447-A-1
HE 1.202: W 57

AGRICULTURAL MARKETING SERVICE, Agriculture Dept. Washington, DC 20250

- 31906 Cotton gin equipment, July 1973. Aug. 13, 1973. 2 p. narrow f° (Market News Section, Cotton Division.) † A 88.11/19: 973
- 31907 Cotton varieties planted 1969-73. Aug. 1973. cover title, 32 p. il. 4° (Cotton Division.) [Contents on p. 2 of cover.] † A 88.11/13: 969-73

AGRICULTURAL RESEARCH SERVICE, Agriculture Dept. Washington, DC 20250

- ARS (series). † A 77.15: S-(nos.)
- 31908 S-3. Evaluation of USDA limb and stalk remover for cleaning machine-stripped cotton; by Weldon Laird and Roy V. Baker. Feb. 1973. cover title, ii+10 p. il. 4° (Southern Region.)
- 31909 S-12. Scheduling arrival of tobacco at auction warehouses; [by Albert H. Graves and Kenneth R. Forrest]. May 1973. [2]+ii+11 p. il. 4° (Southern region.)
- 31910 Whey Products Conference, held at Chicago, Ill. June 14-15, 1972, proceedings. [Feb. 1973.] cover title, ii+159 p. il. 4° (ERRL pub. 3779; Eastern Regional Research Laboratory.) [Text on inside of back cover.] † A 77.2: W 57/972

AGRICULTURE DEPARTMENT Washington, DC 20250

NOTE.—Requests to the Department of Agriculture for publications should include the USDA number if given in the entry.

Agricultural economic report.

- 31911 246. Families in expanded food and nutrition education program, comparison of food stamp and food distribution program participants and nonparticipants; [by J. Gerald Feaster and Garey B. Perkins]. [Sept. 1973.] cover title, vi+59 p. (Economic Research Service.) [Study conducted by National Economic Analysis Division for Food and Nutrition Service.] † • Item 42-C A 1.107: 246

‡For Sale by National Technical Information Service,
Springfield, VA 22151

•Sent to Depository Libraries

Page 1

GOVERNMENT PUBLICATIONS

Agriculture handbook.

- 31912 447. Guidelines for weed control. [Aug. 1973.] cover title, [1]+iv+169 p. 4° (Agricultural Research Service.) [Issued in looseleaf form. Supersedes Agriculture handbook 332, Suggested Guide for weed control, 1968.] * Paper, \$8.00 (including basic manual and changes for an indefinite period); \$2.00 additional for foreign mailing. ● Item 3 A 1.76: 447

Leaflet.

- 31913 424. Food for fitness, daily food guide; [prepared by Consumer and Food Economics Institute, Agricultural Research Service]. [Mar. 1958, slightly revised July 1973.] [1973.] [2] p. il. oblong 8° folded into narrow 8° size * Paper, 25c. (S/N 0100-02882). ● Item 12 A 1.35: 424/6

Marketing bulletin.

- 31914 54. Market news service on fruits, vegetables, and ornamental crops. [Slightly revised Aug. 1973.] [1973.] 12 p. il. narrow 8° ([Agricultural Marketing Service.]) † ● Item 13-G A 1.95: 54/2

Marketing research reports. † ● Item 13-B

A 1.82: (nos.)

- 31915 996. Nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York [with list of literature cited; by M. J. Ceponis and J. E. Butterfield]. July 1973. cover title, iv+23 p. il. 4° (Agricultural Research Service.)
31916 1008. Costs of dry whole milk packaged for household use [with list of literature cited; by Herbert H. Moede]. Sept. 1973. iv+12 p. il. 4° ([National Economic Analysis Division], Economic Research Division.)
31917 1009. Harvesting, storing, and packing apples for fresh market, regional practices and costs; [by Joseph C. Podany, Robert W. Bohall, and Joan Pearrow]. Sept. 1973. cover title, vi+49 p. il. 4° (Economic Research Service.) [Abstract on p. 2 of cover.]

Miscellaneous publications. ● Item 13-A

A 1.38: (nos.)

- 31918 1264. Squeeze chute for cattle. June 1973. [2] p. il. 4° (Cooperative farm building plan exchange, plan 6133; [Agricultural Research Service.]) * Paper, 15c. (S/N 0100-02776).
31919 1276. Curved holding chute for cattle. [July 1973.] [2] p. il. 4° (Cooperative farm building plan exchange, plan 6139; [Agricultural Research Service.]) * Paper, 15c. (S/N 0100-02881).

PA [Program aid] series.

- 31920 912. Good foods coloring book. [June 1973.] [31] p. il. 4° ([Food and Nutrition Service.]) [Published in support of Federal food stamp and Food distribution programs.] * Paper, 40c. (S/N 0100-02940). ● Item 14-A A 1.68: 912/2

- 31921 United States Department of Agriculture report for Oswego River basin; prepared by Soil Conservation Service, Economic Research Service [and] Forest Service. June 1972. [298] p. il. 4° [Western New York, type 4. River Basins study, prepared for Cayuga Lake, Chemung River, Eastern Oswego, and Wa-Onta Ya Basin Regional Water Resources Planning Boards. Some illustrations are colored.] † A 1.2: Os 9

AIR AND WATER PROGRAMS OFFICE, Environmental Protection Agency, Washington, DC 20460

Publication APTD (series).

- 31922 1441. Low NO_x emission combustor for automobile gas turbine engines; prepared by David J. White, P. B. Roberts, and W. A. Compton, Solar Division, International Harvester Company, San Diego, Calif. Feb. 1973. xi+92 +[2] p. il. 4° [Contract 68-04-0016. Prepared for Mobile Source Pollution Control Program. Advanced Automotive Power Systems Development Division.] † (Price upon application.) EP 4.9/2: 1441

AIR FORCE DEPARTMENT, Defense Dept. Washington, DC 20330

Air Force manual AFM (series).

- 31923 88-3, Chap. 4. See Army Department, Technical manual 5-809-4.
31924 88-3, Chap. 5. See Army Department, Technical manual TM 5-809-5.
31925 Bach, Beethoven or Bacharach in Air Force Band. [1973.] [6] p. il. narrow 8° [Illustrations are colored.] † ● Item 424 D 301.2: B 22/2
31926 Community college of Air Force, general catalog, no. 1, 1973. [1973.] vi+443 p. il. † ● Item 424 D 301.80: 1
31927 A job you like. [1973.] [6] p. il. narrow 8° (NPS 73-4.) [Illustrations are colored.] ● Item 424 D 301.2: J 57/4

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

**AIR TRAFFIC SERVICE, Transportation Dept.
Washington, DC 20553**

- 31928 Terminal air traffic control handbook, Change 3. [July 5, 1973.] [84] p. il. 4° (7110.8.) [Effective Oct. 1, 1973. Cancellation Jan. 1, 1974. Issued with perforations.] * Paper, \$13.50 (including basic handbook and supplementary material for an indefinite period); \$3.50 additional for foreign mailing. ● Item 431-D-1 TD 4.308: T 27/973/ch.3

**ANIMAL AND PLANT HEALTH INSPECTION SERVICE,
Agriculture Dept., Washington, DC 20250**

NOTE.—The Animal and Plant Health Service name changed to Animal and Plant Health Inspection Service April 1972.

- 31929 Meat and poultry inspection regulations, Change 1. June 23, 1973. [56] p. 4° (Meat and Poultry Inspection Service.) [Issued with perforations.] * Paper, \$22.00 (including basic manual and supplementary material for an indefinite period); \$5.50 additional for foreign mailing. ● Item 30-A-4 A 101.6/2: 973/ch.1
- 31930 [Plant quarantine import requirements of France], Aug. 19, 1969, Change. Aug. 3, 1973. 1 p. (353-A; Plant Protection and Quarantine Programs.) [Issued with perforations.] † A 77.329: F 844/969/ch.

**ARMY DEPARTMENT, Defense Dept.
Washington, DC 20310**

Pamphlet.

- 31931 550-163. Area handbook for Malagasy Republic [with bibliography]; by Harold D. Nelson [and others]. 1st edition. Published 1973. xiv+327 p. il. [Prepared by Foreign Area Studies, American University. Research completed Oct. 1972.] * Cloth, \$3.85. ● Item 327 (Rev. 1957) D 101.22: 550-163
L.C. card 73-600012

Technical manual TM (series). † ● Item 329 D 101.11: (nos.)

- 31932 5-809-4. Structural steel, structural aluminum, steel joists, and cold-formed steel for buildings [with bibliography]. May 1973. cover title, 3+1+[1] p. 4° (Air Force AFM 88-3, Chap. 4.) [Issued with perforations. Supersedes edition of Oct. 15, 1973.]
- 31933 5-809-5. Wood structural design for buildings [with list of references]. May 1973. cover title, 4+A-2 p. 4° (Air Force Department manual AFM 88-3, chap. 5.) [Issued with perforations. Supersedes TM 5-809-5 and AFM 88-3, Chap. 5, Oct. 15, 1966.]

**USAAMRDL technical reports. (Eustis Directorate, U.S. Army Air Mobility Research & Development Laboratory, Fort Eustis, Va.) †
D 117.8/2: (nos.)**

- 31934 73-13. Dynamic test of gears manufactured by advanced forging techniques [with list of literature cited]; by Harold K. Frint. May 1973. xi+52 +[2] p. il. 4° [Task 1G162207AA7201; contract DAAJ02-69-C-0060; prepared by Sikorsky Aircraft, Division of United Aircraft Corporation, Stratford, Conn.]
- 31935 73-15. Operational use of UH-1H helicopters in southeast Asia, final report [with list of literature cited]; by Raymond B. Johnson, jr., Larry E. Clay, [and] Ruth E. Meyers. May 1973. xv+227+[2] p. il. 4° [Task 1F162208AA8203; contract DAAJ02-71-C-0039; prepared by Technology Incorporated, Dayton, Ohio.]
- 31936 73-17. Spring overriding aircraft clutch, final report; by P. Lynwander, A. G. Meyer, S. Chachakis. May 1973. xvii+133+[2] p. il. 4° [Prepared by Avco Lycoming Division, Stratford, Conn. under contract DAAJ02-71-C-0035, project 1G162207AA72.]

**ARMY MEDICAL DEPARTMENT, Defense Dept.
Washington, DC 20310**

Army Medical Research and Nutrition Laboratory, Fitzsimons General Hospital, Denver, Colo., Laboratory report.

- 31937 334. ⁷⁵Se-binding by rat plasma proteins after injection of ⁷⁵SeO₃ [with list of references]; by Raymond F. Burk. Mar. 1973. cover title, v+24 p. il. 4° (Bioenergetics Division.) [Project 3A061102B71P. Basic research in support of military medicine; task 01; work unit 061 Mineral metabolism. Some pages are printed as leaves.] † D 104.17: 334

☛For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 3

GOVERNMENT PUBLICATIONS

CANAL ZONE GOVERNMENT

Washington, DC 20004

- 31938 Panama Canal review, [official Panama Canal publication; Willie K. Friar and Jose T. Tunon, publications editors.] Spring 1973. cover title, 35 p. il. 4° [Semiannual. Colored illustrations on front and back cover.] † Paper, \$1.00 a yr., airmail \$2.00 a yr., back issues (regular mail) 50c. each, (Panama Canal Co., Box M Balboa Heights, CZ.) CZ 1.8: 973/1

CENSUS BUREAU, Commerce Dept.

Suitland, MD 20233

1969 census of agriculture, v. 2, general report.

- 31939 chap. 6. Crops, nursery and greenhouse products, forest products. June 1973. iv+131 p. 4° * Paper, \$2.10. ● Item 152
L.C. card 72-600847 C 56.227/3: 969/v.2/chap.6
- 31940 1972 census of governments: v.1, Governmental organization. July 1973. [3]+476 p. il. 4° ([Governments Division.]) * Paper, \$4.55 (S/N 0324-00195). ● Item 148-A
L.C. card 73-600080 C 56.247/2: 972/v.1
- v. 6, Topical studies. ([Governments Division.])
- 31941 2. State reports on State and local government finances [with bibliographies]. Aug. 1973. [3]+70 p. 4° * Paper, 90c. ● Item 148-A
L.C. card 73-600080 C 56.247/2: 972/v.6/pt.2
- 31942 1970 census of housing: v. 5, Residential finance. Mar. 1973. xi+802+40 p. il. 4° * Cloth, \$10.25 (S/N 0301-03652). ● Item 155
L.C. card 72-600057 C 3.224/7: 970/v.5
- 1970 census of housing, Subject reports, HC(7)-(series). ([Housing Division.])
- 31943 7. Geographic aspects of housing inventory. June 1973. viii+171+20 p. il. 4° * Paper, \$2.60. ● Item 155
L.C. card 72-600057 C 3.224/10: 970/7
- 1970 census of housing: Supplementary report, HC(S1)-(series). ● Item 155
C 3.224/8: 970/(nos.)
- 31944 14. Characteristics of Spanish language households for United States, 1970. June 1973. [14] p. 4° * Paper, 25c.
- 31945 15. Value and rent by household composition for United States, 1970. June 1973. [17] p. 4° * Paper, 30c.
- 1970 census of population: v. 1, Characteristics of population. ([Population Division.]) [Table finding guide on lining papers.]
L.C. card 72-600036 C 3.223/9: 970/v.1/pt.(nos.)
- 31946 pt. 8. Connecticut. Mar. 1973. vi+1083+62 p. il. 4° * Cloth, \$10.00
● Item 159-A-8
- 31947 pt. 32/sec. 1, 2. New Jersey. Mar. 1973. 2 v. [ix]+1-1651+62 p. il. 4° * Cloth, \$16.75 per set (2 vols.) ● Item 159-A-32
- 1970 census of population: Subject reports, PC(2) (series). ([Population Division.]) ● Item 159
L.C. card 72-600036 C 3.223/10: 970/v.2/pt.(nos.)
- 31948 1A. National origin and language. June 1973. xi+505+21 p. il. 4° * Paper, \$5.05.
- 31949 9A. Low-income population. June 1973. xi+465+24 p. il. 4° * Paper, \$4.80.
- 31950 pt. 10A. Americans living abroad. [June 1973.] cover title, vii+153+19 p. il. 4° * Paper, \$2.35.

Census tract paper GE-40 (series).

- 31951 9. Social indicators for small areas, papers presented at Conference on Small-Area Statistics, American Statistical Association, Montreal, Canada, Aug. 14, 1972. May 1973. [4]+72 p. il. 4° ([Geography Division.]) [Some illustrations are colored.] * Paper, \$1.00 (S/N 0324-00193) ● Item 131-C
L.C. card 73-602935 C 56.235: 9
- 31952 Cotton ginnings in United States, crop of 1971. Aug. 1972. iii+20 p. 4° ([Agriculture Division.]) * Paper, 35c.
L.C. card 25-26795 C 56.239/2: 971
- 31953 Cotton ginnings in United States, crop of 1972. Aug. 1973. [3]+24 p. 4° ([Agriculture Division.]) * Paper, 50c. ● Item 141
L.C. card 25-26795 C 56.239/2: 972

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

County business patterns, 1972, CBP (series). ([Economic Statistics and Surveys Division.]) [Prepared with assistance of Social Security Administration.] ● Item 133-A
L.C. card 49-45747 C 56.233:(nos.)

- 31954 72-3. Alaska. [July 1973.] cover title, [2]+28 p. il. 4° * Paper, 75c.
- 31955 72-6. California. [July 1973.] [2]+180 p. il. 4° * Paper, \$2.75.
- 31956 72-13. Hawaii. [July 1973.] cover title, [2]+29 p. il. 4° * Paper, 75c.
- 31957 72-15. Illinois. [July 1973.] cover title, [2]+169 p. il. 4° * Paper, \$2.65.
- 31958 72-14. Idaho. [June 1973.] [2]+45 p. il. 4° * Paper, \$1.00.
- 31959 72-42. South Carolina. [July 1973.] cover title, [2]+89 p. il. 4° * Paper, \$1.65.

31960 Current industrial reports; Aluminum foil converted, 1972. Sept. 1973. 4 p. 4° (Series: MA-34 P(72)-1.) † Paper, 25c. ● Item 142-A
C 56.216: MA-34 P(72)-1

31961 — Consumer, scientific, technical, and industrial glassware, 1972, Change sheet. Sept. 1973. 1 p. 4° (Series MA-32 E(72)-1.) † ● Item 142-A
C 56.216: MA-32 E(72)-1/ch.

31962 — Men's apparel monthly survey temporarily delayed, notice. [1973.] 1 p. 4° (M23B.) † ● Item 142-A
C 56.216: M 23 B/notice

31963 — Survey of origin of exports of manufacturing establishments in 1971, preliminary report. Sept. 11, 1973. 9 p. 4° (Series MA-161(71)-1.) † ● Item 142-A
C 56.216: MA-161(71)-1

Current population reports: Series P-20, Population characteristics. * Paper, \$30.50 (including Series P-20, P-23, P-25, P-26, P-27, P-28 summaries, P-60, and P-65 for one year), \$7.75 additional for foreign mailing; single copy, prices vary.

31964 252. College plans of high school seniors, Oct. 1972. Aug. 1973. cover title, ii+15 p. 4° [Issued with perforations.] * Paper, 45c. ● Item 142-C
C 56.218: P-20/252

Current population reports: Series P-25, Population estimates and projections. * Paper, \$30.50 (including Series P-20, P-23, P-25, P-26, P-27, P-28 summaries, P-60, and P-65 for one year), \$7.75 additional for foreign mailing; single copy, prices vary.

31965 504. Estimates of population of United States to July 1, 1973. Aug. 1973. 2 p. 4° * Paper, 25c. ● Item 142-C
C 56.218: P-25/504

Current population reports: Series P-28, Special censuses. † Paper, each, 25c. C 56.218: P 28/(nos.)

- 31966 1501. Special census of Des Plaines, Ill., Mar. 22, 1973. Sept. 1973. 10 p. map, 4°
- 31967 1502. Special census of Oaklawn, Ill., July 14, 1972. Sept. 1973. 7 p. map, 4°
- 31968 1503. Arlington Heights, Ill., June 23, 1972. Sept. 1973. 9 p. map, 4°

Data access descriptions: Census geography series, CG.

31969 3. 1970 census geography; concepts, products, and programs; [prepared by Gerald O'Donnell]. Aug. 1973. [2]+23 p. il. 4° (DAD 33; [Data User Services Office].) [Issued with perforations.] † Paper, 50c. ● Item 142-D
C 56.212/5: 3

Government employment GE-72 (series).

31970 1. Public employment in 1972. Aug. 1973. [3]+31 p. il. 4° ([Governments Division.]) * Paper, 70c. ● Item 148-A
L.C. card 40-26613 C 56.209/2: 972/1

31971 Numerical list of manufactured products (new (1972) SIC basis), 1972 census of manufactures; [prepared in Industry Division]. May 1973. iii+337 p. 4° (MC-72-1.2.) * Paper, \$3.45. ● Item 135
C 56.244/2: P 94/2/972

We the Americans (series). ([Public Information Office.]) [Reports from 1970 census.]

31972 13. We, Asian Americans. [June 1973.] 14+[1] p. il. 4° * Paper, 40c. ● Item 146-H
C 56.234: 13

CENTER FOR DISEASE CONTROL, Health, Education, and Welfare Dept., Atlanta, GA 30333

31973 Neurotropic viral diseases surveillance, annual encephalitis summary 1971. July 1973. [2]+23 p. il. 4° ([DHEW publication (CDC) 74-8252.]) †
HE 20.7011/5: En 1/971

✦For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 5

GOVERNMENT PUBLICATIONS

- 31974 Trichinosis surveillance, annual summary, 1972 [with list of references].
Aug. 1973. [3]+10 p. il. 4° ([DHEW publication (CDC) 74-8256.]) †
HE 20.7011/4: 972

CENTRAL INTELLIGENCE AGENCY Washington, DC 20505

- 31975 Iran [colored map]. Scale 1: 4,400,000, 2.9 in.=200 mi. [Mar. 1973.] 17 x 29
in. [Includes illustrations showing land utilization, population, light
industry and agriculture, and mining and heavy industry. Issued in enve-
lope for mailing.] * Paper, 65c. (S/N 4115-00039). ● Item 856-A-1
PrEx 3.10/4: Ir 1

CHILD DEVELOPMENT OFFICE, Health, Education, and Welfare Dept., Washington, DC 20201

- 31976 Fun in the making. [1973.] cover title, iii+29 p. il. oblong 32° * Paper, 45c.
● Item 454-C-1 HE 21.2: F 96

CIVIL AERONAUTICS BOARD Washington, DC 20428

- 31977 Remarks of Robert D. Timm, Chairman, Civil Aeronautics Board, before
National Association of Regulatory Utility Commissioners, Seattle,
Wash., Sept. 18, 1973. [1973.] 4 p. 4° † C 31.215: T 48/7
31978 Remarks by Robert T. Murphy, Member, Civil Aeronautics Board, Bangor
International Airport, Bangor, Maine, Sept. 20, 1973. 1973. 9 p. 4° †
C 31.215: M 95/60

CIVIL RIGHTS COMMISSION Washington, DC 20425

- 31979 Statute, rules and regulations. U.S. Commission on Civil Rights. 1973.
cover title, [2]+38 p. † ● Item 288-A CR 1.6: St 2/973

CIVIL SERVICE COMMISSION Washington, DC 20415

- Federal employee facts.
31980 8. Meeting your financial obligations. Oct. 1968 [Reprinted 1973]. [6] p. il.
narrow 12° * Paper, 20c. ● Item 293-A CS 1.59: 8
31981 Job opportunities for skilled craftsmen, no written test required, an-
nouncement WA-2-05. Issued Apr. 10, 1972, revised 1973. [1973.] 3 p. 4°
(Washington Area Office.) [Open until further notice.] † ● Item 292
CS 1.26/4: 972/WA-2-05/rev.
31982 Mandate for merit, 89th annual report, fiscal year 1972. [1973.] vi+97 p.
il. 4° [Also issued as H. doc. 13, 93d Cong., 1st sess.]. * Paper, \$1.25
(S/N 0600-00664) ● Item 290 CS 1.1: 972
31983 Medical technician: Assistant, aid, medical technician, pathology techni-
cian, health technician, medical radiology technician, therapy assistant,
medical machine technician, pharmacy assistant, autopsy assistant, an-
nouncement WA-8-13, apply to Desk H, Civil Service Commission, Wash-
ington Area Office, 1900 E Street, N.W., Washington, D.C., 20415. Issued
Aug. 20, 1973, revised July 1973. [1973.] [2]+10 p. 4° [No closing
date.] † ● Item 292 CS 1.26/4: 968/WA-8-13/rev.

COAST GUARD, Transportation Dept. Washington, DC 20591

- 31984 Coast Guard register of reserve officers; Jan. 1, 1973. [1973.] v+211 p. 4°
[1973.] v+211 p. 4° (CG-238.) † ● Item 942 TD 5.19/2: 973
Ocean engineering report.
31985 O. Index of Ocean engineering reports, 1972. cover title, [1]+7 p. 4° (CG-
250-0; Ocean Engineering Division, Office of Engineering.) [Issued with
perforations. Supersedes edition of June 1, 1961.] † TD 5.22: 0

*For Sale by Superintendent of Documents
†Distribution Made by Issuing Office
‡Not Available for Sale or Distribution

DECEMBER 1973

- 31986 Rules and regulations for tank vessels, subchap. D (including pollution prevention regulations, 33 CFR) ; Jan. 1, 1973. viii+164 p. il. 4° (CG-123.) [Title 46, Code of Federal regulations, pts. 30-40 (inclusive).] †
● Item 943 TD 5.6: T 15/973

COMMERCE DEPARTMENT

Washington, DC 20230

NOTE.—Requests to the Commerce Department for publications should give the full title and the date of the publication. Do not include Monthly Catalog entry numbers or Superintendent of Documents classification numbers which should be used only when ordering from the Superintendent of Documents.

- 31987 Address by John K. Tabor, Under Secretary of Commerce, before U.S. international trade policy and the south, Government-business dialogue, Atlanta, Ga. Aug. 22, 1973. [1973.] 8 p. 4° † C 1.18: T 11/2
- 31988 Department of Commerce publication, 1972, catalog and index; [compiled by E. Nell Sawyer and Doris H. Gerhoff]. 1973. iv+91 p. (Office of Publications.) * Paper, 70c. ● Item 126-A C 1.51/2: 972
- OT reports. (Office of Telecommunications.) ● Item 126-D-3 C 1.60/3: (nos.)
- 31989 73-6. [Impedance maps to predict effect of irregular, inhomogeneous ground of Loran C/D radio navigation systems] errata. [1973.] 1 p. 4° †
- 31990 73-14. Objective speech quality measurement of communication channel [with list of references; by] J. A. Payne [and] P. M. McManamon. June 1973. [61] p. il. 4° * Paper, 95c.

COMMUNICATION OFFICE, Agriculture Dept.

Washington, DC 20250

NOTE.—As a result of reorganization within the Agriculture Department, the name of the Information Office was changed to Communication Office, effective Jan. 22, 1973.

- 31991 What's happened to food prices? Aug. 1973. 24 p. il. 4° † ● Item 10
L.C. card 73-602399 A 21.2: F 73/5/973-2
- 31992 What's happening to food prices? Narrative guide for filmstrip and slide set C-192. Aug. 1973. [33] p. il. 4° † A 21.28: F 73

COMMUNITY ENVIRONMENTAL MANAGEMENT BUREAU, Health, Education, and Welfare Dept.

Rockville, MD 20852

- 31993 Lead paint poisoning in children, a problem in your community? [1973.] 11 p. ([DHEW publication (HSM) 73-10011].) † ● Item 512-F
HE 20.2852: L 46

COMPETITIVE ASSESSMENT AND BUSINESS POLICY BUREAU, Commerce Dept., Washington, DC 20230

NOTE.—The Competitive Assessment and Business Policy Bureau was established within the Domestic and International Business Administration by Dept. Organization Order 40-1, effective Nov. 17, 1972.

- 31994 Copper [industry report], 1972 annual statistical supplement; [Mike Bozzelli, editor]. [June 1973.] 19 p. 4° ([Materials Division.]) * Paper, \$2.00 a yr.; 50c. additional for foreign mailing. ● Item 220-A
C 57.312/2: 17

CONGRESS

Congressional Record, proceedings and debates of 92d Congress, 2d session, v. 118. [Permanent edition.] 1972. ● Item 993
L.C. card 12-36438 X.92/2: 118/pt. (nos.)

NOTE.—In the permanent bound edition, the paging differs from that of the daily numbers, the text being revised, rearranged, and printed without break.

- 31995 pt. 1. Jan. 18-Jan. 25, 1972. 1-1240 p. 4° * Cloth, \$13.15. ● Item 993

ΦFor Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 7

GOVERNMENT PUBLICATIONS

Congressional serial set

NOTE.—During each session of Congress the House and Senate documents and reports are accumulated into bound volumes comprising the Congressional serial set. No catalog entry is made for the volumes of the Serial set since the documents and reports contained therein have been previously listed in the Monthly catalog.

The following bound volumes were sent to depository libraries during the period of this catalog:

31996 House document:

no. 376, 92d Congress, 2d session, Our Flag [Serial 12989-9]. ● Item 995-G

House reports:

31997 nos. 1-279, with exceptions, 91st Congress, 1st session, House miscellaneous reports on public bills I [Serial 12837-1]. ● Item 1007-A

31998 no. 356, 93d Congress, 1st session, Summary of proceedings and debate study [Serial 13022-6]. ● Item 1007-A

31999 nos. 580-699, with exceptions, 91st Congress, 1st session, House miscellaneous reports on public bills IV [Serial 12837-4]. ● Item 1007-A

Senate reports:

32000 no. 294, 93d Congress, 1st session, Summary of proceedings and debate study [Serial 13019-3]. ● Item 1007-A

32001 no. 357, 93d Congress, 1st session, Select committee on small business report, 92d Congress [Serial 13019-4]. ● Item 1007-A

Laws

NOTE.—The Federal laws are first published separately and in this form are known as "slip laws". Later, these laws are compiled, edited, indexed, and published in the volumes of the Statutes at large.

Public laws, 93d Congress. ● Item 575

NOTE.—Public laws in slip form in the first prints may be obtained from the Superintendent of Documents, Washington, DC 20402, at a subscription price of \$36.00 per session, \$9.00 additional for foreign mailing; single copies vary in price.

- 32002 44. S 38, act to amend Airport and airway development act of 1970, as amended, to increase United States share of allowable project costs under such act, to amend Federal aviation act of 1958, as amended, to prohibit certain State taxation of persons in air commerce, and for other purposes. [Approved June 18, 1973.] 3 p. * Paper, 15c.
- 32003 45. S. 1136, act to extend through fiscal year 1974 certain expiring appropriations authorizations in Public Health Service act, Community mental health centers act, and Developmental disabilities services and facilities construction act, and for other purposes. [Approved June 18, 1973.] 6 p. * Paper, 15c.
- 32004 50. H.R. 9055, act making supplemental appropriations, fiscal year 1973, and for other purposes. [Approved July 1, 1973.] 30 p. * Paper, 30c.
- 32005 53. H.R. 8410, act to continue existing temporary increase in public debt limit through Nov. 30, 1973, and for other purposes. [Approved July 1, 1973.] 5 p. * Paper, 15c.
- 32006 64. H.R. 8537, act to amend titles 10 and 37, United States Code, to make permanent certain provisions of Dependents assistance act of 1950, as amended, and for other purposes. [Approved July 9, 1973.] 3 p. * Paper, 10c.
- 32007 65. H.R. 5383, act to authorize appropriations for Coast Guard for procurement of vessels and aircraft and construction of shore and offshore establishments, to authorize for bridge alterations, to authorize for Coast Guard end-year strength for active duty personnel, to authorize for Coast Guard average military student loans, and for other purposes. [Approved July 9, 1973.] 3 p. * Paper, 10c.
- 32008 74. H.R. 7528, act to authorize appropriations to National Aeronautics and Space Administration for research and development, construction of facilities, and research and program management, and for other purposes. [Approved July 23, 1973.] 5 p. * Paper, 15c.
- 32009 82. S. 59, act to amend title 38 of United States Code to provide improved and expanded medical and nursing home care to veterans, to provide hospital and medical care to certain dependents and survivors of veterans, to provide for improved structural safety of Veterans' Administration facilities, to improve recruitment and retention of career personnel in Department of Medicine and Surgery, and for other purposes. [Approved Aug. 2, 1973.] 18 p. * Paper, 25c.
- 32010 83. H.R. 8152, act to amend title 1 of Omnibus crime control and safe streets act of 1968 to improve law enforcement and criminal justice, and for other purposes. [Approved Aug. 6, 1973.] 23 p. * Paper, 25c.
- 32011 86. S. 1888, act to extend and amend Agricultural act of 1970 for purpose of assuring consumers of plentiful supplies of food and fiber at reasonable prices. [Approved Aug. 10, 1973.] 29 p. * Paper, 30c.
- 32012 89. H.R. 4083, act to improve laws relating to regulation of insurance in District of Columbia, and for other purposes. [Approved Aug. 14, 1973.] 9 p. * Paper, 15c.

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32013 92. H.R. 6713, act to amend District of Columbia election act regarding times for filing certain petitions, regulating primary election for delegate from District of Columbia, and for other purposes. [Approved Aug. 14, 1973.] 3 p. * Paper, 15c.
- 32014 96. H.R. 8510, act to authorize appropriations for activities of National Science Foundation, and for other purposes. [Approved Aug. 16, 1973.] 3 p. * Paper, 15c.
- 32015 97. H.R. 8947, act making appropriations for public works for water and power development, including Corps of Engineers—Civil, Bureau of Reclamation, Bonneville Power Administration and other power agencies of Department of Interior, Appalachian regional development programs, Federal Power Commission, Tennessee Valley Authority, Atomic Energy Commission, and related independent agencies and commissions for fiscal year ending June 30, 1974, and for other purposes. [Approved Aug. 16, 1973.] 12 p. * Paper, 15c.
- 32016 98. H.R. 8760, act making appropriations for Department of Transportation and related agencies for fiscal year ending June 30, 1974, and for other purposes. [Approved Aug. 16, 1973.] 12 p. * Paper, 15c.
- 32017 100. H.R. 6370, act to extend certain laws relating to payment of interest on time and savings deposits, to prohibit depository institutions from permitting negotiable orders of withdrawal to be made with respect to any deposit or account on which any interest or dividend is paid, to authorize Federal savings and loan associations and national banks to own stock in and invest in loans to certain State housing corporations, and for other purposes. [Approved Aug. 16, 1973.] 7 p. * Paper, 15c.

CONGRESSIONAL OPERATIONS JOINT COMMITTEE

Washington, DC 20510

- 32018 Report of Joint Committee on Congressional Operations pursuant to sec. 402(a) (2) of Legislative reorganization act of 1970 identifying court proceedings and actions of vital interest to Congress, cumulative to June 30, 1973. 1973. ix+496 p. (Committee print, 93d Congress, 1st session.) † Y 4.C 76/7 : C 83/973
- 32019 Special report of Joint Committee on Congressional Operations pursuant to sec. 402(a) (2) of Legislative reorganization act of 1970 identifying court proceedings and actions of vital interest to Congress: Opinions of United States Supreme Court in case of Doe v. McMillan, May 29, 1973. 1973. vii+53 p. (Committee print, 93d Congress, 1st session.) †

Y 4.C 76/7 : C 83/2

Economic Joint Committee

Washington, DC 20510

Acquisition of weapons systems, hearings before Subcommittee on Priorities and Economy in Government, 92d Congress, 2d session.

L.C. card 73-607685

Y 4.Ec 7 : W 37/4/pt.6

- 32020 pt. 6. Dec. 18-Jan. 10, 1973. 1973. x+1623-2536 p. 11. * Paper, \$5.50 (S/N 5270-01956). ● Item 1000

- 32021 Consumer related budget cuts, hearings before Subcommittee on Consumer Economics, 93d Congress, 1st session, Apr. 17 and 18, 1973. 1973. iv+199 p. * Paper, \$1.45 (S/N 5270-01950). ● Item 1000

L.C. card 73-602659

Y 4.Ec 7 : C 76/2

- 32022 Employment act of 1946, as amended, with related laws (annotated) and rules; Mar. 9, 1973. 1973. v+16 p. (Joint committee print, 93d Congress, 1st session.) †

L.C. card 73-602557

Y 4.Ec 7 : Em 7/5/973

Studies in public welfare, prepared for use of Subcommittee on Fiscal Policy. 1973. (Joint committee print, 93d Congress, 1st session.)

L.C. card 73-602728

Y 4.Ec 7 : W 45/paper 7

- 32023 paper 7. Issues in coordination of public welfare programs; July 2, 1973. 1973. vi+255 p. * Paper, \$1.85 (S/N 5270-01852). ● Item 1000

GOVERNMENT PUBLICATIONS

HOUSE OF REPRESENTATIVES
Washington, DC 20515

House documents

NOTE.—All House documents, entries for which are followed by a †, may be obtained from the House Documents Room or from the issuing office.

House documents, 93d Congress.

- 32024 13. Mandate for merit, Civil Service Commission 89th annual report, fiscal year 1972. [1973.] vi+97 p. il. 4° * (Available in departmental edition, \$1.25, CS 1.1:972 and sent to depositories in that form. See entry no. 31982.)
- 32025 123. Amendments to appropriations requested, fiscal year 1974, communication from President of United States transmitting proposed amendments; July 10, 1973. [1973.] 4 p. † ● Item 996
- 32026 132. Radiation control for health and safety, message from the President transmitting 1972 annual report on administration of Radiation control for health and safety act of 1968; July 19, 1973. 1973. vii+106 p. 4° † ● Item 996

House reports

NOTE.—For titles of bills which these reports accompany, see Congressional record index.

House reports on private bills, 93d Congress. † House Document Room, Capitol. ● Item 1008-B

- 32027 442. Michael A. Korhonen. Report from Committee on Judiciary to accompany H.R. 7089. Aug. 2, 1973. 4 p.

House reports on public bills, 93d Congress. † House Document Room, Capitol. ● Item 1008-A

- 32028 245. Market promotion activity of Foreign Agricultural Service (4th review). 4th report together with additional and dissenting views by Committee on Government Operations; June 4, 1973. 1973. v+62 p.
- 32029 246. Census confidentiality/mid-decade sample survey bill. Report from Committee on Post Office and Civil Service to accompany H.R. 7762. June 4, 1973. 25 p.
- 32030 247. Legal services corporation act. Report together with minority views from Committee on Education and Labor to accompany H.R. 7824. June 4, 1973. 29 p.
- 32031 250. Providing for consideration of H.R. 77. Report from Committee on Rules to accompany H. Res. 423. June 5, 1973. 1 p.
- 32032 251. Providing for consideration of bill H.R. 7446. Report from Committee on Rules to accompany H. Res. 424. June 5, 1973. 1 p.
- 32033 252. Providing for consideration of bill H.R. 7645. Report from Committee on Rules to accompany H. Res. 425. June 5, 1973. 1 p.
- 32034 253. Providing for consideration of H.R. 7670. Report from Committee on Rules to accompany H. Res. 426. June 5, 1973. 1 p.
- 32035 254. Extending Public works and economic development act of 1965. Conference report to accompany H.R. 2246. June 5, 1973. 6 p.
- 32036 257. District of Columbia insurance act. Report from Committee on District of Columbia to accompany H.R. 4083. June 5, 1973. 15 p.
- 32037 258. Amending District of Columbia election law. Report from Committee on District of Columbia to accompany H.R. 6713. June 5, 1973. 14 p.
- 32038 259. Authorizing District of Columbia Council to regulate and stabilize rents in District of Columbia. Report together with minority views from Committee on District of Columbia to accompany H.R. 4771. June 5, 1973. 20 p.
- 32039 260. Foreign Service buildings. Conference report to accompany H.R. 5610. June 6, 1973. 4 p.
- 32040 261. Peace Corps. Conference report to accompany H.R. 5293. June 6, 1973. 3 p.
- 32041 262. Commission on Bankruptcy laws. Report from Committee on Judiciary to accompany H.J. Res. 499. June 6, 1973. 4 p.
- 32042 263. Amending sec. 2 of act of June 30, 1954, as amended, providing for continuance of civil government for Trust Territory of Pacific Islands. Report from Committee on Interior and Insular Affairs to accompany H.R. 6129. June 7, 1973. 6 p.
- 32043 264. Discriminatory imposts on wine. Report together with minority views from Committee on Interstate and Foreign Commerce to accompany H.R. 2096. June 7, 1973. 18 p.
- 32044 291. Amending sec. 502(a) of Merchant marine act, 1936. Report from Committee on Merchant Marine and Fisheries to accompany H.R. 6187. June 19, 1973. 7 p.
- 32045 315. Authorizing speaker to entertain motions to suspend rules during week of June 25, 1973. Report from Committee on Rules to accompany H. Res. 454. June 21, 1973. 1 p.
- 32046 316. Waiving points of order against bill H.R. 8877 for failure to comply with provisions of clause 2, rule 21. Report from Committee on Rules to accompany H. Res. 455. June 21, 1973. 1 p.
- 32047 317. Providing for consideration of House Joint resolution 542. Report from Committee on Rules to accompany H. Res. 456. June 21, 1973. 1 p.

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32048 324. Public broadcasting. Report together with additional views from Committee on Interstate and Foreign Commerce to accompany H.R. 8538. June 22, 1973. 18 p.
- 32049 325. Amending export administration act of 1969, to protect domestic economy from excessive drain of scarce materials and commodities and to reduce serious inflationary impact of abnormal foreign demand. Report together with supplemental views from Committee on Banking and Currency to accompany H.R. 8547. June 25, 1973. 17 p.
- 32050 332. Providing for consideration of H.R. 8548. Report from Committee on Rules to accompany H. Res. 468. June 26, 1973. 1 p.
- 32051 333. Waiving points of order against bill H.R. 8916. Report from Committee on Rules to accompany H. Res. 469. June 26, 1973. 1 p.
- 32052 361. Making permanent certain provisions of Dependents assistance act of 1950. Conference report to accompany H.R. 8537. June 29, 1973. 4 p.
- 32053 364. Making continuing appropriations. Conference report to accompany H.J. Res. 636. June 30, 1973. 4 p.
- 32054 365. Renegotiation act extension. Conference report to accompany H.R. 7445. June 30, 1973. [3] p.
- 32055 376. Authorizing exchange of certain lands between Pueblo of Acoma and Forest Service. Report from Committee on Interior and Insular Affairs to accompany H.R. 6925. July 16, 1973. 4 p.
- 32056 382. Authorizing Secretary of Interior to engage in feasibility investigation of certain potential water resource developments. Report from Committee on Interior and Insular Affairs to accompany H.R. 6576. July 18, 1973. 6 p.
- 32057 384. Improved manpower management in Federal Government, examples for period July-Dec. 1972. [Report from] Subcommittee on Manpower and Civil Service Committee on Post Office and Civil Service; July 19, 1973. 1973. xlii + 25 p.
- 32058 390. Granting consent of United States to Arkansas River basin compact. Arkansas—Oklahoma. Report from Committee on Interior and Insular Affairs to accompany H.R. 8056. July 23, 1973. 4 p.
- 32059 391. New coinage design and data emblematic of Bicentennial of American Revolution. Report together with supplemental and individual views from Committee on Banking and Currency to accompany H.R. 8789. July 24, 1973. 13 p.
- 32060 392. Federal executive, legislative, and judicial salaries. Report together with separate and minority views from Committee on Post Office and Civil Service to accompany S. 1989. July 24, 1973. 31 p.
- 32061 393. Providing for consideration of bill H.R. 7482. Report from Committee on Rules to accompany H. Res. 503. July 24, 1973. 1 p.
- 32062 394. Providing for consideration of H.R. 8020. Report from Committee on Rules to accompany H. Res. 504. July 24, 1973. 1 p.
- 32063 395. Providing for consideration of H.R. 9286. Report from Committee on Rules to accompany H. Res. 505. July 24, 1973. 1 p.
- 32064 396. Providing for consideration of bill H.R. 9360. Report from Committee on Rules to accompany H. Res. 506. July 24, 1973. 1 p.
- 32065 397. Tax treatment of members of Armed Forces and civilian employees who are prisoners of war or missing in action. Report from Committee on Ways and Means to accompany H.R. 8214. July 24, 1973. 18 p.
- 32066 398. Increases in rates of disability and death pension, and for other purposes. Report from Committee on Veterans' Affairs to accompany H.R. 9474. July 25, 1973. 19 p.
- 32067 400. Emergency eucalyptus assistance. Report together with minority views, additional opposing views, and additional views from Committee on Agriculture to accompany S. 1697. July 25, 1973. 19 p.
- 32068 404. Emergency employment amendments of 1973. Report together with minority views from Committee on Education and Labor to accompany H.R. 7949. July 26, 1973. 32 p.
- 32069 411. Department of Housing and Urban Development; space, science, veterans appropriations, 1974. Conference report to accompany H.R. 8825. July 27, 1973. 10 p. [Corrected print.]
- 32070 413. Fair labor standards amendments of 1973. Conference report to accompany H.R. 7935. July 27, 1973. 35 p.

Agriculture Committee, House Washington, DC 20515

[Committee publications] serial, 93d Congress. † ● Item 1010

- 32071 L. Extension of food for peace program, hearings, 93d Congress, 1st session, Apr. 4 and 5, 1973. 1973. iii + 72 p. Y 4.Ag 8/1: F 73/28
L.C. card 73-602471
- 32072 N. Energy crisis and its effect on agriculture, hearing, 93d Congress, 1st session, May 17, 1973. 1973. iii + 71 p. il. Y 4.Ag 8/1: En 2
L.C. card 73-602775

Appropriations Committee, House Washington, DC 20515

- 32073 Department of Defense appropriations for 1974, hearings before Subcommittee on Department of Defense, 93d Congress, 1st session. Y 4.Ap 6/1: D 36/5/974/pt.3
pt. 3. Testimony of Hyman G. Rickover. 1973. vi + 196 p. † ● Item 1011

ΦFor Sale by National Technical Information Service,
Springfield, VA 22151
●Sent to Depository Libraries

GOVERNMENT PUBLICATIONS

Armed Services Committee, House
Washington, DC 20515

Paper, 93d Congress.

NOTE.—These papers consist largely of hearings. They are paged continuously for binding at the end of session of Congress under title "Hearings before Committee on Armed Services of the House of Representatives on sundry legislation affecting the naval and military establishments." Title page, contents, and index are issued for each volume.

- 32074 17. Subcommittee on Human Relations hearing on U.S. Army retraining brigade. July 26, 1973. 77 p. † ● Item 1012
L.C. card 73-609932 Y 4.Ar 5/2a : 973-74/17

Crime, Select Committee on, House
Washington, DC 20515

- 32075 Street crime in America, hearings, 93d Congress, 1st session, Apr. 9–May 9, 1973. Y 4.C 86/3 : St 8/pt.2
pt. 2. Corrections approaches. 1973. x+647-968 p. il. * Paper, \$2.10 (S/N 5270-01872). ● Item 1009
L.C. card 73-602336

Education and Labor Committee, House
Washington, DC 20515

- 32076 National Foundation on the Arts and the Humanities act amendments, hearings before Select Subcommittee on Education, 93d Congress, 1st session, on H.R. 3926 and H.R. 4288. Y 4.Ed 8/1 : N 21 f/2/973/pt.2
pt. 2. Washington, D.C., Mar. 14-16; New York, N.Y., Mar. 20, 1973. 1973. viii +243 p. il. † ● Item 1015
- 32077 To extend Drug abuse education act, hearings before Select Subcommittee on Education, 93d Congress, 1st session on H.R. 4715, May 21-July 26, 1973. 1973. iv+386 p. il. [Hearings held in Washington, D.C., Miami, Fla., and Millersville, Pa.] † ● Item 1015
L.C. card 73-602661 Y 4.Ed 8/1 : D 84/2/873
- 32078 Vocational rehabilitation services, oversight hearing before Select Subcommittee on Education, 93d Congress, 1st session on future directions of Rehabilitation Services Administration, Aug. 3, 1973. 1973. iii+88 p. † ● Item 1015
L.C. card 73-602735 Y 4.Ed 8/1 : V 85/4

Foreign Affairs Committee, House
Washington, DC 20515

- 32079 Radio Free Europe and Radio Liberty, hearings, 93d Congress, 1st session on H.R. 8144, July 31-Aug. 1, 1973. 1973. iii+107 p. † ● Item 1017
L.C. card 73-602857 Y 4.F 76/1 : R 11/2
- 32080 U.S. Information Agency authorization for fiscal year 1974, hearings before Subcommittee on State Department Organization and Foreign Operations, 93d Congress, 1st session, June 4-July 18, 1973. 1973. iv+204 p. † ● Item 1017
Y 4.F 76/1 : In 3/2/974

Government Operations Committee, House
Washington, DC 20515

- 32081 Immigration and naturalization service regional office operations, hearings before subcommittee, 93d Congress, 1st session. Y 4.G 74/7 : Im 6/3/pt.1
pt. 1. Mar. 27-Apr. 10, 1973. 1973. iii+155 p. il. † ● Item 1016
L.C. card 73-602500

Interior and Insular Affairs Committee, House
Washington, DC 20515

[Committee publications] serial, 93d Congress. ● Item 1023
Y 4.In 8/14 : 93-(nos.)

- 32082 3. National outdoor recreation programs and policies, hearings before Subcommittee on National Parks and Recreation, 93d Congress, 1st session, Mar. 13-23, 1973. 1973. vi+504 p. il. †
L.C. card 73-602649

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32083 12. Oil and natural gas pipeline rights-of-way, hearings before Subcommittee on Public Lands, 93d Congress, 1st session on H.R. 9130, pt. 1, Apr. 11-May 2, 1973. 1973. viii+1-577 p. il. * Paper, \$3.45 (S/N 5270-01931). L.C. card 73-602599
- 32084 17. Proposed Big Cypress Reserve, Fla., hearings before Subcommittee on National Parks and Recreation, 93d Congress, 1st session, on H.R. 46 and H.R. 4866, May 10 and 11, 1973. 1973. vi+210 p. il. † L.C. card 73-602676

Interstate and Foreign Commerce Committee, House Washington, DC 20515

[Committee publication] serial, 93d Congress.† ● Item 1019
Y 4.In 8/4: 93-(nos.)

- 32085 28. Florida power interruptions, Apr. 1973, hearings, before Subcommittee on Communications and Power, 93d Congress, 1st session, causes and effects of complete power failures in southern Florida, Apr. 23-25, 1973. 1973. iv+142 p. il. L.C. card 73-602770
- 32086 29. Regulation of methadone and other narcotic drugs in treatment programs, hearings before Subcommittee on Public Health and Environment, 93d Congress, 1st session, on H.R. 4872 [and other bills], June 18 and 27, 1973. 1973. iv+185 p. il. L.C. card 73-602666

Merchant Marine and Fisheries Committee, House Washington, DC 20515

[Committee publication] serial, 93d Congress.

- 32087 12. Coast Guard miscellaneous, hearings before Subcommittee on Coast Guard and Navigation, 93d Congress, 1st session, on H.R. 9293, H.R. 9575, H.R. 5384 [and] S. 1352, July 31-Aug. 1, 1973. 1973. iii+58 p. † ● Item 1021
L.C. card 73-602682 Y 4.M: 53: 93-12

Post Office and Civil Service Committee, House Washington, DC 20515

[Committee publications], serial, 93d Congress. † ● Item 1022
Y 4.P 84/10: 93-(nos.)

- 32088 16. Employee safety program of United States Postal Service, hearing before Subcommittee on Postal Facilities, Mail, and Labor Management, 93d Congress, 1st session, May 24, 1973. 1973. iii+61 p. L.C. card 73-602761
- 32089 17. Retirement credit for services rendered States and other government instrumentalities, hearing before Subcommittee on Retirement and Employee Benefits, 93d Congress, 1st session on H.R. 4884, June 18, 1973. 1973. iii+70 p. L.C. card 73-602675
- 32090 18. Contracting out of Government work, hearing before Subcommittee on Manpower and Civil Service, 93d Congress, 1st session, May 31, 1973. 1973. iii+44 p. L.C. card 73-602743
- 32091 21. Federal employee assistance in reduction in force, hearings before Subcommittee on Retirement and Employee Benefits, 93d Congress, 1st session on H.R. 7331, June 5-8, 1973. 1973. iii+146 p. L.C. card 73-602668

Public Works Committee, House Washington, DC 20515

[Committee publication], 93d Congress.

- 32092 17. Implementation of Federal water pollution control act, hearing before Subcommittee on Investigations and Review, 93d Congress, 1st session, June 14, 1973. 1973. v+51 p. † ● Item 1024
L.C. card 73-602853 Y 4.P 96/11: 93-17

Science and Astronautics Committee, House Washington, DC 20515

[Paper] 93d Congress.

- 32093 1. 1974 NASA authorization, hearings, 93d Congress, 1st session on H.R. 4567 (superseded by H.R. 7528). L.C. card 73-601652 Y 4.Scl 2: 93-1/1/ind.
Index for pts. 1-4. 1973. ii+282 p. † ● Item 1025-A

✦For Sale by National Technical Information Service,
Springfield, VA 22151
●Sent to Depository Libraries

GOVERNMENT PUBLICATIONS

- 32094 Remote sensing of earth resources, compilation of papers prepared for 13th meeting of panel on science and technology, 1972. [1973.] ix+224 p. il.
* Paper, \$1.25.
L.C. card 73-602918
Y 4.Sci 2: R 28

Ways and Means Committee, House Washington, DC 20515

- 32095 General tax reform (testimony from Administration and public witnesses), public hearings, 93d Congress, 1st session, Mar. 5-May 1, 1973. 1973.
● Item 1028
L.C. card 73-602852
Y 4.W 36: T 19/66/pt. (nos.)
pt. 3. Mar. 12, 13, 1973. xlv+993-1390 p. il. * Paper, \$2.90 (S/N 5270-01975).
pt. 9. Mar. 29, 1973. xlv+3717-4077 p. il. * Paper, \$2.70 (S/N 5270-01981).
pt. 10. Mar. 30 [and] Apr. 2, 1973. xlv+4079-4451 p. il. * Paper, \$2.75 (S/N 5270-01982).
pt. 12. Apr. 4, 1973. xlv+4747-5038 p. * Paper, \$2.30 (S/N 5270-01984).
32096 Trade reform, hearings, 93d Congress, 1st session on H.R. 6767, May 9-June 15, 1973. 1973.
L.C. card 73-602382
Y 4.W 36: T 67/27/pt.9
pt. 9. May 24-29, 1973. xxv+2839-3110 p. * Paper, \$2.10 (S/N 5270-01916).
● Item 1028

SENATE Washington, DC 20510

Senate documents

NOTE.—All Senate documents, entries for which are followed by a †, may be obtained from the Senate Document Room or from the issuing office.

Senate documents, 93d Congress.

- 32097 26. Budget amendments, fiscal year 1974, communication from President of United States transmitting proposed amendments to request for appropriations transmitted in budget for fiscal year 1974 for Department of State and Arms Control and Disarmament Agency; July 23, 1973. [1973.] 3 p. †
● Item 996

Senate executive document

- 32098 Senate executive document, 93d Congress, 1st session.

T. Convention with Union of Soviet Socialist Republics on matters of taxation, message from the President transmitting convention with related letters, signed, Washington, June 20, 1973; Sept. 19, 1973. 1973. vi+9 p. †
Y 1.93/1: T

Senate executive report

Senate executive report, 93d Congress, 1st session.

- 32099 15. Nomination of Henry A. Kissinger. Report together with additional views of Senator Muskie on nomination of Henry A. Kissinger from Committee on Foreign Relations. Sept. 19, 1973. 14 p. †
Y 1.93/1: rp.15

Senate reports

NOTE.—For titles of bills which these reports accompany, see Congressional record index.

Senate reports on public bills, 93d Congress. † Senate Documents Room, Capitol. ● Item 1008-A

- 32100 131. National Institute of Health Care Delivery Act of 1973. Report from Committee on Labor and Public Welfare to accompany S. 723. Apr. 27, 1973. 29 p.
32101 196. United Nations environment program participation act of 1973. Report from Committee on Foreign Relations to accompany H.R. 6768. June 5, 1973. 26 p.
32102 233. Authorizing appropriations for procurement of vessels and aircraft and construction of shore and offshore establishments. Report from Committee on Commerce to accompany H.R. 5383. June 20, 1973. 10 p.
32103 236. Planning of transit lines to Dulles and Friendship Airports. Report from Committee on Commerce to accompany S. 2047. June 21, 1973. 5 p.
32104 237. Senate confirmation of Director and Deputy Director of Office of Management and Budget. Report from Committee on Government Operations to accompany S. 37. June 21, 1973. 16 p.
32105 239. Railroad retirement amendments of 1973. Conference report to accompany H.R. 7200. June 22, 1973. 14 p.

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32106 240. Renegotiation amendments of 1973. Report from Committee on Finance to accompany H.R. 7445. June 22, 1973. 6 p.
- 32107 245. International voyage load line act of 1973, report of Senate Committee on Commerce on S. 1352; [June 25, 1973]. 1973. [1]+11 p.
- 32108 250. Corps of Engineers user fees. Report from Committee on Public Works to accompany H.R. 6717. June 25, 1973. 4 p.
- 32109 252. Publication of material relating to constitutional rights of Indians. Report from Committee on Judiciary to accompany S. 969. June 26, 1973. 10 p.
- 32110 255. Exemption of Federal Judiciary from charges for space and services. Report from Committee on Public Works to accompany S. 2079. June 26, 1973. 11 p.
- 32111 259. Maritime authorization, fiscal year 1974. Report from Committee on Commerce to accompany H.R. 7670. June 27, 1973. 13 p.
- 32112 261. Authorizing Public Printer to adopt an official Government Printing Office seal, and to designate employees to administer oaths. Report from Committee on Rules and Administration to accompany S. 1795. June 27, 1973. 4 p.
- 32113 262. Relating to certain authority of Joint Committee on Printing. Report from Committee on Rules and Administration to accompany S. 1802. June 27, 1973. 4 p.
- 32114 311. Domestic volunteer service act of 1973. Report from Committee on Labor and Public Welfare to accompany S. 1148. July 11, 1973. 133 p.
- 32115 324. Full opportunity and national goals and priorities act. Report together with minority views from Committee on Labor and Public Welfare to accompany S. 5. July 18, 1973. 20 p.
- 32116 325. Emergency medical services systems act of 1973. Conference report to accompany S. 504. July 19, 1973. 29 p.
- 32117 326. Authorizing additional expenditures by Committee on Interior and Insular Affairs for routine purposes. Report from Committee on Rules and Administration to accompany S. Res. 137. July 19, 1973. 2 p.
- 32118 327. Authorizing additional expenditures by Committee on Interior and Insular Affairs. Report from Committee on Rules and Administration to accompany S. Res. 140. July 19, 1973. 2 p.
- 32119 328. Authorizing printing of additional copies of House report entitled Drugs in our schools. Report from Committee on Rules and Administration to accompany H. Con. Res. 258. July 19, 1973. 1 p.
- 32120 340. Senate confirmation of certain Federal offices. Report from Committee on Interior and Insular Affairs to accompany S. 1828. July 23, 1973. 3 p.
- 32121 342. Reclamation feasibility study, McGee Creek Reservoir, Okla. Report from Committee on Interior and Insular Affairs to accompany S. 2075. July 24, 1973. 5 p.
- 32122 344. Emergency rail services act amendments of 1973. Report from Committee on Commerce to accompany S. 2060. July 24, 1973. 14 p.
- 32123 371. Amending District of Columbia election law. Report from Committee on District of Columbia to accompany H.R. 6713. Aug. 1, 1973. 11 p.

Aging, Special Committee on, Senate

Washington, DC 20510

- 32124 Barriers to health care for older Americans, hearings before Subcommittee on Health of the Elderly, 93d Congress, 1st session.
L.C. card 73-602498 Y 4.Ag 4: H 34/14/pt.2
pt. 2. Mar. 6, 1973. 1973. iii+123-201 p. * Paper, 70c. (S/N 5270-01954).
● Item 1009
- 32125 Future directions in social security, hearings, 93d Congress, 1st session.
L.C. card 73-601751 Y 4.Ag 4: So 1/2/pt.2
pt. 2. Jan. 22, 1973. 1973. iii+95-164 p. ii. * Paper, 50c. (S/N 5270-01802).
● Item 1009

Agriculture and Forestry Committee, Senate

Washington, DC 20510

- 32126 Agricultural trade and proposed round of multilateral negotiations report for Council on International Economic Policy; Apr. 30, 1973. 1973. ix +241 p. (Committee print, 93d Congress, 1st session.) †
L.C. card 73-602534 Y 4.Ag 8/8: T 67
- 32127 Export control policy, report of Subcommittee on Foreign Agricultural Policy; July 30, 1973. 1973. iii+52 p. (Committee print, 93d Congress, 1st session.) †
L.C. card 73-602533 Y 4.Ag 8/2: Ex 7/6
- 32128 Extension of farm and related programs, hearings, 93d Congress, 1st session, on S. 517.
L.C. card 73-601655 Y 4.Ag 8/2: F 22/51/pt.4
pt. 4. Ames, Iowa, Apr. 19, 1973. 1973. v+186 p. i. † ● Item 1032

ΦFor Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 15

GOVERNMENT PUBLICATIONS

- 32129 Report on agriculture in Australia and New Zealand by Carl T. Curtis pursuant to trip Apr. 15-29, 1973; July 17, 1973. 1973. iv+13 p. (Committee print, 93d Congress, 1st session.) †
L.C. card 73-602377 Y 4.Ag 8/2: Au 7
- 32130 Report on proposal to abolish certain regional offices and to consolidate and change regional boundaries of Forest Service, Department of Agriculture, report of Subcommittee on Environment, Soil Conservation, and Forestry; June 27, 1973. 1973. xiii+45 p. il. (Committee print, 93d Congress, 1st session.) †
L.C. card 73-602542 Y 4.Ag 8/2: F 76/14

Appropriations Committee, Senate Washington, DC 20510

- 32131 District of Columbia appropriations, fiscal year 1974, hearings before subcommittee, 93d Congress, 1st session, on H.R. 8658.
Y 4.Ap 6/2: D 63/974/pt.2
pt. 2. 1973. ii+1121-1825+xii p. il. † ● Item 1033
- 32132 Foreign assistance and related programs appropriations, fiscal year 1974, hearings before subcommittee, 93d Congress, 1st session. † ● Item 1033
L.C. card 73-602934 Y 4.Ap 6/2: F 76/7/974/pt. (nos.)
pt. 1. ACTION (Peace Corps); Agency for International Development; Department of Health, Education, and Welfare: Assistance to Refugees in United States (Cuban Program); Department of State: Administrative and other expenses, Inspector General of Foreign Assistance, Migration and Refugee Assistance; Department of Treasury: Contributions to international financial institutions, Foreign currency operations; Export-Import Bank of United States; General Accounting Office, Inter-American Foundation; nondepartmental witnesses; Overseas Private Investment Corporation, 1973. ii+779+xxil p. il.
pt. 2. Agency for International Development (continued): Bureau for Population and Humanitarian Assistance, Bureau of International Organization Affairs, Indochina Poverty War Reconstruction, International Narcotics Control; Department of Defense: Defense Security Assistance Agency, Foreign Military Assistance Program; nondepartmental witnesses, appendices 1-6. 1973. ii+781-1615+xxil p. il.
- 32133 Military construction authorization, fiscal year 1974, joint hearing. See Armed Services Committee, Senate.
- 32134 Public works for water and power development and Atomic Energy Commission appropriations, fiscal year 1974, hearings before subcommittee, 93d Congress, 1st session, on H.R. 8947. Y 4.Ap 6/2: P 96/3/974/pt.4
pt. 4. Atomic Energy Commission. 1973. ii+3717-4727+xii p. il. † ● Item 1033
- 32135 Treasury, Postal Service, and general Government appropriations, fiscal year 1974, hearings before subcommittee, 93d Congress, 1st session, on H.R. 9590. Y 4.Ap 6/2: T 71/974/pt.1
pt. 1. Administrative Conference of United States; Advisory Commission on Intergovernmental Relations; Advisory Committee on Federal Pay; Committee for Purchase of Products and Services of the Blind and Other Severely Handicapped; Commission to Review National Policy Toward Gambling; Department of Defense: Defense Civil Preparedness Agency; Department of Health, Education, and Welfare: Health Services and Mental Health Administration; Department of Treasury: Internal Revenue Service; Executive Office of the President; Council of Economic Advisers; U.S. Tax Court. 1973. ii+1065+xxlii p. il. † ● Item 1033

Armed Services Committee, Senate Washington, DC 20510

- 32136 Military construction authorization, fiscal year 1974, joint hearing before Subcommittees on Military Construction of Committee on Armed Services and Committee on Appropriations, 93d Congress, 1st session, on S. 1797, Aug. 6, 1973. 1973. ii+319 p. † ● Item 1034 & 1033
L.C. card 73-602777 Y 4.Ar 5/3: C 76/9/974

Banking, Housing, and Urban Affairs Committee, Senate Washington, DC 20510

- 32137 Flood insurance and disaster assistance, hearings before Subcommittee on Housing and Urban Affairs, 93d Congress, 1st session on S. 269, S. 390, S. 1495, S. 1840 and S. 1889, June 11-15, 1973. 1973. v+432 p. il. †
● Item 1035
L.C. card 73-602855 Y 4.B 22/3: F 65/6

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32138 FTC jurisdiction over financial institutions and truth-in-savings legislation, hearings before Subcommittee on Consumer Credit, 93d Congress, 1st session on S. 356 [and] S. 1052, June 6 and 7, 1973. 1973. iv+513 p. il. * Paper, \$3.30 (S/N 5270-01953). ● Item 1035
L.C. card 73-602652 Y 4.B 22/3: F 49/7
- 32139 Inaccurate and unfair billing practices, hearings before Subcommittee on Consumer Credit, 93d Congress, 1st session on S. 1630 and S. 914, May 21-24, 1973. 1973. v+460 p. il. † ● Item 1035
L.C. card 73-602664 Y 4.B 22/3: B 49
- 32140 National Commission on Consumer Finance, hearings before Subcommittee on Consumer Credit, 93d Congress, 1st session, on report of National Commission on Consumer Finance, May 17 and 18, 1973. 1973. iii+212 p. il. † ● Item 1035
L.C. card 73-602667 Y 4.B 22/3: N 21/8

Commerce Committee, Senate Washington, DC 20510

- [Committee publication] serial, 93d Congress.
L.C. card 73-602658 Y 4.C 73/2: 93-21
- 32141 21. Oversight hearing on noise control act, hearing before Subcommittee on Aviation, 93d Congress, 1st session, Mar. 30, 1973. 1973. iii+183 p. il. † ● Item 1041
- 32142 Materials discussing proposed legislative program to meet midwest and northeast rail crisis, prepared at request of Chairman of Surface Transportation Subcommittee. 1973. iii+18 p. (Committee print.) †
L.C. card 73-602546 Y 4.C 73/2: R 13/4

District of Columbia Committee, Senate Washington, DC 20510

- 32143 Insurance regulation and election law amendments, hearings before Subcommittee on Business, Commerce, and Judiciary, 93d Congress, 1st session on H.R. 4083 [and] H.R. 6713, July 17, 1973. 1973. iv+127 p. † ● Item 1036
L.C. card 73-602499 Y 4.D 63/2: In 7/6
- 32144 Rent control act of 1973, hearing before Subcommittee on Public Health, Education, Welfare, and Safety, 93d Congress, 1st session on H.R. 4771, July 24, 1973. 1973. iv+90 p. il. 4° † ● Item 1036
L.C. card 73-602856 Y 4.D 63/2: R 29/7

Finance Committee, Senate Washington, DC 20510

- 32145 Private pension, plan reform, hearings before Subcommittee on Private Pension Plans, 93d Congress, 1st session, May 21-June 12, 1973.
L.C. card 73-602353 Y 4.F 49: P 38/7/pt.1
pt. 1. May 21-23, 1973. 1973. vi+617 p. il. * Paper, \$3.20 (S/N 5270-01886).
● Item 1038

Government Operations Committee, Senate Washington, DC 20510

- 32146 Organized crime, securities, thefts and frauds (2d series) hearings before Permanent Subcommittee on Investigations, 93d Congress, 1st session, pursuant to sec. 4, Senate resolution 46, 93d Congress.
L.C. card 73-602913 Y 4.G 74/6: C 86/2/973/pt.1
pt. 1. June 29 and July 13, 1973. 1973. iv+122 p. * Paper, \$1.15 (S/N 5270-01970). ● Item 1037

Interior and Insular Affairs Committee, Senate Washington, DC 20510

- 32147 Realignment of Bureau of Indian Affairs central office, hearings before Subcommittee on Indian Affairs, 93d Congress, 1st session, June 25 and July 10, 1973. 1973. iii+266 p. † ● Item 1040
L.C. card 73-602665 Y 4.In 8/13: In 2/24

♣For Sale by National Technical Information Service,
Springfield, VA 22151
●Sent to Depository Libraries

GOVERNMENT PUBLICATIONS

Judiciary Committee, Senate

Washington, DC 20510

- 32148 American Revolution Bicentennial Administration, hearings before Subcommittee on Federal Charters, Holidays, and Celebrations, 93d Congress, 1st session, on H.R. 7446, July 11, 1973. 1973. iii+54 p. † ● Item 1042
L.C. card 73-602773 Y 4.J 89/2: Am 3/4
- 32149 Judicial review of decisions of Interstate Commerce Commission, hearing before Subcommittee on Improvements in Judicial Machinery, 93d Congress, 1st session on S. 663, July 19, 1973. 1973. iii+36 p. † ● Item 1042
L.C. card 73-602854 Y 4.J 89/2: J 89/20/973
- 32150 Warrantless wiretapping, hearings before Subcommittee on Administrative Practice and Procedure, 92d Congress, 2d session, on practices and procedures of Department of Justice for warrantless wiretapping and other electronic surveillance, June 29, 1972. 1973. iv+221 p. † ● Item 1042
L.C. card 73-602734 Y 4.J 89/2: W 74/7

Nutrition and Human Needs, Select Committee on, Senate

Washington, DC 20510

- 32151 School food program needs, State school food service directors' response, working paper, prepared by Staff; Sept. 1973. 1973. iv+79 p. (Committee print, 93d Congress, 1st session.) * Paper, 80c. (S/N 5270-01992).
L.C. card 73-602731 Y 4.N 95: Sch 6

Post Office and Civil Service Committee, Senate

Washington, DC 20510

- 32152 Postal oversight, hearings, 93d Congress, 1st session. 1973.
L.C. card 73-601461 Y 4.P 84/11: P 84/24/pt.
pt.2. July 25-31, 1973. iv+364 p. II. * Paper, \$2.50 (S/N 5270-01943). ● Item 1044

Public Works Committee, Senate

Washington, DC 20510

- [Committee publications] serial, 93d Congress. † ● Item 1045
Y 4.P 96/10: 93-(nos.)

- 32153 H 8. Impact of growth on environment, hearings before Subcommittee on Air and Water Pollution, 93d Congress, 1st session, Apr. 2 and 3, 1973. 1973. III+158 p. II.
L.C. card 73-602785
- 32154 H 11. River basin authorizations and related water resource projects, hearings before Subcommittee on Water Resources, 93d Congress, 1st session, Apr. 30-May 30, 1973. x+1076 p. [Hearings held in Washington, D.C. and Noblesville, Ind.]
L.C. card 73-602722

Small Business, Select Committee on, Senate

Washington, DC 20510

- 32155 Commission on Government Procurement recommendations and labor surplus area procurement, hearings before Subcommittee on Government Procurement, 93d Congress, 1st session May 17 and 18, 1973. 1973. iv+311 p. † ● Item 1049
L.C. card 73-602653 Y 4.Sm 1/2: P 94/14

COPYRIGHT OFFICE, Library of Congress

Washington, DC 20540

- 32156 Catalog of copyright entries, 3d series, v. 26. * Paper, \$50.00 a yr. (including semiannual issues for pts. 1-13); \$12.50 additional for foreign mailing. ● Item 800 LC 3.6/5: v.26/pt.12-13/no.2
pts. 12-13, no. 2. Motion pictures and filmstrips, July-Dec. 1972. 1973. x+95-165 p. 4° (for parts 12-13 only). * Paper, \$5.00 a yr., \$1.25 additional for foreign mailing; single copy \$2.50.

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

COST OF LIVING COUNCIL, Executive Office of the President
Washington, DC 20416

Economic stabilization program.

- 32157 Phase 4, Insurance, health and procedural regulations, Aug. 10, 1973. 31 p. 4° [Pages 28-31 left blank for notes.] * Paper, 40c. (S/N 4114-00018). ● Item 857-L-1
L.C. card 73-602488 PrEx 17.10: In 7

COUNCIL ON ENVIRONMENTAL QUALITY, Executive Office
of the President, 722 Jackson Pl. NW.
Washington, DC 20036

- 32158 Energy and environment, electric power; prepared by Council on Environmental Quality. Aug. 1973. vi+58 p. il. 4° [List of publications on p. 2 of cover.] * Paper, 85c. (S/N 4111-00019). ● Item 856-E
L.C. card 73-602567 PrEx 14.2: En 8/4
- 32159 Environmental quality, 4th annual report of Council on Environmental Quality. Sept. 1973. xxxiii+499 p. il. * Paper, \$4.30 (S/N 4111-00020).
● Item 856-E-1 PrEx 14.1: 973

CUSTOMS BUREAU, Treasury Dept.
Washington, DC 20226

- 32160 Customs regulations, 147th set of revised pages to customs regulations, Apr.-May 1973. 1973. [70] p. 4° [Includes amendments made by Treasury Decisions 73-78 through 73-139; TD 73-135 adds pt. 145. Issued with perforations.] * Paper, \$28.50 (including basic book and revised pages for an indefinite period); \$7.25 additional for foreign mailing. ● Item 948-A
T 17.9: 971/rev. pages 147

DEFENSE DEPARTMENT
Washington, DC 20301

- 32161 Cataloging manual M (series). (Defense Supply Agency, Defense Logistics Services Center.) [Issued with perforations.]
Federal manual for supply cataloging; Chap. 2, May 1972, [Item Identification], Change 2, June 1, 1973. [41] p. 4° ([Army Dept.] AR 708-12; [General Services Administration] GSA-FSS M 1-2.) * Paper, 70c. ● Item 314-A
D 7.6/3: 1-2/7/ch.2
- 32162 Defense disposal manual (restructured). June 1973. cover title, [514] p. 4° (DoD 4160.21-M; [Defense Supply Agency], Office of Assistant Secretary of Defense (Installations and Logistics.) [Supersedes DoD 4160.21-M, Apr. 1967, and changes 1-28. Issued with perforations.] * Paper, \$5.30.
● Item 314-A D 7.6/4: D 63/2

Defense Supply Agency manual DSAM (series).

- 32163 7000.1. Accounting and finance manual, Jan. 12, 1965, Change 38. Aug. 17, 1973. [107] p. 4° [Issued with perforations.] ‡ ● Item 314-A
D 7.6/8: 7000.1/ch.38
- 32164 Federal item identification guide: Ballasts and starters, July 10, 1970, Change 1. Sept. 21, 1973. [10] p. 4° (INTERIM FIIG T316; Defense Supply Agency, Defense Logistics Service Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 25c. ● Item 314-A
D 7.6/4: B 21/ch.1
- 32165 — Bands, neckwear, and handkerchiefs. Mar. 5, 1971, Change 3. Sept. 12, 1973. [33] p. 4° (INTERIM FIIG T120; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 45c. ● Item 314-A
D 7.6/4: B 22/2/ch.3
- 32166 — Defectors, Nov. 6, 1970, Change 1. Sept. 21, 1973. [50] p. il. 4° (FIIG A237; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 60c. ● Item 314-A
D 7.6/4: D 36/ch.1

GOVERNMENT PUBLICATIONS

- 32167 — Electrical control equipment, Apr. 24, 1970, Change 1. July 20, 1973. [79] p. 4° (FIIG T173; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, \$1.05. ● Item 314-A D 7.6/4: E1 2/4/ch.1
- 32168 — Gears and gear clusters, June 11, 1971, Change 2. Sept. 7, 1973. [138] p. il. 4° (FIIG A270; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, \$1.45. ● Item 314-A D 7.6/4: G 26/ch.2
- 32169 — Hazard-detecting instruments and apparatus, Oct. 9, 1970, Change 2. Aug. 29, 1973. [58] p. 4° (Interim FIIG T132; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 75c. ● Item 314-A D 7.6/4: H 33/ch.2
- 32170 — Household and commercial utility containers, Feb. 26, 1971, Change 1. Aug. 31, 1973. [64] p. 4° (INTERIM FIIG T254; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, \$1.00. ● Item 314-A D 7.6/4: H 81/ch.1
- 32171 — Miscellaneous waxes, oils, and fats, May 14, 1971, Change 3. July 18, 1973. [37] p. 4° (FIIG T097; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 60c. ● Item 314-A D 7.6/4: W 36/2/ch.3
- 32172 — Pest control agents and disinfectants, June 4, 1971, Change 2. Sept. 7, 1973. [42] p. 4° (Interim FIIG T090; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 60c. ● Item 314-A D 7.6/4: P 43/ch.2
- 32173 — Sets, kits and outfits, Aug. 7, 1970, Change 4. Apr. 11, 1973. [83] p. il. 4° (FIIG A238; Defense Supply Agency, Defense Logistics Service Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, \$1.00. ● Item 314-A D 7.6/4: Se 7/ch.4
- 32174 — Shaft collars and hub clamps, Sept. 5, 1969, Change 3. Aug. 22, 1973. [47] p. il. 4° (FIIG A231; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 70c. ● Item 314-A D 7.6/4: Sh 1/ch.3
- 32175 — Strainer elements, June 5, 1970, Change 3. Aug. 31, 1973. [15] p. il. 4° (FIIG A098; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 35c. ● Item 314-A D 7.6/4: St 8/2/ch.3
- 32176 — Tableware, Aug. 28, 1970, Change 2. Aug. 31, 1973. [44] p. 4° (FIIG T106; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 60c. ● Item 314-A D 7.6/4: T 11/ch.2
- 32177 — Tents and tarpaulins, July 24, 1970, Change 2. Aug. 27, 1973. [59] p. 4° (INTERIM FIIG T152; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 75c. ● Item 314-A D 7.6/4: T 26/ch.2
- 32178 — Underwater sound equipment, Apr. 23, 1971, Change 3. Aug. 27, 1973. [89] p. 4° (INTERIM FIIG T212; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, \$1.15. ● Item 314-A D 7.6/4: Un 2/ch.3
- 32179 — Welding and heat treating equipment, May 14, 1971, Change 3. Sept. 4, 1973. [80] p. il. 4° (INTERIM FIIG T345; Defense Supply Agency, Defense Logistics Services Center, Battle Creek, Mich.) [Issued with perforations.] * Paper, 90c. ● Item 314-A D 7.6/4: W 45/2/ch.3
- 32180 [MILSTRIP], supp. 2, Military assistance program address directory, Sept. 1, 1973, Change 11. Aug. 1, 1973. [67] p. 4° (DoD 4140.17-M; Defense Supply Agency.) [Issued with perforations.] * Paper, 85c. ● Item 314-A D 7.6/4: M 59/supp.2/rev.-6/ch.11

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32181 1973-74 counselor's manual: v. 2, Armed services vocational aptitude battery. [1973.] 63 p. il. 4° (DoD 1304.12Y; [Armed Forces Vocational Testing Group, Randolph Air Force Base, Tex.]) [Illustration on cover is colored.] † ● Item 306-A D 1.6/2: Ar 5/973-74/v.2

DEFENSE MAPPING AGENCY, Defense Dept. Washington, DC 20305

NOTE.—The Defense Mapping Agency was established as an agency of the Department of Defense on Jan. 1, 1972, under the provisions of National Security Act of 1947, as amended.

Publication. (Hydrographic Center.)

- 32182 156. Change 1, Aug. 4, 1973, Loose leaf change pages for correcting sailing directions for Japan, 1st edition, 1972. [1973.] [88] p. il. 4° [Includes list of effective pages. Issued with perforations.] * Paper, \$1.75. ● Item 378 (Rev. 1957) D 5.317: 156/ch.1

DOMESTIC AND INTERNATIONAL BUSINESS ADMINISTRATION, Commerce Dept., Washington, DC 20230

NOTE.—The Domestic and International Business Administration was established within the Department of Commerce by Dept. Organization Order 40-1, effective Nov. 17, 1972.

Overseas business reports OBR (series). [Issued irregularly.] * Paper, \$28.50 a yr., \$7.25 additional for foreign mailing; single copy, 30c. 1-3 yr. subs.). ● Item 231-B C 57.11: (nos.)

- 32183 73-37. Foreign trade regulations of Thailand; prepared by Joseph E. Payne, jr. Aug. 1973. 8 p. 4° [Issued with perforations.]
32184 73-38. International economic indicators, quarterly report; [prepared by International Trade Analysis Staff, Bureau of International Commerce]. Aug. 1973. 42 p. il. 4° [Issued with perforations.]
32185 73-39. Establishing business in Turkey [with bibliography]; prepared in Near-East-South Asia Division, Bureau of International Commerce. Aug. 1973. 19 p. 4° [Issued with perforations. Supersedes OBR 70-62.]

DRUG ENFORCEMENT ADMINISTRATION, Justice Dept. Washington, DC 20591

NOTE.—The name of Narcotics and Dangerous Drugs Bureau has been changed to Drug Enforcement Administration, effective July 1, 1973.

- 32186 Drug abuse education in pharmacy schools; prepared by Marc G. Kurzman. [1973.] [21+ii+77 p. 4° [Report prepared by American Association of Colleges of Pharmacy.] † ● Item 967 J 24.2: P 49]

ECONOMIC RESEARCH SERVICE, Agriculture Dept. Washington, DC 20250

- 32187 Energy, natural resources and research in agriculture, effects on economic growth and productivity for U.S. [with list of references]; by George A. Pavelis. Aug. 1, 1973. iii+41 p. il. 4° † ● Item 42-H A 93.2: En 2
L.C. card 73-602920

ERS (series). † ● Item 42-I A 93.21: (nos.)

- 32188 517. Costs of storage and selected services for farmers' stock peanuts in commercial facilities, 1971/72; [by N. A. Wynn, jr. and Joan Pearrow]. [Aug. 1973.] cover title, ii+47 p. il. 4° [Text on inside of back cover.]
32189 526. Horticultural service businesses, dollar volumes and State rankings; [by Richard Hall and Stephen M. Raleigh, jr.] [Aug. 1973.] ii+10 p. il. 4°
32190 527. Farm mortgage characteristics, Jan.-June 1971 and historical data, 1961-69 [with list of literature cited; by Forest G. Warren and Nan P. Mitchem]. [Aug. 1973.] cover title, iv+52 p. il. 4° [Text on p. 2 of cover.]
L.C. card 73-602928

ERS-foreign (series).

- 32191 351. Agricultural situation in Western Hemisphere, review of 1972 and outlook for 1973. [Apr. 1973.] [1]+ii+33 p. il. 4° † ● Item 76-G A 93.21/2: 351
32192 Farm income state estimates 1959-72. Aug. 1973. 112 p. il. 4° (FIS 222/supp.) † ● Item 21-C A 93.9: 222/supp.
32193 Farm mortgage debt; prepared by Forest G. Warren and Nan P. Mitchem. Sept. 1973. 11 p. il. 4° (FMD-12.) † ● Item 42-A A 93.9/12: 12

☐For Sale by National Technical Information Service
Springfield, VA 22151

●Sent to Depository Libraries

Page 21

GOVERNMENT PUBLICATIONS

EDUCATION OFFICE, Health, Education, and Welfare Dept. Washington, DC 20202

- 32194 Adult basic education program statistics, students and staff data, July 1, 1970-June 30, 1971, and selected summaries of fiscal years 1967-71; by Nicholas A. Osso. [1973.] vi+28 p. 4° (DHEW publication (OE) 73-11413; National Center for Educational Statistics.) [At head of title on cover: Adult education.] * Paper, 55c. ● Item 460-A-13
HE 5.97: 970-71
- 32195 Directory of representative work education programs, 1972-73; edited by Steven M. Frankel, Alan J. Cohen, Mary Ann Milsap. [1973.] xii+323 p. oblong, 8° (DHEW publication (OE) 74-01701; Office of Planning, Budgeting, and Evaluation.) * Paper, \$2.95 (S/N 1780-01244). ● Item 461 (Rev. 1965)
HE 5.2: W 89/2: 972-73
- National assessment of educational progress, project of Education Commission of States: Reports.
- 32196 02-L-03. Recognizing literary works and characters, theme 3, literature, Errata sheet. Apr. 1973. 1 p. 4° † ● Item 461 (Rev. 1965)
HE 5.2: As 7/rp.02-L-03/errata
- 32197 Opportunities abroad for teachers, 1974-75, teaching, seminars. [1973.] [3]+27 p. (DHEW publication (OE) 74-19300; Institute of International Studies.) * Paper, 40c. ● Item 460-A-14 HE 5.99/2: 974-75

ENGINEERS CORPS (Army), Defense Dept.

NOTE.—Orders or requests for publications listed below which are not sold by the Superintendent of Documents should be sent to the preparing and issuing office indicated. Address requests to the U.S. Army Corps of Engineers and add the city and state shown. Publications shown as initiated and issued by the Chief of Engineers should be sent to: Office of the Chief of Engineers, Publications Depot, 890 Pickett Street, Alexandria, VA 22304.

- Cold Regions Research and Engineering Laboratory: Research report.
- 32198 309. Isua, Greenland, calculations of glacier flow for open-pit mine [with list of literature cited; by] Samuel C. Colbeck. July 1973. v+25 p. il. 4° †
D 103.33/3: 309
- Cold regions science and engineering monograph [pt. 3, Engineering].
(Cold Regions Research and Engineering Laboratory, Hanover, N.H.)
- 32199 3-D3. Icings developed from surface water and ground water [with selected bibliography; by] Kevin L. Carey. May 1973. vi+67 p. il. 4° (DA project 4A062112A894.) †
D 103.33/7: 3-D3
- Construction Engineering Research Laboratory: Technical manuscript.
- 32200 S-13. Keyed joint performance under heavy load aircraft [with bibliography]; by J. L. Rice. Aug. 1973. cover title, iii+11 p. il. 4° † (Price upon application).
D 103.53/2: S-13
- Construction Engineering Research Laboratory: Technical reports.
‡ (Price upon application). D 103.53: (letters-nos.)
- 32201 D-9. Methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall at Chanute AFB [with list of references]; by Charles C. Lozar. June 1973. v+23 + [1] p. il. 4°
D 103.53: D-9
- 32202 S-23. Guide for design of shock isolation systems for ballistic missile defense facilities [with list of cited references]; by Robert E. Crawford, Cornelius J. Higgins, Edward H. Bultmann, jr. Aug. 1973. cover title, xvi +388 p. il. 4°
- 32203 Flood plain information: Alamo and Ulati Creeks, Vacaville, Calif. June 1973. cover title, [3]+ii+44 p. il. 16 pl. 4° [Prepared for Solano County by Department of Army, Sacramento District Corps of Engineers, Sacramento, Calif.] †
D 103.47: V 13
- 32204 — Agua Hedionda Creek. Pacific Ocean to Buena, San Diego County, Calif. July 1973. cover title, [3]+i+24 p. il. 16 pl. 4° [Prepared for San Diego County by Department of Army, Los Angeles District, Corps of Engineers, Los Angeles, Calif.] †
D 103.47: Sa 5 d/5
- 32205 — Ashuelot River, city of Keene, N.H. Dec. 1972. cover title, [3]+i+26 p. il. 3 pl. 4° [Prepared for town of Keene, Department of Army, New England Division, Corps of Engineers, Waltham, Mass.] †
D 103.47: K 25

*For Sale by Superintendent of Documents
†Distribution Made by Issuing Office
‡Not Available for Sale or Distribution

DECEMBER 1973

- 32206 — Brookings, Brookings County, S. Dak.: v. 1, Deer Creek, Apr. 1973. cover title, [4]+i+30 p. il. 10 pl. 4° [Prepared for South Dakota Water Resources Commission and city of Brookings by Department of Army, Omaha District, Corps of Engineers.] ‡ D 103.47: B 79/2/v.1
- 32207 — Casper, Wyo.: v. 3, North Platte River. Mar. 1973. cover title, [3]+i+27 p. il. 13 pl. 4° [Prepared for city of Casper by Department of Army, Omaha District, Corps of Engineers, Omaha, Neb.] ‡ D 103.47: C 27/v.3
- 32208 — Choctawhatchee River, Pea River, Double Bridges Creek, city of Geneva, Ala. June 1973. cover title, [3]+i+28 p. il. 17 pl. 4° [Prepared for city of Geneva by Department of Army, Mobile District, Corps of Engineers, Mobile, Ala.] ‡ D 103.47: G 28/2
- 32209 — Cibolo Creek, vicinity of Universal City and Schertz, Tex. Apr. 1973. cover title, iv+34 p. il. 12 pl. 4° [Prepared for cities of Universal City, Schertz, Cibolo and Selma, and San Antonio River Authority by Corps of Engineers, U.S. Army, Fort Worth, Tex., District.] ‡ D 103.47: Un 3
- 32210 — Coastal areas, Sarasota County, Fla. May 1973. cover title, [3]+i+28 p. il. 16 pl. 4° [Prepared for Board of County Commissioners of Sarasota County by Corps of Engineers, U.S. Army, Jacksonville, Fla., District.] ‡ D 103.47: Sa 7/3
- 32211 — De Neveu Creek, Fond du Lac River, main stem, east branch, west branch, Fond du Lac County, Wisconsin. Sept. 1972. cover title, [4]+ii+37 p. il. 18 pl. 4° [Prepared for Fond du Lac County and city of Fond du Lac by Dept. of Army, Chicago Dist., Corps of Engineers, Chicago, Ill.] ‡ D 103.47: F 73
- 32212 — Geneseo Creek, Geneseo, Ill. June 1972. cover title, [3]+v+55 p. il. 11 pl. 4° [Prepared for State of Illinois Department of Transportation by Corps of Engineers, U.S. Army, Rock Island District. Some illustrations are colored.] ‡ D 103.47: G 28
- 32213 — Grants Creek, Town Creek, city of Salisbury, N.C. June 1973. cover title, [3]+i+25 p. il. 39 p. 4° [Prepared for city of Salisbury by Department of Army, Charleston District, Corps of Engineers, Charleston, S.C.] ‡ D 103.47: Sa 3/7
- 32214 — Great Falls, Mont., v. 1, Sun River. Feb. 1973. cover title, [4]+i+28 p. il. 6 pl. 4° [Prepared for city of Great Falls, County of Cascade, State of Montana by Department of Army, Omaha District, Corps of Engineers.] ‡ D 103.47: G 79 f/v.1
- 32215 — Ohio River, Cabell County, Wayne County, W. Va. May 1973. cover title, iv+38 p. il. 10 pl. 4° [Prepared for State of West Virginia, Department of Natural Resources, Division of Water Resources, by Department of Army, Huntington District Corps of Engineers, Huntington, W. Va. One plate is colored.] ‡ D 103.47: C 11/2
- 32216 — Orofino Creek, Whiskey Creek, Orofino, Idaho and vicinity. Oct. 1972. cover title, [3]+i+28 p. il. 12 pl. 4° [Prepared for city of Orofino by Department of Army, Walla Walla District, Corps of Engineers, Walla Walla, Wash.] ‡ D 103.47: Or 6
- 32217 — Roaring Fork River and Castle and Hunter Creeks, Aspen, Colo. June 1973. cover title, [2]+ii+30 p. il. 29 pl. 4° [Prepared for City of Aspen and Pitkin County by Department of Army, Sacramento District, Corps of Engineers, Sacramento, Calif. One plate is colored.] ‡ D 103.47: As 6
- 32218 — Rowlett Creek, pt. 1, Dallas and Collins Counties, Tex. Jan. 1973. cover title, iv+40 p. il. 25 pl. 4° [Prepared for city and county of Dallas Flood Control Committee by Corps of Engineers, U.S. Army, Fort Worth, Texas, District.] ‡ D 103.47: D 16/4/pt.1

☛For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 23

GOVERNMENT PUBLICATIONS

- 32219 — Sandy Hook Bay and Raritan Bay shore tidal areas, Monmouth County, N.J. July 1972. cover title, iv+27 p. il. 6 pl. [Prepared by Department of Army, New York District, Corps of Engineers, for Monmouth County Planning Board and New Jersey Department of Environmental Protection.] ‡ D 103.47: M 75/4
- 32220 — South Creek, North Creek, Catfish Creek, Clower Creek, Elligraw Bayou and Matheny Creek, Sarasota County, Fla. June 1973. cover title, [3]+i+32 p. il. 10 pl. 4° [Prepared for Board of County Commissioners of Sarasota County by Corps of Engineers, U.S. Army, Jacksonville, Fla., District.] ‡ D 103.47: Sa 7/2
- 32221 — Spring Branch, Independence, Mo. Feb. 1973. cover title, a-c+i+25 p. il. 8 pl. 4° [Prepared for city of Independence, Mo., by Corps of Engineers, U.S. Army, Kansas City District.] ‡ D 103.47: In 2/2
- 32220 — Virgin River and Fort Pierce, Wash, vicinity of St. George, Washington County, Utah. Apr. 1973. cover title, [3]+i+31 p. il. 19 pl. 4° [Prepared for Washington County Commission by Corps of Engineers, U.S. Army, Los Angeles District, Calif.] ‡ D 103.47: Sa 2 g
- 32223 — Wapsipinicon River and Malone Creek, Independence, Iowa. June 1972. cover title, [3]+iii+67 p. il. 18 pl. 4° [Prepared for State of Iowa, Iowa Natural Resources Council by Corps of Engineers, U.S. Army, Rock Island District. Some plates are colored.] ‡ D 103.47: In 2/3
- 32224 — Wells Creek and tributaries, city of Erin, Tenn. May 1973. cover title, [2]+i+28 p. il. 13 pl. 4° [Prepared for city of Erin by Nashville District, Corps of Engineers, Nashville, Tenn.] ‡ D 103.47: Er 4
- 32225 — West Fork Des Moines River and Perkins Creek, Windom, Minn. June 1972. cover title, [3]+iii+62 p. il. 14 pl. 4° [Prepared for State of Minnesota, Department of Conservation, by Corps of Engineers, U.S. Army, Rock Island District. Some illustrations are colored.] ‡ D 103.47: W 72/3
- 32226 — West Fork River and Elk Creek, Clarksburg and vicinity, Harrison County, W. Va. Mar. 1973. cover title, [3]+i+37 p. il. 9 pl. [Prepared for city of Clarksburg Planning Commission and State of West Virginia Department of Natural Resources by Corps of Engineers, U.S. Army, Pittsburgh District, Pittsburgh, Pa.] ‡ D 103.47: C 56
- 32227 — Winooski River, town of Colchester, cities of Burlington and Winooski, Vt. Apr. 1973. cover title, [4]+i+24 p. il. 5 pl. 4° [Prepared for Department of Water Resources, State of Vermont, by Department of Army, New York District, Corps of Engineers.] ‡ D 103.47: C 67
- 32228 Floods: Alamo and Ulatis Creeks, Vacaville, Calif. June 1973. [2] p. il. f° folded into narrow 8° size. [Prepared for Salona County, partially based on data in Flood plain information, Alamo and Ulatis Creeks, Vacaville, Calif. Some illustrations are colored.] ‡ D 103.47/2: V 13
- 32229 — Aliso Creek, Orange Co., Calif. Mar. 1973. [4] p. il. 4° [Prepared for Orange County Flood Control District from data in Flood plain information, Aliso Creek, Orange County, Calif.] ‡ D 103.47/2: Or 1/4
- 32230 — Hobbie Creek, Springville, Utah. June 1973. [2] p. il. f° folded into narrow 8° size. [Prepared for Springville, Utah partially based on data in Flood plain information, Hobbie Creek, Springville, Utah. Some illustrations are colored.] ‡ D 103.47/2: Sp 8
- 32231 — Logan River, Logan, Utah. June 1973. [2] p. il. f° folded into narrow 8° size. [Prepared for Logan City and Cache County partially based on data in Flood plain information, Logan River, Logan, Utah. Some illustrations are colored.] ‡ D 103.47/2: L 82
- 32232 — Virgin River and Fort Pierce Wash, St. George, Washington County, Utah. [Apr. 1973.] [4] p. il. 4° [Prepared for Washington County Commission, Utah from data in Flood plain information, Virgin River and Fort Pierce Wash, vicinity of St. George, Washington County, Utah.] ‡ D 103.47/2: Sa 2 g

*For Sale by Superintendent of Documents

‡Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32233 — Wells Creek and tributaries, Erin, Tenn. [Feb. 1973.] [2] p. il. f° folded into narrow 8° size. [Prepared for City of Erin from data in Flood plain information, Wells Creek and tributaries, Erin, Tenn.] ‡
D 103.47/2: Er 4
- 32234 Floods in Beaver County, Pa. [1973.] [2] p. il. f° folded into narrow 8° size. [Prepared for Beaver County Planning commission and State of Pennsylvania from data in Flood plain information, Ohio and Beaver Rivers, Beaver County, Pa.] ‡
D 103.47/2: B 38
- 32235 Floods in Burlington, Colchester, Winooski, Vt., Winooski River. [1973.] [2] p. il. f° folded into narrow 8° size. [Prepared for Vermont Department of Water Resources from data in Flood plain information, Winooski River, Town of Colchester, City of Burlington, and Winooski, Vt.] ‡
D 103.47/2: B 92
- 32236 Floods in Geneva, Ala., Choctawhatchee River, Pea River, Double Bridges Creek. [1973.] [2] p. il. f° folded into narrow 8° size. [Prepared for Geneva Planning Commission from data in Flood plain information, Choctawhatchee River, Pea River, and Double Bridges Creek, Geneva, Ala.] ‡
D 103.47/2: G 28/2
- 32237 Floods on Agua Hedionda Creek, Pacific Ocean to Buena, San Diego County, Calif. [1973.] [4] p. il. 4° [Prepared for County of San Diego, Calif. from data in Flood plain information, Agua Hedionda Creek, Pacific Ocean to Buena, San Diego County, Calif.] ‡
D 103.47/2: Sa 5 d/2
- 32238 Floods on Fond du Lac River and De Neveu Creek, Fond du Lac County, Wis. Sept. 1972. [2] p. il. f° folded into narrow 8° size. [Prepared for Fond du Lac County, from data in Flood plain information, Fond du Lac River, De Neveu Creek, Fond du Lac County, Wis.] ‡
D 103.47/2: F 73
- 32239 Floods on Grants Creek and Town Creek, Salisbury, N.C. [1973.] [2] p. il. f° folded into narrow 8° size. [Prepared for city of Salisbury from data in Flood plain information, Grants Creek, Town Creek, city of Salisbury, N.C.] ‡
D 103.47/2: Sa 3/5
- 32240 Floods on Ohio River past and future, Cabell County, Wayne County, West Va. [May 1973.] [2] p. il. oblong f° folded into narrow 8° size. ‡
D 103.47/2: C 11/2
- 32241 Floods on Rowlett Creek, pt. 1, Dallas and Collins Counties, Tex. [1973.] [2] p. il. narrow f° folded into narrow 8° size. [Prepared from data in Flood plain information, Rowlett Creek part 1, Dallas and Collins Counties, Tex.] ‡
D 103.47/2: D 16/5
- 32242 Special flood hazard information: Pilchuk River, vicinity of Machias, Wash. Mar. 1973. cover title, 12 p. il. 8 pl. 4° [Prepared for Snohomish County, Wash., by Corps of Engineers, U.S. Army, Seattle, Wash. District.] ‡
D 103.47: M 18
- 32243 Water resources development in Mississippi. Vicksburg, Miss., Jan. 1, 1973. x+68 p. il. map, 4° (Army Engineer Division, Lower Mississippi Valley.) ‡
D 103.35: M 69 i/973

Waterways Experiment Station.

NOTE.—Unless otherwise indicated, publications of Waterways Experiment Station may be ordered from Corps of Engineers, U.S. Army, Waterways Experiment Station, Vicksburg, Miss. (price upon application).

— Technical report.

- 32244 E-73-3. Middle course 2 cratering series [with list of references; by] Kenneth E. Sprague [and others]. June 1972. viii+89+[2] p. il. 4° (Explosive Excavation Research Laboratory, Livermore, Calif.) [Sponsored by Defense Nuclear Agency.] Φ (Price upon application)
D 103.24/2: E-73-3

GOVERNMENT PUBLICATIONS

ENVIRONMENTAL DATA SERVICE, Commerce Dept. Washington, DC 20235

Key to meteorological records documentation.

- 32245 5.328. Catalog of meteorological satellite data-ITOS 1 television cloud photography, Oct. 1-Dec. 31, 1970. ii+23 p. il. [184] p. of pl. 4° * Paper, \$2.25 (S/N 0319-0008) ● Item 275-C C 55.219: 5.328

ENVIRONMENTAL PROTECTION AGENCY

Washington, DC 20460

- 32246 Automobile emission control, state of art as of Dec. 1972. Feb. 1973. [240] p. 4° (Division of Emission Control Technology, Mobile Source Pollution Control Program, Office of Air and Water Programs.) †
EP 1.2: Au 8/972
- 32247 Basic documents concerning Federal programs to control environmental pollution from Federal Government activities. [1972.] cover title, iii+134 p. 4° ([Office of] Federal Activities.) †
EP 1.2: F 31/2
- 32248 Cattle feedlots in Pacific Northwest. [1973.] [6] p. 4° (Region 10, Seattle, Wash.) †
EP 1.2: C 29
Ecological research series EPA-R3. (Office of Research and Monitoring.)
- 32249 72-004. Role of sludge worms in eutrophication [with list of references]; by Ralph O. Brinkhurst. Aug. 1972. viii+68+[1] p. il. 4° [Project 16010 ECQ.] * Paper, \$1.25. ● Item 431-I-11 EP 1.23: 72-004
- 32250 Environmental assessments for effective water quality management planning; [by Norbert Dee and Neil L. Drobny]. Apr. 1972. [3]+24+[1]+6 p. il. 4° (Water Quality Management Planning.) [Prepared by Battelle Columbus Laboratories, Columbus, Ohio, under contract 68-01-0172.] †
EP 1.2: En 8/5
- 32251 Environmental film list. [1973.] cover title, [9]+26+4+[4] p. 4° (Audio-Visual Branch.) †
EP 1.21: En 8/6
Environmental monitoring series EPA-R4. (Office of Research and Monitoring.)
EP 1.23/5: (nos.)
- 32252 72-001. Growth and decay of turbulent mixing in planetary boundary layer; by R. S. Sholtes. Apr. 1972. iii+95 p. il. 4° [Contract EHSD 71-40, program element 1A1009.] Φ (Price upon application)
- 32253 73-012b. User's guide to diffusion/kinetics (DIFKIN) code. [with one reference]; by J. R. Martinez. Oct. 1972. v+61+[1] p. il. 4° [Contract 68-02-0336, program element 1A1009.] Φ (Price upon application.)
- 32254 73-012c. Field program designs for verifying photochemical diffusion models [with list of references]; by A. Q. Eschenroeder, G. W. Deley, and R. J. Wahl. Mar. 1973. v+50+[2] p. il. 4° [Contract 68-02-0336, program element 1A1009.] Φ (Price upon application)
- 32255 73-016a. Atmospheric turbulence and dispersal of atmospheric pollutants [with list of references]; by Coleman duP. Donaldson. Mar. 1973. [159] leaves+[2] p. il. 4° [Contract 68-02-0014; program element A-11009.] Φ (Price upon application)
- 32256 73-016b. Derivation of non-Boussinesq set of equations for atmospheric shear layer [with list of references]; by Coleman duP. Donaldson. Mar. 1973. [4] p.+[46] leaves, 4° [Contract 68-02-0014, program element A-11009.] Φ (Price upon application)
- 32257 73-016c. Coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems [with bibliographies]; by Glenn R. Hilst [and others]. Mar. 1973. [2] p.+[91] leaves, il. 4° [Contract 68-02-0014, program element A-11009. Includes copyright material.] Φ (Price upon application)
- 32258 73-020. Indoor-outdoor carbon monoxide pollution study; by General Electric Company. Dec. 1972. [447] p. il. 4° [Contract CPA 70-77; program element 1H1326.] Φ (Price upon application)
- 32259 73-026. Automated water monitoring instrument for phosphorus contents [with list of references]; by Manfred J. Prager. June 1973. iv+26+[1] p. il. 4° [Contract no. 68-01-0111, project 16020-GSB, program element 1B1027.] * Paper, 50c. ● Item 431-I-24
- Environmental protection technology series EPA. (Office of Research and Development.)
- 32260 650/2-73-012. Properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes [with list of references]; by J. E. Boone and J. H. Turner. Aug. 1973. vii+38 p. il. 4° (National Environmental Research Center.) [ROAP 21ACX, task 62, program element 1A2013.] Φ (Price upon application)
EP 1.23/2: 650/2-73-012

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- Environmental protection technology series EPA-R2. (Office of Research and Monitoring.) ● Item 431-I-12 EP 1.23/2: (nos.)
- 32261 73-159. Pilot plant demonstration of lime-biological treatment phosphorus removal method [with list of references]; by Lawrence Schmid. June 1973. vii+48+[1] p. il. 4° [Project 17050 DCC, program element 1B2043.] * Paper, 85c.
- 32262 73-234. Organic pollutant identification utilizing mass spectrometry [with list of references]; by John M. McGuire, Ann L. Alford and Mike H. Carter. July 1973. cover title, vii+48+[1] p. il. 4° (National Environmental Research Center, Office of Research and Development, Corvallis, Oreg.) [Project 16ADN 25, program element 1B1027.] * Paper, 85c.
- 32263 73-271. Selected irrigation return flow quality abstracts 1970-71, 2d annual issue; by Gaylord V. Skogerboe [and others]. June 1973. vii+285 +[1] p. 4° [Grant R-800426; project 13030 FVN.] * Paper, \$3.20.
- 32264 Financial and institutional arrangements for wastewater management, Denver SMSA [with bibliography]; by George H. Aull, jr., Robert J. Zuelsdorf, Wilbur Smith and Associates, Denver, Colo. Apr. 1973. vii +147 p. il. 4° ([Rocky Mountain-Prairie Region], Region 8.) [Contract 68-01-0734.] † EP 1.2: W 28/9
- 32265 Health effects of environmental pollution. May 1973. 20 p. il. 4° [Foreword on p. 2 of cover. Illustrations are colored.] * Paper, 30c. ● Item 431-I-1 EP 1.2: H 34
- 32266 Legal compilation, statutes and legislative history, executive orders, regulations, guidelines and reports.
v. 1. [Solid waste with list of references]. Jan. 1973. xx+640 p. 4° * Paper, \$3.20 (S/N 5500-0065). ● Item 431-I-25 EP 1.5/3: So 4/v.1
L.C. card 73-602602
- 32267 National Environmental Research Center, Las Vegas, staff study; prepared by Laboratory Operations Division, Office of Research and Monitoring. Jan. 1973. xi+54+15+23 p. il. 4° † EP 1.2: N 21 e/2
- 32268 Ocean disposal practices and effects, report to Administrator of Environmental Protection Agency by President's Water Pollution Control Advisory Board, Sept. 26-29, 1972 [with list of references]. [1972.] [79] p. 4° † EP 1.2: Oc 2/2
L.C. card 73-601843
- 32269 Questions and answers from EPA's 2d national citizens' briefing. Apr. 1973. [2]+12 p. 4° † EP 1.2: C 49/3
- 32270 Radiological surveillance studies at pressurized water nuclear power reactor [with lists of references; by] Bernd Kahn [and others]. Aug. 1971. [9]+99+[1] p. il. 4° (Radiochemistry and Nuclear Engineering Branch, National Environmental Research Center.) (IRD 71-1.) † EP 1.2: R 11/2
- Socioeconomic environmental studies series EPA-R5. (Office of Research and Monitoring.)
- 32271 73-022. 1972 survey and assessment of air pollution damage to vegetation in New Jersey [with list of literature cited]; by Eva J. Pell. June 1973. vi +36+[1] p. il. 4° [Contract 68-02-0078, program element 1A1004.] † (Price upon application) EP 1.23/3: 73-022
- 32272 Waste treatment plan construction, Federal funding available July 1, 1971-June 30, 1974. [Nov. 28, 1972.] [10] p. il. oblong, 12° † EP 1.2: W 28/8/971-974
- Water pollution control research series.
- 32273 18050 ELD 01/73. Biota of freshwater ecosystems identification manual 10, Genera of freshwater nematodes [Nematoda] of eastern North America [with list of references]; by V. R. Ferris, J. M. Ferris, and J. P. Tjepkema. Jan. 1973. ix+38+[1] p. il. 4° [Contract 14-12-894.] * Cloth, \$4.00. ● Item 473-A-1 EP 1.16: 18050 ELD 01/73/no.10

EXPORT-IMPORT BANK OF UNITED STATES Washington, DC 20571

- 32274 Aviation export financing. Apr. 1973. 16 p. narrow 8° † ● Item 1060
Y 3.Ex 7/3: 2 Av 5

♣For Sale by National Technical Information Service,
Springfield, VA 22151
●Sent to Depository Libraries

GOVERNMENT PUBLICATIONS

FARM CREDIT ADMINISTRATION

Washington, DC 20578

- 32275 Production Credit Association, 1971 P.C.A. sample survey : PCA borrowers 1971, their characteristics, their loans. Dec. 1972. cover title, 24 p. 4° (Research Division.) † FCA 1.2: P 94/3/971
- 32276 Production Credit Association, 1971 P.C.A. sample survey : Profile of largest borrowers in 442 PCAs. Dec. 1972. 31 p. 4° (Research Division.) † FCA 1.2: P 94/5/971
- 32277 Production Credit Association, 1971 P.C.A. sample survey : Profile of new PCA borrowers. June 1972. cover title, 26 p. 4° (Research Division.) † FCA 1.2: P 94/4/971

FEDERAL AVIATION ADMINISTRATION, Transportation Dept.

Washington, DC 20553

- 32278 Acceptable methods, techniques, and practices: Aircraft alterations. Reprinted June 1973. [1973.] cover title, [102] p. il. 4° (AC 43.13-2.) [Issued with perforations. Includes Changes 1-14.] * Paper, \$2.50 (including basic manual and supplementary material for an indefinite period); 75c. additional for foreign mailing. ● Item 431-F-6 TD 4.28: 973

FEDERAL COMMUNICATIONS COMMISSION

Washington, DC 20554

- 32279 Directory of field contacts for coordination of use of radio frequencies; [prepared by IRAC Secretariat, Frequency Management Support Division, Office of Telecommunications, Commerce Department]. Jan. 1, 1973. [190] p. 4° (TELE-IRAC-73-25.) [Prepared in cooperation with Office of Telecommunications Policy, Executive Office of the President.] † CC 1.2: R 11/14/973
- 32280 Federal Communications Commission reports, decisions and reports : v. 32, 2d series, Oct. 29, 1971-Jan. 28, 1972. 1973. xxix+1082 p. [Digests have been added for convenience, but are not part of decisions or reports.] * Cloth, \$6.80. ● Item 284 CC 1.12/2: 32

FEDERAL HIGHWAY ADMINISTRATION, Transportation Dept.

Washington, DC 20591

Federally coordinated program of research and development in highway transportation.

- 32280A v.2. Reduction of traffic congestion, and improved operational efficiency. July 1, 1973. iv+66 p. il. 4° (Office of Research and Development.) [Issued with perforations.] † ● Item 982-G-5 TD 2.2: R 31/2/v.2
- 32281 Guidelines for review of plans for water supply and sanitary waste treatment facilities for safety rest areas [with list of references]; prepared by Robert H. Baumgardner. June 1972. [3]+32 p. il. 4° (Office of Engineering, Bridge Division, Hydraulics Branch.) [Issued with perforations.] † TD 2.8: R 32
- Nationwide personal transportation study, reports. † TD 2.31: (nos.) L.C. card 73-600627
- 32282 4. Transportation characteristics of school children; [by] Darrell A. Beschen, jr. July 1972. [3]+32 p. il. 4° (Program Management Division, Office of Highway Planning.)
- 32283 5. Availability of public transportation and shopping characteristics of SMSA households; [by] Rolan M. Hatley. July 1972. [1]+36 p. il. 4° (Program Management Division, Office of Highway Planning.)
- 32284 1973 annual report on urban area traffic operations improvement programs (TOPICS); report of Secretary of Transportation to United States Congress pursuant to sec. 10, Pub. law 90-495, Federal aid highway act of 1968. Dec. 1972 [published 1973.] cover title, v+65 p. il. 4° (Office of Traffic Operations.) † TD 2.29: 973

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32285 Rest area sewage disposal and water supply [with partial list of references]; prepared by Robert H. Baumgardner. [1972.] [1]+48 p. il. 4° (Hydraulics Branch, Bridge Division, Office of Engineering.) [Presented to Roadside Development Session of 1972 AASHO meetings. Issued with perforations.] ‡ TD 2.2: R 32

FEDERAL MARITIME COMMISSION Washington, DC 20573

SP-(series).

- 32286 73-17. Our merchant marine, fourth arm of defense, remarks by James V. Day, Federal Maritime Commissioner, at 55th National Convention of American Legion held in Honolulu, Hawaii, Aug. 20, 1973. [1973.] 6 p. 4° ‡ FMC 1.9: 73-17

FEDERAL REGISTER OFFICE, General Services Administration Washington, DC 20408

Code of Federal regulations. [1973.] * Paper, \$200.00 a year, \$50.00 additional for foreign mailing; single copies vary in price. ● Item 572

- 32287 28. Judicial administration, revised as of July 10, 1973. vi+232 p. [Containing codification of documents of general applicability and future effect as of July 10, 1973, with ancillaries.] * Paper, \$1.70. GS 4.108: 28/973
- 32288 31. Money and finance, Treasury, revised as of July 1, 1973. vi+639 p. [Containing codification of documents of general applicability and future effect as of July 1, 1973, with ancillaries.] * Paper, \$4.75. GS 4.108: 31/973
- 32289 32. National Defense, pts. 1000-1399, revised as of July 1, 1973. vi+183 p. [Containing codification of documents of general applicability and future effect as of July 1, 1973, with ancillaries.] * Paper, \$1.60. GS 4.108: 32/pts.1000-1399

FEDERAL RESERVE SYSTEM BOARD OF GOVERNORS Washington, DC 20551

- 32290 Changes in bank lending practices, 1972; [prepared by Richard H. Puckett]. [1973.] p. [501]-505, 4° [Reprinted from Federal reserve bulletin, July 1973.] ‡ FR 1.3/a: L 546/5/972
- 32291 Changes in time and savings deposits at commercial banks, Jan.-Apr. 1973; [prepared by Martha Strayhorn]. [1973.] p. [493]-500, 4° [Reprinted from Federal reserve bulletin, July 1973.] ‡ FR 1.3/a: D 441/11/973
- 32292 Federal Reserve Board publications. June 1973. 7 p. 4° ‡ FA 1.45: 973
- 32293 Objectives and responsibilities of Federal Reserve System, address by Arthur F. Burns, Chairman, Board of Governors of Federal Reserve System, [before] Federal Reserve Bank of Minneapolis, Minn., Sept. 8, 1973. Sept. 8, 1973. [1]+15 p. 4° ‡ FR 1.23: B 93/18
- 32294 Quest for international monetary reform, remarks of J. Dewey Daane, Member, Board of Governors of Federal Reserve System before American Chamber of Commerce in Switzerland, Zurich, Switzerland, Sept. 11, 1973. Sept. 11, 1973. [1]+17 p. 4° ‡ FR 1.23: D 11/24

Regulations (series). ‡

- 32295 D. Reserves of member banks, amendments effective July 12, 1973. Aug. 1973. [2] p. 4° FR 1.6: D/970/amdt.-5
- 32296 Q. Interest on deposits, amendment, effective July 5, 1973. July 1973. 1 p. 4° FR 1.6: Q/971/amdt.
- 32297 Q. [Interest on deposits] as amended effective July 26, 1973, supplement. July 1973. 1 p. 4° FR 1.6: Q/971/supp.-2
- 32298 Treasury and Federal reserve foreign exchange operations, interim report; [prepared by Charles A. Coombs]. [1973.] [2] p. 4° [Reprinted from Federal Reserve bulletin, July 1973.] ‡ FR 1.3/a: F 761/2/973

FEDERAL SUPPLY SERVICE, General Services Administration, Washington, DC 20405

[Consumer information series] CIS.

- 32299 13. Mixers and blenders. [Aug. 1973.] [8] p. il. 4° * Paper, 25c. ● Item 558-A-2 GS 2.16: 13

☐For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

**FOOD AND DRUG ADMINISTRATION, Health Education,
and Welfare Dept., Washington, DC 20201
GOVERNMENT PUBLICATIONS**

Federal standards. Issued with perforations.

NOTE.—Federal standards may be purchased from the General Services Administration, Specifications Activity, Special Programs Division, Building 197, Naval Weapons Plant, Washington, DC 20407. *All checks and money orders should be made payable to the Treasury of the United States.* Single copies are available without charge at the nearest GSA regional office.

- 32300 351. Wrench sets, box and open end. June 20, 1973. 2 p. 4° † Paper, 5c.
● Item 563 GS 2.8/3: 351
- 32301 FDA consumer guide. [1973.] 2 p. f° folded into narrow 48° size. (DHEW publication (FDA) 74-1008.) † ● Item 475-G HE 20.4008: C 76
- 32302 Federal/State radiation control legislation, 1972; [by] Lois A. Miller.
Mar. 1973. x+43 p. 4° (DHEW publication (FDA) 73-8035.) †
HE 20.4115: 972
- 32303 We want you to know about microwave oven radiation. [1973.] [7] p. il.
narrow 8° ([Publication (FDA) 73-8049.]) * Paper, 20c. ● Item 475
HE 20.4002: M 58

**FOOD AND NUTRITION SERVICE, Agriculture Dept.
Washington, DC 20250**

- FNS (series). † ● Item 74-A-2 A 98.9(nos.)
- 32304 72. Food stamp facts, eligibility requirements. Revised July 1973. [1973.] 3 p. 4°
(Food stamp facts series.)
- 32305 86. Quantity recipes for child care centers; [prepared by Nutrition and Technical
Services Staff, Consumer and Food Economics Institute, Agricultural Research
Service and National Marine Fisheries Service, National Oceanic
and Atmospheric Administration]. [May 1973.] [92] cards, each 5 x 8 in.
[Includes title card, separator tab cards, with accompanying recipe cards.]

FOREIGN SCHOLARSHIPS BOARD

Operations Staff, c/o Bureau of Educational and Cultural Affairs,
Department of State Building, Washington, DC 20520

- 32306 Report on exchanges, 10th annual report. Dec. 1972 [published 1973].
vii+40 p. † ● Item 1063-F Y 3.F 76/4: 1/972

**FOREST SERVICE, Agriculture Dept.
Washington, DC 20250**

- 32307 American wood: American sycamore [with list of references; by Robert G.
McAlpine and Milton Applefield]. Mar. 1973. 7 p. il. 4° (FS-267.) [Issued
with perforations. Supersedes unnumbered publication American
sycamore, 1945.] * Paper, 20c. (S/N 0101-00326.) ● Item 80-A
A 13.31: Sy 1/973
- 32308 — Pecan [with list of references; by Alexander Clark III]. Mar. 1973.
8 p. il. 4° (FS-249.) [Issued with perforations. Supersedes unnumbered
publication Pecan, 1945.] * Paper, 25c. (S/N 0101-00324.) ● Item 80-A
A 13.31: P 33/973
- 32309 — Port-Orford-cedar [with list of references; by John W. Henley]. Mar.
1973. 6 p. il. 4° (FS-228.) [Issued with perforations. Supersedes un-
numbered publication Port-Orford-cedar, 1945.] * Paper, 20c. (S/N
0101-00320.) ● Item 80-A
A 13.31: C 32/5/973
- 32310 Dividends from wood research, recent publications of Forest Products
Laboratory. July 1973. 20 p. il. † A 13.27/7: W 85/15/973-2
- 32311 Environmental education at Sylvania Visitor Center [with list of refer-
ences]. [Nov. 1971.] cover title, ii+19 p. 4° (Eastern Region.) [Text
on p. 3 of cover.] † A 13.2: En 8/3
Forest pest leaflet.
- 32312 138. Atropellis canker of pines [with list of references; by] Paul C. Lightle
and John H. Thompson. July 1973. 6 p. il. 4° * Paper, 25c. (S/N
0101-00313.) ● Item 82-A A 13.52: 138

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- General technical report NE-(series). (Northeastern Forest Experiment Station Upper Darby, Pa.) † A 13.88: NE-(nos.)
- 32313 NE-2. Pinchot Institute system for environmental forestry studies; [by Pinchot Institute]. 1973. cover title, [2]+60 p. il. 4° [Illustrations are colored. Abstract cards inserted.]
- 32314 NE-4. Non-game wildlife research in megalopolis, Forest Service program [with list of references]; by Jack Ward Thomas and Richard M. DeGraaf. 1973. cover title, 12 p. il. 4° [Abstract cards inserted.]
- 32315 Increasing your lumber recovery, sawmill improvement program. [July 1973.] cover title, 25 p. il. oblong, 8° [Cooperative effort of State and private forestry, and State forestry agencies, and Forest Products Laboratory. Text on p. 2 of cover.] † ● Item 84 A 13.2: L 97/17
- 32316 List of publications, 1972, annotated. [1973.] 27 p. 4° (North Central Forest Experiment Station, St. Paul, Minn.) [Foreword and table of contents on p. 2 of cover.] † A 13.82/9: 972
- 32317 Materials to help teach forest conservations. Revised June, 1970, slightly revised, July 1973. [1973.] 8 p. † ● Item 85-A A 13.11/2: T 22/973
- 32318 1972 wildfire statistics; prepared by Division of Cooperative Forest Fire Control, State and Private Forestry Cooperation. Aug. 1973. vi+57 p. il. 4° † A 13.32/2: 972
- Research note FPL-(series). (Forest Products Laboratory, Madison, Wis.)
- 32319 FPL-0226. Moisture content of wood in use. 1973. 6 p. il. 4° [Revision of FPL report 1955, of same title, originally written in 1947 by E. C. Peck.] † A 13.79: FPL-0226
- Research note NC-(series). (North Central Forest Experiment Station, St. Paul, Minn.) † A 13.79: NC-(nos.)
- 32320 NC-150. Controlling lophodermium needlecast on Scotch pine Christmas trees; [by Darroll D. Skilling and Thomas H. Nicholls.] [1973.] 4 p. 4°
- 32321 NC-151. Factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length Aspen [with list of literature cited]; by Dennis P. Bradley and Frank E. Blitonen. [1973.] 4 p. 4°
- 32322 NC-152. Pulpwood production in Lake States by county, 1972; [by James E. Blyth]. [1973.] 4 p. il. 4°
- Research note NE-(series). (Northeastern Forest Experiment Station, Upper Darby, Pa.) † A 13.79: NE-(nos.)
- 32323 NE-160. Sawlog sizes, comparison in two Appalachian areas; [by Curtis D. Goho and A. Jeff Martin]. 1973. 5 p. il. 4°
- 32324 NE-161. Wooden beverage cases cause little damage to bottle caps; [by R. Bruce Anderson and William C. Miller]. 1973. 4 p. 4°
- 32325 NE-171. Pressure injection of solubilized benomyl for prevention and cure of oak wilt [with list of references; by Thomas W. Jones, Garold F. Gregory, and Percy McWain]. 1973. 4 p. il. 4°
- Research note PNW-(series). (Pacific Northwest Forest and Range Experiment Station.) † A 13.79: PNW-(nos.)
- 32326 PNW-199. Mission Ridge, case history of soil disturbance and revegetation of winter sports area development; by Glen Klock. Apr. 1973. 10 p. il. 4° [Paper presented at National Winter Sports Symposium, Denver, Colo., Feb. 26-Mar. 2, 1973.]
- 32327 PNW-200. Initial releases of *Chrysocharis laticinellae* and *Diadromus westwoodii* for biological control of larch casebearer in western United States [with list of literature cited; by] R. B. Ryan and R. E. Denton. Apr. 1973. 4 p. il. 4°
- Research note RM-(series). (Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colo.) † A 13.79: RM-(nos.)
- 32328 RM-237. Procedures for using yield simulation programs for dwarf mistletoe-infested lodgepole and ponderosa pine stands [with list of literature cited; by] Frank G. Hawksworth and Clifford A. Myers. Apr. 1973. 4 p. il. 4°
- 32329 RM-238. Enclosed weir for small streams in snow country [with list of literature cited; by] Kendall L. Johnson and Ronald D. Tabler. May 1973. 8 p. il. 4°
- 32330 RM-239. Soil-topographic site index for Engelmann spruce on granitic soils in northern Colorado and southern Wyoming [with list of literature cited; by] John A. Sprackling. May 1973. 4 p. il. 4°
- 32331 RM-240. Sagebrush control with herbicide has little effect on elk calving behavior [with list of literature cited; by] A. Lorin Ward. May 1973. 4 p. il. 4°
- 32332 RM-241. Engelmann spruce seedling roots reach depth of 3 to 4 inches their first season [with list of literature cited; by] Daniel L. Noble. June 1973. 3 p. il. 4°

✦For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 31

GOVERNMENT PUBLICATIONS

- 32333 RM-242. Herbicides ineffective in controlling southwestern dwarf mistletoe [with list of literature cited; by] Paul C. Lightle and Esle H. Lampi. June 1973. 3 p. il. 4°
- 32334 RM-243. Revegetating devastated sites in New Mexico with western wheat-grass transplants [with list of literature cited; by] Earl F. Aldon, O. D. Knipe and George Garcia. June 1972. 3 p. il. 4°
- 32335 RM-244. Bark beetle emergence cages modified for use as pit traps; [by] J. M. Schmid, J. C. Mitchell, and M. H. Schroeder. June 1973. 2 p. il. 4°
- 32336 RM-245. Revegetating coal mine spoils in New Mexico, laboratory study; [by] Earl F. Aldon and H. W. Springfield. June 1973. 4 p. il. 4°

Research paper FPL-(series). (Forest Products Laboratory, Madison, Wis.) † A 13.78: FPL-(nos.)

- 32337 FPL-188. Effects of trans a-hydroxyl groups in alkaline degradation of glycosidic bonds [with list of literature cited; by R. M. Rowell and J. Green]. 1972. cover title, 8 p. il. 4° [Abstract cards inserted. Text on p. 2 of cover.]
- 32338 FPL-189. Determining loss of wood substance in outside chip storage, comparison of two methods [with list of literature cited; by W. C. Feist, E. L. Springer and G. J. Hajny]. 1972. cover title, 11 p. il. 4° [Abstract cards inserted.]
- 32339 FPL-193. Fiber bonding and tensile stress-strain properties of earlywood and latewood handsheets [with list of literature cited; by William E. Smith and Von L. Byrd]. 1972. cover title, 8 p. il. 4° [Abstract cards inserted. Text on p. 2-3 of cover.]
- 32340 FPL-194. Correlation of ASTM exposure test for evaluating durability of fire-retardant treatment of wood [with list of literature cited; by C. A. Holmes]. 1973. cover title, 11 p. il. 4° [Abstract cards inserted.]
- 32341 FPL-199. FPL facility for evaluating strength-performance of walls exposed to fire; [by K. H. Boller]. 1973. cover title, 4+[1] p. il. 4° [Text on p. 2-3 of cover. Abstract cards inserted.]
- 32342 FPL-200. Effective dry methods of separating thermoplastic films from waste-papers [with list of literature cited; by J. F. Laundrie and J. H. Klungness]. 1973. cover title, 11 p. il. 4° [Abstract cards inserted.]

Research paper NE-(series). (Northeastern Forest Experiment Station, Upper Darby, Pa.) † A 13.78: NE-(nos.)

- 32343 NE-259. Deforestation effects on soil moisture, streamflow, and water balance in central Appalachians [with list of literature cited]; by James H. Patric. 1973. cover title, [1]+12 p. il. 4° [Abstract cards inserted.]
- 32344 NE-260. Nature and properties of some forest soils in White Mountains of New Hampshire [with list of literature cited]; by M. C. Hoyle. 1973. cover title, 18 p. il. 4° [Abstract cards inserted.]

Research paper PNW-(series). (Pacific Northwest Forest and Range Experiment Station, Portland, Oregon).

- 32345 PNW-142. Direct solar radiation on various slopes from 0 to 60 degrees north latitude [with list of literature cited; by] John Buffo, Leo J. Fritschen, and James L. Murphy. 1972. cover title, 74+[1] p. il. 4°
† A 13.78: PNW-142

Research paper RM-(series). (Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colo.) † A 13.78: RM-(nos.)

- 32346 RM-107. Hydrologic simulation model of Colorado subalpine forest [with list of literature cited]; by Charles F. Leaf and Glen E. Brink. May 1973. [2]+23+[1] p. il. 4°
- 32347 RM-108. Economics of containerized conifer seedlings; [by] Marilyn K. Colby and Gordon D. Lewis. May 1973. [2]+7+[1] p. 4° [Abstract on p. 2 of cover.]

GENERAL ACCOUNTING OFFICE

Washington, DC 20548

Reports to Congress; by Comptroller General of United States. † Paper, each, \$1.00 (Free to Members of Congress, Congressional committee staff members, Government officials, the press, college libraries, faculty and students. Requests to the General Accounting Office (Room 6417) for copies of reports to Congress should give full title, date, and B-number of the report. Do not include Monthly Catalog entry numbers or Superintendent of Documents classification numbers. Orders should be accompanied by check or money order. *Do not* send cash, postage stamps, or Superintendent of Documents coupons.)

- 32348 Airmail improvement program objectives unrealized, United States Postal Service. Aug. 6, 1973. cover title, [3]+16 p. 4° (B-114874.) GA 1.13: Ai 7/103
L.C. card 73-602507
- 32349 Assessment of Federal and State enforcement efforts to control air pollution from stationary sources. Aug. 23, 1973. cover title, [3]+43 p. 4° (B-166506.) GA 1.13: En 2/2
L.C. card 73-602925

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32350 Clarifying Webb-Pomerene act needed to help increase U.S. exports, Federal Trade Commission, Department of Commerce, Department of Justice. Aug. 22, 1973. cover title, [3]+31 p. (B-172255.)
L.C. card 73-602912 GA 1.13: Ex 7/7
- 32351 Examination of financial statements for year ended Dec. 31, 1972, Federal Home Loan Bank Board, Federal Home Loan Banks, Federal Savings and Loan Insurance Corporation. Aug. 31, 1973. cover title, [4]+30 p. 4° (B-114827.)
GA 1.13: F 31/31
- 32352 Examination of financial statements of National Credit Union Administration for periods ended June 30, 1971 and 1972 limited by restriction on access to credit union examination records. Sept. 18, 1973. cover title, [3]+32 p. 4° (B-164031 (4).)
GA 1.13: N 21c/3
- 32353 Increased use of felled wood would help meet timber demand and reduce environmental damage in Federal forests, Department of Agriculture, Department of Interior. July 30, 1973. cover title, [4]+52 p. il. 4° (B-125053.)
L.C. card 73-602483 GA 1.13: F 33
- 32354 Opportunities to improve model cities program in Kansas City, [Mo.] and Saint Louis, Mo., and New Orleans, La., Department of Housing and Urban Development. Jan. 16, 1973. cover title, [4]+74 p. 4° (B-171500.)
L.C. card 73-600825 GA 1.13: C 49/10
- 32355 Revenue sharing, its use by and impact on State governments, Department of Treasury. Aug. 2, 1973. cover title, [3]+59 p. 4° (B-146285.)
L.C. card 73-602442 GA 1.13: R 32/2
- 32356 Should appropriated funds be used for transportation procured specifically for Armed Forces exchange goods? Department of Defense. Aug. 6, 1973. cover title, [4]+25 p. 4° (B-169972.)
L.C. card 73-602465 GA 1.13: T 68/21
- 32357 Status, progress, and problems in Federal agency accounting during 18 months ended June 30, 1973. Sept. 19, 1973. cover title, [5]+21 p. il. 4° (B-115398.)
L.C. card 73-602933 GA 1.13: F 31/30
- 32358 Report to Subcommittee on Near East and South Asia, Committee on Foreign Affairs, House. Summary of European views on dependency of free world on Middle East oil. Aug. 29, 1973. cover title, 2+[1]+19 p. 4° (B-178334.) † Paper, \$1.00 (Free to Members of Congress, Congressional committee staff members, Government officials, the press, college libraries, faculty and students.)
GA 1.13: Oi 5/5

GEOLOGICAL SURVEY, Interior Dept. Washington, DC 20242

Bulletin.

- 32359 1303. Chemical analysis of thermal waters in Yellowstone National Park, Wyo., 1960-65 [with list of references]; by J. J. Rowe, R. O. Fournier and G. W. Morey. 1973. iii+31 p. il. [Results for samples collected from 89 geysers, pools, and hot springs are compiled together with previous analyses.] * Paper, 35c. (S/N 2401-02367). ● Item 620
L.C. card 73-600154 I 19.3: 1303
- 32360 Elevations and distances in United States. [1973.] 23 p. il. narrow 8° (USGS INF-73-7.) * Paper, 30c. (S/N 2401-00349). ● Item 621
I 19.2: El 2/3
- 32361 Low-flow characteristics of streams in Puget Sound region, Wash. [with list of references cited]; by F. T. Hidaka. 1973. [1]+ii+55 p. il. map in pocket, 4° [Open-file report prepared in cooperation with State of Washington Department of Ecology. Map is colored.] † I 19.2: P 96/5
- 32362 Nuclear energy resources, geologic perspective. [1973.] 15 p. il. (USGS: Inf-73-11.) [Includes list of suggested reading.] † ● Item 621
I 19.2: N 88
- 32363 Reports [bibliographic list] for California by Geological Survey Water Resources Division; compiled by J. S. Bader and Fred Kunkel. Menlo Park, Calif., 1973. viii+111 p. 4° †
L.C. card 73-602287 I 19.14/2: C 12/2
- 32364 Surface-water investigations at Barrow, Alaska; by Stanley H. Jones. Nov. 1972. 16 p. il. 4° (Water Resources Division, [Alaska District].) [Basic data report prepared in cooperation with Public Health Service.] †
I 19.2: B 27
- 32365 Water resources data for New Mexico, 1969: pt. 2. Water quality records [with list of selected references]. [1973.] vi+213 p. 4° ([Water Resources Division.]) [Prepared in cooperation with State of New Mexico and with other agencies.] † I 19.53/2: N 42 m/969/pt.2

☞For Sale by National Technical Information Service,
Springfield, VA 22151
●Sent to Depository Libraries

GOVERNMENT PUBLICATIONS

HEALTH, EDUCATION, AND WELFARE DEPARTMENT Washington, DC 20201

- 32366 Availability data, minorities and women. [June 1973.] cover title, [80] p. 4°
(Office for Civil Rights.) † ● Item 445
L.C. card 73-602613 HE 1.2: M 66
- 32367 Higher education guidelines, Executive order 11246. [1973.] [116] p. 4°
(Office for Civil Rights.) † HE 1.6/3: H 53
- 32368 Preservation of human resources during national crisis, HEW emergency
preparedness programs. [1973.] [8] p. il. narrow 8° ([Publication (OS)
73-98.]) † ● Item 445 HE 1.2: H 88

HEALTH MANPOWER EDUCATION BUREAU, Health, Education, and Welfare Dept., Bethesda, MD 20014

- 32369 DMI [Division of Manpower Intelligence] analytical studies.
Health professions capitation grants, fy 1972; [by Nancy Allen]. [1973.] [8]
+50 p. il. oblong 24° (DHEW publication (NIH) 73-460.) † ● Item
507-D-6 HE 20.3114/4: C 17

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION, Health, Education, and Welfare Dept., Bethesda, MD 20014

- 32370 HSMHA Public Advisory Committees, roster of members, June 30, 1973,
councils, committees, boards, panels, study sections. June 30, 1973. vi+89
p. 4° (DHEW publication (HSM3 74-6; Office of Administrator, OMP,
Committee Management Staff.) † ● Item 483-T HE 20.2011/2: 973-3

HOUSING AND URBAN DEVELOPMENT DEPARTMENT Washington, DC 20410

- 32371 Acquisition programs, Housing act of 1949: Development progress direc-
tory, Dec. 31, 1972, special report. [1973.] vi+48 p. 4° (Housing Pro-
duction and Mortgage Credit, FHA Division of Research and Statistics,
Statistics Branch.) † ● Item 582 HH 1.2: Ac 7
- 32372 Buying and financing mobile home. [Sept. 1973.] [10] p. il. oblong 48°
(HUD-243-F (3).) † ● Item 582 HH 1.2: M 71/2/973
- 32373 Get facts before buying land. [Sept. 1973.] [5] p. narrow 8° † ● Item
582 HH 1.2: L 22/3
- HUD handbooks. [Issued with perforations.] † HH 1.6/6: (nos.)
- 32374 4110. [Mortgagees' guide, home mortgage insurance, fiscal instructions,
Change]. Aug. 8, 1973. [81] p. 4° (Housing Production and
Mortgage Credit.) [Includes transmittal notice.]
- 32375 7480.1. HUD-assisted housing maintenance handbook on safety. Aug. 1973.
[51]+19 p. 4° (Program participants; Housing Management.)
[Includes transmittal notice 1.]
- 32376 7480.2. Fire safety in HUD-assisted multifamily housing projects. Aug. 1973.
[43] p. il. 4° (Program participants; Housing Management.)
[Includes transmittal notice 2.]
- 32377 HM 7510.1. Low-rent housing accounting handbook. [Aug. 21, 1973.] [45] p. 4°
(Housing Management.) [Includes transmittal notice 15.]

HUD training handbooks. [Issued with perforations.] †
HH 1.6/6-2: (nos.)

- 32378 4075.3. Kitchen planning. May 1973. [6]+1+22 p. il. 4° (Program partici-
pants and HUD Staff; Housing Production and Mortgage Credit-
Federal Housing Administration.) [Includes transmittal notice,
May 31, 1973.]
- 32379 4075.5. Soil sampling and testing for residential developments. May 1973. [5]
+1+85 p. 4° (Program participants and HUD Staff; Housing Pro-
duction and Mortgage Credit-Federal Housing Administration.) [In-
cludes transmittal notice, July 13, 1973.]
- 32380 4075.12. Central water and sewerage systems (ownership and organization). May
1973. [60] p. 4° (Program participants and HUD Staff; Housing
Production and Mortgage Credit-Federal Housing Administration.)
[Includes transmittal notice, June 23, 1973.]

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32381 Management training. [1973.] [2] p. il. oblong, 8° folded into narrow 8° size.
† HH 1.2: M 31
- 32382 Model cities program, comparative analysis of participating cities, process, product performance, and prediction. [July 1973.] [2]+54 p. il. 4° (Office of Community Development, Evaluation Division.) * Paper, 80c. (S/N 2300-00242). ● Item 582 HH 1.2: M 72/10
- Registry of minority contractors and housing professionals. (Office of Assistant Secretary for Equal Opportunity.) ● Item 582
L.C. card 73-602923 HH 1.2: M 66/4/v. (nos.)
- 32383 v. 1. Listing of minority construction contractors and housing professionals in selected cities in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. [1973.] [113] p. oblong 12° (HUD region 1.) * Paper, \$2.85 (S/N 2300-0026).
32384 v. 7. Listing of minority construction contractors and housing professionals in selected cities in Iowa, Kansas, Missouri, Nebraska. [1973.] [112] p. oblong, 12° (HUD region 7.) * Paper, \$1.75 (S/N 2300-00232).
32385 v. 8. Listing of minority construction contractors and housing professionals in selected cities in Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming. [1973.] [188] p. oblong, 12° (HUD region 8.) * Paper, \$2.85 (S/N 2300-10223).
- 32386 Study of effects of real estate property tax incentive programs upon property rehabilitation and new construction [with bibliographies]. [1973.] cover title, [384] p. il. 4° ([HUD-PDR-29-4.]) [Prepared by Price Waterhouse & Co. under contract H-1300.] * Paper, \$3.70 (S/N 2300-00238). ● Item 582 HH 1.2: R 22

IMMIGRATION AND NATURALIZATION SERVICE, Justice Dept. Washington, DC 20536

- 32387 Federal textbook on citizenship: Our Constitution and Government, home study course for student. [Revised 1973.] [1973.] cover title, viii+155 p. il. 4° ([M-39-Y.]) [Last page left blank for notes.] * Paper, \$2.60 (S/N 2702-00134). ● Item 724 J 21.9: C 76/4/973

INTERIOR DEPARTMENT Washington, DC 20240

NOTE.—Requests to the Interior Department for publications should give the full title and the date of the publication. Do not include Monthly Catalog entry numbers or Superintendent of Documents classification numbers, which should be used only when ordering from the Superintendent of Documents.

- 32388 Final environmental statement for prototype oil-shale leasing program. 1973. [Prepared in compliance with sec. 102(2) (c) of National environmental policy act of 1969.]
v. 5. Letters received during review process [with list of references]. [810] p. 4° * Paper, \$7.90 (S/N 2400-00776). ● Item 603 I 1.2: OI 5/4/v.5
L.C. card 73-602850
- 32389 Meet Johnny Horizon, '76, environmental action campaign to clean up America for our 200th birthday. [Aug. 1972.] [6] p. il. narrow 8° † I 1.2: J 61
- 32390 Mining and minerals policy, 1973, 2d annual report of Secretary of Interior under Mining and minerals policy act of 1970 (P.L. 91-361): pt. 2, Appendices. June 1973. [598] p. il. 4° * Paper, \$5.30. ● Item 603-F I 1.96/3: 973/pt.2
L.C. card 72-622941
- 32391 Remarks of Stephen A. Wakefield, Assistant Secretary of Interior for Energy and Minerals, before National Petroleum Council, Washington, D.C., July 24, 1973. [1973.] 5 leaves, 4° † I 1.68: W 13/2
- 32392 Research reports supported by Office of Water Resources Research under Water resources research act of 1964, received during period, July 1972-Mar. 1973. [1973.] cover title, [5]+149 p. 4° (Water Resources Scientific Information Center.) † I 1.97/2: 972-73
- Water Resources Scientific Information Center WRSIC (series). (Office of Water Resources Research.)
- 32393 73-206. Aeration of natural waters, bibliography; edited by George L. Knapp. July 1973. iv+358 p. 4° † I 1.97: 73-206
L.C. card 73-602600

GOVERNMENT PUBLICATIONS

INTERNATIONAL COMMERCE BUREAU, Commerce Dept. Washington, DC 20230

- Foreign economic trends and their implications for United States, ET (series). * Paper, \$27.00 a yr., \$6.75 additional for foreign mailing.
● Item 231-I C 57.111: (nos.)
- 32394 73-078. Kenya. July 12, 1973. 20 p. 4° (American Embassy, Nairobi.) [Annual. Supersedes ET 72-094.]
 - 32395 73-079. Netherlands Antilles. July 5, 1973. 7 p. 4° (American Consulate General, Curacao.) [Annual. Supersedes ET 72-011.]
 - 32396 73-080. Nepal. July 13, 1973. 11 p. 4° (American Embassy, Kathmandu.) [Annual. Supersedes ET 71-053.]
 - 32397 73-081. Central African Republic. July 7, 1973. 11 p. 4° (American Embassy, Bangui.) [Annual. Supersedes ET 72-024.]
 - 32398 73-082. Iran. July 17, 1973. 9 p. 4° (American Embassy, Tehran.) [Semiannual. Supersedes ET 73-013.]
 - 32399 73-083. Norway. July 24, 1973. 10 p. 4° (American Embassy, Oslo.) [Semiannual. Supersedes ET 73-017.]
 - 32400 73-085. Argentina. July 20, 1973. 10 p. 4° (American Embassy, Buenos Aires.) [Semiannual. Supersedes ET 73-003.]

JOINT PUBLICATIONS RESEARCH SERVICE 1000 N. Glebe Rd., Arlington, VA 22201

NOTE.—When ordering Joint Publications Research Service publications from the National Technical Information Service, give the JPRS number in the order. Do not include Monthly Catalog entry numbers or Superintendent of Documents classification numbers, which should be used only when ordering from the Superintendent of Documents.

- Titles of JPRS serial reports listed below were issued during the month, but were not cataloged separately. Φ (Price upon application).
- 32401-1 Soviet public health. USSR, nos. 7, 8, 1973; JPRS 60003, 60119.
 - 32401-2 Translations from Kommunist, no. 11, 1973; JPRS 60002.
 - 32401-3 Translations on Africa, nos. 1365-1374; JPRS 59996, 60010, 60024, 60037, 60057, 60078, 60099, 60118, 60132, 60139.
 - 32401-4 Translations on Eastern Europe: Economic and industrial affairs, nos. 957-968; JPRS 60009, 60023, 60028, 60039, 60048, 60062, 60077, 60086, 60093, 60106, 60124, 60144.
 - 32401-5 Translations on Eastern Europe: Political, sociological, and military affairs, nos. 775-785; JPRS 60008, 60021, 60026, 60041, 60053, 60061, 60078, 60096, 60111, 60115, 60138.
 - 32401-6 Translations on Eastern Europe: Scientific affairs, nos. 354-358; JPRS 60012, 60047, 60063, 60120, 60140.
 - 32401-7 Translations on Latin America, nos. 985-992; JPRS 59994, 60020, 60052, 60071, 60089, 60098, 60107, 60122.
 - 32401-8 Translations on Mongolia, no. 276; JPRS 60043.
 - 32401-9 Translations on narcotics and dangerous drugs, nos. 115-117; JPRS 59993, 60055, 60112.
 - 32401-10 Translations on Near East, nos. 1023-1034; JPRS 59997, 60018, 60045, 60051, 60059, 60072, 60084, 60094, 60102, 60121, 60125, 60137.
 - 32401-11 Translations on North Korea, nos. 311-314; JPRS 60056, 60075, 60081, 60117.
 - 32401-12 Translations on North Vietnam, nos. 1444-1453; JPRS 59995, 60004, 60054, 60066, 60067, 60070, 60083, 60110, 60126, 60142.
 - 32401-13 Translations on People's Republic of China, nos. 238-241; JPRS 60014, 60042, 60060, 60092.
 - 32401-14 Translations on south and east Asia, nos. 428-430; JPRS 60044, 60097, 60129.
 - 32401-15 Translations on USSR agriculture, nos. 690-697; JPRS 60011, 60016, 60033, 60040, 60064, 60085, 60108, 60143.
 - 32401-16 Translations on USSR economic affairs, nos. 500-504; JPRS 59999, 60019, 60080, 60116, 60133.
 - 32401-17 Translations on USSR industrial affairs, nos. 262-266; JPRS 60007, 60027, 60050, 60095, 60128.
 - 32401-18 Translations on USSR military affairs, nos. 956-962; JPRS 60006, 60029, 60046, 60087, 60090, 60101, 60134.
 - 32401-19 Translations on USSR political and sociological affairs, nos. 431-437; JPRS 60005, 60015, 60032, 60058, 60073, 60113, 60123.
 - 32401-20 Translations on USSR resources, nos. 414-420; JPRS 60017, 60034, 60049, 60088, 60105, 60127, 60136.
 - 32401-21 Translations on USSR trade and services, nos. 586-593; JPRS 60013, 60022, 60030, 60074, 60082, 60109, 60130, 60141.
 - 32401-22 Translations on Western Europe, nos. 425-430; JPRS 59998, 60031, 60036, 60069, 60131, 60135.
 - 32401-23 USA: Economics, politics, ideology, no. 8, 1973; JPRS 60025.
 - 32401-24 USSR and East Europe scientific abstracts: Biomedical sciences, no. 9; JPRS 60038.
 - 32401-25 USSR and East Europe scientific abstracts: Chemistry, no. 7; JPRS 60079.
 - 32401-26 Vestnik of the USSR Academy of Medical Sciences, no. 7, 1973; JPRS 60068.
 - 32401-27 Vestnik of USSR Academy of Sciences, no. 7, 1973; JPRS 60065.

JPRS (series).

Y 3.J 66: 13/(nos.)

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32402 60000. Characteristics of electrical part of atomic-electric plants, USSR [with bibliography]; by M. L. Fel'dman and A. K. Chernovets. Sept. 11, 1973. cover title, [1]+a-b+202 p. il. 4° [Publication of Izdatel'stvo Energiya, Leningrad, 1972.] Φ Paper, \$3.00.
- 32403 60001. Gyrostabilizers, USSR [articles, with bibliographies]. Sept. 11, 1973. cover title, [1]+a+16 p. il. 4° [From Izvestiya VUZ, Priborostryeniye, no. 6, 1973.] Φ Paper, \$3.00.
- 32404 60091. Mechanisms and principles of goal-directed behavior, USSR [with bibliographies]; edited by P. K. Anokhin]. Sept. 21, 1973. cover title, [1]+a-e+310 p. il. 4° [Moscow, Izd-Nauka, 1972.] Φ Paper, \$6.00.
- 32405 60100. Information capacity of gradient method of measuring earth's magnetic field, USSR [with bibliography]; by Ye. N. Roze. Sept. 21, 1973. cover title, [1]+4 p. 4° [From Geomagnetizm i aeronomiya, v. 13, no. 4, 1973.] Φ Paper, \$3.00.
- 32406 60103. Ideation and automata, USSR [with bibliography]; by D. A. Pospelov, V. N. Pushkin. Sept. 24, 1973. cover title, [1]+a-b+182 p. il. 4° [Moscow, Izdatel'stvo sovet'skoye radio, 1972.] Φ Paper, \$3.00.
- 32407 60104. Economic evaluation of aircraft and spacecraft, USSR [with bibliography]; by S. A. Sarkisyan, E. S. Minayev. Sept. 24, 1973. cover title, [1]+a+186 p. il. 4° [Moscow, Izdatel'stvo mashinostroyeniye, 1972.] Φ Paper, \$3.00.
- 32408 60114. Analysis of meteorological conditions for aviation, USSR [with bibliography]; K. G. Abramovich, editor. Sept. 25, 1973. cover title, [1]+a-b+64 p. il. 4° [Analiz meteorologicheskikh usloviy dlya aviatsii, no. 95, 1972.] Φ Paper, \$3.00.

JUSTICE DEPARTMENT

Washington, DC 20530

- 32409 Address by Donald E. Santarelli, Administrator, Law Enforcement Assistance Administration, Abidjan World Conference on World Peace Through Law, Abidjan, Ivory Coast, Aug. 29, 1973. [1973.] [1]+11 p. 4°
† J 1.34: Sa 5
- 32410 American student left, historical essay [with select bibliography]; by Carl F. Rosenthal. [1973.] ii+10 p. 4° (American Institutes for Research, Center for Research in Social Systems.) [Reprinted by Law Enforcement Assistance Administration for distribution through National Criminal Justice Reference Service.] † ● Item 717 J 1.2: St 9
- Criminal justice monograph. (Law Enforcement Assistance Administration, National Institute of Law Enforcement and Criminal Justice.)
● Item 717-E
- 32411 New approaches to diversion and treatment of juvenile offenders [papers, with bibliographies]. June 1973. ix+202 p. il. 4° [Presented at Fourth National Symposium on Law Enforcement Science and Technology, May 1-3, 1972 conducted by Institute of Criminal Justice and Criminology, University of Maryland, supported by Contract no. J-LEAA-021-72.] * Paper, \$2.60 (S/N 2700-00190).
L.C. card 73-602916 J 1.37/3: J 98
- 32412 Reducing court delay [with bibliographies]. June 1973. ix+116 p. il. 4° [Papers presented at Fourth National Symposium on Law Enforcement Science and Technology, May 1-3, 1972, conducted by Institute of Criminal Justice and Criminology, University of Maryland, supported by contract no. J-LEAA-021-72.] * Paper, \$2.10 (S/N 2700-00195).
L.C. card 73-602915 J 1.37/3: C 83
- 32413 Exemplary project, community based corrections in Des Moines, coordinated approach to improved handling of adult offenders. [1973.] cover title, [1]+16 p. (Law Enforcement Assistance Administration, National Institute of Law Enforcement and Criminal Justice.) † ● Item 717 J 1.10: D 46
- Selected topic digest (series). (National Criminal Justice Reference Service.)
- 32414 2. Criminal, society, and the victim [with bibliography]; by Gerhard O. W. Mueller and H. H. A. Cooper. [1973.] 19 p. il. 4° (Law Enforcement Assistance Administration.) † ● Item 717-M J 1.42/2: 2

LABOR DEPARTMENT

Washington, DC 20210

- 32415 Background and major provisions of Executive order 11491, as amended, labor-management relations in Federal service. [1973.] 12 p. narrow 8° (FLMR 73-1 (12/72); Labor-Management Services Administration, Office of Federal Labor-Management Relations.) * Paper, 25c. (S/N 2900-00184). ● Item 745 L 1.2: 11/26

Φ For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 37

GOVERNMENT PUBLICATIONS

- 32416 Collective bargaining in public employment and merit system; [prepared by Jerry Lechhook and Herbert J. Lahne]. Apr. 1972. [5]+114 p. 4°
* Paper, \$1.25 (S/N 2900-0153).
L.C. card 72-602061 L 1.2: C 68/4
- 32417 Occupations in library science. 1973. viii+75 p. (Manpower Administration, U.S. Employment Service.) * Paper, 65c. (S/N 2913-00073). ● Item 745
L.C. card 73-602623 L 1.2: L 61/2
- 32418 100 largest retirement plans 1960-71. [1973.] [1]+iii+43 p. il. 4° (Labor-Management Services Administration, Office of Labor-Management and Welfare-Pension Reports.) †
L.C. card 73-601533 L 1.2: R 31/5/960-71
- 32419 Questions and answers on role of Assistant Secretary of Labor for labor-management relations under Executive order 11491, as amended, labor-management relations in Federal service. [1973.] [5]+36 p. 4° (FLMR 74-1 (7/73); Labor-Management Services Administration, Office of Federal Labor-Management Relations.) * Paper, 75c. (S/N 2900-00188). ● Item 745 L 1.2: As 7/4
- 32420 Speech by Peter J. Brennan, Honolulu Chamber of Commerce, Representatives of Hawaiian Labor Movement, and Hawaiian Governor's Task Force on Jobs for Veterans, Honolulu, Hawaii, Sept. 14, 1973. [1973.] 5 leaves, 4° (USDL 73-457.) † L 1.13: B 75/18
- 32421 Speech by Peter J. Brennan, Secretary of Labor, before annual Western Pension Conference, Victoria, British Columbia, Canada, Aug. 7, 1973. Aug. 7, 1973. 7 leaves, 4° (USDL 73-353.) † L 1.13: B 75/11
- 32422 Speech by Peter J. Brennan, Secretary of Labor, before 55th annual Convention of Operating Engineers, Glens Falls, N.Y., July 30, 1973. July 31, 1973. 6 leaves, 4° (USDL 73-345.) † L 1.13: B 75/9
- 32423 Speech by Peter J. Brennan, Secretary of Labor, before Grand Aerie Fraternal Order of Eagles, Seattle, Wash., Aug. 3, 1973. Aug. 3, 1973. 8 leaves, 4° (USDL 73-352.) † L 1.13: B 75/10
- 32424 Speech by Peter J. Brennan, Secretary of Labor, before National Alliance of Businessmen, Detroit, Mich., Sept. 6, 1973. 1973. 6 leaves, 4° (USDL 73-421; Office of Information.) † L 1.13: B 75/15
- 32425 Speech by Peter J. Brennan, Secretary of Labor, before Tampa Chamber of Commerce, Tampa, Fla., Aug. 15, 1973. Aug. 16, 1973. 4 leaves, 4° (USDL 73-379.) † L 1.13: B 75/14
- 32426 Speech by Peter J. Brennan, Secretary of Labor, before 25th annual Southern States Apprenticeship Conference, Tulsa, Okla., July 27, 1973. July 28, 1973. 8 leaves, 4° (USDL 73-339.) † L 1.13: B 75/8
- 32427 Speech by Peter J. Brennan, Secretary of Labor, before 28th Convention of Wood, Wire & Metal Lathers International Union, Orlando, Fla., Aug. 15, 1973. Aug. 15, 1973. 7 leaves, 4° (USDL 73-374.) † L 1.13: B 75/13
- 32428 Speech by Peter J. Brennan, Secretary of Labor, before Women's National Press Club, Washington, D.C., Sept. 12, 1973. 1973. 5 leaves, 4° (USDL 73-454; Office of Information.) † L 1.13: B 75/17
- 32429 Speech by Peter J. Brennan, Secretary of Labor, regular meeting, Y Group, Washington, D.C., Sept. 11, 1973. [1973.] 6 leaves, 4° (USDL 73-428.) † L 1.13: B 75/16
- 32430 Telephone directory. Aug. 1973. 46+46+[4] p. il. 4° (Office of Assistant Secretary for Administration.) [Last 2 pages left blank for notes and frequently called numbers.] * Paper, \$1.25. ● Item 754-E L 1.67: 973

LABOR STATISTICS BUREAU, Labor Dept. Washington, DC 20210

Bulletin.

- 32431 1678. Wage chronology: International Harvester Co., 1970-73, supplement. 1973. 22 p. 4° † ● Item 768 L 2.3: 1678/supp.

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32432 Collective bargaining agreements in Federal service, late 1971, summary report. Apr. 1973. 9 p. il. 4° † L 2.2: C 68/5/971
 32433 Department store inventory price indexes, July 1973. Aug. 30, 1973. 2 p. 4° † L 2.79: 973

Monthly labor review, reprint.

- 32434 2895. Labor and materials required for highway construction; [by] Robert Ball. [1973.] 40-45 p. il. 4° [From June 1973 issue.] † L 2.6/a: 2895

LAND MANAGEMENT BUREAU, Interior Dept. Washington, DC 20240

Information bulletin.

- 32435 4. How to buy public lands. [1973.] [4] p. 4° * Paper, 25c. (S/N 2411-00044).
 ● Item 632 I 53.9: 4/3
 32436 Learning about environment. June 1973. [19] p. il. * Paper, 25c. (S/N 2411-00042). ● Item 633 I 53.7/2: En 8/2

LIBRARY OF CONGRESS Washington, DC 20540

- 32437 Accessions list: Bangladesh, v. 2, no. 1, June, 1973. 1973. cover title, [3] +26+ii p. il. 4° (ISSN 009-8340, American Libraries Book Procurement Center, New Delhi.) [Acquisition activities on which list is based are supported in part by provisions of Public law 480. Issued 2 times a year. Annual index included in Dec. issue. English and Bengali.] † L.C. card 73-902218 LC 1.30/9: 2/1
 32438 Claude Charles Bolch, Julius Augustus Furer, John Franklin Shafroth, William Harrison Standley, register of their papers in Library of Congress. 1973. [34] p. 4° (Naval Historical Foundation Collection; Reference Department, Manuscript Division.) [ISBN 0-8444-00882.] † Library of Congress, Manuscript Division, Washington, DC 20540 L.C. card 73-4374 LC 4.2: B 62
 32439 Literary lectures presented at Library of Congress. 1973. ix+[1]+602 p. 4° * Cloth, \$7.55 (S/N 3016-0018). ● Item 784 LC 1.14: L 71
 L.C. card 72-14365

MARIHUANA AND DRUG ABUSE COMMISSION 801 19th St., NW., Washington, DC 20006

- 32440 Drug use in America, problem in perspective, technical papers of 2d Report of National Commission on Marihuana and Drug Abuse, appendix: v. 2, Social responses to drug use [with bibliographies]. Mar. 1973. xiii+781 p. il. 4° * Paper, \$6.15 (S/N 5266-00005). ● Item 1089 Y 3.M 33/2: 1/973 app./v.2
 L.C. card 73-601309
 32441 — v. 4, Treatment and rehabilitation [with bibliographies]. Mar. 1973. xiii+863 p. il. 4° * Paper, \$7.45 (S/N 5266-00007). ● Item 1089 Y 3.M 33/2: 1/973/app./v.4
 L.C. card 73-601309

MARINE CORPS (Navy), Defense Dept. Washington, DC 20350

Fleet Marine Force manual FMFM (series).

- 32442 4-1. Logistics and personnel support, Dec. 4, 1970, Change 1. Apr. 9, 1973. [14] p. il. 4° [Issued with perforations.] * Paper, 25c. (S/N 0855-00068).
 ● Item 384 D 214.9/4: 4-1/2/ch.1

MEDICINE AND SURGERY BUREAU (Navy), Defense Dept. Washington, DC 20350

- 32443 Medical statistics, Navy, 102d statistical report of Surgeon General, Navy, occurrence of diseases and injuries in Navy for fiscal year 1968. [1973.] x+125 p. il. (NAVMED P-5027.) † ● Item 388 D 206.11: 968

☛For Sale by National Technical Information Service,
 Springfield, VA 22151
 ●Sent to Depository Libraries

GOVERNMENT PUBLICATIONS

U.S. Naval Submarine Medical Center, Submarine Base, Groton, Conn.: Reports.

- 32444 741. Literature review of effects of helium on mechanics of respiration, with clinical correlations [with list of references]; by Clinton Lane. Mar. 5, 1973. cover title, iii+8+2 p. 4° [Research work unit MF099.01.01.11.] †
D 206.10:741

MILITARY HISTORY, OFFICE OF CHIEF OF (Army), Defense Dept., Washington, DC 20315

- 32445 Army lineage series: Armor-cavalry, pt. 2, Army National Guard [with bibliographies]; by Mary Lee Stubbs and Stanley Russell Connor with lineages adapted by Janice E. McKenney. 1972. xiii+297 p. il. 20 p. of pl. [Plates are colored.] * Paper, \$5.00 (S/N 0829-0085). ● Item 343-B
L.C. card 69-60002 D 114.11:Ar 5/pt.2

MINES BUREAU, Interior Dept. Washington, DC 20240

- 32446 Distribution of Pennsylvania anthracite for calendar year, 1972; prepared in Division of Fossil Fuels. [1973.] 9 p. 4° (Mineral industry surveys; Pennsylvania anthracite distribution annual.) † Mines Bureau, Pittsburgh, PA 15213. I 28.50/3:972
- 32447 How you get help from Bureau of Mines, remarks of Elburt F. Osborn, Director, Bureau of Mines, Department of Interior, before American Mining Congress, Denver, Colo., Sept. 11, 1973. [1973.] 7 leaves, 4° †
I 28.52:Os 1/2

Information circulars.

- 32448 8601. Coroslon resistance of metals in hot brines, literature review [with list of references]; by Lloyd H. Banning and Laurance L. Oden. [1973.] [2]+11+39 p. il. 4° * Paper, 70c. ● Item 637-A I 28.27:8601

Petroleum products surveys (series). (Mineral industry surveys.)

- 32449 81. Burner fuel oils, 1973; [by Ella Mae Shelton]. July 1973. cover title, [1]+35 p. map, 4 pl. 4° † Mines Bureau, Pittsburgh, PA 15213. ● Item 642-A I 28.18/3:81

Preprint from 1971 Minerals yearbook.

- 32450 Mineral industry of Iowa; [by Brinton C. Brown]. [1973.] [2]+16 p. il. * Paper, 25c. I 28.37/a 2:Io 9/971

MINT BUREAU, Treasury Dept. Washington, DC 20220

- 32451 100th annual report for fiscal year ended June 30, 1972. [1973.] ix+227 p. il. (Treasury Department document 3259.) * Paper, \$2.20 (S/N 4805-00013). ● Item 965 T 28.1:972

MOTOR CARRIER SAFETY BUREAU, Transportation Dept. Washington, DC 20591

- 32452 Commercial vehicle front-tire failures. 16 p. il. 4° † TD 2.302:F 92

NATIONAL ADVISORY COUNCIL ON EXTENSION AND CONTINUING EDUCATION, 1325 G Street NW., Washington, DC 20005

- 32453 Measure of success, Federal support for continuing education, 7th annual report and recommendations of National Advisory Council on Extension and Continuing Education. Mar. 31, 1973. viii+98 p. 4° † ● Item 1062-B Y 3.Ex 8:1/973

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION Washington, DC 20546

NASA contractor reports CR (series). Φ Paper, each \$3.00.

- 32454 2077. Source mechanisms for rotor noise radiation; by M. V. Lowson, A. R. Whatmore, and C. E. Whitfield. Aug. 1973. cover title, v+58 p. il. 4°
N 51.26:(nos.)

*For Sale by Superintendent of Documents
†Distribution Made by Issuing Office
‡Not Available for Sale or Distribution

DECEMBER 1973

- 32455 2261. Annoyance judgments of aircraft with and without acoustically treated nacelles by Paul N. Borsky and Skipton Leonard. Aug. 1973. iii+70 p. il. 4° [Prepared under contract NGL-33-008-118 by Columbia University, Noise Research Unit, Franklin Square, N.Y.]
- 32456 2263. Radiation from apertures in curved surfaces [with list of references]; by P. H. Pathak and R. G. Kouyoumjian. July 1973. cover title, iii+77 p. il. 4° [Prepared by Ohio State University, Electro-Science Laboratory, Columbus, Ohio, under contract NGR 36-008-144.]
- 32457 2279. Arousal from sleep by noises from aircraft with and without acoustically treated nacelles [with list of references]; by J. S. Lukas, D. J. Peeler, and M. E. Dobbs. July 1973. cover title, vi+45 p. il. 4°
- 32458 2281. Physical phenomena related to crystal growth in space environment [with list of references]; by Ting L. Chu. July 1973. cover title, iii+36 p. il. 4° [Prepared by Electronic Sciences Center, Southern Methodist University, Dallas, Tex., under contract NAS1-11869.]
- 32459 2283. Ionic migration and weathering in frozen Antarctic soils [with list of references and notes]; by Florenzo C. Ugolini and Duwayne M. Anderson. July 1973. cover title, [1]+24 p. il. 4° [Prepared by College of Forest Resources, University of Washington, Seattle, Wash., under contract NGR 50-001-153.]
- 32460 2299. Pressure recovery performance of conical diffusers at high subsonic Mach numbers [with list of references]; by Francis X. Dolan and Peter W. Runstadler, jr. Aug. 1973. iii+143 p. il. 4°
- 32461 2304. Compilation of studies from atmospheric variability experiment (AVE) [with list of references]; by J. R. Scoggins [and others]. Aug. 1973. cover title, vii+192 p. il. 4° [Prepared by Texas A&M University, College Station, Tex.]
- 32462 2314. Distribution of odd nitrogen in lower stratosphere and possible perturbations caused by stratospheric air transport [with list of references]; by Ivar S. A. Isaksen and Elgil Hessvedt. Aug. 1973. cover title, iv+23 p. il. 4°

NASA SP (series).

NAS 1.21: (nos.)

- 32463 331. Significant accomplishments in sciences, Goddard Space Flight Center, 1972, proceedings of symposium held at NASA Goddard Space Flight Center, Nov. 7-8, 1972, prepared by Goddard Space Flight Center. 1973. ix+223 p. il. 4° (Scientific and Technical Information Office.) Φ Paper, \$3.00. L.C. card 73-602687
- 32464 3078. Tables for supersonic flow of helium around right circular cones at zero angle of attack [with list of references]; by Joseph L. Sims. 1973. iii+[1]+74 p. il. 4° (Scientific and Technical Information Office.) [Accompanied by microfiche supplement in envelope.] * Paper, \$2.45 (S/N 3300-00490). $\bullet$ Item 830-1 L.C. card 73-600000
- 32465 7037(32). Aeronautical engineering, special bibliography with indexes, supp. 32. June 1973. cover title, [113] p. 4° (Scientific and Technical Information Office.) [Selection of annotated references to unclassified reports and journal articles that were introduced into NASA scientific and technical information system and announced in May 1973 in Scientific and Technical Aerospace Reports (STAR), International Aerospace Abstracts (IAA). Φ Paper, \$3.00. L.C. card 75-611357

NASA technical notes TN (series).

NAS 1.14: D- (nos.)

- 32466 D-6080. Acoustic and aerodynamic performance of 6-foot-diameter fan for turbofan engines: 2. Performance of QF-1 fan in nacelle without acoustic suppression, by Arthur W. Goldstein, James G. Lucas, and Joseph R. Balomblin, Nov. 1970, errata. Aug. 1973. 1 p. 4° $\dagger$
- 32467 D-6523. Experimental investigation of laminar gas jet diffusion flames in zero gravity, Jan. 1972, errata; by Thomas H. Cochran. Aug. 1973. 2 p. 4° $\dagger$
- 32468 D-7020. Experimental performance of modular turbojet combustor burning natural gas fuel, by Nicholas R. Marchionna and Arthur M. Trout, Dec. 1970, errata. Aug. 1973. 1 p. 4° $\dagger$
- 32469 D-7193. Application of phase-change technique to thin sections with heating on both surfaces [with list of references]; by James L. Hunt, Joan I. Pitts, and Christine B. Richie. Aug. 1973. cover title, [1]+68 p. il. 4° Φ Paper, \$3.00.
- 32470 D-7194. Wind tunnel investigation of effects of variations in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configuration [with list of references]; by Lysle P. Parlett, Charles C. Smith, jr., and James L. Megrall. Aug. 1973. [1]+154 p. il. 4° Φ Paper, \$3.00.
- 32471 D-7219. Heat pipe investigations [with list of references]; by James P. Marshburn. Aug. 1973. cover title, iv+44 p. il. 4° Φ Paper, \$3.00.
- 32472 D-7222. Experimental and analytical determination of stability parameters for balloon tethered in wind [with list of references]; by L. Tracy Redd, Robert M. Bennett, and Samuel R. Bland. Sept. 1973. cover title, iii+55 p. il. 4° Φ Paper, \$3.00.
- 32473 D-7300. Airport-area airspace used in simulated operations with experimental powered-lift STOL airplane [with list of references]; by Norman S. Slisby and Richard H. Sawyer. Sept. 1973. cover title, [1]+27 p. il. 4° Φ Paper, \$3.00.

Φ For Sale by National Technical Information Service,
Springfield, VA 22151

$\bullet$ Sent to Depository Libraries

Page 41

GOVERNMENT PUBLICATIONS

- 32474 D-7307. Cold cathodes for sealed-off CO₂ lasers [with list of references]; by Urs E. Hochuli, Thomas P. Sclaca, and Charles R. Hurt. Aug. 1973. cover title, iv+60 p. il. 4° Φ Paper, \$3.00.
- 32475 D-7355. Materials technology programs in support of mercury rankine space power system [with list of references]; by Phillip L. Stone. Sept. 1973. cover title, iii+46 p. il. 4° Φ Paper, \$3.00.
- 32476 D-7365. Extended torsional tests of interlocked bi-stem satellite boom [with list of references]; by Richard A. Abercrombie. Aug. 1973. cover title, v+22 p. il. 4° Φ Paper, \$3.00.
- 32477 D-7377. Flaw growth behavior in thick welded plates of 2219-T87 aluminum at room and cryogenic temperatures [with list of references]; by Royce G. Forman, Samuel V. Glorioso, and James D. Medlock. Aug. 1973. cover title, vi+43 p. il. 4° Φ Paper, \$3.00.
- 32478 D-7381. Oxidation resistance of selected mechanical carbons at 650° C in dry flowing air [with list of references]; by Gordon P. Allen and Donald W. Wisander. Sept. 1973. cover title, [1]+16 p. il. 4° Φ Paper, \$3.00.
- 32479 D-7402. Test stand for precise measurement of impulse and thrust vector of small attitude control jets [with list of references]; by James R. Woodruff and Dean M. Chisel. Aug. 1973. cover title, v+36 p. il. 4° Φ Paper, \$3.00.

NATIONAL ARCHIVES AND RECORDS SERVICE, General Services Administration, Washington, DC 20408

National Archives and Records Service Inventory series.

- 32480 6. Inventory of records of War Manpower Commission, record group 211; compiled by Charles Zaid. 1973. viii+75 p. 4° $\dagger$
L.C. card 73-600180 GS 4.10/2:6

NATIONAL BUREAU OF STANDARDS, Commerce Dept. Gaithersburg, MD 20760

Building science series.

- 32481 45. Dynamic thermal performance of experimental masonry building; [by] Bradley A. Peavy, Frank J. Powell and Douglas M. Burch. July 1973. iii+98+[1] p. il. 4° (Building Environment Division, Center for Building Technology, Institute for Applied Technology.) * Paper, \$1.25 (S/N 0303-01119). $\bullet$ Item 241-A
L.C. card 72-600347 C 13.29/2:45

Monograph.

- 32482 130. Divergent beam (Kossel) X-ray method and its uses in measuring strain contours in individual grain of Fe-3 weight percent Si transformer sheet. [with list of references]; by; Harvey Yakowitz. Aug. 1973. iii+76 p. il. 4° (Metallurgy Division, Institute for Materials Research.) * Paper, 95c. (S/N 0303-01120). $\bullet$ Item 247-A
L.C. card 72-600265 C 13.44:130

Technical notes. $\bullet$ Item 249-A

C 13.46:(nos.)

- 32483 785. Scanning electron microscope examination of wire bonds from high-reliability devices [with list of references]; by; Kathryn O. Leedy. Aug. 1973. vi+28+[1] p. il. 4° (Electronic Technology Division, Institute for Applied Technology.) * Paper, 55c.
- 32484 788. Methods of measurement for semiconductor materials, process control, and devices, quarterly report, Jan. 1-Mar. 31, 1973 [with list of references]; W. Murray Bullis, editor. Aug. 1973. vii+70+[1] p. il. 4° (Electronic Technology Division, Institute for Applied Technology.) * Paper, 95c.

NATIONAL CANCER INSTITUTE, Health, Education, and Welfare Dept., Bethesda, MD 20014

- 32485 Multilevel analysis of NCI research grants by scientific category, fiscal year 1972 [prepared by John H. Schneider]. [July 1973.] cover title, a-dd+199 p. $\dagger$ $\bullet$ Item 507-G-2 HE 20.3152: R 31/4/972
- 32486 Virus-cancer program. [Aug. 1973.] [3]+399 p. il. 4° (Progress report 10 Public Health Service, National Institutes of Health.) [Report prepared by senior staff of Viral Oncology Area, Division of Cancer Cause and Prevention, NCI.] $\dagger$ $\bullet$ Item 507-G-2 HE 20.3152: V 81/973

NATIONAL CENTER FOR HEALTH SERVICES RESEARCH AND DEVELOPMENT, Health, Education, and Welfare Dept., Rockville, MD 20852

- 32487 Financial planning in ambulatory health programs; prepared by Boston Consulting Group, Inc. [July 1973.] xi+[1]+243 p. +[6] folded leaves, il. 4° (DHEW publication (HSM) 73-3027.) $\dagger$ HE 20.2108: Am 1

*For Sale by Superintendent of Documents

$\dagger$ Distribution Made by Issuing Office

$\ddagger$ Not Available for Sale or Distribution

DECEMBER 1973

NATIONAL CENTER FOR HEALTH STATISTICS, Health,
Education, and Welfare Dept., Washington, DC 20201

- 32488 Nursing homes, county and metropolitan area data book, data compiled from 1969 master facility inventory; [prepared by Stewart C. Rice, jr.]. 1973. iii+135 p. 4° ([DHEW publication (HSM) 73-1215-2; Division of Health Resources Statistics.]) * Paper, \$2.10 (S/N 1722-00280).
● Item 508

L.C. card 78-609001

HE 20.2202 : C 83/sec.2/973

Vital health statistics: Series 2, Data evaluation and methods research.

- 32489 57. Net differences in interview data on chronic conditions and information derived from medical records; [by William G. Madow]. June 1973. v+58 p. il. 4° (DHEW publication (HSM) 73-1331; Division of Health Interview Statistics.) [Prepared in cooperation with Bureau of Census.] * Paper, 85c. ● Item 500-E
L.C. card 73-600034

HE 20.2210 : 2/57

— Series 13, Data from National health survey.

- 32490 14. Utilization of short-stay hospitals, summary of nonmedical statistics, United States, 1970 [with list of references; by Evelyn W. Gordon]. Aug. 1973. iv+58 p. il. 4° (DHEW publication (HRA) 74-1765; [Division of Health Resources Statistics.]) [Prepared in cooperation with Bureau of Census.] * Paper, 85c. ● Item 500-E
L.C. card 73-600046

HE 20.2210 : 13/14

NATIONAL ENDOWMENT FOR THE ARTS, National Foundation on
the Arts and the Humanities, Washington, DC 20506

- 32491 Expansion arts program, guidelines for funding assistance for community arts projects, fiscal 1975. [1973.] [3]+11 p. 4° † ● Item 831-B-2

NF 2.8: Ex 7

NATIONAL GUARD BUREAU, Defense Dept.
Washington, DC 20310

- 32492 Join local radio station, Army Guard communications, electronics. [Apr. 1973.] [3] p. narrow il. 16° (Army, National Guard; [NGB-26-73.]) [Illustrations are colored.] † ● Item 356

D 12.2: R 11

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND
HEALTH, Health, Education, and Welfare Dept.
Rockville, MD 20852

- 32493 Working with ammonia. [1973.] [5] p. il. narrow 8° ([HSM 73-11003].) † ● Item 499-F-2

HE 20.2802 : Am 6

NATIONAL INSTITUTE OF DENTAL RESEARCH, Health,
Education, and Welfare Dept., Bethesda, MD 20014

- 32494 National Institute of Dental Research, grants and awards, fiscal year 1972 funds; [prepared by Office of Program Studies and Analysis]. (DHEW publication (NIH) 74-547.) [In collaboration with Smithsonian Information Exchange (SSIE).] † ● Item 507-0-1

HE 20.3402 : G 76/972

NATIONAL INSTITUTE OF EDUCATION, Health, Education,
and Welfare Dept., Washington, DC 20202

NOTE.—The National Institute of Education was established by Public law 92-318, approved June 23, 1972.

Center for Vocational and Technical Education, Ohio State University: Research and development series.

- 32495 91. Procedures for constructing and using task inventories; [by William H. Malching and Sidney D. Borchert]. Mar. 1973. v+56 p. il. 4° [Final report on Project conducted under Project 7-0158, Grant OEG-3-7-000158-2037.] * Paper, \$1.35. ● Item 461-D-1

HE 18.11 : 91

✦For Sale by National Technical Information Service
Springfield, VA 22151

●Sent to Depository Libraries

Page 43

GOVERNMENT PUBLICATIONS

- 32496 Research in education, semiannual index Jan.-June 1973. [1973.] cover title, [2]+614 p. (Educational Resources Information Center, ERIC: DHEW publication (NIE 73-27603).) [Includes accession nos. ED 066 621-073 329.] * Paper, \$5.30. ● Item 466-A HE 18.10: 973/ind.

NATIONAL INSTITUTE OF MENTAL HEALTH, Health, Education, and Welfare Dept., Chevy Chase, MD 20015

- 32497 Depressive illnesses major public health problem; by Dean Schuyler and Martin M. Katz. Jan. 1973. [1]+9 p. (DHEW publication (HSM) 73-9125; Division of Extramural Research Programs.) * Paper, 20c. ● Item 507-B-5 HE 20.2402: D 44/3
- 32498 Mental health resources in greater Washington area, fall 1973. [Revised 1973.] [1973.] [3]+46 p. 4° (DHEW publication (HSM) 73-1960 (formerly PHS publication 2126).) [Map on p. 2-3 of cover.] * Paper, 75c. (S/N 1729-00332). ● Item 507-B-15 HE 20.2426: 973

Statistical note. (Office of Program Planning and Evaluation, Biometry Branch, Survey and Reports Section.)

- 32499 90. Utilization of psychiatric facilities by persons under 18 years of age, United States 1971; [by] Richard W. Redick. July 1973. 15 p. il. 4° ([DHEW publication (NIH) 74-655.]) † ● Item 507-B-12 HE 20.3812: 90

NATIONAL INSTITUTES OF HEALTH, Health, Education, and Welfare Dept., Bethesda, MD 20014

- 32500 National Institutes of Health radiation safety guide; prepared by Radiation Safety Staff, Department of Nuclear Medicine, Clinical Center. [1973.] vii+96 p. il. 4° (DHEW publication (NIH) 73-18; Office of Administrative Services, NIH safety guide series.) [Issued with perforations. Some illustrations are colored.] * Paper, \$2.00 (S/N 1740-00351). ● Item 507-H HE 20.3008: R 11

NATIONAL LABOR RELATIONS BOARD Washington, DC 20570

- 32501 Classification outline for decisions of National Labor Relations Board and related court decisions. Dec. 1972. cover title, xxxi+151 p. 4° * Paper, \$2.35. ● Item 826 LR 1.8/7: 972
L.C. card 73-602820
- 32502 Decisions and orders of National Labor Relations Board, v. 189, Mar. 18-Apr. 22, 1971. 1973. xii+965 p. 4° * Cloth, \$10.75 (S/N 3100-0101). ● Item 826 LR 1.8: 189
- 32503 — v. 195, Jan. 24-Mar. 31, 1972. 1973. xv+1139 p. 4° * Cloth, \$12.10 (S/N 3100-0107). ● Item 826 LR 1.8: 195

NATIONAL LIBRARY OF MEDICINE, Health, Education, and Welfare Dept., Bethesda, MD 20014

- 32504 Bibliography of history of medicine, no. 6, 1970. [1973.] vi+295 p. 4° ([DHEW publication (NIH) 72-315.]) * Paper, \$3.70 (S/N 1752-0138). ● Item 508-F HE 20.3615: 6

NATIONAL OCEAN SURVEY, Commerce Dept. Washington, DC 20235

- 32505 Distances between United States ports. 5th (1973) edition. [1973.] iii+34 +7 p. il. map 4° † Paper, 60c. ● Item 192 C 55.402: D 63
- 32506 List of authorized aeronautical chart agents, for sale of National Ocean Survey aeronautical charts, July 1, 1973. [1973.] 31 p. narrow 8° Φ (Price upon application) C 55.402: Ae 8
- 32507 Nautical chart catalog 3, United States, Alaska, including Aleutian Islands, charts, tide tables, coast pilots, current tables, tidal current charts. Aug. 1973. [2] p. il. oblong, f° folded into narrow 8° size † C 55.418: 3/973

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32508 Tidal current tables, 1974: Atlantic Coast of North America. 1973. 200 p. il. [Includes list of publications relating to tides and tidal currents. Astronomical data, 1974 on p. 3 of cover.] † Paper, \$2.00. ● Item 190
C 55.425 : 974

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, Commerce Dept., Washington, DC 20235

Hydrometeorological report.

- 32509 48. Probable maximum precipitation and snowmelt criteria for Red River of the North above Pembina, and Souris River above Minot, N. Dak. [with list of references]; prepared by John T. Riedel. May 1973. vii+69 p. il. 4° (Hydrometeorological Branch, Office of Hydrology.) [Prepared in cooperation with Department of Army, Corps of Engineers.] * Paper, 95c.
● Item 275-A C 55.28 : 48

NOAA technical report. (National Marine Fisheries Service.)

- 32510 NMFS CIRC-376. Bottom-water temperatures on Continental Shelf, Nova Scotia to New Jersey [with list of literature cited; by] John B. Colton, Jr. and Ruth R. Stoddard. June 1973. iii+55 p. il. 4° * Paper, 60c. ● Item 208-B-7 C 55.13 : NMFS CIRC-376

NATIONAL OCEANOGRAPHIC INSTRUMENTATION CENTER, Commerce Dept., Washington, DC 20390

Instrument fact sheet IFS (series).

- 32511 73011. [Index to National Oceanographic Instrumentation Center instrument fact sheets]. June 1973. [1]+8+[1] p. il. 4° [Issued with perforations.] †
C 55.71 : 73011

NATIONAL PARK SERVICE, Interior Dept. Washington, DC 20242

- 32512 Cape Hatteras National Seashore, N.C. [Revised 1973.] [1973.] [2] p. il. narrow f° folded narrow 24° size † ● Item 651 I 29.6/2 : C 17 h/2/973
- 32513 Chesapeake, National Park Service lightship for environmental awareness. [1973.] [5] p. il. narrow 8° † I 29.2 : C 42/3
- 32514 Discovering Prince William Forest; [by Bill Perry]. [1973.] cover title, 24 p. il. 4° [Drawings by Betty Fraser. Blank and line spaces for developing exploration notebook.] * Paper, 45c. (S/N 2405-00502). ● Item 651 I 29.6 : P 93/4
- 32515 Vicksburg National Military Park, Miss. [Revised 1973.] [1973.] [2] p. il. oblong large 8°, folded into narrow 24° size † ● Item 650 I 29.21 : V 66/4/973

NATIONAL SCIENCE FOUNDATION Washington, DC 20550

- 32516 Cooperative science programs in Latin America, cooperative research, joint seminars, scientific visits. [Aug. 1973.] [1]+8 p. narrow 8° ([NSF 73-16.]) † NS 1.2 : L 34
- 32517 Initial reports of Deep Sea Drilling Project. [Project planned and carried out with advice of Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES).]
v. 17. Covering leg 17 of cruises of drilling vessel Glomar Challenger, Honolulu, Hawaii to Honolulu, Hawaii, Apr.-May 1971 [with lists of references]; Editors, Peter H. Roth, James R. Herring. [Aug. 1973.] [1]+xx+930 p. il. 1 pl. 4° [Illustrated lining papers. National Ocean Sediment Coring Program under contract C-482 by University of California, Scripps Institution of Oceanography. Some illustrations are colored.] * Cloth, \$13.00. ● Item 834-C NS 1.2 : D 36/2/v.17
L.C. card 74-603338
- 32518 Science resources studies highlights: Federal support to universities and colleges rises to \$4.1 billion in FY 1972; [prepared in Universities and Nonprofit Institutions Studies Group. Division of Science Resources Studies]. Aug. 1, 1973. 4 p. il. 4° (NSF 73-307.) † NS 1.31 : Un 3/972

☛For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 45

GOVERNMENT PUBLICATIONS

- 32519 — Immigrant scientists and engineers decline in FY 1972, physicians increase sharply; prepared in Manpower Utilization Group, Division of Science Resources Studies. Aug. 20, 1973. 4 p. il. 4° (NSF 73-311.) †
NS 1.31: Im 6/972

NATIONAL TECHNICAL INFORMATION SERVICE, Commerce Dept., Springfield, VA 22151

- 32520 SFCSI special foreign currency science information program, list of translations in process, 1973, coordinated and administered by National Science Foundation. Sept. 1973. cover title, v+45 p. (SFCSI 73-01.) [Text on p. 2 of title.] †
C 51.12: 973

NATIONAL TRANSPORTATION SAFETY BOARD, Transportation Dept., Washington, DC 20590

Aircraft accident report NTSB-AAR (series).

- 32521 72-12. Capitol International Airways, Inc., DC-8-63 F, Anchorage, Alaska, Nov. 27, 1970; adopted Mar. 29, 1972, errata. June 12, 1973. 1 p. 4° (SA-423; file 1-0025.) †
TD 1.112: 72-12/errata
- Marine casualty report. (U.S. Coast Guard Marine Board of Investigation report and Commandant's action, action by National Transportation Safety Board.)
- 32522 MV Theresa F. capsizing in Gulf of Mexico on Jan. 9, 1969. Mar. 31, 1971. cover title, [1]+22 p. 4° †
TD 1.116: M 57/4

NAVAL OBSERVATORY, Defense Dept. Washington, DC 20350

Publications of Naval Observatory, 2d series, v. 22.

- 32523 pt. 5. [Micrometer measures of 618 double stars with list of references; by R. L. Walker, jr.]. 1972. 66 p. il. 4° † ● Item 398
L.C. card 73-602415
D 213.10: 22/pt.5

NAVAL OPERATIONS OFFICE, Defense Dept. Washington, DC 20390

- 32524 Naval documents of American Revolution: v. 6, American theatre, Aug. 1-Oct. 31, 1776, European Theatre, May 26-Oct. 5, 1776 [with bibliography]; William James Morgan, editor, foreword by President Richard Nixon, introduction by Edwin B. Hooper. 1972 [published 1973.] xxvi +[2]+1641 p. il. 4° [Illustrated lining papers.] * Cloth, \$18.40.
● Item 399-D
L.C. card 64-60087
D 207.12: 6

NAVAL RESEARCH OFFICE, Defense Dept. Washington, DC 20390

NRL reports. (Naval Research Laboratory.) D 201.8:(nos.)

- 32525 7513. Adaption of NRL acoustic research tank facility for experiments in parametric sonar, with preliminary results [with bibliographies; by] Anthony I. Eller. Jan. 29, 1973. cover title, iii+20 p. il. 4° [NRL problem S01-68, projects SF11121-601-16727 and SF11121-103-16728.] Φ (Price upon application).
- 32526 7548. Description of α - β filter in Cartesian coordinates [with list of references; by] Ben H. Cantrell. Mar. 21, 1973. cover title, ii+48 p. il. 4° [NRL problem R02-54, project RF 05-151-403-4010.] Φ (Price upon application, AD 759011).

OIL AND GAS OFFICE, Interior Dept. Washington, DC 20240

- 32527 Oil imports totals for April 1973. July 25, 1973. 14 leaves, 4° †
I 64.2: Oi 5/3/973-2

*For Sale by Superintendent of Documents
†Distribution Made by Issuing Office
‡Not Available for Sale or Distribution

DECEMBER 1973

PATENT OFFICE, Commerce Dept.
Washington, DC 20231

- 32528 Manual of classification, replacement pages, Jan. 1973. [1973.] [190] p. 4°
[Includes list of replacement pages. Issued with perforations.] * Paper,
\$44.00 (including basic manual, index and supplementary material for
an indefinite period) \$11.00 additional for foreign mailing. ● Item 258
C 21.12: 969/rev.pages-13

PESTICIDES PROGRAMS OFFICE, Environmental
Protection Agency, Chamblee, GA 30341

- 32529 EPA compendium of registered pesticides, v. 3: [Insecticides, acaricides,
molluscides, and antifouling compounds.] (Technical Services Division.)
[Issued with perforations.] * Paper, \$66.00 (including basic manual
and supplementary material for an indefinite period); \$16.50 additional
for foreign mailing.
L.C. card 73-600835 EP 5.11/3: 972/supp.7
supp. 7. [June 30, 1973.] [1]+1v+154 leaves, 4° ● Item 473-B-3
- 32530 Guide for analyzing pesticide legislation, digest of state pesticide use and
application laws. Jan. 1, 1973. [193] p. 4° † EP 5.8: P 43
- 32531 Lead, pesticides, man and environment [with bibliographies]. Feb. 1972,
published 1973. [2]+vi+67 p. il. 4° (Special Pesticide Review Group.)
† ● Item 473-B-1
L.C. card 73-602395 EP 5.2: L 46

POPULATION GROWTH AND THE AMERICAN FUTURE,
COMMISSION ON, 726 Jackson Pl., NW.
Washington, DC 20506

Research report.

- 32532 6. Aspects of population growth policy [with bibliographies]; edited by Robert
Parke, jr. and Charles F. Westoff. [1972, published 1973.] xvii+607 p. il. 4°
* Paper, \$5.30. ● Item 1089
L.C. card 72-600128 Y 3.P 81: 9/6

PRESIDENT OF UNITED STATES
Washington, DC 20501

- 32533 Annual report, ESEA title 3 [5th annual report of President's National Ad-
visory Council on Supplementary Centers and Services]. [1973.] cover
title, 32 p. il. 4° † Pr 36.8: Su 7/2/R 29/972
- 32534 Malnutrition, learning, and intelligence, paper presented at Leadership
Institute held by President's Committee on Mental Retardation in
Charleston, S.C.; [by] Herbert G. Birch. [1973.] [1]+24+[2] p.
([PCMR professional papers. DHEW publication (OS)73-96; Presi-
dent's Committee on Mental Retardation.]) † President's Committee
on Mental Retardation, Washington, D.C. 20201 ● Item 851-J
Pr 36.8: M 52/29
- 32535 Opening doors for handicapped, publicity guide and activities calendar for
State and local committees on employment of handicapped. [1973.] cover
title, [1]+26+[10] p. il. (President's Committee on Employment of the
Handicapped.) † President's Committee on Employment of Handi-
capped, Washington, DC 20210 ● Item 766-C PrEx 1.10/8: D 72
- 32536 Time for progress report, ESEA, title 3, 4th annual report of President's
National Advisory Council on Supplementary Centers and Services.
[1973.] cover title, 52 p. il. 4° [Text on p. 2 of cover.] †
Pr 30.8: Su 7/2/R 29/971
- 32537 Weight training for strength and power. [1973.] 20 p. il. 4° (President's
Council on Physical Fitness and Sports.) † ● Item 851-J (special
offer) Pr 37.8: P 56/2/W 42

GOVERNMENT PUBLICATIONS

- 32538 White House Fellows. [1973.] vi+22 p. il. oblong, 12° [President's Commission on White House Fellows.] † Director, Commission on White House Fellows, White House, Washington, DC 20500 ● Item 851-J
Pr 36.8: W 58/F 33/973-74

PUBLIC HEALTH SERVICE, Health, Education, and Welfare Dept. Washington, DC 20201

- 32539 Community water supply study, analysis of national survey findings. July 1970. [4]+xii+111 p. il. 4° (Environmental Health Service, Bureau of Water Hygiene.) †
HE 20.2: W 29/5

RECLAMATION BUREAU, Interior Dept. Washington, DC 20240

- 32540 Colorado—Big Thompson Project, 1972, regional examination of major irrigation structures & facilities, region LM field trip report; [by C. H. Christensen, R. R. Ridgway, and W. A. Lidster]. Sept. 1972. cover title, [1]+iv+42 leaves, il. 4° †
I 27.2: C 71/15
REC-ERO [Reclamation Branch, Engineering and Research Center] (series). † (Price upon application) I 27.60: (nos.)
32541 71-49. Azotea Tunnel instrumentation program, San Juan-Chama Project N. Mex. [with list of references]; by Walter H. Ortel. Dec. 1971. [3]+45+[4] p. il. 4° (Earth Sciences Branch, Division of General Research.)
32542 72-36. Four instrumentation developments of general interest, fiscal year 1972; by M. Gutierrez, V. B. Hartman, P. F. Enger. Oct. 1972. [3]+15+[4] p. il. 4° (Instrumentation Group, Division of General Research.)
32543 72-38. Laboratory load tests on buried flexible pipe progress report: 4, Reinforced plastic mortar (RPM) pipe [with list of references]; by Amster K. Howard. Nov. 1972. [2]+v+75+[4] p. il. 4° (Earth Sciences Branch, Division of General Research.)

REHABILITATION SERVICES ADMINISTRATION, Health, Education, and Welfare Dept., Washington, DC 20201

Statistical notes.

- 32544 38. Profile of rehabilitated clients who were recipients of public assistance at any time during vocational rehabilitation process, fiscal year 1971. July 1973. 11 p. 4° †
HE 17.114: 38

SAFETY OFFICE, Transportation Dept. Washington, DC 20590

- Railroad employee accident investigation reports. † TD 3.10/3: (nos.)
32545 2. Southern Railway System, Forsyth, Ga., Dec. 2, 1972. [June 1, 1973.] [2] p. 4°
32546 3. Penn Central Transportation Company, Harmon, N.Y., Dec. 20, 1972. [June 20, 1973.] [2] p. 4°
32547 4. Penn Central Transportation Company, New York, N.Y., Dec. 28, 1972. [June 20, 1973.] [2] p. 4°

SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

- 32548 Rules of practice and rules relating to investigations and code of behavior governing ex parte communications between persons outside Commission and decisional employees, as in effect Dec. 1, 1972. [1973.] ix+31 p. 4° [Title 17, Code of Federal regulations, pt. 200, 201, and 203.]
* Paper, 65c. (S/N 4600-00093). ● Item 907 SE 1.6: R 86/4/972

SMALL BUSINESS ADMINISTRATION Washington, DC 20416

- 32549 SBA story, Small Business Administration, 1972 annual report, v. 2. [1973.] [2]+204 p. 4° * Paper, \$2.60 (S/N 4500-00121). ● Item 901-A
SBA 1.1: 972/v.2

*For Sale by Superintendent of Documents

†Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32550 Survival and growth (2), small R & D firm, proceedings, West Coast Conference, Los Angeles, Calif. Sept. 1972, dealing with problems of small firms in research and development industry; edited by Samuel Z. Cardon. [1973.] x+205 p. 4° (Office of Procurement Assistance.) [Co-sponsored with National Aeronautics and Space Administration.] * Paper, \$2.60 (S/N 4500-00119). ● Item 901-B
L.C. card 72-600233 SBA 1.2: Su 7
- 32551 U.S. Government purchasing and sales directory; [prepared by George S. Hartman]. [1972 revision.] [Dec. 1972; published 1973.] cover title, viii+169 p. 4° ([PMA-3; Office of Procurement Assistance.]) * Paper, \$2.35. ● Item 901-D SBA 1.13/3: 972

SMITHSONIAN INSTITUTION Washington, DC 20560

Smithsonian contributions to zoology.

- 32552 153. Western Atlantic shrimps of genus *Solenocera* with description of new species (Crustacea, Decapoda, Penaeidae) [with list of literature cited; by] Isabel Pérez Farfante and Harvey R. Bullis, Jr. 1973. [2]+33 p. il. 4° * Paper, 65c. ● Item 910-B
L.C. card 73-1967 SI 1.27: 153

SOCIAL AND REHABILITATION SERVICE, Health, Education, and Welfare Dept., Washington, DC 20201

- 32553 Building education into youth services. [1973.] 31 p. il. 4° ((SRS) 73-02021.) [Reprinted from Human needs, v. 1, no. 3, Sept. 1972.] * Paper, 55c. HE 17.26/a: Ed 8
- 32554 Funds, by source, expended for public assistance payments and for administration, services, and training, calendar year ended Dec. 31, 1972. July 15, 1973. cover title, iii+15 p. il. 4° (SRS 74-04006, Office of Financial Management, Division of Finance.) † ● Item 512-A-1
HE 17.2: P 96/4/972

SOCIAL SECURITY ADMINISTRATION, Health, Education, and Welfare Dept., Washington, DC 20201

Health insurance statistics: III (series). (Office of Research and Statistics.)

- 32555 50. Short-stay hospitals under medicare, 1969, use and charges, by major discharge diagnosis, 1969; [by Charles Helbing]. Aug. 17, 1973. 12 p. 4° (DHEW publication (SSA) 74-11702.) † HE 3.28/5: 50

Medicare: Health insurance for the aged, 1971. (Office of Research and Statistics.)

- 32556 sec. 2. Persons enrolled in health insurance program. [1973.] xxvii+59 p. 4° (DHEW publication (SSA) 73-11704.) Title on cover is: Medicare, 1971, sec. 2: Enrollment. * Paper, \$1.50. ● Item 516-D
L.C. card HEW 66-36 HE 3.57: 971/sec.2

Preliminary findings from survey of new beneficiaries, report.

- 32557 10. Income of newly entitled beneficiaries, 1970 [with list of references; by Alan Fox]. June 1973. [3]+58 p. il. 4° (Office of Research and Statistics.) [Errata, 1 p. issued also.] † HE 3.46/2: 10

Research and statistics note 1973 (series). (Office of Research and Statistics.)

- 32558 15. Railroad retirement legislation in 1973, [prepared in Interprogram Studies Branch, Division of Economic and Long-Range Studies]. Aug. 22, 1973. 3 p. 4° (DHEW publication (SSA) 74-11701.) † HE 3.28/2: 973/15

SOIL CONSERVATION SERVICE, Agriculture Dept. Washington, DC 20250

- 32559 Conservation in New Mexico, progress report 1972. [1973.] cover title, [1]+12 p. il. 4° (M 7-N-22850; Soil Conservation Service, Albuquerque, N. Mex.) [One illustration is colored.] † A 57.2: N 42m/2

♠For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

GOVERNMENT PUBLICATIONS

- 32560 Federal-State-private cooperative snow surveys; Summary of snow survey measurements Wyoming and pertinent measurements in Colorado, Montana and South Dakota, 1919-72; [prepared by George W. Peak and George P. Clagett]. [1973.] cover title, [5]+x+206+[2] p. il. 4° (Soil Conservation Service, Casper, Wyo.) [Prepared in cooperation with State Engineer of Wyoming, Department of Atmospheric Research, University of Wyoming, Forest Service, Geological Survey, National Park Service, Bureau of Reclamation, and other Federal, State and private organizations.] ‡ A 57.2: Sn 6/17/919-72
- 32561 Resource conservation in California, 1973. [1973.] [16] p. il. 4° (M 7-N-22584). ‡ A 57.2: C 12/7
- 32562 Soil survey: Steele County, Minn. [with list of literature cited; by Joseph F. Cummins and others]. Aug. 1973. cover title, [1]+102 p. il. 37 p. of pl. and maps. 4° [Prepared in cooperation with Minnesota Agricultural Experiment Station. Text on p. 2 of cover. One map is colored.] * Paper, \$5.50. ● Item 102 (Rev. 1957) L.C. card 73-602841 A 57.38: St 3
- 32563 Soil surveys for land use planning in Alaska. [Mar. 1973.] [2]+9 p. il. (M 7-N-22821.) [Two illustrations are colored.] ‡ A 57.2: A1 1s

SOURIS-RED-RAINY RIVER BASINS COMMISSION Moorhead, MN 56560

NOTE.—The Souris-Red-Rainy River Basins Commission was established by Executive Order 11359, dated June 20, 1967.

- 32564 Annual report, 1972. 1972. cover title, 32 p. il. 4° [Table of contents on p. 2 of cover. Some illustrations are colored.] ‡ Y 3.50 8: 1/972

SPECIAL ACTION OFFICE FOR DRUG ABUSE PREVENTION, Executive Office of the President, Washington, DC 20501

NOTE.—The Special Action Office for Drug Abuse Prevention was created by Executive order 11599, June 17, 1971. Formalized by Congress in the Drug Abuse Office and Treatment Act of 1972 (Pub. Law 92-253), signed into law, March 21, 1972.

- 32565 Special Action Office for Drug Abuse Prevention answers most frequently asked questions about drug abuse. [5]+25 p. ‡ PrEx 20.2: An 8/972

SPORT FISHERIES AND WILDLIFE BUREAU, Interior Dept. Washington, DC 20240

- 32566 Chincoteague National Wildlife Refuge. [1973.] [6] p. il. ‡ I 49.2: C 44

STATE DEPARTMENT Washington, DC 20520

Background notes. ([Office of Media Services, Bureau of Public Affairs.]) [Issued with perforations.] * Paper, \$14.50 per yr., \$3.65 additional for foreign mailing; single copies, each 20c. ● Item 862-B

- 32567 France [with reading list]. [Revised May 1973.] May 1973. 10 p. il. 4° ([Publication 8209.]) S 1.123: F 84/973
- 32568 Malagasy Republic [with reading list]. [Revised June 1973.] June 1973. 4 p. il. 4° ([Publication 8015.]) S 1.123: M 29/3/973
- 32569 Nigeria [with reading list]. [Revised May 1973.] May 1973. 7 p. il. 4° ([Publication 7953.]) S 1.123: N 56/2/973
- 32570 Portuguese Guinea [with reading list]. [Revised June 1973.] June 1973. 4 p. il. 4° ([Publication 7966.]) S 1.123: P 83/973
- 32571 Tonga [with reading list]. June 1973. 4 p. 4° ([Publication 8594.]) S 1.123: T 61/973
- 32572 Department of State. [1973.] [2] p. il. oblong 8° folded into narrow 8° size. ‡ ● Item 876 S 1.2: St 2/17/973

European and British Commonwealth series. (Office of Media Services, Bureau of Public Affairs.) ● Item 869 S 1.74: (nos.)

- 32573 79. Washington summit: General Secretary Brezhnev's visit to United States, June 18-25, 1973. [Aug. 1973.] cover title, 63 p. il. 4° ([Publication 8733.]) [Text on p. 2 of cover.] * Paper, 85c. L.C. card 73-602921

*For Sale by Superintendent of Documents

‡Distribution Made by Issuing Office

‡Not Available for Sale or Distribution

DECEMBER 1973

- 32574 80. Current foreign policy: United States troop levels in Europe [testimony of Deputy Secretary of State, Kenneth Rush on July 25, 1973, before Senate Foreign Relations Subcommittee on Arms Control, International Law and Organizations]. [Sept. 1973.] 7 p. il. 4° ([Publication 8737.]) * Paper, 25c.
- International boundary study. (Geographer [Directorate for Functional Research], Bureau of Intelligence and Research.)
- 32575 139. Kenya-Uganda boundary [with list of documents]. Aug. 27, 1973. cover title, [1]+12 p. map, 4° † S 1.119/3:139
- Treaties and other international acts series. * Paper, \$27.00 a yr. (approximately 150 issues), \$6.75 additional for foreign mailing; single copies, vary in price. (Issues of \$1.00 or more are not furnished as part of the subscription). ● Item 899 S 9.10:(nos.)
- 32576 7485. Technical cooperation, agreement between United States and Afghanistan, extending agreement of June 30, 1953, as extended, effected by exchange of notes signed Kabul June 26 and July 8, 1972; [entered into force July 8, 1972]. [1973.] [2]+3 p. [English and Persian.] * Paper, 15c.
- 32577 7491. Improvement of airfield facilities, memorandum of understanding between United States and Khmer Republic, signed Phnom Penh Aug. 12, 1972; [entered into force Aug. 12, 1972.] [1973.] [2]+5 p. * Paper, 15c.
- 32578 7492. Military assistance, deposits under Foreign assistance act of 1971, agreement between United States and Colombia, effected by exchange of notes signed Bogota Aug. 25, 1972, with related notes dated Bogota Sept. 11 and 21, 1972; [entered into force Aug. 25, 1972; effective Feb. 7, 1972.] [1972.] [2]+5 p. [English and Spanish.] * Paper, 15c.
- 32579 7581. Claims, Trust Territory of Pacific Islands, agreement between United States and Japan, implementing article 1, par. 3, of agreement of Apr. 18, 1969, effected by exchange of notes signed Washington Mar. 13, 1973; [entered into force Mar. 13, 1973]. [1973.] [2]+5 p. * Paper, 15c.
- 32580 7584. Atomic energy, application of safeguards by IAEA to United States-Republic of Korea cooperation agreement, agreement between United States, Republic of Korea, and International Atomic Energy Agency, amending agreement of Jan. 5, 1968, signed Vienna Nov. 30, 1972; [entered into force Mar. 19, 1973]. [1973.] [2]+3 p. * Paper, 15c.
- 32581 7650. Cooperation in agriculture, agreement between United States and Union of Soviet Socialist Republics, signed Washington June 19, 1973; [entered into force June 19, 1973]. [1973.] [2]+13 p. [English and Russian.] * Paper, 25c.
- 32582 7663. Fisheries, consideration of claims resulting from damage to fishing vessels or gear and measures to prevent fishing conflicts, protocol between United States and Union of Soviet Socialist Republics, adding annex II to agreement of Feb. 21, 1973, signed Copenhagen June 21, 1973; [entered into force June 21, 1973]. [1973.] [2]+15 p. [English and Russian.] * Paper, 30c.

TARIFF COMMISSION Washington, DC 20436

- 32583 Aluminum ingot from Canada, determination of no injury or likelihood thereof in investigation AA1921-121 Antidumping act, 1921, as amended. Aug. 1973. 4 p. 4° (TC publication 602.) † TC 1.31: A18
- 32584 Antifriction balls and ball bearings, including ball bearings with integral shafts, and parts thereof, report to the President on investigation TEA-I-27 under sec. 301(b)(1) of Trade expansion act of 1962. July 1973. cover title, v+25+123 p. il. 4° (TC publication 597.) † TC 1.2: B 38
- 32585 Ceramic glazed wall tile from Philippines, determination of no injury or likelihood thereof in investigation AA1921-120 under Antidumping act, 1921, as amended. Aug. 1973. cover title, 6 p. 4° (TC publication 599.) † TC 1.31: C 33/3
- 32586 Deformed concrete reinforcing bars of non-alloy steel from Mexico, determination of no injury or likelihood thereof in investigation AA1921-122 under Antidumping act, 1921, as amended. Aug. 1973. cover title, 6 p. 4° (TC publication 605.) † TC 1.31: C 74
- 32587 Electronic color separating or sorting machines from United Kingdom, determination of no injury or likelihood therein in investigation AA1921-123 under Antidumping act, 1921, as amended. Sept. 1973. cover title, 6 p. 4° (TC publication 609.) † TC 1.31: E1 2
- 32588 Electronic receiving tube mounts, workers of Reynoldsville, Pa., plant of Erskine Industries, Inc., report to the President on investigation TEA-W-203 under sec. 301(c)(2) of Trade expansion act of 1962. Aug. 1973. [51]; p. (TC publication 600.) † TC 1.2: T 79/2

◆For Sale by National Technical Information Service,
Springfield, VA 22151

●Sent to Depository Libraries

Page 51

GOVERNMENT PUBLICATIONS

- 32589 Footwear for men and women: Hubbard Shoe Co., Inc., Rochester, N.H., report to the President on worker investigation TEA-W-202 under sec. 301(c) (2) of Trade expansion act of 1962. Aug. 1973. [51] p. 4° (TC publication 598.) † TC 1.2: F 73/21
- 32590 Footwear for men, Winchell Shoe Manufacturing Co., Natick, Mass., report to the President on investigation TEA-W-201 under sec. 301(c) (2) of Trade expansion act of 1962. July 1973. [3]+6+A-29 p. 4° (TC publication 593.) † TC 1.2: F 73/20
- 32591 Footwear for women and protective footwear for men, boys, and infants, and parts of such footwear, BGS Shoe Corp., Manchester, N.H., report to the President under sec. 301(c) (2) of Trade expansion act of 1962. July 1973. [2]+ii+21+A-113 p. 4° (TC publication 592.) † TC 1.2: F 73/19
- 32592 Footwear for women and protective footwear for men, women, boys, and infants: BGS Shoe Corp., Manchester, N.H. report to the President on firm investigation TEA-F-53 under sec. 301(c) (1) of Trade expansion act of 1962. Aug. 1973. [70] p. 4° (TC publication 606.) † TC 1.2: F 73/22
- 32593 Nonfat dry milk, report to President on investigation 22-23 under sec. 22 of Agricultural adjustment act, as amended. Aug. 1973. cover title, [1] +14+28 p.4° (TC publication 603.) † TC 1.2: M 59/2/973-2
- 32594 Printed vinyl film from Brazil and Argentina, determination of likelihood of injury in investigations AA1921-117 and -118 under Antidumping act, 1921, as amended. July 1973. cover title, 6 p. 4° (TC publication 595.) † TC 1.31/2: F 48
- 32595 Stainless steel wire rods from France, determination of injury in investigation AA1921-119 under Antidumping act, 1921, as amended. July 1973. cover title, 11 p. 4° (TC publication 596.) † TC 1.31/2: St 3/5
- 32596 Steel wire rope from Japan, determination of injury in investigation AA1921-124 under Antidumping act, 1921, as amended. Sept. 1973. cover title, 8 p. 4° (TC publication 608.) † TC 1.31/2: St 3/6
- 32597 Television yokes, workers of Warrensville Heights (Cleveland), Ohio, plant of Pemcor, Inc., report to the President on Worker investigation TEA-W-199 under sec. 301(c) (2) of Trade expansion act of 1962. July 1973. [62] p. 4° (TC publication 591.) † TC 1.2: T 23/8
- 32598 Transistors and diodes, workers of Buffalo, N.Y., plant of General Electric Co., report to President on investigation TEA-W-196 under sec. 301 (c) (2) of Trade expansion act of 1962. June 1973. [45] p. 4° (TC publication 588.) † TC 1.2: T 68/4
- 32599 Women's dress shoes, Erving Shoe Co., Inc., Lowell, Mass., report to President on worker investigation TEA-W-200 under sec. 301(c) (2) of Trade expansion act of 1962. July 1973. [1]+11+A-31 p. 4° (TC publication 590.) † TC 1.2: Sh 7/30

TELECOMMUNICATIONS POLICY OFFICE, Executive Office of the President, Washington, DC 20504

NOTE.—The Telecommunications Policy Office was created as an agency in the Executive Office of the President by Reorganization Plan 1 of 1970, effective April 20, 1970.

- 32600 Manual of regulations and procedures for radio frequency management [replacement pages]. Revision, May 1973. [1973.] [201] p. il. 4° [Issued with perforations.] * Paper, \$21.50 (including basic manual and supplementary material for an indefinite period) ; \$5.50 additional for foreign mailing. ● Item 857-M-1 PrEx 18.8: R 11/rev.pages

*For Sale by Superintendent of Documents
†Distribution Made by Issuing Office
‡Not Available for Sale or Distribution

DECEMBER 1973

TRANSPORTATION DEPARTMENT
Washington, DC 20590

- 32601 Cooperative approach to cargo security in trucking industry. Aug. 1973. cover title, [103] p. il. 4° (DOT 5200.7; Office of Transportation Security.) * Paper, \$1.25. ● Item 982-C-1 TD 1.2: C 19
- 32602 Report to Congress: Railroad-highway safety, pt. 2, Recommendations for resolving problem; prepared by staff of Federal Railroad Administration, Federal Highway Administration. Aug. 1972. [4]+vi+108 p. il. 4° ‡
L.C. card 72-601286 TD 1.2: R 13/2/pt.2
- 32603 6th annual report, fiscal year 1972. [1973.] xxiv+226 p. il. * Paper, \$1.85 (S/N 5000-00062). ● Item 982-C TD 1.1: 972

TREASURY DEPARTMENT
Washington, DC 20220

- 32604 Recommendations for change in U.S. financial system. Aug. 3, 1973. iii+34 +[1] p. 4° * Paper, 65c. (S°N 4800-00216). ● Item 925 T 1.2: F 49/3
L.C. card 73-602565

UNITED STATES POSTAL SERVICE
Washington, DC 20260

[Commemorative stamp posters.]

NOTE.—Commemorative stamp posters, which will be issued irregularly, are available on a subscription basis from the Superintendent of Documents, \$3.00 a yr.; 75c. additional for foreign mailing.

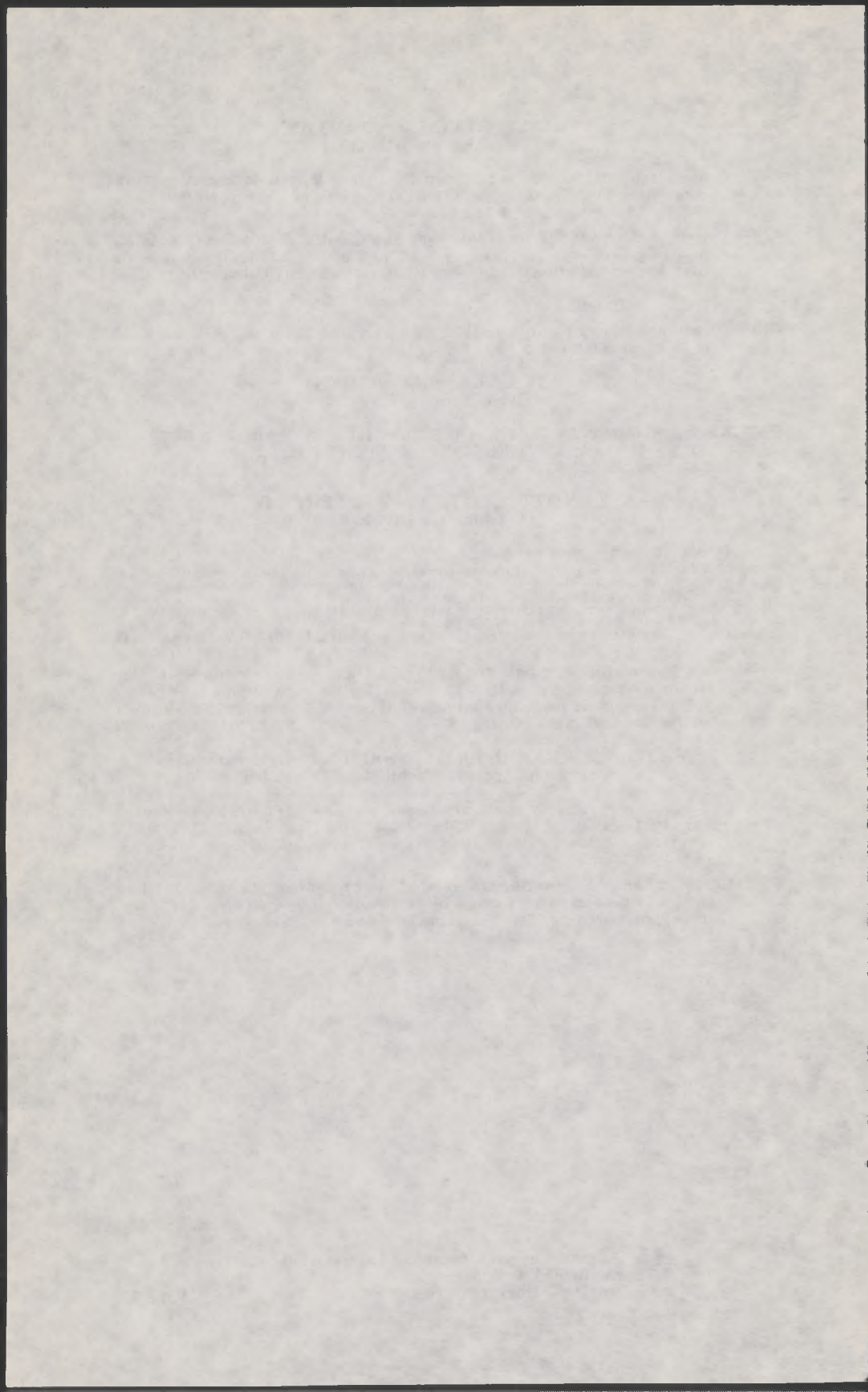
- 32605 Angus cattle commemorative stamp (rural America series). Issue date Oct. 5, 1973, St. Joseph, Mo. [1973.] 10.5 x 8 in. P 1.26/2: An 4
- 32606 100th anniversary of postal card, issue date Sept. 14, 1973, Washington, D.C. [1973.] 10.5 x 8 in. P 1.26/2: P 84/9
- 32607 Postal contracting manual. June 29, 1973. [32] p. 4° (Publication 41.) [Includes transmittal letter 12. Issued with perforations.] * Paper, \$10.50 (including basic manual and changes for 1 year) \$2.75 additional for foreign mailing). ● Item 838-E P 1.12/6: 971/trans.12

WATER PROGRAM OPERATIONS OFFICE, Environmental
Protection Agency, Washington, DC 20460

- 32608 Community water supply study, significance of national findings. Reprinted Apr. 1971. [1971.] [1]+ii+13 leaves, 4° (Water Hygiene Division.) [Previously printed as Bureau of Water Hygiene, USPHS, report dated July 1970.] † EP 2.2: W 29/2
- 32609 Health guidelines for water and related land resources planning, development and management, for use by Regional Offices [with lists of references]; prepared by Water Hygiene Division. Oct. 1971. vi+57 p. il. 4° † EP 2.8: H 34

☛For Sale by National Technical Information Service,
Springfield, VA 22151
●Sent to Depository Libraries

Page 53



Index

MONTHLY CATALOG JANUARY-DECEMBER 1973

NOTE.—All publications are indexed by subjects currently in use with cross-references, if necessary, from all key words in the title. Title entries are used when the subject is not apparent in the given title. The name of the writer, reporter, editor, or compiler of the document is used when it appears in the publication. Serial publications are indexed from the series title, in addition to criteria mentioned above.

A

- Aamland, E., molten salt electrowinning of magnesium-yttrium alloys, 23660
- Abaca:
disposal from national stockpile—
hearing, 24845
law, 30921
reports, 26139, 31064
- Abandoned housing research, compendium, 31411
- Abbott Creek Research Natural Area, general information, 21607
- Abbreviations:
contractions used by FAA, etc., handbook, 16639, 18163, 22382
Federal aviation regulations 18291
reference aid, abbreviations in—
Cambodian and Lao press, 23525
Mongolian press, 16189
reference aid, glossary of abbreviations, acronyms, and terms used in West European press, 26599
- Abel, W. T., removing pyrite from coal by dry-separation methods, 29230
- Abell, Bruce, mosaic 18654
- Abend David A., USAF instructors journal, 19032
- Abercrombie, Richard A., extended torsional tests of interlocked bi-stem satellite boom, 32476
- Aberdeen, Miss., special flood hazard information report, Tombigbee River, 17407
- Aberdeen Proving Ground, disposition of real property assets, hearings, 31010
- Abex Corp., hydraulic presses and industrial hydraulic valves, certain workers of Columbus, Ohio, plant of Denison Division of Abex Corp., Tariff Commission report, 17912
- Ability:
aptitude levels in enlisted manpower pool of Air Force, 20940
elementary and secondary school children to sense oncoming car velocity, 15625
human resources, message from the President, 24816
lack of bilateral generalization of adaptation to auditory rearrangements, 31578
preservation of human resources during national crisis, HEW emergency preparedness programs, 32368
- Ablation:
effects of material composition on ablation performance of low-density elastomeric ablaters, 29283
oxidant-fuel-ratio-zoned rocket injector for high performance and ablative engine compatibility, design and evaluation, 17221
- Ables, Jackson H., Jr., outlet works, Warm Springs Dam Dry Creek, Russian River Basin Sonoma County, Calif., 25101
- Abortion:
not the law's business? monograph, 26745
prostaglandins in abortion and reproductive physiology, citations from literature search, 25609
- Above property rights, 24254
- Aboveground home shelter, 26298
- Abrams, Creighton W., nomination, hearings, 19950
- Abrasives:
abrasive blast of aircraft components, military standard, 15969
abrasive materials—
mineral industry survey, advance summary, 21932, 29201
minerals yearbook chapter, 20551
Federal item identification guide, 26312
- Abridged index medicus, 17939
- Absaroka Mountain, stratigraphic framework of Absaroka Volcanic Supergroup in Yellowstone National Park region, 21730
- Absentee Delaware Tribe of Western Oklahoma, *see* Delaware Indians.
- Absenteeism, suggestions for control of turnover and absenteeism, 23588
- Absolute intensities of gamma rays from decay of 238C and 232Th, 22476
- Absorbent materials, absorbing materials and control rods for fast reactors, USSR study, 31528
- Absorbents, concept evaluation, recovery of floating oil using polyurethane foam sorbent, 17418
- Absorbers:
Investigation of helicopter transmission noise reduction by vibration absorbers and damping, 20988
reflection characteristics of screen wave absorbers, 28783
absorption of—
microwaves by plasma which is essentially nonuniform along magnetic field, 22453
SHF waves by plasma at upper hybrid frequencies, study, 22440
anomalous absorption of electromagnetic waves in magnetized plasma, 22445
nonlinear effect in microwave absorption by plasma, 22446
see also Atomic absorption.
- Abstracts, *see* names of departments, bureaus, etc., issuing abstracts—*also* subjects.
- Academy of Health Sciences, Army, Walter Reed Army Institute of Nursing, educational opportunity in nursing field, 30765
- Academy of Medical Sciences, USSR:
33rd General Session, USSR study, 25332
vestnik (periodical), 19045
- Academy of Sciences, USSR:
Institute of High Temperatures, outstanding results of scientific research in 1971, 20448
vestnik (periodical), 19046
- Acadia National Park, general information, 27807
- Acaricides, EPA compendium of registered pesticides, acaricides, etc., 23904-6, 26793, 29445, 31765, 32529
- Accelerated roadbuilding on North Umpqua, economic analysis, 20317

INDEX 1973

- Acceleration:
 - develop acceleration and brake monitor system, 24053
 - effective specific impulse of external nuclear pulse propulsion systems, 17727
- Accelerators:
 - influence of method of liquefying vapor phase on flow characteristics of accelerator output of liquid-metal MHD-converter, USSR study, 21848
 - photonuclear activation analysis with GE (Li) detectors, compilations, 30594, 30596
 - possibility of building pulsed electron accelerators with energies of 20-50 MeV, USSR study, 23516
 - see also* Synchrotrons.
- Accelerometers, experimental investigation of accelerometer-controlled automatic braking system, 20607
- Access, *see* Availability.
- Accessibility, its use as evaluation criterion in testing and evaluating alternative transportation systems, 30213
- Accessions index, lists, etc., *see* Library accessions.
- Accident insurance, commercial health and accident insurance industry, is it competitive, can it provide adequate health care system, hearings, 27348
- Accidents:
 - communications, guidelines, 30495
 - Defense Dept. resources used to provide medical emergency transportation to civilians, hearings, 27192
 - dispatcher, emergency medical technicians, training course, 20662
 - emergency health services digest, 29040
 - emergency medical services—
 - act—
 - hearings, 15753, 27220
 - report, 29874
 - Federal programs, proposals and other background, 21264
 - systems development act, hearings, 31153
 - GPSS/360 computer models to simulate aircraft passenger emergency evacuation, 28093
 - organic iodide formation under accident conditions in water-cooled reactors, review, 24203
 - pipeline accident report, NTSB-PAR series, 30567-568
 - roles and resources of Federal agencies in support of comprehensive emergency medical services, 25269
 - safety recommendations, 18884
 - soldering accident dosimeter to film badge holder for radac detecting element, process, military standard, 20069
 - some characteristics of local accident in core of fast reactor, USSR study, 20450
 - State statutes on emergency medical services, 29043
 - see also* Aircraft accidents—Disasters—
 - Injuries—Marine accidents—Mine accidents—Motor vehicle accidents—Quarry accidents—Railroad accidents—Safety of life.
- Accommodation of stereoacuity, 25408
- Accountants:
 - and Government in age of social change (address), 28976
 - audit guide for use by independent public accountants—
 - for low rent housing program, 25270
 - urban renewal program, 31436
 - certified public, regulations governing practice of attorneys, enrolled agents before Internal Revenue Service 17916
 - examination announcement, 22592-593, 30876
 - partnership between accounting professional and SEC (address), 30623
 - provisions in CPA laws and regulations, 19169
- Accounting, *see* Accounts and accounting.
- Accounting machines, current industrial reports, 16773, 30845
- Accounts and accounting:
 - accounting and finance manual, 21403, 32163
 - accounting guidelines for mental health centers and related facilities, 16391
 - accounting manual for—
 - Federal credit unions, 25574
 - health maintenance organizations, 21754
 - multi-funded economic development districts, 20085
 - accounting methods allowed farmers, tax incentives and consequences, 23129
 - accounting periods and methods, tax information, 20417
 - accounting series releases, SEC, 17951
 - air carriers, certificated, uniform system, 19023
 - better management needed in civil agencies over selection of in-house or contract performance of support activities, GAO report, 30253
 - Budget and accounting act, amend, hearing, 27331
 - civilian career in Coast Guard, 28219
 - code of Federal regulations, 25157
 - cost accounting for small manufacturers, 16472
 - cost certification guide for mortgagors, contractors, and independent public accountants, 20372
 - financial accounting, classifications and standard terminology for local and State school systems, 30139
 - flow of funds accounts—
 - annual flow, 16056
 - 1945-71, financial assets and liabilities outstanding, 20267
 - frequently asked questions about accrual accounting in Federal Government, 28980
 - GAO review (periodical), 18396
 - General Accounting Office policy and procedures manual for guidance of Federal agencies, 18398
 - low-rent housing accounting handbooks, 21798, 32377
 - manual for manpower accounting in higher education, 17362
 - MILSTRAP, military standard transaction reporting and accounting procedures, 17338
 - National economic accounting training programs for economists and statisticians from other countries, 20084
 - New Mexico work-effort analysis computer program, 17530
 - occupational survey of 7 accounting and finance civil service series, 22366
 - 1000-MWE central station power plants investment cost studies, 24200-201
 - program budgeting and analysis, what's new? (address), 28982
 - range management practices, 1970 investment costs, 20901
 - school food service financial management handbook for uniform accounting—
 - complete system, 31347
 - simplified system, 31348
 - status, progress, and problems in Federal agency accounting during 18 months ended June 30, 1973, GAO report, 32357
 - summary of accounts and deposits in all commercial banks, national summary, 25141
 - toward common accounting standards (address), 29484
 - uniform accounting system for nonappropriated funds, Air Force manual, 15491
 - uniform system of accounts—
 - and reports for certificated air carriers, 28212

Accounts and accounting—Continued
uniform system of accounts—continued
prescribed for—
natural gas companies, 19023, 26434
public utilities and licenses, 19024
radiotelegraph carriers, FCC rules and
regulations, 18312
telephone companies, uniform system of
accounts, FCC rules and regulations,
18311
wire-telegraph and ocean-cable carriers,
FCC rules and regulations, 18312
Accumulators, discharging of inductive
power accumulator for generating short-
front pulse, USSR study, 26589
Accuracy in spectrophotometry and lumi-
nescence measurements, 29317
Accuracy of ballistic density departure
tables, 22409
Accuracy of data on population character-
istics for subgroups of total population,
22564
Accuracy of determining mountain pine
beetle attacks in ponderosa pine utilizing
pitch tubes, frass, and entrance holes,
23291
Accuracy requirements for measurement of
meteorological parameters which affect ar-
tillery fire, 22410
Acer macrophyllum, *see* Maple.
Acetylcholine:
effect of anticholinesterase substances on
action of acetylcholine and its ana-
logues on neurons of gastropods, USSR
study, 17637
on molecular mechanism of action of or-
ganic agents on cholinergic receptors, 27639
Acetylene, selection of coals for AVCO hy-
drogen plasma arc process for making
acetylene, 28218
Achievement:
achievement, mobility and draft, their im-
pact on earnings of men, 26835
study of achievement of our nation's stu-
dents, 31231
Achievement Place, model for delinquency
treatment, 30504
Achievement tests, training evaluation and
student achievement measurement, review
of literature, 15485
Achievements, cost and administration of
Ocean sediment coring program, 20324
Achievements 1972, Federal incentive awards
program, Civil Service Commission, 29803
Acid-mine-drainage, *see* Mine drainage.
Acidity-alkalinity (pH), 20857.
Acidity/alkalinity, water quality standards
criteria digest, 20221
Acidosis, Bohr effect alteration important in
respiratory acidosis in chronic hyper-
capnia, 30408
Acids:
acidity-alkalinity (pH), 20857
acidity/alkalinity, water quality standards
criteria digest, 20221
elevated atmospheric CO₂ on acid-base
balance and red-cell electrolytes of FBM
submarine crew members, effects, 20526
site preparation and reforestation of
droughty, acid sands, 23288
Ackerman, Carl W., papers in Library of
Congress, register, 29181
Ackerman, Larry J., effects of altitude on
Cebus apella monkey, 16658
Acoma Pueblo:
disposition of judgment funds, report,
17005
land conveyance to, report, 32055
providing for disposition of funds appro-
priated to pay judgment in favor of
Pueblo de Acoma in Indian Claims Com-
mission docket 266, law, 16924
Acoustical insulation, *see* Insulation.
Acoustics, *see* Noise—Sound.
Acquisition, *see* Valuation.
Acquisition management, guide for program
management, 30733

Acquisition management, statement of work
preparation guide, 15493
Acquisition management systems list, 31178-
179
Acquisition programs, Housing act, develop-
ment progress directory, 32371
ACR series, 16442, 31750
Acreage allotments, *see* Agricultural prod-
ucts—also names of products.
Acreage marketing guides, 19100, 22315-316
Acrididae, arthropod and nematode parasites,
parasitoids and predators of Acrididae in
America, north of Mexico, 28024
Acrobasis, *see* Moths.
Acronyms:
Government Procurement Commission,
report, index-bibliography-acronyms,
26513
reference aid, glossary of abbreviations,
acronyms, and terms used in West Euro-
pean press, West Europe study, 26599
Action:
Action for businessman, Peace Corps,
Vista, 25810
Action pamphlets, 19096-98, 20878, 22306-
307, 26923, 27972, 29592-593, 30686
Active Corps of Executives, one part of
ACTION, 29594
appropriations, 1973—
hearings, 15866
reports, 16989, 16991, 19887
appropriations, 1974, hearings, 28387,
32132
Associate Director, nomination of—
Ervin, Charles W., hearing, 19999
Mould, Christopher M., hearing, 20000
bi-annual statistical summary, Peace Corps
volunteer records, 20879, 22309, 30685
biographic register, 30643
businessmen in Action, 20878
continuation of domestic programs, hear-
ing, 19753, 21359
Director, nomination of Michael F. Bal-
zano, Jr., 26268
directory of college student volunteer pro-
grams, 30686
domestic programs, appropriations, 1974,
report, 30983
field staff, Foreign Service list, 18384
first 120 days of ACTION, 29595
flyers, 29591
foster grandparent program, one part of
Action, 28923
interACTION (periodical), 18495
1972 annual report, 29596
1000 volunteers, university year for Action,
19098
operation of all domestic volunteer pro-
grams, authorize—
hearing, 28559
reports, 29889, 32114
opportunities for older Americans in
ACTION, 27972
SCORE, Service Corps of Retired Exec-
utives, one part of Action, counselor's
guidebook, 29592
Service Corps of Retired Executives, one
part of ACTION, 29593
transition, magazine for Action volunteers,
18970
U.S. foreign aid to education: Does Brazil
need it? GAO report, 30267
VISTA, one part of action, 27973
what should U.S. policy be for development
assistance to Ecuador? 25247
Action Committee, annual report, 26021
Action for environmental quality, 28787
Action for retarded, recommendations to
President on Federal programs, 22193
Actions at law:
citizen suits under Clean air act, 21488
court proceedings and actions of vital in-
terest to Congress, reports, 16928, 24303,
32018-19
litigation releases, Securities and Ex-
change Commission, 18588

INDEX 1973

Actions at law—Continued

- National Labor Relations Board, litigation manual outline and litigation manual, 27792
- permitting suits against United States to adjudicate quiet title actions—
law, 19489
- report, 19702
- prescriptive package, case screening and selected case processing in prosecutor's offices, 26607
- taking of evidence abroad in civil or commercial matters, convention agreement, 20805
- 10-year limitation from time of defective or unsafe improvements on real property on actions arising out of death or injury in D.C.—
law, 19504
- report, 19914
- See also* Appeals—Criminal procedure.
- Activated carbon, *see* Carbon.
- Activated charcoal, *see* Charcoal.
- Activated sludge, *see* Sludge.
- Activation analysis, *see* Radioactivation analysis.
- Active Ballot Club No. 1428, political committee, annual report, 22860
- Active Corps of Executives, one part of ACTION, 29594
- Active research projects report, National Environmental Research Center, 16015
- Activity networks to model transportation systems subject to facility constraints, 26379
- Acts of Congress, *see* Law.
- Actuarial notes, 22225-227, 23969, 25701, 26830-831
- Actuaries Board, retirement and disability fund, 1970, annual report, 26050
- Actuators, hydrofluidic servoactuator development, 30763
- Acute conditions, incidence and associated disability, United States, 16370, 29331
- Adams, Dewey A., review and synthesis of research concerning adult vocational and technical education, 17351
- Adams, Jim. for Congress Committee, *see* Jim Adams for Congress Committee.
- Adams, John W., bibliography of geology and mineralogy of rare earths and scandium to 1971, 26492
- Adams County Republican Committee, annual report, 22765
- Adaptations:
adaptation to displaced hearing, non-proprioceptive change, 30407
- handedness and adaptation to distortion, of size and distance under water, 2664.
- see also* Dark adaptation.
- Adapters, improved adapter for increment borer ratchet assembly, 25224
- Adapting Goddard Research and Engineering Development Exercise (GREMEX) to non-spacecraft environments, 29279
- Aday, Lu Ann, utilization of health services, indices and correlates, research bibliography, 25563
- Addamiano, Arrigo, vapor phase epitaxy of gallium arsenide, 27854
- Addicks Reservoir, opportunity for recreation, 23900
- Addicott, Warren O.:
neogene marine mollusks of Pacific Coast of North America, 1797-1969, bibliography, 23329
- Oligocene molluscan biostratigraphy and paleontology of lower part of type Temblor formation, Calif., 27572
- Addicts, *see* Narcotic addicts—Narcotic habit.
- Additives:
aerial spray adjuvants for herbicidal drift control, 28926
- flow augmenting effects of additives on open channel flows, 30189

Addresses, lectures, etc.: by—

- Allen, Charles E., 21542
- Allen, David B., 23903
- Allen, Edward L., 21106, 29121
- Ancker-Johnson, Betsy, 28240
- Anderson, H. W., 26809
- Armstrong, Ellis L., 23921, 23927, 23933
- Austen, Frank, 29353
- Bartelsmeyer, Ralph R., 17455
- Bellport, B. P., 23942
- Bentley, Helen D., 23223, 27507, 28867-868
- Bernstein, George K., 23450
- Blackwell, Robert J., 20520, 21926-928, 23225, 23617, 23619, 25397
- Bomar, Thomas R., 21547
- Brennan, Peter J., 25376, 29156-159, 31553-554, 32420-429
- Brimmer, Andrew F., 21569-571, 21589, 21591, 25182, 25188, 28886, 30227
- Browne, Secor D., 21076-79, 22576, 30872
- Brunthaver, Carroll G., 25823
- Bucher, Jeffrey M., 21588, 26449, 28888, 28901, 28905, 30226
- Burns, Arthur F., 23243, 28893, 28897, 28902, 28904, 32293
- Burch, Dean, 23213
- Butz, Earl L., 16596, 20891-893, 20896, 20902, 20905, 20908, 22330-331, 22335, 22361
- Cairns, Robert W., 21112
- Campfield, W. L., 28977, 29001
- Carroll, Thomas E., 21491
- Casey, Howard F., 23224, 23610, 23618, 23620, 25399, 27690-691
- Casey, William J., 29462, 29465-466, 29469, 29471, 29473-475, 29477, 29479-482, 29484-485, 30618-621, 30623-629
- Clarke, Thomas Hal, 21546
- Comarow, Murray, 29572, 30675
- Duane, J. Dewey, 20270, 32294
- David, John, 29351
- Davis, Fred J., 23943
- Day, James V., 32286
- Dent, Frederick B., 22625, 22639, 24278-280, 25959-962, 25975, 27058-61, 28228-230, 29816, 30892
- Dillon, E. Scott, 27692
- Dole, Hollis M., 21814
- Farr, Richard S., 29349
- Fletcher, James, 31663
- Fry, Donald W., 25033
- Gibson, Andrew E., 22638
- Gilliland, Whitney, 28208
- Gottschalk, Robert, 22190, 27862
- Green, Marshall, 22258
- Grunewald, Richard J., 23584-585
- Hann, R. A., 23279
- Hearn, George H., 16045, 21549-550, 25147-150, 27506, 28866
- Herlong, A. Sydney, jr., 29464
- Hodgson, James D., 16217, 17652-653, 17656, 21895-896, 21900-1, 23574-576, 23586
- Irwin, John N. II, 16499
- Jackson, Samuel C., 21805, 21807, 23449
- Jacobsen, Josephine, 29190
- Jenkins, John L., 22623
- Johnson, U. Alexis, 22257
- Kamp, Carl O., jr., 21541, 23216-217
- Klasinger, Henry A., 29530
- Klassen, E. T., 29573
- Lazarus, Steven, 25032
- Leonard, Jerris, 21887
- Levine, Bernard B., 29352
- Lichtenstein, Lawrence M., 29350
- Lynn, James T., 21096
- McCahill, William P., 29451
- Mair, Andrew J., 26942
- Manus, Peter C., 21107, 21109, 28241-242
- Marland, Sidney P., jr., 25044, 25047-49, 25055, 25059, 25061, 26359, 26362, 26364, 26366-367, 28655, 28659,

Addresses, lectures, etc.—Continued
by—continued

Marland, Sidney P., jr.—Continued
28661, 28682, 30137, 30149, 30154-
155, 31219, 31234
Martin, Preston, 21544-545
Marvin, Leigh E., 28982
Miller, Edward B., 22086, 31706-7
Mitchell, George W., 16054, 21565,
21568, 26446
Mitchell, John N., 17650
Morrell, Gene P., 22184, 23897
Morse, Ellsworth H., jr., 28978
Morton, Rogers C. B., 16139, 23471-473,
29088
Murphy, Robert T., 31978
Needham, James J., 29483
Nehmer, Stanley, 21114, 22637
Norman, Philip S., 29354
Osburn, Elbert F., 32447
Ottina, John R., 25046, 26372
Owens, Hugh F., 29467, 29470, 29472,
29476
Owens, James M., 21413, 26346
Paarlberg, Don, 26932
Palmbly, Clarence D., 20910
Passer, Harold C., 21108, 22626, 22630,
28231, 28237-239
Pearce, William R., 27898
Pecora, William T., 23474
Peterson, Peter G., 21097-99, 21115,
22624, 22627-629, 22643, 28226-227
Pitkin, Marvin, 29194
President Nixon, 20263, 20789
Quarles, John R., jr., 21519
Reed, John H., 20715, 22150-152,
25645
Roberts, Richard W., 29314
Robertson, J. L., 20275
Romney, George, 21806
Ruckelshaus, William D., 21507, 21512
Rush, Kenneth, 27907
Russell, Harold, 22195
Santarelli, Donald E., 32409
Sheehan, John E., 21573, 28892
Schertz, Lyle P., 28651
Schultz, George P., 20789
Siegel, Jacob S., 27040
Simpson, Richard O., 16826, 21110,
22636
Sisco, Joseph J., 31848
Smith, Halbert C., 21543
Staats, Elmer B., 28976, 28979
Stafford, William, 29190
Stans, Maurice H., 28233
Tabor, John K., 30893, 31987
Timm, Robert D., 16811, 19270, 22573,
31977
Volpe, John A., 17914
Wakefield, Stephen A., 31499, 32391
Wakelin, James H., jr., 21111
Ward, David H., 17861
Weigley, Russell F., 24147
Wittenberg, Ernest, 22194
FMC SP series, 27506-507
Harmon memorial lectures in military his-
tory (series), 19140, 24147
Inaugural addresses from President George
Washington to President Richard M.
Nixon, print as H. doc., report, 31087
literary lectures presented at Library of
Congress, 32439
MA SP series, 21926-928, 23616-620,
25397, 27690-692
philatelic dedicatory lecture series, 22090
Reclamation's Great Plains weather mod-
ification program (paper), 23941
SP series, 28866-868
speaking for State, speaker request forms,
31849
Aden, Gulf of, sailing directions, 27418
Adequacy of Federal response to housing
needs of older Americans, 19940, 21313
Ades, Richard, foreign trade regulations of
Brazil, 15618

Adhesion :
adhesion and transfer of polytetrafluoro-
ethylene to metals studied by Auger
emission spectroscopy, 20613
adhesion at crystalline interfaces in rock,
26660
Adhesive tape, packaging, adhesive and
gummed, methods of inspection, sampling,
and testing, Federal standard, 16064
Adhesives :
evaluating adhesives for—
building construction, 20305
bond quality in telephone crossarms
after 16 to 23 years of exterior ex-
posure, 21667
Adjoint gamma-ray moments computer code,
ADJMOM-1, 25556
Adjutant General's Office, Army Library,
selected current acquisitions, 18897
Adkin Branch :
flood plain information, 21452
floods in Kingston, N.C., 21463
Adkison, W. L. :
lithologic characteristics of upper oligo-
cene and miocene rocks drilled at Elk
Hills, Kern County, Calif., 29005
stratigraphy and structure of Middle and
Upper Ordovician rocks in Sedgwick
basin and adjacent areas, south-central
Kansas, 21726
Adler Construction Co., relief, 28444
ADMATCH system, *see* Computer programs/
programming
Administration, *see* Administrative manage-
ment
Administration request to increase debt cell-
ing, accompanied by spending ceiling,
15786
Administrative agencies, *see* Government of-
fices
Administrative assistants, management clerical
and assistance series, position classifica-
tion standard, 16823
Administrative Conference of United States :
Administrative Conference act, amend—
law, 19456
report, 19630
annual report, 16580
appropriations, 1973—
increase report, 15847
law, 15640
appropriations, 1974—
hearings, 28393, 32135
reports, 29885, 31117
recommendations and reports, 27975
Administrative law, judges, examination
announcement, 19286
Administrative management :
acquisition management systems, Hist, DoD
manual, 31178-179
administration in mental health, 22066
administration of contract studies could
be improved, GAO report, 21685
administration of National environmental
policy act, hearings, 1972, 15770
administrative services and facilities for
hospitals, planning guide, 26517
analysis of State fire control laws, general
administration, environmental protec-
tion, and pollution control, 25204
BNDD personnel management series,
21969
career in labor-management relations as
field examiner, 29369
civilian manpower management (periodi-
cal), 18529
CODAP, input standard (INPSTD) and
variable generation (VARGEN) pro-
grams, 20943
comprehensive planning assistance pro-
grams administration, HUD handbook,
16133
develop operational system for evaluating
and testing methods and instruments
for determining effects of fuels and fuel
additives on automobile emissions, 31277

INDEX 1973

- Administrative management—Continued
 DOD directory of contract administration services components, 28593
 executive leadership in public service, bibliography, 29576
 field operations and enforcement manual for air pollution, organization and basic procedures, 22375
 field procedures in connection with reports on relocation activities, 30295
 financial and institutional arrangements for wastewater management, Denver SMSA, 32264
 grants administration manual, 18409
 circular, 18410
 guide to preparation of operational plans for sewage treatment facilities, 31286
 guidelines for police performance appraisal, promotion and placement procedures, 27654
 health maintenance organizations, some information descriptive of successfully operating, 29038
 housing management procedures, processing reports on audit and findings, handbook, 23439
 human relations in management for State and local agencies, curriculum guide, instructor's manual, student workbook, 29046
 issues in welfare administration, welfare, administrative nightmare, 21140
 low-rent housing—
 administration of program, handbook, 17559, 23440, 26527
 production control procedures handbook, 25286
 management—
 AMC study program, fiscal years 1972-73, AMC pamphlet, 15502
 engineering policies and procedures, Air Force manual, 30732
 housing for elderly, guide, 23419
 literature survey, continuing bibliography, 29269
 sciences training center catalog, 29810
 manpower, improved management in Federal Government, reports, 27116M, 32057
 military personnel office management and administrative procedures, 22430, 24178
 National emergency readiness of Federal personnel management manual, 18337
 nursing home administration, statistical analysis of examination (form 2) and summary of responses to background survey, 21119
 operations research approach to Douglasfir thinning, 28964
 paacesetting year for personnel management, Civil Service Commission annual report—
 departmental edition, 16818
 document edition, 16939
 personnel—
 advisory series, 25953
 bibliography series, 15608, 16820, 27050-52
 code of Federal regulations, 25158
 literature, 18754
 management series, 29811
 policies and practices, 27050
 perspectives in defense management (periodical), 18755
 procedures for constructing and using task inventories, 32495
 procedures for implementation of memorandum of understanding between HUD and GSA, 30298
 project fiscal procedures, HUD handbook, 21790, 25280
 public management sources, 18831
 questions and policy issues for oversight hearings on administration of Outer Continental Shelf act, 31498
 responsibility and responsiveness, 23403
- Administrative management—Continued
 revolutionary activities directed toward administration of penal or correctional systems, hearings, 29921
 role of management representative in hearings, 29579
 selection and development of staff from disadvantaged groups (address), 29001
 Senate procedures, revised edition, print and bind subject to copyright—
 law, 19360
 report, 19616
 small business management series, 16472
 staff, examination announcement, 22605
 studies in manpower planning, 27055
 supervising paraprofessionals, 20237
 tips, Army personnel magazine, 18961
 training rural supervisors, 16221
 zero in on safety campaign slips, trips, falls, 29084
 see also Management.
- Administrative Office of United States Courts, annual report, 29598
 Administrative personnel, see Administrative management.
 Administrative procedures, military personnel office management and administrative procedures, Army pamphlet, 22430
 Administrative rule making, see Administrative procedure.
 Administrators:
 administrative staff, examination, 22605
 administrators of nursing and personal care homes—
 education and training, June-Aug. 1969, United States, 27748
 work experience, 26720
 Federal tax guide for survivors, executors, and administrators, 21817
 national survey of professional, administrative, technical, and clerical pay, 21909
 representatives, Federal aviation regulations, 18292
 supplementary compensation, in PATC industries, 27683
- Admiralty:
 admiralty jurisdiction, United States as party, hearings, 17273
 Armed Forces, Admiralty claims against U.S., settlement, law, 19367
 Admissions to outpatient psychiatric services by age, sex, color and marital status, June 1970-May 1971, 27783
 Adolescence, see Youth.
 Adolescents, see Youth.
- Adoption:
 birth certifications for alien children adopted by U.S. citizens, 23726
 older children need love too, 25945
- ADP, see Electronic data processing systems.
- Adrenergic blocking agents, series of compounds tested for sympatholytic properties, 16204
- Adsorbents:
 design information for molecular-sieve type regenerative CO₂-removal systems, 31608
 evaluation of data regarding efficiency of activated charcoal adsorbents at low gas phase iodine concentrations, 21031
 oil/sorbent harvesting system for use on vessels of opportunity, 27470
- Adsorption:
 activated carbon adsorption, new process for treating wastewater, 16545
 carbon, process design manual, 16546
 chlorinated hydrocarbons from seawater by crosslinked polymer, 28806
 package sorption device system study, 28812
- Adult education, see Education—Vocational education.
 Adults:
 adults as reading models for children, 28673
 approach to consumer education for adults, 28575

Adults—Continued

nationwide survey of mental health and correctional institutions for adult mentally disordered offenders, 23758
survey of institutionalized adults, reports, 26833
use of tobacco, 30864

Advanced engine control program, 25865

Advanced Systems Division, annotated bibliography of reports, 28029

Adverse action, law and regulations, annotated, 18333

Adverse actions and appeals handbook, HUD, 31420

Advertising:

advertising allowances and other merchandising payments and services, guides, 16065

advertising substantiation, guidelines, 20655

Cigarette labeling and advertising act, amend, hearings, 21321

corporate policies and procedures on advertising and promotion, 20652

direct mail advertising, broken promises and shaken premises (address), 22627

directory of minority media, 29817

documentation of claims concerning safety, 1972, performance comparative price, etc., require, hearings 17235

false don't be gypped 20279

regulation, hearings, 27313

staff report to Federal Trade Commission on ad substantiation program, 17242

Truth in advertising act, hearings, 17235

use of formal advertising for government procurement can, and should, be improved, GAO report, 31385

Veterans Administration advertising guidelines for fair housing, 24093

what does advertising do for consumer? resource paper, 25559

see also subjects.

Advertising, Marketing and Society, National Institute, see National Institute of Advertising, Marketing and Society.

Advisory Commission on Information, report on USIA programs, 31903

Advisory Commission on Intergovernmental Relations:

annual report, 30687

appropriations, 1973, law, 15640

appropriations, 1974—
hearings, 28393 32135

reports, 29885, 31117

expansion, hearings, 21238

Advisory Commission on International Educational and Cultural Affairs, annual report, 24807

Advisory Committee on Enforcement Policies and Practices, Securities and Exchange Commission, report, 29478

Advisory Committee on Federal Pay:

appropriations, 1974—
hearings, 28393, 32135

reports, 29885, 31117

Advisory committees:

Federal advisory committee act—
law, 19397

report, 16990

Federal advisory committees, report of the President to Congress, 28539

Federal uniform standards and procedures for establishment and operation, report, 17144

first annual report of the President, 30602

HSMHA public advisory committees, roster of members, 32370

National Institutes of Health, public advisory groups, authority, structure, functions, members, 23775

National Sea Grant program description and suggestions for preparing proposals, 17770

President's water pollution control and air quality advisory boards, 16027

Advisory committees—Continued

public access to information from executive branch advisory groups, hearings, 21241

public, Health Services and Mental Health Administration, roster of members, 16131, 23412, 26523

Advocate of public interest, 25978

AE-CL series, 18065

AEC, see Atomic Energy Commission.

AEC-NASA tech briefs, 18663

Aeration:

aeration of natural waters, bibliography, 32393

cannery wastewater treatment with rotating biological contactor and extended aeration, 28797

characterization of stream reaeration capacity, 21490

hydraulic model studies of Scoggins Dam fishtrap aeration and supply structure, 23939

Aerial photography:

aerial photographic and electromagnetic determination of sea surface and its conductivity, USSR study, 23553

aerial photographs in National Archives, list, 29306

aerial surveillance spill prevention system, 25105

ASCS maps, status, 22320

catalog of meteorological satellite data-ITOS 1 television cloud photography, 32245

coastal imagery data bank, interim report, 25066

feasibility demonstration of aerial surveillance spill prevention system, 25127

photo plot bias, 28961

television cloud photography, meteorological satellite data, catalog, 20181

Aerial radiological measuring survey:

Dresden Nuclear Power Station, 25869

measuring survey of area surrounding Shippingport Atomic Power Station, Pa., 30767

Aerial remote sensing, bibliography, 27592

Aerial spraying, see Sprays and sprayers.

Aerial surveys, see Aerial photography.

Aero Taxi, aircraft accident, 23860

Aerobic dancing, rhythmic sport, 31766

Aerobic secondary treatment of plywood glue wastes, 28809

Aerobic treatment of livestock wastes, 20216

Aerobiology:

aerobic treatment of livestock wastes, 20216

anaerobic-aerobic treatment of textile wastes with activated carbon, 28825

Aerodynamic heating, analytical and experimental studies of shock interference heating in hypersonic flows, 31626

Aerodynamics:

acoustic and aerodynamic performance of 6-foot-diameter fan for turbofan engines, QF-1 fan in nacelle without acoustic suppression, 32466

aerodynamic effects of 5 lift-fan POD arrangements on unpowered V/STOL transport model, 29275

comparison of several methods for estimating low-speed stability for 2 airplane configuration, 20598

effect of wing aspect ratio and flap span on aerodynamic characteristics of externally blown jet-flap STOL model, 31629

extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687

investigation of effects of variations in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configurations, 32470

INDEX 1973

Aerodynamics—Continued
longitudinal aerodynamic parameters of Kestrel aircraft (XV-6A) extracted from flight data, 29295
low-speed—
aerodynamic characteristics of fuselage model with various arrangements of elongated lift jets on V/STOL model, 31633
wind tunnel investigation of semispan STOL jet transport wing body with upper-surface blown jet flap, 29272
predicting pressure distribution about nacelle at transonic speeds, analytical method, 31603
see also Boundary layer—Helicopters—Spacecraft.
Aeroembolism:
pathogenesis of skin bends, review, 16246
tunnel workers and decompression illness, 17759
Aerogramme, see Air mail.
Aeromagnetism, see Terrestrial magnetism.
Aeronautical and Space Sciences Committee, Senate:
activities during 92d Congress, report, 27268
committee print, 17212
hearings, 23037, 27297, 28508-509, 31121
investigations and studies, authorization and expenses, report, 27260
reports, 26207, 28485
Aeronautical charts, see Maps and charts.
Aeronautical engineering, special bibliography with indexes, 17708, 21984, 26685, 32465
Aeronautical instruments, tape playback and serial-time decoder for IFF flight test instrumentation, 22171
Aeronautical supplies, aircraft type certificate data sheets and specifications, 17981
Aeronautics:
aeronautics and space—
code of Federal regulations, 26438-439
report of President, 1972, activities, 25530
aeronautics update (periodical), 17957
air freight problems (address), 22573
air transport services, agreement with Polish People's Republic, 25764
airman's information manuals, 17983-985, 23208
airport directory, 26427
airport and airway development act, amend, reports, 15699, 15707, 17139
Army aviation digest, 19026
aviation maintenance technician schools, certification, Federal aviation regulations, 18299
aviation news (periodical), 18277
aviation radio services, FCC rules and regulations, 18308
chronology on science, technology and policy, 27709
civil aviation accidents—
brief format (periodical), 17979
1972, preliminary analysis of data, 29412
civil aviation research and development, policies, programs and problems, report, 15713
code of Federal regulations, 25176
convention for suppression of unlawful acts against safety of civil aviation, 21307
message from the President, 17123
economic evaluation of aircraft and spacecraft, USSR study, 32407
FAA personnel employment practices, hearing, 15773
Federal aviation act—
amend—
hearings, 21258, 23046, 23050-51
reports, 15699, 15707, 17139, 19693, 19846, 21258
enforcement procedures, Federal aviation regulations, 18292

Aeronautics—Continued
Federal aviation act—Continued
rule making procedures, Federal aviation regulations, 18292
Federal aviation regulations, 18291-292, 18295-297, 18300-301, 20239, 21532, 23209-210, 31317
14 points for survival of civil aviation (remarks), 22576
future of Alaska (address), 16811
growth and preservation of American aviation (address), 19270
international civil aviation, agreement with other governments, 31866
international notams, 18510
long range needs of aviation, report, 30784
maintainability, verification/demonstration/evaluation for aeronautical systems, military standard, 28609
maximal control force capability of female pilots, preliminary study, 22510
Mech, naval aviation maintenance safety (periodical), 18615
memorandum for aviators, 18617
midair collisions in U.S. civil aviation, 20717
most asked questions about space and aeronautics, 27704
NASA aeronautics, research, etc., 31602
national aviation system—
FAA policy summary, 27504
FAA 10 year plan, 27503
naval aviation news, 18678
naval aviation safety review, 18004
new civil aircraft and responsive airline regulation (remarks), 21077
Pacific chart supplement, U.S. Government flight information publication, 19028
publications, price list, 27869
scientific and technical aerospace reports, 18890,
semiannual indexes, 18889
social impacts of civil aviation and implications for R & D policy, 17693
suppression of unlawful acts against safety of civil aviation (sabotage), convention between U.S. and other governments, 27928
see also Aeronautical engineering—Air navigation—Air power—Flight.
Aeronomy Laboratory, NOAA technical report, ERL-AL series, 17777, 20693, 29389
Aerophysical research, 27620
Aerosols:
aerosol and precipitation chemistry at Mauna Loa Observatory, 23805
aerosol studies, USSR study, 26600
vertical transport by thunderstorms, observations, 27800
Aerospace, see Outer space.
Aerospace industries:
backlog of orders for aerospace companies, current industrial reports, 29755
testing methods and techniques, quality control and nondestructive testing, 20758
vendor substantiation for aerospace propulsion system items, 20078
welding technology, 20597
Aerospace medicine, see Medicine.
Aerospace physiology, see Physiology.
Aerospace safety (periodical), 17959
Aerospace vehicles, see Spacecraft.
Aerothermodynamics, aerothermodynamics test model materials and fabrication technique, study for development, 17694
Afars and Isaas, see French Territory of Afars and Issas.
AFDC, see Children—Families—Public Welfare.
Affens, W. A., flammability properties of hydrocarbon fuels, 30593
Afghanistan:
background notes, 17851
map, 19264

Afghanistan—Continued
 military assistance, deposits under Foreign assistance act of 1971, agreement, 16532
 mineral industry, minerals yearbook chapter, 25428
 technical cooperation, agreement, 23999, 32576
 AFHRL, *see* Air Force Human Resources Laboratory.
 AFL-CIO Committee on Political Education of Santa Clara County, *see* Santa Clara County AFL-CIO Committee on Political Education.
 AFL-CIO Connecticut COPE Political Contributions Committee, annual report, 27097
 AFL-CIO COPE Committee, Idaho State, *see* Idaho State AFL-CIO COPE Committee.
 Afognek Island, natural reforestation after logging, 20299
 Africa:
 African series, 16490, 25718, 27902
 agricultural situation, 1972 review and 1973 outlook, 27424
 current foreign policy, U.S. role in African development, 16490
 digest of African countries' economic development plans, 28639
 Eastern, accessions list, Library of Congress, Nairobi, Kenya, 17944
 faces of Africa, diversity and progress, repression and struggle, 15735, 21182
 foreign relations of United States, 1947—departmental edition, 17858
 document edition, 16936
 French-speaking Central Africa, official publications guide, 27685
 gazetteer, official standard names, supplement, 21704
 investment laws of selected African countries, 30130
 market profiles, 22632
 mineral industry, minerals yearbook chapter, 25432
 North, States of North Africa in 1970's, hearings, 17052
 opportunities for expanding trade with developing African nations (address), 21096
 Sahel, drought crisis, hearing, 31021
 select audiovisual records, contemporary African art from Harmon Foundation, still pictures, 22000
 southern—
 Botswana, Lesotho, South Africa and Swaziland, 22631
 constant themes in U.S. policy, 25718
 U.S. business involvement, hearings, 15740
 southwest coast, sailing directions, 31200
 translations, 18972
 U.S.-African interests, frank appraisal, 27902
 west coast—
 lights and fog signals, list, 22160
 tide tables, 31716
 AFSC, *see* Air Force Systems Command.
 Afterbodies, effect of fineness ratio on boat-tail drag of circular-arc afterbodies having closure ratios of 0.50 with jet exhaust at Mach numbers up to 1.30, 29274
 Afterglow, probe method for recording ions produced by laser radiations in afterglow discharge plasma, 20993
 Age:
 age and earnings by industry for U.S., supplementary report, 29713
 census of population, 1970—
 age at 1st marriage, 29709
 and children ever born, supplementary report, 25912
 discrimination in employment act, interpretative bulletin, 24098
 estimates and projections of populations of U.S.S.R. by age and sex, 1950-2000, international population report, 25035

Age—Continued
 interaction of age and alcohol on dark adaptation time, 16840
 Aged:
 adequacy of Federal response to housing needs of older Americans, hearings, 19940, 21313
 aging (periodical), 17961
 aid to aged, social security amendments, material related to H.R. 1, 19966
 barriers to health care for older Americans, hearings, 31122, 32124
 dignity instead of desperation, programs for elderly poor, 17345
 fire safety in highrise buildings for the elderly, hearings, 28510
 Golden Eagle passport and Golden Age passport, general information, 26776
 home delivered meals for older Americans, demonstration, final report and guidelines, 27977
 housing for elderly—
 project mortgage insurance, 23435
 status report, working paper, 24908
 Income of aged population, money income 1971 and changes from 1967, 31811
 information and referral services, reaching out with community services, 29600
 management of housing for elderly, guide, 23419
 medicare, health insurance for the aged, 17833
 amounts reimbursed, State and county, 20770, 27880
 national older American volunteer program for Action, subsidize, hearings, 21359
 new facts about older Americans, 31904
 nutrition program for the elderly—
 grants to States under Older Americans act, authorize, law, 16860
 highlights of research and development nutrition projects funded under title 4 of Older Americans act, 25812
 Older Americans act—
 amend—
 hearing, 15923, 26281, 27196
 law, 16860
 report, 19923
 comprehensive services amendments of 1972—
 legislative history, 23067
 reports, 19709, 19894
 comprehensive services amendments of 1973—
 explanation and background material, 28511
 law, 27089
 reports, 26099, 26102
 Older Americans Community Service employment program, authorization and appropriation, report, 19855
 opportunities for older Americans in ACTION, 27972
 oversight on older Americans, hearing, 29901
 partnership for older Americans, 27978
 patterns for progress in aging, work study in social gerontology, 30689
 Project Helping Wheels, transportation for elderly people, 31905
 relative importance of income sources of aged, 29504
 rural rental housing, rural credit program, 29633
 space benefits and older citizens, 21992
 supplementary security income, report, 15860
 tax benefits for older Americans, 21822
 to find way to services in your community, 25813
 we the American elderly, 30861
 White House Conference on Aging, recommended for action, employment and retirement, 16577
 see also Gerontology—Medicare—Old age, survivors, disability and health insurance.

INDEX 1973

- Agency for International Development, *see* International Development Agency.
- Agents:
- enrolled, regulations governing practice of attorneys, certified public accountants, and enrolled agents before Internal Revenue Service, 17916
 - journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of the Navy to survey timber resources between Mernentau and Mobile Rivers, Nov. 1817-May 1819, with appendix, etc., microcopy, pamphlet describing, 21994
- Agey, W. W., beneficence of Calico District, California, silver-barite ores, 25507
- Agglomerations, delineation of clustered points in 2 dimensions by measuring perimeters of convex hulls, 21940
- Agglutination, *see* Hemagglutination.
- Aggregates:
- aggregate concrete mixtures with high water-cement ratios, laboratory investigation, 20174
 - monetary policy in controlling monetary aggregates, financing economic growth, and inflationary trends, 28905
 - wastewater treatment studies in aggregate and concrete production, 26407
- Aging:
- action on aging legislation in 92d Congress, 17213
 - AOA catalog on films on aging, 25811
 - basic concepts of aging, programmed manual, 20880
 - developments in aging, 1972 and Jan.-Mar. 1973, report, 28461
 - print additional copies, report, 27293
 - economics of aging, toward full share in abundance, index to hearings and report, 29998
 - effect of aging at 1040° C (1900° F) on ductility and structure of tantalum alloy, T-111, 20615
 - extramural program of research on aging of National Institute of Child Health and Human Development, 17761, 31691
 - long term care under medicare, trends, hearings, 15862, 19942, 23039
 - menopause and aging, research conference, summary report, 26740
 - nutrition and aging, selected annotated bibliography, 29601
 - patterns for progress in aging, work study in social gerontology, 30689
 - problems of the aging, hearings, 15744, 17056
 - publications, price list, 27868
 - Research on aging act, 29999
 - hearing, 27357
 - report, 31082
 - rural aging, special problems, report, 27128
 - some demographic aspects of aging in United States, 24238
 - statistical analysis of truncated-data methods to shorten thermal-aging tests of electrical insulation, 22172
 - toward national policy on aging, proceedings of 1971 White House Conference on Aging, 24106
 - trends of research on prevention of physiological aging and value of exercise for fitness and health, 31773
 - White House Conference on Aging, recommended for action—
 - employment and retirement, 16577
 - transportation, 24105*see also* Aged.
- Aging Administration:
- AOA catalog of films on aging, 25811
 - publications, list, 24112
- Aging, Federal Council on:
- establish—
 - law, 27089
 - report, 19923
- Aging, National Information and Resource Clearing House, *see* National Information and Resource Clearing House for the Aging.
- Aging, National Institute of, *see* National Institute of Aging.
- Aging, Special Committee on, Senate:
- committee prints, 17213, 19941, 23067, 24908, 26245, 28511, 29998-999
 - hearings, 15862, 17214, 19940, 19942, 21313, 23039, 26244, 27298, 28510, 31122, 32124-125
 - investigations and studies, authorization and expenses, report, 26218
 - members of Committee and subcommittees, 26246
 - publications, 87th-92d Congresses, list, 26245
 - report, 28461
- Agnes floods, post-audit of effectiveness of storm and flood warning system of National Oceanic and Atmospheric Administration, report, 26676
- Agnew, Donald B., cost of marketing U.S. livestock through dealers and public agencies, 27997
- Agnew, Robert W., free floating endless belt oil skimmer, 20188
- Agreement on limitation of strategic offensive weapons, 19618, 21170
- Agreement on tariff and trade, *see* General agreement on tariffs and trade.
- Agribusiness, *see* Agriculture.
- Agricultural adjustment act, *see* Agriculture.
- Agricultural and Marine Pollution Control Section, projects, 26417
- Agricultural chemicals, *see* Chemicals.
- Agricultural commodities, *see* Agricultural products.
- Agricultural Cooperative Trust, annual report, 24351
- Agricultural credit:
- debt rescheduling under certain agricultural commodity and credit and loan agreements, agreements with—
 - Egypt, 17899
 - Pakistan, 17905
 - food, agricultural, and farm credit legislation, review, hearings, 26145
 - rural credit program, nonfarm enterprises, 30711
 - see also* Loans—Production credit associations.
- Agricultural economics, *see* Agriculture.
- Agricultural education, *see* Agriculture.
- Agricultural experiment stations, State professional workers, lists, 20898, 22326
- Agricultural finance, *see* Agricultural credit—Agriculture.
- Agricultural implements, *see* Farm implements and machinery.
- Agricultural insurance:
- crop insurance—
 - selling to farmers under 21, law, 15641
 - statutes, compilation, 25820
 - Federal crop insurance act, amend, law, 15641
 - insuring crop and livestock losses caused by restricted pesticide use, appraisal, 27422
- Agricultural lands, *see* Land.
- Agricultural loans, *see* Agricultural credit.
- Agricultural Library, *see* National Agricultural Library.
- Agricultural machinery, *see* Farm implements and machinery.
- Agricultural marketing agreement act, *see* Agricultural products.
- Agricultural Marketing Service:
- AMS series, 15461, 20881, 22312, 24113, 25814-815, 26924-925, 29602
 - available publications, list, 25814
 - PMG series, 16583, 20883, 24116
 - processed fruits and vegetables, potentially adulterated products need to be better

Agricultural Marketing Service—Continued
 controlled, sanitation in some plants
 needs improvement, GAO report, 23324
 this is USDA's Agricultural Marketing
 Service, general information, 19127
 Agricultural occupations, earning a living
 with sheep, 25135
 Agricultural outlook, *see* Agriculture.
 Agricultural policy, *see* Agriculture.
 Agricultural products:
 acreage diversion, statutes, compilation,
 25820
 agricultural commodities, agreement
 with—
 Bolivia, 24004, 31851
 Colombia, 26876, 27932, 31871
 Ecuador, 16531, 17902, 27923
 Guinea, 17894
 Iceland, 31852
 Indonesia, 16510, 20810, 24011, 24014,
 25747, 27934
 Israel, 17875, 25736
 Japan, 30653
 Khmer Republic, 16537, 24001, 24009
 Korea Republic, 24003, 25762, 27931
 Liberia, 17880
 Pakistan, 17872, 20813, 22264, 24012,
 25742, 27911, 27925
 Philippines, 25730, 25751, 31874
 Portugal, 20794
 Sri Lanka, 25750
 Sudan, 31361
 Tunisia, 22265
 Uruguay, 25738
 Vietnam, Republic, 17907-908, 20811,
 24010, 27919, 31870
 Agricultural marketing agreement act,
 amend
 hearing, 17218
 law, 19400
 report, 19869
 agricultural prices (periodical), 17964
 agricultural production and trade of Co-
 lombia, 25038
 Canada institutes unilateral tariff cuts on
 important agricultural items, 28919
 cash in lieu of commodity donations to
 schools, report, 26226
 CCC monthly sales list, 18056
 commodity futures statistics on futures
 trading in commodities regulated under
 Commodity exchange act, monthly,
 18644
 consumer products by design, report on
 new foods, fabrics and materials from
 agricultural research, 29618
 eminent domain pool allotments, 19352
 establishments handling or processing ag-
 ricultural commodities under Fair labor
 standards act, 26917
 export control policy, 32127
 exports, limit, reports, 30997, 32049
 Federal-State market news service, 22336
 Federal stockpile inventories, report,
 17953
 food and agricultural export directory,
 31349
 food retailer and PACA, 29629
 foreign agricultural trade, monthly, 18378
 foreign trade, 1972, fiscal year, statistical
 report, 15986
 fruit and vegetable grower and PACA
 (Perishable agricultural commodities
 act), 20925
 Spanish edition, 22348
 futures trading and open interest in regu-
 lated commodities, 18395
 general information, value of products,
 economic class, contracts, 1969 census of
 agriculture, 30792
 marketing bulletins, 22336, 27994-28000,
 29624, 31914
 marketing research reports, 15474-476,
 19109-112, 22337, 24134, 25824-
 825, 26937-940, 29625-626, 30707-708,
 31915-917

Agricultural products—Continued
 nontariff barriers affecting trade in agri-
 cultural products—
 Denmark, 20286
 Ireland, 23264
 Norway, 17497
 Spain, 20287
 Switzerland, 28920
 United Kingdom, 23263
 Perishable agricultural commodities act,
 amend, report, 19609
 prices, 1973, annual summary, 29541
 production research reports, 16613, 19128-
 129, 20930, 26945, 28017, 30716
 school lunch commodity donations, report
 26121
 storing perishable foods in home, 29623
 trading in commodity futures contracts on
 Chicago Board of Trade, 29626
 USDA grades, to help you choose, 15461
 USDA standards for food and farm prod-
 ucts, list, 29621
 world agricultural production and trade,
 statistical reports, 19090, 21602
 world monetary conditions in relation to
 agricultural trade, 27426
see also Crops—Markets and marketing—
 Wheat
 Agricultural Research Center, welcome,
 29616
 Agricultural Research Service:
 ARS series, 15464, 16584-586, 20884-889,
 22319, 25818, 26927-929, 27984, 29614-
 615, 30693, 31908-909
 ARS-NC series, 24117
 utilizations research and development,
 1971 summary report, 16587
 Agricultural research technicians, jobs as
 agricultural and biological technicians, bio-
 logical laboratory technicians, agricultural
 research technicians, examination an-
 nouncement, 30882
 Agricultural residues, *see* Waste products.
 Agricultural science review, 17966
 Agricultural situation, *see* Agriculture.
 Agricultural South in growing America (ad-
 dress), 20896
 Agricultural Stabilization and Conservation
 Service:
 aerial photography status maps, 22320
 ASCS background information BI series,
 22321-322
 ASCS defense activities, 22321
 need intensifies to amend legislation to re-
 duce Government losses on peanut price-
 support program, GAO report, 26479
 press releases, 18773
 Agricultural statistics, *see* Agriculture.
 Agricultural supplies, review of world rice
 markets and major suppliers, 17498
 Agricultural trade and proposed round of
 multilateral negotiations, 32126
 Agricultural trade development and assist-
 ance act:
 Library of Congress project newsletter,
 18579
 Library of Congress Public law 480 project
 accessions list—
 Ceylon, 17943
 India, 17945
 Israel, 17947
 Middle East, 17948
 Nepal, 17949, 29177
 Pakistan, 17950, 21919, 29178
 Sri Lanka, 29179
 public law 480, statutes, compilation,
 25820
 Agricultural workers, *see* Farm labor.
 Agriculture:
 Africa and West Asia, situation, 1972 re-
 view and 1973 outlook, 27424
 Agricultural act, amend and extend—
 hearings, 32128
 law, 32011
 reports, 27296, 28380, 31005

INDEX 1973

Agriculture—Continued

Agricultural adjustment act, amend—
law, 16864
report, 17014
agricultural aircraft operations, Federal
aviation regulations, 18298, 23209
agricultural charts, 1972 handbook, 19105
agricultural development and farm em-
ployment in India, 21419
agricultural economic reports, 15982-983,
20894, 22323-325, 24122, 25819, 27986,
29617, 30696-697, 31911
agricultural economics—
periodic reports, list, 25833
reports issued by Economic Research
Service and Statistical Reporting
Service, checklist, 18065
research (periodical), 17962
agricultural education, instructional ma-
terials, compilation of abstracts from
AIM, 20092
agricultural finance review, 31215
agricultural labor-management relations,
hearings, 24848
agricultural marketing and bargaining,
hearing, 19738
agricultural outlook digest, 17963
agricultural prices (periodical), 17964
agricultural programs, appropriations—
1973, hearings, 26146
1974, hearings, 28384
agricultural research (periodical), 17965
agricultural science review, 17966
agricultural situation—
crop reporters magazine, 17967
Western Hemisphere, review of 1972
and 1973 outlook, 32191
agricultural South in growing America
(address), 20896
agricultural statistics—
Eastern Europe and Soviet Union,
1950-70, 28649
1972, 20897
agricultural trade policy ATP (series),
17497, 20286-287, 23263-264, 28919-
920
Agriculture and consumer protection
act—
law, 32011
reports, 27296, 28380, 31005
agriculture handbooks, 15464, 16588-590,
19103-5, 20898-901, 22326-329, 24123-
126, 25820, 26931, 27987-988, 29620-
621, 31912
agriculture in upper Great Lakes region,
1949-69, 22354
agriculture in Vietnam economy, system
for economic analysis, 31218
agriculture information bulletins, 15465-
66, 19106, 20895, 27989, 29618-619
Australia and New Zealand report by
Carl T. Curtis, 32129
balance sheet of farming sector, 20895
bargaining in modernizing agriculture,
proceedings, 27499
census, 1969—
general reports, 27003, 29689, 30789-
794, 31939
publication program 21038
census, 1974—
financing, availability, etc., hearings,
31039
relating to taking, hearing, 30064
census reports, 1969—
area reports, 16688-689, 22512, 24210-
211
general publications, 21038
subject reports, 24212
changes in farm production and efficiency,
summary report, 28018
Chile, agricultural reforms and pro-
ductivity and trade, 23130
code of Federal regulations, 23232-233,
25160-170, 26435-436
cooperation in agriculture, agreement
with Union of Soviet Socialist Repub-
lics, 32581

Agriculture—Continued

cooperatives in agribusiness, 17443
corporate secrecy, agribusiness, hearings,
28573, 31166
corporation farming, effect on small busi-
ness, hearings, 28573
decisions, 17968
desalination of agricultural tile drainage,
bio-engineering aspects of agricultural
drainage, San Joaquin Valley, Calif.,
21520
economics of agriculture, reports and pub-
lications, list, 20087
effects of agricultural waste treatment
on algal bioassay response, bio-engineer-
ing aspects of agricultural drainage,
San Joaquin Valley, Calif., 21522
emergency loan program, source of funds
for farmers and ranchers in disaster
areas, reports, 26073, 26077, 27134
energy crisis and its effect on agriculture,
hearing, 32072
energy, natural resources and research in
agriculture, effects on economic growth
and productivity for U.S., 32187
extension of farm and related programs,
hearings, 26247, 30000, 32128
Far East and Oceania—
agricultural data book, 15984
situation, 1972 review and 1973 outlook,
26356
farm program, studies and data, 27299
farm relief and agricultural adjustment
acts, compilation, 19540
farming in classroom, teacher's guide,
30717
farms, number, use of land, size of farms,
1969 census of agriculture, 30789
finance outlook, 23128
food, agricultural, and farm credit legis-
lation, review, hearings, 26145
foreign agricultural economic reports,
21419, 25040-42
Foreign Agricultural Service, miscellane-
ous FAS-M series, 27524-525
foreign agriculture (periodical), 18379
foreign agriculture circulars, 18380
foreign trade, U.S. fiscal year 1972, statis-
tical report, 15986
future belongs to those who prepare for
it (address), 20905
goals are achieved through farmer efforts,
strengthened by farmer organizations,
and served by government action, (ad-
dress), 20891
general information—
procedures for collection, processing,
classification, 1969 census of agricul-
ture, 27003
value of products, economic class, con-
tracts, 1969 census of agriculture,
30792
improving management in the Sel'khoztek-
hnika system, USSR study, 25357
leadership to keep agriculture strong (ad-
dress), 20893
legislative proposal relating to labor-man-
agement relations in agriculture through
Apr. 1972, summaries, 17042
livestock, poultry, livestock and poultry
products, 1969 census of agriculture,
29689
management challenges in agriculture (ad-
dress), 22335
miscellaneous bills, hearings, 19742
notes from Washington on international
research and development, 26930
place in agriculture through Peace Corps,
19097
professional careers in biological and ag-
ricultural sciences, 19278, 22611, 30874
ranking agriculture counties, 24212
regional agricultural research, quarter cen-
tury of achievement through cooperative
endeavor, 30709
review of agricultural legislation in 92d
Congress, 23006

Agriculture—Continued

Soviet and Polish agriculture, observations, 24910
 subsidies, economics of Federal subsidy programs, 28267
 U.S. foreign agricultural trade policy, hearings, 30003
 USSR, translations, 18984
 welcome to Agricultural Research Center, 29616
 Western Europe, situation, review of 1972 and outlook for 1973, 26355
 world agricultural production and trade, statistical report, 19090
 world agricultural situation, 25043
 special supplement on world grain situation, 20091
see also Agricultural products—Farm labor—Farmers' cooperative organizations.

Agriculture and Forestry Committee, Senate:
 calendar, 18559
 committee prints, 17215-217, 17219-222, 19943, 21314-15, 23040, 24910, 27299-301, 30002, 32126-127, 32129-130
 hearings, 15863, 17218, 19944-947, 24909, 26247-249, 28512, 30000-1, 30003, 31123, 32128
 investigations and studies, authorization and expenses, report, 24896
 reports, 17142, 17195, 19841, 19869, 19874, 24906-907, 26208, 26210-212, 26221, 26226, 26235, 27296, 28492, 28495, 29959, 29992, 31092

Agriculture Committee, House:
 calendar, 18541
 committee prints, 17024, 21199, 23006
 hearings, 17023, 19735-742, 24838-839, 26144-145, 27175-177, 28383, 29892, 31007, 32071-72
 investigations and studies, authorization and expenses, report, 26880
 reports, 16954, 16979, 17014, 19609, 19640, 19651, 19662, 19672, 24828, 26073, 26120, 26134, 27153, 28331, 28357, 28380, 29850, 32067

Agriculture Department:
 additional actions needed to minimize adverse environmental impacts of timber harvesting and road construction on forest land, GAO report, 25236
 agriculture economic reports, 31911
 appropriations, 1973—
 hearings, 26146
 law, 15651
 report, 15829
 appropriations, 1974—
 hearings, 27178, 28384
 report, 29861
 supplemental, proposal, 31056
 Assistant Secretary, nomination of Robert W. Long, hearings, 26249
 audit of rural telephone bank, for initial period Oct. 1, 1971-June 30, 1972, GAO report, 25237
 chemical compounds authorized for use under USDA poultry, meat, rabbit, and egg products inspection programs, lists, 22399, 28041
 directory of State-USDA rural development committees, 26424
 Federal advisory committees, annual report, 28539
 field staff, Foreign Service list, 18384
 fiscal instructions for home mortgages to be insured by HUD-FHA under sec. 235(1) and sec. 237 of National housing act, 25279
 how it serves people on farm and in community, nation, world, 22345
 how USDA can help you involve youth in community development, 28013
 Impact of Federal programs to improve living conditions of migrant and other seasonal farmworkers, GAO report, 23319

Agriculture Department—Continued

increased use of felled wood would help meet timber demand and reduce environmental damage in Federal forests, GAO report, 32353
 inspection of farmers' Federal income tax returns, 27176
 leaflets, 15473, 16601-603, 19108, 20909, 24132-133, 25822, 31913
 marketing bulletins, 22336, 27994-28000, 29624, 31914
 marketing research reports, 15474-476, 19109-112, 20911-914, 24134, 25824-825, 26937-940, 29625-626, 30707-708, 31915-917
 meat and poultry inspection regulations, 31929
 meat inspection procedures manuals, 15498A, 28040
 miscellaneous publications, 15477-478, 16607, 19113-120, 20915-921, 22339-343, 24135-136, 25826-827, 26941, 28002-8, 29627-628, 30709, 31918-919
 national heart, blood vessel, lung and blood program, program analysis, 30492
 need intensifies to amend legislation to reduce Government losses on peanut price-support program, GAO report, 26479
 opportunities to improve effectiveness and reduce costs of homeownership assistance programs, GAO report, 21698
 PA [program aid] series, 15480-481, 16608-611, 19121-127, 20922-928, 22344-351, 24137-139, 25828-832, 26943, 28009-14, 29629-633, 30710-714, 31920
 plants under continuous inspection, processed fruits and vegetables, etc., list, 20882
 press releases, 18774
 production research reports, 16613, 19128-129, 20930, 26945, 28017
 publications and motion pictures, bi-monthly list, 18030
 Russian wheat sales and weaknesses in agriculture's management of wheat export subsidy program, GAO report, 30263
 service, USDA's report to consumers (periodical), 18904
 single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
 statistical bulletin, 15482-484, 16614, 19130-139, 20932-934, 22353-357, 24141-144, 25834-836, 26946, 28018-23, 29634-635, 30718
 technical bulletins, 16615, 20935-937, 22358-360, 24145-146, 25837-838, 28024-25, 29636, 30719
 unused food assistance funds, food stamps, administration witnesses, hearings, 20007

USDA—
 and military cooperate to stop foreign invaders, 28015
 DHIA cow performance index list, May 1972, registered cows calving between Aug. 1969 and Apr. 1971, 16584
 employee newsletter, 19033
 fights fire ant, 28016
 grade standards for food, how they are developed and used, 20926
 grades in buying food, how to use, 20906
 report for Oswego River basin, 31921
 standards for food and farm products, list, 29621
 statistics, guide, 20900

Agrometeorology, experimental control of hydrometeorological factors for solution of agrometeorological problems, USSR study, 17641

INDEX 1973

Agrometeorology—Continued
 Pacific Ocean to Buena, San Diego County, Calif.—
 Agua Hedlonda Creek, floods, 32237
 flood plain information, 32204
 Aguirre Nuclear Plant, unit 1, Puerto Rico Water Resources Authority, fiche index for nuclear dockets, 25873
 AHA, *see* American Historical Association.
 Ahn, Chung Sung, first report of study to forecast nuclear power plant effects on coastal zones, 30771
 AIR series, 15465-66, 19106, 20895, 27989, 29618-619
 AID, *see* International Development Agency.
 Aid to cities, counties and States, 23028
 Aid to families with dependent children, *see* Children—Families—Public Welfare.
 Aides, enlisted aide program, of military services, GAO report, 27547
 Aidman's medical guide, 24171
 Aids to navigation, *see* Navigation.
 Aikele, J. H., survey of field laboratories of Bureau of Reclamation, 23937
 Air:
 air modulated vacuum oil recover collection of spilled oil (foams), 17416
 air temperature at remote site from official weather station records, 23292
 development of equilibrium air computer programs suitable for numerical computation using time-dependent or shock-capturing methods, 20591
 engineering evaluation of non-reserve zinc-air cells, 19159
 fretting of secondary-seal-ring candidate materials in air temperatures of 816° C, 23683
 gas chromatography, method of determining harmful substances in air and in biological media, USSR study, 31529
 neutron dose and fluence distributions in infinite air medium, 23711
 survey of air and population lead levels in selected American communities, 31270
 turbulent immersed wall jet of air on burning graphite surface, USSR study, 16182
see also Air pollution—Atmosphere.
 Air almanacs, *see* Almanacs.
 Air and Water Programs Office:
 publications, AP series, 24159, 29637-638, 30720-721
 publications, APTD series, 29639-650, 30722-728, 31922
 Air blasts:
 estimating water-shock-induced airblast from detonations in medium overlain with water, 26390
 jet blast hazards, special study, 30566
 prediction of—
 airblast overpressures from underground explosions, 17376
 ground-shock-induced airblast overpressures for subsurface explosions from peak vertical spill velocity, 17378
 Air cargo specialist (cargo agent), 16617
 Air carriers:
 air passenger fees, State and local charges, reports, 15699, 15707, 17139
 air taxi operators and commercial operators of small aircraft, Federal aviation regulations, 18298, 23209
 air taxi safety study, 25647
 air transport services, agreement with—
 Barbados, 16514
 Czechoslovak Socialist Republic, 16509
 Hungarian People's Republic, 27930
 Lebanon, 26872
 Spain, 17877, 22276
 Union of Soviet Socialist Republics, 31862
 Venezuela, 27917
 application of sonic-boom minimization concepts in supersonic transport design, 29277

Air carriers—Continued
 authorize aircraft loan guarantee—
 law, 21131
 report, 19653
 certificated, account and reports, uniform system, 19022, 28212
 certificated route, airport activity statistics, 28850
 certificated, subsidy, 19275
 certification and operations—
 Federal aviation regulations, 18297, 20239
 land airports serving CAB-certificated scheduled air carriers operating large aircraft (other than helicopters), Federal aviation regulations, 21532
 economic condition of air transportation industry, hearings, 21323
 economics of air transport, 29302
 financial statistics, quarterly and 12-month, 17969
 foreign operations, Federal aviation regulations, 18297, 20239
 guide to air shippers' rights, 27043
 improving air line management (remarks), 21078
 in-flight safety of passengers and flight attendants aboard air carrier aircraft, special study, 29411
 interface standard for shipboard systems, compressed air service for surface ships, military standard, 27409
 loans, Government guarantees, hearing, 19777
 local service—
 to small communities, hearings, 23050
 unit costs, 15599, 21075, 22574, 28211, 30871
 1972 general overflow of air carriers (remarks), 30872
 passenger charter air services, agreement with Belgium, 22273
 reduced air rates for elderly, handicapped, etc., hearings, 23049
 review of airline industry (remarks), 21076
 schedule and supplemental certification for carriers, allow, hearings, 23051
 scheduled, with helicopters, certification and operations, Federal aviation regulations, 18297, 20239
 subsidizing air service to small communities (remarks), 31977
 traffic statistics, monthly and 12-month data, 17970
 transportation of dangerous articles, etc., Federal aviation regulations, 18296
 U.S. carriers, list, 21074, 28210
 utilization of Bangor International Airport in operating flag-stop cargo service (remarks), 31978
 Air commerce, *see* Aeronautics.
 Air conditioning, equipment, current industrial reports, 22549, 30837
 Air controlman, *see* Air traffic controllers.
 Air crews, *see* Flight crews.
 Air-cured tobacco, *see* Tobacco.
 Air cushion vehicles:
 development and manufacture of linear induction motor propulsion system for tracked air cushion research vehicle, 21559
 measurements of laser extinction in ice fog for design of SEV pilotage system, 21437
 observations of surface effect vehicle performance, 30159
 preliminary ecological evaluation of effects of air cushion vehicles on Arctic tundra of northern Alaska, 21439
 Air drop operations, airdrop of supplies and equipment, Army technical manual, 24182
 Air ducts, *see* Pipes and pipe fittings.
 Air flow, *see* Flow.

Air Force:
aeronautical charts, latest edition, 18537
Air Force civil engineer (periodical), 17972
Air Force physicians, 19146
airman, official magazine of Air Force, 17982
aptitude levels in enlisted manpower pool, 20940
Armed services procurement regulation, ASPR supplement, 17971
automated apprenticeship training (AAT), systematized audio-visual approach to self-paced job training, 30729
background and interest tests for officer state career intent, validity, 26949
Civil Air Patrol, auxiliary Air Force, general information, 20946
Community College of Air Force, general catalog, 31926
comparison of 1970 and 1971 Air Force enlistees by draft-vulnerability category, 28030
comptroller (periodical), 17973
contractor data management, 15494
development and standardization of Air Force officer qualifying test form L, 26948
development and validation of scores to predict officer career status, 28035
enlisted personnel airmen classification manual, 19141
evaluation of—
device to train forward air controllers to communicate target locations, 20938
item-by-item test administration, 30731
technical training courses and students, some techniques, 22363
grades of major, lieutenant colonel and colonel, extend time during which authorized numbers may be increased—law, 19488
report, 17198
guidance counselor's handbook, 19147
if you really want an education, educational programs of Air Force, 29653
Instructors Journal, 19032
job you like, 31927
management engineering program, policies and procedural manual, 30732
manpower standards—
command and command support, 22367
direct support, 24149
medical research and development, and activities outside the USAF, 22368
mission agreement with Argentina, 26874
officer personnel, officer career information, 16625
predictability of expressed career intent, 20941
predicting civilian position grades from occupational and background data, 25841
publications, price list, 27869
readiness in Europe, GAO report, 30260
road signs, about your CAC (Career Assistance and Counseling Office) in Consolidated Base Personnel Office, 16636
specialist training—
aerospace ground equipment repairman, notice, 16616
air cargo specialist (cargo agent), notice, 16617
aircraft control and warning radar repairman, notice, 16626
aircraft pneumatic repairman, notice, 16627
aircraft propeller repairman, notice, 16628
aircraft radio repairman, notice, 16629
fuel specialist, notice, 16631
inventory management specialist, notice, 16632
medical service specialist (medical assistance), notice, 16633

Air Force—Continued
specialist training—continued
physical conditioning specialist (athletic training), notice, 16634
precision measuring equipment specialist, notice, 16635
weapons control systems (electronics repairman), notice, 16637
tomorrow is now . . . for women in U.S. Air Force, 15496
travel regulations, 18526, 30120
use of simulation models pertaining to best mix of aircraft, support personnel, spare parts, and level of repair, 30730
see also Armed Forces—Military education.
Air Force Academy, Colo.:
additional pay for permanent professors, provide, hearing, 17224
assembly, 1972 report, 25839
catalog, 28027
servicemen's group life insurance coverage for cadets and midshipmen, law, 15636
Air Force Bands, Bach, Beethoven, or Bacharach in Air Force band, 31925
Air Force Cambridge Research Laboratories, geophysics and space data bulletin, 18401
Air Force Department:
Air Force manuals, 15486-491, 16618-624, 19141-145, 20944-945, 22367-372, 24149-156, 25845-851, 26951-952, 29652, 30732, 31923-924
Air Force pamphlets, 16625, 22373
Air Staff, organization chart, 17976
appropriations, 1973, military construction—
law, 19476
reports, 19711, 19898
Assistant Secretary (Financial Management), nomination of William W. Woodruff, hearing, 26252
need to improve accuracy of Air Force requirements system for repairable parts, GAO report, 16098
nominations, hearing, 26250
reduced requirements for modular electronic equipment for aircraft, GAO report, 30261
Air Force Human Resources Laboratory:
annotated bibliography of Advanced Systems Division, reports, 28029
technical reports, 15485, 20938-943, 22362-366, 24148, 25840-844, 26948-950, 28028-35, 29651, 30729-731
Air Force Medical Service, digest, 19025
Air Force Reserve:
air reservist (periodical), 17975
get off ground in Air Force Reserve, 24157
Air Force School of Military Sciences, some grad schools are more challenging than others, 28036
Air Force Systems Command:
pamphlet, 15493, 30733
regulations, 15494
Air frames, see Airframes.
Air inlets (aircraft):
analytical and experimental performance of optimal controller designs for supersonic inlet, 26689
experimental dynamic response of two-dimensional, Mach 2.7, mixed-compression inlet, 20608
investigation of coaxial jet noise and inlet choking using F-111 A airplane, 31849
tests of mixed compression axisymmetric inlet with large transonic mass flow at Mach numbers 0.6 to 2.65, 21987
Air lines, see Air carriers.
Air mail:
aerogramme 15c, recognizes balloonists (poster), 22292
airmail improvement program objectives unrealized GAO report, 32348
air service instructions, 29569

INDEX 1973

Air National Guard, *see* National Guard.

Air navigation:

ATC procedures for random area navigation routes, 31314

expenditure of Federal funds for nonmilitary airports or air navigation facilities thereon, Federal aviation regulations, 18301, 23210

navigator (periodical), 18684

non-Federal facilities, Federal aviation regulations, 18301, 23210

Pacific chart supplement, U.S. Government flight information publication, 19028

polyurethane shroud designed to prevent TACAN outages, 24043

sight reduction tables—

latitudes, and declinations, 30125

stars, 28632

TACAN-DME false distance lock-on, 30654

VOR TACAN low altitude flight check summary, 24041

Air passenger fees, State and local charges, 15699

Air pilots, *see* Aviators.

Air piracy:

administration's emergency anti-hijacking regulations, hearings, 23052

aircraft piracy amendments of 1971, reports, 15845, 17186

anti-hijacking act, amend, hearing, 23048, 26170, 27221

convention for suppression of unlawful acts against safety of civil aviation, 21307

message from the President, 17123

experimental short-pulse X-ray detection system, 24031

hijacking accord with Cuba hearing, 24854

hijacking of aircraft and vessels and other offenses, agreement with Cuba, 26884

more effective program to prevent, report, 26205

unlawful seizure of aircraft, convention for suppression, implement, report, 19846

Air pollution:

action for environmental quality, standards and enforcement for air and water pollution control, 28787

advanced air quality management courses, descriptions, 20948

air pollution abstracts (periodical), 17974

petroleum refineries, 19150

air pollution aspects of emission sources, primary production, bibliography with abstracts—

aluminum, 30720

lead, 30721

air pollution damage to vegetation in New Jersey, 1972 survey and assessment, 32271

air pollution impact methodology for airports, phase 1, 29646

air quality data, from national air surveillance networks for—

metals, 30725

nonmetallic inorganic ions, 30724

organics, 30723

air quality standards study, authorization, report, 29972

aircraft emissions, impact on air quality and feasibility of control, 21485

application of remote sensing to air pollution, detection and measurement, 26650

analysis of regulatory aspects of fuel oil supply, 29645

aspects of emission sources, pulp and paper industry, bibliography with abstracts, 29638

assessment of Federal and State enforcement efforts to control air pollution from stationary sources, GAO report, 32349

automobile gas turbine, optimum cycle selection study, final report, 29642

Air pollution—Continued

background information for proposed new source performance standards, 29643, 30722

cascade impactor network used to determine size of particulate pollutants, 19149

chemist meteorologist workshop, Jan. 15-19, 1973, 29683

citizen suits under Clean air act, 21488

Clean air act—

extend and amend—

hearing, 28417, 31029

law, 30901

reports, 26122, 26124, 26201

implementation, oversight, hearings, 21260

text, 24867

clean air, it's up to you too, 26396

compilation of air pollutant emission factors, 29637

control of zinc smelters (address), 26346

control techniques for asbestos air pollutants, 25852

cost of air pollution damage, status report, 27479

demand for platinum to reduce pollution from automobile exhausts, 23641

derivation of non-Boussinesq set of equations for atmospheric shear layer, 32256

determination of molecular contamination performance for space chamber tests, 29285

development of X-ray fluorescence spectroscopy in elemental analysis of particulate matter, evaluation of commercial multiple crystal spectrometer instruments, 31273

exhaust emissions from diesel locomotives, pollution problems, progress report, 26734

fate of trace constituents of coal during gasification, 31272

field operations and enforcement manual for air pollution control—

control technology and general source inspection, 22376

organization and basic procedures, 22375

field program designs for verifying photochemical diffusion models, 32254

growth and decay of turbulent mixing in planetary boundary layer, 32252

guide to research in air pollution, active projects, 24158

guidelines for—

development of quality assurance program, 31271

technical services of State air pollution control agency, 22377

impact of growth on environment, hearings, 32153

indoor-outdoor air pollution relationships, literature review, 20947

interpretation of gas chromatographic spectra in routine analysis of exhaust hydrocarbons, 23651

mercury and air pollution, bibliography with abstracts, 16638

nationwide air pollutant emission trends, 28832

odors and air pollution, bibliography with abstracts, 19151

package sorption device system study, 28812

primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effect, 29294

President's water pollution control and air quality advisory boards, 16027

selected industrial air pollution control equipment, current industrial reports, 22552, 30847

State air programs digest, 21518

technical publications of Environmental Protection Agency, 28788

technology, suggested 2-year post high school curriculum, 30152

Air pollution—Continued
 training courses and university training programs, 19148
 training institute, curriculum description and recommendations, 30728
 translations, bibliography with abstracts, 27481, 28833
 transportation controls to reduce motor vehicle emissions in Salt Lake City, Utah, 29644
 urban air pollution problems, briefing document for President's Air Quality Advisory Board, 25125
 user's guide to diffusion/kinetics, DIFKIN, code, 32253
see also names of individual types of pollution or pollutants.
 Air Pollution Training Institute, *see* Institute for Air Pollution Training.
 Air power, tactical air power and F-14 appropriations, 1974, authorization, hearings, 31132
 Air Programs Office:
 Manpower Development Staff, general information, 20950
 publications, AP series, 15497, 16638, 19149-151, 20947, 22374, 24158, 25852
 publications, APTD series, 22375-377
 Air Quality Advisory Board, President's, *see* President's Air Quality Advisory Board.
 Air Quality Control Advisory Board, organization, duties, etc., 16027
 Air quality standards study authorization, 29972
 Air raid shelters, *see* Protective shelters.
 Air reservist (periodical), 17975
 Air Resources Laboratories, NOAA technical memorandum, ERL-ARL series, 30521
 Air routes, *see* Airways.
 Air safety, *see* Safety of life.
 Air service, *see* Air Carriers.
 Air slots, *see* Slots.
 Air speed:
 comparison of several methods for estimating low-speed stability for 2 airplane configurations, errata, 20598
 ice-surface heating and flow phenomena on space shuttle orbiters at large angles of attack and hypersonic speeds, 20621
 performance of 40-millimeter-bore ball bearings with lead- and lead-alloy-plated retainers in liquid hydrogen at 1.2 million DN, 20612
 predicting pressure distribution about nacelle at transonic speeds, analytical method, 31603
 pressure recovery performance of conical diffusers at high subsonic Mach numbers, 32460
 subsonic aerodynamic characteristics of complex planforms, vortex-lattice FORTRAN program for estimating, 31621
 table of differential pressure in relation to calibrated airspeed, military standard, 17337
 Air taxi operators, *see* Air carriers.
 Air taxi safety study, 25647
 Air terminals, *see* Terminals (transportation).
 Air traffic:
 air carrier statistics, monthly and 12-month data, 17970
 aircraft control and warning radar repairman, Air Force notice, 16626
 airport-area airspace used in simulated operations with experimental powered-lift STOL airplane, 32473
 ATC procedures for random area navigation routes, 31314
 control—
 contractions used by FAA, etc., handbook, 16639, 18163, 22382, 26953
 en route, handbooks, 18260, 19152, 26954, 30734
 facility management handbooks, 16640, 22383, 25853
 flight services, handbooks, 22384, 30735

Air traffic—Continued
 control—continued
 radar beacon code assignment plan 3d, simulation, 24050
 special military operations, 19153, 22385, 30736
 terminal handbook, 19154, 22386, 28038, 31928
 frequency of anti-collision observing responses by solo pilots as function of traffic density, ATC traffic warnings, and competing behavior, 30788
 high-activity level tower cab, evaluation, 24052
 lateral distribution of aircraft traffic, 31260
 national aviation system—
 FAA policy summary, 27504
 FAA 10 year plan, 27503
 navigable airspace, objects affecting, Federal aviation regulations, 18301, 23210
 noise in air route traffic control center, flight service station, air traffic control tower and remote facilities, 24032, 25774
 preclearance inspection and other improvements for air travelers (remarks), 21079
 security control, Federal aviation regulations, 18296
 special rules, and airport traffic patterns, Federal aviation regulations, 18296
 special use airspace, Federal aviation regulations, 18301, 23210
 systems for collision avoidance (address), 22152
 Air traffic controllers:
 air controlman 3 & 2, rate training manual, 29438
 female and male air traffic controller trainees, comparative study, 21033
 job attitudes, comparison of 3 air traffic control specialties, 29685
 potential reflection problems when using NAS model 3d display in vertical position in air route traffic control centers, evaluation, 24039
 use of simple indicators for detecting potential coronary heart disease susceptibility in air traffic controller population, 16681
 Air transport services, agreement, 16514
 Air transportation, *see* Aeronautics—Air carriers—Transportation.
 Air travel, *see* Travel.
 Air University Library, index to military periodicals, 17977
 Air University review, 17978
 Air warfare, U.S. air operations in Cambodia, Apr. 1973, subcommittee report, 30032
 Airborne exports and general imports, 19013
 Airborne operations:
 engineer battalions, airborne and air-mobile divisions, Army field manual, 24169
 ESSA Research Flight Facility, facilities for airborne atmospheric research, errata, 20686
 Airborne ordnance, ground fit and compatibility tests of airborne stores, procedure for, military standard, 20066
 Air carriers, *see* Air carriers.
 Alcoa Speer Electronic Components Division, Alcoa, Inc., radio frequency coils, molded ceramic capacitors, and fixed precision metal film resistors, certain workers of Dubols, Pa., plant of Alcoa Speer Electronic Components Division, Tariff Commission report, 22282
 Aircraft:
 abrasive blast of aircraft components, military standard, 15969
 acquisition and production of additional F-4 EJ aircraft and acquisition of RF-4 E aircraft, defense agreement with Japan, 26862

INDEX 1973

Aircraft—Continued

aerodynamic effects of five lift-fan pod arrangements on an unpowered V/STOL transport model, 29275
 agricultural, operations, Federal aviation regulations, 18298, 23209
 aircraft and aircraft engines, current industrial reports, 18194
 aircraft and airport noise, EPA report, 31160
 aircraft and related products, identification and registration marking, Federal aviation regulations, 18292
 aircraft emissions, impact on air quality and feasibility of control, 21485
 aircraft exterior lighting and marking for avoiding collisions, 20826
 aircraft microwave measurement of ice in Beaufort Sea, 1971, some preliminary results, 30528
 aircraft noise impact, planning guidelines for local agencies, 30293
 aircraft-pavement interaction studies, finite-element model of jointed concrete pavement on non-linear viscous subgrade, 31240
 aircraft piracy amendments, report, 15845, 17186
 aircraft propulsion gas turbine engines, designation, military standard, 20060
 aircraft structural integrity program, airplane requirements, military standard, 15970
 airworthiness, FAA directives, 18292
 alterations, acceptable methods, techniques, and practices, 17444, 17941, 21530, 27500, 32278
 altitude alerting devices/systems, guidelines, 17446
 analysis of meteorological conditions for aviation, USSR study, 32408
 annoyance judgments of aircraft with and without acoustically treated nacelles, 32455
 application of sonic-boom minimization concepts in supersonic transport design, 29277
 arousal from sleep by noises from aircraft with and without acoustically treated nacelles, 32457
 as instrument of self destruction, 29686
 attitude instrument flying, 26974
 audit of payments from special bank accounts to Lockheed Aircraft Corporation for C-5 aircraft program during quarter ended—
 Sept. 30, 1972, GAO report, 21689
 June 30, 1973, GAO report, 31378
 authorize aircraft loan guarantee—
 hearing, 15880
 law, 21131
 reports, 15848, 19653
 aviation export financing, 32274
 certificates of airworthiness for imported aircraft, agreement with—
 Great Britain, 26867
 Sweden, 31863
 binaural processing of speech in light aircraft, 22511
 certification and operations, land airports serving CAB-certificated scheduled air carriers operating large aircraft (other than helicopters), Federal aviation regulations, 21532
 certification procedures for products and parts, Federal aviation regulations, 18292
 changes (remarks), 28208
 civil—
 aircraft register, United States, 20242, 28854
 regulation of public exposure to sonic booms, hearing, 21258
 technical standard order authorization, Federal aviation regulations, 18292
 Coast Guard, 1974, authorization for procurement, laws, 29828, 32007

Aircraft—Continued

complete aircraft and aircraft engines, current industrial report, 28150
 directional divergence characteristics of several high-performance aircraft configurations, summary, 20617
 distribution of odd nitrogen in lower stratosphere and possible perturbations caused by stratospheric air transport, 32462
 effect of shear on aircraft landing, 31612
 effect of vertical active vibration isolation on tracking performance and on ride qualities, 21975
 effect of wing aspect ratio and flap span on aerodynamic characteristics of externally blown jet-flap STOL model, 31629
 electric and electronic wiring, installation practices, organizational DS, GS and depot maintenance manual, 19173
 emergency procedures over water, 21093
 emission characteristics of aircraft auxiliary power unit, 25510
 engineering optimization method with application to STOL-aircraft approach and landing trajectories, 17726
 evaluation of trainer for sensor operators on Gunship II aircraft, 20942
 external loads and aircraft strength, 31657
 FAA aircraft program data feedback (periodical), 18276
 FAA certificated aviation maintenance technician schools, directory, 31315
 Federal aircraft noise abatement program, 29565
 Federal aviation act, amend, report, 26205
 Federal use tax on civil aircraft, 27596
 flight evaluation of methods for predicting vortex wake effects on trailing aircraft, 23681
 flight of aircraft with partial and unbalanced thrust, 29301
 flight simulator study of STOL transport longitudinal control characteristics, 24036
 flight tests of rotating cylinder flap on North American Rockwell YOY-10 aircraft, 21974
 general operating and flight rules, Federal aviation regulations, 18296
 GPSS/360 computer models to simulate aircraft passenger emergency evacuations, 28093
 IFR altitudes, Federal aviation regulations, 18301, 23210
 influence of crossflow on jet noise, 23671
 inspection aids, general aviation, 18399
 inspection and repair, acceptable methods, techniques, and practices, 26426
 integrated system of geologic mapping and geochemical sampling by light aircraft, 26491
 investigation of—
 aircraft gas turbine combustor having low mass emissions, 30761
 flow fields within large-scale hypersonic inlet models, 29270
 suction system and boundary-layer characteristics on high-lift, BLC L-19 test aircraft, 30760
 key to aviation weather reports, 22154
 keyed joint performance under heavy load aircraft, 32200
 landing-mat-surfaced airfields for operation of C-5A aircraft, design, 30167
 large, commercial operators, certification and operations, Federal aviation regulations, 18297, 20239
 launching, landing and ground handling equipment, Federal item identification guide, 31180
 loan guarantees, hearing, 19777
 longitudinal aerodynamic parameters of Kestrel aircraft (XV-6A) extracted from flight data, 29295

Aircraft—Continued

- low-speed—
 - aerodynamic characteristics of fuselage model with various arrangement of elongated lift jets on V/STOL model, 31633
 - wind tunnel investigation of semispan STOL jet transport wing body with upper-surface blown jet flap, 29272
- maintenance, preventive maintenance, rebuilding and alteration, Federal aviation regulations, 18295
- maximal control force capability of female pilots, preliminary study 22510
- military procurement, appropriations, 1973, hearings, 21200
- military, transportation of dangerous materials, packaging and handling, Air Force manual, 29652
- national aviation system—
 - FAA policy summary, 27504
 - FAA 10 year plan, 27503
- numerical simulation of three-dimensional transonic flow with application to C-141 wing, 31624
- obstruction marking and lighting, 23211
- operating cost and performance report, 19271
- performance of DC-9 aircraft liquid nitrogen fuel tank inerting system, 24034
- point and path performance of light aircraft, review and analysis, 30452
- radiometric techniques for observing atmosphere from aircraft, 25628
- reduced requirements for modular electronic equipment for aircraft, GAO report, 30261
- registration, Federal aviation regulations, 18292
- relationship between SAE smoke number and jet aircraft smoke visibility, 24025
- S-67 aircraft fuel augmentation system flight evaluation, 16656
- sabotage convention, 21307
- small, air taxi operators and commercial operators, 18298
- sonic boom measurements for SR-71 aircraft operating at Mach numbers, etc., 17712
- spacecraft and aircraft guidance system USSR study, 20456
- STOL ride control feasibility study, 30453
- supplemental type certificates, summary, 18944
- titles and security documents, recording, Federal aviation regulations, 18292
- type certificate data sheets and specifications, 17981
- type certification noise standards, Federal aviation regulations, 18293
- unlawful seizure of aircraft, implement convention, hearings, 23048, 26170, 27221
- use by civil aircraft of airfield at Grand Turk Auxiliary Air Base, agreement with Great Britain, 20807
- see also* Air carriers—Airplanes—Fighter planes—Helicopters—Spacecraft — *also* names of aircraft parts, e.g. Brakes.

Aircraft accidents:

- accidents involving engine failure/malfunction, U.S. general aviation, special study, 25648
- aircraft accident report NTSB-AAR series, 16421-425, 20716, 22147-149, 23851-861, 25643, 27834-835, 29407-410, 30559, 31742-745, 32521
- aircraft exterior lighting and marking for avoiding collisions, 20826
- application of commercial aircraft accident investigation techniques to railroad derailment, 30785
- briefs of aircraft accidents involving turbine powered aircraft, general aviation, briefs, 25644
- civil aviation—
 - accidents, 1972, preliminary analysis of data, 29412

Aircraft accidents—Continued

- civil aviation—continued
 - brief format (periodical), 17979
- collision avoidance and pilot warning indicator systems, install on aircraft, hearings, 23046
- Cutting air crash, case study in early Federal aviation policy, 27501
- frequency of anti-collision observing responses by solo pilots as function of traffic density, ATC traffic warnings, and competing behavior, 30788
- improved helicopter crashworthiness analytical and design techniques development program, 30759
- in-flight safety of passengers and flight attendants aboard air carrier aircraft, special study, 29411
- jet blast hazards, special study, 30566
- midair collisions in U.S. civil aviation, 20717
- NTSB-AAS series, 20717
- stall-spin accidents, 1967-69, general aviation, 25646
- systems for collision avoidance (address), 22152
- Aircraft dispatchers, written test guide, 26452
- Aircraft engines, *see* Engines (aircraft).
- Aircraft mechanics, *see* Mechanics (persons).
- Aircraft piracy amendments of 1971, 15845.
- Aircraft radio stations, SAWRS Supplementary Aviation Weather Stations] surface observations, 17787
- Aircraft repair stations:
 - Federal aviation regulations, 18295
 - maintenance and repair shop specialized equipment, industrial plant equipment handbook, 20034
- Aircraft tires, *see* Tires.
- Aircrews, *see* Flight crews.
- Airfields, *see* Airports—Aviation fields.
- Airfoils:
 - airfoil dynamic stall and its influence on helicopter control loads, 20991
 - description and calibration of Langley 6-by 19-inch transonic tunnel, 29271
 - effects of leading-edge camber on low-speed characteristics of slender delta wings, 20582
- Airframe mechanics, *see* Mechanics (persons).
- Airframes:
 - airframe and powerplant mechanics, certification guide, 30210
 - airframe structural components, 24990
 - methods and techniques of airframe strength flight tests, 31660
- Airline stewardesses, *see* Stewardesses.
- Airlines, *see* Air carriers.
- Airmail, *see* Air mail.
- Airmen:
 - airman's information manual, 17983-986, 23208
 - airport directory, 17445, 26427
 - analysis difficulty of jobs performed by first-term airmen in 11 career ladders, 29651
 - enlisted personnel airman classification manual, Air Force manual, 19141
 - see also* Aviators—Flight crews—Notice to airmen.
- Airplane accidents, *see* Aircraft accidents.
- Airplane stewards, *see* Stewards.
- Airplanes:
 - airplane noise levels, 31313
 - airport-area airspace used in simulated operations with experimental powered-lift STOL airplane, 32473
 - aviation education through building airplane, 28851
 - briefs of aircraft accidents involving turbine powered aircraft, general aviation, briefs, 25644
 - calculative techniques for transonic flows about certain classes of wing-body combinations, 20584
 - Coast Guard, description, 15612

INDEX 1973

Airplanes—Continued

- comparison of several methods for estimating low-speed stability derivatives for 2 airplane configurations, errata, 20598
- extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687
- flight instructor written test guide, 26453
- flight test guide, private pilot airplane, 31341
- improved method for aerodynamic analysis of wing-body-tail configurations in subsonic and supersonic flow, 29253
- jet routes—
 - and area high routes, establishment, Federal aviation regulations, 23210
 - establishment, Federal aviation regulations, 18301
- loading conditions imposed by ground turning maneuvers with 3 jet transport airplanes, 23690
- McDonnell Douglas DC-8 series aircraft, maintenance inspection notes, 17449
- nitrogen-pressurized spray system for C-47 airplanes, 27527
- normal, utility, and aerobatic category airplanes, airworthiness standards, Federal aviation regulations, 18293
- pilot transition courses for complex single-engine and light twin-engine airplanes, 25138
- reduction of electrostatic charge in jet fuels during refueler loading, 22165
- 727 noise retrofit feasibility, lower goal design, fabrication, ground and flight testing, 24030
- SST again, Federal transportation policy, 24305
- supersonic transport, hearings, 24310
- transport category, airworthiness standards, Federal aviation regulations, 18293
- see also* Fighter planes.
- Airport control towers, *see* Towers.
- Airports:
 - activity statistics of certificated route air carriers, 28850
 - air passenger fees, State and local charges, reports, 15699, 15707, 17139
 - air pollution impact methodology for airports, phase 1, 29646
 - aircraft and airport noise, EPA report, 31160
 - airport and airway—
 - annual report on financial conditions of trust funds, 26054
 - development act, amend, reports, 15699, 15707, 17139, 19693, 28328
 - airport-area airspace used in simulated operations with experimental powered-lift STOL airplane, 32473
 - airport development acceleration act—
 - hearings, 26169
 - law, 32002
 - reports, 27156, 28351
 - airport directory, airman's information manual, 17445, 17984, 26427
 - allowable project costs, increase United States share for airports and airway development—
 - hearings, 26169
 - law, 32002
 - reports, 27156, 28328, 28351
 - design of landing-mat-surfaced airfields for operation of C-5A aircraft, 30167
 - evaluation and maintenance of expedient-surfaced airfield facilities, 28779
 - expenditure of Federal funds for nonmilitary airports or air navigation facilities thereon, Federal aviation regulations, 18301, 23210
 - Federal aid program, Federal aviation regulations, 18300, 21532
 - Federal aviation act, amend, reports, 15699, 17139

Airports—Continued

- Federal turnaround on aid to airports, 25137
- human engineering analysis of airport lighting control panels and proposal for new design, 24047
- improvement of airfield facilities, agreement with Khmer Republic, 32577
- location identifiers, handbook, 18593
- model airport hazard zoning ordinance, 21533
- national aviation system—
 - FAA policy summary, 27504
 - FAA 10-year plan, 27503
- National Capital, Federal aviation regulations, 18300
- notice of construction, alteration, activation, and deactivation, Federal aviation regulations, 18301, 23210
- planning State airport system, 23212
- property, release from surplus property disposal restrictions, Federal aviation regulations, 18300, 21532
- public, acquisition of U.S. land, Federal aviation regulations, 18300, 21532
- single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
- statistical analysis of meteorological parameters during fog at 45 U.S. airports, final report, 24029
- systems approach to airfield pavements, Allerton Park conference proceedings, 30163
- user requirements for airfield pavement system, 23157
- Wake Island code, Federal aviation regulations, 18300.
- Washington National and Dulles International police, revise pay structure, report, 19689
- see also* Air traffic—also names of airports and places where located.
- Airpower, *see* Air power.
- Airspace reservations, special use airspace, Federal aviation regulations, 18301, 23210
- Airspace utilization, *see* Air traffic.
- Airspeed, *see* Air speed.
- Airstrips, *see* Runways (aeronautics).
- Airways:
 - airport and airway—
 - annual report on financial conditions of trust funds, 26054
 - development act, report, 28328
 - allowable project costs, increase United States share for airport and airway development, report, 28328
 - area low routes, controlled airspace and reporting points, designation, Federal aviation regulations, 23210
 - controlled airspace and reporting points, designation, Federal aviation regulations, 18301
 - jet routes and area high routes, establishment, Federal aviation regulations, 23210
 - jet routes, establishment, Federal aviation regulations, 18301
 - navigable airspace, objects affecting, Federal aviation regulations, 18301, 23210
 - noise in air route traffic control center, flight service station, air traffic control tower and remote facilities, 24032, 25774
- Airworthiness, *see* Aircraft—Airplanes.
- Aisenbrey, A. J., jr., design criteria for concrete retaining walls, 23919
- Akers, David J., jr., dewatering of mine drainage sludge, phase 2, 25118
- Akima, Hiroshi, method of bivariate interpolation and smooth surface fitting based on local procedures, 27065
- Akita, Japan, summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23889
- Akron, Ohio, area wage survey, 26626

AL, see Aeronomy Laboratory.
 Al Engel for Congress, political committee, annual report, 24671
 Al Holst Congressional Committee, annual report, 24739
 Al Smith for Congress Committee, annual report, 24538
 Alabama:
 Alabama forest industries, 21681
 Assistant Commissioner for Bureau of Refugees, Freedom and Abandoned Lands, records 1865-70, pamphlet describing microfilm, 26694
 census of housing, 1970, housing characteristics for States, cities, and counties, 16720
 census of population, 1970—
 characteristics of population, 29697
 detailed characteristics, 16732
 climatological data, 18073
 county business patterns, 16753, 29726
 criminal justice agencies, 1971, list, 23562
 draft environmental statement, proposed 1973 Outer Continental Shelf, oil and gas general lease sale, offshore Mississippi, Alabama, and Florida, 31568
 Education Superintendent for Bureau of Refugees, Freedmen, and Abandoned Lands, records 1865-70, pamphlet describing microfilm, 26695
 electric rate book, 17457
 forest statistics for Alabama counties, 21682, 28974
 landings, fish and shellfish, 17987, 20681
 mineral industry, minerals yearbook chapter, 16261, 29214
 precipitation data, hourly, 18425
 rehabilitation facilities, national directory, 25686
 resource conservation in Alabama, 27894
 truck inventory and use survey, 19230
 Alabama University, physics of space environment, colloquium held at Huntsville, Ala., 17704
 Alameda County, Calif.; emergency disaster bill to prevent forest fires, report, 28466, 32067
 Alamo Creek:
 floods, Alamo and Ulatis Creeks, Vacaville, Calif., 32228
 Vacaville, Calif., flood plain information, 32203
 Alaska:
 adult bark beetles commonly associated with white spruce stands, description, etc., 23288
 Alaskan coastal waters, marine weather services chart, 29415
 census of business, 1967, wholesale trade, 16714
 census of housing, 1970, housing characteristics for States, cities, and counties, 15532
 census of population, 1970, characteristics of population, 28112
 census of transportation, 1972, truck inventory and use survey, 30813
 chemical composition of sedimentary rocks in Alaska, Idaho, Oregon, and Washington, 23364
 climatological data, 18074
 county business patterns, 31954
 dental services for American Indians and Alaska natives, annual report, 23460
 electric rate book, 20252
 flood survey along proposed TAPS route, Alaska, 23342
 future of aviation in Alaska (address), 16811
 Geological Survey Alaska program, 29012
 geology and mineral deposits of Chulitna-Yentna, mineral belt, 29021
 growth and survival of northern plants at low soil temperature, growth response, organic nutrients, and ammonium utilization, 30157

Alaska—Continued
 guidelines for obtaining natural regeneration of white spruce, 20294
 heated pipeline, some effects of ground-water flow in Alaska, 23374
 hunting possession, transportation, and importation of waterfowl, coots, snipe, and cranes in Alaska, 1972-73, Federal regulations, 20781
 hydraulic geometry of some Alaska streams south of Yukon River, 23346
 Indian tribes, Alaskan native villages, payment listing by county, entitlement period 3—
 3rd payment, 27956
 4th payment, 30674
 Indians, Alaska natives, 31444
 Jurassic paleobiogeography of Alaska, 29025
 McHugh complex of south-central Alaska, 26494
 massive sulfide deposits near Shellabarger Pass, southern Alaska Range, Alaska, 17527
 measurement of lateral erosion at proposed river crossing sites on Alaska pipeline, 23352
 mineral industry, minerals yearbook chapter, 16262
 mineralogy of suspended sediment in some Alaskan glacial streams and lakes, 23152
 natural gas regulation and trans-Alaska pipeline, hearings, 16930
 nautical chart, catalog, 32507
 Pacific herring, fishery facts, 23792
 Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution, 25257
 paper birch seed production in Tanana Valley, 21657
 Pennsylvanian carbonates, paleoecology, and rugose colonial corals, north flank, eastern Brooks Range, Arctic Alaska, 21733
 pipeline, hearing, 19790
 placer deposits, 30270
 preliminary ecological evaluation of effects of air cushion vehicles on Arctic tundra of northern Alaska, 21439
 Project Sergius Narrows, summary of tests on Llesnoi Island, Alaska, 17377
 proposed construction of Federal office buildings in Alaska, hearings, 23073
 rehabilitation facilities, national directory, 23947
 research opportunities and needs in taiga of Alaska, 31359
 snow surveys, 18350
 soil surveys for land use planning in Alaska, 32563
 southeastern, lumber yield from Sitka spruce, 20314
 surface water quality, 16116
 territorial boundaries, provisional charts delimiting, hearings, 15392
 trans-Alaska oil and gas pipeline, authorize—
 hearings, 31026, 32083
 report, 31000
 trans-Alaska pipeline—
 construction and operation is vital to all Americans and Alaskans (remarks), 23472
 economically sound and nationally essential (remarks), 21114
 system, ground motion values for use in seismic design, 21713
 water resources investigations along proposed route, 21739
 treatment of Alaskan species by double-diffusion and modified double-diffusion methods, 23301
 winter survival of fecal indicator bacteria in subarctic Alaskan river, 20190
 Alaska Airlines, Inc., accident report, 23857

INDEX 1973

- Alaska, Joint-Federal-State Land Use Planning Commission, *see* Joint-Federal-State Land Use Planning Commission for Alaska.
- Alaska Power Administration :
 appropriations, 1974, hearings, 2d annual report, 22387
 3d annual report, 22388
 4th annual report, 22389
 public works appropriations, 1974—
 law, 32015
 report, 29993
- Alban, David H., improved growth intercept method for estimating site index of red pine, 21671
- Albania, mineral industry, minerals year-book chapter, 20538
- Albany, N.Y., aircraft accident report, 31743
- Albany County, N.Y., low-flow study of streams, 23351
- Albemarle County, Va. :
 flood plain information—
 Meadow Creek, 17387
 Mechums River, 28716
 Moores Creek, Charlottesville, Va., 16011
 North Fork Rivanna River, 28718
 South Fork Rivanna River, 28726
 floods, how to avoid damage—
 Meadows Creek, 20138
 Mechums River, 28743
 North Fork Rivanna River, 28744
 South Fork Rivanna River, 28748
- Albers, John P., summary petroleum and selected mineral statistics for 120 countries, including offshore areas, 26510
- Albert, Carl, Albert for Congress Club annual report, 24340
- Albert for Congress Club, annual report, 24340
- Albuquerque, N. Mex. :
 aircraft accident report, 23859
 Albuquerque District, Corps of Engineers, history, 1st 36 years, 28695
 area wage survey, 29168
 daily weather and river bulletin, 18204
 high-gain, long-period seismograph station, installation report, 22097
 replication of bilingual education project, 17367
- Alcohol :
 alcohol and alcohol safety, curriculum manual, 22042-47
 alcohol and alcoholism, problems, programs and progress, 22067
 alcohol and drug abuse, interchange, lessons learned and other information, 22431
 alcohol and health notes (periodical), 25585
 alcohol safety action projects, first year evaluation preview, 16376
 code of Federal regulations, 26444
 District of Columbia, implied consent of motorists for chemical testing, provide, hearing, 15888
 Federal alcohol administration act, regulations, 30737
 hyperbaric oxygen breathing on rate of ethanol metabolism in man, studies on effect, 29197
 interaction of age and alcohol on dark adaptation time, 16840
 revenue rulings, etc., internal revenue bulletin, cumulative index-digest supplement system, 17567, 18480
 selected specific rates of reactions of solvated electron in alcohols, 17736
see also Alcoholism.
- Alcohol Abuse and Alcoholism, National Institute on, *see* National Institute of Alcohol Abuse and Alcoholism.
- Alcoholics :
 directory of halfway houses for mentally ill and alcoholics, 25588
 utilization of psychiatric facilities by persons diagnosed with alcohol disorders, U.S., 30507
- Alcoholism :
 alcohol abuse and alcoholism prevention, treatment and rehabilitation act amend, report, 28498
 alcohol and—
 alcoholism, problems, programs and progress, 22067
 you, HSMHA employee health program on alcoholism, HSMHA developing model program to combat alcoholism, 16038-A
 alcohol and health notes (periodical), 25585
 alcohol health and research world, 29362
 Alcoholism Conference of National Institute on Alcohol Abuse and Alcoholism, proceedings—
 1st annual meeting, 29363
 2d annual meeting, 29364
 alcoholism treatment and rehabilitation, selected abstracts, 23749
 best public service campaign of year, but is it doing any good? 27779
 Comprehensive alcohol abuse and alcoholism prevention, treatment, and rehabilitation act, amend—
 hearings, 28558
 law, 19482
 reports, 17016, 17065
 text, 24867
 drug and alcohol abuse among U.S. military personnel and dependents in Germany, 21316
 halfway houses, general characteristics, 23767
 here's looking at us . . . alcoholism and Federal workers, problem, policy, program, 24267
 HSMHA employee health program on alcoholism, policies, procedures, and assignment of responsibilities, 21536
 occupational alcoholism, some problems and some solutions, 23759
 proceedings, joint conference on alcohol abuse and alcoholism, 23754
 proceedings on alcoholism emergency care services, 22078
 St. Louis Detoxification and Diagnostic Evaluation Center, 29150
 selected characteristics of residents in alcoholism halfway houses, 25593
 utilization of psychiatric facilities by persons diagnosed with alcohol disorders, United States, 30507
 veterans, comprehensive treatment and rehabilitative services, reports, 24897-898
 Veterans' drug and alcohol treatment and rehabilitation act—
 report, 15849
 testimony submitted to Veterans' Affairs Committee, 23770
- Alcorn, Claude V., and others, relief, 19577, 28305
- Alcorn County, Miss., forest inventory statistics, 22287
- Alden, N.Y. :
 flood plain information, Ellicott Creek, 28708
 floods, Ellicott Creek, 28762
- Alder, dimension yields from alder lumber, 21666
- Allo Leopold Wilderness Area :
 designate, hearings, 15911
 Gila National Forest, N. Mex., designate, report, 17163
- Aldon, Earl F. :
 revegetating coal mine spoils in New Mexico, laboratory study, 32336
 revegetating devastated sites in New Mexico with western wheat-grass transplants, 32334
- Aldrich, Nelson W., papers in Library of Congress, register, 26635
- Aleutian Islands, nautical chart catalog, 32507
- Aleuts, and their Federal relationship, 16137

- Alexander, Barbara A., progressive fish-culturist, 18825
- Alexander, James D., Apollo experience report, evolution of rendezvous-maneuver plan for lunar landing missions, 31654
- Alexander, Robert R.:
partial cutting practices in old-growth lodgepole pine, 16092
field guide, 16093
- Alexandria, Va.:
conveyance of lands, report, 16952
railroad employee accident report, 25692
waterfront, land conveyance, hearing, 19961
- Alexandria City Democratic Committee, annual report, 24660
- Alfalfa, system for visually classifying alfalfa flower color, 22327
- Alfonso, Peter J., use of circumaural earphones for attenuating ambient noise in bone conduction audiometry, 26045
- Alfred, 1st continental flagship, 31804
- Alfven waves, see Magnetohydrodynamics.
- Algae:
effects of agricultural waste treatment on algal bioassay response, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21522
marine benthic algae from—
Truk and Kuop, Caroline Islands, 25695
Yap, Western Caroline Islands, additional records, 25695
removal of nitrate by algal system, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 25126
- Algebra:
algebraic manipulation by computer, 31754
MANIP, computer system for algebra and analytic differentiation, 31719
- Algeria:
area handbook, 25857
background notes, 17850
economic trends and their implications for United States, 30316
gazetteer, official standard names, 26486
reference aid, guide to transliteration of Algerian Arable place names, 21864
selling in Algeria, 27066
significance of ground-water chemistry in performance of North Sahara tube wells in Algeria and Tunisia, 21742
- Algonquian Indians, general information, 31445
- Algorithms, see Mathematics.
- All, A. W., low-energy electron impact rate coefficients for some atmospheric species, 16452
- Aliens:
aliens, their obligations under U.S. draft law, 17824
birth certifications for alien children adopted by U.S. citizens, 23726
code of Federal regulations, 23234
illegal aliens, hearings, 26173
illegal entries, review of hearings conducted, 27233
more needs to be done to reduce number and adverse impact of illegal aliens in United States, GAO report, 31382
nonresident and foreign corporations, withholding of tax, 31500
United States tax guide for aliens, 21831
unlawful hiring of nonauthorized aliens, report, 21171
see also Immigration and emigration.
- Alignment, electron paramagnetic resonance study of alignment induced by magnetic fields in 2 smectic-A liquid crystals not exhibiting nematic phases, 21989
- AHI Air Hawaii, Inc., accident report, 16425
- Alimony:
equal rights amendment and alimony and child support laws, 20384
payments, income tax deductions, 23480
- Allment, see Alignment.
- Aliso Creek:
Orange County—
flood plain information, 31248
floods, 32229
- Alkalies:
chemistry of peralkaline oversaturated obsidians, 23358.
control techniques for mercury emissions from extraction and chlor-alkali plants, 27480
investigation of alkaline phosphatase activity in persons dealing with electromagnetic emission generators of high, ultrahigh and superhigh frequency, USSR study, 30357
- Alkalinity, see Water.
- Alker, Robert I., administrative services and facilities for hospitals, planning guide, 26517
- Alkyl compounds, inactivation of O-Alkyl-S Hexylmethylthiophosphonates by animal body tissues, USSR study, 23520
- All-American Canal System, see Boulder Canyon project.
- All around you, environmental study guide, 29175
- All electric homes in United States, annual bills, 16046
- All hands, Naval Personnel Bureau career publication, 17989
- All Union:
Note.—For headings beginning All-Union, see Union of Soviet Socialist Republics.
All-volunteer Armed Forces, progress, problems and prospects, 28513
Allan, Philip F., autumn olive, for wildlife and other conservation uses, 15473.
Alleghany County Republican Committee, annual report, 22805
Alleged purchase of classified information by Member of Congress, 27188-189
Alleghany County, N.C., soil survey report, 26839
Alleghany County Democratic Committee, annual report, 24755
Alleghany Executive Republican Committee, annual report, 22775
Allegheny Airlines, Inc., accident report, 16423, 23852
Allen, Charles E., address, Oct. 18, 1972, 21542
Allen, David B., address, Dec. 1, 1972, 23903
Allen, Donald M., calico scallop, Argopecten gibbus, 20701
Allen, Dwight W., microteaching, 20096
Allen, Edward L.:
remarks—
Dec. 1, 1972, 21106
Feb. 16, 1972, 29121
Allen, Gordon P., oxidation resistance of selected mechanical carbons, at 650° C in dry flowing air, 32478
Allen, Hollis H., characterizing vegetation from existing source material for predicting munition height of burst in inaccessible areas, 31258
Allen, Jerry M., evaluation of compressible-flow preston tube calibrations, 29273
Allen, Joe H., auroral electrojet magnetic activity indices (AE), 23182
Allen, John J., effects of stress history on resilient response of soils, 31243
Allen, John L., residues of MS-22 in northern pike, muskellunge, and walleye, 20780
Allen, Nancy, health professions capitation grants, 32369
Allen, R. Wade, visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29256
Allen County Democratic Central Committee, annual report, 24729
Allentown, Pa., area wage survey, 17658
Allergy:
allergic disease research, edited remarks, 29349-355

INDEX 1973

- Allergy—Continued
cellular histamine release and allergy (remarks), 29350
drug allergy (remarks), 29352
Alleys, *see* Streets.
Alleviate freight car shortages, 15828
Alliance College, commencement ceremonies (remarks), 17914
Alliance for educational progress, 25044
Alliances, national security policy and changing world power alignment, hearing, 21227
Allied health professions traineeships for advanced training, 23405
Allies, *see* Alliances.
Allocations of resources in Chicago Police Department, 16214
Allotment of space in Federal courthouses or in Federal buildings which include Federal courts, 21283
Allotments of salary to savings accounts and disposition of net pay checks, 21774
Allowances, *see* Pay, allowances, etc.
Alloys:
diffraction of X-rays in aging alloys having different degree of volumetric discrepancy between precipitation phase and matrix, USSR study, 26565
E1893L, influence of several technological parameters on strength properties, USSR study, 21886
fretting of secondary-seal-ring candidate materials in air temperatures to 816° C, 23683
Lorenz ratios of technically important metals and alloys, 26706
metal materials, ores, minerals, and alloys, Federal item identification guide, 28601
superlight structural alloys, USSR study, 30363
tin as alloying element in heat-resistant alloys, USSR study, 23515
see also names of metals, etc.
Alluviums:
experimental study of heavy-mineral segregation under alluvial-flow conditions, 27564
geochemical sampling in McCormick County, S.C., 29006
heavy mineral segregation under alluvial-flow conditions, experimental study, 20349
sediment transport in alluvial channels (series), 21721, 27564
summary of alluvial-channel data from Rio Grande conveyance channel, New Mexico, 1965-69, 21721
Alma-Ata central seismic station, description, USSR study, 31535
Alma-County, Ga., Alma-Bacon County story, model for rural America, 17215
Almanacs:
air almanac, 16435, 22159, 26784
nautical, 1974—
American ephemeris and nautical almanac, 29430
calendar years, 25653
Almenas, K. K., engineering economic model for fish protein concentration processes, 22101
Almira, Wash., test-observation well near Almira, Wash., description and preliminary results, 23377
Alpena County Republican Committee, annual report, 22777
Alpha particles, scattering of 42-MeV alpha particles from copper-65, 31642
Altamaha River and Valley, Altamaha basin, plan for development of land and water resources of southeast river basins, 17924
Alter the destiny of your community, 31346
Alteration tests of Abernathy salmon diet, 17849
Alternating currents, *see* Electric currents.
Alternative futures and environmental quality, 31311
Alternatives to bilateral economic aid, 30023
Alternators, *see* Electric generators.
Altimeters, altitude alerting devices/systems, guidelines, 17446
Altitude:
altitude alerting devices/systems, guidelines, 17446
boundary-layer electron profiles for entry of a blunt slender body at high altitude, 31637
elevations and distances in United States, 32360
effects of altitude on *Cebus apella* monkey, 16658
high—
meteorological data, report (periodical), 18210
physiology of man in Tien Shan and Pamirs, some results of studies, USSR study, 23550
operation of aircraft under IFR, Federal aviation regulations, 18301, 23210
VOR TACAN low altitude flight check summary, 24041
Alumina:
electromotive force measurements on cells involving B-alumina solid electrolyte, 29298
methods for producing alumina from clay, evaluation of sulfurous acid-sulfuric acid process, 30435
Aluminum:
air pollution aspects of emission sources, primary aluminum production, bibliography with abstracts, 30720
chemical interactions of aluminum with aqueous silica at 25° C, 23392
chemistry of aluminum in natural water (series), 23392
cyclic oxidation of cobalt-chromium-yttrium and aluminide coating in IN-100 and via alloys in high-velocity gases, 17714
dispersion strengthening of internally oxidized iron-aluminum alloys, 21944
disassociation energies of some high temperature molecules containing aluminum, 23689
dynamic tear tests of 3-in. thick aluminum alloys, 25658
economics of byproduct metals, 26649
electric conductivity test for measurement of heat treatment of aluminum alloys, eddy current method, military standard, 25027
evaluation of—
landing mat, Dow Chemical Co. extruded aluminum 4-piece 4 by 4 ft. (MX 18-E), 26388
Goodyear medium-duty aluminum honeycomb, 26387
flaw growth behavior in thick welded plates of 2219-T87 aluminum at room and cryogenic temperatures, 32477
hot press and roll welding of titanium-6-percent-aluminum-4-percent-vanadium bar and sheet with auto-vacuum cleaning, 17723
imports and exports (monthly), 17992
industry, mineral industry survey, monthly, 17991
ingot and mill products, current industrial reports, 18194, 25917
ingot from Canada, determination of no injury, etc., Tariff Commission report, 32583
Kaiser MX 19-B and MX 19-C aluminum honeycomb landing mat, evaluation, 16389
minerals yearbook chapter, 16257
non-destructive testing of plated aluminum/stainless steel joint, 29679
plating of beryllium wire, 28067
preparation of aluminum alloys for electroplating, military standard, 27412

- Aluminum—Continued
specimen thickness effects on fatigue-crack-growth behavior and fracture toughness of 7075-T6 and 7178-T6 aluminum alloys, 27712
stress-corrosion cracking in high strength steels and in titanium and aluminum alloys, 16453
structural steel, structural aluminum, steel joists, and cold-formed steel for buildings, 31932
tensile properties to 650° C and deformed structures in precipitation-strengthened titanium-aluminum alloy, 30460
tolerances for aluminum alloy and magnesium alloy wrought products, Federal standard, 16062
toxic effects of aqueous aluminum to rainbow trout, effects of chemical variations in aquatic environments, 26401
transmission of gamma rays through aluminum and laminated lead, aluminum slabs, 26991
United States—
exports, statistics, 26348-349
imports, statistics, 26350
see also names of articles manufactured from aluminum.
Aluminum fluoride, utilization of byproduct fluosilicic acid in the manufacture considering economic availability, 25413
Aluminum foil, converted, current industrial reports, 16754, 31960
Aluminum oxides, *see* Alumina.
AM series, 16679-682, 19187, 21033-34, 22510-511, 24205, 28093, 29684-686, 30785-788
Amalgamated Clothing Workers of America, Political Action Committee, *see* Northern California Joint Board, Amalgamated Clothing Workers of America, Political Action Committee.
Amalgamated Transit Union, ATU-COPE, annual report, 22794
Amaral, Maria M., relief, 19573
Amaranth, *see* Dyes and dyeing.
Ambassadors, nomination of William B. Macomber, Jr. to Turkey, Marshall Green to Australia, Ruth L. Farkas to Luxembourg, V. John Krehbiel to Finland, 26268
Ambient noise, *see* Noise.
ambulance design criteria, 22048
Ambulances:
ambulances and other medical emergency vehicles, grants for acquisitions—
hearings, 15753, 31153
report, 29874
Ambulatory care, *see* Medical care.
AMC, *see* Army Materiel Command.
Amchitka Island, Alaska:
geopiezomagnetic experiment resulting from Canikin nuclear explosion, 30541
hydraulic tests in hole UAe-1, Amchitka Island, Alaska, 23348
interpretation of aeromagnetic survey of Amchitka Island area, Alaska, 17534
America, *see* United States.
America burning, report of National Commission on Fire Prevention and Control, 29335
America voices its recreation concerns, 10 public forums on nationwide outdoor recreation planning, 25665
American Airlines, Inc., aircraft accident report, 27834
American arts series, commemorative stamp posters, 31889-890
American Basketball Association, proposed merger with National Basketball Association, hearings, 26172
American basswood, *see* Linden.
American Battle Monuments Commission:
annual report, 17307
appropriations, 1973, law, 19473
appropriations, 1974, hearings, 28388
assume control of overseas memorials authorize, report, 30975
American Chain and Cable Company, Page Steel and Wire Division, workers, carbon steel round, flat, and shaped wire, Tariff Commission report, 26892
American Commission to Negotiate Peace, general records, 1918-31, microfilm, pamphlet describing, 23701
American commitment to NATO, 19743
American crafts, rich heritage and rich future, 19126
American education (periodical), 17993
American environment, home study course, 30637
American ephemeris and nautical almanac, 29430
American Ex Prisoners of War, incorporate, District of Columbia, report, 19583
American Falls Dam:
Minidoka project, replace under Government of nongovernmental control, report, 31073
Upper Snake River project, Idaho, replace under government or nongovernmental control, hearings, 30040
American Historical Association:
annual report—
departmental edition, 24161
document edition, 24806
American history, *see* Naval history.
American Indians, *see* Indians.
American Instructors of the Deaf, Convention of, *see* Convention of American Instructors of the Deaf.
American international banking, 28886
American Leadership Committee, *see* Committee on American Leadership.
American Legion:
convention, 1972, proceedings, 26049
legislative recommendations, 1973, hearings, 27367
recommendations 1973, hearings, 26183
American-Mexican boundary treaty act of 1972, 15702
American National Cattlemen's Association, Forest Service comments on resolutions relating to National Forest System as adopted in 1971-72 by American National Cattlemen's Association, National Wool Growers Association and State livestock associations, 25210
American nationals:
Americans living abroad, 31950
insurance coverage for U.S. nationals employed by Federal Government, report, 16965
see also Citizens of United States.
American poetry, 2 lectures, Leftovers and From Anne to Marianne, 29190
American Postal Workers Union, AFL-CIO, Political Fund Committee, *see* Political Fund Committee of American Postal Workers Union, AFL-CIO.
American Printing House for the Blind:
appropriations, 1973, veto message, 19556
appropriations, 1974, hearings, 31009
American prisons in turmoil, 19749
American republics, Inter-American series, 17861, 30648
American Revolution, *see* Revolution 1775-83.
American Revolution Bicentennial Administration:
establish—
hearings, 27232, 32148
reports, 26222, 28352, 32032
American Revolution Bicentennial Commission:
American Revolution Bicentennial Symbol, guidelines for authorized usage, official graphics standards, 29654
appropriations, 1973—
additional, law, 19467
supplemental hearings, 26149

INDEX 1973

- American Revolution Bicentennial Commission—Continued
 appropriations, 1974—
 hearings, 28385
 report, 29861
 law, 27086
 newsletter, bicentennial era, 18029
 poster, 15498
 programs and activities, legislative oversight, hearings, 19985
- American Samoa:
 briefing on territorial matters, with text of constitution, hearing, 28541
 census of agriculture, 1969, area reports, 16689
 census of housing, 1970, housing characteristics for States, cities, and counties, 24213
 census of population, 1970, characteristics of population, 28119
 county business patterns, 30835
 general information, 30305
 Governor, appointment, require Senate confirmation, report, 32120
 nautical chart catalog, 29380
 personal exemptions for American Samoans from Federal income tax, authorize increase—
 law, 19505
 reports, 19924, 19938, 19726
 plant quarantine import requirements, 20955
- American Shipbuilding Commission:
 appropriations—
 1973, law, 19473
 1974, hearings, 28388
 member be allowed to waive right to compensation, report, 15684
- American States, Inter-American relations
 documents, legislation, description of organizations, 21224
- American student left, 32410
- American Telephone and Telegraph Company, geographical areas serviced by Bell and independent telephone companies in U.S., 25966
- American Veterans of World War II:
 convention address, 23574
 legislative recommendations, 1973, hearings, 27367
 recommendations, 1973, hearings, 26183
- American Waterways Operators, Inc., decision of Florida District Court in case of American Waterways Operators, Inc., et al. v. Askew, analysis, 17296
- American woods, *see* Wood.
- Americans living abroad, 31950
- Americas and Spain, Postal Union of, *see* Postal Union of the Americas and Spain.
- America's fourth seacoast, St. Lawrence Seaway Development Corporation, 1971 report, 17822
- Americium, plutonium and americium measurement in humans by X- and gamma-ray spectral analysis, 25884
- Ames, Iowa, extension of farm and related programs, hearings, 32128
- AMG, *see* Acreage marketing guides.
- AMIL (microprogramming language), *see* Programming languages.
- Amines:
 effects of amine catalyst on compressive properties of urethane foam, 28064
 series of compounds tested for sympatholytic properties, USSR study, 16204
- Amino acids:
 epizootiological importance of Pasteurella pestis having various amino acid requirements, USSR study, 16187
 series of compounds tested for sympatholytic properties USSR study, 16204
- Ammonia:
 growth and survival of northern plants at low soil temperature, growth response, organic nutrients, and ammonium utilization, 30157
- Ammonia—Continued
 properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260
 removal in physical-chemical wastewater treatment process, 20207
 some quarternary ammonium compounds, USSR study, 21877
 working with ammonia, 32493
- Ammonites:
 Middle Jurassic (Bajocian) ammonites from Eastern Oregon, 30280
 stratigraphy and ammonite fauna of Graneros shale and Greenhorn Limestone near Pueblo, Colo., 23360
- Ammonium bisulfate; properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260
- Ammonium sulfate, properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260
- Ammunition:
 color coding, military standard, 20058
 rigging, low and high velocity airdrop, 24182
- Amnesty, selective service and amnesty, administrative possibilities, hearings, 21358
- Amortization, *see* Mortgages.
- Amory, Miss., special flood hazard information report, Tombigbee River, 17407
- Amperes, volt-ampere characteristics of optically controlled avalanche transistor, 23542
- Amphetamines, current concepts on amphetamine abuse, proceedings, 25587
- Amphibians, Army water transport units, field manual, 19163
- Amphibious operations, amphibious training, 25392
- Amphipods:
 deep-sea amphipoda of Genus Lepechinella (Crustacea), 23962
 freshwater amphipod crustaceans (Gammaridae) of North America, 17437
 pelagic amphipods of genus hyperia and closely related genera, Hyperiidea: Hyperiliidae, 25698
see also Synopiidae.
- Amplan, Sarkis G.:
 clays, 25439
 zirconium and hafnium, 25494
- Amplifiers:
 solid-state—
 amplifier for bridge circuit of mercury detector, 17684
 radio receivers, radio-phonograph combinations, loudspeakers, and amplifiers, workers of H. H. Scott, Inc., Tariff Commission report, 27948
- Amplitude modulation:
 broadcasting stations of world, amplitude modulation, according to—
 country and city, 17500
 frequency, 17501
 study of amplitude of electromagnetic wave reflected from boundary of anisotropic plasma, 22450
- AMS, *see* Agricultural Marketing Service.
- AMTRAK, *see* National Railroad Passenger Corporation.
- Amusements, travel, entertainment, and gift expenses, deducting from income tax, 20427
- AMVETS, *see* American Veterans of World War II.
- Anaerobes:
 anaerobic-aerobic—
 ponds for beet sugar waste treatment, 26409

Anaerobes—Continued

- anaerobic-aerobic—continued
- treatment of textile wastes with activated carbon, 28825
- cannery waste treatment by anaerobic lagoons and oxidation ditch, 25107
- denitrification by anaerobic filters and ponds, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21521
- identification and control of petrochemical pollutants inhibitory to anaerobic processes, 30180
- inspection procedure for anaerobic thread locking compounds, military standard, 28612
- Anahelm, Calif., area wage survey, 16224, 26628
- Analgesics, electro-analgesia, USSR study, 30359
- Analysis, *see* Chemical analysis—also names of substances analyzed or subjects.
- Analysis (mathematics), *see* Mathematics.
- Analysis of meteorological conditions for aviation, USSR study, 32408
- Analysis of regulatory aspects of fuel oil supply, 29645
- Analytical necessary and sufficient condition for riemannian manifold to be complete, 16452
- Analzers, hydrolab IIA portable water quality analyzer, 22112
- see also* Auditory analyzers—
- Pulse-height analyzers—Trace oxygen analyzers.
- Anatomy:
 - avian anatomy, integument, 24123
 - body measurements for sizing of girls' apparel, 30477
 - morphological and anatomical considerations of grass subfamily Bambusoideae based on new genus *Maclurolyra*, 26822
 - neuroanatomy of speech, 23768
 - plutonium and americium measurement in humans by X- and gamma-ray spectral analysis, 25884
- Anbar, Michael, selected specific rates of reactions of transients from water in aqueous solution hydrated electron, 29313
- Anchorage, Alaska:
 - aircraft accident report, 23851, 25643, 32521
 - Chester, Campbell, Fish and Ship Creeks, special flood hazard report, 20166
 - flood plain information, Rabbit Creek, 28722
 - floods, Rabbit Creek, 28757
- Ancker-Johnson, Betsy, remarks, May 2, 1973, 28240
- And the wheat goes on, 30715
- Andal Shoes, Inc., Haverhill, Mass., women's dress shoes, Tariff Commission report, 25787
- Anders, D. E., geochemical aspects of saturated hydrocarbon constituents of Green River oil shale-Colorado no. 1 core, 29231
- Andersen, Ronald, health service use, National trends and variations, 22022
- Anderson, C. A., precambrian geology of northern Bradshaw Mountains, Yavapai County, Ariz., 20343
- Anderson, Clinton P., tributes, upon retirement from Senate, 24887
- Anderson, David R., population ecology of mallard, review of previous studies and distribution and migration from breeding areas, 16488
- Anderson, H. W., talk, May 1-4, 1972, 26809
- Anderson, James R., land use classification system for use with remote-sensor data, 21712
- Anderson, Leroy O., selection and use of wood products for home and farm building, 15465
- Anderson, Maynard E., economic analysis of automating small fluid milk plant, 24117
- Anderson, P. J., part programming for numerical control matching and gaging, 22502
- Anderson, Peter W., characteristics of water quality and streamflow, Passaic River basin above Little Falls, N.J., 31400
- Anderson, R. Bruce, wooden beverage cases cause little damage to bottle caps, 32324
- Anderson, Walter C., economically oriented production functions for slash and loblolly pine plantations, 23297
- Anderson, Warren, surface water in Duval and Nassau Counties, Fla., 23376
- Anderson, Bill, Friends of, *see* Friends of Bill Anderson.
- Anderson Gully:
 - flood plain information, 20131
 - floods in Vidor, Tex., how to avoid damage, 20139
- Andersonville, story of Civil War prison camp, 23818
- Anderton, David A., Apollo 17 at Taurus-Littrow, 27707
- Ando, Jumpsel:
 - nitrogen oxide abatement technology in Japan, 30196
 - recent developments in desulfurization of fuel oil and waste gas in Japan, 30187
- Andover, Mass., Merrimack-Shawsheen-Spicket Rivers, flood plain information, 25078
- Andragogy, its concepts, experience and application trainers guide, 20497
- Andreas-Penninsula Earthquake Engineering Laboratory, APEEL array, site study, 22096
- Andrew Johnson National Historic Site, general information, 23819
- Andrews, Ralph, Andrews for Congress Committee annual report, 24481
- Andrews for Congress Committee, annual report, 24481
- Anegada Island, drone launching facility, agreement with Great Britain, 26877
- Anemia:
 - National Cooley's anemia control act, law, 19366
 - sickle cell anemia—
 - and sickle cell trait, 23587
 - answers to common questions about, 29339
 - answers to frequently asked questions, 29340
 - medical review, 16245
 - so I have sickle cell trait . . . , 26756
- Anemometers:
 - flow-field measurements around Mars lander model using hot-film anemometers under simulated Mars surface conditions, 17710
 - UVW anemometers dynamic performance study, 22411
- Anesthesia, *see* Anesthetics.
- Anesthetics, electro-analgesia, USSR study, 30359
- Anga, annotated Anga (Kukukuku) bibliography, 26749
- Angelfish, field guide to angelfishes (Pomacanthidae) in western Atlantic, 23807
- Angell, Raymond C., soil survey of Sherman County, Kans., 29512
- Angle of attack:
 - dynamic stability derivatives at angles of attack from -5° to 90° variable-sweep fighter configuration with twin vertical tails, 20602
 - lee-surface heating and flow phenomena on space shuttle orbiters at large angles of attack and hypersonic speeds, 20621
 - tables for supersonic flow of helium around right circular cones at zero angle of attack, 32464

- Angles:
self-focusing antenna for low-angle tracking, 31757
theory of soil plasticity with indefinite angle of non-coaxiality, 30156
Angling, *see* Fish and fisheries.
Angola, *see* Portuguese West Africa.
Angstroms, *see* Wave lengths.
Angular momentum, experimental investigation of accelerometer-controlled automatic braking system, 20607
Anhydrators, *see* Dryers (Industrial).
Animal and Plant Health Inspection Service, APHIS series, 22398
Animal and Plant Health Service, APHS series, 16641, 22393-397, 28039, 29655
Animal industry, *see* Livestock.
Animal vectors, *see* Vectors (biological).
Animal waste, *see* Waste products.
Animals:
and animal product, code of Federal regulations, 25171
animal depredations on spot-seeded yellow-poplar in central Tennessee, 28953
animal histology procedures of Pathological Technology Section of National Cancer Institute, 22020
care and use of laboratory animals, 20673
coniferous forest ecosystems, 1st year progress in coniferous forest biome, research, 20303
consumability of animals exposed to radiation in post attack situation, 29678
determining cholinesterase activity in animals' tissues following action of reversible inhibitors, USSR study, 21868
diethylstilbestrol, its use as drug for humans and in animal feeds, regulations, hearings, 17057
endangered species conservation, hearings, 19960
experimental hypersensitivity in animals (remarks), 29353
external electric field recorded around animals, man, USSR study, 26593
Federal animal damage control act, hearings, 24917
hydrodynamics of certain animals, USSR study, 20454
inactivation of O-Alkyl-S Hexylmethylthiophosphonates by animal body tissues, USSR study, 23520
pollution control costs and research priorities in animal slaughtering and processing industries, 27763, 30499
problems of control of body functions of humans and animals, USSR study, 31521
role of mixed disulfide bonds in radioprotective effect of B-mercaptoethylamine (MEA), USSR study, 16192
shooting animals from aircraft, provide for effective enforcement of provisions to prohibit—
law, 19432
reports, 15680, 15857
we want you to know about drugs for food-producing animals, 30244
see also Diseases of animals—Food for animals—Wildlife
Anisotropy:
determination of three-dimensional deformation anisotropy in rock specimens, new methods, 26488
study of amplitude of electromagnetic wave reflected from boundary of anisotropic plasma, 22450
Anne Arundel County, Md., soil survey report, 27895
Annealing annealing of thin magnetic films at high temperatures, USSR study, 30340
Annelids:
branchiobdellid (Annelida, Clitellata) fauna of mesoamerica, summary, 29490
freshwater leeches (Annelida: Hirudinea) of North America, 17440
see also Polychaeta.
Annett, John R., use of model output statistics (MOS) to estimate daily maximum temperatures, 30536
Annette Island, Alaska, airport, Federal aviation regulations, 18300, 21532
Annosus root rot, *see* Fomes annosus.
Announcement of highway safety literature, bi-monthly abstract journal, 17996
Annoyance judgments of aircraft with and without acoustically treated nacelles, 32455
Annuities:
annuities of widows of justices of Supreme Court, law, 16901
civil service retirement annuities, increase, hearing, 20008
Federal law enforcement and firefighting personnel, increase, hearings, 31038
increased annuities for secretaries of justices and judges of United States, report, 19708
pension trust procedures and guides for integration of qualified plans, 20403
annuities, increase, hearing, 17288
amend, revise annuity eligibility conditions—
hearings, 30061
Railroad retirement act—
amend, revise annuity eligibility conditions, report 29859, 31071
tax information on pensions and annuities, 23485
tax-sheltered annuity plans for employees of public schools and certain tax-exempt organizations, 25308
see also Civil service pensions.
Anobiidae, *see* Beetles.
Anomalies:
anomalous absorption of electromagnetic waves in magnetized plasma, 22445
geochemical anomalies—
and alteration in Moenkopi formation, Skull Creek, Moffat County, Colo., 21734
of claypit area, Callaway County, Mo., and related metabolic imbalance in beef cattle, 29026
gold anomaly in soil of West End Creek area, Yellow Pine District, Valley County, Idaho, 26496
waves, instabilities and anomalous dissipation of parametric plasma in strong electromagnetic field of pumping wave, USSR study, 31534
Anomalous nonlinear dissipation of high-frequency radio waves in plasma, 31532
Anomaly, *see* Anomalies.
Answers for doctors, social security disability program, 22228
Answers to common questions about sickle cell disease, 29339
Answers to frequently asked questions about sickle cell anemia, 29340
Antarctic regions:
Antarctic bibliography, erratum, 20512
Antarctic journal of United States, 17997
cationic analysis of Byrd Station, Antarctica, ice core, 17374
deep rotary core drilling in ice, 28688
effects of extreme factors of Antarctica on sleep of polar expedition members, USSR study, 30356
ionic migration and weathering in frozen Antarctic soils, 32459
monitoring Northern Hemisphere trans-missions in Antarctica and some oblique sounding systems, USSR study, 23522
seismological bulletin (periodical), 17998
theoretical problems of conservation of Antarctic resources under international law, world wide study, 23555
Antarctica, *see* Antarctic regions.
Antbirds, behavior of ocellated antbirds, 28789

- Antennas:**
 antennas and transionospheric propagation as related to ELF/VLF downlink satellite communications, conference proceedings, 27844
 electromagnetic radiation from simple sources in presence of homogeneous dielectric sphere, 29251
 erection and testing of zonal signal enhancer on Chollon-Ata-Orgochur radio relay lines, 21867
 ferrite rod antenna arrays for Loran-C receivers, 20967
 prototype annular slot antenna measurements, 21113
 radars with synthesized antenna, USSR study, 29132
 radiation from apertures in curved surfaces, 32456
 self-focusing antenna for low-angle tracking, 31757
 structures, construction, lighting, and marking, FCC rules and regulations, 18304
 using holographic matched filters in correcting phase discontinuities in antenna apertures, USSR study, 27650
Anthocephalus cadamba, *see* Cadam.
Anthraxite, *see* Coal—Coal mines and mining.
Anthraxnose, eastern hardwoods, 16074
Anthropology:
 anthropological papers, 20704
 Smithsonian contributions, 20760
Anthropometry, ten-State nutrition survey, 22569
Anti-ballistic missiles, *see* Missiles.
Antibiotics:
 antibiotics in animal and poultry feeds, critical review of research, 20886
 misuses, hearings, 24963
Anticholinesterases:
 effect of anticholinesterase substances on action of acetylcholine and its analogues on neurons of gastropods, USSR study, 17637
 inactivation of O-Alkyl-S Hexylmethylthiophosphonates by animal body tissues, USSR study, 23520
 significance of cholinergic reactions in brain neuron pathology brought on by anticholinesterase intoxication, USSR study, 20458
 subtle changes in brain functions produced by single doses of mevinphos (phosdrin), 30786
Anticompetitive impact of oil company ownership of petroleum products pipeline, 17096
Antidegradation waters quality standards digest, 25130, 28845
Antidiscrimination, *see* Discrimination in housing.
Antiferromagnetism, *see* Magnetism
Antifreeze solutions, antifreeze/coolant, 23247
Antifriction bearings, *see* Bearings (machinery).
Antigens and antibodies:
 conference and workshop on cellular immune reactions to human tumor-associated antigens, 30478
 tissue typing antisera, 1972-73 catalog, 23743
Antilla, Charles, People for Antilla Committee annual report, 24676
Antilles:
 contributions to hydrology of Latin America and the Antilles (series), 16112
 light list, 28222
Antimissile missiles, *see* Missiles.
Antimonopoly laws, *see* Monopolies.
Antimony:
 mineral industry survey, quarterly, 17999
 minerals yearbook chapter, 20532
Antioxidants, effect of some antioxidants and EDTA on development of rancidity in Spanish mackerel (*Scomberomorus maculatus*) during frozen storage, 22104
Anti-poverty program, *see* Poverty.
Antiques, Hobby protection act, antique glassware and china, hearing, 26167
Antitrust laws, *see* Trusts (Industrial).
Ants, USDA fights fire ant, 28016
Antung, China, despatches from U.S. consuls in Antung, Manchuria, China, 1904-6, pamphlet describing microfilm, 23698
Anxiety, state-trait anxiety inventory and assessment of stress under simulated conditions, study, 16682
AOML, *see* Atlantic Oceanographic and Meteorological Laboratories.
Apache Indians, general information, 31446
Apalachicola River and Valley, Apalachicola-Chattahoochee-Flint basins, plan for development of land and water resources of southeast river basins, 17924
Apartment houses:
 deterrence of crime in and around residences, 30376
 market absorption of apartments, current housing reports, 18193
APCL, *see* Atmospheric Physics and Chemistry Laboratory.
APEEL, *see* Andreas-Penninsula Earthquake Engineering.
Apertures:
 photosensor aperture shaping in facsimile cameras, investigation, 16352
 radiation from apertures in curved surfaces, 32456
 using holographic matched filters in correcting phase discontinuities in antenna apertures, USSR study, 27650
APHIS, *see* Animal and Plant Health Inspection Service.
APIIS, *see* Animal and Plant Health Service.
Aplite, minerals yearbook chapter, 20556
Apollo experience report, 20611, 29293
Apollo project, *see* Project Apollo (man-in-space program).
Apollo spacecraft, *see* Spacecraft.
Apostle Islands National Lakeshore, general information, 30544
Appalachian region:
 Appalachian hardwoods for pallets, correlation between service and laboratory testing, 20304
 Appalachian Research reports, 30747-749
 capital resources in central Appalachian region, 30748
 deforestation effects on soil moisture, streamflow, and water balance in central Appalachians, 32343
 demonstration of safety plugging of oil wells penetrating Appalachian coal mines, 16338
 forestry returns evaluated for uneven-aged management in 2 Appalachian woodlots, 20306
 recreational potential in Appalachian highlands, market analysis, 30749
 sawlogs sizes, comparison in two Appalachian areas, 32323
 spatial concentration of industry in Appalachia analysis of potential for import substitution, 30747
 strategy for development in central Appalachia, 30747-748
Appalachian Regional Commission:
 annual reports, 30742-746
 public works appropriations, 1973, law, 19363
 public works appropriations, 1974—law, 32015
 reports, 29993, 30989
Appalachian Regional Hospitals, Inc., relief, 19349
Apparel, *see* Clothing.
Apparent object movement produced by head movement under water, 16247

INDEX 1973

- Appeals:
adverse actions and appeals handbook, HUD, 31420
appellate procedure, Federal rules with forms, 15768
employee appeal from adverse actions, 16815
Interstate Commerce Commission, decision, judicial review, improve hearings, 32149
land appeals, decisions, 18499
rules governing procedures, proposed amendments, 24110
tax refunds, appeal rights and claims, audit of returns, 20390
Appearance and visibility of thin oil films on water, 26405
Appellate proceedings, *see* Appeals.
Apple, *see* Apples.
Apples:
blight, 20909
evaluation of hydrohandling system for sorting and sizing apples for storage in pallet boxes, 19109
fresh and for processing eligible for marketing orders, report, 17014
harvesting, storing, and packing apples for fresh market, regional practices and costs, 31917
nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
orchards, young, establishing and managing, 16592
Appleton, Budd, results of clinical survey for microwave ocular effects, lecture, 26804
Appleton, Wis., aircraft accident report, 31744
Applicability of Federal meat inspection act to retail establishments, 27657
Application of remote sensing to air pollution detection and measurement, 26650
Application of sonic-boom minimization concepts in supersonic transport design, 29277
Application of space program fire-retardant technology to housing, 31644
Application through firm commitment for project insurance, 23432
Applications, program reservations and preliminary loans handbook, 23446
Applied mathematics series, 29307
Applied theory of inertial navigation, 20455
Appomattox Court House National Historical Park, general information, 20705
Appraisal, *see* Valuation.
Appraisers, minority businessmen, VA invites you to get share of multimillion dollar business, 29584
Apprentices:
apprentice training sure way to skilled craft, 26957
apprenticeship National standards, painting, decorating and drywall taping, 15500
apprenticeship program and its potential for black Americans (speech), 31554
apprenticeship programs (speech), 32426
automated apprenticeship training (AAT), systematized audio-visual approach to self-paced job training, 30729
employment of—
apprentices, 26920
learners, 24099
jobs for which apprenticeships are available, 29173
national apprenticeship—
and training standards for—
carpentry, 25854
sheet metal industry, 22401
program, general information, 22402
standards for—
automotive machinist, 28043
ophthalmic finisher-dispenser, 15501
veterans, train for skilled trade through apprenticeship, 24164
Apprenticeships, *see* Apprentices.
Approach, naval aviation safety review, 18004
Approach to consumer education for adults, 28575
Approach lights, *see* Lights and lighting.
Appropriations:
budget estimates, etc., statements, 1972, with respect to foreign assistance and related programs, 19802
executive, 1973, supplemental, proposal, 30947
further continuing appropriations for 1973—
law, 19497
reports, 19729, 26090
general Government matters, 1973—
continue—
laws, 15637, 16896, 19381, 27084
reports, 26078, 27265
supplemental, proposals, 26059
general Government matters, 1974, continue—
law, 30924
reports, 29967, 30990, 32053
impoundment of appropriated funds by the President, 24929
judiciary, 1973, supplemental, proposal, 30947
judiciary, 1974, amendments, 30949, 31058
legislative, 1972 and 1973, supplemental, proposal, 19560
legislative, 1973—
law, 16573
supplemental, proposal, 19568, 30947, 30950, 30955
legislative, 1974—
amendments, 30949
hearings, 24841, 31129
impoundment control and 1974 expenditure ceiling, report, 30991
report, 29991
should appropriated funds be used for transportation procured specifically for Armed Forces exchange goods? GAO report, 32356
statements, 92d Congress, 2d session, 23030
supplemental, 1973—
hearings, 15718, 19949, 26149, 27187, 27302
law, 19530, 32004
proposals, 16946, 19553, 31053
reports, 19700, 19705, 19722, 19930, 26143, 28333, 28376, 28472, 29866
urgent, hearings, 27304
veto message, 30960
supplemental, 1974, proposal, 26053
see also names of departments, etc., for which appropriations are made—*also* subjects.
Appropriations Committee, House:
hearings, 15715-719, 17025, 24841, 26146, 149, 27178-187, 28384-393, 29893, 31008-12, 32073
reports, 16987, 16989, 19632, 19699-700, 26078, 27136, 28377, 29861, 29866, 30972, 30977, 30983, 30989-990
Appropriations Committee, Senate:
additional expenditures for routine purposes, authorize, report, 28468
hearings, 15864-870, 17223, 19948-949, 24911, 27302-304, 30004-6, 31124-126, 31128-131, 32131-132, 32184-136
reports, 15829, 15861, 19887, 19898, 19930, 21311, 27265, 27288, 28472, 29963, 29967, 29991, 29993, 29995, 31117
Approximations, approximate tests of independence in contingency tables from complex stratified cluster samples, 27743
Apricots, growing apricots for home use, 30705
Aptitude levels in enlisted manpower pool of Air Force, 20940
Aptitude tests:
armed services vocational aptitude battery, 1973-74 counselor's manual, 32181

Aptitude tests—Continued

development and standardization of Air Force officer qualifying test form L, 26948

physiological principles of aptitude for mass occupations, USSR study, 17628
suitability of using common selection test standards for Negro and white airmen, 25844

Aqualung, vision through various scuba facemasks, 30409

Aquatic animals, effects of temperature on growth and reproduction of aquatic snails, 27452

see also Marine fauna.

Aquatic environment, *see* Environment.

Aquatic life:

aquatic dryopoid beetles (Coleoptera) of U.S., 17438

biological problems in water pollution, 20734

Buffalo River drainage basin, Tennessee Valley streams, their fish, bottom fauna, and aquatic habitat, 30672

methods for collection and analysis of aquatic biological and microbiological samples, 29031

pesticides in aquatic environment, 16575

Squatchie River drainage basin, Tennessee Valley streams, their fish, bottom fauna, and aquatic habitat, 16552

toxicity of power plant chemicals to aquatic life, 28091

Aquatic plants, aquatic and wetland plants of southwestern United States, 17432

see also Waterweed.

Aqueous solution:

chemical interactions of aluminum with aqueous silica at 25°C, 23392

reactivity of hydroxyl radical in aqueous solutions, 30470

selected specific rates of reactions of transients from water in aqueous solution, hydrated electron, 29313

sulfur dioxide emission control by hydrogen sulfide, reaction in aqueous solution, citrate system, 30443

use of atomic absorption spectroscopy in determination of ug/liter concentrations, 17370

Aquí tiene usted su manual del arte de cocinar pescado con sentido comun, 20683

Aquifers:

feasibility of artificially recharging basalt aquifers in eastern Washington, 23340

glossary of selected terms useful in studies of mechanics of aquifer systems and land subsidence due to fluid withdrawal, 20362

injecting highly treated sewage-plant effluent into deep sand aquifer at Bay Park, N.Y., preliminary results, 17540

rehabilitation of brine-polluted aquifer, 21495

Arab Republic of Egypt, *see* United Arab Republic (Egypt).

Arab Republic of Yemen, *see* Yemen.

Arabian Sea, N.E., N.W., summary of synoptic meteorological observations, southwest Asian marine areas, 22183

Arabic language, reference aid, guide to transliteration of Algerian Arabic place names, 21864

Aragonite, *see* Calcium carbonates.

Araman, Philip A., new kind of end-glued joint for hardwood industry, 25223

Arapaho Indians:

Cheyenne-Arapaho Tribes of Oklahoma, judgment funds, disposition, law, 19374

general information, 31447

Arasan, *see* Thiram.

Arboretum, *see* National Arboretum.

Arc welding, *see* Welding.

Arcata, Calif., microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418

Archeology:

preservation of historical and archeological data—

hearings, 21249

threatened by Federal or federally assisted construction, 28475

Archery:

tax on bows and arrows to provide wildlife restoration funds—

law, 19485

reports, 19669, 19937

Architect of Capitol:

appropriations, 1973, legislative, law, 16873

appropriations, 1974, legislative—

hearings, 31129

report, 29991

reports, semiannual 23032, 31062

Architects:

architect-engineer selection bill—

law 19507

report, 19879

architects in Peace Corps and VISTA, 22308

publications of interest to, list, 31356

Architects Nationally for McGee Committee, annual report, 24684

Architecture:

architectural analysis and inspections for—

project mortgage insurance, 21793, 25281

title 10 land development projects, HUD, 29073

architectural design for crime prevention, 26803

architectural handbook for building single-family dwellings for home mortgage insurance, 29061

architectural processing and inspection for home mortgage insurance, 21780

Bridgeport's Gothic ornament, Harral-Wheeler House, 20767

Chicago school of architecture, plan for preserving significant remnant of America's architectural heritage, 23823

definitive designs for—

Marine Corps facilities, 16432

naval shore facilities, 16433-434

design and development of housing systems for Operation Breakthrough, phase 1, feedback, 30294

design of small dams, 30614

dining facility user-attitudes and environmental design research at Travis AFB, Calif., 31239

FLP designs meet family housing needs, 21668

HUD awards for design excellence, 4th biennial, announcement and entry form, 23417

new environments for incarcerated, 17648

performance concept in buildings, symposium proceedings, 16359

prospects for the past, study of notable architecture, Sheboygan, Wis., 31439

seismic design for buildings, 25862

systemizing information to identify and relate behavioral and physical design parameters, 25069

Archives, *see* Records.

Arcs (electric), *see* Electric arcs.

Arctic Coast, coast pilot, Cape Spencer to Beaufort Sea, 26764

Arctic Ocean, lights and fog signals, 30124

Arctic region:

Arctic winter games, authorization, report, 28482

North American arctic and subarctic, ice thickness, 1967-68, 1968-69, observations, 16006

preliminary ecological evaluation of effects of air cushion vehicles on Arctic tundra of northern Alaska, 21439

Arctiinae, *see* Moths.

Are you overloading your skidder tires? 20309

INDEX 1973

Area handbooks :

- Algeria, 25857
- Chad, 15508
- China, People's Republic, 15507
- China, Republic, 19168
- Ecuador, 26965
- Greece, 22429
- Khmer Republic (Cambodia), 25858
- Laos, 26966
- Libya, 30754
- Malagasy, Republic, 31931
- Mauritania, 24177
- Peru, 24176
- Poland, 28050
- Romania, 15509
- Sudan, Democratic Republic, 25856
- Area redevelopment, *see* Redevelopment (city planning, etc.)
- Area studies, higher education programs in foreign language and area studies, research and training opportunities abroad, 15997
- Area trends in employment and unemployment (periodical), 18006
- Area wage survey, *see* Wages.
- Areas eligible for flood insurance, 29045
- Archart, T.A., jr., spindle thermal effects, 22506

Argentina :

- Air Force mission agreement, 26874
- background notes, 29517
- cooperation in combating illicit international traffic in narcotics, etc., agreement, 20809
- economic trends and their implications for United States, 23493, 32400
- extradition treaty, 25753
- with message from the President, 15799
- loan of vessels, extension agreement, 26873
- military assistance, deposits under Foreign assistance act, agreement, 17891
- mineral industry, minerals yearbook chapter, 16264
- printed vinyl films from Brazil and Argentina, Tariff Commission report, 32594
- production and trade prospects for Argentine oil-seeds and their products, 31350
- records relating to political relations between Argentina and other States, 1910-29, pamphlet describing microfilm, 25540
- scientific and technical cooperation, agreement, 20804
- social security agreement, 20814

Argon :

- chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-argon flames, 25500
- dissociation rate of bromine diatomics in argon heat bath, 23685
- geochemistry and potassium-argon ages of plutonic rocks in Battle Mountain mining district, Lander County, Nev., 29024
- liquid densities, 25554
- radical species profiles for methane-oxygen-argon flame, 30439
- ratio of longitudinal and transverse diffusion coefficients in argon SHF discharge plasma, 20999
- smelting metal with argon, USSR study, 17625

Argopecten gibbus, *see* Scallops.

Argulus, *see* Copepods.

Arid regions, *see* Deserts.

Arithmetic, ranger 'rithmetic for 6th grade teachers, 20297

Arizona :

- census of housing, 1970, housing characteristics for States, cities, and counties, 15533
- census of population, 1970, characteristics of population, 30800
- census of transportation, 1972, truck inventory and use survey, 22538
- climatological data, 18075
- counties, population estimates, 16785
- county business patterns, 29727

Arizona—Continued

- criminal justice agencies, 1971, list, 23563
- economic data, equal employment, opportunity program, State of Arizona, 17816
- geohydrology of Needles area, Arizona, California, and Nevada, 26498
- geophysical studies in Yuma area, 30275
- Glen Canyon National Recreation Area, establish, report, 17011
- income limits for rent supplement housing, 29077
- litter production by oak-mountain mahogany chaparral in central Arizona, 17518
- mineral industry, minerals yearbook chapter, 16265
- moisture stresses in Arizona mixed conifer seedlings, 16085
- placer gold deposits of Arizona, 21708
- precipitation data, hourly, 18426
- predicting fire spread in Arizona's oak chaparral, 28968
- proposed system for Arizona telemetry of mountain snow pack and related data, 17839
- radar echo distribution in Arizona during July and Aug., study, 30538
- radiometric ages of igneous rocks from Pima, Santa Cruz, and Cochise Counties, southeastern Arizona, 27557
- regular income limits for sec. 235-236 housing, 29075
- releases of Bracon kirkpatricki (Wilkinson) and Chelonus Blackburni Cameron for pink bollworm control in Arizona, 28017
- report on pollution affecting Las Vegas Wash, Lake Mead and Lower Colorado River, Nevada, Arizona, and California, 20211
- socio-economic profile of American Indians, 22589
- stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, 17528
- water supply outlook and snow surveys, 19056
- Arizona Federation of Republican Women, annual report, 24494
- Arizona Medical Political Action Committee, annual report, 24370
- Arizona (U.S.S.) Memorial construct and provide shoreside facilities, hearings, 15723
- Arkansas :
- Arkansas River basin compact, agreement with Oklahoma, consent of Congress, reports, 17197, 31074, 32058
- census of business, 1967, selected services, 16701
- census of housing, 1970, housing characteristics for States, cities, and counties, 15534
- census of population, 1970—
- characteristics of population, 29698
- detailed characteristics, 19200
- census of transportation, 1972, truck inventory and use survey, 21048
- climatological data, 18076
- counties, population estimates, 28180
- county business patterns, 29728
- electric rate book, 20253
- hydrologic significance of lithofacies of Cane River formation or equivalents, 27565
- income limits for rent supplement housing, 29077
- mineral industry, minerals yearbook chapter, 16266, 30422
- precipitation data, hourly, 18427
- real property, authorize exchange, report, 28362
- regular income limits for sec. 235-236 housing, 29075
- Arkansas Committee on Political Education, annual report, 26025

Arkansas County, Ark., soil survey report, 17840
 Arkansas Mountains, burning to reduce understory hardwoods in Arkansas Mountains, 23298
 Arkansas Nuclear One, unit 1, Arkansas Power and Light Company fiche index for nuclear dockets, 29673
 Arkansas Post National Memorial, interpretive prospectus, 22117
 Arkansas Power and Light Company, fiche index for nuclear dockets Arkansas Nuclear One, unit 1, 29673
 Arkansas River and Valley:
 basin compact, interstate agreement consent of Congress, reports, 17197, 31074, 32058
 determining rights and interests of Choctaw Nation, Chickasaw Nation, and Cherokee Nation in and to bed of Arkansas River below the Canadian Fork and to eastern boundary of Oklahoma, report, 29876
 flood plain information, 20112
 Pulaski County, Ark., 28697
 Little Rock, Ark., 16007
 floods in—
 Fort Smith, Ark., 20101
 Pulaski County, Ark., 28684
 navigation conditions at confluence of Arkansas, Verdigris and Grand Rivers, hydraulic model investigation, 25100
 water supply and snow surveys, 19057
 Arkansas Trading House, record book, 1805-10, pamphlet to accompany microfilm, 25538
 Arkwright Mills, Inc., certain woven fabrics of cotton and of manmade fibers, Arkwright Mills, Inc., Spartanburg, S.C., Tariff Commission report, 24058
 ARL. see Air Resources Laboratories.
 Arlington, Tex., special flood hazard information report, Kee Branch, 21475
 Arlington, Va., railroad accident report, 30570
 Arlington Heights, Ill., population, special censuses, 31968
 Arlington House, Robert E. Lee Memorial, general information, 27808
 Armed Forces:
 additional movements at Government expense of household goods and personal effects, or mobile homes, of dependents of members who are in missing status, authorize—
 law, 19410
 report, 19890
 Admiralty claims against U.S., settlement law, 19367
 all-volunteer Armed Forces, progress, problems and prospects, 28513
 alliance for educational progress (address), 25044
 appropriations 1973, military procurement, hearings, 21200
 armed services—
 housing for—
 civilian employees, information and processing instructions insurance, 21785
 home mortgage insurance, 21786
 procurement regulations 24979
 vocational aptitude battery 1973-74, counselor's manual, 32181
 defense procurement circular, 18217
 Dependents assistance act—
 • amend—
 hearing, 28395
 law, 32006
 reports, 29957, 32052
 make permanent certain provisions—
 hearings, 28514
 report, 28372
 driver, traffic safety magazine for military driver, 18236

Armed Forces—Continued
 drug and alcohol abuse among U.S. military personnel and dependents in Germany, 21316
 EEO equal employment opportunity counseling, 24167
 enlisted aide program of military services, GAO report, 27547
 Federal income tax information, 1972 returns, 17643
 fraud and corruption in management of military club systems, 30034
 further improvement needed in assisting military personnel in finding adequate housing near bases, Department of Defense, GAO report, 28993
 grant and pension regulations for USSR servicemen, handbook, 30361
 health maintenance organizations, authorize use for families of active duty uniformed services, report, 19620
 information for persons disabled in military service vocational rehabilitation and other benefits, 29582
 interested in environmental health? Operation MEDIHIC, 21761
 investigation of attempts to subvert United States armed services, hearings, 15750
 members—
 erroneous payments of pay or allowances, waiver of claims—
 law, 19388
 report, 19866
 free letter mail and air transportation mailing privileges, additional, law, 19403
 uniformed services in missing status, promotions, reports, 27119, 27277
 voluntarily extending tour of duty in hostile fire areas, special 30-day period of leave, extend authorization—
 law, 19413
 report, 19889
 who are in missing status to accumulate leave without limitation, authorize—
 law, 19520
 report, 15688, 19927
 who function as judge advocates and law specialists, additional compensation, authorization, hearing, 15871
 military personnel—
 equality of treatment in application of dependency criteria, report, 19878
 office management and administrative procedures, Army pamphlet, 22430
 military tenant, responsibilities, etc., 29087
 mortgage insurance for servicemen for home mortgage insurance, 21783
 Nonappropriated fund instrumentalities act, 21372
 operation MEDIHIC—
 for health trained service personnel, 23409
 military experience directed into health careers, 21762
 personal property traffic management regulation, 17341, 27416, 31197
 power of attorney, extend expiration data executed by members of Armed Forces, missing in action or prisoners, report, 19888
 privileges, pensions, and allowances for military personnel, USSR study, 25345
 procurement regulations, 18007
 Air Force, ASPR supplement, 17971
 race relations, Armed Forces, 1960-72, special bibliography, 26971
 recipe service, recipes, 22435
 indexes, 19171, 24181
 recomputation and other retirement legislation—
 hearings, 21208
 subcommittee report, 21209

INDEX 1973

Armed Forces—Continued

retired uniformed services personnel in Federal civilian service, Sept. 1972, study, 21282
 revise special pay structure relating to members of uniformed services, hearings, 17030
 service-connected disabled veterans, increase compensation payments, hearings, 15784
 servicemen's group life insurance—
 coverage for Ready Reserve, Retired Reserve and National Guard, report, 15675
 extend coverage for cadets and midshipmen, law, 15636
 full coverage to Reserves and National Guard, provide, hearings, 17105
 should appropriated funds be used for transportation procured specifically for Armed Forces exchange goods? GAO report, 32356
 special pay structure relating to members with special qualifications and skills, report, 19676
 survivor benefit plan for retired military personnel, 23461, 31493
 establish—
 hearings, 15873, 17028
 law, 19369
 report, 15851
 tabular analysis of records of U.S. colored troops and their predecessor units in National Archives, 31672
 Task Force on Administration of Military Justice in Armed Forces, report, 23119
 tax treatment of—
 members of Armed Forces and civilian employees who are prisoners of war or missing in action, 32065
 survivor benefit plans of uniformed services, reports, 19673, 30980
 tutorial assistance for veterans, dependents and servicemen under GI bill, 29585
 uniformed services—
 health professions revitalization act, law, 16917
 joint travel regulations, 18526, 30120
 United States troop levels in Europe, current foreign policy, 32574
 USDA and military cooperation to stop foreign invaders, 28015
 utilization of manpower in military, report, 15722
 voting information, 20382
 see also Pay, allowances, etc.—Retirement.
 Armed Forces Day, report, 1973, serving the Nation, 26301
 Armed Forces Institute, bulletin, 31199
 Armed services, *see* Armed Forces.
 Armed Services Committee, House:
 activities, 92d Congress, summary 21191
 calendar, 18542
 committee prints, 17026, 17031–32, 21211, 21293, 24842, 27189, 27191
 hearings, 15721, 15723, 17027–30, 19744, 19746, 21200–6, 21208, 21210, 24845, 26150–151, 27188, 27190, 27192, 28394–395, 29894, 32074
 title page, contents, and index, 23007
 investigations and studies, authorization and expenses, reports, 26075, 26115
 organization meeting, 93d Congress, 24844
 reports, 15722, 16982, 19620, 19675–676, 19685, 19701, 21191, 21207, 24843, 26094–97, 26139, 26141, 27119, 28335–336, 28372, 29882, 30976, 30982
 Armed Services Committee Senate:
 activities, 92d Congress, report, 26242
 calendar, 18560
 committee prints, 21316, 28513, 30008
 expenses, additional for route purposes, authorize, report, 15838
 hearings, 15871–873, 17223–225, 17227, 19950–951, 26250–252, 27305, 28514–517, 30007–7A, 31132–133, 32136

Armed Services Committee Senate—Con.

reports, 15851, 17196, 17198, 19870, 19878, 19881, 19885, 19888–891, 19927, 19929, 19939, 26238, 26242, 27277–279, 28469, 29957, 31064, 31101
 Armed services papers, 15721–728, 17027–30, 19743–747, 21200–209, 24843–845, 26150–151, 27190–192, 28394–395, 29894, 32074
 title page, contents, and index, 23007
 Armendariz, Manuel, characteristics of turbulent diffusion parameters as related to stability, 20980
 Armor, NILECJ standard on ballistic resistance of police body armor, 23570
 Armor plate, aircrew protection requirements nonnuclear weapons threat, military standard, 20065, 23111
 Armored force:
 Army lineage series, armor-cavalry, Army National Guard, 32445
 communications in armored infantry and infantry (mechanized) divisions, field manual, 24172
 medical support in divisions, separate brigades and armored cavalry regiment, field manual, 16645
 Arms (firearms), *see* Firearms.
 Arms control, *see* Disarmament.
 Arms Control and Disarmament Agency:
 appropriations, 1973—
 law, 19473
 report, 19704
 appropriations, 1974—
 amendments, proposal, 32097
 hearings, 28388, 31127
 arms control report, annual report, 28044
 economic impact of reductions in defense spending, summary of research prepared for U.S. Arms Control and Disarmament Agency, 26958
 telephone directories, 20791, 29538–539, 31850
 Arms control report, 28044
 Armstrong, Augustus K., Pennsylvanian carbonates, paleoecology, and rugose colonial corals, north flank, eastern Brooks Range, Arctic Alaska, 21733
 Armstrong, Ellis L.:
 addresses, etc.—
 Mar. 10, 1971, 23927
 Apr. 25, 1971, 23933
 May 9, 1972, 23921
 Armstrong, F. E.:
 locating uncharted oil and gas wells, state-of-the-art, 25514
 radiation halos and hydrocarbon reservoirs, review, 25419
 tests for analyzing incombustible content of coal mine dust using instruments employing gamma-ray backscatter technique, 25513
 Armstrong Creek:
 flood plain information, 20122
 floods, McDowell County, N.C., 20149
 Army:
 Army lawyer (periodical), 18009
 Army lineage series, 20532, 32445
 Army logistician (periodical), 18010
 Army recreation and travel guide, 29659
 Army reorganization for 1970s, assessment of planning, GAO report, 31377
 aviation digest, 19026
 battle casualties and medical statistics, U.S. Army experience in Korean War, 24191
 Chief of Staff, nomination of Creighton W. Abrams, hearings, 19950
 commanders call support materials (periodical), 18131
 field fortifications, field manual, 15505
 Fife and Drum Corps, 3d United States Infantry, general information, 28046
 formal schools catalog, 26964
 General, nomination of Alexander M. Haig, Jr., hearing, 19951

Army—Continued

helicopter inspection requirements, analysis, 22437
human self-development, our moral heritage, Army pamphlet, 26963
Infantry, Regular Army, Army lineage series, 20532
information for dependents traveling to overseas areas, 20985
Judge Advocate legal service, pamphlets, 18533
Korean war, policy and direction, 1st year, 20533
living and working in Germany, guide for Department of Army civilians, 22432
manual for courts martial annotation, 15506, 19166
marine equipment maintenance support in Army in field, field manual, 24173
mathematicians, 18th conference transactions, 28045
medical support of U.S. Army in Vietnam, 30764
military personnel, office management and administrative procedures, 24178
noise limits for Army materiel, military standard, 25025
the Old Guard, Army's ceremonial unit and escort for the President, 3d U.S. Infantry, tradition of service to America, 22426
personnel—
selection and classification, 25859
tips magazine, 18961
preparation and serving of food in garrison dining facility, technical manual, 25053
procurement of M561, Gama Goat, 17026
publications, price list, 23911
recruiting and career counseling journal, 18850
register, Jan. 1, 1972—
departmental edition, 15512
document edition, 15663
research and development, newsmagazine, 18011
retraining brigade for behavior modification after court martial, hearing, 32074
ROTC in review, summer camp IGMR, Annville, Pa., 16647
today's Army
meaningful alternative for young people, 26976
wants to join you, 19174, 30757
today's dynamic Army looks to future, 15511
travel regulations, 18526, 30120
United States Army in World War II, 20534
water transport units, field manual, 19163
Women's Army Corps, educational opportunities, exciting jobs, 15504
your personal affairs handbook, pamphlet, 15510.

see also Armed Forces.

Army Air Mobility Research and Development Laboratory, technical reports, 15513, 16653-656, 20987-991, 22436-438, 24183-190, 25865, 26977-982, 28055-59, 29663, 30758-763, 31934-936

Army Audit Agency, bulletin, 19003

Army Combat Developments Command, arrowhead (periodical), 18013

Army Command and General Staff College, Library Division, special bibliography series, 26967-973

Army Department:

administration of contract studies could be improved, GAO report, 21685
alcohol & drug abuse, interchange, lessons learned and other information, 22431

appropriations, 1973—
hearings, 15864

Army Department—Continued

appropriations, 1973—continued
military construction—

law, 19476
reports, 19711, 19898

Army reorganization for 1970s, assessment of planning, GAO report, 31377

Assistant Secretary—
(Financial Management), nomination of Hadlai A. Hull, hearing, 26252
(Manpower and Reserve Affairs), nomination of Carl S. Wallace, hearing, 26252

chiefs and executives, organization chart, 18416

civilian aides to Secretary of Army, 19th national conference, 25855

civilian personnel pamphlet QPP (series), 24167

EEO equal employment opportunity counseling, 24167

field manuals, 15505, 16645, 19161-163, 20981-982, 22424-425, 24168-173, 30751-752

general information leaflets, 28046

index of AMC-sponsored DA administrative publications and DOD publications, 30750

management information systems, information processing systems exchange, 22427, 26961

pamphlets, 15506-510, 18533, 19165-168, 20983-985, 22427-432, 24174-178, 25856-860, 26961-966, 28047-50, 29659-660, 30753-754, 31931

publications, price list, 23911

railway operating and safety rules, technical manual, 30756

relief of certain corporations, associations, and individuals under Army Dept. contract, 15806

Secretary of Army, nomination of Howard H. Callaway, 28516

Southwestern Federal power program, financial progress and problems, GAO report, 21699

technical bulletin, 22433

technical manuals, 16648-652, 19171-173, 20986, 22434-435, 24180-182, 25861-864, 26974-975, 28051-54, 29662, 30756, 31932-933

training and equipping Army National Guard for maintaining order during civil disturbances, GAO report, 16102
transportation reference data, field manual, 22425, 30752

Army Electronics Command, research and development technical report, ECOM series, 16643-644, 19158-159, 20966-980, 22404-421

Army Engineer Division, North Pacific, technical reports, 28685

Army Intelligence School, Fort Holabird, Md., relocation to Fort Huachuca, Ariz., 17031

Army Intelligence School Fort Huachuca, Ariz., relocation of U.S. Army Intelligence School from Fort Holabird, 17031

Army Library:

periodicals currently received, checklist, 27974

special lists, 27974

Army Materiel Command:

AMC pamphlets, 15502, 16642, 18882, 19157, 20964-965, 22403, 24166, 29658, 30750

AMC publications and blank forms, index, 16642, 20964, 24166, 29658

index of AMC-sponsored DA administrative publications and DOD publications, 30750

reports and statistics register of approved recurring reports, 22403

Army Medical Department, newsletter, 18706

INDEX 1973

- Army Medical Research and Nutrition Laboratory, Fitzsimons General Hospital, laboratory report, 15515, 16658, 28060, 31937
- Army Memorial Affairs Agency, appropriations, 1974, hearings, 27186, 31130
- Army Mobility Equipment Research & Development Center, news releases, 18791
- Army National Guard, *see* National Guard.
- Army Research Office, Durham, N.C.: reports, 28045
research in progress, list, 19170, 30755
- Army Reserve:
Army Reserve magazine, 18012
be you, be someone new, information for women, 15503
gentlemen, you have decisions to make, 26960
what you should know about U.S. Army Reserve, 15514
- Army Security Agency, hallmark (periodical), 18413
- Arnett, Alvin J., nomination, hearing, 31156
- Arno, John R., soil survey of Somerset County, Maine, southern part, 20776
- Arnold, Joseph P., determining occupational emphases for high school program design, 27771
- Arnold Pond Quadrangle, bedrock geology of Cuscutup and Arnold Pond quadrangles, west-central Maine, 27553
- ARO-D reports, 28045
- Arola, Rodger A.:
compression debarked chips from whole-tree chipper, 28937
compression debarking of—
branchwood chips from Finland, 17516
wood chips, 28959
estimating force and power requirements for crosscut shearing of roundwood, 16082
- Arousal from sleep by noises from aircraft with and without acoustically treated nacelles, 32457
- Arp, V. D., some applications of cryogenics to high speed ground transportation, 27726
- Arrestors, *see* Lightning arrestors.
- Arrhenius, G., asteroid and comet exploration, 31615
- Arrington, James P., aerodynamic and flow-visualization studies of 2 delta-wing entry vehicles at Mach number of 20.3, 31631
- Arrivals and departures by selected ports, 16567
- Arrowhead, 18013
- ARS, *see* Agricultural Research Service.
- Arsenals, associated lists for Frankford arsenal engineering drawings, 15963
- Arsenic, arsenic as indicator element for mineralized volcanic pipes in Red Mountain area, western San Juan Mountains, Colo., 23330
- Art:
application of nuclear technology to art identification problems, 22472
expansion arts program, guidelines for funding assistance for community arts projects, 32491
Negro art from Harmon Foundation, select audiovisual records, 31671
select audiovisual records, contemporary African art from Harmon Foundation, still pictures, 22000
Smithsonian opportunities for research and study in history, art, science, 16478
support for cultural activities, survey of United States and foreign governments, 15926
visual arts program guidelines, National Endowment for the Arts, 1973 fiscal year, 20661
works and reproductions, catalog of copy-right entries, 28576, 31168
- Arteries, National heart, blood vessel, lung, and blood act, law, 19368
- Arthritis Month, National, *see* National Arthritis Month.
- Arthropoda, arthropod and nematode parasites, parasitoids and predators of Acrididae in America north of Mexico, 28024
- Arthropodborne diseases, reported arthropodborne encephalitis in horses and other equidae, 22396
- Arthur A. Marshall Jr. for Congress, political committee, annual report, 22793
- Artificial heart, evaluation of practicability of radiolotope thermal converter for artificial heart device, phase 1 final report, 30775
- Artificial intelligence, artificial intelligence, USSR study, 26571
- Artificial islands, rules and regulations for artificial islands and fixed structures on Outer Continental Shelf, 15610
- Artificial kidneys:
bibliography (periodical), 18014
kidney disease and artificial kidneys, 22058
6th annual contractors' conference of artificial kidney-chronic uremia program, National Institute of Arthritis, Metabolism, and Digestive Diseases, 26739
- Artificial limbs, use of special aids, U.S., 22026
- Artificial organs, *see* Artificial heart.
- Artificial satellites, *see* Satellites.
- Articles of Confederation, text, 29949.
- Artillery:
accuracy requirements for measurement of meteorological parameters which affect artillery fire, 22410
artillery sound ranging computer simulations, 22412
statistical prediction of impact displacement due to wind effect on unguided artillery rocket during powered flight, 20978
weather radar investigations on artillery test conducted in Panama Canal Zone, 20973
- Artists:
artists in schools, 26728
questions to artist who is also an author, conversation between Maurice Sendak and Virginia Haviland, 16242
your Navy from viewpoint of Nation's finest artists, 29440
- Arts and crafts:
American crafts, rich heritage and rich future, 19126
apprentice training, sure way to a skilled craft, 26957
commemorative stamp, American arts series (poster)—
8 cent George Gershwin, 22290
Henry Ossawa Tanner, 31889
Willa Cather, 31890
crafts, general information, 26729
new dimensions for the arts, 25578
- Arts and the Humanities, National Foundation on the, *see* National Foundation on the Arts and the Humanities.
- As you were, Vietnam era veterans in Federal employment, 15606
- Asbestos:
airborne asbestos fiber concentrations in asbestos mines and mills in United States, 30445
control techniques for asbestos air pollutants, 25852
criteria for recommended standard, occupational exposure to asbestos, 26735
minerals yearbook chapter, 16314
national inventory of sources and emissions, 29641
- Ascension Island:
Bahamas Long Range Proving Ground, expanded use of Ascension Island, agreement with United Kingdom of Great Britain and Northern Ireland, 31856

Ascension Island—Continued
two new caridean shrimps, one representing new family, from marine pools on Ascension Island (Crustacea: Decapoda: Natantia), 20765

ASCS, *see* Agricultural Stabilization and Conservation Service.

Asellus, *see* Isopods.

Ash (tree):
American wood, 31352
horizontal planting of green ash cuttings looks promising, 28952
Ash content, *see* Coal.

Ashby, Charlotte, marine science newsletters, 1973, annotated bibliography, 29388

Ashcroft, John D., Ashcroft for Congress annual report, 24565

Ashcroft for Congress, political committee, annual report, 24565

Ashland County Democratic Executive Committee, annual report, 24752

Ashland County Republican Executive Committee, annual report, 24767

Ashland Research Natural Area, general information, 21608

Ashley, Burton E.:
mineral industry of—
British Honduras, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, 25429
Mexico, 16290

Ashtabula County, Ohio, soil survey report, 31817

Ashtabula County Republican Central and Executive Committees, annual report, 22858

Ashuelot River, flood plain information, Keene, N.H., 32205

Asia:
East Asian and Pacific series, 16496
17855, 20787, 22258, 25726, 29529
East, catalog of nautical charts, 23869
new China policy, its impact on United States and Asia, hearings, 21228
operational use of UH-1H helicopters in southeast Asia, 31935
our Asian neighbors, hearings, 28408
Pacific coast, tidal current tables, 17769
South—
and East, translations, 18983
crisis in South Asia, 15914
Near East and South Asian series, 29536
Southeast—
American prisoners of war and missing in action, hearings, 29903
Clark congressional delegation regarding its inspection of Coast Guard Loran A and C stations in Southeast Asia, 17073
communism, theory and practice, hearings, 21253
drug traffic and its impact on U.S. security, hearings, 15920
peninsular, bibliographic survey, Burma, Cambodia, Laos, Thailand, 29660
U.S. agreements with and assistance to free world forces in need, improved reporting to Congress on their status, GAO report, 30266
U.S. heroin problem and Southeast Asia, 27210
Southwest, gazetteer, official standard names, supplement, 21704
summary of synoptic meteorological observations—
southeast Asian marine areas, 22181, 23890-891
southwest Asian marine areas, 22182-183, 23892-893
2 reports on Vietnam and Southeast Asia to President of United States, 26196
U.S.—
aid to population/family planning in Asia, 27209

Asia—Continued
U.S.—Continued
Interests in and policies toward South Asia, hearings, 20910
trade with communist areas, 30131
and South Asia, Subcommittee report, 29909
West, agricultural situation, 1972 review and 1973 outlook, 27424

Asian Americans, *we*, Asian Americans, 31972

Asian Development Bank:
appropriations, 1973—
hearings, 15717, 17025
reports, 16989, 16991, 19887

Asian Studies Institute, establish, hearing, 21214

Asparagus:
canned, standards for grades, 29605
conditions of competition between U.S.-produced and foreign produced asparagus, Tariff Commission report, 26896

Aspects of organizing automated control system in medical industry, 23531

Aspects of population growth policy, 32532

Aspen:
American wood, description, etc., 26459
factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length aspen, 32321
protecting aspen resource in Lake States, 21672
symposium proceedings, College of Forestry, University of Minnesota, 16076

Aspen, Colo., Roaring Fork River and Castle and Hunter Creeks, flood plain information 32217

Aspen tortrix, *see* Moths.

Asphalt, concrete plants, background information for proposed new source performance standards, 29643, 30722
see also Roofing—Sliding.

Aspinall, Wayne L., Support Aspinall Committee, annual report, 24615

Aspitarte, Thomas R., methods for pulp and paper mill sludge utilization and disposal, 31279

ASPPO listing, 26342

ASRDI oxygen technology survey, thermophysical properties, 17706, 23676

Assault on freedom, 30048

Assaying, estimating nahcolite and dawsonite content of Colorado oil shale from oil-yield assay data, 21947

Assel, R. A., Great Lakes ice cover, 1970-71, winter, 31720

Assessing water pollution potential of manufactured products, 27472

Assessment/placement profile (APP) system, HUD handbook, 21772

Assessments:
assessment/placement profile (APP) system, HUD, 31418
Federal and State enforcement efforts to control air pollution from stationary sources, GAO report, 32349
Internal revenue assessment lists, 1862-66, for Maine, 25544
methods of assessing disadvantaged in manpower programs, review and analysis, 26613
technology assessment and forecast, 28243
see also Taxation.

Assets and liabilities, *see* Banks and banking—Federal reserve member banks—Property.

Assignments, road to work, technical school training or directed duty assignment? 25842

Assiniboiné Indians:
Assiniboiné tribes, judgement funds, disposition—
law, 19484
report, 19727

Assistance, *see* Public welfare.

Associations, *see* Educational associations—Trade associations.

Astacidae, *see* Cambarus.

INDEX 1973

- Asteroida, *see* Starfishes.
- Asteroids, asteroid and comet exploration, 31615
- Asthma, intermittent, reversible, obstructive airway disease (remarks), 29349
- Astrogeology, contributions to astrogeology (series), 29019
- Astrometry, astrometry and astrophysics, research of sun and stars, 31658
- Astronautics:
and aeronautics, 1970, chronology on science, technology and policy, 27709
psychological compatibility in interplanetary flight, USSR study, 21841
space ergonomics, 31656
space flight investigations, opportunities for participation, handbooks, 17728-729, 18735
- Astronauts, Skylab astronauts, testimony, hearing, 31121
- Astronomical papers prepared for use of American ephemeris and nautical almanac, 30583
- Astronomy:
astronomical phenomena, 25652
scientific results from Orbiting Astronomical Observatory (OAO-2), 17705
Sklab experiments, physical science, solar astronomy, information for teachers, 30454
Soviet bloc research (periodical), 18917
see also Astrometry—Astrophysics.
- Astrophysics:
astrometry and astrophysics, research of sun and stars, 31658
Smithsonian contributions, 23958
Asymmetric hypersonic flow, 20590
Asymptotic solutions, *see* Mathematics.
- At research frontier goals and achievements in high energy physics, 30783
- ATC, *see* Air traffic.
- Atchison, Topeka and Santa Fe Ry. Co., accident report, 30571, 31791
- Atelopus, *see* Frogs.
- Atelsek, Frank, long-term institutional care and alternative solutions, 23626
- Athens, Ohio:
flood plain information, Hocking River, 28710
floods, Hocking River, 28749
- Athens County Democratic Central Committee, annual report, 22666
- Athens County Democratic Executive Committee, annual report, 22667
- Atkins, John G., rice diseases, 16593
- Atlanta, Ga.:
aircraft accident reports, 23853, 31745
area wage survey, 16225
census of housing, 1970, components of inventory change, 28099
- Atlantic Coast:
Atlantic continental shelf and slope of United States, sand-size fraction of bottom sediments, New Jersey to Nova Scotia, 21719
coast pilot—
Cape Cod to Sandy Hook, 22093
Cape Henry to Key West, 16407
Eastport to Cape Cod, 16405
Sandy Hook to Cape Henry, 16406, 31717
light list—
Little River, S.C. to Rio Grande, Tex., 28222
St. Croix River, Maine to Little River, S.C., 24273
Lower Cretaceous, Jurassic(?), and Triassic ostracoda from Atlantic Coastal Region, 21736
marine weather services charts—
Cape Hatteras, N.C., to Savannah, Ga., 29416
Eastport, Maine to Montauk Point, N.Y., 29417
Manasquan, N.J. to Cape Hatteras, N.C., 29423
- Atlantic Coast—Continued
marine weather service charts—con.
Montauk Pt., N.Y. to Manasquan, N.J., 29425
Savannah, Ga. to Apalachicola, Fla., 29428
national east coast winter storms operations, plans, 20687
nautical chart catalog, 22092, 29379
North America, tidal current tables, 32508
oceanographic observations along East Coast of U.S., 22619
surface water temperature and density, North and South America, 30516
Atlantic Coastal Plain, structural and stratigraphic framework and spatial distribution of permeability, North Carolina to New York, 23367
Atlantic Continental Shelf, drilling for oil and gas (remarks), 31499
Atlantic menhaden, *see* Menhaden.
- Atlantic Ocean:
coast pilot, Atlantic Coast, Gulf of Mexico, Puerto Rico, and Virgin Islands, supplement, 27798
field guide to angelfishes (Pomacanthidae) in western Atlantic, 23807
Gulf Stream, position of northern edge, etc., monthly summary, 18649
middle—
fishery problems on high seas in western areas, agreement with USSR, 27929
western region fisheries, agreement with Polish People's Republic, 17876
- North—
devastating hurricanes of 20th century, 27804
oceanographic observations, North Atlantic Ocean Station DELTA, 28224
Northwest Atlantic fisheries convention, protocol, 25731
amendments, hearing, 19972
report, 17124
radio navigational aids, 23121
seasonal distribution of tunas and billfishes in Atlantic, 25632
South marine fishes (poster), 29377
tropical storm and Atlantic hurricane, 17781
underwater television survey of Atlantic outer continental margin near Wilmington Canyon, 31800
- Atlantic Oceanographic and Meteorological Laboratories:
collected reprints, 20234, 23206
NOAA technical report, ERL-AOML series, 20691, 27802
- Atlantic Richfield Co., wage chronology, 29166
- Atlantic States:
cost of transporting freight, 20441, 25320
evaluation of yields of wells in consolidated rocks, Virginia to Maine, 17550
Middle Atlantic division, annual survey of manufacturers—
1970, statistics for divisions and States, 15529
1971, statistics for States, standard metropolitan statistical areas, large industrial counties, and selected cities, 25891
Middle Atlantic region, Environmental Protection Agency, 25121
North Atlantic slope basins, surface waters quality, 20363
quality of surface waters of United States, 31402
South Atlantic division, annual survey of manufacturers—
1970, statistics for divisions and States, 15530
1971, statistics for States, standard metropolitan statistical areas, large industrial counties and selected cities, 25894
- Atlantic Union:
delegation, create—
hearing, 24852
reports, 17205, 27127, 27133

Atlases:

- American Revolution 1775-83, atlas of 18th century maps and charts, theaters of operations, 27842
- atlas of meat inspection pathology, 16589
- BOMEX atlas of satellite cloud photographs, 20232
- catalog of copyright entries, 21389
- China, People's Republic, 16807
- congressional districts, 93d Congress, 24231
- EASTROPAC atlas, eastern tropical Pacific Ocean, 23782, 29373
- environmental-acoustics atlas of Caribbean Sea and Gulf of Mexico, marine environment, 22161
- geographical, in Library of Congress, list, 29186
- meteorological atlas of International Indian Ocean Expedition—
 - surface climate, 22135
 - upper air, 22136
- national atlas—
 - story, 16104
 - United States of America, 21716
- volcanic phenomena (posters), 21706

Atmosphere:

- airborne atmospheric research, ESSA Research Flight Facility, 20686
- atmospheric dispersion estimates, workbook, 22374
- atmospheric effects for ground target signature modeling, atmospheric transmission at 1.06 micrometers, 22415
- atmospheric transmission from 4 π light source to 2 π receiver, survey of studies, 22408
- atmospheric turbulence and dispersal of atmospheric pollutants, 32255
- atmospheric variability experiment (AVE), compilation of studies, 32461
- distribution of total content of atmosphere according to satellite observations, USSR study, 21856
- four-dimensional world-wide atmospheric models (surface to 25km altitude), 17696
- growth and decay of turbulent mixing in planetary boundary layer, 32252
- illumination in atmosphere and on surface of Venus obtained by automatic interplanetary station Venera-8, USSR study, 31544
- low energy electron impact rate coefficients for some atmospheric species, 16451
- LUN, code for calculation of cosmic ray propagation in atmosphere, 29675
- Mars and Mars-3 automatic space station, preliminary results of measuring H₂O content in atmosphere, USSR study, 27649
- methemoglobin formation in humans during exposure to hyperbaric oxygen in standard Navy decompression treatment table, 25403
- method for concentrating and determining trace organic compounds in atmosphere, 20104
- optical phenomena in atmosphere as observed from manned spaceships, USSR study, 17595
- National Weather Service and cooperative upper air stations, 30579
- problem of space vehicle descent in planetary atmospheres, 26691
- radiation balance of earth atmosphere system from Nimbus 3 radiation measurements, 27715
- radiometric techniques for observing atmosphere from aircraft, 25628
- reference method for continuous measurement of carbon monoxide in atmosphere, guidelines for development of quality assurance program, 31271
- temperature and Cn profiles measured over land and ocean to 3 km above surface, 25623

Atmosphere—Continued

- three-minute gas chromatographic analysis of main constituents of mine atmospheres, 21951
- transport, deposition, and meteorological studies of nuclear debris in atmosphere, 30521
- upper air, Indian Ocean, 22136
- upper atmosphere geophysics, report UAG series, 19091
- see also Ionosphere.
- Atmospheric electricity:
 - atmospheric electricity criteria guidelines for use in aerospace vehicle development, 17718
 - cylindrical field mill system for measuring electric fields, description and instruction manual, 30520
 - differential magnetic measurements near cumulus clouds, 22421
- Atmospheric entry:
 - boundary-layer electron profiles for entry of a blunt slender body at high altitude, 31637
 - flight test of erectable spacecraft used for decelerator testing at simulated Mars entry conditions, 20603
 - radiative coupled viscous flow with massive blowing, 26650
- Atmospheric Physics and Chemistry Laboratory: NOAA technical memorandum, ERL-APCL series, 30520
- NOAA technical report, ERL-APCL series, 20692, 23805, 27800, 31722, 31724
- Atmospheric pressure, speech intelligibility during exercise at normal and increased atmospheric pressure, 16248
- Atmospheric sounding, see Sounding and soundings—Sounding (meteorology)
- Atmospheric turbulence, see Turbulence.
- Atolls, see Coral reefs and islands.
- Atomic absorption, use of atomic absorption spectroscopy in determination of certain concentrations, 17370
- Atomic auxiliary power generator, SNAP 19 RTG for Viking lander system, semiannual progress report, 22479
- Atomic blasting:
 - construction of nuclear geostorage facilities for petroleum products, 26393
 - cratering in layer media, 26394
 - Project Sergius Narrows, summary of tests on Llesnoi Island, Alaska, 17377
- Atomic Bomb Casualty Commission, origin and findings, 25681
- Atomic clocks, modeling of atomic clock performance and detection of abnormal clock behavior, 26707
- Atomic electric-power stations, 26563
- Atomic energy:
 - act, amend—
 - law, 15635
 - reports, 19613, 29983, 31093
 - application of nuclear technology to art identification problems, 22472
 - Bureau of Mines research programs on recycling and disposal of mineral, metal, and energy-based wastes, 25426
 - Calvert Cliffs and other court decisions effect upon nuclear power in United States, 17265
 - certain background information for consideration when evaluating national energy dilemma, 25991
 - code of Federal regulations, 26437
 - commercial nuclear power in Europe, interaction of American diplomacy with new technology, 21229
 - cooperation for civil uses, agreement with—
 - Austria and International Atomic Energy Agency, application of safeguards pursuant to nonproliferation treaty, protocol, 20796
 - Brazil, 17903
 - applications of safeguards by IAEA, 17904

INDEX 1973

Atomic energy—Continued
 cooperation for civil uses, agreement with—continued
 Republic of Korea, 27933
 application of safeguards by IAEA, 32580
 cooperation for peaceful uses, agreement with European Atomic Energy Community, 27927
 Federal energy research and development policies and future technological options, hearings, 15903
 goals and achievements in high energy physics, at research frontier, 30783
 heat engineering problems in nuclear centralized heating and power centers, USSR study, 21853
 issuances of AEC and Atomic Safety and Licensing Boards concerning facility operating licenses, 30776
 legislation through 92d Congress, 2d session, compilation, 24300
 materials technology programs in support of mercury rankine space power system, 32475
 may atom be worker and not soldier, AEC delegation to USSR, report, 28086
 military applications of nuclear technology, 29833
 nuclear energy—
 environment and engineering education, proceedings of workshop, 28072
 resources, geologic perspective, 32362
 nuclear materials, AEC authorizing legislation, 1974, hearings, 28265
 nuclear power—
 and related energy problems, 21137
 industry (remarks), 25399
 1973-2000 for generating electricity, etc., 24196
 reactor instrumentation systems handbook, 28085
 nuclear technician manpower symposium, proceedings, 21015
 physical research program, research contracts and statistical summary, 21029
 power systems for spacecraft, USSR study, 25347
 programs—
 operating and developmental functions, 27000
 regulatory activities, 27001
 selected tables of atomic spectra, atomic energy levels and multiplet tables, H, I, D, T, data derived from analyses of optical spectra, 17735
 summaries of USAEC basic research program in chemistry, research and development in process, 28082
 survey of energy consumption projections, 17264
 title listing of civilian power reactor docket literature in Nuclear science abstracts, 28080
 visit to USSR by U.S. Energetic Beam Team, Apr. 1-15, 1972, report, 15523
 Atomic Energy Commission:
 AEC-NASA tech brief, 18663
 AEC news releases, 17956
 index, 17955
 AEC Pollution Control Conference, Oak Ridge, Tenn., proceedings, 26990
 AEC research and development reports, 15517-526, 16660-676, 19177-185, 20992-21031, 22439-503, 24194-203, 25866-885, 26984-997, 28061-92, 29664-683, 30766-783
 AEC symposium series, 30768
 annual report—
 departmental editions, 26998-999
 document editions, 27256-257
 appropriations, 1973—
 hearings, 15870
 law, 19350
 report, 16951

Atomic Energy Commission—Continued
 appropriations, 1974—
 authorization—
 hearings, 27090, 28265, 28392, 29382
 law, 30391
 reports, 29848, 29890, 30974
 hearings, 32134
 water and power development, law, 32015
 cataloging reports, report number codes used by Technical Information Center, 22487
 corporate author headings used by AEC in cataloging reports, 15522
 delegation to USSR, report, may atom be worker and not soldier, 28086
 environmental research and development, summaries, 28081
 financial report, supplement, financial statements, uranium enrichment activity, 23886
 geology and ground-water characteristics of Hanford Reservation of Atomic Energy Commission, Wash., 26505
 Health and Safety Laboratory—
 fallout program, quarterly summary report, 19180, 28078, 30773
 appendices, 19181, 28077, 30774
 index, 19182
 procedures manual, 19183
 interim nuclear licensing for power reactors, report, 19613
 isotopes development programs, 1972, research and development, progress reports on sponsored work, 24198
 issuances of AEC and Atomic Safety and Licensing Boards concerning facility operating licenses, 30776
 issue temporary operating licenses for nuclear power reactors, authorize, law, 15635
 management of AEC's controlled thermodynamic nuclear research program GAO report, 21696
 national heart, blood vessel, lung and blood program, program analysis, 30492
 1972 financial report, 15527
 opportunity for AEC to improve its procedures for making sure that containers used for transporting radioactive materials are safe, GAO report, 30258
 plan for management of AEC-generated radioactive wastes, 30777
 programs—
 operating and developmental functions, AEC, annual report, 27000
 regulatory activities, AEC annual report, 27001
 public works appropriations—
 1973, law, 19363
 1974, reports, 29993, 30989
 research and development in progress, summaries in USAEC basic research program in chemistry, 28082
 rules and regulations, 18018
 selling to AEC, 16677
 standard for fire protection of AEC electronic computer/data processing systems, 30781
 telephone directory, 19186
 water supply for Nuclear Rocket Development Station at AEC's Nevada test site, 17547
 Atomic Energy Joint Committee:
 committee prints, 21137, 24300, 25991, 27091, 30937
 current membership, publications and other pertinent information through 92d Congress, 27091
 hearings, 19531-532, 21136, 24301, 27090, 28265, 29832
 reports, 19613, 29883, 30974, 31093
 Atomic physics, see Nuclear physics.
 Atomic power plants, see Nuclear reactor power plants.
 Atomic radiation, see Radiation.
 Atomic Safety and Licensing Appeal Board, issuances, indexes, 25881

- Atomic Safety and Licensing Boards, issuance of AEC and Atomic Safety and Licensing Boards concerning facility operating licenses, 30776
- Atomic spectra *see* Spectra—Spectral lines.
- Atomic warfare:
checklist guide for nuclear emergency operations planning, 30082
consumability of animals exposed to radiation in post attack situation, 29678
- Atoms:
applicability of perturbation theory in describing process of multiphoton ionization of an atom, 22459
International Conference on Inner Shell Ionization Phenomena and Future Applications, Apr. 17-22, 1972, proceedings, 25870
may atom be worker and not soldier, AEC delegation to USSR report, 28086
resonance phenomena during multiphoton ionization of a xenon atom in an electric field $E \times 10^7$ V/cm, 22452
- ATP series, 17497, 20286-287, 23263-264, 28919-920
- Atropellis canker of pines, 32312
- Atropine:
cholinolytic activity of oxymethyl analogs of atropine and tropacine, USSR study, 17611
transient blindness due to combined effects of mevinphos and atropine, 30787
- Attached inflatable decelerator (AID), *see* Decelerators.
- Attachments and accessories for grinding machines, military standard, 28611
- Attala County Miss., special flood hazard information report, 20165
- Attari, A., fate of trace constituents of coal during gasification, 31272
- Attention, response factors and selective attention in learning from instructional materials, annotated bibliography, 22365
- Attenuation:
atmospheric effects for ground target signature modeling atmospheric transmission at 1.06 micrometers, 22415
millimeter attenuation and reflection coefficient measuring system, 17739
terminal ballistics in ordinary snow, small arms fire attenuation, 21441
- Attinello, John S. relief, 16857
- Attitude (inclination):
Apollo experience report, evolution of attitude time line, 25526
attitude-referenced radiometer study, primary calibration system, 21972
geostationary satellite position and attitude determination using picture landmarks, 30527
- Attitude (psychology):
dining facility user-attitudes and environmental design research at Travis AFB, California, 31239
job attitudes of air traffic controllers, comparison of 3 air traffic control specialties, 29685
learning center evaluation, measurement of students' attitudes toward undergraduate pilot training learning centers, 28032
methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall at Chanute AFB, 32201
metropolitan housewives' attitudes toward solid waste disposal, 20215
reducing pressures in learning to read, 28675
toward philosophy of planning, attitudes of Federal water planners, 27493
- Attitude control, *see* Aircraft—Spacecraft.
- Attorney General, *see* Justice Department.
- Attorneys, *see* Lawyers.
- Attracting and feeding birds, 17561
- Attribute sampling inspection procedure based on hypergeometric distribution, 15526
- ATU, *see* Amalgamated Transit Union.
- Auburn, Mass.:
flood plain information, Stone, Dark and Kettle Brooks, 25081
floods, 25086
- Auctions:
computer processing of sales data on livestock auction market, 24134
scheduling arrival of tobacco at auction warehouses, 31909
- Audiometry, use of circumaural earphones for attenuating ambient noise in bone conduction audiometry, 26645
- Audio-visual education:
automated apprenticeship training (AAT), systematized audio-visual approach to self-paced job training, 30729
Indians in United States audiovisual records, 26696
- Auditing:
another look at audit of management performance, progress report (address), 28977
audit guide for use by independent public accountants for—
low rent housing program, 25270
public facility loans program, 25284
urban renewal program, 31436
audit of Overseas Private Investment Corporation, 30957
audit of payments from special bank account to Lockheed Aircraft Corporation for C-5 aircraft program during quarter ended Sept. 30, 1972, GAO report, 21689
career, Defense Contract Audit Agency, 23086
field processing of project reports on audit and findings, 29054
handbook for educational program audit, 28658
returning appeal rights and claims for refund, 20390
standards for audit of Governmental organizations, programs, activities and functions, 31389
technical reviews and audits for systems, equipment and computer programs, military standard, 20075
see also for audit reports, names of corporations, etc.
- Auditors:
examination announcement, 22592-593, 30876
expanding role of auditor in Government operations (address), 28978
Interagency Auditor Training Center, bulletin, 19291, 29819
internal auditors, career opportunities, 16150
tax, career opportunities, 16154
- Auditory analyzers, possibilities of using induced potentials in evaluating functional state of auditory analyzer, USSR study, 27629
- Auditory perception, *see* Perception.
- Auditory system, *see* Hearing.
- Audits, *see* Auditing.
- Augers:
auger analysis of oxygen and sulfur interactions with various metals and effect of sliding on these interactions, 30461
new technique for auger analysis of surface species subject to electron-induced desorption, 27716
oxygen and sulfur interaction with clean iron surface and effect of rubbing contact on these interactions, 29290
- Augusta, Roswitha S., basic data on economy of Austria, 27067
- Aulenbach, Donald B., treatment of laundry wastes, 26412
- Aull, George H., jr., financial and institutional arrangements for wastewater management, Denver SMSA, 32264

INDEX 1973

- Aural protector, sound, 25023
Auroras, auroral electrojet magnetic activity indices (AE), 23182
Austen, Frank, remarks, Jan. 26, 1971, 29353
Austenitic steels:
 preparation and homogeneity characterization of austenitic iron-chromium-nickel alloy, standard reference materials, 20636
 strengthening properties of laves phases, USSR study, 26587
Austin, Howard D., for Congress Committee, *see* Howard D. Austin for Congress Committee
Austin, R. W., measurements of performance of multiwire proportional chambers, 29297
Austin, Tex.:
 area wage survey, 27674
 Big and Little Walnut Creeks, flood plain information, 28698
Austin County, Republican Executive Committee, *see* Republican Executive Committee of Austin County
Australia:
 agriculture, report by Carl T. Curtis, 32129
 Ambassador, nomination of Marshall Green, 26268
 background notes, 31834
 canned Bartlett pears from Australia, Tariff Commission report, 25777
 economic trends and their implications for United States, 16164, 27604
 mineral industry, minerals yearbook chapter, 16267
 north and west coasts, sailing directions, 16437
 south coast, sailing directions, 26345
 trade, meat imports, agreement, 17879
Austria:
 application of safeguards for atomic energy, pursuant to non-proliferation treaty, agreement, 20796
 economic trends and their implications for United States, 20438, 29096
 economy, basic data, 27067
 foreign relations of U.S.—
 departmental edition, 30943
 document edition, 31845
 mineral industry, minerals yearbook chapter 16268, 25456
Authors:
 author's introduction to Human needs, 29494
 corporate author headings used by Atomic Energy Commission in cataloging reports, 15522
 index medicus, cumulated, 25606
 Library of Congress national union catalog, cumulative list, 18675, 29187
 questions to artist who is also an author, conversation between Maurice Sendak and Virginia Haviland, 16242
Autism:
 core and treatment of autistic children, research and development, provide hearings, 28560
 facts about autism, 22070
Autistic Children's Week, *see* National Autistic Children's Week
Auto tour, Great Basin Experimental Range, 20290
Autoclaves, autoclave heat treatments on mechanical properties of prealloyed powder cobalt-base alloy HS-31, 23688
Autogenous smelting of copper sulfide concentrate, 23655
Autogenic training applied to neurotic habits, 17601
Autogenic training, USSR study, 20473
Automated apprenticeship training (AAT), systematized audio-visual approach to self-paced job training, 30729
Automated data processing equipment, *see* Electronic data processing systems.
Automated engineering document preparation system, 30121
Automated overseas employment referral program, 30088
Automated technology, *see* Automation.
Automated water monitoring instrument for phosphorus contents, 32259
Automatic assembly, *see* Automation.
Automatic data acquisition system for underground measurements, 25509
Automatic data processing equipment, *see* Electronic data processing systems.
Automatic machinery, experimental investigation of accelerometer-controlled automatic braking system, 20607
 see also Robots.
Automatic toasters, 26450
Automation:
 accuracy of automated temperature forecasts for Philadelphia as related to sky condition and wind direction, 30531
 aspects of organizing automated control system in medical industry, USSR study, 23531
 automated collection of transient data for electrochemical studies, 16643
 automated control systems in housing and public utilities, USSR study, 17623
 automated engineering document preparation, military standard, 17332
 finishes, 15955
 fuseholders, 20049
 fuses, 17333
 resistors, 20047
 terminal boards, 20048
 washers, 15956
 automated management system for Union Republic economy, USSR study, 25348
 automated procedure for design to wing structures to satisfy strength and flutter requirements, 30456
 automation and Federal library community, report on survey, 30398
 conference on automation on scientific research through use of computers, USSR study, 20480
 creation of Republic automated control system, USSR study, 25354
 digital follow-up systems for ship automation, USSR study, 26577
 economic analysis of automating small fluid milk plant, 24117
 identification and automata, USSR study, 32406
 machine analysis of biological structures, methods and techniques, USSR study, 17607
 Order Division automated system, Library of Congress, 25388
 pneumatic jet medical apparatuses, USSR study, 25359
 technical base of automated material and technical supply control system, USSR study, 17626
 technical diagnosis of ship automation, USSR study, 26566
 technology—
 East European abstracts, 18240
 USSR abstracts, 19036
 see also Optimal processes.
Automation of instruction, *see* Teaching machine.
Automobile accidents, *see* Motor vehicle accidents.
Automobile drivers, *see* Motor vehicle operators.
Automobile driving:
 heavy duty vehicle driving pattern and use survey, final report, New York City, 30727
 monetary value drivers place on comfort in night driving, 31322
Automobile insurance:
 information and cost savings—
 law, 19443
 report, 19655

- Automobile insurance—Continued
 National no-fault motor vehicle insurance act—
 committee print, 23054
 report, 31119
 text and analysis of committee print 3 of act, 17244
 Automobile license plates, 1972 plates, 20243
 Automobile mechanics, *see* Mechanics (persons).
 Automobile parking, *see* Parking of vehicles.
 Automobile, parts, *see* Automobiles.
 Automobile seat belts, *see* Restraint apparatus.
 Automobile-truck collision followed by fire and explosion of dynamite cargo on U.S. Highway 78, near Waco, Ga., highway accident report, 30561
 Automobiles:
 auto safety—
 oversight, hearings, 21327
 repairs at no cost, hearings, 28523
 automobile gas turbine, optimum cycle selection study, final report, 29642
 automobile installment credit developments—
 not seasonally adjusted data, statistical supp., 25180
 seasonally adjusted data, statistical supp., 25181
 automobile, truck, trailer, and farm implement dealers under Fair labor standards act, 26915
 automotive springs, clutch discs, and rear deck lid torsion bars, workers and former workers of Eaton Corporation Plant, Detroit, Mich., Tariff Commission report, 25776
 Canadian agreement operation of automotive products trade act of 1965, annual report, 23057
 demand for platinum to reduce pollution from automobile exhausts, 23641
 effect of fuel additives on chemical and physical characteristics of particulate emissions in automotive exhaust, 31275
 emission control, state of art as of Dec. 1972, 32246
 estimating auto occupancy, review of methodology, 16040
 Federal item identification guide, 30092
 future of automobile (address), 21507
 household ownership of cars and light trucks, 22563
 information disclosure act, amend. law, 16880
 installment credit developments (periodical), 18019
 International Technical Conference on Experimental Safety Vehicles, report, 30498
 low NO_x emission combustor for automobile gas turbine engines, 31922
 nationwide personal transportation study, reports, 32282-283
 new passenger automobiles, former workers of Commerce, Calif., assembly plant of Chrysler Corp., Tariff Commission report, 25782
 operational system for evaluating and testing methods and instruments for determining effects of fuels and fuel additives on automobile emissions, develop. 31277
 passenger cars, performance data, 1972 consumer information series, 23738
 recent purchases and expectations to buy cars, houses, and other durables, survey data, 15593, 21065, 25937, 29785
 Soviet correspondents report motor trip through United States, USSR study, 31520
 suspension of 1975 auto emission standards, decision of Administrator of Environmental Protection Agency regarding, hearings, 27365, 31161
 Automotive mechanics, *see* Mechanics (persons).
 Automotive Retailers Committee, annual report, 26018
 Automotive Retailers, Minnesota Committee of, *see* Minnesota Committee of Automotive Retailers.
 Automotive tires, *see* Tires.
 Automotive vehicles, *see* Motor vehicles.
 Autonomy:
 creating independence, 1763-89, background reading for young people, 23606
 8 cent commemorative stamp, rise of spirit of independence—
 post rider (poster), 27959
 role of pamphleteer (poster), 24085
 Autosuggestion, USSR study, 25328
 Autoxidation, *see* Oxidation.
 Autumn olive, *see* Olives.
 Availability:
 controlled accessibility bibliography, 30476
 information to Congress, 29911
 public transportation and shopping characteristics of SMSA households, 32283
 rhenium in U.S., 25416
 Avalanches:
 avalanches, including debris avalanches, bibliography, 23478
 simulated sonic boom as avalanche trigger, 23293
 AVCO Research Corporation, selection of coals for AVCO hydrogen plasma arc process for making acetylene, 28218
 Averitt, Paul, bibliography and index of Geological Survey publications, 1882-1970, relating to coal, 21710
 Avery County, N.C., forest inventory statistics. Avery-Watauga County unit, western North Carolina, 29561
 Aves, *see* Birds.
 Avian anatomy, integument, 24123
 Aviation, *See* Aeronautics—Aircraft—Airports.
 Aviation accidents, *see* Aircraft accidents.
 Aviation Advisory Commission, appropriations, 1973, law, 19362
 Aviation boatswain's mate, E 3 & 2, rate training manual, 25661
 Aviation education through building airplane, 28851
 Aviation engineering, *see* Aeronautical engineering.
 Aviation fields:
 evaluation of redesigned XW18 membrane and accessories, for aircraft landing areas, 27446
 military, instrument approach procedure charts, 18624
 Aviation fuels, *see* Gasoline—Turbin fuel.
 Aviation machinists, mate J 3 & 2, rate training manual, 25662
see also Machinists.
 Aviation mechanics, *see* Mechanics (persons).
 Aviation medicine, *see* Medicine.
 Aviation services, *see* Aircraft radio stations.
 Aviators:
 aircraft as instrument of self-destruction, 29686
 almen other than flight crewmembers, certification, Federal aviation regulations, 18299
 aviation medical examiners, directories, 16678
 commercial pilot, airplane flight test guide, 20240
 development of low-cost cockpit/outside time sharing training equipment, 24048
 dynamic observation in T-37 undergraduate pilot training (UPT) link trainers (T-4), 26950
 effect of vertical active vibration isolation on tracking performance and on ride qualities, 21975
 flight test guide, private pilot airplane, 31341

INDEX 1973

Aviators--Continued

- frequency of anti-collision observing responses by solo pilots as function of traffic density, ATC traffic warnings, and competing behavior, 30788
- greater use of flight simulators in military pilot training can lower costs and increase pilot proficiency, GAO report, 30256
- instrument rating (airplane), written test guide, 17448
- learning center evaluation—
 - measurement of students' attitudes toward under-graduate pilot training learning centers, 28032
 - teaching undergraduate pilot training academic course in learning center, 28033
- maximal control force capability of female pilots, preliminary study, 22510
- memorandum for aviators, 18617
- pilot transition courses for complex single-engine and light twin-engine airplanes, 25138
- pilot warning indicator systems, install on aircraft, hearings, 23046
- pilot's handbook of aeronautical knowledge, 17491
- private and commercial pilot—
 - gyroplane, flight test guide, 16067
 - private pilot, written test guide, 16068
- psycho-physiological testing and training of pilots, USSR study, 23551
- refresher courses for private and commercial pilots, 23255
- student pilot guide, 17450
- Avram, Henriette D., RECON (MARC retrospective conversion) pilot project, final report, 23611
- Awards (incentives), *see* Rewards (prizes, etc.).
- Axial flow, *see* Flow.
- Axisymmetry, *see* Symmetry.
- Azotea Tunnel, instrumentation program, San Juan-Chama Project N. Mex., 32541
- Azov, Sea of, lights and fog signals, list, west coast, 22160

B

- B. Everett Jordan Dam and Lake, designate, report, 31118
- B. F. Goodrich Co., wage chronology, 17667
- B. K. Truckling, accident, 23664
- Babic, Slobodan, relief, 28319
- Babies, *see* Infants.
- Babitzke, Herbert R., mineral industry of Puerto Rico, Panama Canal Zone, Virgin Island, Pacific Islands Possessions, and Trust Territory of Pacific Islands, 20566
- Baby carriers, collapsible baby strollers from Japan, Tariff Commission report, 26895
- Bach, Beethoven, or Bacharach in Air Force band, 31925
- Bachrach, Leona L.:
 - center and catchment area variations in age, color and sex distributions of additions to 69 selected community mental health centers, 1971, United States, 29366
 - differentials in dollar payments and primary payment sources, discharges from non-Federal general hospital psychiatric inpatient units, 1970-71, United States, 25595
- Bacillus pestis, epizootiological importance of Pasteurella pestis strains having various amino acid requirements, USSR study, 16187
- Back Creek:
 - flood plain information, 23158
 - floods, Roanoke County, Va., 21469
- Background and interest tests for Air Force officer, stated career intent, validity, 26949
- Background and major provisions of Executive order 11491, as amended, labor-management relations in Federal service, 32415

- Background information for proposed new source performance standards, asphalt concrete plants, etc., 29643, 30722
- Background noise, *see* Noise.
- Background notes, 22251-256, 23986-992, 25718-725, 26851-855, 27903-905, 29517-526, 20642, 31834-842, 32567-571
- Backscatter:
 - Doppler spectra, wind wave studies, 27850
 - tests for analyzing incombustible content of coal mine dust using instruments employing gamma-ray backscatter technique, 25513
- Bacon County, Ga. Alma-Bacon County story, model for rural America, 17215
- Bacteria and bacteriology:
 - bacteria criteria, water quality standards, 20859
 - bacteria, water quality standards criteria digest, 20222
 - bacterial counts, Eniwetok Atoll, Marshall Islands, 25695
 - bacteriological analytical manual for foods, 20282
 - estuarine and marine pollution, biological, bacteriological and physical aspects, bibliography, 20738
 - winter survival of fecal indicator bacteria in subarctic Alaskan river, 20190
- Bacterial warfare, *see* Biological warfare.
- Badalamenti, Maria, relief, 19574
- Bader, J. S., reports for California by Geological Survey Water Resources Division, 32363
- Badges:
 - Federal item identification guide, 30093
 - film badge holder, process for soldering accident dosimeter, for radian detecting element, military standard, 20069
- Badlands National Monument:
 - addition to National Wilderness Preservation System, proposal, 23000
 - wilderness recommendation, 22125
- Baer, Lester H.:
 - learning center evaluation—
 - measurement of students' attitudes toward undergraduate training learning centers,
 - teaching undergraduate pilot training academic course in learning center, 28033
- Baffin Bay, oceanographic conditions in northern Baffin Bay region, 28223
- Bagby, D. Gordon, initial quality and life-cycle costs in military family housing, 31241
- Bags:
 - bags, envelopes, and shipping sacks, Federal item identification guide, 30094
 - development of insect-resistant cotton bag, 24145
- Hitlerbags, evaluation of their use, 20301
- Bahamas:
 - Bahamas Long Range Proving Ground, expended use of Ascension Island, agreement with United Kingdom of Great Britain and Northern Ireland, 31856
 - Customs Bureau pre-clearance activities, hearings, 27179
 - economic trends and their implications for United States, 17575
 - livestock research, agreement, 27921
 - mineral industry, minerals yearbook chapter, 20539
 - revisions of genus Petalium LeConte in United States, Greater Antilles, and Bahamas (Coleoptera: Anobiidae), 29636
 - use by Bahamian organizations of certain lands at U.S. Navy Base, Great Exuma Islands, Bahamas, agreement with United Kingdom of Great Britain and Northern Ireland, 25755
 - weather stations, cooperative meteorological program, agreement, 27910
- Bahrain:
 - map, 16803
 - mineral industry, minerals yearbook chapter, 16269

- Bailey, George W., reactions of nitrogenous and phosphatic compounds with soils and geologic strata, 17936
 Bailey, John M., potential for cooperative distribution of petroleum products in South, 28849
 Bailey, William A., building hobby greenhouses, 27989
 Bainbridge, United States Naval Academy Preparatory School, 1973-74 catalog, 25649
 Baird, James T., relationships among parent ratings of behavioral characteristics of children, U.S. 22029
 Baird, Robert W., testimony concerning world drug traffic and its impact on U.S. security, hearings, 31152
 Baird Basin Research Natural Area, general information, 21609
 Bait, Truk live-bait survey, 20694
 Baker, Byron A., correlations of phase-boundary pressures of condensate fluid systems with compositions modified by added butane, 30436
 Baker, Carlos, for Congress, *see* Carlos Baker for Congress
 Baker, D. Keith:
 discipline is not a dirty word, 21969
 recognition is your responsibility, of superior work for awards, 26673
 Baker, D. Philip what can communities do to improve reading programs? 28677
 Baker, Raymond F., Andersonville, story of Civil War prison camp, 23818
 Baker, Roy V., ginning studies of baled and field-extracted, machine-stripped cotton 22319
 Baker, William E., relief, 15634
 Bakersfield, Calif., forecasting precipitation using pressure gradient vectors, 30539
 Bakery products, productivity in bakery products industry, 16238
 Balance of payments:
 lessons to be learned in balancing (remarks), 20270
 trade adjustment assistance to attain favorable economic balances, 21232
 Balance of power, national security policy and changing world power alignment, hearing, 21227
 Balance sheet of farming sector, 20895
 Balance sheets, *see* Finance
 Balances, scales, balances and optical instruments industrial plant equipment handbook, 23088
 Balch Springs, Tex.:
 flood plain information, Hickory Creek, 17385
 floods, how to avoid damage, 20137
 Bald eagles, *see* Eagles
 Baldwin, Godfrey:
 estimates and projections of population of U.S.S.R. by age and sex, 1950-2000, international population report, 25035
 projections of population of communist countries of Eastern Europe, 1972-2000, by age and sex, 26351
 Baldwin, John, annotated bibliography of Lake Ontario limnological and related studies, physical, 27455
 Balers, *see* Harvesting machinery
 Ball, Robert, labor and materials required for highway construction, 32434
 Ball bearings, *see* Bearings (machinery)
 Ballance, Wilbur C., hydraulic tests in hole U Ae-1 Amchitka Island, Alaska, 23348
 Ballast, segregated ballast VLCCs, economic and pollution abatement analysis, 30403
 Ballast (electric):
 ballasts and starters, Federal item identification guide, 32164
 fluorescent lamp ballasts, current industrial report, 25923, 30841
 Ballinger, Craig A., effect of load variations on flexural fatigue strength of plain concrete, 31319
 Ballistic missiles, *see* Missiles
 Ballistic range, accuracy of 1934-72 ballistic density departure tables, 22409
 Ballistics:
 ballistic design methods for solid-fuel missiles, USSR study, 30328
 hydroballistics modeling, 25664
 NILECJ standard on ballistic resistance of police body armor, 23570
 radiographic, petrographic, and SEM evaluation of ballistically loaded clay, 31261
 terminal ballistics in ordinary snow, small-arms fire attenuation, 21441
 Balloons:
 ballooning, 1782-1972, exhibition catalog, 31665
 experimental and analytical determination of stability parameters for balloon tethered in wind, 32472
 15c. aerogramme recognizes balloonists (poster), 22292
 Japan's World War II balloon bomb attacks on North America, 26692
 manned free balloons, airworthiness standards, Federal aviation regulations 18294
 moored, Federal aviation regulations, 18296
 unmanned, Federal aviation regulations, 18296
 Balsam fir, *see* Fir
 Baltimore, Md.:
 area wage survey, 25379
 model early childhood learning program, Baltimore, Md., 27775
 Balzano, Michael F., nomination, hearings, 26268
 Bamboo:
 genera of bamboos native to New World (Gramineae: Bambusoideae), 29488
 morphological and anatomical considerations of grass subfamily Bambusoideae based on new genus *Macdurolyra*, 26822
 Bambusoideae, *see* Bamboo
 Bandages and bandaging, surgical dressings, Federal item identification guide, 17329
 Bandelier National Monument, wilderness recommendation, 28724
 Bands, Federal item identification guide, 32165
 Bands (music), Bach, Beethoven, or Bacharach in Air Force band, 31925
 Bandwidth, method for finding D-region electron density distributions from L.F. broadband pulse measurements, 22641
 Bangkok, Thailand, despatches from U.S. consuls in Bangkok, Siam, 1856-1906, pamphlet describing microfilm, 23699
 Bangladesh:
 accessions list, Library of Congress, American Libraries Book Procurement Center, New Delhi, 27684, 32437
 background notes, 26851
 economic assistance, agreement, 22267
 economy, basic data, 19298
 foreign trade regulations, 28641
 general agreement on tariffs and trade, protocol to accession, 26875
 India, Pakistan and Bangladesh, current information supplement, 17855
 issues in United States foreign policy, 29546
 mineral industry, minerals yearbook chapter, 16321A
 Bangor International Airport, utilization of Bangor International Airport in operating flag-stop cargo service (remarks), 31973
 Bankaitis, H., ASRDI oxygen technology survey, cleaning requirements, procedures, and verification techniques, 23676
 Bankers:
 bankers and the bank holding company (remarks), 30226
 SEC and the bankers (address), 29480
 Banking, *see* Banks and banking
 Banking and Currency Committee, House:
 activities, 92d Congress, summary, 21187
 calendar, 18543

INDEX 1973

Banking and Currency Committee, House—
Continued
committee prints, 17033, 24846-847, 21015
hearings, 15724, 19748, 26152-153, 27193-
194, 28396-402, 29895, 31013-314
investigations and studies, authorization
and expenses, reports, 26079, 26128,
prices of lumber and plywood, investigation
and study, report, 15692
reports, 15714, 16958, 16992, 19614, 21172,
21187, 26135, 27148-149, 28337, 28340,
28375, 29858, 29870, 29873, 29888,
30249, 32059
Banking, Housing and Urban Affairs Com-
mittee, Senate:
activities—
92d Congress, 2d session, summary,
17233
1972 summary, 24916
calendar, 18561
committee prints, 17229-233, 23044, 24914,
24916
hearings, 15874-877, 15816, 15834, 15853,
17228, 21317-320, 23041-043, 24913,
24915, 26253-258, 27306-309, 28518-
523, 30009-13, 31134-136, 32137-140
reports, 17130, 17140, 19906, 24900, 26199,
26224-225, 28452-453, 28455, 28466-
467, 28478, 28487, 28490, 28494, 29968,
29970, 31079, 31106-107
Banking Profession Political Action Com-
mittee, annual report, 28276
Bankruptcy:
act, proposed rules and official forms, pre-
liminary draft, 22310
Federal rules of appellate procedure, with
forms, 15768
laws, compilation, 19537
Penn Central Company, financial collapse,
staff report of Securities and Exchange
Commission, 15761
rules and official forms covering proce-
dures, 28301
Bankruptcy Laws of United States Commis-
sion:
extend term—
law, 30927
report, 32041
Banks, Vera J., farm population estimates,
1910-70, 29635
Banks and banking:
accounts and deposits in all commercial
banks, national summary, 25141
allotments of salary to savings accounts
and disposition of net pay checks,
change, 21774
American International banking, trends
and prospects (paper), 28886
applications and reports received, or acted
on announcement by Board of Governors
of Federal Reserve System, 18002
assets and liabilities, commercial and mu-
tual savings banks, 21535
bank card and payments mechanism (re-
marks), 21565
bank debits—
and demand deposits, 21566, 23237-238,
28887
deposits and deposit turnover, 16053,
18023
bank lending practices, 1972 changes,
32290
bank/SBA loans, partnership for small
business, progress, 31793
Bank secrecy act, amend, hearing, 15874
bankers and bank holding company (re-
marks), 30226
banking and credit measures, weekly sum-
mary, 19078
banking and monetary statistics, 21567
changing structure of banking (remarks),
16054
code of Federal regulations, 25173-174
commercial and mutual savings banks, as-
sets and liabilities, 17452, 23215
commercial banks, assets and liabilities,
17988, 18016

Banks and banking—Continued
consumer installment credit, monthly re-
port, 18158
correspondent banking's future role (re-
marks), 21568
credit by banks for purpose of purchasing
or carrying margin stocks, regulations,
20274, 21584-587, 28896, 30234
Federal Financing Bank—
act, hearings, 15787
establish, 27252
hearings, 24879
reports, 28478, 30981
summary of bill, 17111
summary of proposal, 26191
summary of testimony, 17113
Federal reserve par list, 25186
cumulative supplement, 18349
financial institutions to invest in State
housing corporations, authorize, report,
27148
FTC jurisdiction over financial institutions
and truth-in-savings legislation, hear-
ings, 32138
gold and central bank swap network for
foreign currencies, hearings, 19534
gold, SDR's and central bank swaps, 28268
holding companies, regulation, amendment,
25189
implications for banking of amended Bank
holding company act (remarks), 26449
international financial institutions, appro-
priations, 1973, hearings, 15869
large commercial banks—
and domestic subsidiaries, weekly con-
dition report, 19076
New York and Chicago, weekly condi-
tion report, 19076
member bank borrowing, portfolio strategy
and management of Federal Reserve dis-
count (paper), 21570
monetary policy, savings flows, and avail-
ability of housing finance (remarks),
30227
multi-national banks and management of
monetary policy in United States
(paper), 25188
negotiable order of withdrawal services on
certain interest bearing deposits, statu-
tes shall not prohibit, hearing, 26254
nonmember banks that maintain clearing
accounts with Federal reserve banks,
18925
open market operations, 30228
operating banking offices, list, 18733,
28861, 30211
operating banks and branches, 1972, 28860
payment of interest on time and savings
deposits extend certain laws—
law, 30934
reports, 27148, 28329
questions and answers regarding original
issue discount on savings deposit ar-
rangements, tax treatment, 23481
recent activities of foreign branches of
U.S. banks, 20271
regulation Q, NOW accounts, investment
in State housing corporations, hearings,
27194
reserve positions of major reserve city
banks, 18867
some problems of central banking, ad-
dresses, 28902, 30236
State and local taxation of—
banks, report of study, 17231
insured commercial and national banks,
authorize, hearings, 15877
State taxation of federally insured finan-
cial institutions, regulate, hearings,
26258
structure of reserve requirements (ad-
dress), 28904
time and savings deposits at commercial
banks, changes, 20264, 32291
trends and development in credit card
banking (paper), 21591

- Banks and banking—Continued
volume and composition of individuals'
savings, statistical release, 19050
see also Federal reserve member banks—
National banks—State banks—also
headings beginning Federal reserve—
also name of banks or places where
located.
- Banner, A., thermal effects on eggs, larvae,
and juveniles of bluegill sunfish, 28792
- Banning, Lloyd H., corrosion resistance of
metals in hot brines, literature review,
32448
- Bannock Indians:
Judgment funds, disposition—
law, 19377
reports, 15710, 15832
- Bar, see Lawyers.
- Barabba, Vincent P., nomination, hearing,
31158
- Barbados:
air transport services, agreement, 16514
economic trends and their implications
for United States, 20435
mineral industry, minerals yearbook chap-
ter, 20539
- Barbados Oceanographic and Meteorological
Experiment, BOMEX atlas of satellite
cloud photographs, 20232
- Barbiturates:
abuse in United States, youthful offenders,
24940
barbiturate abuse, 1971-72, hearings,
21351
- Barenberg, Ernest J., pavement distress iden-
tification and repair, 28694
- Bargaining in a modernizing agriculture,
27499
- Bargar, Martha, international demographic
data directory, 21067
- Barges, container barge service, report, 19628
- Bargman, Robert D., characterization of acti-
vated sludge process, 28818
- Barite:
beneficiation of Calico District, Calif.,
silver-barite ores, 25507
minerals yearbook chapter, 20553
- Bark:
bark thickness and past diameters of En-
gelmann spruce in Colorado and Wyo-
ming, 17519
compression debarked chips from whole-
tree chipper, 28937
compression debarking of—
branchwood chips, from Finland, 17516
wood chips, 28959
moisture content and specific gravity of
bark and wood of northern pulpwood
species, 17514
wood and bark properties of spruce pine,
21675
- Bark beetle emergence cages modified for
use as pit traps, 32335
- Bark Beetles, see Beetles.
- Barker, John E., biological removal of car-
bon and nitrogen compounds from coke
plant wastes, 26415
- Barker, Lawrence K., refining improvement
of shale oil naphtha, 26665
- Barker, Linda A., preprimary enrollment,
30148
- Barker quadrangle, Little Belt Mountains, ig-
neous rocks and related mineral deposits,
30279
- Barker Reservoir, opportunity for recreation,
23900
- Barksdale, T. H., tomato diseases and their
control, 16588
- Barnard, J. Laurens:
deep-sea amphipoda of Genus *Lepechi-
nella* (Crustacea), 23962
review of family Synopiidae (-Tironidae),
mainly distributed in deep sea (Crus-
tacea: Amphipoda), 17828
- Barnard, Joseph E.:
forest survey cubic-foot volume equations,
31364
preview of Delaware's timber resource,
28942
- Barnes, Burton B., geologic prediction, de-
veloping tools and techniques for geophy-
sical identification and classification of sea
floor sediments, 23802
- Barnes, D. K., system for visually classifying
alfalfa flower color, 23237
- Barnes, Dale, European urban growth poli-
cies, 26529
- Barnes, Ivan, chemical composition of natu-
rally occurring fluids in relation to mer-
cury deposits in part of north-central Cal-
ifornia, 27559
- Barnes, J. Lee, foreign trade regulations of
Malaysia, 31209
- Barnes, Robert A., ammonia removal in
physical-chemical wastewater treatment
process, 20207
- Barnes, Victor G., jr., pocket gophers and
reforestation in Pacific Northwest, prob-
lem analysis, 27899
- Barnett, Elva, State statutes on emergency
medical services, 29043
- Barney, Richard J.:
inexpensive meteorological radiation shield
for thermistors and thermocouples,
26472
31-day battery-operated recording weather
station, 23285
- Barns:
comparison of milking operations in her-
rington milking layouts for large herds
in California, 19129
dairy barn, pole-frame construction, 19113
farrowing house, 19119
free-stall barn drive-through type, 19117
horse barn indoor exercise area, farm
building plan, 22343
portable stalls for calves, 28007
2-stall horse barn, farm building plan,
19116
ventilation system for cold, free-stall
barns, 28005
- Baron, Norton, structure of zirconium-93 and
zirconium-91 as shown by reactions ^{93}Zr
(d,p) ^{92}Zr and ^{93}Zr (d,t) ^{92}Zr , 17719
- Barr, Richard H., elementary and secondary
education, 1970-71, expenditures and reve-
nues for public elementary and secondary
education, 27429
- Barr, Theodore, relief, 19590, 28308
- Barr, William C., accuracy requirements for
measurement of meteorological parameters
which affect artillery fire, 22410
- Barre, Vt., flood plain information, Stevens
Branch-Winooski River, 28728
- Barrels, steel shipping, current industrial re-
ports, 18194, 21056, 25928
- Barren County, Nixon-Nunn Campaign Fund,
see Nixon-Nunn Campaign Fund of Bar-
ren County.
- Barresi, James A., northern Maine regional
treatment system, 27492
- Barrett, Ashton C., nomination, hearing,
19954.
- Barrett, James W., large-crowned planted
ponderosa pine respond well to thinning,
21659
- Barrett, Larry B., cost of air pollution dam-
age, status report, 27479
- Barrett, Paul J., methods for producing
alumina from clay, evaluation of sulfurous
acid-sulfuric acid process, 30435
- Barriers:
control of hazardous chemical spills by
physical barriers, 28808
Galveston Bay hurricane surge study, ef-
fects of proposed barriers on—
hurricane surge heights, calibration
tests, hydraulic model, investigation
27444

INDEX 1973

Barriers—Continued

- Galveston Bay, etc.—Continued
 - tides, currents, salinities, and dye, dispersion for normal tide conditions, calibration tests, hydraulic model investigation, 27445
 - wind tunnel simulation and prototype studies of barrier flow phenomena, 20974
- Barriers to health care for older Americans, 32124
- Barron County Democratic Party, annual report, 24661
- Barrow, Alaska, surface-water investigations at Barrow, Alaska, 32364
- Barry, Bob:
 - Citizens for Bob Barry, annual report, 24474
 - Friends of Bob Barry, annual report, 24472
- Barry, Bob, Congressional Colleagues for, *see* Congressional Colleagues for Bob Barry.
- Barry County Republican Committee, annual report, 24523
- Bars (metal, etc.):
 - deformer concrete reinforcing bars of non-allow steel from Mexico, Tariff Commission report, 32586
 - metal bars, rods, wires, sheets, plates, and shapes, Federal item identification guide, 30105
 - nonmetallic coatings for concrete reinforcing bars, coating materials, 27733
- Barsom, George, lagoon performance and state of lagoon technology, 30178
- Bartelsmeyer, Ralph R., address, June 6, 1972, 17455
- Bartleson, John D., jr., field guide for Civil War explosive ordnance, 29439
- Bartlett, E. L. (Bob), memorial statue presented by Alaska, dedication proceedings, 15797
- Bartlett pears, *see* Pears.
- Bartsch, Paul, bibliography and zoological taxa of Paul Bartsch, with biographical sketch, 30633
- Basalt:
 - crystallization history of lunar feldspathic basalt 14310, 29029
 - feasibility of artificially recharging basalt aquifers in eastern Washington, 23540
 - quality of ground water in basalt of Columbia River Group, Washington, Oregon, and Idaho, 20360
- Base development, Vietnam studies, 26983
- Base metal parts for incandescent illuminating articles, suitable for residential use, from Canada, 20827
- Bashaw, J. D., hollow fiber technology for advanced waste treatment, 27460
- Bashline, James E., relief, 28307
- Basic data contribution, 25249–250
- Basic properties of ice as related to performance of ice condensers, 24202
- Basic properties of pavement components, 30215
- Basketball, merger of 2 or more professional leagues, authorize, report, 17176
- Bassett, Frank W., VOR TACAN low altitude flight check summary, 24041
- Bateman, Paul C., Huntington Lake quadrangle, central Sierra Nevada, California, analytic data, 21728
- Bateman, Robert H., basic data on economy of Republic of Panama, 15620
- Bates, Daniel W., traveling screen for removal of debris from rivers, 22102
- Bates Shoe Division, Wolverine World Wide, Inc., Webster, Mass., men's dress and casual footwear, Tariff Commission report, 26897
- Bath, G. D., interpretation of aeromagnetic survey of Amchitka Island area, Alaska, 17534
- Bathrobes, *see* Robes.
- Bathrooms, airborne noise control for vertically stacked bathrooms with mechanical exhaust systems, 26469

Bathymetry:

- bathymetric and magnetic data from north-east Pacific 40° to 53° N, 125° to 160° W, 29391
- model 4100 graphic recorder, 31727
- Pacific SEAMAP 1961–74 data, bathymetry, magnetics and gravity, 17778–780, 23810–813
- synthetic bathymetric profiling system (SYNBAPS), 30584
- Baton Rouge, La.:
 - flood plain information, Ward Creek and tributaries, 23159
 - floods, how to avoid damage, 25083
- Battalions, tank units, Army field manual, 20981
- Batteries, *see* Electric batteries.
- Battle, David G., Yellowstone National Park, Fort Yellowstone, historic structure report, 27830
- Battle act, *see* Exports.
- Battle casualties, battle casualties and medical statistics, U.S. Army experience in Korean War, 24191
- Battle honors, *see* Decorations of honor.
- Battle Mountain:
 - geochemistry and potassium-argon ages of plutonic rocks in Battle Mountain mining district, Lander County, Nev., 29024
 - geochemistry of porphyry copper environment in Battle Mountain district, Nev., 29024
- Battle streamers of United States Navy, 16440
- Battlefields, *see* names of battles or battlefields.
- Battleships, disposal of naval vessels, report, 30008
- Baum, Samuel, problems in interpretation and projection of fertility changes in continuing program of population projections, 22566
- Baumbick, Robert J., experimental dynamic response of two-dimensional, Mach 2.7, mixed-compression inlet, 20608
- Baumgaertner & Burchman for Delegate Committee, annual report, 22901
- Baumgardner, Robert H.:
 - rest area sewage disposal and water supply, 32285
 - water supply and sanitary waste treatment facilities for safety rest areas, guidelines for review of plans, 32281
- Baumgartner, D. J., brief outline of study of sewage sludge dumping in New York Bight, 31302
- Bauxite:
 - minerals yearbook chapter, 25437
 - report, quarterly, 18024
- Bay Park, N.Y.:
 - deep-well artificial-recharge experiments at Bay Park, Long Island, N.Y. (series), 30278
 - design and operation of artificial-recharge plant at Bay Park, N.Y., 30278
 - injecting highly treated sewage-plant effluent into deep sand aquifer at Bay Park, N.Y., preliminary results, 17540
- Bay State Physicians Political Action Committee, annual report, 24356
- Bayer, Kenneth C.:
 - recorded and processed seismic data from 1971 San Fernando earthquake and aftershocks by Nevada Special Projects Party, 17776
 - seismicity of southern Nevada region, 26768
- Bayley, Richard W., preliminary report on geology and gold deposits of Rochford district, Black Hills, S. Dak., 26489
- Bayo, Francisco, mortality of charter beneficiaries, 22227
- Bayou Lafourche, sediment transport in Mississippi River distributary, Bayou Lafourche, La., 16115
- Bayou Sara Creek, special flood hazard report, 20163
- Bayous, *see* names of bayous.

- BDC, *see* Domestic Commerce Bureau.
- Be safe from insects in recreation areas, 16598
- Be wise, consumers' quick credit guide, 16591
- Be you, be someone new, 15503
- BEA, *see* Economic Analysis Bureau.
- Beach, Norman E., Government specifications and standards for plastics, covering materials and applications, 31198
- Beaches:
- beach widening by perched beach concept Santa Monica Bay, Calif., hydraulic model investigation, 31264
 - ecological effects of offshore dredging and beach nourishment, review, 27437
 - mobile system for cleaning oil-contaminated beaches, development, 28822
 - restoration of beaches contaminated by oil, 23184
- Beamer, Lyndall G., syncretism, dynamics of health, analytic series on interactions of health and socioeconomic development, 25264
- BEAMR, an interactive graphic computer program for design of charged-particle beam transport systems, 31640
- Beams:
- BEAMR, an interactive graphic computer program for design of charged-particle beam transport systems, 31640
 - effect of deformed shanks, prebored lead holes, and grain orientation on elastic bearing constant for laterally loaded nail joint, 27533
 - see also* Concrete beams—Electron beams—X-ray beams.
- Bean, J. L., spruce budworm in Eastern United States, 27528
- Bean Creek:
- Marion County, Ind.—
 - flood plain information, Marion County, Ind., 28720
 - floods, how to avoid damage, 28745
- Beans, *see* Soybeans.
- Bear Creek, special flood hazard information report, Denver metropolitan area, 28768
- Beard, J. T., solar reflectance of monolayer covered and clean water surfaces, 23938
- Beard, Leo R., hydrologic data management, 20155
- Bearing indicators, performance on expanded time bearing plot as function of bearing accuracy, 26640
- Bearings (machinery):
- antifriction balls and ball bearings, including ball bearings with integral shafts, and parts thereof, Tariff Commission report, 32584
 - bearing, antifriction—
 - Federal item identification guide, 30095
 - manufacturer's shipment and unfilled orders, 23123
 - development of high speed parallel hybrid boost bearing, 25519
 - dynamic frictional moment of ball bearing of pendulum suspension, USSR study, 16197
 - effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, sinusoidal and random vibration, 29250
 - environmental endurance testing of elastometric pitch change bearings, 26981
 - foil journal bearings for Brayton rotating unit, design, fabrication and performance, 31604
 - friction losses in lubricated thrust-loaded cageless angular-contact bearing, 31643
 - hot hardness characteristics of ausformed AISI M-50, Matrix II, WD-65, modified AISI 440-C, and super nitralloy, 29281
 - mounted, Federal item identification guide, 24991
 - performance of 40-millimeter-bore ball bearings with lead- and lead-alloy-plated retainers in liquid hydrogen at 1.2 million DN, 20612
- Bearings (machinery)—Continued
- roller assembly, journal bearing, Federal item identification guide, 23101
 - test results report and technology development report HLH/ATC compliant roller bearing development program, 24186
 - thermal effects on clearance and stiffness of foil journal bearings for Brayton cycle turboalternator, 20587
- Bears, killing of polar bears, moratorium, authorize, report, 15703, 19905
- Bearss, Edwin C., Lyndon B. Johnson National Historic Site, Blanco & Gillespie Counties, Tex., historical data, 27813
- Beaser, Herbert W., youth service bureaus and delinquency prevention, 27971
- Beating heat-wave weather, 16408
- Beatty, R. W., invariance of cross ratio applied to microwave network analysis, 20643
- Beaubien, L. A., behavior of materials in subsurface ocean environment, 17793
- Beaufort Sea, aircraft microwave measurement of ice, 1971, some preliminary results, 30528
- Beautification, highway and its environment, fourth annual awards competition, 21538
- Beaver Creek, special flood hazard information report, St. Edward, Nebr., 28769
- Beaver County, Pa.:
- flood plain information, 31253
 - floods, 32234
- Beaver Lodge, Machinist Nonpartisan Political League, *see* Machinist Nonpartisan Political League.
- Beaver River, flood plain information, Ohio and Beaver Rivers, Beaver County, Pa., 31253
- Beaverhead National Forest, designate certain lands as wilderness, bearing, 19982
- Becher, John C., commanders digest, 18132
- Beck, Harold L.:
- absolute intensities of gamma rays from decay of ^{238}U and ^{232}Th , 22476
 - in situ $\text{Ge}(\text{Li})$ and $\text{NaI}(\text{Tl})$ gamma-ray spectrometry, 22474
- Becker, Burton C., guidelines for erosion and sediment control planning and implementation, 17415
- Becker, C. D., toxicity of power plant chemicals to aquatic life, 28091
- Becker, James M., teaching international relations, 17366
- Beckers, Charles V., quantitative methods for preliminary design of water quality surveillance systems, 23199
- Beckett, C. W., physics and chemistry, journal of research, 18530
- Beckwith, Roy C.:
- key to adult bark beetles commonly associated with white spruce stands in interior Alaska, 23288
 - large aspen tortrix, 26465
- Becoming a citizen series, 30302
- Bed springs, *see* Bedsprings.
- Bedding, current industrial reports, 19241
- Bedford County, Republican Committee, *see* Republican Committee of Bedford County.
- Bedrock, bedrock geology of Cuscutupic and Arnold quadrangles, west-central Maine, 27553
- Bedroom furniture, *see* Furniture.
- Beds, *see* Bedsprings.
- Bedsprings:
- current industrial reports, 18194, 30843
 - mattresses, bedsprings, and other sleep furniture, current industrial reports, 15588
- Bee culture, analysis of beekeeping production costs and returns, 30716
- Bee moths, controlling greater wax moth, pest of honeycombs, 16595
- Beebe, Richard L., activated carbon treatment of raw sewage in solids-contact clarifiers, 26419

INDEX 1973

- Beef:**
 beef carcass boning lines, operations, equipment, and layouts, 15475
 effects of alternative—
 import policies on beef and pork sectors, 17346
 marketing margins for beef and pork, 30697
 fresh boneless, imported, futures trading and open contracts, 18394
 guidelines for uniform beef improvement programs, 16611
 how to buy beef steaks, 27992
 prices and consumers, address, 20892
 slaughtering, cutting, and processing beef on farm, 30699
Beef cattle, see Cattle.
Beef Improvement Federation, recommendation, guidelines for uniform beef improvement programs, 16611
Beef stock, see Cattle.
Beekeeping, see Bee culture.
Beetles:
 accuracy of determining mountain pine beetle attacks in ponderosa pine utilizing pitch tubes, frass, and entrance holes, 23291
 aquatic dryopoid beetles (Coleoptera) of United States, 17438
 bark beetle emergence cages modified for use as pit traps, 32335
 black turpentine beetles, general information, 17507
 Japanese, controlling, 30703
 key to adult bark beetles commonly associated with white spruce stands in interior Alaska, 23288
 mountain pine beetle, description, control, etc., 16072
 revision of genus *Petalium* LeConte in United States, Greater Antilles, and Bahamas (Coleoptera: Anobiidae), 29636
 revision of genus *Petalium* LeConte in Central America (Coleoptera, Bruchidae), 28025
 subtribe *Tachina* (Coleoptera, Carabidae, Bembidiini), studies, revision of neotropical genus *Xystosomus* Schaum, 29489
 treatment height for mountain pine beetles in front range ponderosa pine, 17520
 Begich, Nicholas J., aircraft, accident, 25643
Behavior:
 adults as reading models for children, 28673
 behavior modification in child and school mental health, annotated bibliography on applications with parents and teachers, 23750
 behavior of bituminous-stabilized pavement layers, study, 25095
 behavior of ocellated antbirds, 27879
 behavioral changes from chronic exposure to pesticides used in aerial application, effects of phosdrin on performance of monkeys and pigeons on variable interval reinforcement schedules, 21034
 certain aspects of participation of neostriatum in behavioral control, 17594
 classification of criminal behavior, seminar, 29146
 complex form of behavior of dolphins *Tursiops truncatus* (Montagu), USSR study, 16203
 forest insects, 23280
 frequency of anti-collision observing responses by solo pilots as function of traffic density, ATC traffic warnings, and competing behavior, 30788
 human behavior aspects of fish and wildlife conservation, annotated bibliography, 28927
 mechanisms and principles of goal-directed behavior, USSR study, 32404
 mental health and social change, annotated bibliography, 23755
Behavior—Continued
 methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall at Chanute AFB, 32201
 nutrition development and social behavior, Western Hemisphere, conference proceedings, 27766
 relationships among parent ratings of behavioral characteristics of children, U.S., 22029
 social change and human behavior, mental health challenges of 70's, 23761
 systemizing information to identify and relate behavioral and physical design parameters, 25069
 television and growing up, impact of televised violence report to Surgeon General, app. A, hearings, 15878
 urban noise problems and social behavior public hearings on noise abatement and control, 21513
 VA cooperative studies in mental health and behavioral sciences, annual conference highlights, 17925
 see also Conduct of life—Group behavior.
 Behavior and impact of chemicals on forest environment, 21604
 Behavior of 2- β tracker for maneuvering targets under noise, false target, and fade conditions, 22167
 Behl, Wishvender K., thermodynamics of molten mixtures of lithium chloride-potassium chloride at 640°C, 22407
 Belchley, G. L., hydraulic model studies of Scoggins Dam fishtrap aeration and supply structure, 23909
 Belafonte, Harry, Show Committee, see Harry Belafonte Show Committee.
 Belew, Leland F., Skylab, guidebook, 29262
Belgium:
 background notes, 17852
 double taxation, taxes on income, convention, 20817
 economic trends and their implications for United States, 17577, 29097
 market factors, 19295
 mineral industry, minerals yearbook chapter, 16270
 mutual defense assistance, agreement, 16525
 passenger charter air services, agreement, 22273
 selling in Belgium, 21102
 Bell, David M., resource adjustment in fertilizer industry with emphasis on Michigan, 19110
 Bell, Donald R., labor law and practice in the Philippines, 26614
 Bell, Frances C.:
 index to reports of National Conference on Weights and Measures from 1st-56th, 25553
 National Conference on Weights and Measures, annual report, 29318
 Bell, Henry, III:
 geochemical prospecting using water from small streams in central South Carolina, 25254
 some results of geochemical sampling in McCormick County, S.C., 29006
 Bell, Milo C.:
 fisheries handbook of engineering requirements and biological criteria, 31247
 survival of fish passing through spillways and conduits, compendium, 31238
 Bell Branch, flood plain information, 23175
 Bell County, Tex., watershed work plan for watershed protection and flood prevention, Pond Creek watershed, 20012
 Bell County Republican Finance Committee, annual report, 24789
 Bell Telephone System, geographical areas serviced by Bell and independent telephone companies in U.S., 25966

- Bellamy, Thomas R., southern pulpwood production, 1971, 21679
- Bellanca, Guido, relief, 28318
- Belleau Creek:
St. Charles County, Mo.—
flood plain information, 28707
floods, 28761
- Bellevue, Idaho:
flood plain information, 17379
floods on Big Wood River, 20146
- Bellevue, Nebr., special flood hazard information report, Beta Road Ditch, 17406
- Bellport, B. F., paper, Apr. 9-14, 1972, 23942
- Bells, *see* Carillons.
- Belman, Albert A., selected earnings and demographic characteristics of union members, 20498
- Belmont County, Ohio, floods, 17397
- Belorussian Soviet Socialist Republic, Academy of Sciences, prototype of continuous dryer developed by ITMO, USSR study, 21869
- Belt conveyors, Federal item identification guide, 27381
- Belting, belting and belts for machinery, and rubber sheeting, workers of Passaic, N.J., plant of Uniroyal, Inc., Tariff Commission report, 27944
- Belton, Mont., railroad accident, report, 20748
- Beltrami County Republican Committee, annual report, 24536
- Belts:
belting and belts for machinery, and rubber sheeting, workers of Passaic, N.J., plant of Uniroyal, Inc., Tariff Commission report, 27944
Federal item identification guide, 27380
free floating endless belt oil skimmer, 20188
transmission, Federal item identification guide, 27381
see also Restraint apparatus.
- Bench marks, task difficulty and task aptitude, benchmark scales for mechanical and electronics career fields, 25843
- Bender, Bernice, MANIP, computer system for algebra and analytic differentiation, 31719
- Bends, pathogenesis of skin bends, review, 16246
- Beneficial use of storm water, 23192
- Beneficiaries:
BENDEX, beneficiary data exchange, 24193
benefits and beneficiaries under public employee retirement systems, 16481
income of newly entitled beneficiaries, 32557
preliminary findings from survey of new beneficiaries, reports, 32557
rent watch for social security beneficiaries, 16152
social security beneficiaries—
in metropolitan areas, 31810
under representative payments, 25704
Spanish-surnamed in Southwest, 22243
- Beneficiation:
Calico District, Calif., silver-barite ores, 25507
Idaho Kyanite-bearing materials, 27699
mica beneficiation, 23635
- Benefit amounts, under 1972 amendments, 22241
- Benefit-cost analysis of Federal programs, 21138
- Benefit series service, unemployment insurance, report, 18026
- Benham (USS):
loan to Peru, extension, agreement, 16501
- Benjamin Franklin Memorial Hall:
designate as Benjamin Franklin National Memorial—
law, 21130
report, 21181
- Benjamin Franklin National Memorial:
designation—
law, 21130
report, 21181
- Benjamin Franklin 7-cent commemorative postage stamp (poster), 16559
- Bennett, Gordon D.:
ground water along Rio Bucana at Ponce, P.R., and effects of proposed floodway on ground-water quality, 23384
ground water in Tortuguero area, P.R., as related to proposed harbor construction, 23383
- Bennett, Harold J., economic appraisal of supply of copper from primary domestic sources, 30415
- Benomyl:
benomyl-derived fungitoxicant for tree wilt disease control, 27532
control of postharvest brown rot of sweet cherries and peaches with chemical and heat treatments, 19112
- Benson, Carl S., physical properties of snow cover in Ft. Greely area, Alaska, 17372
- Benson, David K., development and evaluation of vacuum pressure gauge components from carbon and graphite, 20583
- Benson, Ferris B., indoor-outdoor air pollution relationships, literature review, 20947
- Benson, Manuel A., national study of stream-flow data-collection programs, 30287
- Benson, Richard H., Bradleya problem, with descriptions of two new psychrospheric Ostracode genera, *agrenocythere* and *poseldonamicus* (Ostracoda: Crustacea), 20762
- Benthos, benthic faunal surveys in San Francisco Bay, review, 29011
- Bentley, Helen D.:
remarks—
Feb. 6, 1973, 23223
May 14, 1973, 27507
June 5, 1973, 28867
June 14, 1973, 28868
- Benton, William, memorial address, 29821
- Benton County Republican Committee, annual report, 24416
- Benzene, benzenoid chemicals and products, imports, 31881
- Benzene hexachloride, economic impact of discontinuing farm use of lindane and BHC, 31216
- Benzenoid chemicals, *see* Benzene.
- Berber, John S., low-temperature lignite tar, processing and utilization, 26647
- Bercaw, Robert W., programmable computer interface for CAMAC, 26688
- Bereskin, B., central swine-testing and purebred-improvement programs in U.S., 24136
- Berg, Dorothy F., illicit use of dangerous drugs in United States, compilation of studies, surveys and polls, 20579
- Berg, Robert A., flight simulator study of STOL transport longitudinal control characteristics, 24036
- Bergan, John J., U.S. kidney transplant fact book, information from ACS/NIH Registry, 16387
- Berger, Harvey W., NBS lead paint poisoning project, housing and other aspects, 25557
- Bergman, Brian A., training evaluation and student achievement measurement, review of literature, 25485
- Bergman, Perry D., economics of mixed potassium-cesium seeding of an MHD combustion plasma, 23657
- Bering Sea:
northern, sedimentary processes and distribution of particulate gold, 17531
studies on marine geology of Bering Sea (series), 23363
- Berkovits, Avraham, hodographic approach to predicting inelastic strain at high temperature, 16353

INDEX 1973

- Berkowitz, J. B.:
 assessing water pollution potential of
 manufactured products, 27472
 water pollution potential of manufactured
 products, 27473-475
- Berkowitz, John B., plating methods, survey,
 26683
- Berlin, quadripartite agreement on Berlin
 and final protocol between USA and other
 governments, 27918
- Berman, Barry L., International Conference
 on Photonic Reactions and Applica-
 tions, proceedings, 30769
- Bermuda:
 background notes, 20783
 Customs Bureau pre-clearance activities,
 hearings, 27179
 mineral industry, minerals yearbook chap-
 ter, 20539
- Berne, Robert, case for protective design,
 nuclear and otherwise, 23083
- Bernhardt, Audrey, cases decided in Court
 of Claims, 17315, 20024, 28579
- Berne Shoe Co., women's dress and casual-
 shoes, Bernie Shoe Co., Haverhill, Mass.,
 report to President on firm investigation
 and worker investigation, Tariff Commis-
 sion report, 24072
- Bernstein, Blanche, income-tested social
 benefits in New York, adequacy, incen-
 tives, and equity, 29835
- Bernstein, George K., remarks, Sept. 26, 1972,
 23450
- Bernstock, William M., bulletin of prosthet-
 ics research, 22297, 25800, 27964
- Berquist, Russell R., helicopter gust response
 including unsteady aerodynamic stall ef-
 fects, 29663
- Berquist, Virginia A., analysis of work stop-
 pages, 29171
- Berrien County, Ga., soil survey report,
 31818
- Berrien County Hutchinson for Congress
 Committee, annual report, 24668
- Berries, *see* names of berries.
- Berry, Frederick H., decay causes little loss
 in hickory, 20298
- Berryman, William M., lithologic character-
 istics of Pliocene rocks cored at Elk Hills,
 Kern County, Calif., 27552
- Bertelson, Daniel F., Alabama forest indus-
 tries, 21681
- Berthier, J., weak thermal points or thermal
 bridges, building research translation,
 27728
- Bertin, Michael C., nucleonic sensor for de-
 tecting metal in recirculating lubricating
 oil systems, 20989
- Beryllium:
 aluminum plating of beryllium wire, 28067
 beryllium and beryllium-lithium complexes
 in single-crystal silicon, study, 21990
 control techniques for beryllium air pol-
 lutants, 24159
 criteria for recommended standard, oc-
 cupational exposure to beryllium, 27764
 national inventory of sources and emis-
 sions, 29648
 toxicology of beryllium, 16386
- Beschen, Darrell A., transportation charac-
 teristics of school children, 32282
- Bessemer for Murphy Committee, annual re-
 port, 22804
- Best bets for returning veterans in Wash-
 ington, D.C. area, 18027
- Best opportunities for Federal employment,
 18028
- Best public service campaign of year, but is
 it doing any good?, 27779
- Beta Club Week, National, *see* National Beta
 Club Week.
- Beta rays, ecological and environmental
 effects from local fallout, beta and
 gamma radiation effects from close in fall-
 out, 16663
- Betabistine hydrochloride, FDA regulation
 of new drug Serc. hearing, 21240
- Bethel, Helen E., provisional patient move-
 ment and administrative data, State and
 county mental hospital inpatient services,
 25594
- Bethesda Democratic Headquarters, annual
 report, 24738
- Bethlehem, Pa., area wage survey, 17658
- Better communities act, cities speak, 31412
- Better Community Committee, annual report,
 24363
- Better ways to help youth, 3 youth services
 systems, 25808
- Bettner, James L., design and experimental
 results for turbine with jet flap stator and
 jet flap rotor, 29257
- Betz Road Ditch, city of Bellevue, Nebr.,
 special flood hazard information report,
 17406
- Bevans, Charles I., treaties and other inter-
 national agreements of United States of
 America, 1776-1949, compilation, Nepal-
 Peru, 17909
- Beverages, beverage container problem,
 analysis and recommendations, 20197
- Bexar County Republican Finance Commit-
 tee, annual report, 24773
- Bexar County Republican Women's Club,
 annual report, 22956
- Bexar County Socialist Workers, annual re-
 port, 22897
- Beyond the melting pot, 31219
- BGS Shoe Corp., Manchester, N.H.:
 footwear for women and protective foot-
 wear for men, women, boys, and
 infants—
 and parts of such footwear, Tariff Com-
 mission report, 32591
 Tariff Commission report, 32592
- Bhagat, Surinder K., correlated studies of
 Vancouver Lake-water quality prediction
 study, 21500
- BHC, *see* Benzene Hexachloride.
- BI series, 23221-322
- Biaggi, Mario, D.C. Committee for, *see* D.C.
 Committee for Mario Biaggi.
- Biaggi, Mario Reelect Congressman *see* Re-
 elect Congressman Mario Biaggi Commit-
 tee.
- Bianchi Ralph A., development and demon-
 stration of underwater oil harvesting tech-
 nique, 28813
- Blaxial gyrostabilizer and superconducting
 spherical suspension, 23548
- Bible, Gutenberg Bible, 1st page of Genesis
 from Library of Congress copy in facsimile,
 16240
- Biblio-profile on human communication and
 its disorders, capsule state-of-the-art re-
 port with bibliography, 23768
- Bibliography:
 abused and battered child, 25591
 Advanced Systems Division reports,
 28029
 aeration of natural waters, 32393
 aerial remote sensing, 27592
 aeronautical engineering, 17708, 21984,
 26685, 32465
 aerospace, 27706
 medicine and biology, 17958
 agricultural education, instructional ma-
 terials, compilation from AIM, 20092
 Agricultural Marketing Service, available
 publications, list, 25814
 air pollution—
 aspects of emission sources—
 petroleum refineries, 19150
 primary aluminum production, 30720
 primary lead production, 30721
 pulp and paper industry, 29638
 technical publications of Environmental
 Protection Agency, 28788
 translations, with abstracts, 27481,
 28833
 alcoholism treatment and rehabilitation,
 23749
 American Indian education, 28652
 annotated Anga (Kukukuku) bibliography,
 26749

Bibliography—Continued

annotated bibliography of cunner, *Tautoglabrus adspersus* (Walbaum), 30542
 Antarctic bibliography, erratum, 20512
 architects, builders, engineers and retail lumbermen publications, 31356
 arms control & disarmament (periodical), 18008
 artificial kidney (periodical), 18014
 artificial recharge of groundwater, 26537
 atomic line shapes and shifts, 16361
 avalanches, including debris, 23478
 aviation medicine translations, 16679
 behavior modification in child and school mental health, 23750
 biblio-profile on human communication and its disorders, capsule state-of-the-art report with bibliography, 23768
 bibliographical resources about India, annotated list of English-language reference works published 1965-70, in India, 15987
 bibliography and zoological taxa of Paul Bartsch, with biographical sketch, 30633
 bibliography, to 1971, of geology and mineralogy of rare earths and scandium, 26492
 biological effects of metals in aquatic environments, 26399
 blood level determinations of antiepileptic drugs, clinical value and methods, 23770
 brain death, 22081
 cadmium in water, 26538
 California water resources, 32363
 catalogue of publications of National Center for Health Statistics, 17745, 29328
 Census Bureau methodological research, 19194, 29688
 Center for Vocational and Technical Education, Ohio State University, bibliography series, 20092-93
 central western Indian Ocean, 26821
 cerebral palsy, mental retardation and other neurological and sensory disorders of infancy and childhood, collaborative study, 26750
 chemical kinetics in C-O-S and H-N-O-S systems, bibliography, 16360
 chemical wastewater treatment, 27833
 Chinese sources on medicine and public health in People's Republic of China, 29123
 cold regions, science and technology, 23154
 controlled accessibility to material in computer system, 30476
 cost analysis of water pollution control, 27494
 creating independence, 1763-89, background reading for young people, 23606
 crime and delinquency, international bibliography (periodical), 18178
 cryogenic publications and reports, list, 18180
 current bibliography of epidemiology, guide to literature of epidemiology, preventive medicine, and public health, 18182
 Division of Dental Health, catalog, 16123
 drug abuse literature, 22038
 drug interactions, annotated bibliography 1967-70, with selected excerpts, 20675
 drying of wood, 20292
 ecological techniques utilizing radionuclides and ionizing radiation, 21016
 economics of agriculture, 20087
 employees benefits and services, government, 27051
 environmental quality as it relates to health, selected references (periodical), 18899
 environmental services, 28827
 epidemiology—
 mental disorders, 26743
 preventive medicine and public health, 25608
 epilepsy, 29367
 estuarine pollution, 27591
 ethnicity and ethnic groups, 26744

Bibliography—Continued

evapotranspiration and watershed research as related to riparian and phreatophyte management, 25826
 executive leadership in public service, 29576
 explosive excavation related research, 25099
 Federal libraries, selected list of documents available through ERIC, 23607
 Federal racial/ethnic data system, 23464
 fibrinolysis, thrombolysis, and blood clotting, 27759
 foreign language, area studies, completed research and instructional materials, 26363
 foreign medical graduate, 29039
 foreign statistical publications, accessions list, 18385
 Fort Leavenworth, 26968
 furniture manufacturers and woodworkers publications, 31358
 Geological Survey publications relating to coal, 21710
 Government Procurement Commission, index-bibliography-acronyms, report, 26513
 Government reports announcements, 18405
 Green River Formation, Colo., Utah, and Wyo., 27560
 health services research, 16365
 highways, new developments in design, etc., newsbriefs, 18692
 home-based child development program resources, bibliography, 30868
 home economics education, instructional materials, compilation of abstracts from Abstracts of Instructional Materials in Vocational and Technical Education, 20093
 hospital equipment, 30290
 hospital outpatient and emergency activities, 29034
 hospitals, health facilities, etc., 23401
 housing and planning references (periodical), 18469
 improving employee performance, 15608
 indexed bibliography of eggs and young of tunas and other scombrids (Pisces, Scombridae), 20700
 Index medicus, 18481
 abridged, 17939
 inventory of congressional concern with research and development, 17260, 27334
 irrigation efficiency, 27594
 JPRS ad hoc publications, 1972 directory, reference aid, 25338
 kinetic data on gas phase reaction of nitrogen oxygen, and nitrogen oxides, 26699
 labor-management relations—
 act, 1947, as amended by Labor-Management reporting and disclosure act, 1959, supplement, 25604
 in public service, 16820
 Lake Erie, 16142
 Lake Huron, 16143
 Lake Michigan, 16144
 Lake Ontario limnological and related studies—
 biology, 27454
 chemistry, 27453
 physical, 27455
 Lake Superior, 16145
 Law Enforcement Assistance Administration, library book catalog, author catalog, 17646, 23571, 25367
 livestock waste management, 21499
 management, continuing literature survey, 29269
 marine biology, 23815
 marine geology and geophysics, 23816
 marine radioecology, selected bibliography of non-Russian literature, 22489
 marine science newsletters, 1973, annotated bibliography, 29388
 marketing economics research publications, reference list, 27421

INDEX 1973

Bibliography—Continued

mass spectroscopy literature for 1971 compiled by computer method, 26992
 medical reviews, 18481, 18640
 cumulated, 25606
 medicine 1970, history, 32504
 mental health and social change, 23755
 mercury and air pollution, 16638
 methodological research, 1963-71, key word subject index, 29687
 military justice, 26970
 military libraries, recommended books, 26967, 26972
 military strategy and tactics, 26969
 minority business enterprise, 30894
 monitoring, control and disposal of tritium, 29680
 multi-ethnic literature in high school, mental health tool, 30508
 naval history, 23872
 nematodes of soybeans, 26928
 neogene marine mollusks of Pacific Coast of North America, 1797-1969, bibliography, 23329
 NINDS bibliography series, 22081, 23770
 nuclear explosions, civil, industrial and scientific uses for nuclear explosions, 19185
 nuclear medicine, 15521
 nutrition and aging, selected annotated bibliography, 29601
 odors and air pollution, 19151
 oil spillage, 29089
 outdoor education, 27433
 parasites from sea mammals caught off west coast of North Carolina, 20698
 Parkinson's disease & related disorders, citations from literature, 18748
 PCB in water, 26536
 peninsular southeast Asia, Burma, Cambodia, Laos, Thailand, 29660
 personnel bibliography series, 15608, 16820, 27050-52
 personnel literature, 18754
 phosphorus removal, 29090, 30310
 photonuclear reaction data, indexes, etc., 26700
 planning for retirement, 24175
 port information sources, 23622
 poultry and egg research, 20889
 principles of war (supplement), 26973
 productivity, 31560
 propagation effects from 10 GHz-1000 THz of electromagnetic waves, 16837
 prostaglandins in abortion and reproductive physiology, citations from literature search, 25609
 public health series, 16467, 30610
 pyrrone and BBB publications, 21985
 questionnaires for research, annotated bibliography on design, construction, and use, 20320
 R & M research reports, 27491
 race relations, Armed Forces, 26971
 racism, 20669
 remote sensing for earth resources, 23370
 resource list for drug abuse literature, 23668
 response factors and selective attention in learning from instructional materials, annotated, 22365
 Russian radioecology, bibliography of Soviet publications with citations of English translations and abstracts, 21018
 salinity problems in arid lands irrigation, literature review and selected bibliography, 23476
 sanitary landfills, 16146
 selected Office of Education publications and related information on international education, 28681
 small business, 20757
 smoking and health, 16467, 30610
 social and psychological aspects of applied human genetics, 25323

Bibliography—Continued

solid waste management—
 available information materials, 23201, 27496
 list of available literature, 17430, 21517
 Spanish-language health communications teaching aids, 31410
 special bibliography series, U.S. Army Command and General Staff College, Library Division, 26967-973
 state water-rights laws and related subjects, supplemental bibliography, 15479
 sudden infant death syndrome, 23745
 suicide and suicide prevention, 16389
 superconducting devices and materials, quarterly literature survey, 18946
 temperature measurement, 20640
 terrestrial and freshwater radioecology, 22488
 thermal degradation, thermal oxidation and thermal analysis of high polymers, 4, Literature survey, 27417
 timber products, milling and utilization, 31357
 toxicity, 18967
 training commercial salesmen, 20757
 transplutonium elements, supplement, 19184
 tree nut production and marketing research, 19120
 urban water planning, bibliography, 16147
 use of naturally impaired water, 27595
 utilization of health services, indices and correlates, 25563
 venereal disease, 18195
 vocational education, state instructional materials for trade and industrial occupations, 30153
 Water Resources Council, publication list, 22302
 water resource systems, analysis, 25300
 water reuse, 30311
 weather modification, precipitation inducement, 27593
 see also Library accessions—also names of departments, etc., issuing lists of publications.
 Bicentennial Administration, American Revolution, see American Revolution Bicentennial Administration.
 Bicentennial commemorative coinage and construction of new mint buildings, 30009
 Bicentennial Commission, American Revolution, see American Revolution Bicentennial Commission.
 Bicentennial era, American Revolution Bicentennial Commission newsletter, 18029
 Bicentennial of American Independence, see American Revolution Bicentennial.
 Bicentennial of American Revolution, see American Revolution Bicentennial.
 Bicycles and tricycles, bicycle speedometers from Japan, determination of injury to U.S. industry, Tariff Commission report, 16539
 Bidding, see Government contracts.
 Bielleki, Richard J., methane diffusion parameters for sized coal particles, 21952
 Biesterfeldt, R. C. finding and keeping a healthy house, 28929
 BIF, see Beef Improvement Federation.
 Big Bend National Park, general information, 20706
 Big Blue River and Valley:
 flood plain information, 21450
 floods in Manhattan, Kans., 21465
 Kansas-Nebraska compact negotiation, consent of Congress, law, 16861
 Big Cottonwood Creek:
 watershed, acquire, authorize—
 hearing, 21350
 report, 17167
 Big Cypress National Fresh Water Reserve, establish, hearings, 21244, 32084
 Big Cypress Swamp, see Everglades-Big Cypress National Recreation Area.
 Big Delta, Alaska, Salcha-Big Delta Area soil survey report, 31824

Big Lagoon, flood plain information, 21449
 Big Sandy River and Valley :
 flood plain information, 23160, 25077
 floods, 25065
 Boyd County, Ky., 21436
 Big Thicket National Park, establish, hear-
 ing, 26164
 Big Thompson River, Loveland, Colo., flood
 plain information, 16008
 Big Walnut Creek, flood plain information,
 Austin, Tex., 28698
 Big Wills Creek :
 Valley Head, Ala.—
 flood plain information, 28699
 Valley Head, Ala., floods, 28759
 Big Wood River :
 flood plain information, 17379
 floods, Bellevue, Halley, Idaho and
 vicinity, 20146
 Bighorn River, limnology, 26398
 Bigleaf maple, *see* Maple.
 Biello, Michael A., ice thickness observa-
 tions, North American arctic and subarctic,
 16006
 Bilingualism, *see* Language and languages.
 Bill, Robert C., fretting of secondary-seal-
 ing candidate materials in air tempera-
 tures to 816° C, 23683
 Bill Chappell Dinner Committee, annual re-
 port, 28279
 Biller, Cleveland J., are you overloading your
 skidder tires? 20309
 Biller, James C., HUD newsletter, 18472
 Billfishes, *see* Fish and fisheries.
 Bills, Nelson L., public investments and
 population changes in 3 rural Washington
 State towns, 20894
 Bills (congressional) :
 armed services hearing on miscellaneous
 bills, 15872, 19746, 21201
 digest, 18228
 history, 18145
 legislative proposals relating to emergency
 labor disputes pending before Labor and
 Public Welfare Committee, Senate,
 17283
 nongermane Senate amendments and other
 matters added to House-passed meas-
 ures, provide means for House rejection
 report, 19646
 Bills (Invoices), *see* Invoices.
 Billy Turner for U.S. Congress Committee,
 annual report, 24600
 Binary diffusion, *see* Diffusion.
 Binational science foundation, agreement
 between United States and Israel, 25733
 Binaural beat perception, *see* Perception.
 Binaural processing of speech in light air-
 craft, 22511
 Binding, *see* Public printing and binding.
 Bingham, Tayler H., beverage container
 problem, analysis and recommendations,
 20197
 Bingham, Utah :
 geologic studies of Bingham mining dis-
 trict, Utah (series), 26499
 igneous rocks in Bingham mining district,
 26499
 Binghamton, N.Y. :
 area wage survey, 20507
 census of population and housing, 1970,
 census tracts, errata, 19212
 Blinkin, Martin, all-volunteer Armed Forces,
 progress, problems and prospects, 28513
 Bins :
 bin fronts for potato storages, 16604
 pallet bins, farm building plans, 20921
 Bioassay, *see* Biological assay.
 Bioastronautics, data book, 21983
 Biocenology, state and prospects of bio-
 geocentological research, USSR study,
 20135
 Biochemistry :
 does cessation of negative stimulus cause
 activation of brain's emotionally posi-
 tive zone? USSR study, 20462

Biochemistry—Continued
 dynamics of pathomorphological changes
 in cerebrocortical motor region in re-
 sponse to single lysergamide (LSD)
 administration (electronic microscopic
 investigation), USSR study, 20461
 effect of pre-mortem stress, holding tem-
 peratures and freezing on biochemistry
 and quality of skipjack tuna, 22105
 inactivation of O-Alkyl-S Hexylmethyl-
 thiophosphonates by animal body tissues,
 USSR study, 23520
 methods of estimating half-life of biologi-
 cal activity of toxic chemicals in water,
 20780
 ten-State nutrition survey, 22569
 Bioelectric control, 31539
 Bioelectricity :
 bioelectric control, USSR study, 31539
 newly discovered properties of plants,
 USSR study, 31540
 Bioelectronics, determination of focal pro-
 jections of internal organs in brain of man
 through isolation of useful signals, 27646
 Bioenergetics, bioenergetic and hydrodynamic
 aspects of dolphin swimming, USSR study,
 27630
 Bioengineering :
 aspects of agricultural drainage, San
 Joaquin Valley, Calif., 21520-522, 25126,
 27498
 possibilities of using induced potentials in
 evaluating functional state of auditory
 analyzer, USSR study, 27629
 see also Biomedical engineering.
 Biographic register, 30643
 Biography :
 contemporary biographies from Large
 Soviet encyclopedia, USSR, 17598,
 23529, 25340, 26592
 eminent Americans, namesakes of Polaris
 submarine fleet, 21159
 Bioherms, fossils from Ordovician bioherm
 at Meiklejohn Peak, Nev., 21724
 Biological agents, *see* Biological products.
 Biological assay :
 biological problems in water pollution,
 20734
 effects of agricultural waste treatment on
 algal bioassay response, bio-engineering
 aspects of agricultural drainage, San
 Joaquin Valley, Calif., 21522
 plant analysis for nutrient assay of natural
 waters, 28796
 Biological chemistry, *see* Biochemistry.
 Biological control of insects, *see* Insects.
 Biological Effects Division, BRH/DBE series,
 17814, 25677, 26804, 27872
 Biological filters, *see* Filters and filtration.
 Biological laboratory technicians, jobs as
 agricultural and biological technicians,
 biological laboratory technicians, agricul-
 tural research technicians, examination
 announcement, 30882
 Biological products :
 produced in licensed establishments, vet-
 erinary biologics notice, during—
 calendar year 1972, list, 24163
 fiscal year 1972, list, 22400
 fiscal year 1973, list, 30741
 Biological removal of carbon and nitrogen
 compounds from coke plant wastes, 26415
 Biological sciences, *see* Biology.
 Biological systems, *see* Organisms.
 Biological warfare, Geneva protocol of 1925
 prohibiting, hearings, 15892
 Biology :
 aerospace medicine and biology, bibliog-
 raphy, 17958
 annotated bibliography on—
 biological effects of metals in aquatic
 environments, 26399
 Lake Ontario limnological and related
 studies, 27454
 biological deterioration of woods in tropi-
 cal environments, 31753

INDEX 1973

Biology—Continued

- biological effect of constant magnetic fields, USSR study, 21851
- biological problems in water pollution, 20734
- biological removal of colloidal matter from wastewater, 31276
- biological structures, methods and techniques of machine analysis, USSR study, 17607
- biology, ecology, and control of lodgepole needle miner, 25837
- cannery wastewater treatment with rotating biological contactor and extended aeration, 28797
- careers in medical technology and related biological sciences in Veterans Administration hospitals and clinics, 30681
- construction of an 8-mm time-lapse camera for biological research, 16087
- determination of molecular contamination performance for space chamber tests, 29285
- directory of information resources in United States, biological sciences, 16239
- electric and acoustic fields of fishes, use in commercial fishing, etc., USSR study, 31527
- estuarine and marine pollution, biological, bacteriological and physical aspects, bibliography, 20738
- external electric field recorded around animals, man, USSR study, 26583
- fisheries handbook of engineering requirements and biological criteria, 31247
- gas chromatography, method of determining harmful substances in air and in biological media, USSR study, 31529
- how to increase biological resources of the Caspian, USSR study, 23523
- interaction of ultrasound and biological tissues, 27872
- methods for collection and analysis of aquatic biological and microbiological samples, 29031
- professional careers in biological and agricultural sciences, amendment, 19278, 22611, 30874
- sludge processing for combined physical-chemical-biological sludges, 31281
- Soviet research on exobiology, USSR study, 21858
- state and prospects of biogeocenological research, USSR study, 29135
- ultra-sound cutting and fusing of biological tissue, USSR study, 26586
- see also* Aerobiology—Space biology.
- Biomedical Communications, Lister Hill National Center, *see* Lister Hill National Center for Biomedical Communications.
- Biomedical engineering, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21520-522

Biomedicine:

- biomedical and environmental research, AEC authorizing legislation, 1974, hearings, 28265
- biomedical equipment, global market survey, 30319
- biomedical science—
 - East European abstracts, 18238
 - USSR abstracts, 19034
- fellowships and traineeships to assure continued excellence of biomedical research, hearings, 27224
- human experimentation, 1973, quality of health care, ethical, social and legal implications of advances in biomedical research and technology, hearings, 28566, 30060
- National biomedical research fellowship, traineeship, and training act, report, 28350, 29997, 30965
- National Institutes of Health, international awards for biomedical research and research training, 29124

Biomedicine—Continued

- project SOAP, systems approach to biomedical research program management, case study, 27730
- research and development in progress, biomedical and environmental research program, 22490
- scientific directory and annual bibliography, 31703
- Biopotentials, four-channel miniature radio-telemetric system for transmitting brain biopotentials, USSR study, 21871
- Biordi, Joan C., chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-argon flames, 25500
- Biosphere:
 - ecological forecasting and optimizing of biosphere, USSR study, 30362
 - interaction between man and biosphere, USSR study, 29130
 - man and biosphere, USSR study, 25351
- Biota:
 - and chemistry of Piceance Creek, effects of chemical variations in aquatic environments, 28790
 - biota of freshwater ecosystems, identification manuals, 17437, 17441
 - freshwater ecosystems, 32273
 - freshwater unionacean clams (Mollusca: Pelecypoda) of North America, 31310
- Bipartisan Committee for Better Government, annual report, 22668
- Biphenyl:
 - final environmental impact statement, rule making on polychlorinated biphenyls, 23256
 - identification of polychlorinated biphenyls in presence of DDT-type compounds, 20186
 - PCB in water, bibliography, 26536
- Birch:
 - effects of various combinations of nitrogen, phosphorus, and potassium on paper birch seedling growth, 23941
 - paper birch seed production in Tanana Valley, Ala., 21657
 - response of paper birch seedling to nitrogen, phosphorus and potassium, 28940
 - ten-year growth of planted paper birch in old fields in Maine, 20308
- Birch, Herbert G., malnutrition, learning, and intelligence, conference paper, 32534
- Bird, Ronald:
 - housing conditions in areas served by Farmers Home Administration housing programs, 1970, by States, 15483
 - inadequate housing and poverty status of households, areas served by Farmers Home Administration programs, 1970, by States, 28022
- Birds:
 - analysis of population dynamics of selected avian species with special reference to changes during modern pesticide era, 22250
 - attracting and feeding birds, 17561
 - avian anatomy, integument, 24123
 - birds imported in 1970, into United States, 27900
 - Brazoria National Wildlife Refuge, list, 31829
 - convention with Japan for protection of birds and their environment, report, 24895
 - migratory, aerial surveys of waterfowl production, 1955-71, in North America, 20782
 - population ecology of migratory birds, symposium, 26850
 - protection of birds and their environment, agreement with Japan, 15800
 - rodenticides and mammal, bird and fish toxicants, EPA compendium of pesticides, 20731A, 25668

Birds—Continued
 seen on island in Cargados Carajos Shoals, 25695
 shooting at birds from aircraft, provide for effective enforcement of provisions to prohibit—
 law, 19432
 reports, 15680, 15857
Birmingham, Ala.:
 area wage survey, 31558
 phosphorous removal from Birmingham, Ala., calcareous iron ore, 25505
Birth:
 expectations—
 and fertility, June 1972, current population reports, 27032
 data, June 1971, current population survey, 15591
 prenatal-postnatal health needs and medical care of children, U.S., 26718
 state of birth, 1970, census of population, 25908
 test of birth registration completeness, 1964-68, census of population and housing, 25913
Birth certificates:
 birth certifications for alien children adopted by U.S. citizens, 23726
 where to write for birth and death records of U.S. citizens who were born or died outside of United States, 23726
Birth control:
 family planning digest (periodical), 18281
 five-year plan for family planning services and population research programs, progress report, 17286
 international demographic data directory, computerized information retrieval system for demographic and family planning data, 21067
 U.S. aid to population/family planning in Asia, 27209
Bishop, Edward W.:
 police traffic services, supervisory level training program—
 course guide, 27762
 instructor's lesson plans, 29347
 student study guide, 30496
Bishop for Congress, annual report, 22914
Bismuth:
 metal, mineral industry survey, quarterly, 18031
 properties of crystalline bismuth selenide and its use as Hall effect magnetometer, 23682
Big Thompson—Colorado Project, see Colorado—Big Thompson Project.
Bit (tools):
 drill bits, counterbores, and countersinks, Federal item identification guide, 24993
Bituminous coal, see Coal.
Bituminous materials, behavior of bituminous-stabilized pavement layers, study, 25095
Bjorkbom, John C.:
 effects of various combinations of nitrogen, phosphorus, and potassium on paper birch seedling growth, 28941
 response of paper birch seedlings to nitrogen, phosphorus, and potassium, 28940
 ten-year growth of planted paper birch in old fields in Maine, 20308
Black, Douglas F. B., Strodes Creek member (upper Ordovician), new map unit in Lexington Limestone of north-central Kentucky, 23331
Black Americans, see Negroes.
Black Canyon of Gunnison National Monument, Colo., general information, 23820
Black cherry, see Cherry.
Black flies, see Flies.
Black-footed ferrets, see Ferrets.
Black Hawk County Republican Central Committee, annual report, 22937

Black Hills:
 Black Hills, S. Dak., flood of June 1972, impacts and implications, 28928
 classification of deer habitat in ponderosa pine forest, 16091
 flood of June 9, 1972, description, etc., 23799
 judging ripeness of seeds in Black Hills ponderosa pine cones, 28950
 morphometry of 3 small watersheds, Black Hills, S. Dak., and some hydrologic implications, 21673
 preliminary report on geology and gold deposits of Rochford district, Black Hills, S. Dak., 26489
 specific gravity variation with height in Black Hills ponderosa pine, 17517
 water yield characteristics of three small watersheds in Black Hills of S. Dak., 28967
 Black lung disease, *see* Pneumoconiosis.
 Black news digest, 18033
 Black Panther Party, origin and development, 19776
 Black people (U.S.), *see* Negroes.
 Black presence in era of American Revolution, 31737
 Black Sea, west coast, lights and fog signals, list, 22160
 Black spruce, *see* Spruce.
 Black turpentine beetles, *see* Beetles.
 Black walnut, *see* Walnut.
 Black Warrior River, navigation conditions and filling and emptying system, New Bankhead Lock, Black Warrior River, Ala., hydraulic model investigation, 20176
 Blackbaling, professional and ethical aspects, 21849
 Blackbeard Island National Wildlife Refuge, addition of part to National Wilderness Preservation System as Blackwood Island Wilderness, proposal, 23000
Blackberries:
 growing, 19107
 thornless black berries for home garden, 26936
 Blackburn, Maurice, distribution of forage of skipjack tuna (*Euthynnus pelamis*) in eastern tropical Pacific, 22103
Blackfeet Indians, general information, 31448
Blackfiles, see Files.
Blackmon, B. G., nitrogen fertilization increases cottonwood growth on old-field soil, 21865
Blackout of sporting events on TV, 19957
Blackwell, Robert J.:
 addresses, etc.—
 Nov. 9, 1972, 21926
 Nov. 11, 1972, 20520
 Nov. 30, 1972, 21927
 Dec. 6, 1972, 21928
 Jan. 27, 1973, 23225
 Feb. 3, 1973, 23619
 Feb. 5, 1973, 23617
 Mar. 27, 1973, 25397
 nomination, hearing, 19954
Blades:
 analytical evaluation of controllable twist rotor performance and dynamic behavior, 15513
 design study of expendable main rotor blades, 28056
 expendable main rotor blade study, 28055
 field-replaceable rotor blade pocket study, final report, 28058
 flight test of advance-geometry boron blades, 28057
 investigation of dissipation of tip vortex of rotor blade by mass injection, 20990
 main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20586

INDEX 1973

- Blades—Continued
sectionalized main rotor blade advanced design study, 20987
- Blake, L. V., Fortran computer program to calculate range of pulse radar, 22170
- Blanco, Abel J., statistical prediction of impact displacement due to wind effect on unguided artillery rocket during powered flight, 20978
- Blank forms, *see* Forms, blanks, etc.
- Blankendaal, M., growing plants without soil for experimental use, 20916
- Blankennagel, Richard K., geohydrology of eastern part of Pahute Mesa, Nevada test site, Nye County, Nev., 20350, 30274
- Blanton, William E.:
preschool reading instruction, information of administrator, 23746
teacher's guide to preschool reading instruction, 29361
- Blasko, Donald P., oilfields and crude oil characteristics, Cook Inlet Basin, Alaska, 21946
- Blast, designing blast patterns using empirical formulas, comparison of calculated patterns with plans used in quarrying limestone and dolomite, with geologic considerations, 17679
see Air blasts.
- Blast effects, *see* Explosions.
- Blasting:
active list of permissible explosives and blasting devices approved before Dec. 31, 1972, 30414
breakage of floating ice by compressed gas blasting, 25067
fracturing in zone around blasthole, White Pine, Mich., 30430
measurement and reduction of noise from detonating cord used in quarry blasting, 17685
mine roof vibrations from underground blasts, Pilot Knob, Mo., 30437
rock damage from small charge blasting in granite, 30429
study of fragmentation from bench blasting in limestone at reduced scale, 23654
see also Explosives.
- Bleaching, ion exchange color and mineral removal from kraft bleach wastes, 31283
- Bledsoe, A. Stewart, Youth for Bledsoe, annual report, 24679
- Blecher, Theodore, labor law and practice in China (Taiwan), 20495
- Blenders:
mixers and blenders, consumer information, 32299
- Blennidae:
additions to revisions of blenniid fish genera Ecsenius and Entomacrodus, with description of 3 new species of Ecsenius, 16476
synopsis of Tribe Omobranchini with descriptions of 3 new genera and 2 new species, 20764
- Blessed are the real peacemakers (address), 20902
- Blickensderfer, Robert, testing of coal-cutter materials for incendivity and radiance of sparks, 21957
- Blight, property taxes and urban blight, 30039
- Blind:
aid to blind—
program, findings of 1970 AB study, demographic and program characteristics, 22035
social security amendments, material related to H.R. 1, 19966
blind and otherwise physically disabled in District of Columbia establish rights to participate in social and economic life—
law, 19445
report, 17200
equal rights of participation in public accommodations and transportation, provide hearing, 15887
- Blind—Continued
supplementary security income, report, 15860
vision impairment services teams, report, 17926
- Blinded Veterans Association:
legislative recommendations, 1973, hearings, 27367
recommendations, 1973, hearings, 26183
- Blindness, transient blindness due to combined effects of mevinphos and astropine, 30787
- Blindness Statistical Model Reporting Area, *see* Model Reporting Area for Blindness Statistics.
- Bliss, Susan, performance, 18753
- Bloch, Claude C., papers in Library of Congress, register, 32438
- Block and tackle, Federal item identification guide, 28595
- Block designs, tables of 2-associate-class partially balanced designs, 29307
- Blodgett, J. A., design and applications of holographic system for crystal-growth studies, 27852
- Blodgett, J. C.:
water temperatures of California streams—
Delta-Central Sierra subregion, 23394
San Francisco Bay subregion, 23395
- Blood:
blood level determinations of antiepileptic drugs, clinical value and methods, bibliography, 23770
calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia, studies, 16250
distribution of α -tocopherol in human plasma lipoproteins, 28060
evaluated atmospheric CO₂ on acid-base balance and red-cell electrolytes of FBM submarine crew members, effects, 20526
fibrinolysis, thrombolysis, and blood clotting, bibliography, 27759
investigation of alkaline phosphatase activity in persons dealing with electromagnetic emission generators of high, ultrahigh and superhigh frequency, USSR study, 30357
national heart, blood vessel, lung, and blood—
act, law, 19368
program—
blood diseases panel, report, 30489
blood resources panel, report, 30490
National Heart and Lung Advisory Council, report, 30488
panel chairman, report, 29342
program analysis, 29345, 30491-492
summary, 29341
- NHLI's blood resource studies—
regulation of Nation's blood resource, 29346
supply and use of Nation's blood resources, 30493
- ⁷⁵Se-binding by rat plasma proteins after injection of ⁷⁵SeO₃-, 31937
- simulated breathholding dives in dry and wet chambers on blood shifts into thorax, effect, 29190
- Blood banks, national heart, blood vessel, lung and blood program blood resources panel, report, 30490
- Blood pressure:
get your blood pressure taken before your number's up, 30510
modern management of hypertension, 26912
National conference on high blood pressure education, report of proceedings, 27760
renal disease and hypertension, Public Health Service cooperative study, conference proceedings, 16039
- Blood transfusions, *see* Blood.

- Blood vessels :
 national heart, blood vessel, lung and blood program—
 heart and blood vessel diseases panel, report, 29343
 National Heart and Lung Advisory Council, report, 30488
 panel chairman, report, 29342
 program analysis, 29345, 30491-492
 summary, 29341
- Blood vessels, *see also* Arteries.
- Bloomington, Ill., census of housing, 1970, metropolitan housing characteristics, 16731
- Blosser, E. K., develop operational system for evaluating and testing methods and instruments for determining effects of fuels and fuel additives on automobile emissions, 31277
- Blowing :
 effect of wing aspect ratio and flap span on aerodynamic characteristics of externally blown jet-flap STOL Model, 31629
 implicit finite-difference solution to viscous shock layer including effects of radiation and strong blowing, 20622
- BLS, *see* Labor Statistics Bureau.
- BLS staff papers, 29161
- Blue-collar workers :
 prevailing rate pay system, equitable fixing and adjusting rates of pay—law, 15650
 report, 19840
- Blue Earth County Republican Committee, annual report, 24392
- Bluegills, thermal effects on eggs, larvae, and juveniles of bluegill sunfish, 28792
- Bluejoy Research Natural Area, general information, 21610
- Blumenson, Martin, many faces of George S. Patton, jr., 19140
- Blumer, Max, interaction between marine organisms and oil pollution, 28793
- Blumkin, S., behavior of uranium isotopes in separation cascades, ideal cascades, 22480
- Blunt bodies, boundary-layer electron profiles for entry of a blunt slender body at high altitude, 31637
- Blyth, James E. :
 Lakes States pulpwood production dips to 4 million cords in 1971, 28938
 Missouri's primary forest products output and industries, 25234
 pulpwood production in Lake States, 1972, by county, 32322
- BNDD, *see* Narcotics and Dangerous Drugs Bureau.
- Board of Education, New York City, *see* New York, N.Y.
- Board of International Broadcasting, *see* International Broadcasting Board.
- Board of Trustees of Federal Hospital Insurance Trust Fund, annual report, 19547
- Boards (lumber), *see* Lumber.
- Boards of Education, *see* Educational boards and departments.
- Boards of trade, *see* Commodity exchanges.
- Boating, what's your move? Coast Guard Auxiliary education and safety program, 24277
- Boats :
 Army water transport units, field manual, 19163
 official Coast Guard recreational boating guide, 28225
 vessels illegally seized by foreign countries, expedite reimbursement for charge paid by owners to obtain release of crews—
 law, 19495
 report, 19682
- Boatswains, *see* Aviation boatswain's mate—Boatswain's mate.
- Boatswain's mates, 1 & C, Navy rate training manual, 23886
- Boatwright, Donald W., measurements of velocity components in wake of full-scale helicopter rotor in hover, 24184
- Bob Poage for Congress, Temple Committee, annual committee, 22711
- Bobwhites, *see* Quail.
- Bodega Head, Calif., petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
- Bodies (aerodynamics), *see* Aerodynamics.
- Bodies of revolution :
 simulated artificial gravity on human performance, effects, 21973
 stress, stability, and vibration of complex branched shells of revolution, analysis and user's manual for BOSOR4, 20588
 supersonic flow of hot gases around bodies, USSR study, 16177
- Body (human) *see* Anatomy.
- Body armor, *see* Armor.
- Body fluids, survey of analytical methods for determination of controlled drugs in body fluids, 30446
- Body measurements :—
 for sizing of girls' apparel, 30477
 selected body measurements of children 6-11 years, U.S., 27747
- Body weight :
 food and your weight, 30701
 height and weight of children, socioeconomic status, United States, 17749
 height and weight of youths 12-17 years, U.S., 23724
- Boehning, Richard A. : Boehning for Congress Committee, annual report, 24444
 Jasper County Richard Boehning for Congress, annual report, 22849
 Lake County Boehning for Congress Committee annual report, 22850
 Pulaski County Boehning for Congress Committee, annual report, 22871
 White County Boehning for Congress Committee, annual report, 22851
- Boehning for Congress Committee annual report, 24444
- Bogard, Vinson A., soil survey of Pontotoc County, Okla., 29511
- Bogges Durward H. controlled discharge from W. P. Franklin Dam as means of flushing saline water from fresh water reach of Caloosahatchee River Lee County, Fla., 23336
- Boggs, Hale M., aircraft accident, 25643
- Bohall Robert W., pricing performance in marketing fresh winter tomatoes, 19111
- Bohan, Joseph P. :
 selective withdrawal from man-made lakes, hydraulic laboratory investigation, 25102
 simultaneous, multiple-level release from stratified reservoirs, 23178
- Bohannon, Purita P., relief, 27116L
- Bohr effect in chronic hypercapnia, 30408
- Boilers :
 fabrication and test of space power boiler feed electromagnetic pumps, endurance and final performance tests, 23669
 steel power boilers, current industrial reports, 28167
- Bolling :
 compound type separation and characterization studies for 370° to 535° C boiling distillate of Gach Saran, Iran, crude oil, 30441
 extended hydrodynamic theory of peak and minimum pool boiling heat fluxes, 30451
 subcooled forced convection boiling of trichlorotrifluoroethane, 20592
see also Nucleate boiling.
- Bolling point, liquid metal boiling inception, 17699
- Rolling reactors, *see* Reactors (atomic).
- Bolling water reactors, *see* Reactors (atomic).
- Bolin, Jerome K. :
 alcohol & health notes, 25585
 alcohol health and research world, 29362
- Boise, F. Leigh social and economic characteristics of students, 15592

INDEX 1973

- Boise City, Idaho, area wage survey, 25383
Boise project mechanical equipment, Pacific Northwest region field review of maintenance, 31782
Boles, Patrick P. cost of operating trucks for livestock transportation, 22337
Bolivia :
 agricultural commodities, agreement, 24004, 31851
 background notes, 20784
 economic trends and their implications for United States, 17580
 military assistance, deposits under Foreign assistance act of 1971, agreement, 16508
Boller, K. H. :
 facility to evaluate three-dimensional performance of house modules, 26470
 FPL facility for evaluating strength-performance of walls exposed to fire, 32341
Bollworms :
 releases of *Bracon kirkpatricki* (Wilkinson) and *Chelonus blackburni* Cameron for pink bollworm control in Arizona, 28017
 tomato fruitworm, how to control it, 24132
Bol'shaya Sovetskaya Entsiklopediya :
 contemporary biographies from Large Soviet encyclopedia, 17598, 23529, 25340, 26592
Bolstad, D.D. procedures used for sampling fracture orientations in underground coal mine, 29237
Bolts (lumber) :
 volume of selected hardwood species suitable for turnery bolts in Maine, 31363
Bolts and nuts :
 studs installed with anaerobic thread locking compound, inspection procedure, military standard, 28612
 threaded studs, Federal item identification guide, 25009
Boltzmann equation, *see* Equations.
Bomar, Thomas, R., address, Oct. 10, 1972, 21547
Bombay, India summary of synoptic meteorological observations southwest Asian marine areas 23892
Bombing (aerial) :
 bombing as policy tool in Vietnam, effectiveness, 21337
 directing President and Secretary of Defense to furnish to House of Representatives information with respect to bombing in Vietnam, hearing, 17027
 North Vietnam—
 adverse reports, 26094-97
 hearings, 24340, 27190
 unauthorized bombing of military targets hearing, 21210-211
Bombs :
 Japan's World War II balloon bomb attacks on North America, 26692
 pressure bomb measures changes in moisture stress of birchleaf mountain-mahogany, 23290
BOMEX, *see* Barbados Oceanographic and Meteorological Experiment.
Bond, A. D. digital processing of radiographic images, 29252
Bonding, *see* Bonds of officers, etc.
Bonding of materials :
 electrical terminations, welded, brazed, bonded, 29666
 fiber bonding and tensile stress-strain properties of earlywood and latewood hand-sheets, 32339
 microelectronic interconnection bonding with ribbon wire, 29322
 scanning electron microscope examination of wire bonds from high-reliability devices, 32483
Bonds :
 alternative to tax-exempt State and local bonds, general tax reform, panel discussions, 26188
Bonds—Continued
 Federal guarantees for bonds issued by Washington Metropolitan Area Transit Authority, law, 16876
 open market money rates and bond prices, monthly, 18732
 sales for public school purposes, 25050
 yields on newly issued corporate bonds, 23245
 yields on recently offered corporate bonds, 28906
 see also Municipal bonds—
 Savings bonds—State bonds.
Bonds of officers, etc. :
 bonding of government officers and employees under act of Aug. 9, 1955, operations for fiscal year 1972, report, 17079
 elimination of surety bonds for Federal Personnel, law, 16863
 procurement reports prescribed, rescission, 24081
Bonds of United States :
 6¾ percent Treasury bonds, 24082
 7 percent Treasury bonds, 27955
 see also Government securities—Savings bonds.
Bone conduction vibrators, use of circum-aural earphones for attenuating ambient noise in bone conduction audiometry, 26645
Bones :
 beef carcass boning lines, operations, equipment, and layouts, 15475
 involvement of CO₂ and calcium stores in decompression sickness and bone necrosis, 30412
Bones, James T. :
 land clearing and wood use in Delaware, 31361
 primary wood-product industries of Pennsylvania, 23309
 timber industries of New Jersey and Delaware, 27542
Bonner, John L., State profiles, current status of public sector labor relations, 21899
Bonner, Robert S. :
 microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418
 technical manual on characteristics and operation of cloud condensation nuclei collection/detection/recording, instrument, 22416
Bonner County Republican Central Committee, annual report, 28275
Booneville Dam, fish passage report, 20100, 28683
Bonneville Power Administration : appropriations, 1974, hearings, 27186
 generation and sales statistics, 16683, 27002
 public works appropriations, 1974, 30989
 law, 32015
 report, 29993
Bonsal, growing bonsal, 30706
Bonus (military), combat-element enlistment bonus, extend report, 32052
Bookhart, T. W., data collection and correction on computer controlled dimensional inspection machine, 22503
Books :
 books on Indian history problems, and relationship to Federal Government, list, 31449
 catalog of copyright entries, 23078, 27373, 30072
 children, 1972, list, 26634
 Federal item identification guide, 28596
 Library of Congress—
 author catalog, 18675, 29187
 subject catalog, 18576, 29184
 new versions and reprints, 24968
 wide world of children's books, exhibition for International Book Year, annotated catalog, 29191
 see also Printing.

Books (talking). *see* Talking books.

Books, Kenneth G., paleomagnetism of some Lake Superior Keweenaw rocks, 17542

Booms:

- extended torsional tests of interlocked blastem satellite boom, 32476
- rapidly deployable oil containment boom for emergency harbor use, 27461
- shore termination for oil spill booms, 28800

Boone, J. E., properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260

Boone, R. S., compression wood formation and other characteristics of plantation-grown *Pinus caribae*, 28955

Boone County, Ky.:

- flood plain information, Ohio River, 28719
- floods, Ohio River, 28750

Boone County Republican Campaign Committee, annual report, 26033

Booth, Thurman W., Jr., attracting and feeding birds, 17561

Boots and shoes:

- footwear—
 - industry wage survey, 31564
 - men's and boys' leather, Hammond Shoe Corp., Worcester, Mass., Tariff Commission report, 25781
 - men's dress and casual, Bates Shoe Division, Wolverine World Wide, Inc., Webster, Mass., Tariff Commission report, 26897
 - production by manufacturers' selling price, 1972, current industrial reports, 29762
 - women's, Frank H. Pfeiffer Co., Inc., Worcester, Mass., Tariff Commission report, 16544
- footwear for men—
 - Koss Shoe Co., Inc., Auburn, Maine, Tariff Commission report, 30656
 - Stetson plant, South Weymouth, Mass. of Kayser-Roth Shoes Division of Kayser-Roth Corp., New York, N.Y., Tariff Commission report, 30657
 - Winchell Shoe Manufacturing Co., Natick, Mass., Tariff Commission report, 32590
- footwear for men and women—
 - Freeport, Me., plant of Kayser-Roth Shoes Division of Kayser-Roth Corp., New York, N.Y., Tariff Commission report, 29552
 - Hubbard Shoe Co., Inc., Rochester, N.H., Tariff Commission report, 32589
- footwear for women—
 - Regina Footwear, Inc., Brooklyn, N.Y., Tariff Commission report, 30658
 - Rose-Bro. Shoe Co., Inc., Boston, Mass., Tariff Commission report, 25779
 - Wise Shoe Company, Inc., Exeter, N.H., report to President on worker investigation, Tariff Commission report, 24062
- footwear for women and children, Consolidated National Shoe Corp., Norwood, Mass., Tariff Commission report, 25778
- footwear for women and protective footwear for men, women, boys, and infants—
 - and parts of such footwear, BGS Shoe Corp., Manchester, N.H., Tariff Commission report, 32591
 - BGS Shoe Corp., Manchester, N.H., Tariff Commission report, 32592
- shoe materials, Federal item identification guide, 25008
- shoes and slippers, current industrial reports, 16778, 18194
- temporary suspension of duty on certain copying shoe lathes, report, 15686
- women's casual shoes, Wilson Shoe Corp., Shamokin, Pa., Tariff Commission report, 20834

Boots and shoes—Continued

- women's dress and casual shoes—
 - Bernie Shoe Co., Haverhill, Mass., report to President on firm investigation and worker investigation, Tariff Commission report, 24072
 - Dainty Maid Footwear, Inc., Gettysburg, Pa., Tariff Commission report, 24073
 - Dover Shoe Manufacturing Co., Somersworth, N.H., Tariff Commission report, 25786
 - Genesco, Inc., Nashville, Tenn., Tariff Commission report, 20835
 - Johnson Shoes, Inc., Manchester, N.H., Tariff Commission report, 29557
 - Welpro, Inc., Seabrook, N.H., Tariff Commission report, 20836
- women's dress shoes—
 - Andal Shoes, Inc., Haverhill, Mass., Tariff Commission report, 25787
 - Erving Shoe Co., Inc., Lowell, Mass., Tariff Commission report, 32599
 - Shapiro Brothers Shoe Co., Inc., Auburn, Maine, Tariff Commission report, 27952
- Borcher, Sidney D.:
 - automotive mechanics, occupational performance survey, 29357
 - business data processing occupational performance survey, 31693
 - secretarial science, occupational performance survey, 29358
- Border Patrol, Immigration and Naturalization Service, origin and work, 30300
- Boreholes, rotary drilling and coring in permafrost, deep core drilling, core analysis and bore hole thermometry at Cape Thompson, Alaska, 21440, 28689
- Boring, improved adapter for increment borer ratchet assembly, 25224
- Boring insects, old house borer, description, control, 19108
- Boring machinery, *see* Drills (tools).
- Boris, Jay P., proceedings, 4th conference on numerical simulation of plasmas, 25659
- Boron:
 - abstracts of papers from international symposium on boron, 21842
 - flight test of advanced-geometry boron blades, 28057
 - minerals yearbook chapter, 16315
- Boron carbide, oxidation resistance of selected mechanical carbons, at 650° C. in dry flowing air, 32478
- Borosilicate glass, *see* Glass.
- Borrego Mountain, earthquake of Apr. 9, 1968, 23365
- Borrowing, *see* Loans.
- Borsky, Paul N., annoyance judgments of aircraft with and without acoustically treated nacelles, 32455
- Bosselman, Fred, taking issue, analysis of constitutional limits of land use control, 31174
- Boston, Mass.:
 - adequacy of Federal response to housing needs of older Americans, hearings, 21313
 - area wage survey, 23594
 - census of housing, 1970, components of inventory change, 29690
 - issues of concern to Puerto Ricans in Boston and Springfield, 22584
- Boston Tea Party, 8-cent bicentennial series (poster), 27958
- Botanic Garden:
 - appropriations, 1973, legislative, law, 16873
 - appropriations, 1974, legislative—
 - hearings, 31129
 - report, 29901
- Botany:
 - introduction to botanical type specimen register, 30631

INDEX 1973

- Botany—Continued
 Smithsonian contributions to botany, 25696, 26822, 29488, 30631
- Botetourt County Republican Committee, annual report, 24422
- Botswana:
 background notes, 23989
 basic data on economy, errata, 22631
 economic trends and their implications for United States, 29098
- Bottles:
 beverage container problem, analysis and recommendations, 20197
 bottle gardening, 20927
 Federal item identification guide, 17325
 Oregon, bottle bill, first 6 months, 31309
 plastics, current industrial reports, 18194, 29769
 wooden beverage cases cause little damage to bottle caps, 32324
- Bottom-water temperatures on Continental Shelf, Nova Scotia to New Jersey, 32510
- Botulism, mechanisms of paradoxical sensitivity of botulin study, USSR study, 21859
- Bouguer gravity, *see* Gravity.
- Boulder, Colo., special flood hazard information report, Boulder Creek, 20164
- Boulder Canyon project:
 electrical equipment, region 3, field review of operation and maintenance, 31785
 use of Federal irrigation projects, water use research study, Boulder Canyon project, All-American Canal System, Coachella Division, Calif., reports, 23944-945
- Boulder County, Colo.:
 flood plain information—
 Lower St. Vrain Creek, 17386
 Upper St. Vrain Creek, 21457
- Boulder County Republican Central Committee, annual report, 24795
- Boulder Creek, special flood hazard information report, 20164
- Boundaries:
 Alaska territorial boundaries, provisional charts delimiting, hearings, 15882
 American-Mexican boundary treaty act—
 facilitate compliance—
 law, 19478
 report, 15702
 report, 19921
 international boundary study, 17862-866, 22261, 23996, 29532-534, 30649-650, 31846, 32575
 large groups in boundary waters canoe area, their numbers, characteristics, and impact, 17515
 Maryland-Virginia seaward boundary agreements, consent of Congress—
 law, 19492
 reports, 16983, 19936
 1972 boundary and annexation survey, 29786
 North Carolina-Virginia Seaward boundary agreement, consent of Congress—
 law, 19513
 reports, 16984, 19931
 studies:
 Congo-Zaire boundary study, 17865
 Dahomey-Togo, 17862
 Ghana-Ivory Coast, 30650
 Ghana-Togo, 17864
 Guinea-Liberia, 23996
 Guinea-Sierra Leone, 30649
 Kenya-Somalia, 29533
 Kenya-Uganda, 32575
 Liberia-Sierra Leone, 22261
 Mozambique-South Africa, 29532
 Mozambique-Swaziland, 29534
 South Africa-South-West Africa (Namibia), 17863
 South Africa-Swaziland, 31846
 Togo-Upper Volta, 17866
- Boundaries (physics):
 study of amplitude of electromagnetic wave reflected from boundary of anisotropic plasma, 22450
- Boundary layer:
 analytical and experimental investigation of circulation control by means of turbulent Coanda jet, 17701
 boundary-layer electron profiles for entry of a blunt slender body at high altitude, 31637
 derivation of non-Boussinesq set of equations for atmospheric shear layer, 32256
 development of probe for measuring 3-dimensional boundary layers, 16653
 growth and decay of turbulent mixing in planetary boundary layer, 32252
 influence of heat exchange of freezing chemical reactions in non-equilibrium laminar boundary, USSR study, 16180
 investigation of flow fields within large-scale hypersonic inlet models, 29270
 model of wind shear and turbulence in surface boundary layer, 31613
 investigation of suction system and boundary-layer characteristics on high-lift, BLC L-19 test aircraft, 30760
 radiative coupled viscous flow with massive blowing, 26680
 some problems of calculation of 3-dimensional boundary-layer flows on general configurations, 31611
 turbulent—
 fluid friction of rotating disks, 31607
 immersed wall jet of air on burning graphite surface, USSR study, 16182
 real-gas turbulent boundary layers with variable edge entropy, integral method for calculation, errata, 21986
 unsteady thermal boundary layers, analysis, 20618
 variable property turbulent boundary layers by means of modified compressibility transformation, analysis, 21976
- Boundary value problems:
 electromagnetic radiation from simple sources in presence of homogeneous dielectric sphere, 29251
 how to use two computational strategies to solve simple system, identification problems, 25212
- Bourgea, Ron, rehabilitation record, 18858
- Bourne, Charles T., training device developments, 18969
- Bouthillet, Lorraine, mental health digest (periodical), 18619
- Rove, Beverly A., health services for migrant children, 21423
- Bovine mastitis, *see* Mastitis.
- Bow, Frank T., memorial services, 28253
- Bow and arrow, *see* Archery.
- Bowen, Charles W., tradeoff study for extended-life helicopter transmission, 26977
- Bower, Eli M., teachers talk about their feelings, 30509
- Bowers, Jack L., nomination, hearing, 28517
- Bowie County Republic Party, annual report, 22848
- Bowles, Gladys K., poverty dimensions of rural-to-urban migration, statistical report, 24142
- Box cars, shortage, alleviate, hearings, 24909
- Box Elder County, Utah, feasibility of cloud seeding to enhance water resources in Cassia and Oneida Counties, Idaho, and Box Elder County, Utah, 22208
- Boxcars, *see* Box cars.
- Boxes:
 closing, sealing and reinforcing fiberboard shipping boxes, general methods for, 16061
 Federal item identification guide, 28597
- Boyd County, Ky.:
 Big Sandy River floods, 21436
 flood plain information, Big Sandy River, 23160

- Boyd County Democratic Campaign Committee, annual report, 24782
 Boyd County Labor Committee for Re-election of Carl Perkins, annual report, 24788
 Boyd County Republican Campaign Committee, annual report, 24781-812
 Boyer, William D., brown-spot resistance in natural stands of longleaf pine seedlings, 20302
 Boyes for Congress, political committee, annual report, 22954
 Boyle, Stanley E., economic report, conglomerate merger performances, empirical analysis of 9 corporations, staff report, 28913
 Bozzelli, Mike :
 copper—
 annual industry report, 31994
 quarterly industry report, 18165
 Brachiopods :
 Eocene brachiopods from Eua, Tonga, 25256
 new Brachiopoda from Indian Ocean, 24960
 Permian brachiopods of west Texas, 23959
 Vema's Brachiopoda (recent), 23961
 Brackets, Federal item identification guide, 30096
 Brackish water, *see* Water.
 Bracnoidae, releases of Bracn kirkpatricki (Wilkinson) and Chelonus blackburni Cameron for pink bollworm control in Arizona, 28017
 Braden, Gale, application of commercial aircraft accident investigation techniques to railroad derailment, 30785
 Bradford, Henry W., foreign trade of co-operatives, statistical supplement, 25136
 Bradley, Dennis P. :
 factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length aspen, 32321
 improve forest inventory with access data, measure transport distance and cost to market, 25226
 Bradley, J. Roy, Jr., evaluation of high-level tower cab, 24052
 Bradley, James T., climate of Florida, 21483
 Bradleya problem, with descriptions of two new psychrospheric Ostracode genera, agrenocythere and poseldonamicus (Ostracoda : Crustacea), 20762
 Bradshaw Mountains, precambrian geology of northern Bradshaw Mountains, Yavapai County, Ariz., 20343
 Brady, B. T., strengthening of fractured rock pillars by use of small radial reinforcement pressures, 30432
 Brady, John J., U.S. heroin problem and Southeast Asia, 27210
 Brady, Lawrence L. :
 experimental study of heavy mineral segregation under alluvial-flow conditions, 20349
 sediment transport in alluvial channels (series), 27564
 Bragg, Fort, economic feasibility study of Fayetteville, N.C., treating Fort Bragg's waste water, 25074
 Braid, high density broad cable shields, fy 72-4, quarterly report, 26987
 Brain :
 brain death, bibliography, 2208L
 certain problems of surgical aid in crainio-cerebral trauma, USSR study, 17639
 determination of focal projections of internal organs in brain of man through isolation of useful signals, 27646
 discovering yourself in brain age, journey to universe of inner space, 26754
 does cessation of negative stimulus cause activation of brain's emotionally positive zone? USSR study, 20462
 effects of altitude on Cebus apella monkey, 16658
 Brain—Continued
 effects of LSD, chlorpormazine and organo-phosphorous cholinesterase inhibitors on brain, USSR study 21860
 four-channel miniature radiotelemetric system for transmitting brain biopotentials, USSR study, 21871
 method of implanting permanent diagnostic electrodes in corpus amygdaloideum of human brain, USSR study, 27637
 self-regulation of the brain, USSR study, 21875
 significance of cholinergic reactions in brain neuron pathology brought on by anticholinesterase intoxication, USSR study, 20458
 subtle changes in brain functions produced by single doses of mevinphos (phosdrin), 30786
 Brakes :
 aircraft tire behavior during high-speed operations in soil, 16350
 commercial motor vehicle braking, special study, 30573
 comparison of braking performance for 1973 passenger cars and motorcycles, 25581
 develop acceleration and brake monitor system, 24053
 experimental investigation of accelerometer-controlled automatic braking system, 20607
 power brake requirements, United States safety appliance standards, 30617
 Bramer, Henry C., economic feasibility of minimum industrial waste load discharge requirements, 28841
 Branch County Republican Committee, Michigan annual report, 22705
 Branchiobdellidae, *see* Annelids.
 Branchiura, *see* Copepods.
 Branded merchandise, brand names identical to products purchased and tested for use by Federal Government, 20278, 23246
 Branson, Byron M., fate of radioactive contaminants in water, 20735
 Brantley, F. E., iron and steel, 25449
 Brantley project :
 Pecos River basin, N. Mex., construct, operate and maintain—
 hearing, 17061
 law, 19444
 reports, 15712, 19643
 Brashier, Clyde K., effect of silt and silt removal in prairie lake, 31269
 Brasington, Clayton F., Jr., beef carcass boning lines, operations, equipment, and layouts, 15475
 Brass, brass or bronze ingot production plants, background information for proposed new source performance standards, 29643, 30722
 Brass mills, inventories of shapes, current industrial reports, 16765, 18194-194A
 Brass wind instruments, *see* Wind instruments.
 Brassieres, girdles, and allied garments, current industrial reports, 16756, 29756
 Brathwaite, Yvonne, Citizens for Brathwaite-O'Neill, annual report, 24528
 Brathwaite, Yvonne, Committee to Elect, *see* Elect Yvonne Brathwaite Committee.
 Brathwaite, Yvonne, Friends of, *see* Friends of Yvonne Brathwaite.
 Brattleboro, Vt. :
 flood plain information, 17381
 floods, how to avoid damage, 20135
 Brauner, Gerhard :
 subsidence due to underground mining—
 ground movements and mining damage, 25415
 theory and practices in predicting surface deformation, 25414

INDEX 1973

Brayton cycle:

- effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, sinusoidal and random vibration, 29250
- foil journal bearings for Brayton rotating unit, design, fabrication and performance, 31604
- thermal effects on clearance and stiffness of foil journal bearings for Brayton cycle turboalternator, 20587

Brazil:

- atomic energy, cooperation for civil uses—agreement, 17903
- application of safeguards by IAEA, agreement, 17904
- economic trends and their implications for United States, 17571, 27608
- Eugenheiro Avidos Dam, examination and proposed rehabilitation, 23920
- fisheries, shrimp, agreement, 31857
- foreign trade regulations, 15618
- military assistance, deposits under Foreign assistance act of 1971, agreement, 16533
- printed vinyl films from Brazil and Argentina, Tariff Commission report, 32594
- records of Dept. of State, microfilm, pamphlet describing, 20627
- remote sensing for earth—resources, agreement, 31855
- surveys, agreement, 27916
- shrimp, agreement—
hearing, 19972
message from the President, 19811
report, 17126
- trade in cotton textiles, agreement, 16524
- U.S. foreign aid to education, does Brazil need it? GAO report, 30267
- Brazing, *see* Solder and soldering.
- Brazoria County, Tex., Clerk Creek, special flood hazard information, 28771
- Brazoria National Wildlife Refuge, birds, list, 31829
- Brazos County Republican Party, annual report, 22826
- Brazos River and Valley
origin and management of salt springs and seeps in upper Brazos River basin, Tex. (series), 30283
- recognition of natural brine by electrical soundings near Salt Fork of Brazos River, Kent and Stonewall Counties, Tex., 30283
- salinity control, interim report for water supply and water quality control study, Brazos River basin, Tex., 28840
- Breach of contract, persons or firms currently debarred for violations of various public contracts acts incorporating labor standards provisions, 18146
- Breakage of floating ice by compressed gas blasting, 25067
- Breakthrough Operation, *see* Operation Breakthrough.
- Breathholding, *see* Respiration.
- Breathing, *see* Respiration.
- Breathing apparatus, *see* Respiratory equipment.
- Breccia, geochemical characteristics of mineralized breccia pipes in Red Mountain District, San Juan Mountains, Colo., 27558
- Breeder reactors, *see* Reactors (atomic).
- Breeding, *see* Genetics—also names or classes of plants or animals.
- Brehm, William K., nomination, hearing, 31133
- Bremer Republican Women, annual report, 24731
- Bremsstrahlung radiation:
Bremsstrahlung of relativistic plasma, 21007
plasma Bremsstrahlung from relativistic particles in turbulent plasma, 20992
- Brennan, J. A., evaluation of several cryogenic turbine flowmeters, 20644

Brennan, Peter J.:

- addresses, etc.—
Feb. 28, 1973, 25376
Apr. 4, 1973, 29159
Apr. 10, 1973, 29156
May 1, 1973, 29157
June 6, 1973, 29158
July 24, 1973, 31554
July 26, 1973, 31553
July 27, 1973, 32426
July 30, 1973, 32422
Aug. 3, 1973, 32423
Aug. 7, 1973, 32421
Aug. 15, 1973, 32425, 32427
Sept. 6, 1973, 32424
Sept. 11, 1973, 32429
Sept. 12, 1973, 32428
Sept. 14, 1973, 32420
nomination, hearings, 24950
- Brent, Floyd V., soil survey of Oktibbeha County, Miss., 31823
- Bresler, Ralph, basic data on economy of Chad, 25974
- Bresler, Sidney A., economics of ion exchange technology applied to municipal water quality improvement, 16141
- Bretton Woods Agreement, *see* International Bank for Reconstruction and Development—International Monetary Fund.
- Brevoortia, *see* Menhaden.
- Brevoortia tyrannus, *see* Menhaden.
- Brewe, David E., performance of 40-millimeter-bore ball bearings with lead- and lead-alloy-plated retainers in liquid hydrogen at 1.2 million DN, 20612
- Brewer, Edward O., soil survey of Alleghany County, N.C., 26839
- Brewer Spruce Research Natural Area, general information, 21611
- Brezhnev, Leonid I., Washington Summit, General Secretary Brezhnev's visit to United States, June 18–25, 1973, 32573
- BRH, *see* Radiological Health Bureau.
- Brice, James, measurement of lateral erosion at proposed river crossing sites on Alaska pipeline, 23352
- Brickman, William, educational reform and renewal in contemporary Spain, 23139
- Bricks, waste glass as flux for brick clays, 21955
- Bridge circuits, *see* Circuits.
- Bridgeman, W. C., reserve marine, 18866.
- Bridgeport, Conn., Gothic ornament, Harrah-Wheeler House, 20767
- Bridgeport Indian Colony, lands in Mono County, Calif., declared held in trust by United States, report, 17169
- Bridges:
bridges over navigable waters of United States, Gulf and Mississippi, 24272
condition of 12-year-old glued-laminated stringer bridge with nailed-laminated deck, decay hazard aspects, 25205
- International bridge act—
law, 16922
reports, 15701, 17147
- military fixed bridges, technical manual, 20986
- State of Iowa, City of Clinton Bridge Commission—
law, 19480
report, 15852
see also names of rivers, etc.
- Brief highlights of major Federal laws and order on sex discrimination, 22303
- Brief history of 12th Marines, 23614
- Briggs, Joseph, military engineering applications of commercial explosives, introduction, 30168
- Briggs, Ted C.:
compressibility data for helium, nitrogen, and helium-nitrogen mixtures at 0°, 25° and 50° at pressures to 1,000 atmospheres, 16331
mineral industry of Morocco, 16321

- Bright, G. R.:
preventive maintenance programs, 22504
some aspects of numerical control maintenance and training, 22505
- Brightness of sky, see *Sky*.
- Brighton, N.Y.:
Red Creek and Genesee River flood plain information, 17390
floods, 20150
- Brigantine National Wildlife Refuge, addition to part of National Wilderness Preservation System as Brigantine Wilderness, proposal, 23000
- Brignall, James T., Brignall for Congress, political committee, annual report, 24653
- Brignall for Congress, political committee, annual report, 24653
- Brimmer, Andrew F.:
addresses, etc.,—
Apr. 24, 1972, 21571
Aug. 25, 1972, 21570
Sept. 7, 1972, 21591
Oct. 19, 1972, 21589
Nov. 10, 1972, 21569
Dec. 28, 1972, 25188
Mar. 2, 1973, 25182
Apr. 2, 1973, 28886
July 23, 1973, 30227
- Brinegar, Claude S., nomination, hearings, 26262
- Brines:
concentration of brines by spray evaporation, 16140
corrosion resistance of metals in hot brines, literature review, 32448
recognition of natural brine by electrical soundings near Salt Fork of Brazos River, Kent and Stonewall Counties, Tex., 30283
recondition and reuse of organically contaminated waste sodium chloride brines, 30182
rehabilitation of brine-polluted aquifer, 21495
- Brinkhurst, Ralph O., role of sludge worms in eutrophication, 32249
- Bristol Republican Finance Committee, annual report, 22695
- British Columbia, sailing directions (enroute), 28628
- British Commonwealth, see Great Britain.
- British Garrison of St. Augustine, 1763-84, Castillo de San Marcos National Monument, Fla., 27811
- British Honduras:
background notes, 23986
mineral industry, minerals yearbook chapter, 25429
prevention of foot-and-mouth disease and rinderpest, agreement, 20808
- British Isles, see Great Britain.
- British railways, advance passenger service technology, 15879
- British siege of St. Augustine in 1740, Castillo de San Marcos National Monument, Fla., 27812
- Brittle materials, crack propagation studies, 31756
- Britton, Joseph C., two new species and new subgenus of Lucinidae (Mollusca: Bivalvia), with notes on certain aspects of Lucinid phylogeny, 20763
- Broaching machines, industrial plant equipment handbook, 23090
- Broad band, see Bandwidth.
- Broadcasting, see Radio broadcasting—Television.
- Broadwoven goods, see Textiles.
- Brobst, Donald A.:
United States mineral resources, 29027
X-ray mineralogy of Parachute Creek member, Green River formation, in northern Piceance Creek basin, Colo., 30282
- Broderick, Grace N.:
mineral industry of—
Arkansas, 16266, 30422
- Broderick, Grace N.—Continued
mineral industry of—continued
Austria, 16268, 25456
Michigan, 29221
- Brodie, Donald C., institutional pharmacy practice in the 1970's, 16366
- Brodrick, Harold J., verification of operational SIRS B temperature retrievals, 23806
- Brogdon, N. J., jr., Grays Harbor estuary, Wash., south jetty study, hydraulic model investigation, 17408
- Brollers, see Chickens—Poultry.
- Broken Bow, Nebr., Mud Creek, special flood hazard information report, 28776
- Brokerage:
fixed brokerage rates, prohibit, hearings, 27306
quality service in brokerage (address), 29475
real estate brokerage, urban business profile, 21416
- Brokers:
broker-dealer and investment adviser directory, 29463
credit regulations—
amendments, 21580-581, 26447
supplements, 21582-583, 30223
minority businessmen, VA invites you to get share of multimillion dollar business, 29584
- Bromides, see Methyl bromides.
- Bromine, dissociation rate of bromine diatomics in argon heat bath, 23685
- Bromotrifluoromethane, chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-argon flames, 25500
- Bronx CDU Candidates Committee, annual report, 22955
- Bronx Sentencing Project of Vera Institute of Justice, 21894
- Bronze:
brass or bronze ingot production plants, background information for proposed new source performance standards, 29643, 30722
electrolytic preparation and evaluation of tungsten bronzes, 20969
- Brooke County, W.Va., flood plain information, Ohio River, 20123
- Brookings County, S.Dak., flood plain information, Brookings, S.Dak., Deer Creek, 32206
- Brooks, Frank P., gastroenterology abstracts and citations, 18397
- Brooks, Parkman T., improving nickel extraction from oxide nickel ores, 21959
- Brooks County, W. Va., floods, 17398
- Brooks Range, Pennsylvanian carbonates, paleoecology, and rugose colonial corals, north flank, eastern Brooks Range, Arctic Alaska, 21733
- Broome County Republican Committee, annual report, 24756
- Brooms, mops, sponges, and squeegees, Federal item identification guide, 23093
- Brotherhood of Railway Carmen of United States and Canada, emergency board report, investigate and dispute between Port Authority Trans-Hudson Corporation and certain of its employees represented by Brotherhood Railway Carmen of United States and Canada, 25062
- Brou, Claire E., relief, 16854
- Broward County Democratic Executive Committee, annual report, 24717
- Brown, B. F., stress-corrosion cracking in high strength steels and in titanium and aluminum alloys, 16453
- Brown, Bernice G.:
administrators of nursing and personal care homes—
education and training, June-Aug. 1969, United States, 27748
work experience, 26720

INDEX 1973

- Brown, Bertram S., when your child goes off to school, 26748
- Brown, Brinton C.:
cement, 16258, 25438
mineral industry of—
Indiana, 16280
Iowa, 16282, 32450
Philippines, 16303
- Brown, D. W., Water Resources Division bulletin of training, July 1972–June 1973, 23391
- Brown, Daniel G., behavior modification in child and school mental health, annotated bibliography on applications with parents and teachers, 23750
- Brown, Dolores A., housing units authorized for demolition in permit-issuing places, 16751
- Brown, Don N.:
design of landing-mat-surfaced airfields for operation of C-5A aircrafts, 30167
lateral distribution of aircraft traffic, 31260
- Brown, Edward D., arms control in hydro-space, legal aspects, 17327
- Brown, George W., controlling thermal pollution in small streams, 17423
- Brown, Harley P., aquatic dryopoid beetles (Coleoptera) of United States 17438
- Brown James M., effect of overstory removal upon surface wind in black spruce bog, 16077
- Brown, John S., model driven question-answering system for CAI environment, 28028
- Brown, Philip M., structural and stratigraphic framework and spatial distribution of permeability of Atlantic Coastal Plain, North Carolina to New York, 23367
- Brown, R. C., Coast Guard reservist, 18124
- Brown R. D., Jr., geologic and seismologic aspects of Managua, Nicaragua, earthquakes of Dec. 23, 1972, 29028
- Brown, Rexford G., understanding imaginative language, theme 1, national assessment of literature, report, 26368
- Brown, Richard A., for Congress, *see* Richard A. Brown for Congress.
- Brown, Robert O., effect of personal treatment of Navy subjects on hearing discrimination task, 20528
- Brown, William T., soil survey, Obion County, Tenn., 25712
- Brown County, Wis.:
flood plain information, East River and tributaries, 17383
floods, how to avoid damage, 20136
- Brown County Republican Central Committee, annual report, 22842, 24393
- Brown County Republican Executive Committee, annual report, 22737
- Brown spot, brown-spot resistance in natural stands of longleaf pine seedlings, 20302
- Brown stain, ventilation of mechanical refrigerator cars to prevent carbon dioxide accumulation and brown stain in lettuce loads, 27994
- Browne, Margaret C., supervising parapprofessionals, 20237
- Browne, Secor D.:
addresses, etc.—
Aug. 16, 1972, 21077
Sept. 12, 1972, 21076
Oct. 3, 1972, 21079
Oct. 5, 1972, 21078
Dec. 19, 1972, 30872
Jan. 18, 1973, 22576
- Browning, James S., mica beneficiation, 23635
- Brownrigg, J. T., identification of polychlorinated biphenyls in presence of DDT-type compounds, 20186
- Browns Park, general information, 23477
- Brucellosis, swine, how to eradicate it and validate herd and area, 15480
- Bruchidae, *see* Beetles.
- Brummet, R. Lee, cost accounting for small manufacturers, 16472
- Brunel:
accessions list, Library of Congress, Djakarta, 17946
mineral industry, minerals yearbook chapter, 25428
- Bruns, V. F.:
response of several crops to 6 herbicides in irrigation water, 20937
studies on control of reed canarygrass along irrigation systems, 26929
- Brunson, E. Evan, improving water quality management planning in nonmetropolitan areas, 28830
- Brunswick, Ga., harbor plans for reduction of shoaling, hydraulic model investigation, 20175
- Brunthaver, Carroll G., address, Nov. 8, 1972, 25823
- Brush, Francis W., Brush for Congress Committee, annual report, 26035
- Brush for Congress Committee, annual report, 26035
- Brushes (electrical machinery):
electrical contact brush, holder, Federal item identification guide, 26321
- Bryan, D. E., releases of *Bracon kirkpatricki* (Wilkinson) and *Chelonus blackburni* Cameron for pink bollworm control in Arizona, 28017
- Eryce Canyon National Park, Utah, general information, 31729
- Bubble chambers, BESM-4 and SDS-1604A computer videodisplay and its application in processing spark and bubble-chamber photographs, USSR study, 25364
- Buchanan, T. J., analysis of water level data for Everglades National Park, Fla., 20340
- Buchanan County Central Committee of Iowa, annual report, 24443
- Bucher, Jeffrey M.:
remarks—
Oct. 28, 1972, 21588
Jan. 25, 1973, 26449
Apr. 2, 1973, 28905
May 18, 1973, 28901
June 4, 1973, 28888
June 23, 1973, 30226
- Buchholtz, Fredric, home delivered meals for older Americans, demonstration, final report and guidelines, 27977
- Buckeye, American woods, 25202
- Buckley, Donald H.:
auger analysis of oxygen and sulfur interactions with various metals and effect of sliding on these interactions, 30461
friction-induced surface activity of some hydrocarbons with clean and oxide-covered iron, 26690
oxygen and sulfur interactions with clean iron surface and effect of rubbing contact on these interactions, 29290
- Buckley for Congress Committee, *see* John Buckley for Congress Committee.
- Buckling, *see* Strains and stresses.
- Budd, Edward C., size distribution of family personal income, methodology and estimates for 1964, 31213
- Budget Control, Joint Study Committee:
appropriations, authorization, report, 26209
hearings, 27092
report, 26071
- Budget of United States:
appropriations, budget estimates, etc., statements, 1972, 19802
Budget and accounting act of 1921, amend, hearing, 27331
budgetary and fiscal information needs of Congress, GAO report, 20325
budgetary cutbacks, hearings, 28423
budgetary reserves, report of impoundments, etc., 24890
consumer related budget cuts, hearings, 32021

- Budget of United States—Continued
estimates, submitted by the President, 92d Congress, 2d session, 23030
Federal fiscal policy, 31339
Federal R&D funding by function, analysis, 23844
Federal spending, is it out of control? (address), 28979
improving congressional control—
compendium of materials, 24930
hearings, 27092, 27332, 30035
over budgetary outlay and receipts totals, 24302, 26071
improving fiscal and budgetary information for Congress, report, 16973
major steps in budget process, 23612
1972, status, scorekeeping reports, 15791-794
1973, status, scorekeeping reports, 17118-119, 19801
1974—
amendments—
hearings, 28388
proposal, 30954
budget in brief, 21924
departmental edition, 21921
appendix, 21922
document edition, 21164
appendix, 21165
hearings, 28390, 30004
special analyses, 21923
1974, status, scorekeeping reports, 27254-255, 29947-948, 31043-44
President's budget message and economic report to Congress, extend time of transmission, law, 27076
program budgeting and analysis, what's new? (address), 28982
proposals (address), 24280
reform of Federal Budget (address), 28893
Budgetary and fiscal information needs of Congress, 20325
Budgets, *see* Budget of United States—
Budgets (family and personal)—*also* names of departments, etc.—*also* subjects.
Budgets (family and personal):
retired couple, guide for budgeting, 15470
Budke, Wesley E., career education practice, 27768
Budworms:
methods for large-scale rearing of tobacco budworm, 19128
sampling populations of western spruce budworm and predicting defoliation on Douglas-fir in eastern Oregon, 27540
spruce budworm in Eastern United States, 27528
Buena Vista, Va.:
engineers report—
departmental edition, 27436
document edition, 27111
Buescher, Stephen L., Army lawyer, 18009
Buettner, Howard J., fish farming in 12 South Central States, species, acreage, and number of farmers, 20682
Buffalo, N.Y.:
area wage survey, 23598
census of housing 1970, components of inventory change, 28100
port, Engineers Corps series, 17405
Spanish English developmental program, Buffalo, N.Y., title 1, ESEA case study 21433
Buffalo Bayou:
Shepherd Drive to Barker Dam, Houston metropolitan area—
floods, 28733
special flood hazard information, 28770
Buffalo County, Democratic Party, *see* Democratic Party of Buffalo County.
Buffalo Creek:
disaster, 1972, West Virginia, 17276
hearings, 15921
Buffalo River, drainage basin, Tennessee Valley streams, their fish, bottom fauna, and aquatic habitat, 30672
Buffers, signal processing element functional description, microprogrammed control unit, buffer store, and storage control unit, 22175
Buffering loads, *see* Loads (mechanics).
Buffo, John, direct solar radiation on various slopes from 0 to 60 degrees north latitude, 32345
Bugle, keyed bugles in United States, 20768
Builders, publications of interest to, list, 31356
Building:
architectural handbook for building single-family dwellings for home mortgage insurance, 29061
aviation education through building airplane, 28851
building education into youth services, 32553
building practices for disaster mitigation, 23702
building research translation, weak thermal points or thermal bridges, 27728
building science series, 23702, 25549, 32481
building technology, weekly Government abstracts, 19068
construction—
complaints handbook, 21778
drafting, technical manual, 25861
health research facilities, remodeling equipping, message from the President annual report, 16944
homes, publications, price list, 16462
industry under Fair labor standards act, 24094
management, Army technical manual, 24180
only half the answer, municipal waste treatment, 16022
period to final closing for project mortgage insurance, HUD handbook, 21791
unattended seismological observatory (USO) in permafrost, 28687
construction reports—
housing units authorized for demolition in permit-issuing places, 16752
1959-71, housing starts, 21055
permits, housing authorized, 18149, 24232, 30816
residential alterations and repairs, expenditures, 18153
Coordinated Evaluation System (CES)
Project model documentation for building regulation, 27736
Department of Defense construction criteria manual, 23092
effects of real estate property tax incentive programs upon property rehabilitation and new construction, study, 32386
estimate of construction needs of higher education by 1980, 17360
evaluating adhesives for building construction, 20305
health facilities construction costs reduce with innovative techniques, new materials, etc., 21379
hospital survey and construction act with amendments, 21144
low-rent public housing construction guides, change, 23420
minimum property requirements for proposed construction in housing credit shortage areas, 29583
new construction products in Kursk Magnetic Anomaly, USSR study, 26584
noise from heavy construction, 21511
notice of construction, alteration, activation, and deactivation of airports, Federal aviation regulations, 18301, 23210
nursing schools, construction grants awarded, list, 21757
performance concept in buildings, symposium proceedings, 16359

INDEX 1973

- Building—Continued
 planning and construction of thermal electric power plants (construction part), USSR study, 26561
 port construction in theater of operations, 28786
 property disposition handbook, reconditioning acquired properties, 21796, 31427
 recreational buildings and facilities, building plans, 16590
 research translation, ventilation air inlets for dwellings, 23710
 seismic design of building structures, 20108
 selection and use of wood products for home and farm building, 15465
 solving construction and building trade problems by Government, industry and building crafts working together (address), 21896
 State and local governments, construction expenditure, 18147
 structural performance evaluation of innovative building systems, 16362
 unauthorized use of funds for construction and alteration of public buildings, GAO report, 21701
 VA hospital building system, integration of mechanical, electrical, structural and architectural systems in VA hospital facilities, 24090
see also Construction industry—Installations (military).
- Building machinery, construction machinery—
 current industrial reports, 18139A, 25919, 28151
 Building materials, *see* Construction materials.
 Building your safe campfire, 24139
- Buildings:
 building service contracting, urban business profile, 15974
 Chicago school of architecture, plan for preserving significant remnant of America's architectural heritage, 23323
 dynamic thermal performance of experimental masonry building, 32481
 fire safety in highrise buildings for the elderly, hearings, 28510
 Foreign Service program, 1974 and 1975 authorization—
 hearings, 24853
 law, 30920
 report, 32039
 life expectancy of facilities, 28690
 permits, housing authorized, construction reports, 16750
 recreational buildings and facilities, 16590
 seismic design of building structures, 20108
 Army technical manual, 25062
 solid waste handling and disposal in multi-story buildings and hospitals, summary, conclusions, and recommendations, 21516
 wood structural design for buildings, Army technical manual, 31933
see also Farm buildings.—Public buildings.
- Bulso, Thomas A.:
 mineral rights conveyance to—
 law, 19332
 reports, 19581, 19922
- Bulgaria:
 map, 16799
 microbiological laboratory services, organization, USSR study, 27632
 mineral industry, minerals yearbook chapter, 16317
- Bulgar, *see* Wheat.
- Bull, Gerald V., relief, 19340, 19606
- Bull, Craig, for Congress Committee, *see* Craig Bull for Congress Committee.
- Bull Creek:
 flood plain information, 21445
 floods in vicinity of McPherson, Kans., 21444
- Bull Run Research Natural Area, general information, 21612
- Bulletins, *see* Farmers' bulletins—*also* names of departments, etc., issuing bulletins—*also* subjects.
- Bullis, Harvey R., Southeast Fisheries Center bionumeric code, fishes, 25631
- Bullis, W. Murray, methods of measurement for semiconductor materials, process control and devices, 22014, 26708, 30475, 32484
- Bullock, F. J., survey of analytical methods for determination of controlled drugs in body fluids, 30446
- Bullock, G. D.:
 communication and control systems—
 mid-Pacific region, field review of maintenance, 31777
 South Platte River projects, North Platte River projects, region 7, field review of maintenance, 31778
- Bullock, Lynwood, Bullock for Congress Committee, annual report, 24517
- Bullock for Congress Committee, annual report, 24517
- Bultman, J. D., resistance of tropical wood *Dalbergia retusa* to marine borer, preliminary investigation, 16449
- Bumpers, bumper-protected laminated spacecraft mainwalls, 29260
- Bunker, C. M., geology of oxidized uranium ore deposits of Tordilla Hill-Devesville area, Karnes County, Texas, study of district before mining, 26509
- Bunker oil, *see* Petroleum as fuel.
- Buoys, applications of remote sensing techniques to buoy-based environmental data gathering, 30526
- Burbank, Wilbur S., arsenic as indicator element for mineralized volcanic pipes in Red Mountain area, western San Juan Mountains, Colo., 23330
- Burch, Dean, address, Jan. 11, 1973, 23213
- Burch, J. B.:
 freshwater spaerliacean clams (Mollusca: Pelecypoda) of North America, 17435
 freshwater unionacean clams (Mollusca: Pelecypoda) of North America, 31310
- Burcham, Frank W., jr., steady state and dynamic pressure phenomena in propulsion system of F-111A airplane, 31636
- Burcham & Baumgaertner for Delegate Committee, *see* Baumgaertner & Burcham for Delegate Committee.
- Burd, R. M., desalination plant laboratory procedures manual, 25294
- Burdens Creek:
 flood plain information, 20113
 floods in Research Triangle area, N.C., 20142
- Burdette, Mary E., personal care and household help needs of noninstitutionalized disabled, 22229
- Bureau of Mines energy program, 31586
- Bureaucracy, windows to bureaucracy, report, 17690
- Burger, Thomas C., ground control requirements for precision processing of ERTS images, 17529
- Burgess, David S., detonation of flammable cloud following pipeline break, Dec. 9, 1970, explosion in Port Hudson, Mo., 26668
- Burgin, Vera E.:
 decisions of Interior Department, 23466
 index-digest, Interior Department decisions and opinions, 18501
- Burglary, *see* Theft.
- Burial:
 National cemeteries act, reports, 15678, 17206
 veterans' burial benefits, study, 30071
- Burk, Raymond F.:
 distribution of α -tocopherol in human plasma lipoproteins, 28060
 ^{75}Se -binding by rat plasma proteins after injection of $^{75}\text{SeO}_3^{2-}$, 31937

- Burke, Gall de P.:
investigation of thermoluminescent dosimeters for environmental monitoring, 22477
transmissions of gamma rays through aluminum and laminated lead, aluminum slabs, 26991
- Burke, J. Doyle, road and landing criteria for mobile-crane yarding systems, 26471
- Burke, James A., reelection of Congressman James A. Burke and election of other Democratic Candidates Committee, annual report, 26004
- Burkham, D. E., channel changes of Gila River in Safford Valley, Ariz., 23361
- Burks, Harold D., annotated bibliography of pyrrone and BBB publications, 21985
- Burlage, Charles L., Burlage for Congress, political committee, annual report, 24607
- Burlage for Congress, political committee, annual report, 24607
- Burley, Idaho, motor carrier accident, 23664
- Burley tobacco, *see* Tobacco.
- Burlington, Vt.:
area wage survey, 26620
Winooski River—
flood plain information, 32227
floods, 32235
- Burlington County Republican Committee, annual report, 24493
- Burlington Northern, Inc.:
accident investigation, 23951
railroad accident investigation, report, 20748
- Burlington Northern Officers Voluntary Good Government Fund, annual report, 24379
- Burma:
bibliographic survey of literature, 29660
map, 16800
mineral industry, minerals yearbook chapter, 16318
narcotic enforcement efforts by local government and American missions, report, 27229
- Burner fuel oil, *see* Petroleum as fuel.
- Burners, *see* Incinerators.
- Burning, *see* Combustion.
- Burning of land, burning to reduce understory handwoods in Arkansas Mountains, 23298
- Burns, Arthur F.:
addresses—
Dec. 29, 1972, 23243
Apr. 26, 1973, 28904
May 6, 1973, 28893
June 5, 1973, 28897
June 6, 1973, 28902
Sept. 8, 1973, 32293
- Burns, Cecil D., study of behavior of bituminous-stabilized pavement layers, 25095
- Burns, Donald E., physical-chemical treatment of municipal waste-water using powdered carbon, 31287
- Burns, Russell M., site preparation and reforestation of droughty, acid sands, 23238
- Burns, Velma I., optical radiation measurements, photometric calibration procedures, 20642
- Burns and scalds, community action approach for prevention of burn injuries, 21117
- Burns Indian Colony, Oreg., *see* Palute Indians.
- Burnup determination for fast reactor fuels, 29681
- Burrell, M. O., approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of $A=12$, 31653
- Burton, James D.:
American woods, osage orange, 25203
guying to prevent wind away influences, loblolly pine growth and wood properties, 21677
- Burton, Richard, relief of estate, 27116C
- Burundi, economic trends and their implications for United States, 29102
- Buser, Rudolf G., controlled helicopter discharge, 20968
- Buses, *see* Motorbuses—School buses.
- Bush, Anna-Mary, reduction of photographic plate measurements for satellite triangulation, 30543
- Bush, Joseph C., industry wage survey, footwear, 31564
- Bushes, *see* Shrubs.
- Bushings (electrical):
field repairs of EHV bushing oil leaks, 25874
- Bushnell, David, stress, stability, and vibration of complex branched shells of revolution, analysis and user's manual for BOSOR4, 20588
- Business:
American small and independent business, investigation of problems, authorization, report, 26216
assistance to inventors and small R&D firms program area description of experimental technology incentives program, 27720
business conditions digest, 18037
business credit and assistance, code of Federal regulations, 25175
business data processing occupational performance survey, 31693
business development organizations handbook, Office of Minority Business Enterprise, 19294
Business Resource Center, Minority Business Enterprise Office, handbook, 24283
census, 1967—
major retail centers, area statistics, 16690-696
retail trade area statistics, 16697-700
selected services, area statistics, 16701-713
wholesale trade area statistics, 16714-716
wholesale trade subject reports, 16717-718, 27004
challenge ahead, path to steady growth (remarks), 22626
commerce today, developments in business and technology, 18135
concerns, facts about relocation, 31415
conditions—
digest, advance, 17954
national summary, 18674
contracts with foreign firms should be priced in local currency, GAO report, 30254
cooperatives in agribusiness, 17443
county business patterns, CBP series, 15583, 16753, 29726-753, 30818-835, 31954-959
publications order form, 30836
criminal redistribution systems and their economic impact on small business—
analysis, 17302
appendix to analysis, 15931
hearings, 31165
current business reports (series), 15584, 18183-189
doing business with NATO, how U.S. companies can participate, 21414
education and business necessary merger (address), 28655
establishing business in—
Indonesia, 24286
Iran, 28635
Spain, 16829
Thailand, 15615
Turkey, 32185
Zambia, 25972
financing American consumer, business report on consumer credit—
committee reports, 20654
summary report, 20653
foreign direct investors in U.S., list of foreign firms with some interest/control in American manufacturing and petroleum companies in U.S., 23488
franchising in economy, 22647

INDEX 1973

Business—Continued

implications of multinational firms for world trade and investment and for U.S. trade and labor, 23058
income tax returns, statistics, 21821
indexes, monthly, 18038
initiatives in corporate responsibility for consumer protection and better products, 17237
interdependence between business and Government is a good and necessary arrangement (remarks), 21107
interim review of economy, expanding economy of 1972, with 1973 industry projections, 20083
international economic indicators, 28633, 31203, 32184
look at business in 1990—
address, 28233
summary of White House Conference on Industrial World Ahead, 24107
losses from operating a business, tax information, 26542
minority business enterprise—
bibliography, 30894
program, progress report, 19303
minority business people must actively carve their futures in national life and economy (address), 22623
Minority enterprise small business—
investment act, report, 15834
problems, investigation, report, 19731
1965 nationwide inventory of publicly owned recreation areas and assessment of private recreation enterprises, 22185
OMBE outlook, news from Office of Minority Business Enterprise, 18728
outlook (remarks), 28242
overseas business reports, OBR (series), 15614-621, 16828-836, 18742, 19295-302, 21100-105, 22631-635, 24286-289, 25968-974, 27066-68, 28633-641, 31203-204, 32183-185
participation of businessmen needed to advance our free enterprise system (address), 25959
public attitude (address), 28227
responsive approaches to consumer complaints and remedies, 22018
road ahead, outlook for blacks in business (address), 21589
rural credit program, nonfarm enterprises to supplement farm income, 30711
sale or other disposition of business or business interest, tax information, 26544
SCORE Service Corps of Retired Executives, one part of Action, counselor's guidebook, 29592
service checklist, guide to Commerce Dept. publications, weekly, 18039
small business—
act, amend—
hearing, 31013
law, 16893
reports, 28375, 30998, 31006, 31108
bank/SBA loans, partnership for small business progress, 31793
bibliographies, 20757
drug industry, competitive problems, hearings, 15932, 27366
drugs sold over the counter, effect of promotion and advertising on, hearings, 24963
Federal paperwork burden—
hearings, 17304, 26292
investigation, report, 26243
future of smalltown and rural America, impact of small business, investigation, 19724
impact of actions and policies by Federal regulatory agencies, hearings, 28434
impact of crime, hearings, 20015
impact of Federal installations, report, 19611

Business—Continued

small business—continued
inadequacy of petroleum supplies and its repercussions—
investigation, hearings, 17097
on small business, investigation, report, 19732
investment act, amend—
law, 21134
report, 21172
legislation 1973, hearings, 24915
management series, 16472
1973 tax guide, 21823
opportunities in outdoor recreation and tourism, investigation, report, 19723
position and problems in Government procurement, report, 19728
problems in gasoline marketing, hearings, 21292
raw fuel industries, concentration of ownership by competing fuels in energy market—
hearings, 15782
report, 19626
role in export trade and foreign investment—
hearings, 19797
report, 19734
role of giant corporations, hearings, 28573
SBIC financing for small business, money for growth, 25694
small marketers aids, 16473
small business and Occupational safety and health act—
hearings, 15783
report, 16976
Tennessee Valley area, concentration by competing raw fuel industries in energy market and its impact, investigation, report, 16970
Small Business Administration and investment act, with amendments, 21151
special current business reports (series), 18920
statistics—
Federal reserve monthly chart book, 18348
weekly, 18040
survey of current business (periodical), 18948
weekly supplement, 18040
survival and growth (2), small R&D firm, proceedings, West Coast Conference, 32550
tax information on business expenses, 21824
tire inflation and consumer, program to improve safety and economy, 22019
U.S. business involvement in southern Africa, hearings, 15740
urban business profile (series), 15974-980, 21416
venture capital, guidebook for new enterprises, 17222
see also Competition.
Business consolidations:
American and National Basketball Associations, proposed mergers, hearings, 26172
Civil Aeronautics Board flexible powers to approve air carrier-surface carrier control relationship, hearings, 23051
economic report, conglomerate merger performances, empirical analysis of 9 corporations, staff report, 28913
Business consultants, *see* Consultants.
Business machines, *see* Office furniture and equipment.
Business men:
ACTION for businessman, Peace Corps, VISTA, 25810
businessmen in Action, 20878
minority businessmen, VA invites you to get share of multimillion dollar business, 29584

Business men—Continued
 State Dept., guide to key officers of Foreign Service posts, 18534
 Business names, name or symbol of Federal Government in collection of debts, prohibit misuse, report, 28370
 Businessmen, *see* Business men.
 Businessmen for Carney Committee, annual report, 24448
 Businessmen for Tom Ward, annual report, 22965
 Busterud, John, nomination, hearing, 19979
 Butanes, correlations of phase-boundary pressure of condensate fluid systems with compositions modified by added butane, 30136
 Butler, Robert L., fish and food organisms in acid mine waters of Pennsylvania, 26402
 Butler, T. R., calibration of displacement transducers, 22408
 Butler County Republican Central & Executive, annual report, 22706
 Butter Creek Research Natural Area, general information, 21613
 Butterfield, Alexander P., nomination, hearings, 28529
 Buttons, Federal Item Identification guide, 30093
 Butts, Anaconda and Pacific Ry., accident investigation, summary report, 27875
 Butz, Earl L.
 addresses, etc.—
 Apr. 21, 1972, 18596
 May 4, 1972, 20905
 May 17, 1972, 20902
 May 18, 1972, 20891, 20893
 June 26, 1972, 20896
 June 29, 1972, 20892
 July 19, 1972, 20908
 Oct. 12, 1972, 22335, 22361
 Oct. 16, 1972, 22331
 Jan. 29, 1973, 22330
 Buxton Creek:
 flood plain information, DeQuincy, La., 28700
 floods, DeQuincy area, La., 28760
 Buyers, *see* Purchasing agents.
 Buying, *see* Purchasing.
 Byrd Station, cationic analysis of Byrd Station, Antarctica, ice core, 17374
 Byrnes, James F., memorial services, 17121

C

C.F.S. series, 16397-402, 20676-682
 C-47, *see* Airplanes.
 C-141, *see* Aircraft.
 C.O.P.E. Franklin Square Teachers Association, *see* Franklin Square Teachers Association, C.O.P.E.
 CAB, *see* Civil Aeronautics Board.
 Cabell County, W. Va.:
 floods on Ohio River, past and future, Cabell County, Wayne County, W. Va., 32240
 Ohio River, flood plain information, 32215
 Cabinet Committee on Opportunities for Spanish Speaking People:
 appropriations, 1973—
 hearings, 15866
 reports, 16987, 19615, 21311
 veto, 19556
 appropriations, 1974, hearings, 28387
 newsletter, Hoy, 28094
 Cable cars, commemorative medals, authorization, report, 26224
 Cable television manpower, job descriptions and educational requirements, 24285
 Cable Television, Political Action Committee of, *see* Political Action Committee of Cable Television.
 Cables:
 cable fabrication and encapsulation, fy 73-1, quarterly report, 26986
 high density braid cable shields, fy 72-4, quarterly report, 26987

Cables—Continued
 rope, cable and chain fittings, Federal Item Identification guide, 27394
 see also Electric cables—Telephone cables.
 Cabrillo Republican Women Federated, annual report, 24589
 Cache National Forest:
 land acquisition within boundaries—
 hearings, 24932
 report, 17166
 Cache River:
 modification of basin feature, Mississippi River and tributaries project, Arkansas, engineers report—
 departmental edition, 20158
 document edition, 19566
 Cadam, extraction and germination of Kadam seeds, 28935
 Caddo County, Okla., soil survey report, 30638
 Cadets, *see* Coast Guard Academy, New London—Military Academy, West Point.
 Cadigan, R. A., geochemical anomalies and alteration in Moenkopi formation, Skull Creek, Moffat County, Colo., 21734
 Cadmium:
 cadmium in—
 plants, 20341
 water, bibliography, 26536
 lithium in surficial materials of conterminous U.S. and partial data on cadmium, 23334
 mineral industry survey, quarterly, 18041
 national inventory of sources and emissions, 29639
 Cadmium telluride, detectors, 2d interim technical report, 29672
 Cady Brook, flood plain information, 25030
 Cafeterias, cafeteria and retail management careers in Veterans Administration hospital canteens, 29580
 Cages, bark beetle emergence cages modified for use as pit traps, 32335
 Cages (bearing):
 friction losses in a lubricated thrust-loaded cageless angular-contact bearing, 31643
 Cagle, Caroline, changes in time and savings deposits at commercial banks, 20264
 Caguas, P. R., census of housing, 1970, metropolitan housing characteristics, 24214
 Calcos Islands, North and South, facilities, defense areas, agreement with Great Britain, 20792
 Cairns, Robert W., remarks, July 20, 1972, 21112
 Cairo (USS):
 Civil War gunboat, restore, reconstruct and exhibit, authorize, law, 19415
 Calsson disease, *see* Aeroembolism.
 Cajdusek, D. Carleton, Colombian expedition to Noanama Indians of Rio Siguirisua and to Cofan and Ingano Indians of Putumayo, 25596
 Cajon Pass, Calif., petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
 Calcasieu River, evaluations of waste sources in Calcasieu River basin, La., report, 20210
 Calcium:
 calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia, studies, 16250
 formation of scandium-46 during irradiation of calcium in high-energy neutron beams, USSR study, 16188
 involvement of CO₂ and calcium stores in decompression sickness, 30412
 use of atomic absorption spectroscopy in determination of $\mu\text{g/liter}$ concentrations, 17370
 Calcium carbonates, aragonite and genesis of carbonates in mahogany zone oil shales of Colorado's Green River formation, 25504

INDEX 1973

- Calcium fluoride, utilization of byproduct fluosilicic acid in the manufacture considering economic availability, 25413
- Calcium hydroxide, *see* Lime.
- Calcium phosphates, calcium phosphate precipitation in wastewater treatment, 21498
- Calcium sulfate, evaluation of CaSO_4 : Dy and CaSO_4 : Tm TLD for measurement of small gamma ray exposures, 25876
- Calculating machines, current industrial reports, 16773, 30845
- Calculating spreading resistance of linearly polarized electrodes, 16184
- Calculation of profile drag at high gas velocities and in presence of heat transfer, 16179
- Calculations, *see* Numerical calculations.
- Calculative techniques for transonic flows about certain classes of wing-body combinations, 20584
- Calculators:
 - method for calculating mine ventilation pressure losses using computers and desk-top calculators, 29212
 - veterans benefits, 26186
- Calderon, Cleofe, morphological and anatomical considerations of grass subfamily Bambusoideae based on new genus *Maclurolyra*, 26822
- Calendars:
 - American Indian calendar, 29086
 - calendar for air-drying lumber in upper Midwest, 23283
 - calendar of environmental meetings, quarterly, 31303
 - calendar of events in Library of Congress (periodical), 18043
 - calendar of Smithsonian Institution, monthly, 18044
 - 18-month calendar of national meetings, 18251
 - Federal Trade Commission, 18042
 - overseas trade promotions calendar, 31211
 - tax calendar and check list, 20410
 - wage calendar, 26629
- Calendars (executive), *see* Senate.
- Calendars (of business), *see* Court of Claims—House of Representatives—Senate—*also* names of certain congressional committees.
- Calibration:
 - calibration and test services of National Bureau of Standards, 18614
 - calibration of—
 - displacement transducers, 22498
 - radioaction detectors in ultraviolet region between 972–2500 Å, 20616
 - compressible-flow preston tube calibrations, evaluation, 29273
 - description and calibration of Langley 6-by 19-inch transonic tunnel, 29271
 - gage calibration and control system, 22495
 - Galveston Bay hurricane surge study, effects of proposed barriers on—
 - hurricane surge heights, calibration tests, hydraulic model investigation, 27444
 - tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, hydraulic model investigation, 27445
 - generation of accurate and uniform time scale with calibration and prediction, 22009
 - grid calibration by coordinate transfer, 23814
 - naval shore electronics criteria, NAVEL-LEX calibration program, 16431
 - photometric calibration procedures, optical radiation measurements, 20642
 - piston manometer as absolute standard for vacuum-gage calibration in range 2–500 millitorr, 20619
 - platinum resistance thermometry, 29311
 - primary calibration system, attitude-referenced radiometer study, 21972
 - Calibration—Continued
 - proposed calibration target for visible channel of satellite radiometer, 22099
 - reciprocity calibration of microphones under high ambient pressures, 20524
 - studies of calibration standards used in Department of Defense equipment oil analysis program, 23712
 - table of differential pressure in relation to calibrated airspeed, military standard, 17337
- Calibrators, dose calibrator pilot study, 31680
- Calico, Calif., beneficiation of Calico District, California, silver-barite ores, 25507
- California:
 - census of housing, 1970, housing characteristics for States, cities and counties, 16721
 - census of population, 1970, detailed characteristics, 22517
 - census of transportation, 1972, truck inventory and use survey, 28135
 - chemical composition of naturally occurring fluids in relation to mercury deposits in part of north-central California, 27559
 - climatological data, 18077
 - coast pilot, 26765
 - comparison of milking operation in herdingbone milking layouts for large herds in California, 19129
 - counties, estimates of population, 28188
 - county business patterns, 31955
 - flows of mill residues to pulp and board manufacturers, 20322
 - geohydrology of Needles area, Ariz., Calif. and Nev., 26498
 - Geological Survey Water Resources Division, reports, bibliographic list, 32363
 - geology and oil resources of western Puente Hills, southern California, 21718
 - geophysical studies in Yuma area, 30275
 - Huntington Lake quadrangle, central Sierra Nevada, Calif., analytic data, 21728
 - income limits for sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235–236 housing, 29076
 - Indians, California tribes, 31450
 - landings, fish and shellfish, 18045
 - major outbreaks of Douglas-fir tussock moth in Oregon and California, 27529
 - marine fishes of California current and adjacent waters, 23795
 - marine sanctuaries in California, create, suspend leasing for oil and gas, and other minerals, 21343
 - mineral industry, minerals yearbook chapter, 16271
 - northern, floods, flood disaster seminar, Feb. 27, 1970, Sacramento, Calif., 19791
 - Pacific slope basins, surface water, quality, 21743
 - precipitation data, hourly, 18428
 - report on pollution affecting Las Vegas Wash, Lake Mead, and Lower Colorado River, Nev., Ariz., and Calif., 20211
 - resource conservation, 32561
 - runoff characteristics of California streams, 20361
 - soil survey laboratory data and descriptions, 31825
 - southern, scour and fill, fanhead valley in urban areas, 27567
 - systematics and areal distribution of pelagic cephalopods from seas of southern California, 16475
 - Twelfth Congressional Republican Committee, annual report, 24506
 - water resources data, 23385, 31396
 - water temperatures of streams—
 - Delta-central Sierra subregion, 23394
 - San Francisco Bay subregion, 23395

- California, Democratic State Central Committee of, *see* Democratic State Central Committee of California.
- California State Council of Carpenters Political Action Fund, annual report, 28284
- Calkins, James A., CRIB, mineral resources data bank of Geological Survey, 27561
- Callaway, Howard H., nomination, hearing, 28516
- Callaway County, Mo., geochemical anomalies of claypit area, and related metabolic imbalance in beef cattle, 29026
- Calling all women in Federal service, know your rights and opportunities, 16579
- Calloway County Democratic Campaign, annual report, 24759
- Caloosahatchee River, controlled discharge from W. P. Franklin Dam as means of flushing saline water from fresh-water reach of river, Lee County, Fla., 23336
- Calorimeters, calorimeters for heat of solution and low-temperature heat capacity measurements, 17541
- Calvert, W., plasmasphere sounder satellite, 20693
- Calvert Cliffs Nuclear Power Plant, units 1 and 2, fiche index for nuclear dockets, 28075
- Calves:
calf crop report, 22278
portable stalls for calves, 20007
- CAMAC, *see* Electronic data processing systems.
- Cambarus, crayfish (astacidae) of North and Middle America, 17441
- Cambay, Gulf of, summary of synoptic meteorological observations, southwest Asian marine areas, 22183
- Camber (aircraft):
effects of leading-edge camber on low speed characteristics of slender delta wings, 20582
- Cambial dieback and taphole closure in sugar maple after tapping, 25222
- Cambodia:
bibliographic survey of literature, 29660
crisis in Cambodia, relief and rehabilitation of war victims in Indochina, hearings, 28556
map, 16801
military activities in and over, inquiry resolution, report, 28335
mineral industry, minerals yearbook chapter, 25428
prohibit use of any funds for combat activities by U.S. forces—
law, 32004
report, 29866
- Thailand, Laos and Cambodia, military situation, facts and future prospects, 17257, 30031
- United States—
air operations in Cambodia, Apr. 1973, subcommittee report, 30032
assistance, hearing, 30006
policy and programs, hearings, 29908
war victims in Indochina, GAO report, 19990
see also Khmer Republic.
- Cambodian language:
contemporary Cambodian, land and economy, 27906
reference aid, abbreviations in Cambodian and Lao press, 23525
- Cambrian period, stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, 17528
- Cambridge, Mass.:
Longfellow National Historic Site, establishment—
law, 19408
report, 19644
- Cameras:
computing cameras with prism compensation, USSR study, 16181
- Cameras—Continued
construction of 8-mm time-lapse camera for biological research, 16087
evaluation of 200 mCi 55re X-ray diffraction source in focusing and Debye-Scherrer analytical applications, 25871
photosensor aperture shaping in facsimile cameras, investigation, 16352
- Cameron County Republican Executive Committee, annual report, 22853
- Cammarota, V. Anthony, Jr.:
mercury, 20560
mineral industry of Nevada, 16295, 29223
tin, 20571
- Camp, John N. Happy, Happy Camp for Congress, annual report, 24313
- Camp (U.S.S.):
loan, agreement with Vietnam, 24008
- Camp Century, Greenland, cationic analysis of ice core, 17373
- Campaign Committee for Congressman John Young, annual report, 22694
- Campaign Committee for Roy A. Taylor, annual report, 24331
- Campaign expenditures, Federal election campaign act, hearings, 26261, 31137
- Campaign Expenditures, Special Committee to Investigate, House:
create, report, 24835
investigations and studies, authorization and expenses, report, 27140
reports, 24821, 28374
- Campaign to make Ed Tandy Congressman Tandy, annual report, 24505
- Campaigns (political), *see* Elections.
- Campanian age, *see* Cretaceous period.
- Campbell, C. J., pressure bomb measures changes in moisture stress of birchleaf mountainmahogany, 23290
- Campbell, H. D., JAG Journal, 18523, 20481
- Campbell, Ralph E., air temperature at remote site from official weather station records, 23292
- Campbell, Thomas E., regenerating loblolly pine by direct seeding, natural seeding and planting, 28971
- Campbell, W. H., introduction to solar terrestrial activity for geomagnetic studies, earth's main field, 22095
- Campbell, Ohio, flood plain information, Mahoning River, Mahoning County, Ohio, 28713
- Campbell Creek, Greater Anchorage area, special flood hazard report, 20166
- Campfield, W. L.:
addresses—
Sept. 9, 1971, 28977
Sept. 23, 1971, 29001
- Campgrounds, *see* Camps.
- Camping:
building your safe campfire, guide for leaders and youth, 24139
camping safely with liquefied petroleum gas, 21116
canoeing-camping in Superior National Forest, Minn., 21605
growth potential of family camping market, 26476
in national park system, fees, facilities, etc., 26773
proposed reservation system in selected national parks, hearings, 27345
Shawnee Is camping, hiking, hunting, floating, fishing, scenery, 23314
- Campos, Arturo B., Apollo experience report, lunar module electrical power subsystem, 20611
- Campos, Juan M. Cordova, *see* Cordova-Campos, Juan M.
- Camps:
comfort station for campgrounds, building plan, 22340
commercial campground industry in New Hampshire, report on 1971 campground census, 27536
overnight stays, 1972, public use of national parks, 27820

INDEX 1973

Campuses. *see* Colleges and universities.

Can you change this man? 21083

Canada:

- aluminum ingot from Canada, determination of no injury, etc., Tariff Commission report, 32583
- automobile agreement, operating of Automotive products trade act, annual report, 23057
- base metal parts for incandescent illuminating articles, suitable for residential use, from Canada, 20827
- committee on water quality in St. John River basin, agreement, 22270
- Customs Bureau pre-clearance activities, hearings, 27179
- defense leased areas in Goose Bay Newfoundland agreement 17883
- economic trends and their implications for United States, 17573, 29095
- fishing vessels, old and under size, prohibit issuance of licenses for use in American fisheries—
law, 19524
reports, 17020, 19877
- foreign trade regulations, 19300
- forest products shipped into north central region, 25227
- instant potato granules from Canada, Tariff Commission report, 16542
- Institutes unilateral tariff cuts on important agricultural items, 28919
- international bridge, construction, consent of Congress—
law, 16922
reports, 15701, 17147
- kraft wrapping paper from Canada, determination of no injury, etc., Tariff Commission report, 24064
- labor offices in United States and Canada, 17368
- market profiles, 21104
- mineral industry, minerals yearbook chapter, 20541, 29215
- nongovernment organization codes for military standard contract administration procedures (MILSCAP)—
code to name, 18709
name to code, 18710
- North American Air Defense Command, agreement, 31867
- northern bleached hardwood kraft pulp from Canada, determination of injury, etc., Tariff Commission report, 24066
- plant quarantine import requirements, 20956-957
- promotion of safety on Great Lakes by means of radio, agreement, 31046
- random sample egg production tests, U.S. and Canada, 1972 report, 27984
- reciprocal fishing privileges, agreement, 31859
- rural development programs, 27301
- St. Lawrence Seaway, tariff of tolls, agreement, 17886
- special requirements on imports into Canada, 19297
- United States and Canadian fabric flammability standards, 20647
- Canada-United States Interparliamentary Group:
Senate delegation reports—
14th meeting, 21338
15th meeting, 30024
- Canadian River project, general information, 23916
- Canal Zone:
appropriations, 1973, law, 19362
- census of housing, 1970, housing characteristics for states, cities and counties, 24213
- census of population, 1970, characteristics of population, 28119
- geology and paleontology of Canal Zone and adjoining parts of Panama, description of Tertiary mollusks, 29018
- mineral industry, minerals yearbook chapter, 20566

Canal Zone—Continued

weather radar investigations on artillery test conducted in Panama Canal Zone, 20973

Canal Zone Government:

- annual report, 25888
- appropriation, 1974, authorization, report, 29995
- see also* Panama Canal.

Canals:

- elimination of hazardous open canals, hearing, 15906
- evaluation of canal lining for salinity control in Grand Valley, 20193
- explosions for canal construction, USSR study, 27627

Cancer:

- cancer of mouth, 31681
- carcinogenesis abstracts (periodical), 18051
- chemotherapy abstracts (periodical), 18046
- chemotherapy reports (periodical), 18047-49
- chemotherapy, summary reports of chemotherapy program, NCI, 16364, 22021
- colon and rectum, general information, 25560
- color presentation of thermograms for, cancer research, 29249
- conference and workshop on cellular immune reactions to human tumor-associated antigens, 30478
- conference on immunology of carcinogenesis, 25561
- international research, U.S. contributions, authorize—
law, 19425
report, 17148
- larynx, diagnosis, treatment, etc., 26713
- multilevel analysis of NCI research grants by scientific category, 32485
- radionuclide carcinogenesis, 30768
- skin, general information, 23718
- special virus cancer program, 17743
- Veterans Administration Central Cancer Registry, 1958-63 report, 29577
- viral tumorigenesis reports, 17744, 27739
- virus-cancer program, 32486
- Cancer Institute, *see* National Cancer Institute.
- Cancer Institute, National *see* National Cancer Institute.
- Cancer, International Agency for Research, *see* International Agency for Research on Cancer.
- Cane River Formation, hydrologic significance of lithofacies or equivalents of Ark., La., Miss., and Tex., 27565

Caney Creek:

- flood plain information, 20131
- floods in Vidor, Tex., how to avoid damage, 20139

Canker (disease of plants):

- atropellis canker of pines, 32312
- eutypella canker of maple, 17510

Canned foods:

- red tart pitted cherries, standards for grades, 22318
- stocks, pack, shipments, (periodical), 18184
- see also* names and classes of foods canned.

Canneries:

- cannery waste treatment by anaerobic lagoons and oxidation ditch, 25107
- cannery wastewater treatment with rotating biological contactor and extended aeration, 28797
- national symposium on food processing wastes, proceedings, 21496
- Canning and preserving, low water volume enzyme deactivation of vegetables before preservation, 31278

- Canning and preserving—Continued
see also names of commodities canned or preserved.
- Cannon, Glenn A.:
 currents observed in Juan de Fuca submarine canyon and vicinity, 25624
 observations in Puget Sound—
 currents, 27801
 currents and water properties, 26767
- Cannon, Mildred S.:
 alcoholism halfway houses—
 general characteristics, 23767
 selected characteristics of residents, 25593
 differential utilization of psychiatric facilities by men and women, United States, 29365
 psychiatric halfway houses, general characteristics, 27784
- Canoes and canoeing:
 canoeing-camping in Superior National Forest, Minn., 21605
 canoeist suggestions for stream management in Manistee National Forest of Michigan, 17521
 large groups in boundary waters canoe area, their numbers, characteristics, and impact, 17515
- Canopies, drag characteristics of disk-gap-band parachute with nominal diameter of 1.65 meters and Mach number from 2.0 to 3.0, 20601
- Cans:
 beverage container problem, analysis and recommendations, 20197
 metal cans, current industrial reports, 15589, 18194
 Cantaloupes, *see* Muskmelons.
- Canteens, cafeteria and retail management careers in Veterans Administration hospital canteens, 29580
- Canton, Steve, Air Force comptroller, 17973
- Canton, Ohio, area wage survey, 16223
- Canton Island:
 Service contract act, extend to Canton Island—
 law, 30928
 report, 30973
- Cantor, Bernard H., Cantor for Congress, annual report, 24688
- Cantor, Israel, survey of studies of atmospheric transmission from 4π light source to 2π receiver, 22408
- Cantor for Congress, annual report, 24688
- Cantrell, Ben H.:
 behavior of α - β tracker for maneuvering targets under noise, false target, and fade conditions, 22167
 description of α - β filter in cartesian coordinates, 32526
- Canyon Country National Conservation Area, establish, hearings, 15748
- Canyon Creek Research Natural Area, general information, 21614
- Canyon Ferry unit, *see* Pick-Sloan Missouri Basin program.
- Capacitors:
 aluminum electrolytic capacitors, workers of Tazewell, Va., plant of General Instruments Corp., Tariff Commission report, 25775
 application of shunt capacitors to rural electric system, 27874
 fixed, Federal item identification guide, 30097
 radio frequency coils, molded ceramic capacitors, and fixed precision metal film resistors, certain workers of Dubois, Pa., plant of Aircro Speer Electronic Components Division, Tariff Commission report, 22282
 selection and use, military standard, 17334-335, 20051-54, 23107, 28608
- Cape Cod to Sandy Hook, coast pilot, 22093
- Cape Fear River, movement and dispersion of soluble pollutants in Northeast Cape Fear Estuary, N.C., 16114
- Cape Hatteras, Texaco Oklahoma (SS), structural failure and sinking, marine casualty report, 30565
- Cape Hatteras, N.C. to Savannah, Ga., marine weather services chart, 29416
- Cape Hatteras National Seashore, general information, 32512
- Cape Henry to Key West, coast pilot, 16407
- Cape Thompson, Alaska, rotary drilling and coring in permafrost, deep core drilling, core analysis and bore hole thermometry, 21440, 28689
- Capellen, J., bibliography of mass spectroscopy literature for 1971 compiled by computer method, 26992
- Capillaries, optical measurement of capillary wave structure, 30540
- Capital:
 capital markets and economic development, Kleinman plan, hearing, 21222
 capital resources in central Appalachian region, 30748
 improved management information system needed for Eximbank's capital loan program, GAO report, 23320
 internationalization of capital markets (address), 29469
 tax treatment of capital recovery (investment credit, accelerated depreciation and amortization), general tax reform, panel discussions, 26188
 venture capital, guidebook for new enterprises, 17222
see also Investments.
- Capital assets:
 acquisition of capital plant, NASA, 17088
 capital gains and losses in reference to tax reform, panel discussions, 24881, 26188-
 A
 capitalization of farm program benefits into land value, 17347
 class life asset depreciation range system, 21826
 real estate, general tax reform, panel discussions, 26188
 tax treatment of capital recovery, panel discussion, 27251
- Capital of United States:
 airports, Federal aviation regulations, 21532
 notes from Washington on international research and development in agriculture, 26930
see also District of Columbia.
- Capitol:
 the Capitol in story and pictures, print as House document, reports, 28355, 31066
 creating select committee to regulate parking on House side, report, 26070
 police force, reorganization of supervisory positions under House of Representatives, report, 28364
 power plant improvements, hearings, 21285
 Capitol Hill Political Action Committee, annual report, 22761
- Capitol International Airways, Inc., accident reports, 23851, 32521
- Capitol Reef National Park, Utah, general information, 30545
- Capps, David, relief, 15631
- Caprio Frank, for Congress Headquarters, *see* Frank Caprio for Congress Headquarters.
- Caprolactam, caprolactam monomer, duty suspension, report, 30987
- Caps:
 caps, radiator and tank, Federal item identification guide, change, 23094
 wooden beverage cases cause little damage to bottle caps, 32324
- Capstan, capstans, hoists, winches, and windlasses, Federal item identification guide, 24993
- CAR of New Mexico, annual report, 24784
- Carabidae, *see* Beetles.
- Carbamates, *see* Carbamic acid.

INDEX 1973

- Carbamic acid:**
 liquid chromatography of carbamate pesticides, 17422
 rapid detection system for organophosphates and carbamate insecticides in water, 23183
- Carbides, see Plutonium carbides.**
- Carbon:**
 activated carbon—
 adsorption, new process for treating wastewater, 16545
 anaerobic-aerobic treatment of textile wastes, 28825
 treatment of ferrous acid mine drainage, 25114
 treatment of raw sewage in solids-contact clarifiers, 26419
 biological removal of carbon and nitrogen compounds from coke plant wastes, 26415
 chemical kinetics in C-O-S and H-N-O-S systems, bibliography, 16360
 development and evaluation of vacuum pressure gauge components from carbon and graphite, 20583
 11th biennial conference on carbon, extended abstracts, 29670
 friction and wear of selected metals and of carbons in liquid natural gas, 25523
 oxidation rate at high temperatures, reaction-rate control or transport control, 23679
 oxidation resistance of selected mechanical carbons, at 650° C in dry flowing air, 32478
 physical-chemical treatment of municipal wastewater using powdered carbon, 31287
 process design manual for carbon adsorption, 16546
 study of carbon dioxide-carbon reaction by oxygen exchange, 29203
- Carbon black:**
 mineral industry survey—
 annual, 27694
 quarterly, 18050
- Carbon dioxide:**
 calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia, studies, 16250
 chronic CO₂ toxicity, species difference in physiological and histopathological effects, 21930
 cold cathodes for sealed-off CO₂ lasers, 32474
 development of design information for molecular-sieve type regenerative CO₂ removal systems, 31608
 elevated atmospheric CO₂ on acid-base balance and red-cell electrolytes of FBM submarine crew members, effects, 20526
 formation of inversion in CO₂-H₂O-N₂ gas mixture jet expanding through slit, 21845
 involvement of CO₂ and calcium stores in decompression sickness, 30412
 quasistationary CO₂ laser with pulsed excitation, USSR study, 27625
 study of carbon dioxide-carbon reaction by oxygen exchange, 29203
 ventilation of mechanical refrigerator cars to prevent carbon dioxide accumulation and brown stain in lettuce loads, 27994
- Carbon dioxide acidosis, see Acidosis.**
- Carbon monoxide:**
 CO, odorless, tasteless, colorless, deadly, 22644
 criteria for recommended standard, occupational exposure to carbon monoxide, 25583
 effect of low levels of carbon monoxide on visual processes, preliminary study, 26644
 general information, 15624
 indoor-outdoor carbon monoxide pollution study, 32258
 ionic and neutral reactions in glow discharges of He-SO₂-CO mixture, 30425
- Carbon monoxide—Continued**
 kinetics of CO reduction of hematite to magnetite and effect of silica, 23659
 reference method for continuous measurement of carbon monoxide in atmosphere, guidelines for development of quality assurance program, 31271
 you can't see what's wrong with grilling indoors, you can't see carbon monoxide, we want you to know what we know about carbon monoxide poisoning (poster), 23261
- Carbon steel, see Steel.**
- Carbonates, Pennsylvania carbonates, paleoecology, and rugose colonial corals, north flank, eastern Brooks Range, Arctic Alaska, 21733**
- Carbonyls:**
 conversion of ilmenite to rutile by carbonyl process, 23658
 optimizing decomposition of carbonyl sulfide in electrical discharge, 21953
 oxygenates in automotive exhaust gas, estimation of levels of carbonyls and noncarbonyls in exhaust from gasoline fuels, 23649
- Carcass Data Service, beef, meat inspector, guide, 20881**
- Carcich, Italo G., pressure sewer system demonstration, 23185**
- Carcinogenesis, see Cancer.**
- Card deck, software instructions for AIST-O system, USSR study, 20474**
- Card-gap and projectile impact sensitivity measurements, compilation, 30418**
- Cardiac activity, see Heart.**
- Cardiac pacemaker, see Heart.**
- Cardiac surgery, see Surgery.**
- Cardiovascular system:**
 advance national attack against cardiovascular, pulmonary, and blood diseases, law, 19368
 use of simple indicators for detecting potential coronary heart disease susceptibility in air traffic controller population, 16681
- Cardon, Samuel Z.**
 survival and growth (2), small R & D firm, proceedings, West Coast Conference, 32550
- Cards, see Catalog cards.**
- Career guidance, see Guidance.**
- Careers, see Civil service—Occupations—also types of careers.**
- Carey, Kevin L., icings developed from surface water and ground water, 32199**
- Carey, William A., nomination, hearing, 20002**
- Cargados Carajós Shoals, birds seen at sea and on island, 25695**
- Cargo, see Air cargo—Shipments—Shipping.**
- Cargo, Commission on Security and Safety of, see Security and safety of Cargo Commission.**
- Cargo handling:**
 activity networks to model transportation systems subject to facility constraints, 26379
 air cargo specialist (cargo agent), Air Force notice, 16617
 chemical data guide for bulk shipment by water, 25956
 computer simulation and validation of Travis freight terminal facility, 27438
 stochastic network to model air cargo terminals, 25071
- Cargo services, see Air carriers.**
- Cargo terminals, see Terminals (transportation).**
- Caribbean area:**
 appraisals of potentials for outdoor recreation development, Spanish edition, 27893
 bibliography on—
 marine biology, 23815
 marine geology and geophysics, 23816
 climatological data, 18116

- Caribbean area—Continued
 Cooperative Investigation of Caribbean and Adjacent Regions, CIGAR, 23815-816
 market profiles, 24287
 Caribbean Free Trade Association, history, purpose, accomplishments, etc., 16833
 Caribbean Sea:
 environmental-acoustics atlas of Caribbean Sea and Gulf of Mexico marine environment, 22161
 starfishes from Caribbean and Gulf of Mexico, 26824
 Caricatures and cartoons, political cartoons in 1848 election campaign, 20766
 Carles, *see* Teeth.
 CARIFTA, *see* Caribbean Free Trade Association.
 Carillons:
 duty-free entry of carillon for—
 Marquette University—
 law, 19344
 report, 15813
 University of California (Santa Barbara)—
 law, 19512
 report, 19932
 Carl L. Estes Dam and Lake, designate Mineola Dam and Lake, law, 19525
 Carleton, David A.:
 mineral industry of—
 Iran, 17683, 29219
 Kuwait and Saudi Arabia, 20564
 Carlisle County Citizens for Stubblefield Committee, annual report, 26009
 Carlos Baker for Congress, political committee, annual report, 24464
 Carlsbad Caverns National Park:
 addition to National Wilderness Preservation System, proposal, 23000
 general information, 23821
 wilderness recommendation, 23831
 Carlson, Harry W., application of sonic-boom minimization concepts in supersonic transport design, 29277
 Carlson, K. W.:
 examination of discontinuities in welds by stereoradiography, 20106
 introduction of discontinuities in high strength steel weldments, 25070
 Carlson, Lane, soldiers, 18915
 Carlton County Republican Committee, annual report, 24540
 Carlucci, Frank C., nomination, hearing, 21335
 Carnahan, T. G., simulation in situ leaching of copper from porphyry ore, 29242
 Carney, Charles J., Businessmen for Carney Committee, annual report, 24448
 Carolin, V. M., sampling populations of western spruce budworm and predicting defoliation on Douglas-fir in eastern Oregon, 27540
 Carpenter, Eugene M., Canadian forest product shipped into north central region, 25227
 Carpenter, James B., predicting civilian position grades from occupational and background data, 25841
 Carpenters, Ohio State Council, Political Action Committee, *see* Ohio State Council of Carpenters Political Action Committee.
 Carpentry, national apprenticeship and training standards for carpentry, 25854
 Carpets:
 carpets and rugs, 28907
 current industrial reports, 16758, 18194A, 25918
 Carr, G. L.:
 evaluation of Goodyear medium-duty aluminum honeycomb landing mat, 26387
 evaluation of Kaiser MX 19-B and MX 19-C aluminum honeycomb landing mat, 26389
 Carr, M. Robert, Students for Carr, annual report, 27102
 Carr, Robert elected to Congress, Republicans and Democrats who want, *see* Republicans and Democrats who want Robert Carr elected for Congress.
 Carrera, Edith E., relief, 19586
 Carrier lifetime measurement by photoconductive decay method, 17741
 Carriers:
 common carrier—
 actions, FCC, reports, 18302
 services, applications, FCC, reports, 18302
 tariff filings, FCC, reports, 18302
 common property tax assessments, report, 15850
 Interstate commerce act, amend, hearing, 19956
 liquefied natural gas carriers, construction, hearings, 21270
 motor common carriers and common carriers by rail, express, and water, establish through rates and joint rates, hearing, 19956
 radiotelegraph carriers, uniform system of accounts, FCC rules and regulations, 18312
 wire-telegraph and ocean-cable, uniform system of accounts, FCC rules and regulations, 18312
see also Communications—Express companies—Motor carriers—Shipping—Telegraph—Telephone—Transportation—Water carriers.
 Carrigan, Anne L., geophysics and space data bulletin, 18401
 Carrigan, P. H., Jr., probability of exceeding capacity of flood-control system of National Reactor Testing Station, Idaho, 22478
 Carroll, Thomas E., address, Nov. 17, 1971, 21491
 Carroll County Republican Central Committee, annual report, 24556
 Cars, *see* Automobiles—Passenger cars.
 Carson, Everett B., for Congress, *see* Everett Brown Carson for Congress.
 Carson National Forest:
 boundaries, modify, law, 19399
 exchange lands within for private lands within Pledra Lumbre Grant, N. Mex., authorize—
 law, 16925
 report, 17203
 Carta, F. O., investigations of airflow dynamic stall and its influence on helicopter control loads, 20991
 Carter, N. E., use of isotopes composition data to improve reactor calculational techniques, 21012
 Carter, Robert S., NBS reactor, summary of activities, 27729
 Carter County, Tenn., forest inventory statistics, Carter-Johnson County unit, northeast Tennessee, 30668
 Carters Lake, preimpoundment study, 31901
 Cartesian coordinates, *see* Coordinates.
 Cartographic Archives Division, cartographic records in National Archives, 25531
 Cartography, *see* Maps and charts.
 Cartridges:
 cartridge projection motion picture film super 8mm, 27411
 tax information for manufactures of firearms, shells and cartridges, 20413
 Cascade, behavior of uranium isotopes in separation cascades, ideal cascades, 22480
 Cascade impactor, cascade impactor network, 19149
 Cascade Range, culture of mixed conifers, west-side Cascades, 23269
 Case, Forrest N., study of gamma induced low temperature oxidation of textile effluents, 30193
 Case, J. E., regional geophysical investigations in central Colorado Plateau, 30276
 Case for protective design, nuclear and otherwise, 23083

INDEX 1973

- Case for revenue sharing, 25048
Case hardening, *see* Casehardening.
Case studies series, 20658
Casehardening, hot hardness, characteristics
Casey, Howard F.:
of ausformed AISI M-50, Matrix II, WD-65, modified AISI 440-C, and super nitralloy, 29281
Caseload statistics, state vocational rehabilitation agencies, 30615
Cases, wooden beverage cases cause little damage to bottle caps, 32324
Casey, Howard F.:
addresses, etc.—
Oct. 14, 1972, 23616
Jan. 23, 1973, 23224
Feb. 27, 1973, 23460
Feb. 28, 1973, 23618
Mar. 27, 1973, 25399
May 21, 1973, 27690
May 22, 1973, 27691
Casey, Hugh E., salinity problems in arid lands irrigation, literature review and selected bibliography, 23476
Casey, William J.:
addresses—
Jan. 27, 1972, 29481
Mar. 8, 1972, 29466
Mar. 15, 1972, 29469
Mar. 17, 1972, 29480
Apr. 8, 1972, 29482
Apr. 21, 1972, 29479
May 19, 1972, 29484
May 22, 1972, 30626
June 6, 1972, 30620
June 9, 1972, 30619
July 6, 1972, 30628
Aug. 15, 1972, 30618
Sept. 11, 1972, 30621
Sept. 18, 1972, 30629
Sept. 21, 1972, 30624
Sept. 28, 1972, 30625
Sept. 29, 1972, 30627
Oct. 2, 1972, 30623
Oct. 3, 1972, 29471
Oct. 5, 1972, 29462
Oct. 11, 1972, 29475
Oct. 13, 1972, 29485
Oct. 18, 1972, 29465
Oct. 23, 1972, 29473
Nov. 13, 1972, 29477
Nov. 27, 1972, 29474
Cash in lieu of commodity donations to schools, 26226
Cash transactions, *see* Finance.
Cashiers, food stamp counterpoints, manuals for cashiers, 20924
Casper, Wyo., flood plain information, North Platte River, 32207
Caspian Sea:
how to increase biological resources of the Caspian, USSR study, 23523
water pollution and Caspian Sea fishing industry, USSR study, 17629
Cass County, N. Dak.:
relief—
law, 19459
report, 17171
Cass County Republican Committee, annual reports, 22818, 22900
Cassia County, Idaho, feasibility of cloud seeding to enhance water resources in Cassia and Oneida Counties, Idaho, and Box Elder County, Utah, 22208
Cassidy, John J., control of surging in low-pressure pipelines, 23940
Cast iron:
cast iron soil pipe fittings from Poland, determinations of no injury AA1921-100 etc., 16540
current industrial reports, 18194
see also names of articles manufactured.
Castors, Federal item identification guide, 24994
Castillo de San Marcos National Monument:
British Garrison of St. Augustine, 1763-84, historic resource study, 27811
Castillo de San Marcos—Continued
British siege of St. Augustine in 1740, historic resource study, 27812
general information, 20707
Castings:
cast spider's web (development of micro-wire), USSR study, 20447
creation of large castings by investment process, final report, 26988
iron, current industrial reports, 18194
nonferrous, current industrial reports, 18194, 25927
steel, current industrial reports, 18194
Castle Creek, Roaring Fork River, Aspen, Colo., flood plain information, 32217
Casualties, *see* Battle casualties.
Casualty services, *see* Civilian defense.
Cataland, George, low temperature thermometry, interim report, 27732
Catalog cards:
Library of Congress—
books, authors, 18675, 29187
books, subjects, 18576, 29184
motion pictures and filmstrips, 18577
music and phonorecords, 23609
Cataloging:
Atomic Energy Commission, report number codes used by Technical Information Center, 22487
cataloging handbook, H series, 15939, 17317, 18353-354, 18356-358, 20030-31, 23084, 24980, 27376
cataloging manual M series, 15940-941, 17318, 24981, 26302-303, 25588-589, 32161
CIP, cataloging in publication progress report, 30399-400
corporate author headings used by AEC in cataloging reports, 15522
Federal item name directory for supply cataloging—
abbreviations and symbols, 27376
alphabetic index of names, 18316
numeric index of Federal item identification guide to item name codes, 24980
numeric index of item name codes to Federal item identification, names, etc., 15939, 18317
Federal manual for supply cataloging—
material management, special operating procedures, 17318
operating forms, 28588
manuscripts, MARC format, 25387
national aspects of creating and using MARC/RECON records, 31570
RECON (MARC retrospective conversion) pilot project, final report, 23611
reports to Congress on Defense cataloging and standardization act of 1952, by Defense Dept., 15720, 24842.
service, bulletin, 18054
supply cataloging, Federal manual—
international cataloging, 26303
operating procedures, 15940
Catalogs:
adult continuing educational opportunities for Government employees in Washington metropolitan area, 27049
Air Force Academy, 28027
AoA catalog of films on aging, 25811
Army formal schools catalog, 26964
assistance programs providing financial support and services to States, communities, organizations, individuals, 17551
ballooning, 1752-1972, exhibition, 31665
telescope catalog of ultraviolet stellar observations, 5068 objects measured by Smithsonian experiment aboard Orbiting Astronomical Observatory (OAO-2), 27878
Census Bureau, 18034
census publications, monthly supplement, 18035
census retrospective 1968-70 on microfiche, 30554
checklist of permanent collection, 30552
Coast Guard Academy, 15611

Catalogs—Continued

colorimetric measures of stars on 6-color system of Stebbins and Whitford, 23863
Commerce Department publications, 15623, 31988
Community College of Air Force, 31926
copyright entries, 21389, 23078-79, 24965, 27373-374, 28576, 30072, 31167-168, 32156
Defense Civil Preparedness Agency, courses and conferences, 31176
dictionary, L. C. subject headings, 18935
Division of Dental Health, 16123
environmental protection research catalog, 21493
Federal domestic assistance, 18053, 23613, 30401
Federal education assistance programs, 15988
Federal supply catalog—
consolidated master cross reference list, 20042
GSA stock catalog, 18351-352
film fare, catalogue of films and filmstrips produced by Housing and Urban Development Department, 25272
Government publications, monthly catalog, 18641
GSA stock catalog, 17488
Health, Education, and Welfare Department, catalog of publications—
cumulative issue, 21750
quarterly, 18052
Illustrated catalog of Neotropical Aretlineae types in United States National Museum (Lepidoptera; Aretlineae), 26825
Industrial College of Armed Forces, 26556
Interagency training program catalog of courses, 16816
Internal Revenue Service, forms, letters, notices, 26539
introduction to botanical type specimen register, 30631
Law Enforcement Assistance Administration, library book catalog—
author catalog, 17646, 23571
periodical catalog, 23572
subject catalog, 21892, 27655
title catalog, 17647, 25367
Library of Congress—
books, subjects, 18576, 29184
motion pictures and filmstrips, 18577
music and phonorecords, 23609
national union catalog, 18675
annual cumulation, 29187
management sciences training center catalog, 29810
market share reports, 21835
meteorological satellite data, television cloud photography, ITOS 1, 20181, 32245
multifamily reports and forms catalog, HUD handbook, 23443
National Bureau of Standards, standard reference materials, 29316
National Library of Medicine—
annual cumulation, 29371, 30513
cumulative listing, 18670
monthly listing, 18671
nautical charts—
Atlantic and gulf coasts including Puerto Rico and Virgin Islands, 22092
numerical listing of charts, 23871
region 9, East Asia, 23869
special purpose navigational charts and publications, 23870
United States—
Alaska including Aleutian Islands, 32507
Atlantic and gulf coasts, 29379
Pacific coast, including Hawaii, etc., 29380
Naval Academy, Annapolis, 27836
Naval Academy Preparatory School, Bainbridge, 25649
publications of National Center for Health Statistics, 17745, 29328

Catalogs—Continued

research in aquatic pest control and pesticide residues in aquatic environments, 17931
research projects, OSW, 31494
Smokey Bear trading post, help prevent forest fires, Smokey Bear items, 30248
Staff College, Defense Civil Preparedness Agency, catalog of courses, 29027
tissue typing antisera, 23743
trade list catalog, 30321
trigonometric parallaxes of faint stars, 2d catalog, 29431
water resources research catalog, project summaries and lists of subjects, performing organizations, and supporting organizations, 30309
wide world of children's books, exhibition for International Book Year, annotated catalog, 29191
Catalysis, catalytic combustion, pollution-free means of energy conversion? 31274
Catalysts:
catalyst for rural development, 20383, 25293
catalytic decomposition of chloroform, 23877
effects of amine catalyst on compressive properties of urethane foam, 28064
Cataracts:
focus on research, 27755
general information, 23732
Caterers and catering, urban business profile, mobile catering, 15977
Catfish:
demand for farm-raised channel catfish in super-markets, analysis of selected market, 26940
producing and marketing catfish in Tennessee Valley, conference proceedings, 16551, 30666
weight loss of pond-raised channel catfish (*Ictalurus punctatus*) during holding in processing plant vats, 20699
Catfish Creek, flood plain information, Sarasota County, Fla., 32220
Catheart, James L., journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy to survey timber resources between Mermentau and Mobile Rivers, Nov. 1817-May 1819, with appendix etc., microfilm, pamphlet describing, 21994
Cather, Willa, commemorative stamp, American arts series (poster), 31890
Catheters, surgical catheters, drains and tubes, Federal Item Identification guide, 30114
Cathey, Henry M., growing bonsai, 30706
Cathode ray tubes, shell, instructor console, cathode ray tube, military standard, 15965
Cathodes, cold cathodes for sealed-off CO₂ lasers, 32474
Cations, *see* Ions.
Catlett, Vernon R., soil survey of Ouachita County, Ark., 30639
Catoma Creek:
flood plain information, 20114
floods, vicinity of Montgomery, Ala., 20147
Cattle:
Angus cattle commemorative stamp, rural America series, 32605
beef cattle feedlot site selection for environmental protection, 21503
calf crop report, 22278
cattle feedlots in Pacific Northwest, 32248
cattle raising in United States, 22324
cattle scabies, 24140
characteristics of rainfall runoff from beef cattle feedlot, 17419
comparison of milking operations in herringbone milking layouts for large herds in California, 19129
cooperative State-Federal sheep and cattle scabies eradication progress report and epidemiology, 22395

INDEX 1973

- Cattle—Continued
 curved holding chute for cattle, 31919
 disposal of cattle feedlot wastes by pyrolysis, 23189
 feeder for cattle, liquid supplement, 22341
 finishing beef cattle, 27990
 geochemical anomalies of claypit area, Callaway County, Mo., and related metabolic imbalance in beef cattle, 29026
 guidelines for uniform beef improvement programs, 16611
 inventories, value, calf crop, etc., 1965-70, 19139
 live beef cattle, commitments of traders, 18140
 livestock market, farm building plans, 20917
 number of cattle and calf, 31878
 on feed, 18055
 sold for slaughter, selected markets, 18055
 squeeze chute for cattle, 31918
see also Livestock—Tuberculosis in animals.
- Cattle ranches, *see* Ranches.
- Cattle ticks, fight against cattle fever ticks, 26943
- Cattlehide, *see* Leather, hides and skins.
- CATV (community antenna television), *see* Television.
- Caucasian race:
 differential utilization of general hospital psychiatric inpatient units by whites and nonwhites 1970-71, United States, 23763
 suitability of using common selection test standards for Negro and white airmen, 25844
- Caustic soda, *see* Soda (caustic).
- Cavalry (armored), *see* Armored force.
- Cavender, James H., nationwide air pollutant emission trends 1940-70, 28832
- CBD parking report, 16041
- CCC, *see* Commodity Credit Corporation.
- CCPM pamphlet, 17801
- CDD-series, 15582
- Cebeci, Tuncel, some problems of calculation of 3-dimensional boundary-layer flows on general configurations, 31611
- Cebus, *see* Monkeys.
- Cedar:
 phytophthora root rot of Port-Orford-cedar, 17508
 Port-Orford, American wood, 32309
- Cedar Bayou:
 flood plain information, Houston metropolitan area, Tex., 28701
 floods, Houston metropolitan area, Tex., how to avoid damage, 28734
- Cedar Breaks National Monument, Utah, general information, 31730
- Cedar Flats Research Natural Area, general information, 21615
- Cedar Keys National Wildlife Refuge Wilderness in Florida, designate as wilderness area, law, 16884
- CEDDA, *see* Center for Experiment Design and Data Analysis.
- Cederstrom, D. J., evaluation of yields of wells in consolidated rocks, Virginia to Maine, 17550
- Telescope catalog of ultraviolet stellar observations, 5068 objects measured by Smithsonian experiment aboard Orbiting Astronomical Observatory (OAO-2), 27878
- Cells:
 cellular histamine release and allergy (remarks), 29350
 cellular immunology (remarks), 29351
 engineering evaluation of non-reserve zinc-air cells, 19159
 information transfer between living cells, USSR study, 23560
 injections of neighborhood size 3 and 4 on set of configurations from infinite one-dimensional tessellation automata of two-state cells, 22405
- Cells—Continued
 one cell spoke to another, USSR study, 27642
 workshop on lung cell identification, isolation and culture, 30494
see also Cancer—Mesophyll cells.
- Cells (electrolytic), *see* Electrolytic cells.
- Cells (photovoltaic), *see* Photoelectric cells.
- Cement:
 aggregate concrete mixtures with high water-cement ratios, laboratory investigation, 20174
 analyses of check-test results of pozzolan samples, 25098
 fracture mechanics applicability to Portland cement concretes, 26380
 lime-cement combination stabilization, 30161
 mineral industry survey, monthly, 18058
 minerals yearbook chapter, 16258, 25438
 statistical summary of cement in United States, 23661
- Cemeteries, American Military, Jefferson Barracks National Cemetery, 16646
see also National cemeteries—also names of cemeteries or places where located.
- Cenozoic era:
 Cenozoic fossil mollusks from western Pacific Islands: gastropods (Turritellidae through Strombidae), 21720
 Cenozoic rocks of Santa Rita Mountains, southeast of Tucson, Ariz., 21732
- Census:
 agriculture, financing, availability, etc., hearings, 31039
 agriculture, 1969—
 area reports, 16688-689, 22512, 24210-211
 general publications, 21038
 general reports, 27003, 29689, 30789-794, 31939
 agriculture, 1974, relating to taking, hearing, 30064
 business, 1967—
 major retail centers, area statistics, 16690-696
 retail trade area statistics, 16697-700
 selected services, area statistics, 16701-713
 wholesale trade—
 area statistics, 16714-716
 subject reports, 16717-718, 27004
 census confidentiality/mid-decade sample survey bill, report, 32029
 census data for community action, 21037
 census employment survey user's guide, 31566
 census geography series CG, data access descriptions, 31969
 census, 1970—
 procedural history, 25914
 users bulletin, 18059
 census programs of several countries in Europe and Middle East, 26091
 census reports, 1969, subject reports, 24212
 census retrospective 1968-70 on microfiche, catalog, 30554
 census tabulation available on computer tape series, data access descriptions, 15594
 census tract papers GE-40 (series), 31951
 census use study, 29722-723
 clerical recoding manual, 1972 economic censuses, 16749
 collection, evaluation, and processing series, data access descriptions, 28191
 comparison of total population figures from censuses taken around 1970 with population estimates for selected countries, 28194
 construction industries, 1967, industry statistics, 16719
 data access descriptions, 15594, 19250, 28191, 31969
 census 1970, geography, products, and programs, 31969

Census—Continued

detailed housing characteristics for United States, regions, divisions, and States, 1970, publications order form, 22516
economic censuses, 1967, procedural history, 21066
economic censuses, 1972, publication output and major items collected, 27041
economic censuses printed reports series ECPR, 19250
farms, number, use of land, size of farms, 30789
general information, procedures for collection, processing, classification, 27003
governments, 1972—
preliminary report, 21039
taxable property values and assessment, sales price ratios, 27005
housing, 1970—
characteristics for States, cities and counties, United States summary, 27007
components of inventory change, 27006, 28099-106, 29690-692, 30795-797
detailed housing characteristics, 19195
microfiche order form, 22139
final reports, 15532-568, 16720-729, 19196-198, 21040, 24213, 25897, 31942
housing characteristics for States, cities, and counties, bound volumes, 27007
metropolitan housing, 15569, 16730-731, 24214-216, 25898, 28107
microfiche order form, 22138
publications order form, 22513
United States and regions, 16730
subject reports, 25899, 29693-694, 30798, 31943
supplementary reports, 15570-572, 19199, 27008-9, 28108-111, 31944-945
microfiche order form, 22140
publications order forms, 22514, 22516
index to 1970 census summary tapes, 28192
link of census establishment and IRS corporation data, enterprise statistics, 25938
livestock, poultry, livestock and poultry products, 1969 census of agriculture, 29689
local jails, report presenting data for individual county and city jails from 1970 national jail census, 26605
manufactures, 1970, annual survey, 21036
manufactures, 1972, special reports, 30799
mid-decade census of population, proposals, hearing, 27237
1970 census and you, general introduction to census data, subjects, areas, reports, tapes, microfilm, 24209
1970 census users' guide and summary tape technical documentation, corrections, 22548
1970, estimates of coverage of population by sex, race and age (paper), 27040
population, 1970—
characteristics of population, 29697-704, 31946-947
bound volumes, 25900-906, 27010-17, 28112-119, 30800-804
publications order form, 25907
detailed characteristics, 15573-575, 16732-742, 19200-208, 21041-42, 22517-525, 24217, 28120-121
microfiche order form, 22141
publications order form, 22526
United States summary, 28120
final reports, 19210
general social and economic characteristics, 15576, 16743, 19209
industries and occupations, classified index, 29705
procedural history, 28134

Census—Continued

population, 1970—Continued
subject reports, 15577, 21044, 22533-534, 24218-219, 25908-910, 27018-19, 28122-124, 29706-710, 30805-810, 31948-950
microfiche order form, 22144
publications order form, 27020
supplementary reports, 15578-579, 19211, 21045-47, 22535, 24220-221, 25911-912, 27021-24, 28125-130, 29711-718, 30811
microfiche order forms, 22142-142A
publications order forms, 22528-532
population and housing, 1960, evaluation and research program of U.S., 22564
population and housing, 1970—
census tract memo series, 21053
census tracts, 15580-581, 16744-745, 19212-227, 28131
employment profiles of selected low-income areas, rural areas—
microfiche order form, 23849
publications order form, 22527
evaluation and research program, 22536, 28132
quality of residential geographic coding, 22536
geographic identification code scheme, 16746, 19228-229
microfiche order form, 22145
publications order form, 22537
procedural history, 28133
printed reports issued by Bureau of Census for economic, governments, and agriculture censuses, 19250
public use samples of basic records from 1970 census, description and technical documentation, 28193
research document series, 28194
small-area data notes, 18908
subject reports from 1970 census of population and housing, 28191
summary tape processing centers for census data, 16791
summary tapes from 1970 census of population and housing 6th count, 15594
transportation, 1972—
national travel survey, 25915, 28135-146, 38012
transportation, 1972—
truck inventory and use survey, 19230-236, 21048-52, 22538-545, 24222-230, 27026-29, 29720-721, 30813-815
United States Code, amendments, 17295
see also Population.
Census Bureau :
catalog, 18034
census use study, 28147
correction, update, extension of geographic base (DIME) files, 22547
Director, nomination of Vincent P. Barabba, hearing, 31158
maps, 21069
United States maps GE-50, series, 21071
methodological research—
key word subject index—1963-71, 29687
papers and reports, list, 19194, 29688
papers by staff members, lists, 22565, 25939
press releases, 18776
printed reports issued for economic, governments and agriculture censuses, 19250
publications catalog, monthly supplement, 18035
research document series, 22566
schedule B, statistical classification of domestic and foreign commodities exported from United States, 16794, 18888
small-area data notes, 18908
technical papers, 16792
United States Code, amendments, 17295
United States maps GE-50 (series), 29789
working papers, 24247
Centaur launch vehicle, *see* Spacecraft.

INDEX 1973

- Centenarians, America's social security beneficiaries who reach 100, 26832
- Centennial events, national parks centennial 1872-1972, 23822
- Center for Disease Control:
CDC veterinary public health notes, 18057 surveillance—
salmonella report, 18060
shigella report, 18061
zoonoses, rabies, summary, 18062, 29793
- Center for Experiment Design and Data Analysis, CEDDA, general information, 30190
- Center for Studies of Crime and Delinquency, research reports, 30504
- Center for Vocational and Technical Education:
Ohio State University—
bibliography series, 20092-93
information series, 17349-352, 27768-769
research and development series, 17353-354, 21421, 26741, 27770-771, 29357-358, 30501-502, 31693, 32495
- Centerwall, Willard R., phenylketonuria, inherited metabolic disorder associated with mental retardation, 17677
- Central African Republic, economic trends and their implications for United States, 32397
- Central America:
branchiobdellid (Annelida, Clitellata) fauna of mesoamerica, summary, 29490
index numbers for North and Central America to identify coded meteorological reports, 22153
revision of genus Sennius of North and Central America (Coleoptera, Bruchidae), 28025
west coast, sailing directions, 28627
- Central Cities Educational Center, Fort Worth, Tex., 27773
- Central Intelligence Agency:
Congress to be kept better informed on foreign policy and national security by Central Intelligence Agency, report 15822
Retirement act, amend—
hearings, 26150-151, 27305
law, 30907
reports, 26141, 27278
- Central States:
annual survey of manufactures, statistics for—
States, standard metropolitan statistical areas, large industrial counties and selected cities—
East North Central division, 25892
West North Central division, 16685, 25893
West South Central division, 16686
Canadian forest product shipped into North Central Region, 25227
cost of transporting freight, 16170, 25320
development of case study of total effect of pesticides in environment, non-irrigated croplands of the Mid-west, 20867
fish farming in 12 South Central States species acreage, and number of farmers, 20682
ground water levels in United States, 1967-71, North-Central States, 31401
ground water pollution in South Central States, 30194
manufactures, annual survey, general statistics—
East North Central division, 19189
East South Central division, 24207
West South Central division, 24208
North Central regions, food consumption of households, 16600
north central region, geographic identification code scheme, 16746
- Central States—Continued
potential radiological implications of nuclear facilities in upper Mississippi River basin in year 2000, 28090
10th Lake States Forest Tree Improvement Conference and 7th Central States Forest Tree Improvement Conference, joint proceedings, 28923
- Central swine-testing and purebred-improvement programs in United States, 24136
- Central Valley project:
annual reports, 23917-918
electrical equipment, Central Valley project, mid-Pacific region, field review of maintenance, 31779
San Luis, Westlands water district construction charges, deferment, law, 16888
- Central water and sewerage systems (ownership and organization), 32380
- Centrifugal compressor, *see* Compressors.
- Centrifugal separators, *see* Separators.
- Centrifugal tensile tester for snow, 23296
- Cephalopods, systematics and areal distribution of pelagic cephalopods from seas of southern California, 16475
- Ceponis, M. J., nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
- CEQ, *see* Council on Environmental Quality.
- Ceramic tile, *see* Tiles.
- Ceramics:
ceramic tableware, Tariff Commission report, 27943
crack propagation studies in brittle materials, 31756
increasing heat and impact resistance of zirconium-dioxide based ceramics, USSR study, 20470
metal-ceramic structural materials, USSR study, 17615
radio frequency coils, molded ceramic capacitors, and fixed precision metal film resistors, certain workers of Dubois, Pa., plant of Airco Speer Electronic Components Division, Tariff Commission report, 22282
- Cercocarpus, *see* Mountainmahogany.
- Cerebral cortex:
dynamics of pathomorphological changes in cerebrocortical motor region in response to single isergamide (LSD) administration (electronic microscope investigation), USSR study, 20461
stable changes in frequency and synchronism of cortical neuron population discharges in experiments with feedback, USSR, study, 20475
- Cerebral palsy, *see* Palsy.
- Cerebrum, *see* Brain.
- Cerium, effect of MeV electrons on ceria-doped solar cell cover glass, 29282
- CERL, *see* Construction Engineering Research Laboratory.
- Certain background information for consideration when evaluating national energy dilemma, 25991
- Certain sheet glass, 29551
- Certificates, *see* types of certificates or subjects involved.
- Certificates of deposit, question and answers regarding original issue discount on savings deposit arrangements, tax treatment, 23481
- Certification of air carriers, *see* Air carriers.
- Certified copies of Copyright Office records 24967
- Certified public accountants, *see* Accountants.
- Cesium, economics of mixed potassium-cesium seeding of an MHD combustion plasma, 23657
- Cessna 182, aircraft accident report, 29409

- Ceylon:
 accessions list, Library of Congress American Libraries Book Procurement Center, New Delhi, 17943
 behavior and ecology of Asiatic elephant in southeastern Ceylon, 26823
 Ceylon and Socialist countries, USSR study, 25342
 economic trends and their implications for United States, 17584
 mineral industry, minerals yearbook chapter, 25428
 N.E., S.E., W., summary of synoptic meteorological observations, southwest Asian marine areas, 22182
 Sri Lanka, accessions list, Library of Congress American Libraries Book Procurement Center, New Delhi, 29179
 Sri Lanka, agricultural commodities, agreement, 25750
 Cha, C. Y., photochemical methods for purifying water, 20206
 Chace, Fenner A., jr., two new caridean shrimps, one representing new family, from marine pools on Ascension Island (Crustacea: Decapoda: Natantia), 20765
 Chad:
 area handbook, 15508
 background notes, 17853
 economic trends and their implications for United States, 16162
 economy, basic data, 25974
 Chadwick, Russell B., technical and economic trade-offs for geostationary orbit communications resources, 28235
 Chafetz, Morris E., proceedings of annual alcoholism conferences of National Institute on Alcohol Abuse and Alcoholism, 29363-364
 Chaffee, Frederick H., area handbook for China, 19168
 Chain saws, *see* Saws.
 Chains:
 Federal item identification guide, 30098
 roller chain from Japan, Tariff Commission report, 25783
 rope, cable and chain fittings, Federal item identification guide, 27394
 Chalcopyrite, copper recovery from chalcopyrite by roast-leach procedure, 25516
 Challenge ahead, path to steady growth, 22626
 Challenge of environment, primer on EPA's statutory authority, 16016, 21487
 Challenge of youth service bureaus, 30684
 Chamber devices:
 characteristics and operation of cloud condensation nuclei collection/detection recording instrument, technical manual, 22416
 experimental and analytical study of one- and two-component flows in spherical chambers, 31609
 historical summary of activities in UCFAA fog chamber, 24027
 microwave plasma heating experiments in Tuman-2 device, 22447
 simulated breathholding dives in dry and wet chambers on blood shifts into thorax, effect, 29199
 Chamberlain, Charles E.:
 Chamberlain Committee, annual report, 24347
 Jackson Chamberlain Committee, annual report, 26031
 Chamberlain, Everett B., waterfowl status report, 29516A
 Chamberlain Committee, political committee, annual report, 24347
 Chamberlayne, Earl C., status of immunization in tuberculosis in 1971, report of conference on programs to date, future trends and research needs, 16174
 Chambers, hyperbaric facilities, design manual for naval shore facilities, 27838
 Chamlee, Donald L., Federal probation, journal of correctional philosophy and practice, 18343
 Champaign County Republican Executive Committee, annual report, 22702
 Champie, Ellmore A., Federal turnaround on aid to airports, 1926-38, 25137
 Chancelleries:
 Chancery act, amend, hearing, 31040
 property for chancery sites in D.C., provide, improvements, report, 19926
 Chancellor, Jerry L., relief, 19323, 19829
 Chanceries, *see* Chancelleries.
 Chandler, Edwin E., water spectrum, 19055
 Chandler, Whitman M., jr., cost of storing and handling cotton at public storage facilities, 1971-72, projects for 1973-74, 28647
 Chang, Kuay Ten, relief, 19824
 Change process in criminal justice, 30375
 Changes in farm production and efficiency, 28018
 Changes in permeability of histo-hematic barriers under effect of microwaves, 23521
 Changing demand for local capacity, analysis of functional programming and policy planning, 25271
 Changing market for hardwood plywood stock panels, 21669
 Changing nature of mass media, 22194
 Changing structure of banking (remarks), 16054
 Channel catfish, *see* Catfish.
 Channels:
 channel changes of Gila River in Safford Valley, Ariz., 23361
 channel conditions, Devil's Island Reach, Mississippi River, Mo. and Ill., hydraulic model investigation, 23180
 channel modifications, report, 28578
 effective hydraulic roughness for channels having bed roughness different from bank roughness, state-of-the-art report, 25094
 flow and channel characteristics of 2 high mountain streams, 23306
 flow augmenting effects of additives on open channel flows, 30189
 navigation channel improvement Gastineau Channel, Alaska hydraulic model investigation, 21481
 objective speech, quality measurement of communication channel, 31990
 principles and measuring techniques of turbulence characteristics in open-channel flow, 23357
 proposed calibration target for visible channel of satellite radiometer, 22099
 sediment transport in alluvial channels (series), 21721
 selected streamflow characteristics as related to channel geometry of perennial streams in Colorado, 23373
 stream channelization, effects, etc., hearings, 29915
 summary of turbulence data from rivers, conveyance channels, and laboratory flumes, 23375
 supercritical flow in curved channels, hydraulic model investigation, 21477
 Chanute Air Force Base, methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall, 32201
 Chaparral:
 litter production by oak-mountainmahogany chaparral in central Arizona, 17518
 predicting fire spread in Arizona's oak chaparral, 28968
 Chapel Hill-Carrboro Lee For Congress, annual report, 22982
 Chaplains:
 military chaplains' review, 18625
 Naval Reserve handbook, 31749
 Chappell, Bill, Dinner Committee, *see* Bill Chappell Dinner Committee.

INDEX 1973

- Char:
 char oil energy development, interim report, 21092
 economic evaluation of COED process plus char gasification, 22615
 Characteristics of American youth, 24239
 Characteristics of clients rehabilitated in fiscal years 1967-71, Federal-State vocational rehabilitation program, 29460
 Characteristics of electrical part of atomic-electric plants, 32402
 Characteristics of estuarine sediments of United States, 17538
 Characteristics of NARA patients in after-care during June 1971, 25586
 Characteristics of Negro immigrants to selected metropolitan areas, 29716
 Characteristics of occupied housing units by year structure built and tenure for United States, 15571-572
 Characteristics of 2d home owners for United States, 28108
 Characteristics of Spanish language households for United States, 31944
 Characteristics of turbulent diffusion parameters as related to stability, 20980
 Characterization of linear polyethylene SRM 1475, 17737
 Characterization of stream reaeration capacity, 21490
 Characterizing vegetation from existing source material for predicting munition height of burst in inaccessible areas, 31258
 Charba, Jess, gravity current model applied to analysis of squall-line gust front, 25620
 Charcoal, evaluation of data regarding efficiency of activated charcoal adsorbents at low gas phase iodine concentrations, 21031
 Charged particles, *see* Particles.
 Charges for care and sources of payment for residents in nursing homes, United States, 31682
 Charitable contributions, *see* Charities.
 Charitable institutions, testimony on legislative activities by certain tax-exempt organizations, at public hearings, summary, 17115
 Charitable trusts:
 compliance with provisions of Tax reform act of 1969 hearings, 28400
 tax-exempt, their impact on our economy, 31015
 Charities:
 fund-raising within Federal service for voluntary health and welfare agencies, manual, 27048
 income tax deduction for contribution, 20398
 Charles County, Republican Central Committee, *see* Republican Central Committee of Charles County.
 Charlotte, N.C., area wage survey, 27671
 Charlottesville, Va.:
 flood plain information, Meadow Creek, 17387
 floods, how to avoid damage, Meadow Creek, 20138
 Moores Creek, Albemarle County, flood plain information, 16011
 Charnell, Robert L., oceanographic observation of New York Bight from ERTS-1, 27802
 Charpy impact tests, *see* Impact.
 Chars, structure and properties of various coal chars, 25955
 Chartbook on smoking tobacco and health, 16797
 Chartbook on prices, wages, and productivity, 18064
 Charter flights, *see* Air carriers.
 Charters, United Nations, art. 61, amendment, 28441
 Charts:
 National Weather Service, 29414
 sold by Superintendent of Documents, price list, 25674
 Charts—Continued
see Maps and charts—Organization charts—*also* subjects.
 Chase, Joseph, oceanographic observations along East Coast of U.S., 22619
 Chase Lake National Wilderness Refuge, addition of part to National Wilderness Preservation System as Chase Lake Wilderness, proposal, 23000
 Chassahowitzka National Wildlife Refuge, addition of part to National Wilderness Preservation System as Chassahowitzka Wilderness, proposal, 23000
 Chatam, Claude E., Jr., study of beach widening by perched beach concept Santa Monica Bay, Calif., 31264
 Chattahoochee River and Valley, Apalachicola-Chattahoochee-Flint basins, plan for development of land and water resources of southern river basins, 17924
 Chattanooga, Tenn.:
 area wage survey, 23595
 census of population and housing, 1970, census tracts, errata, 19213
 Chavez, Phillip A., soil conservation, 18913
 Cheboygan County Republican Committee, Michigan, annual report, 22729
 Check career with U.S. Office of Civil Defense, 16812
 Check characters, *see* Error-correcting codes.
 Check lists, *see* Checklists.
 Checklist guide for nuclear emergency operations planning, 30082
 Checklists:
 business service, 18039
 State publications, monthly, 18642
see also names of departments, etc. issuing checklists—*also* subjects.
 Checks:
 agency heads to draw checks in favor of financial organization to other classes of recurring payments, extension of authority, 16885
 allotments of salary to savings accounts and disposition of net pay checks, change, 21774
 checks and other items, collection, regulation, amendment, 21579
 continued substantial increase in volume of use before long distant electronic transfer of funds (remarks), 2*888
 recent regulatory changes in reserve requirements and check collection, 17485
 social security checks for students 18 to 22, 17836
 your social security check while you're outside U.S., 31814
 Cheese, Tariff Commission report, 26894
 Chelonus, release of *Bracon kirkpatricki* (Wilkinson) and *Chelonus blackburni* Cameron for pink bollworm control in Arizona, 28017
 Chemical analysis:
 chemical analysis and laboratory instruments, change, 21399
 chemical composition of sedimentary rocks in Alaska, Idaho, Oregon, and Washington, 25364
 desalination plant operators chemical control guide, 25295
 development of analytical procedures for determining chlorinated hydrocarbon residues in waters and sediments from storage reservoirs, 22209
 gas chromatography, method of determining harmful substances in air and in biological media, USSR study, 31529
 instruments—
 Federal item identification guide, 28598
 industrial plant equipment handbook, 23089
 thermal waters in Yellowstone National Park, Wyo., 1960-65, 32359
 Chemical desulfurization of coal, report of bench-scale developments, 28805, 30179

Chemical elements, *see* Transition elements.
 Chemical equilibrium, *see* Equilibrium.
 Chemical grouting, 31246
 Chemical precipitation, *see* Precipitation (chemistry).
 Chemical reactions:
 chemical interactions of aluminum with aqueous silica at 25° C, 23392
 coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems, 32257
 drug interactions, annotated bibliography 1967-70 with selected excerpts, 20675
 influence on heat exchange of freezing chemical reactions in non-equilibrium laminar boundary, USSR study, 16180
 kinetics and thermodynamics of processes of interaction of gases with liquid metals, summaries of symposium reports, 23530
 kinetics of CO reduction of hematite to magnetite and effect of silica, 23659
 Kraft effluent color characterization before and after stoichiometric lime treatment, 25113
 oxidation of carbon at high temperatures, reaction-rate control or transport control, 23679
 selected specific rates of reactions of solvated alcohols, 17736
 sulfur dioxide, its chemistry as related to methods for removing it from waste gases, 30419
 Chemical reactors, *see* Reactors (atomic).
 Chemical reduction, *see* Reduction (chemical).
 Chemical treatment of plating waste removal of heavy metals, 28798
 Chemical warfare, Geneva protocol of 1925 prohibiting, hearings, 15892
 Chemicals:
 adverse and toxic effects, toxicity bibliography, 18967
 behavior and impact of chemicals on forest environment, 21604
 chemical and pharmaceutical products, manufacturing machinery, industrial plant equipment handbook, 15944
 chemical composition of naturally occurring fluids in relation to mercury deposits in part of north-central California, 27559
 chemical control of plant growth, 20931
 chemical data guide for bulk shipment by water, 25956
 chemical oceanographic research, present status and future direction, deliberations of workshop held at Naval Postgraduate School, Monterey, Calif., 31750
 chemical products, Federal item identification guide, 24995
 chemical quality of surface water in Flaming Gorge Reservoir area, Wyo. and Utah, 26512
 chemical quality of water in Tucson basin, Ariz., 17548
 chemical thermodynamic properties, tables for lanthanide (rare earth) elements, selected values, 29320
 coke and coal chemicals, minerals yearbook chapter, 25442
 compounds—
 authorized for use under USDA poultry, etc., inspection programs, lists, 23399, 28041
 photographic and copy processing, Federal item identification guide, 26313
 control of hazardous chemical spills by physical barriers, 28808
 deliquescent-chemical maximum humidity indicator, 29667
 effect of fuel additives on chemical and physical characteristics of particulate emissions in automotive exhaust, 31275

Chemicals—Continued
 effects of chemical variations in aquatic environments—
 biota and chemistry of Piceance Creek, 28790
 lead toxicity to rainbow trout and testing application factor concept, 27449
 toxic effects of aqueous aluminum to rainbow trout, 26401
 equipment, labor, expenditures, chemicals, census of agriculture, 1969, general report, 30791
 feasibility of plastic foam plugs for sealing leaking chemical containers, 31282
 Federal item identification guide, 26314, 31181
 future role of chemicals in forestry, 31360
 industrial chemicals, industry wage survey, 29163
 industry reports, 18066
 inorganic, current industrial reports, 16763, 18194, 28160
 interstate commerce, regulate to protect health and environment from hazardous chemical substances, hearings, 28419
 new and certain existing substances, interstate commerce regulations by premarketing, testing, etc.—
 hearings, 30014
 report, 31080
 read the label, 23259
 reference handbook, Army field manual, 24168
 relations among radionuclide content and physical chemical and mineral characteristics of Columbia River sediments, 27562
 report of Industry Advisory Committee, National Export Expansion Council, 19292
 sludge processing for combined physical-chemical-biological sludges, 31281
 toxic substances, 1972, annual list, 17760
 toxicity of power plant chemicals to aquatic life, 28091
 water pollution potential of manufactured products, catalog sec. 3, chemical ingredient listing, 27475
 see also Inorganic compounds—Organic compounds—*also* names of chemicals.
 Chemistry:
 annotated bibliography of Lake Ontario limnological and related studies, chemistry, 27453
 application of modern technologies to international development, list of reports, 18000
 biological and nutrient chemistry data from participating ships, 2d survey cruise, eastern tropical Pacific Ocean, EASTROPAC atlas, 29373
 biota and chemistry of Piceance Creek, effects of chemical variations in aquatic environments, 28790
 burnup determination for fast reactor fuels, review and status of nuclear data and analytical chemistry methodology requirements, 29681
 chemical wastewater treatment, selected abstract, 2733
 chemistry and application of organophosphorus compounds, proceedings of Third Conference, USSR study, 20479
 chemistry of—
 aluminum in natural water (series), 23392
 igneous rocks, data of geochemistry, 23358
 peralkaline oversaturated obsidians, data of geochemistry, 23358
 East European abstracts, 18239
 journal of research, National Bureau of Standards, 18530, 20634
 mineralogy, mineral-chemistry, and composition of Murchison (C2) meteorite, 31799

INDEX 1973

Chemistry—Continued

- significance of ground-water chemistry in performance of North Sahara tube wells in Algeria and Tunisia, 21742
- sulfur dioxide, its chemistry as related to methods for removing it from waste gases, 30419
- summaries of USAEC basic research program in chemistry, research and development in progress, 28082
- survey of application of radiation to preparative chemistry, 20291
- USSR abstracts, 19035
- see also Inorganic chemistry.
- Chemists, chemist-meteorologist workshop, Fort Lauderdale, Fla., 29682-683
- Chemotherapy:
 - cancer chemotherapy abstracts (periodical), 18046
 - cancer chemotherapy reports (periodical), 18047-49
 - protozoan diseases, 15516
 - summary report of chemotherapy program, NCI, 16364, 22021
- Chen, Peter Y. S., elm, American wood, 31353
- Cheng, L., respirable dust adhering to run-of-face bituminous coals, 30438
- Chequamegon National Forest, general information, 28921
- Cherokee County Republican Committee, annual report, 24533
- Cherokee County Republican Women, annual report, 24736
- Cherokee Indians:
 - determining rights and interests of Choctaw Nation, Chickasaw Nation, and Cherokee Nation in and to bed of Arkansas River below the Canadian Fork and to eastern boundary of Oklahoma, report, 29876
 - general information, 31451
- Cherries:
 - canned red tart pitted, standards for grades, 22318
 - canned sweet, standards for grades, 29613
 - control of postharvest brown rot of sweet cherries and peaches with chemical and heat treatments, 19112
 - response to crop-tree release by 7-year-old stems of yellow-poplar and black cherry, 27534
- Cherry Creek Research Natural Area, general information, 21616
- Chesapeake (lightship):
 - National Park Service lightship for environmental awareness, 32513
- Chesapeake Bay, geomorphology and sediments of Chesapeake Bay entrance, 23151
- Chesapeake, Va.:
 - flood plain information, coastal flooding in Chesapeake, Va., 28702
 - floods, how to avoid damage, 28740
- Chesapeake Republican City Committee, annual report, 22888
- Chest:
 - chest X-ray as screening procedure cardiopulmonary disease, policy statement, 26805
 - simulated breathholding dives in dry and wet chambers on blood shifts into thorax, effects, 29199
- Chester, Colby M., papers in Library of Congress register, 29182
- Chester, Ill., bridge across Mississippi River, cooperative operation and maintenance by Missouri and Illinois, report, 17146
- Chester Creek, Greater Anchorage area, special flood hazard report, 20166
- Chesterfield County, Va.:
 - flood plain information, Falling Creek, 21447
 - floods, how to avoid damage, Falling Creek, 21460
- Chesterfield County Republican Committee, annual report, 22831
- Chestnuts, American woods, description, etc., 25200

- Chevalier, James L., hot hardness characteristics of ausformed AISI M-50, Matrix II, WD-65, modified AISI 440-C, and super nitralloy, 29281
- Chevalier (U.S.S.):
 - loan, agreement with Republic of Korea, 20806
- Cheyenne-Arapaho Tribes of Oklahoma, see Cheyenne Indians.
- Cheyenne Indians:
 - Cheyenne-Arapaho Tribes of Oklahoma judgment funds, disposition, law, 19374
 - general information, 31452
- Cheyenne River and Valley, report on pollution affecting water quality of Cheyenne River system, western South Dakota, 20213
- Cheyenne River Sioux Tribe, see Sioux Indians.
- Chiang, C. Y. (Jesse), Chiang for Congress Committee annual report, 24667
- Chiang for Congress Committee, annual report, 24667
- Chlavetta, Kenneth J., wildlife review, 19087
- Chiburis, E. F., Pacific SEAMAP 1961-70 data bathymetry, magnetics and gravity, 23811-812
- Chicago, Ill.:
 - area wage survey, 17663
 - Board of Trade, futures trading and open interest in regulated commodities, 18395
 - census of housing, 1970, components of inventory change, 28101
 - Chicago school of architecture, plan for preserving significant remnant of America's architectural heritage, 23823
 - fresh fruit and vegetable prices, 26946
 - housing and urban development programs, oversight, hearings, 28522
 - Juan Morel Campos Bilingual Center, model programs, compensatory education, 17364
 - large commercial banks, weekly condition report, 19076
 - Police Department, allocations of resources, 16214
 - regional wastewater management systems
 - Chief of Engineers Office report, 24958
- Chicago Board of Trade, trading in commodity futures contracts, 29626
- Chickasaw Indians, determining rights and interests of Choctaw Nation, Chickasaw Nation, and Cherokee Nation in and to bed of Arkansas River below the Canadian Fork and to eastern boundary of Oklahoma, report, 29876
- Chickens:
 - broiler marketing guide, 16583, 20883
 - commercial broilers, annual production and weekly placements, 25769
 - eggs, chickens, turkeys—
 - annual revisions, 1971, hatchery production, number of hatcheries and egg capacity, 25771
 - layers, potential layers, rate of lay, egg production, 26886
 - inventory, chicken and egg production, etc., 1965-70, 19137
 - prices and price spreads for eggs, frying chickens, and turkeys in 12 major cities, 1966-71, 30718
 - production, disposition, cash receipts, and gross income, etc., 22357, 26885
 - production, etc., monthly report, 18250
- Chico Republican Women, Federated, annual report, 24562
- Chicopee, Mass., census of population and housing, 1970, census tracts, 19224
- Chief Counsel's Office, Internal Revenue Service, legal careers, 21819
- Chiggers, controlling chiggers, 30702
- Child abuse prevention act, 28557
- Child care, see Children—Day care of children.
- Child development, see Children.
- Child Development Center, evaluation, 23127

Child Development Office:

annual report on Head Start services to handicapped children, 30867
appropriations, 1974, hearings, 31009
functions, background, organization, 19269

Child health, *see* Children.

Child labor, laws, compilation, 19538

Child welfare, *see* Children.

Childers, Joseph M., trans-Alaska pipeline flood survey along proposed route, 23342

Childhood, *see* Children.

Children:

ability of elementary and secondary school children to sense oncoming car velocity, 15625

abused and battered child, selected references, 25591

adults as reading models for children, 28673

ancillary health personnel in maternal and child health projects, use, 31576

behavior modification in child and school mental health, annotated bibliography on applications with parents and teachers, 23750

books, 1972, list, 26634

case studies of children in Head Start planned variation, 1970-71. Children in Head Start, 1970-71, supplemental report for Office of Child Development, 25944

cerebral palsy, mental retardation and other neurological and sensory disorders of infancy and childhood, collaborative study, bibliography, 26750

child abuse, demonstration program for prevention, identification, and treatment, provide, hearings, 28557

Child abuse prevention and treatment act, report, 29984

child advocacy, report of national baseline study, 28205

child and family resource program, guidelines for child development, oriented family resource system, 24252

child care—

arrangements of AFDC recipients under work incentive program, 18067
disabled dependent care, income tax deduction, 25301

programs, improve, report, 15860

child development publications, price list, 27867

child nutrition programs, 24137

continue financing—

law, 27088

reports, 24829, 26121

handbook for volunteers, 17495

maintain for fiscal year 1973, hearing, 31019

children and youth projects, comprehensive health care in low-income areas, 20521

children served in mental retardation clinics, 1970-72 fiscal years, 29195

children today (periodical), 18064

citizen advocacy for handicapped, impaired and disadvantaged, overview, 16457

color vision deficiencies in children, United States, 17748

compilation of National school lunch act, Child nutrition act, and related provisions of law, 17035

Comprehensive child development act, report, 19707

Comprehensive headstart, child development, and family services act, text and section analysis, 21362

continuous progress program, Williamsburg County, S.C., title 1 ESEA case study, 21432

early childhood education, 22062

education in federally affected areas, 1971 annual report, 27427

eye examination findings among children, U.S., 17747

Children—Continued

facts about mental health of children, 22073

families with children programs, 30019

feeding the child with a handicap, 30404

films suitable for Head Start child development programs, list, 21745

flake and his secret plan, 28245

food for children in pre-school centers, in summer programs, 16070

food for family with young children, 30700

foster grandparent program, one part of

ACTION, 26923

four C, community coordinated child care, concepts, goals, operation, 22572

funds, summer lunch-pre-school feeding, extend hearings, 20006

getting help on reading outside of school, 28676

getting ready to read, 28670

gifted and talented, education, report, 19994

handbook on performance objectives writing, title 1, Elementary and secondary education act of 1965, 26365

has your child had lead test yet? 28246

Head Start newsletter, 18415

Head Start Project—

career planning and progression for

child development center, 23400

evaluating performance and progress of staff, 26515

Head Start services provided to handicapped children, 30867

health screening and treatment for children through medicaid, 30405

health services for migrant children, 21423

hearing and related medical findings among children, race, area and socioeconomic differentials, 22030

height and weight of children, socioeconomic status, 17749

history of title 1, program for educationally deprived children, 17361

home-based child development program resources, bibliography, 30868

how children grow, 17768

hunger in the classroom, then and now, 17292

illegitimate, add as military dependents, report, 32052

influence of trigeminal stimulation on children's judgments of odor, 15627

Juan Morel Campos Bilingual Center, Chicago, Ill., model programs, compensatory education, 17364

lead paint poisoning in children, problem in your community? 31993

leadership development and training for Head Start coordinators of nutrition and cook managers, 21072

maternal and child health, provisions in social security amendments of 1972, 17251

Maternal and Child Health Service—

programs, 23625

reports on promoting health of mothers and children, 23624

reports on research to improve health services for mothers and children, 31575

maternal and child health services of State and local health departments, 25402

mental health at school, 26747

migrant children's nutrition, hearing, 21373

model early childhood learning program, Baltimore, Md., 27775

national assessment and social indicators, 31225

National Council of State committees for children and youth, report of 1st national workshop, 24109

needy school children will receive free or reduced price lunch under National school lunch act, hearing, 15732

INDEX 1973

Children—Continued

- number of children ever born for U.S., and age at 1st marriage for men and women, census of population, supplementary report, 25912
- nutrition—
 - growth and development of North American Indian children, 17762
 - statutes, compilation, 25820
- old paint can poison your children (posters), 28248-249
- older children need love too, 25945
- orphans and child welfare, relief and rehabilitation of war victims in Indochina, hearing, 30053
- our greatest resource for tomorrow, mental health aspects stressed for classroom (poster), 23751
- Oxon Hill children's farm, Oxon Hill, Md., 30547
- parents, are your walls poisoning your children, 28250
- periodontal disease and oral hygiene statistics, 20227
- playing safe in toyland, 21597
- poisons and intoxication by trace elements, abstract review of world wide medical literature, 25977
- practices of low-income families in feeding infants and small children, 17678
- preschool reading instruction, information of administrator, 23746
- preventing lead poisoning in children, 25943
- professional training programs in maternal and child nursing, 16244
- Project Head Start, 1969-70, descriptive report of programs and participants, 21747
- Project Head Start series, 21746, 23400, 26515-516
- psychoanalytic study of child, abstracts, 23757
- reading and language development in 1st grade, 28671
- reading readiness, what parents should know about it, 28672
- receiving physicians' services under crippled children's program, 1971 fiscal year, 26638
- reducing pressures in learning to read, 28675
- relationships among parent ratings of behavioral characteristics of children, U.S., 22029
- research relating to children, studies in progress, 24253, 28207
- rights of children, 1972—
 - appendix, selected readings on child abuse and day care, hearing, 20005
 - examination of sudden infant death syndrome, hearing, print additional copies, report, 17151
- school age child care, primer for building comprehensive child care services, 21120
- screening and assessment of young children at developmental risk, 26794
- conference papers, 29447
- selected body measurements of children 6-11 years, U.S., 27747
- send up more Sputniks, Russia woke us up to need for special education for gifted (address), 28682
- services to AFDC families, annual report to Congress, 22646
- skinfold thickness of children 6-11 years U.S., 22028
- social and rehabilitation services regulations as they affect child care, oversight hearing, 28406
- some kids will try anything once, we want you to know what we know about protecting children from adult medicine (poster), 23260
- Spanish English developmental program, Buffalo, title 1, ESEA case study, 21433

Children—Continued

- special summer food service program—
 - site handbook, 28012
 - sponsor handbook, 25830
 - training manual, 25829
 - speech, language and hearing program, guide for Head Start personnel, 26516
 - stop, look, listen, children ahead (play) 16119
 - strategies for implementation, White House Conference on Children, 16578
 - summer food service program for poor and underprivileged children—
 - law, 16921
 - report, 17154
 - summer food service programs, hearings, 15727
 - summer Head Start services to handicapped children, 28204
 - teacher's guide to preschool reading instruction, 29361.
 - teacher's manual for your chance to live, 26299
 - transportation characteristics of school children, 32282
 - TV advertising of food to children, hearings, 27359
 - vision, hearing, coordination and health in reading, 28674
 - when your child goes off to school, 26748
 - wide world of children's books, an exhibition for International Book Year, annotated catalog, 29191
 - see also Adoption—Day care of children—Juvenile delinquency.
- Children's Bureau, publication, 28206
- Chile:
- agricultural reforms and productivity and trade since 1965, 23130
 - and International Telephone and Telegraph Company, report, 30027
 - multinational corporations and United States foreign policy, hearings, 31141
 - economic trends and their implications for United States, 23496, 31509
 - map, 24248
 - military assistance, deposits under Foreign assistance act of 1971, agreement, 16512
 - United States-Chilean relations, hearing, 26160
- Chiles, W. Dean, residual performance effects of simulated sonic booms introduced during sleep, 16680
- Chillico Indian School, Indian School journal (periodical), 18489
- Chin, E.:
- magnesium compounds, 25453
 - mineral industry of Indonesia, 16281
- Chin, Laura, Bureau of Census catalog, 18034
- China:
- Ceylon and Socialist countries, USSR study, 25342
 - foreign relations of U.S., diplomatic papers—
 - departmental editions, 17859, 30645
 - document editions, 16937, 29837
 - new China policy, its impact on United States and Asia, hearings, 21228
 - People's Republic—
 - area handbook, 15507
 - atlas, 16807
 - economic developments, hearings, 15660
 - economy, basic data, 16828
 - impressions of new China, print additional copies, report, 16963
 - international negotiation, Chinese comment on Soviet foreign policy, 19973
 - issues in United States foreign policy, 20787
 - discussion guide, 25726
 - journey to new China, Apr.-May 1972, report, 19806
 - map, 16806
 - market profiles, 24289
 - medicine and public health, 27617

China—Continued

- People's Republic—Continued
 bibliography of Chinese sources, 29123
 topics of study interest in report of
 planned meeting, 21838
 minerals industry, minerals yearbook
 chapter, 29226
 normalizing commercial contacts with
 Socialist states (address), 28230
 reference aid, standard translations of
 Chinese terms, 17609
 scientific abstracts, 18752
 trading, 27068
 translations, 18982
 U.S. trade prospects with P.R.C., realis-
 tic assessment, 22258
 records of Department of State, pamphlet
 describing microfilm, internal affairs,
 25539
 Republic—
 area handbook, 19168
 economic trends and their implications
 for United States, 16159
 labor law and practice, 20495
 military assistance, deposits under For-
 eign assistance, agreement, 16503
 trade in cotton textiles, agreement,
 20818
 trade in wool and man-made fiber textile
 products, agreement, 25746, 30652
 sailing directions for coast, 28631
 U.S. assistance programs, hearings, 27324
 United States and Communist China in
 1949 and 1950, question of reapproach-
 ment and recognition, staff study, 21340
 see also Taiwan.
 Chinaware, see Tableware.
 Chincoteague National Wildlife Refuge, gen-
 eral information, 32566
 Chinese:
 in United States, census of population,
 1970, subject reports, 30807
 number of Chinese by counties of United
 States, 1970, map, 28199
 Chinese language, reference aid, standard
 translations of Chinese terms, 17609
 Chinese formation, stratigraphy and origin
 and related upper Triassic strata in
 Colorado Plateau Region, 21725
 Chippers (tools):
 compression debarked chips from whole-
 tree chipper, 28937
 lumber recovery from Douglas-fir thin-
 nings at hand-mill and 2 chipping
 centers, 20311
 segregation of foliage from chipped tree
 tops and limbs, 28936
 Chippewa Indians:
 federally owned land declared held in trust
 by United States for Lac du Flambeau
 Band—
 law, 19376
 report, 19854
 federally owned lands within White Earth
 Reservation declared in trust by United
 States for Minnesota Chippewa Tribe,
 15824
 general information, 31453
 Chips, compression debarked chips from
 whole-tree chipper, 28937
 Chiropody:
 podiatry manpower, general profile, 31683
 students consider a career in podiatry,
 29368
 Chisago County Republican Party, annual
 report, 24387
 Chlorides, nonmetallic coatings for concrete
 reinforcing bars coating materials, 27733
 Chlorinated hydrocarbons, see Hydrocarbons.
 Chlorination:
 ammonia removal in physical-chemical
 wastewater treatment process, 20207
 identification of polychlorinated biphenyls
 in presence of DDT-type compounds,
 20186

Chlorination—Continued

- oxidation of pyrites in chlorinated sol-
 vents, 20200
 photochemical methods for purifying
 water, 20206
 Chlorine:
 control techniques for mercury emissions
 from extraction and chlor-alkali plants,
 27480
 working with chlorine, 31689
 Chloroform, catalytic decomposition of
 chloroform, 23877
 Chloropicrin, relative toxicity of chloropi-
 crin, phosphine, EDC-CCl₄ and CCl₄-CS₂
 to various life stages, 30693
 Chlorpromazine, effects of LSD, chlorproma-
 zine and organophosphorous cholineste-
 rase inhibitors on brain, USSR study,
 21860
 Choate, Grover A., flows of mill residues to
 pulp and board manufacturers, Washing-
 ton, Oregon, and California, 20322
 Chocolate, see Confectionery.
 Choctaw Indians:
 determining rights and interests of Choc-
 taw Nation, Chickasaw Nation, and
 Cherokee Nation in and to bed of Arkan-
 sas River below the Canadian Fork and
 to eastern boundary of Oklahoma, re-
 port, 29876
 general information, 31454
 Choctawhatchee River and Valley:
 Choctawhatchee-Perdido basins, plain for
 development of land and water resources
 of southeast river basins, 17924
 flood plain information, Geneva, Ala.,
 32208
 floods in Geneva, Ala., Choctawhatchee
 River, Pea River, Double Bridges Creek,
 32236
 Chokes (fuel systems):
 investigation of coaxial jet noise and in-
 let choking using F-111 A airplane,
 31649
 Cholame, Calif., gravity, magnetics, and ge-
 ology of San Andreas Fault area, 26500
 Cholera, interim report of Task Force on
 Cholera, 16169
 see also Hog cholera.
 Cholesky factorization and matrix inver-
 sion, 26772
 Choline, see Acetylcholine.
 Cholinesterase:
 determining cholinesterase activity in an-
 imals' tissues following action of rever-
 sible inhibitors, USSR study, 21868
 effects of LSD, chlorpromazine and orga-
 nophosphorous cholinesterase inhibitors
 on brain, USSR study, 21860
 see also Anticholinesterase.
 Cholinolytic drugs, cholinolytic activity of
 oxymethyl analogs of atropine and tro-
 pacine, 17611
 Chou, Y. S., radiative coupled viscous flow
 with massive blowing, 26680
 Choudhury, Nabendu S., electromotive force
 measurements on cells involving B-alumina
 solid electrolyte, 29298
 Chow, Stanley:
 drug education, 17763
 early childhood education, 22062
 Christal, Raymond E., CODAP, input stand-
 ard (INPSTD) and variable generation
 (VARGEN) programs, 20943
 Christensen, C. H., Colorado-Big Thompson
 Project, regional examination of major
 irrigation structures & facilities, 32540
 Christensen, D. E., summary of experience
 with use of isotopic correlation safeguard
 techniques, 22470
 Christensen, Herbert E., toxic substances,
 1972, annual list, 17760

INDEX 1973

- Christian, Joyce, foreign trade regulations of Libyan Arab Republic, 25971
- Christmas, 8-cent commemorative postage stamp (poster), 20848
- Christmas Islands, mineral industry, minerals yearbook chapter, 20540
- Christmas trees, controlling lophodermium needlecast on Scotch pine Christmas trees, 32320
- Christopulus, John A., electrolytic preparation and evaluation of tungsten bronzes, 20969
- Chromatography:
 gas chromatography, method of determining harmful substances in air and in biological media, USSR study, 31529
 inactivation of O-Alkyl-S Hexylmethylthiophosphonates by animal body tissues, USSR study, 23520
 interpretation of gas chromatographic spectra in routine analysis of exhaust hydrocarbons, 23651
 liquid chromatography of carbamate pesticides, 17422
 three-minute gas chromatographic analysis of main constituents of mine atmospheres, 21951
- Chrome, *see* Chromium.
- Chromium:
 comparison standards for chromium plated 5.56MM, 7.62MM, and caliber .30 small arms barrel bores, military standard, 15964
 cyclic and isothermal oxidation behavior at 1100° and 1200° C of nickel-20-percent-chromium, nickel-20-percent-chromium-3-percent-manganese, nickel-20-percent-chromium-3-percent-silicon, and nickel-40-percent-chromium alloys, 29288
 cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminate coatings on IN-100 and via alloys in high-velocity gases, 17714
 diffusional creep and creep degradation in dispersion-strengthened alloy TD-NiCr, 23686
 ductility of titanium alloys and atomic ordering in nickel chromium alloy, USSR study, 17631
 improved diffusion welding technique for TD-NiCr sheet, 23691
 mineral industry survey, monthly, 18069
 preparation and homogeneity characterization of austenitic iron-chromium-nickel alloy, standard reference materials, 20636
 structural-kinetic study of oxidizability of nickel-chromium based alloys, USSR study, 26569
- Chronic CO₂ toxicity, species difference in physiological and histopathological effects, 21930
- Chronic diseases, *see* Diseases.
- Chrysler Corp., new passenger automobiles, former workers of Commerce, Calif., assembly plant, Tariff Commission report, 25782
- Chrysocarlis laricinnellae, initial releases of Chrysocarlis laricinnellae and Dicladocerus westwoodii for biological control of larch casebearer in western United States, 32327
- CHScene, notes from Community Health Service, 18070
- Chu, Ting L., physical phenomena related to crystal growth in space environment, 32458
- Chubb, Donald L., double electrostatic probe for measuring density, temperature and velocity of flowing plasma, 25528
- Chudnoff, M., preservative treatments and service life of fence posts in Puerto Rico, 1972 progress report, 28954
- Chugach Mountains, McHugh complex of south-central Alaska, 26494
- Chukchi Sea, ecological survey in eastern Chukchi Sea, WEBSEC, 24275
- Chulitna River:
 flood plain information, 17393
 floods in Talkeetna, Alaska, 17402
 geology and mineral deposits of—
 Chulitna-Yentna mineral belt, Alaska, 29021
 upper Chulitna and Yentna Districts, south-central Alaska (series), 29021
- Chumas, Sophie J., tabulation of voluntary standards and certification programs for consumer products, 26711
- Chung, Do Sup, damage to corn from pneumatic conveying, 26927
- Chung, Neville K., investigation of use of gel material for mine sealing, 23191
- Church Point, La.:
 Bayou Plaquemine Brule, flood plain information, 25076
 floods, how to avoid damage, 25084
- Churkin, Michael, jr., Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution, 25257
- Chutes:
 curved holding chute for cattle, 31919
 squeeze chute for cattle, 31918
- Cibola National Forest:
 boundaries, modify, law, 19399
 land conveyance to, report, 32055
- Cibola Creek, vicinity of Universal City and Schertz, Tex., flood plain information, 32209
- Cicconi, Vincent A., union status and benefits of retirees, 31555
- Cichy, D. R., flight tests of rotating cylinder flap on North American Rockwell YOY-10 aircraft, 21974
- Cigarettes:
 Federal cigarette labeling and advertising act—
 amend, report, 27276
 text, 26171
 industry wage survey, cigarette manufacturing, 16235
 labeling and advertising act—
 amend, hearings, 21321
 amend to include little cigars—
 hearings, 29923
 report, 32061
 public health cigarette amendments, hearings, 21321
 Public health cigarette smoking act—
 amend, text and background information, 29929
 report to Congress by FTC on enforcement, etc., 17490
 racketeering, eliminate, hearings, 21266
 tar and nicotine content of cigarettes, Federal Trade Commission, lists, 17752, 23729, 26723
- Cigars:
 expand prohibition on advertising of certain tobacco products in broadcast media to include little cigars, report, 27276
 little cigar act, bill text and background information, 29929
 define term and clarify application under cigarette labeling and advertising act—
 hearings, 29923
 report, 32061
- Clmini, Michael H., handling of rail disputes under Railway labor act, 1950-69, 23592
- Cincinnati Joint Board Political Education Committee, annual report, 26001
- Cinnabar, recovery of mercury from cinnabar ores by electrooxidation, 30428
- CIP cataloging in publication progress report, 30399-400
- Circuit Courts of Appeals, revision of judicial circuits, establish commission to make study and recommendations, law, 16927
- Circuit judges, *see* Judges.

Circuits:

- circuits for studying interaction of high-frequency fields with plasma in linear devices, 20994
- design and performance calculations of miniature DC motors, calculation of magnetic circuit and performance, 22485
- discharging of inductive power accumulator for generating short-front pulse, USSR study, 26589
- electromotive force measurements on cells involving B-alumina solid electrolyte, 29298
- electron tube circuits, electron voltage regulation, student guide, 22179
- magneto-Schottky-diode-integrated circuits, 19158
- photofabrication processes for printed circuits, 22468
- prevention of tin-lead overhang in plated copper-clad printed wiring boards, final report, 26985
- solid-state amplifier for bridge circuit of mercury detector, 17684
- specialized semiconductor, microelectronic circuit board manufacturing machinery, industrial plant equipment handbook, 26310

Circulars, *see* names of departments, etc., issuing circulars.

Circulation:

- analytical and experimental investigation of circulation control by means of turbulent Coanda jet, 17701
- nitric oxide formation in combustion processes with strong recirculation, 31293
- nucleonic sensor for detecting metal in recirculating lubricating oil systems, 20989
- variations in stratospheric circulation and ozone during selected periods, 22419

Cities and towns:

- aid to cities, counties, and States, availability and adequacy of relevant statistical population data, hearing, 23028
- Alma-Bacon County story, model for rural America, 17215
- alter the destiny of your community, 31346
- area wage surveys, metropolitan areas, U.S. and regional summaries, 1969-70, 27667
- availability of public transportation and shipping characteristics of SMSA households, 32283
- Better communities act, cities speak on new Federal program, conferences, 31412
- central city problems and urban renewal policy, study, 24914
- changing demand for local capacity, analysis of functional programming and policy planning, 25271
- characteristics of Negro immigrants to selected metropolitan areas, 1970, supplementary report, 29716
- community development evaluation series, 27581, 31414
- community development, magazine, 23415, 31413
- community water supply study, significance of national findings, 32608
- consumer price index, city average, 18161
- data book, 1972—
 - departmental edition, 30817
 - document edition 30951A
- data elements, entitlement period 1, Revenue Sharing Office, Treasury Dept., 27953
- Departments of Transportation and Housing and Urban Development on urban transportation policies, report, 15665
- diminishing barrier, report on school desegregation in 9 communities, 21081
- economics of ion exchange technology applied to municipal water quality improvement, 16141
- employment and population changes, standard metropolitan statistical areas and central cities, 16787

Cities and towns—Continued

- employment profiles of minorities and women in SMSA's of 16 large cities, 23207
- estimated retail food prices by cities, 18269
- European urban growth policies, 26529
- feasibility of desalting municipal water supplies in Montana, 20387
- Federal grant process, analysis of use of supplemental and categorical funds in model cities program, 26525
- financing new communities, Government and private experience in Europe and U.S., 29047
- future of small town and rural America, impact on small business, investigation, report, 12724
- highway and urban mass transportation, 18421
- household income in 1969 for States, SMSA's, cities, and counties, 30811
- housing and urban development trends (periodical), 18470
- housing and urban environment, report, print additional copies, report, 15840
- housing authorized by building permits and public contracts, construction reports, 24232
- HUD new communities program, oversight, hearings, 31014
- inner city environment and role of Environmental Protection Agency, hearings, 17236
- local government finances in selected metropolitan areas and large counties, 19253
- minimum design standards for community sewerage systems, 23437
- mobility for metropolitan areas, census of population, subject reports, 27018
- model cities programs—
 - comparative analysis of city response patterns and their relation to future urban policy, 31437
 - comparative analysis of participating cities process, product, performance and prediction, 32382
 - Newark, N.J., hearing, 19748
- model cities reporting requirements, HUD handbook, 25276
- municipal collective bargaining agreements in large cities, 21906
- new municipal rules in human resource development, 21417
- new-town-in-towns, strategy to save cities (address), 23449
- 1972 boundary and annexation survey, 29786
- non-game wildlife research in megalopolis, Forest Service program, 32314
- opportunities for community in economic distress, 22196
- opportunities to improve model cities program in Kansas City, Mo., and Saint Louis, Mo., and New Orleans, La., GAO report, 32354
- our cities and suburbs, 29790
- patterns of commuting in large metropolitan areas, 1970, supplementary report, 29714
- planned variations, program to enable cities to solve critical urban problems, 1st year survey, 21766
- police isolation and community needs, report of Wisconsin State Committee to United States Commission on Civil Rights, 19276
- population-migration reports, rural urban migrants, 24142
- population of places of 2,500 or more, 1970 and 1960, 15578
- property taxes and urban blight, 30039
- public employment programs in selected rural and urban areas, Department of Labor, GAO report, 31388

INDEX 1973

Cities and towns—Continued

public investments and population changes in 3 rural Washington State towns, 20894
 report on national growth, 17343
 small community needs, study, 17221
 social indicators for small areas, 31951
 social security beneficiaries in metropolitan areas, 31810
 standard metropolitan statistical areas—census tract memo, 21053
 standard metropolitan statistical areas, Federal general data standard representations and codes, 20632, 31673
 State and local fiscal assistance act, per capita comparisons of distributions to large cities, selected small cities, and rural areas, 19970
 State boundaries and savings and loan branching, 21546
 subsidizing air service to small communities (remarks), 31977
 supplemental payment entitlement periods 1, 2, & 3, list, Revenue Sharing Office, 29567
 survey of air and population lead levels in selected American communities, 31270
 urban air pollution problems, briefing document for President's Air Quality Advisory Board, 25125
 urban area traffic operations improvement programs (TOPICS), Transportation Dept. annual reports, 17081, 32284
 urban business profile (series), 15974-980, 21416
 urban education, partnership for survival (address), 25061
 urban freeway surveillance and control, state of art, 21539
 urban growth policies in 6 European countries, 23453
 urban mass transportation—abstracts, 25799
 act, amend, report, 28330
 assistance act of 1973, financial assistance for operating expenses, hearings, 28402
 authorize grants to assure adequate commuter service in urban areas—hearings, 26253
 report, 31107
 substantial increase in assistance, authorize, report, 27149
 travel surveys, 16043
 urban noise problems and social behavior, public hearings on noise abatement and control, 21513
 urban origin-destination surveys, 30216
 urban rat control, 1969-71 status report, 21118
 urban revitalization of central cities (remarks), 21805
 urban storm water runoff, selected abstracts, 21502
 urban transportation needs, lecture series, 16555
 vehicle-free zones in city centers, European experience, 21802
 water in urban environment (series), 23332, 29009
 water management and sediment control for urbanizing areas, 17846
 Cities and towns, *see also* Finance—Redevelopment (city planning, etc.)—*also* special subjects.
 Citizen Participation Committee, annual report, 24602
 Citizens' Advisory Council on Status of Women, annual report, 26532
 Citizens Committee for Congressman Lloyd Meeds, annual report, 24319
 Citizens Committee for Goldberg, annual report, 26039
 Citizen's Committee for Good Government, annual report, 24344

Citizens Committee for Improved Government, annual report, 24334
 Citizens Committee to Elect Anthony M. Sanchez, annual report, 22959
 Citizens for Bob Barry, annual report, 24474
 Citizens for Bob McGrath Club, annual report, 26037
 Citizens for Brathwaite-O'Neill, annual report, 24528
 Citizens for Clant Seay, annual report, 24463
 Citizens for Concerned Congress, annual report, 22669
 Citizens for Dellums, annual report, 24762
 Citizens for DiFruscia, annual report, 24734
 Citizens for Donald H. Wright, political committee, annual report, 24597
 Citizens for Gene Collegos, annual report, 24480
 Citizens for Jameson Committee, annual report, 24764
 Citizens for LaBaffe, annual report, 24581
 Citizens for Lubinski to Congress, annual report, 24675
 Citizens for Nedzi Committee, annual report, 24656
 Citizens for Nordvall, political committee, annual report, 24598
 Citizens for Responsible Land Use, annual report, 24683
 Citizens for Ryan, political committee, annual report, 24586
 Citizens for Saylor Committee, annual report, 24315
 Citizens for Stratton Committee, annual report, 24333
 Citizens for Stubblefield, annual report, 24373
 Citizens for Stubblefield Committee, annual report, 24365
 Citizens for Ware Committee, annual report, 25994
 Citizens for Wyman, annual report, 22867
 Citizens of United States:
 citizen action can get results, 17413
 citizen advocacy for handicapped, impaired and disadvantaged, overview, 16457
 citizen involvement and responsive agency decision making, responses to questionnaire, 23064
 citizen suits under Clean air act, 21488
 citizen support for law enforcement efforts against drug related crime, 17688
 citizens abroad, tax return filing requirements, 23487
 citizens make difference, case studies of environmental action, 25670
 Customs hints for returning residents, know before you go, 26297
 EPA citizens' bulletins, 18266
 Federal election reform, hearings, 30069
 going abroad? important message for U.S. citizens, 30713
 new facts about older Americans, 31904
 records, computers, and rights of citizens, report, 30292
 tax guide for U.S. citizens employed in U.S. possessions, 20411
 U.S. taxpayers abroad, questions asked, 20405
 we the Americans (series), 16795-796, 19263, 28201-202, 29790-792, 30858-863, 31972
 who we are, 16795
see also American nationals.
 Citizens with Sandman, annual report, 22960
 Citizenship:
 becoming a citizen series, our United States, 30302
 citizenship, 1969-70, assessment, group results for parental education, color, size, and type of community, national assessment of educational progress, 26370

Citizenship—Continued
country of origin, mother tongue, and citizenship for United States, 1970, supplementary report, 28125
Federal textbook on citizenship, 31440-442, 32387
English and State government, home study course, 30303
publications, price list, 17800
Citizenship Day, guide, 30301
Citrates, sulfur dioxide emission control by hydrogen sulfide reaction in aqueous solution, citrate system, 30443
Citrus County Democratic Executive Committee, annual report, 24414
Citrus fruit:
foreign agriculture circulars, 18380
photoelectric color sorting of citrus fruits, 22358
City of Salem Republican Committee, annual report, 22387
City of Williamsburg Republican Committee, annual report, 22927
City planners:
city planners in Peace Corps and VISTA, 22308
water facts and figures for planners and managers, 29009
Ciudad! La pintura de plomo envenena, 25401
Civil Aeronautics Board:
annual reports, 19273, 25946
applications, etc., filed with CAB, 18001
appropriations, 1973—
law, 19362
supplemental, reports, 27136, 27154, 27288
appropriations, 1974—
authorization, report, 29995
hearings, 28386
law, 32016
report, 30977
orders, 18737
press releases, 18776
publications, list, 19274
regulations, 18854, 22575
reports, economic and safety enforcement cases, 19272, 21073, 28209, 30870
U.S. carriers, list, 21074, 28210
weekly summary of orders and regulations, 19080
Civil Air Patrol, general information, 20946
Civil aircraft, *see* Aeronautics—Aircraft.
Civil aviation, *see* Aeronautics.
Civil defense, *see* Aeronautics defense.
Civil Defense Office:
check career, 16812
handbook series, 26298
leaflets, 16812, 23082
technical report, 23083
Civil Defense Preparedness Agency, appropriations, 1973, law, 15640
Civil disturbances, *see* Riots.
Civil engineers:
Air Force civil engineer (periodical), 17972
Navy civil engineer (periodical), 18685
Civil law, Ethiopia, administration, exchange of notes, 23033, 26198
Civil liabilities, Soldiers' and sailors' civil relief act and amendments, 22998
Civil preparedness new dual mission, 31175
Civil procedure:
civil remedies for victims of racketeering activity and theft, report, 15844
Federal rules of appellate procedure, with forms, 15768
Interstate Commerce Commission decisions, judicial review, improve, hearing, 32149
judicial disqualification, hearing, 30049
taking of evidence abroad in civil or commercial matters convention agreement, 20805
Civil remedies for victims of racketeering activity and theft, 24902

Civil rights:
above property rights, 24254
act, amend, 17280, 31155
law, 19427
report, 19641
civil rights digest (periodical), 18071
Federal civil rights enforcement effort, reassessment, report of Civil Rights Commission, 25948
Federal Power Commission civil rights responsibilities, 17068
layman's guide to individual rights under United States Constitution, 15916
prisons, prison reform and prisoners' rights, Michigan, hearings, 15764
processing procedures for title 6 complaints and compliance reviews, HUD, 29074
publications of Subcommittee on Constitutional Rights, Judiciary Committee, Senate, list, 24943
records, computers, and rights of citizens, report, 30292
to know or not to know collection and use of racial and ethnic data in Federal assistance programs, 22591
Civil Rights Commission:
appropriations, 1973—
law, 19473
report, 19704
appropriations, 1974, hearings, 28388, 28393
Clearinghouse publications, 21080-81, 22577, 24254, 25947
extend and expand—
law, 19427
report, 19641
extend and expand jurisdiction and authorize appropriations, report, 15833
Federal civil rights enforcement effort, reassessment, report of Civil Rights Commission, 25948
general information, 16814
hearing to investigate denial of equal opportunity for Puerto Ricans, 24255
statute, rules and regulations, 31979
Civil service:
adverse action, law and regulations, FPM manual supplement, 18333
best opportunities for Federal employment, 18028
calling all women in Federal service, know your rights and opportunities, 16779
cancelled careers, impact of reduction in force policies on middle-aged, 19941
career opportunities—
attorneys, Tax Division, Justice Department, 20485
Food and Nutrition Service, 25832
for veterans, 16819
industrial hygienists, 24258
Internal Revenue Service, 17568
office assistant and related positions, examination announcement, 25949
civil service journal, 18072
civil service laws, executive orders, rules and regulations, 25951
classification and salary laws, compilation, 21142
collective bargaining agreements in Federal service, late 1971, summary report, 32432
complaint filing guide, how to file unfair labor practice complaint under Executive order 11491, in Federal service, 30382
coordinated Federal wage system, Federal personnel manual supplement, 18330
development of qualification standards, 24261
Directory of state merit systems, 19280
5 year record, mentally retarded workers in Federal service, 22597
employment under executive assignment system, 18326
equal opportunity in Federal employment, newsletter, 18268

INDEX 1973

Civil service—Continued

evaluation of employees for promotion and internal placement, 18327
 examination announcement—
 accountants, auditors, IRS agents, 22592-593, 30876
 administrative staff, technical service and certain professional positions, 22605
 biological and agricultural sciences, professional careers, 19278, 22611, 30874
 computer specialist, 19279, 22595
 correctional officer, can you change this man, 21083
 current, 18191
 Washington, D.C., metropolitan area, 18196
 D.C. metropolitan policeman, police-woman, 22596
 engineering, physical sciences, and related positions, 21084, 30875
 Federal mine inspector, 21086
 Federal service entrance examination, 15603
 hearing examiner (administrative law judge), 19286
 illustrator, 25952
 jobs as agricultural and biological technicians, biological laboratory technicians, agricultural research technicians, 30882
 journeymen in printing crafts, 15602, 21085
 junior federal assistant, 19277, 22603, 30873
 librarian, professional careers, 27053
 licensed practical nurse and nursing assistant, 27047
 medical technician, assistant, aid, 31983
 messenger, 22594
 photographers and photographers (laboratory), 24260
 skilled craftsmen, 31981
 stenographers and typists, opportunities, 16817
 technical aids, science and engineering, 28215
 opportunities, 19285
 technical assistant, 21082, 22612-613, 29804
 technicians in engineering and physical science, 22598
 veterinary medical officer, 22606
 executive manpower in Federal service, 30877
 Federal career service at your service, introducing Federal personnel system, 25953
 Federal civilian employment by geographic area, annual report, 24269
 Federal employment problems of the Spanish speaking, investigation report, 17069
 Federal jobs in engineering, physical sciences & related professions, 29808
 Federal jobs overseas, 24265
 Federal personnel, fund raising for voluntary health and welfare agencies manual, 18608
 Federal personnel manual, 18324
 supplements, 18325-340, 21087, 22599-602, 24262-264, 25951, 30880
 Federal wage system, Federal personnel manual supplement 22602
 fund-raising within Federal service for voluntary health and welfare agencies, manual, 27048
 guidelines for reevaluation of employment requirements and practices pursuant to emergency employment act, 15604
 handbook X-118, 18835
 Indian Federal employment referral program, 23457
 insurance coverage for U.S. nationals employed by Federal Government, report, 16965

Civil service—Continued

job grading standards—
 store workers, 21087-88
 wood worker, 19282
 job grading system for trades and labor occupations, 17329, 22600-601, 24264, 30880
 job qualification system for trades and labor occupations, 29809
 labor-management relations in Federal Service—
 answers to question about Executive Order 11491, 19283, 23214
 Executive Order 11491 as amended, 19284
 hearing, 30067
 labor relations in Federal service, guide to changes in revised regulations, 21897
 laws, Executive orders, rules and regulations, FPM manual supplement, 18338
 management sciences training center catalog, 29810
 medical certificates, reviewing and acting on, 18328
 minority group employment in Federal Government, 22610
 national emergency readiness of Federal personnel management, manual, 18337
 national emergency standby regulations and instructions, personnel and manpower, FPM supplement, 18340
 occupational groups and series of classes, handbook, 18414
 occupational survey of 7 accounting and finance civil service series, 22366
 occupations of Federal white-collar workers, 15607
 opportunities in Federal service for veterans, 30887
 personnel advisory series, 25953
 personnel bibliography series, 15608, 16820, 27050-52
 position-classification standards for general schedule (GS) positions, 18763
 positions in supergrade levels, report on executive manpower in Federal service, 17077
 predicting civilian position grades from occupational and background data, 25841
 processing personnel actions, 18325
 proposals to reform Federal classification systems, hearings, 21275
 qualification standards, positions under general schedule, 18835
 questions and answers—
 about temporary intergovernmental assignments, 25954
 on role of Assistant Secretary of Labor for labor-management relations under Executive Order 11491, labor-management relations in Federal service, 32419
 readjustment appointments, questions and answers about program of assistance to returning veterans, 24266
 retirement, mandatory at age 70 with 5 years' service, report, 27122
 selective placement in Federal civil service employment of physically handicapped, etc., handbook, 19281
 severance pay, what it is, 29811
 summer jobs in Federal agencies, operations manual, 29812
 tests and other applicant appraisal procedures, Federal personnel manual, supplement, 24262
 veterans, best bets in Washington, D.C. area, 18027
 working for USA, how to apply for civil service job, what government can offer you as Federal worker, 28216
 see also Civil service pensions—Classification—Government officials and employees.

Civil Service Commission:
 achievements 1972, Federal incentive awards program, 29803
 administration of Federal employees health benefits program, hearings, 21278
 annual report—
 departmental editions, 16818, 31982
 document editions, 16939, 32024
 appropriations, 1973, law, 15640
 appropriations, 1974—
 hearings, 28393
 reports, 29885, 31117
 civil service laws, executive orders, rules and regulations, 25951
 Commissioner, reappointment of Robert E. Hampton, hearing, 31158
 examining practices, 22599, 24263
 Federal employees' group life insurance program, evaluation, 29934
 legislative oversight, review, hearings, 21279
 pamphlets, 15608-607, 16819, 21089, 22607-610, 24265-269, 27049, 28216, 30887-888
 Retirement, Insurance, and Occupational Health Bureau, annual report, 15601
 salary table 58, executive branch of Government, 27054
 unclaimed benefits in civil service, retirement fund, GAO report, 21702
 Civil service pensions:
 annual report, 15601
 annuity increases for certain retirees and retirees and reduced rate of employee deductions, hearings, 31036
 civil service annuity legislation, hearing, 30065
 civil service preference, retirement, and salary classification laws, compilation, 21143
 civil service retirement system, 28213
 current salary schedules of Federal officers and employees together with history of salary and retirement annuity adjustments, 21280-281
 District of Columbia teachers' retirement benefits, revise, hearing, 21331
 firefighters, include in provision for hazardous occupation, law, 15648
 increases in certain annuities for Federal retirees, hearing, 15774
 reduction-in-force, retirement, and fringe benefit legislation, hearings, 21277
 retirement and disability fund, 1970, annual report, 26050
 retirement—
 annuities, increase, report, 31100
 benefits, FPM manual supplement, 18334
 hazardous occupation classification for customs and immigration inspectors report, 29660
 retirement fund, financial condition, etc., hearing, 27239
 survivor annuities of civil service retirees, increase to full when not married, report, 31098
 tax information on civil service retirement and disability retirement, 20423
 unclaimed benefits in civil service retirement fund, GAO report, 21702
see also Retirement.
 Civil service retirement and disability, *see* Civil service pensions.
 Civil War, 1861-65:
 Andersonville, story of Civil War prison camp, 23818
 explosive ordnance disposal, 29439
 military operations, official records of Union and Confederate Armies, guide index, main eastern theater of operations, check-list, 23697
 select audiovisual records, pictures of Civil War, 22001
 Civil works, *see* Public works.

Civilian defense:
 annual statistical report, 24977
 checklist guide for nuclear emergency operations, planning, 30082
 civil defense, protection against what, 21392
 civil preparedness, introduction, etc., 21397
 Defense Civil Preparedness Agency, courses and conferences, 31176
 emergency planning in communications and electronics equipment industries, Industrial civil defense handbook, 20082
 Federal civil defense act amend—
 hearing, 15721
 law, 16881
 Federal stockpile inventory, report, 17953
 FG series, 20026A
 Government responsibilities for civil defense, 21396
 HS series, 21392-396
 Industrial civil defense handbook, 20082
 programmed orientation to civil defense, 21392-396
 publications, price list, 30608
 rescue skills and techniques, 15938
 standards for local civil preparedness, 26300
 summary for public officials, 28584
 student manual SM series, 15938
 teacher's manual for your chance to live, 26299
see also National defense.
 Civilian employees, *see* Air Force—Armed Forces—Army—Government officials and employees—National Guard.
 Civilians:
 characteristics of civilian male veterans for U.S., 25911
 civilian aides to Secretary of Army, 19th national conference, 25855
 civilian personnel pamphlet CPP (series), 24167
 manpower management (periodical), 18529
 Civilization, prototype of environmental civilization (address), 21512
 Clalborne group, geohydrology of Clalborne group (series), 27565
 Claims:
 claims and judgments against U.S., proposed supplemental appropriations to pay, 30948
 damage to fishing vessels or gear and measures to prevent fishing conflicts—
 agreement with Union of Soviet Socialist Republics, 26883
 protocol with Union of Soviet Socialist Republics, adding annex II to agreement, 32582
 erroneous payments of pay or allowances to—
 employees of Government Printing Office, waiver of claims, report, 29994
 members of Armed Forces and personnel of National Guard, waiver—
 law, 19388
 report, 19866
 medical malpractice, report, 27577
 Micronesian claims act of 1971, amend—
 hearing, 26159
 report, 27137
 military claims, finality of settlement, amend U.S. Code—
 law, 15652
 report, 19848
 National Guard members, contributory negligence claims, apply local law—
 law, 19380
 report, 17179
 settlement of claims, agreement with Hungarian People's Republic, 26879
 tax refunds, appeal rights and claims, audit of returns, 20390
 Trust Territory of Pacific Islands against Japan, agreement, 32579

INDEX 1973

Claims—Continued
you asked about tribal claims against
United States, 31492
see also Unemployment insurance.

Clamps, hub clamps, Federal item identifica-
tion guide, 32174

Clams :
brackish water clam *Rangia cuneata* as
indicator of ecological effects of salinity
changes in coastal waters, 30164
freshwater—
sphaeriacean clams (Mollusca: Pelecypoda)
of North America, 17435
unionocean clams (Mollusca; Pelecypoda)
of North America, 31310
protecting consumer from potentially
harmful shellfish (clams, mussels, and
oysters) GAO report, 26483

Clapp, Roger B. :
birds imported into United States, in 1970,
27900
natural history of Gardner Pinnacles,
northwestern Hawaiian Islands, 26820

Clarifiers, *see* Filters and filtration.

Clark, Alexander, III, pecan, American wood,
32308

Clark, Alton A., port construction in theater
of operations, 28786

Clark, F. Bryan, planting black walnut for
timber, 16602

Clark, Frank M., Clark congressional dele-
gation regarding its inspection of Coast
Guard Loran A and C stations in South-
east Asia, 17073

Clark, Joe W., condition of 12-year-old glued-
laminated stringer bridge with nailed-
laminated deck, decay hazard aspects,
25205

Clark, Roger N., litterbags, evaluation of
their use, 20301

Clark, Sandra H. B., McHugh complex of
south-central Alaska, 26494

Clark, Thomas D., economic realities of re-
claiming natural resources in solid waste,
17431

Clark County, Wash., soil survey, 25708

Clark County Democratic Committee, annual
report, 24380

Clark County Republican Central and Execu-
tive Committee, annual report, 22715

Clarke, Frank A., significance of ground-
water chemistry in performance of North
Sahara tube wells in Algeria and Tunisia,
21742

Clarke, James W., geophysical abstracts,
index, 29015

Clarke, Robert G. :
abrasive materials, 20551
gem stones, 20558
mineral industry of—
Kenya, Tanzania, and Uganda, 16286
South Carolina, 25470

Clarke, Thomas Hal, state boundaries and
savings and loan branching, 21546

Clarksburg, W. Va., flood plain information
West Fork River and Elk Creek, Harrison
County, W. Va., 32226

Clary, David A., place where hell bubbled
up, history of 1st national park, 23829

Class actions, *see* Actions at law.

Class rooms, *see* Classrooms.

Classical 8th- and lower-order Runge-Kutta-
Nyström formulas with new stepsize con-
trol procedure for special 2d-order differ-
ential equations, 29300

Classification :
Air Force, enlisted personnel, airman clas-
sification annual, 19141
classification definition series, 23902
classification of criminal behavior, semi-
nar, 29146
definitions of tactical, prime, precise, and
utility terminologies for classification of
DOD mobile electric power engine gen-
erator set family, military standard,
25019

Classification—Continued
Government publications available to de-
pository libraries, list of classes, 17797,
23910

Library of Congress—
additions and changes, quarterly list,
18585
class Q, science, 25386

Navy—
enlisted personnel manual, 25657, 30587
officers, classification manual, 23873
outline for decisions of National Labor
Relations Board and related court de-
cisions, 32501
position classification standards for—
consumer safety series, 16821
general schedule (GS) positions, 18763
management analysis series, 16822
management clerical and assistance
series, 16823
meteorology series, 16824
predicting civilian position grades from
occupational and background data,
25841
U.S. foreign trade statistics, classifications,
and cross-classifications, 19016
see also Government officials and employ-
ees—also names of substances, objects,
etc., classified.

Classification bulletin, Patent Office, 16456

Classified matter, *see* Confidential material.

Classroom personnel, *see* Teachers.

Classroom Teachers Association Committee
on Political Education, Farmingdale, *see*
Farmingdale CTA Committee on Political
Education.

Classrooms :
hunger in the classroom, then and now,
17292
promoting mental health in classroom,
handbook for teachers, 31698
Skylab, student project, information for
teachers including classroom activities,
21979

Clatworthy, Willard H., tables of 2-asso-
ciate-class partially balanced designs,
29307

Clay :
construction products—
current industrial reports, 18194, 30839
geochemical anomalies of claypit area,
Callaway County, Mo., and related
metabolic imbalance in beef cattle, 29026
methods for producing alumina from clay,
evaluation of sulfuric acid-sulfuric
acid process, 30435
minerals yearbook chapter, 25439
power requirements for wheels operating
in fine-grained soils, 26386
radiographic, petrographic, and SEM eval-
uation of ballistically loaded clay, 31231
underclay deposits of Somerset and east-
ern Fayette Counties, Pa., 21709
waste glass as flux for brick clays, 21955
see also Montmorillonite.

Clean air act, *see* Air pollution.

Clean electric power, 22501

Clean electric ranges for clean house, 16610

Clean hands, 30241

Clean refrigerator for clean house, 16609

Clean rooms, clean room and work station
requirements, controlled environment,
28911

Clean Water Week, National, *see* National
Clean Water Week.

Cleaners (mechanical) :
mobile system for cleaning oil-contami-
nated beaches, development, 28822

Cleaning :
ASRDI oxygen technology survey, clean-
ing requirements, procedures, and veri-
fication techniques, 23876
contract cleaning services, industry wage
survey, 31561
see also House cleaning.

- Cleaning fluid, properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260
- Cleaning machines, *see* Cleaners (mechanical).
- Clear Creek:
Brazoria, Fort Bend, Galveston, and Harris Counties, Tex., special flood hazard information, 28771
floods, Houston metropolitan area, Tex., 28735
- Clear-cutting, timber-harvest clearcutting and nutrients in northeastern United States, 31365
- Clear Fork, flood plain information, 17380
- Clearing houses:
directory of State, metropolitan and regional clearinghouses under Office of Management and Budget, 25389
regulation of clearing agencies and transfer agents dealing with securities, hearings, 30013
- Clearing of land:
land clearing and wood use in Delaware, 31361
site preparation and reforestation of droughty, acid sands, 22328
- Clearwing moths, type material of North American clearwing moths (Lepidoptera: Sesilidae), 29492
- Cleaver, Thayer, comparison of milking operations in herringbone milking layouts for large herds in California, 19129
- Clemente, Roberto W., Roberto Walker Clemente medals, report, 28452
- Clemente, Roberto Walker Commemorative medals, *see* Roberto Walker Clemente medals.
- Clements, E. W., shipboard shock and Navy devices for its simulation, 16445
- Clements, William P., nomination, 24912
- Clendenen, Richard J., strengthening State committees and National Council, report of 1st national workshop for State committees for children and youth, 24109
- Clergy, clergymen and religious workers, social security information, 20409
- Clerical geocoding manual, 1972 economic censuses, 16749
- Clerical workers, *see* Clerks.
- Clerk, House of Representatives, *see* House of Representatives.
- Clerks:
national survey of professional, administrative, technical, and clerical pay, 21909
supplementary compensation in PATC industries, 27683
- Clermont County Republican Executive Committee, annual report, 22812
- Cleveland, Ohio:
aircraft accident, 23860
area wage survey, 25378
census of housing, 1970, components of inventory change, 28102
food retailing in metropolitan area with emphasis on inner city, 16606
- Cleveland Refractory Metals, Division of Chase Brass and Copper Co., electrical contact points, workers of Solon, Ohio, plant of Cleveland Refractory Metals, Division of Chase Brass and Copper Co., Tariff Commission report, 26900
- Clevis, turnbuckles, clevis/connector rod ends and the rods, Federal item identification guide, 30116
- Click, C. N., feasibility of flow smoothing stations in municipal sewage systems, 28802
- Cliff Humphrey for Congress Committee, annual report, 24593
- Cliff rose, cliffrose and mountainmahogany seeds retain viability 6 years in cold storage, 28951
- Cliffrose, *see* Cliff rose.
- Clifton, Ivory D., farm real estate historical series data, 1850-1970, 28648
- Clifton, James R.:
nonmetallic coatings for concrete reinforcing bars, coating materials, 27733
some aspects of setting and hardening of gypsum plaster, 23714
- Clifton, Robert A.:
asbestos, 16314
mineral industry of—
Connecticut, 25457
Massachusetts, 25462
New Zealand, 16296
- Clifton, N.J., area wage survey, 17659
- Clifton Manufacturing Co., certain coarse cotton fabrics workers of Clifton Plant (Converse, S.C.) of Woodside Division of Dan River, Inc., Tariff Commission report, 20828
- Climate:
climatology of United States, climates of States, 17410, 20178-179, 21483
climatological data—
by States, etc., 18073-119
national summary, 18120
Florida, 21483
heat supply diagrams for USSR climatic regions, USSR study, 21882
local climatological data, 18592
Maine, 17410
Minnesota, 20178
monthly climatological charts of behavior of fog and low stratus at Los Angeles International Airport, 30537
monthly data for world, 18643
New York, 20179
preliminary transport wind and mixing height climatology, St. Louis, Mo., 30530
surface climate, 1963-64, Indian Ocean, 22135
synoptic climatological studies of precipitation in Plateau States, 17774
wave climatology for U.S. coastal waters, 20102
- Climatology, *see* Climate.
- Climatological observers, *see* Meteorological observers.
- Climatology, *see* Climate.
- Clinch, J. M., study of noise in air route traffic control center, flight service station, air traffic control tower and remote facilities, 25774
- Clinical Center, National Institutes of Health: description, 22083
handbook for nursing staff, 23773
- Clinical medicine, *see* Medicine.
- Clinical pharmacology, *see* Pharmacology.
- Clinics:
children served in mental retardation clinics, 1970-72 fiscal years, 29195
differential utilization of psychiatric facilities by men and women, United States, 29365
ophthalmology manpower, characteristics of clinical practice, 29332
results of clinical survey for microwave ocular effects, lecture, 26804
ten-State nutrition survey, 22569
utilization of psychiatric facilities by persons—
diagnosed with alcohol disorders, United States, 30507
under 18 years of age, United States, 32499
- Clinton, Iowa:
Bridge Commission, convey bridges and other assets to State of Iowa and complete bridge—
law, 19480
report, 15852
- Clinton County, Mich., flood plain information, Lookingglass river, 23166
- Clinton County Republican Committee, annual report, 24787
- Clinton Republican Town Committee, annual report, 24746
- Clocks and watches:
generation of accurate and uniform time scale with calibration and prediction, 22009

INDEX 1973

- Clocks and watches—Continued
standard digital data clock-rate generator with programmable digital phase shift, 31755
- Closed Basin division, *see* San Luis Valley project.
- Closing the circle, 25124
- Closures:
closing, sealing and reinforcing fiberboard shipping boxes, general methods for, 16061
closures for containers, current industrial reports, 18194, 30840
effect of fineness ratio on boattail drag of circular-arc afterbodies having closure ratios of 0.50 with jet exhaust at MACH numbers up to 1.30, 29274
- Cloth, *see* names of textiles.
- Clothes dryers, washers and dryers, consumer information series, 16059
- Clothing:
apparel survey, 1971, current industrial reports, 16755
body measurements for sizing of girls' apparel, 30477
men's and women's selected monthly apparel cuttings, current industrial report, 22551
men's apparel, current industrial reports, 18194, 31962
women's apparel, current industrial reports, 18194
see also names or types of clothing.
- Clothing Workers Political Committee for Eastern Pennsylvania, annual report, 24350
- Clots, *see* Blood.
- Cloture, Senate cloture rule, limitation of debate, legislative history, 17290
- Cloud modification, *see* Weather control.
- Cloud Peak Primitive Area, mineral resources of Cloud Peak Primitive Area, Wyo., 20347
- Cloud seeding, *see* Weather control.
- Clouds:
BOMEX atlas of satellite cloud photographs, 20232
characteristics and operation of cloud condensation nuclei collection/detection/recording instrument, technical manual, 22416
cloud-to-ground lightning versus radar reflectivity in Oklahoma thunderstorms, 23801
code chart for interpreting cloud reports, 20414
cumulus clouds experiment, 20235
differential magnetic measurements near cumulus clouds, 22421
modeling effects of clouds and rain upon satellite-to-ground system performance, 25967
monthly climatological charts of behavior of fog and low stratus of Los Angeles International Airport, 30537
television photography, meteorological satellite data, catalogs, 20181, 32245
- Cloverlick Creek, flood plain information, 21453
- Clower Creek, flood plain information, Sarasota County, Fla., 32220
- Clubs, private clubs and fraternal orders under Fair labor standards act, 26919
- Clustering:
approximate tests of independence in contingency tables from complex stratified cluster samples, 27743
reliability of estimates with alternative cluster sizes in health interview, survey, 27742
structure of space charge field of an ellipsoidal cluster of charged particles, 22462
- Clutches (machinery):
spring overriding aircraft clutch, 31936
- Clutter, *see* Radar.
- CMS series, 22232, 26834, 31808
- Cnephia, *see* Flies.
- Coachella Division, *see* Boulder Canyon project.
- Coagulation, initial mixing in coagulation processes of wastewater treatment, 20194
analysis of trace elements in coal by spark-source mass spectrometry, 26662
- Coal:
anthracite, Pennsylvania—
distribution 1970-71 year, 21934
mineral industry surveys, annual, 23637, 32446
minerals yearbook chapter, 16259, 25441
ARC-coal process development, 21091
better coke by using antifissurants, results for Illinois no. 6 and high splint coals, 25498
bituminous and lignite—
mineral industry survey, annual, 23636
minerals yearbook chapter, 25440
bituminous coal and lignite distribution (periodical), 18032
certain background information for consideration when evaluating national energy dilemma, 25991
char oil energy development, interim report, 21092
chemical desulfurization of coal, report of benchscale developments, 23805, 30179
chemicals—
mineral industry survey—
annual, 21933
monthly, 18129
minerals yearbook chapter, 25442
clean energy from coal, national priority, annual report, 22614
coal composition, coal plasticity, and coke strength, 29202
coal-fired fossil plant, 1000-MWe central station power plants investment cost study, 24201
coal fires in abandoned mines and inactive deposits, 16254
composition of coalbed gas, 29236
computerized system for quantitative X-ray diffraction analysis of pyrite in coal, 29244
CSF [consol synthetic fuel] coal liquefaction process, development, 28217
direct method of determining methane content of coalbeds for ventilation design, 29238
economic evaluation of COED process plus char gasification, 22615
evaluation of—
coal-gasification technology, pipeline-quality gas, 24271
waste waters from petroleum and coal processing, 21494
factors affecting use in present and future energy markets, 27339
fate of trace constituents of coal during gasification, 31272
Federal and Indian lands, royalty, income and related statistics, 29013
Federal energy research and development policies and future technological options, 15903
forecasting properties of coal seams in place, 21941
foreign trade reports, 19009
gases desorbed from 5 coals of low gas content, 29239
Geological Survey publications, 1882-1970, bibliography and index, 21710
international trade, monthly inventory, 18503
mechanical properties and cutting coal, 29208
methane—
diffusion parameters for sized coal particles, 21952
emission rate study in deep Pocahontas no. 3 coalbed mine in conjunction with drilling degasification holes in coalbed, 23653

Coal—Continued

- oil and coal laden in U.S. on vessels engaged in foreign trade, foreign trade report, 24246
- optimization of coal gasification processes, 24270
- potential for energy conservation, substitution for scarce fuels, staff study, 23145
- preparation of molecular sieve materials from anthracite, 29813
- removing pyrite from coal by dry-separation methods, 29230
- report, weekly, 19074
- respirable dust adhering to run-of-face bituminous coals, 30438
- selection of coals for AVCO hydrogen plasma arc process for making acetylene, 28218
- statistical and spatial evaluation of sulfur and ash in coal seams, 20573
- structure and properties of various coal chars, 25955
- testing of coal-cutter materials for incendivity and radiance of sparks, 21957
- tipple and delivered samples, analyses, 21956
- United States energy fact sheets by States and regions, 26535
- United States energy through the year 2000, 25299
- see also* Coke—Coal dust.
- Coal beds, *see* Coal.
- Coal dust:
 - characterization of valence state of iron in coal dust, 25503
 - comparison of respirable dust concentrations measured with MRE and modified personal gravimetric sampling equipment, 30442
 - detection of organic compounds in respiratory coal dust by high-resolution mass spectrometry, 21962
 - dispersal of coal- and rock-dust deposits, 16332
 - evaluation of machine-mounted dust collector, 30444
 - minimum extinguishant and maximum oxygen concentrations for extinguishing coal dust-air explosions, 31594
 - respirable dust adhering to run-of-face bituminous coals, 30438
 - spectral growth of expanding flames, infrared radiance of methane-air ignitions and coal dust-air explosions, 31592
 - tests for analyzing incombustible content of coal mine dust using instruments employing gamma-ray backscatter technique, 25513
- Coal lands, temporary moratorium on Federal coal leasing in Montana, provide, report, 19920
- Coal mines and mining:
 - achievements, administrative problems, and costs in paying black lung benefits to coal miners and their widows, GAO report, 16094
 - borer, ripper, and conventional mining products in Illinois No. 6 seam coal, comparison, 21945
 - coal mine health and safety research program, 31584
 - coal mine health seminar, 20536
 - coal mine safety inspection manual for underground mines, 20535
 - coal surface mining and reclamation, Council on Environmental Quality's report, hearing, 20542
 - coal waste banks, list, 31496
 - demonstration of safety plugging of oil wells penetrating Appalachian coal mines, 16338
 - effects of coal mining on water resources of Tradewater River basin, Ky., 25261
 - fatalities, mineral industry survey, monthly, 18121

Coal mines and mining—Continued

- Federal coal mine health and safety act—implementation, hearing, 19996
- 1972 changes, 19992
- proposed amendments to black lung legislation, 17281
- Federal coal mine health program in 1971, annual report of Federal coal mine health and safety act, 21763
- field instrumentation studies of earth tremors and their geologic environments in central Utah coal mining areas, 26504
- geologic factors causing roof instability and methane emission problems, Lower Kittanning coal bed, Cambria County, Pa., 30440
- Girard estate coal lands in Pennsylvania, 23965
- hazard evasion program for mine planning, 16339
- injuries and worktime, monthly report, 18122
- instrumentation studies of earth tremors related to geology and to mining at Somerset Coal Mine, Colorado, 21735
- Kentucky guide for classification, use and vegetative treatment of surface mine spoil, 17838
- lime retention in anthracite coal-breaker refuse, 25221
- mandatory safety standards, underground coal mines, 25427
- methane control, 1972, in U.S. coal mines, 27697
- method for calculating mine ventilation pressure losses using computers and desk-top calculators, 29212
- methods and costs of coal refuse disposal and reclamation, 23643, 30413
- moving forward in coal mine health and safety, report of Secretary of Interior on administration of Federal coal mine health and safety act, 17563
- procedures for evaluating hazards to coal mining operations from hydrocarbon reservoirs, 29206
- procedures used for sampling fracture orientations in underground coal mine, 29237
- protecting health of coal miners, inter-agency approach, 30500
- revegetating coal mine spoils in New Mexico, laboratory study, 32336
- surface mining and reclamation, environmental and economic assessment of alternatives, 27338
- surface mining operations, regulate, hearings, 27346, 28550, 29918, 31025
- see also* Coal lands—Mine accidents—Mine drainage—Mine fires.
- Coal refuse, *see* Culm.
- Coal Research Office, research and development reports, 21092, 22615, 24270-271, 25955, 28217-218, 29813
- Coalescence, laboratory evaluation of electrostatic dynamic fog dispersal concept, 24049
- Coals, *see* Coal.
- Coanda effect, analytical and experimental investigation of circulation control by means of turbulent Coanda jet, 17701
- Coast Guard:
 - appropriations for vessels, etc., 1974, authorizations—
 - hearings, 26176
 - laws, 29828, 32007
 - appropriations, 1973, authorization—
 - law, 16874
 - report, 27145
 - appropriations, 1974, authorization—
 - hearings, 26176, 28530
 - report, 32102
 - authority and capability to handle problems of marine safety and water pollution, extend, law, 16872

INDEX 1973

Coast Guard—Continued

- civilian career, outstanding opportunities in management, public administration, accounting, data processing and related areas, 28219
- construction of shore and offshore establishments, 1974 appropriations, authorization—
 - hearings, 26176
 - laws, 29828, 32007
 - report, 32102
- engineer's digest (periodical), 18123
- field activity, hearings, 21272
- flag officer structure—
 - effect changes in service and promotion of rear admirals, vice admirals, etc., report, 17189
 - law, 19386
 - report, 16959
- help yourself, guide to enlisted careers, 28221
- historically famous lighthouses, 15609
- master chief petty officer, Lighthouse Service—
 - adjust pay, law, 19390
 - make pay comparable to basic pay of senior enlisted advisers of other Armed Forces, reports, 16961, 17188
- miscellaneous bills, hearings, 21273, 32087
- national search and rescue manual, 22618
- ocean engineering reports, 31985
- official recreational boating guide, 28225
- on scene, National Maritime SAR review (periodical), 18730
- publications, price list, 17799
- river currents (periodical), 18873
- seal of safety, courtesy 1973 examination decal for motorboats, requirements for obtaining, etc., 25957
- ships, planes, and stations, general information, 15612
- spring flood, 1973, helping others, 29815
- there's a way to help others while you help yourself, 24276
- travel regulations, 18526, 30120
- veteran petty officers, you can make over \$21,000.00, 28220
- Coast Guard Academy, New London:
 - additional pay for permanent professors, provide, hearing, 17224
 - catalogue of courses, 15611
 - information bulletin for candidates, 25958
 - servicemen's group life insurance, extend coverage for cadets and midshipmen, law, 15636
- Coast Guard Auxiliary, what's your move? public education and safety program, 24277
- Coast Guard Reserve:
 - Coast Guard reservist (periodical), 18124
 - emergency augmentation of regular Coast Guard reservists—
 - law, 19411
 - reports, 16960, 17190
 - enlistment and commissioning of women, provide, hearings, 32087
 - part-time job with full-time rewards, 29814
 - register of officers, 31984
 - veteran petty officers, you can make over \$21,000.00, 28220
- Coast Guard stations:
 - Clark congressional delegation regarding its inspection of Coast Guard Loran A and C stations in Southeast Asia, 17073
 - general information, 15612
- Coast Guard vessels, *see* Ships.
- Coast guide, *see* Coast pilots.
- Coast pilots:
 - Atlantic Coast—
 - Cape Cod to Sandy Hook, 22093
 - Gulf of Mexico, Puerto Rico, and Virgin Islands, 27798
 - Sandy Hook to Cape Henry, 31717
 - Pacific and Arctic Coasts, Alaska, Cape Spencer to Beaufort Sea, 26764

Coast pilots—Continued

- Pacific coast—
 - Alaska, Dixon Entrance to Cape Spencer, 25615
 - California, Oregon, Washington, and Hawaii, 26765
- United States coast pilots, 16405-7
- Coast Ranges batholith, stratigraphy of southern Coast Ranges near San Andreas fault from Cholmae to Maricopa, Calif., 27569
- Coastal Engineering Research Center:
 - miscellaneous papers, 25066, 27437
 - reprint R (series), 20102, 23148-150
 - technical memorandums, 20103, 23151
- Coastal Imagery Data Bank, interim report, 25066
- Coastal Plains Regional Commission:
 - economic development plans, 28241A
 - press releases, 18775
- Coasts:
 - brackish water clam *Rangia cuneata* as indicator of ecological effects of salinity changes in coastal waters, 30164
 - coastal flooding in Chesapeake, Va., flood plain information, 28702
 - Coastal Imagery Data Bank, interim report, 25066
 - coastal pollution research highlights, 27448
 - construction of offshore facilities, approval of adjacent coastal States necessary, hearing, 24960
 - National coastal zone management act—
 - law, 19508
 - report, 19694
 - Offshore marine environment protection act, hearings, 30015
 - use of satellites in coastal engineering, 23149
 - wave climatology for U.S. coastal waters, 20102
- Coastwise shipping, *see* Shipping.
- Coating materials:
 - coated fabric raincoats, provision for evaluating quality, 28614
 - cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminate coatings on IN-100 and via alloys in high-velocity gases, 17714
 - nonmetallic coatings for concrete reinforcing bars, coating materials, 27733
 - oxidation at through-hole defects in fused slurry sintered coated columbium alloys ES-85 and Ch-752, 31635
 - vacuum and ultraviolet radiation effects on binders and pigments for spacecraft thermal-control coatings, errata, 23680
 - see also* Metal coatings.
- Coating processes, *see* Electroplating.
- provisions for evaluating quality of coats—
 - men's dress, military standard, 25026
 - women's dress, military standard, 28619
- see also* Overcoats.
- Cobalt:
 - autoclave heat treatments on mechanical properties of prealloyed powder cobalt-base alloy HS-31, 23688
 - cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminate coatings on IN-100 and via alloys in high-velocity gases, 17714
 - mineral industry survey—
 - monthly, 18125
 - quarterly, 18126
 - minerals yearbook chapter, 20554
 - preparation of samarium-cobalt magnets, 31595
- Cobb, Bart B., comparative study of female and male air traffic controller trainees, 21033
- Cobb, Edward H., placer deposits of Alaska, 30270
- Cobban, William A., stratigraphy and ammonite fauna of Graneros shale and Greenhorn Limestone near Pueblo, Colo., 23360

- Coburn, Morris, indicators of educational outcome, 31224
- Cochise County, Ariz., radiometric ages of igneous rocks, 27557
- Cochran, Joseph A., observation of airborne tritium waste discharge from nuclear fuel reprocessing plant, 29456
- Cochran, Thad., for Congress Committee, see Thad Cochran Campaign for Congress Committee.
- Cochrane, Max W., cannery wastewater treatment with rotating biological contactor and extended aeration, 28797
- Cockpits (aircraft):
development of low-cost cockpit/outside time sharing training equipment, 24048
- Cockroaches, kill those roaches, for clean house, 22347
- Cocoa, foreign agriculture circulars, 18380
- Codalp, input standard (INPSTD) and variable generation (VARGEN) programs, 20943
- Code, Arthur D., scientific results from Orbiting Astronomical Observatory (OAO-2), 17705
- Code of conduct for Armed Forces, see Conduct of life.
- Code of Federal regulations, 16052, 17467-481, 18127, 20260-262, 21560-564, 23230-235, 25156-179, 26434-444, 27511-518, 28872-885, 30220-225, 31329-338, 32287-289
general index, 25179
general provisions, 23230
list of CFR sections affected, 18128
see also for titles, chapters, etc., of the Code printed separately, subject involved.
- Coder, John P., Senate manual containing standing rules, orders, laws, and resolutions affecting business of Senate, etc., 29949
- Codes:
codes calculation of effects of contained underground explosions, method of calculation, 16674
data elements, entitlement period 1, Revenue Sharing Office, Treasury Dept., 27953
fast Fourier transform microcode for Burroughs D-machine, 23884
input and output codes, Federal manual for supply cataloging, 29589
nongovernment organization codes for military standard contract administration procedures (MILSCAP) United States and Canada—
code to name, 18709
name to code, 18710
quality of residential geographic coding, evaluation and research program, 22536
special considerations in use of geometric coding in transformer storage devices, USSR study, 16195
used for proposed intermodalism code regulating shipping in international ocean transportation (remarks), 27507
user's guide to diffusion/kinetics, DIFKIN, code, 32253
see also Code of Federal Regulations—
Codes of law—also headings beginning Code—also names of departments, etc., issuing codes—also subjects.
- Codes of law:
District of Columbia, 1967 edition, supp., 23022
United States—
1970 edition, 28253
title 5, Government organization and employees, 17294, 27362
title 13, census, amendments, 17295
title 28, sec. 455, amend. hearing, 30049
title 39, U.S. Postal Service, amendments, 20010, 24957
see also subjects.
- Coding theory, see Information theory.
- Coefficients:
extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687
heat transfer coefficients of dilute flowing gas-solids suspensions, 29261
measurement of transverse diffusion coefficient in SHF plasma, 20995
ratio of longitudinal and transverse diffusion coefficients in argon SHF discharge plasma, 20999
- Coelho, George V.:
mental change and human behavior, mental health challenges of 70's, 23761
mental health and social change, annotated bibliography, 23755
- Coeur d'Alene Indian Reservation, land exchange and sale, law, 19406
- Coffee:
foreign agriculture circulars, 18380
green coffee inventories, imports, roastings, current business reports, 18185
International agreement—
annual report, 29938
as extended, 31047
world demand prospects for coffee in 1980 with emphasis on trade by less developed countries, 25041
- Coffey, Helen E.:
collected data reports on Aug. 1972 solar-terrestrial events, 30174
data compilation for magnetospherically quiet periods, Feb. 19-23 and Nov. 29-Dec. 3, 1970, 30173
data on solar-geophysical activity associated with major ground level cosmic ray events of January 24 and Sept. 1, 1971, 30172
- Coffing, Arthur, forecasting wheat production in Turkey, 25040
- Coffman, George, farm corporations, financial analysis, 29617
- Coffman, Jerry L., United States earthquakes, 17412
- Cohen, Bill, Cohen Boosters, annual report, 24568
- Cohen, Daniel S., accessibility, its use as evaluation criterion in testing and evaluating alternative transportation systems, 30213
- Cohen Boosters, political committee, annual report, 24568
- Cohort mortality and survivorship, 25565
- Coils, radio frequency coils, molded ceramic capacitors, and fixed precision metal film resistors, certain workers of Dubois, Pa., plant of Airco Speer Electronic Components Division, Tariff Commission report, 22282
- Coins:
bicentennial coinage, Sam Rayburn commemorative coin, etc., authorize, hearings, 28396
bicentennial commemorative coinage and construction of new mint buildings, hearing, 30009
minted proof Eisenhower dollar coin proceeds for grants to Eisenhower College, reports, 28453, 29888
new coinage design and data emblematic of Bicentennial of American Revolution, 32059
outstanding and circulation, monthly statement, 18926
- Coke:
better coke by using antifissurants, results for Illinois no. 6 and high splint coals, 25498
biological removal of carbon and nitrogen compounds from coke plant wastes, 26415
coal composition, coal plasticity, and coke strength, 29202
criteria for recommended standard occupational exposure to coke oven emissions, 27765
mineral industry survey—
annual report, 21933
monthly report, 18129

INDEX 1973

- Coke—Continued
minerals yearbook chapter, 25442
- Colbeck, Samuel C., Isua, Greenland, calculations of glacier flow for open-pit mine, 32198
- Colby, Marilyn K., economics of containerized conifer seedlings, 32347
- Colchester, Vt.:
floods in Burlington, Colchester, Winooski, Vt., 32235
Winooski River, flood plain information, 32227
- Cold (disease):
cough and cold remedies, advertising of proprietary medicines effects, hearings, 24963
- Cold-air investigation of turbine for high-temperature-engine application, two-stage turbine performance, 20609
- Cold cathodes for sealed-off CO₂ lasers, 32474
- Cold regions:
science and engineering monograph series, engineering, 32199
science and technology, bibliography, 23154
seismic exploration, 21443
soil temperature and plants in north, USSR study, 31538
- Cold Regions Research and Engineering Laboratory:
research reports, 21437-438, 23152, 28686, 30156, 31235, 32198
science and engineering, physical science, 21443
special reports, 16006, 17370-374, 20104, 21439, 23153, 25067, 28687, 30157, 31236-237
technical reports, 17375, 21440-442, 23154-155, 28688-689, 30158-159
USA CRREL technical publications, list, 23153
- Cold storage:
cliffrose and mountainmahogany seeds retain viability 6 years in cold storage, 28951
effects of some antioxidants and EDTA on development of rancidity in Spanish mackerel (*Scomberomorus maculatus*) during frozen storage, 22104
report (periodical), 18130
winterfat fruits and seeds retain high viability 3 years in cold storage, 28948
- Cole, John E., III, influence of crossflow on jet noise, 23671
- Cole, John W., mineral industry of Arizona, 16265
- Cole, John Y., foreign newspaper report, 23608
- Cole Creek:
floods, Houston metropolitan area, Tex., 28766
Harris County, Tex., special flood hazard information, 28777
- Coleoptera, *see* Beetles.
- Collaborative Radiological Health Laboratory, annual report, 17814
- Collapsible baby strollers from Japan, 26895
- Collbrant project, mechanical equipment, Collbrant project, Colorado River Storage project, Provo River project, UC region, field review of maintenance, 23928
- Collected data reports on Aug. 1972 solar-terrestrial events, 30174
- Collecting of accounts, title 1 collection handbook, fiscal procedures, 23436
- Collection, evaluation, and processing series, 28191
- Collective bargaining:
agreements in Federal service, late 1971, summary report, 32432
Federal sector, where we are, where we may be going, implications for managers, 29803
in public employment and merit system, 32416
- Collective bargaining—Continued
major collective bargaining agreements—administration of seniority, 21903
layoff, recall, and worksharing procedures, 20499
municipal collective bargaining agreements in large cities, 21906
selected pension plans, digest, 18230
see also Industrial relations.
- Collectors and collecting:
duck stamp data, information for stamp collectors and conservationists, 17847
8-cent stamp collecting stamp, 20849
- College students, *see* Students.
- Colleges, *see* Colleges and universities.
- Colleges and universities:
black, Federal agencies, financial support, 30218
changes in graduate programs in science and engineering, 1970-72 and 1972-74, 16418
college bound program, New York, N.Y., model programs, compensatory education, 17363
college housing debt service grant program for private institutions, 23447
college level examination program, list of institutions participating, 21408
college plans of high school seniors, 31964
college work-study program manual, 17355
directory of college student volunteer programs, 30686
education profession, 1971-72 annual report on people who serve our schools and colleges, 1971-72, as required by Education professions development act, differentiated staffing, state of art, report, 27428
estimate of construction needs of higher education by 1980, 17360
facts about college mental health, 22071
Federal and State student aid programs, 1972, survey, 19807
Federal support—
report to the President and Congress, 25642
science resources studies highlights, 22137, 32518
foreign curriculum consultant program, 15991
graduate science enrollment declines 2 percent from 1971-72, 31740
hanging ten and higher education (address), 26366, 28659
higher education—
guidelines, Executive Order 11246, 32367
index of institutions by States and congressional district, 31223
institutions under Fair Labor standards act, 29587
1972-73, directory, 20094
physical facilities in institutions, inventory, 15992
programs in foreign language and area studies, 1973-74, research and training opportunities abroad, 15997
institutions offering trainee stipends in psychiatric-mental health nursing for school year 1972-73 in graduate education, list, 17764
inventory of physical facilities in institutions of higher education, 27430
jobs for which college education is usually required, 26633
manpower accounting in higher education, manual, 17362
minorities and women, availability data, 32366
National sea grant college and program act, amend—
law, 29831
report, 29962
national Sea Grant program, description and suggestions for preparing, proposals, 17770

Colleges and universities—Continued
 need for teachers, education professions, 1971-72 annual report, 28636
 noncredit activities in institutions of higher education, 1967-68, professional and technical refresher courses, 26373
 1000 volunteers, university year for ACTION, 19098
 price index for deflation of academic R & D expenditures, 16417
 role of campus security in college setting, 26608
 scientific activities, 1971, resources, expenditures, etc., 26780
 sea grant—
 authorization, hearings, 27234
 colleges and program act, amend, report, 27146
 newsletter, index, 17772
 publications index, 17771, 20690, 29386-387
 Soviet medical graduate study standards, 17608
 State departments of education, State boards of education, and chief State school officers, etc., 25056
 State land-grant, Extension Service review (periodical), 18275
 State postsecondary education commissions, hearings, 28407
 student participation in academic governance, 15995
 study of 6 university-based information systems, 29325
 Talent Search, Upward Bound, Special Services, application information and program manual, 25045
 tax advantage story, how U.S. savings would build college funds, etc., 17823
 teaching Spanish in school and college to native speakers of Spanish, 25058
 undergraduate and graduate programs in social work, extension of grant authority, report, 19648
 Women's Army Corps, college junior program, student officer program, 19160
see also Land-grant colleges—*also* names of colleges and universities.
 Collen, Morris F., technology and health care systems in 1980's, conference proceedings, 27740
 Collin County Republican Party Executive Committee, Texas, annual report, 22734
 Collings, M. R.:
 generalization of stream-temperature data in Washington, 29033
 hydrology of 4 streams in western Washington as related to several Pacific salmon species, 23349
 Collins, George W., memorial addresses together with tributes in eulogy, 28254
 Collins, James M.:
 Collins for Congress Reelection Committee, annual report, 22682
 Committee To Reelect Collins to Congress, annual report, 22683
 Collins, Larry R., monotremes and marsupials, reference for zoological institutions, 31797
 Collins, Lora S., survey of current business, 18948
 Collins, William E., simulated sonic booms and sleep, effects of repeated booms of 1.0 psf, 29684
 Collins County, Tex.:
 flood plain information, Rowlett Creek, 32218
 floods, Rowlett Creek, 32241
 Collins for Congress Reelection Committee, annual report, 22682
 Collinsville, Okla., Atchison, Topeka and Santa Fe passenger train no. 212 collision with Stillwater Milling Company motor-truck near Collinsville, Okla., railroad/highway accident report, 30571
 Collisions, *see* Aircraft accidents—Motor vehicle accidents.

Collisions (electronics):
 approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of $A \geq 12$, 31653
 semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475
 Colloids:
 biological removal of colloidal matter from wastewater, 31276
 preparing magnetic fluids by peptizing method, 21960
 Colner, Donald, fire service location-allocation models, 31678
 Colombia:
 agricultural commodities, agreement, 26876, 27932, 31871
 agricultural production and trade, 25038
 background notes, 25721
 Colombian expeditions to Noanama Indians of Rio Siguirisua and to Cofan and Ingano Indians of Putumayo, 25596
 economic trends and their implications for United States, 17581, 29106
 labor law and practice, 26615
 military assistance, agreement, 32578
 mineral industry, minerals yearbook chapter, 20562
 treaty concerning status of Quita Sueno, Roncador, and Serrana, 23306
 Colon (anatomy):
 cancer, 25560
 Colonial Parkway National Historical Park, interpretive prospectus, 22118
 Colonial period:
 craftsmen, age of pride, program, 22090
 colonial drummer, rise of spirit of independence series, commemorative stamp (poster), 31888
 Color:
 color presentation of thermograms for cancer research, 29249
 color removal from kraft pulp mill effluents by massive lime treatment, 25109
 colorimetric measures of stars on 6-color system of Stebbins and Whitford, catalog, 23868
 electronic color separating or sorting machines from United Kingdom, determination of no injury to U.S. industry, Tariff Commission report, 32587
 ion exchange color and mineral removal from kraft bleach wastes, 31283
 kraft effluent color characterization before and after stoichiometric lime treatment, 25113
 NAVSHIPS display illumination guide, introduction to light and color, 30597
 removal gamma induced low temperature oxidation of textile effluents, study, 30193
 Color blindness, color vision deficiencies in children, United States, 17748
 Color codes:
 ammunition, military standard, 20058
 NAVSHIPS display illumination design guide introduction to light and color, 30597
 Color perception:
 photoelectric color sorting of citrus fruits, 22358
 system for visually classifying alfalfa flower color, 22327
 Color television, *see* Television.
 Color vision deficiencies in children, United States, 17748
 Colorado:
 annual streamflow summaries from 4 sub-alpine watersheds, 23276
 bark thickness and past diameters of Engelmann spruce, 17519
 census of agriculture, 1969, area reports, summary data, 24210
 census of housing, 1970, housing characteristics for States, cities, and counties, 15535

INDEX 1973

- Colorado—Continued
 census of population, 1970, general social and economic characteristics, 16743
 climatological data, 18078
 computer simulation of snowmelt within Colorado subalpine watershed, 28966
 counties, population estimates, 24241
 county business patterns, 29729
 Drive Teamster's Colorado-Wyoming Committee, annual report, 24328
 early season snow report for Colorado, Jan. 1, 1973, water supply outlook, Federal-State-private-cooperative snow surveys, 22244
 geology of Green River Formation, bibliography, 27560
 mineral industry, minerals yearbook chapter, 16272
 1970 census of population, characteristics of population, 25900
 ponderosa pine needle miner in Colorado front range, 28943
 precipitation data, hourly, 18429
 register of minority contractors and housing professionals, listing in selected cities, 32385
 selected streamflow characteristics as related to channel geometry of perennial streams in Colorado, 23373
 snow survey measurement summary, 25714, 32560
 truck inventory and use survey, 24222
 volume tables and point-sampling factors for Engelmann spruce, 23305
 water resources, data, 23386
 water supply outlook and snow surveys, 19057
 work of Colorado lawyer with SEC (address), 29485
 Colorado—Blg Thompson Project, regional examination of major irrigation structures & facilities, 32540
 Colorado County Democratic Executive Committee, annual report, 24374
 Colorado National Monument, wilderness recommendation, 22126
 Colorado Plateau:
 regional geophysical investigations in central Colorado Plateau, 30276
 stratigraphy and origin of—
 Chinle formation and related upper Triassic strata in region, 21725
 Triassic Moenkopi formation and related strata in region, 17532
 Colorado River and Valley:
 basin—
 surface water records, 23385
 surface water supply from Green River to Compact Point, 31406
 water quality control project near Yuma, Ariz., 22202
 Colorado, river basins of U.S., 17543
 Colorado River salinity, agreement with Mexico, 20795, 27924
 flood plain information, 28704-705
 floods—
 Grand Junction, Colo., 28736
 Rifle, Colo., 28737
 geohydrology of Needles area, Ariz., Calif., and Nev., 26498
 lower Colorado River-Salton Sea area, water resources (series), 26498
 pollution affecting Las Vegas Wash, Lake Mead, and Lower Colorado River, Nev., Ariz., and Calif., 20211
 Upper Colorado River basin, increase authorization for appropriations for continuing work—
 law, 19356
 report, 15699
 water supply outlook nad snow surveys of drainage basin, 19056-57
 watershed conditions affecting water supply, 18945
 wild rivers system, inclusion of segment, authorize—
 hearing, 21346
 report, 17168
 Colorado River Storage project:
 comparison of analytical and structural behavior results for Morrow Point Dam, 23934
 mechanical equipment, Colbran project, Colorado River Storage project, Provo River project, UC region, field review of maintenance, 23928
 Colorado State University, CSU-PHS Collaborative Radiological Health Laboratory annual report, 17814
 Colorado Statehood Centennial, commemorative medal, authorize, hearings, 28396
 Coloradoans in Washington for Frank Evans, annual report, 27099
 Colorimetry, colorimetric measures of stars on 6-color system of Stebbins and Whitford, catalog, 23868
 Coloring book, see Painting books.
 Coloring matter, see Dyes and dyeing.
 Colton, John B., bottom-water temperatures on Continental Shelf, Nova Scotia to New Jersey, 32510
 Columbia Basin project, mechanical equipment, Pacific Northwest region, field review of maintenance, 31782
 Columbia County Democratic Party, annual report, 24655
 Columbia County Republican Organization, annual report, 24779
 Columbia Military Academy:
 land conveyance, hearings, 15723
 remove restrictions from deed, 16859, 17196
 Columbia River and Valley:
 basin, lower, surface water supply, 16117
 distribution of radionuclides in bottom sediments of Columbia River estuary, 30273
 Federal-State-private cooperative surveys, Western United States, including, Columbia River drainage in Canada, 22245
 fish passage report, Bonneville, The Dalles, John Day, McNary Dams, 20100, 28683
 quality of ground water in basalt of Columbia River Group, Wash., Oreg., and Idaho, 20360
 radionuclides in transport in Columbia River from Pasco to Vancouver, Wash., 27563
 relations among radionuclide content and physical chemical and mineral characteristics of Columbia River sediments, 27562
 river basins of United States, description, etc., 17544
 water supply outlook and snow surveys, 19064
 Columbiana County, Ohio:
 flood plain information, Ohio River, 20124
 floods, 17399
 Columbiana County, Hays for Congress Committee, see Hays for Congress Committee, Columbiana County.
 Columbium, see Niobium.
 Columbus, Ohio, area wage surveys, 25381, 27669
 Comal County Republican Executive Committee, annual report, 22879
 Comanche Indians, general information, 31455
 Comarow, Murray:
 addresses, etc.—
 Apr. 26, 1973, 29572
 May 9, 1973, 30675
 Combat:
 combat-element enlistment bonus, extend—
 hearing, 28514
 report, 28372
 modern combat and problems of psychology, USSR study, 20465
 Combat areas, port construction in theater of operations, 28786, 30169
 Combat vehicles, see Motor vehicles.
 Combined gas-laser pumping, 21843
 Combined sewer overflow study for Hudson River conference, 25115

COMBO, general-purpose program for searching, annotating, encoding-decoding, and reformatting data files, 20645

Combs, Philip G., foreign trade regulations of Yugoslavia, 21103

Combustion:

- catalytic combustion, pollution-free means of energy conversion? 31274
- economics of mixed potassium-cesium seeding of an MHD combustion plasma, 23657
- liquid propellant rocket combustion instability, 21980
- mechanisms of pyrolysis, oxidation, and burning of organic materials, 23706
- nitric oxide formation in combustion processes with strong recirculation, 31293
- oxidant-fuel-ratio-zoned rocket injector for high performance and ablative engine compatibility, design and evaluation, 17721
- primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effect, 29294
- toxic products from burning of fire resistant materials, 25515
- turbulent immersed wall jet of air on burning graphite surface, USSR study, 16182
- see also* Flames.

Combustors:

- effects of fuel nozzle design on performance of experimental annual combustor using natural gas fuel, 20620
- Investigation of aircraft gas turbine combustor having low mass emissions, 30761
- low NO_x emission combustor for automobile gas turbine engines, 31922
- modular turbojet combustor burning natural gas fuel, experimental performance, 32468
- primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effect, 29294

Comets, asteroid and comet exploration, 31615

Comfort stations, *see* Public comfort stations.

Command (military):

- Air Force manpower standards command and command support, 22367
- command & commanders in modern military history, 2d Military History Symposium, proceedings, 16630
- commanders call support materials (periodical), 18131
- commanders digest (periodical), 18132
- index, 15942, 20032, 26304, 27377
- headquarters and headquarters company, etc., field manual, 19161

Command modules, *see* Spacecraft modules.

Command vehicles, *see* Spacecraft modules.

Commanders call support materials, 18131

Commanders digest, 18132

- index, 15942, 20032, 26304, 27377

Commander's maintenance guide, 25860

Commemorative coins, *see* Coins.

Commemorative medals, *see* Medals.

Commemorative stamps, *see* Postage stamps.

Commerce:

- Agricultural trade development and assistance act, Library of Congress project newsletter, 18579
- agricultural trade policy ATP (series), 17497, 20286-287, 23263-264, 28919-920
- American trade with Japan (address), 25960
- bunker fuels, oil and coal laden in U.S. on vessels engaged in foreign trade, foreign trade report, 24246
- clarifying Webb-Pomeroy act needed to help increase U.S. exports, GAO report, 32350

Commerce—Continued

- commerce and foreign trade, code of Federal regulations, 25177
- commerce business daily, 18134
- commerce today (periodical), 18135
- commercial and economic representation abroad, staff report, 25390
- domestic and international transportation of U.S. foreign trade, 16786
- effects of organized criminal activity on interstate and foreign commerce, hearings, 24919
- effects of pollution abatement on international trade, 25964
- endangered species of wild fauna and flora, convention on international trade, 28439
- Environmental Protection Agency efforts to remove hazardous pesticides from channels of trade, GAO review, 28989
- expansion of East-West trade with Communist countries (address), 25962
- export mailing list and FTI tape services, 31202
- foreign agricultural trade, monthly, 18378
- foreign oceanborne trade of United States, containerized cargo on selected trade routes—
 - calendar year 1970, 20519
 - calendar year 1971, 25394
- foreign production and commercial reports, index, 16155, 17569, 18486
- foreign trade of cooperatives, statistical supplement, 25136
- foreign trade—
 - FT reports, 15597, 16793, 19005-15, 22567, 28196-197, 29788
 - schedule C, classification of country designations, statistics, 22568, 30856
 - schedule D, classification of customs districts and ports, 22546, 29724, 30857
 - statistics—
 - regulations, compilations, amendments, 25889
 - U.S. classifications and cross classifications, 19016
 - U.S. imports, commodity by country, TSUSA, 28198
 - United States—
 - annual, 25973
 - quarterly, 16834, 22633
 - impact of changing economic and monetary policies on international trade (address), 21099
 - impact of marine transportation and merchant ship construction on domestic and international shipping (address), 23617
 - implications of multinational firms for world trade and investment and for U.S. trade and labor, 23058
 - improving cargo transportation facilities to promote foreign commerce (address), 25147
 - increasing efficiency and promoting containerization in U.S. foreign trade (address), 23620
 - international economic indicators, 28633, 31203, 32184
 - international economic policy act, amend, report, 31068
 - international voluntary standards in trade, United States participation, report, 19843
- Interstate commerce—
 - act, amend—
 - hearing, 21255
 - reports, 15850, 17177, 31071
 - protect free flow without damage to environment, hearings, 31138
 - regulate to protect health and environment from hazardous chemical substances, hearings, 28419
- Interstate traffic in firearms, provide for better control, text, 24160

INDEX 1973

Commerce—Continued

material relating to United States foreign trade, 17239
 merchant ship construction for containerized service in foreign trade (address), 23619
 national energy policy, shipbuilding and world trade expansion (remarks), 21926
 new diplomacy, trade takes front seat (address), 22629
 new initiative to liberalize international trade, 24308
 normalizing commercial contacts with Socialist states (address), 28230
 Northwest forest industries, trade, 18822
 observations on East-West economic relations, U.S.S.R. and Poland, trip report, 22681
 ocean transportation in noncontiguous States and territories, report, 29964
 oceans of commerce, excerpts from 35 mm slide presentation, 25654
 opportunities for expanding trade with developing African nations (address), 21096
 overseas trade promotion activities, calendar of events, 30320
 overseas trade promotions calendar, 31211
 overview of United States trade prospects with Communist countries (remarks), 21106
 problems to be solved in expanding American share of international trade (remarks), 22638
 prohibit certain State taxation of persons in air commerce—
 hearings, 26169
 law, 32002
 reports, 27156, 28328, 28351
 promote report, 27285
 remove barriers to expanded world trade (remark), 27898
 steamship lines in foreign commerce of U.S., approved conference, rate and interconference agreements, 18005
 taking of evidence abroad in civil or commercial matters convention agreement, 20805
 tax adjustments in international trade, GATT provisions and EEC practices, 26264
 trade—
 adjustment assistance—
 hearings, 15739
 to attain favorable economic balances, 21232
 agreement with Venezuela, 16530
 employment, and labor ministries (address), 21900
 trade list catalog, 30321
 trade negotiations (address), 24280
 trade negotiations and changing attitudes (address), 25032
 trade reform, hearings, 32096
 Trade reform act of 1973, 26060, 27112
 committee print, 24882
 hearings, 29944, 31042
 prepared statements of administration witnesses concerning, 29941
 trade reform legislation (address), 31987
 trading with People's Republic of China, 27068
 U.S.-Canadian economic relations (remarks), 29121
 U.S. foreign agricultural trade policy, hearings, 30003
 U.S.-Soviet commercial agreements, 25034
 U.S.-Soviet commercial relationships in new era, 16838
 U.S.-Soviet trade, what's in it for me (address), 22643
 U.S. trade promotion facilities abroad, 31212
 U.S. trade prospects with People's Republic of China, realistic assessment, 22258

Commerce—Continued

U.S. trade with—
 Communist areas in Eastern Europe and Asia, 30131
 Puerto Rico and U.S. possessions, monthly report, 19008
 USSR trade and services, translations, 15990
 waterborne intermodal cargo transportation (remarks), 25149
 see also Exports—Imports—Transit (international)—also names or classes of articles of commerce.
 Commerce Committee, Senate:
 calendar, 18563
 committee prints, 17234, 17237-247, 23054-55, 27315, 31139, 32142
 consultants, increase limitation on expenditures for, report, 28501
 goals for 93d Congress, 1st session, 27315
 hearings, 15878-883, 17235-236, 19952-960, 21321-328, 23046-53, 24917-922, 26259-263, 27310-314, 28524-530, 30014-15, 31137-138, 32141
 inquiries and investigations, authorization and expenses, 26230
 legislative review of 92d Congress, report, 27273
 reports, 15828, 15835, 15843, 15848, 15850, 15857, 17139, 17141, 17177-178, 17186, 17188-190, 17208, 19843-844, 19846, 19856-857, 19859-863, 19872, 19877, 19899, 19925, 19934, 21309, 26205, 27373, 27276, 27285, 27290, 28463-464, 28479, 28482, 28484, 28491, 28501, 28505-506, 29956, 29962, 29964, 29969, 29978-979, 29983, 31071, 31080-81, 31085, 31094-95, 31114-115, 31119, 32102-103, 32107, 32111, 32122
 Commerce Department:
 annual report, 54281
 appropriations, 1973—
 law, 19473
 report, 19704
 appropriations, 1974—
 amendments, proposals, 30959, 31060
 authorization, hearing, 28526
 hearings, 27183, 28388, 31127
 report, 32051
 supplemental, proposal, 31056
 Assistant Secretary for—
 Domestic and International Business, nomination of Andrew E. Gibson, hearing, 19954
 Maritime Affairs, nomination of Robert J. Blackwell, hearing, 19954
 clarifying Webb-Pomerene act needed to help increase U.S. exports, GAO report, 32350
 Commerce Department services for developing export trade (address), 25033
 commercial offices abroad need substantial improvements to assist U.S. export objectives, GAO report, 20326
 Federal advisory committees, annual report, 28539
 how to sell to U.S. Department of Commerce, 29818
 maritime programs, appropriations, 1973
 supplemental authorization—
 law, 19453
 report, 19706
 maritime programs, appropriations, 1974, authorize—
 hearings, 26175
 law, 29828
 reports, 28358, 32034
 need for national earthquake research program, GAO report, 16097
 press releases, 18776
 publications, catalog and index, 15623, 31985
 Secretary—
 general correspondence, general records, pamphlet describing microfilm, 27718D
 nomination of Frederick B. Dent, hearings, 26262

Commerce Department—Continued
 serving growing economy and growing people, 25963
 summary statistical data files on magnetic tape publicly available from Department of Commerce, 22146

Commercial and economic representation abroad, 25390

Commercial aviation, *see* Air carriers.

Commercial banks, *see* Banks and banking.

Commercial fisheries, *see* Fish and fisheries.

Commercial health and accident insurance industry, 27348

Commercial offices, abroad need substantial improvements to assist U.S. export objectives, 20326

Commercial policy, science, technology and American diplomacy, 28410

Commercial practices, code of Federal regulations, 23235, 25178

Commercial products:
 assessing water pollution potential of manufactured products, 27472
 better products through initiatives in corporate responsibility, 17237
 brand names identical to products purchased and tested for use by Federal Government, 20278, 23246
 commodity oriented items, defense integrated materiel management manual for consumable items, 28590
 consumer products by design, report on new foods, fabrics and materials from agricultural research, 29618
 consumer products warranties, provide disclosure standards against defect or malfunctions, report, 29970
 export commodity classification, special announcements, 19262, 21070

exports—
 foreign trade reports, 19007, 19014
 schedule B—
 commodity groupings by world area, annual foreign trade report, 29787, 30855
 statistical classification, 16794, 18888

imports—
 foreign trade reports, 19006, 19014
 general—
 schedule A, commodity groupings, by world area, annual trade report, 28196
 world area by commodity groupings, annual trade report, 28197
 lack of authority limits consumer protection, problems in identifying and removing from market products which violate law, GAO report, 16096

list of commodities, normally purchased by Federal Supply Service, 21592

NEISS news (National Electronic Injury Surveillance System), product safety, 23258

Nice agreement concerning international classification of goods and services—for purposes of registration of marks, 20798
 to which trademarks are applied, 20797

numerical list of manufactured products (new (1972) SIC basis), 1972 census of manufacturers, 31971

product warranties, business guidelines to meet consumer needs, 23716

read the label, 23259

regulation, 1972, model state method of sale of commodities, 23703

safety in marketplace, program for improvement of consumer product safety, 29327

selected instruments and related products, current industrial reports, 24235

should appropriated funds be used for transportation procured specifically for Armed Forces exchange goods? GAO report, 32356

Commercial products—Continued
 tabulation of voluntary standards and certification programs for consumer products, 26711
 value of product shipments, annual survey of manufacturers, 19193
 voluntary product standard PS (series), 20651, 30477
 water pollution potential of manufactured products—
 catalog *see*, 3, chemical ingredient listing, 27475
 product list, 27474
 summary, 27473
see also names of products.

Commercial standards, *see* Standards and standardization.

Commercial steel forgings, 1972, current industrial report, 28149

Commercial treaties:
 agricultural trade and proposed round of multilateral negotiations, 32126
 Trade reform act of 1973, committee print, 24882

Commercial vehicle front-tire failures, 32452

Comminution, *see* Fragmentation.

Commissaries:
 commissary operating manual, 25851
 Defense Department nonappropriated fund and other resale activities, review, 19747
 meat market operations commissary stores, 26975

Commissary stores, *see* Commissaries.

Commission on Executive, Legislative, and Judicial Salaries, *see* Executive, Legislative, and Judicial Salaries Commission.

Commission on Government Procurement, *see* Government Procurement Commission.

Commission on Highway Beautification, *see* Highway Beautification Commission.

Commission on Organization of Government for Conduct of Foreign Policy, *see* Organization of Government for Conduct of Foreign Policy Commission.

Commissioned Corps of U.S. Public Health Service, 25675

Commissioned officers, *see* Air Force.

Commission on Review of National Policy toward Gambling, *see* Gambling, Review of National Policy toward, Commission.

Committee for Congressman Cornelius E. Gallagher Reception, annual report, 24532

Committee for Election of Harold J. Robinson, annual report, 24647

Committee for Purchase of Products and Services of Blind and Other Severely Handicapped, *see* Purchase of Products and Services of the Blind and Other Severely Handicapped, Committee on.

Committee for Responsive Government, annual report, 24512

Committee on American Leadership, annual report, 24471

Committee to Elect Leroy A. Mercer, annual report, 24631

Committee to Reelect Marvin Esch, annual report, 28293

Committee to Reelect O. C. Fisher, annual report, 27098

Committees, *see* Advisory committees—Congressional committees—*also* names of committees.

Committees, Select Committee on, House, hearings, 29896, 31016

Commodities, *see* Agricultural products—Commercial products—Exports—Fruit—*also* names of commodities.

Commodity Credit Corporation:
 audit fy 1972, GAO report, 21686
 audit report, 24804
 average premiums and discounts for CCC settlement purposes for offers received, 18021
 need intensifies to amend legislation to reduce Government losses on peanut price-support program, GAO report, 26479

INDEX 1973

- Commodity Credit Corporation—Continued
 - report of financial condition and operations, 16839
 - sales list, monthly, 18056
 - statutes, compilation, 25820
- Commodity Exchange Authority, appropriations, 1974, hearings, 28384
- Commodity exchanges:
 - code of Federal regulations, 28872
 - commodity futures—
 - contracts delivery points, hearing, 19737
 - statistics on future trading in commodities regulated under Commodity exchange act, monthly, 18644
 - Cotton and grain futures act, compilation, 19539
 - effects of futures trading on price performance in cash onion market, 22360
 - hedging potential in grain storage and livestock feeding, 22325
 - trading in commodity futures contracts on Chicago Board of Trade, 29626
- Commodity prices, *see* Prices.
- Common carriers, *see* Motor carriers.
- Common thread of service, historical guide to HEW, 16120
- Commonwealth Republican Women's Club, annual report, 24695
- Communicable diseases, *see* Contagion and contagious diseases.
- Communication (psychology):
 - biblio-profile on human communications and its disorders, capsule state-of-the-art report with bibliography, 23763
 - Spanish-language health communications teaching aids, list of printed materials and their sources, 31410
- Communication satellites, *see* Satellites.
- Communications:
 - act of 1934, amend, hearings, 26261, 31137
 - action of dither in digital matched filters, 27851
 - batteries used with law enforcement communications equipment, 30379
 - Campaign communications reform act, amend, reports, 28479, 31083
 - carriers, discontinuance of service, FCC rules and regulations, 18313
 - changing nature of mass media (address), 22194
 - common carriers—
 - and affiliates, reports, FCC rules and regulations, 18313
 - miscellaneous rules, FCC rules and regulations, 18313
 - preservation of records, FCC rules and regulations, 18313
 - communication and control systems—
 - mid-Pacific region, field review of maintenance, 31777
 - South Platte River projects, North Platte River projects, region 7, field review of maintenance, 31778
 - communications industry and news media under Fair labor standards act, 26916
 - communications—
 - electronics management of electromagnetic spectrum, 30753
 - guidelines for emergency medical services, 30495
 - in 9th 5-year plan, USSR study, 27648
 - directory of minority media, 29817
 - electronics technicians, 3 & 2, communications, rate training manual, 27858
 - emergency medical services communications systems, 20369
 - emergency planning in communications and electronics equipment industries, industrial civil defense handbook, 20082
 - engineering feasibility study of communications via subterranean waveguide, 22642
 - evaluation of device to train forward air controllers to communicate target locations, 20930
- Communications—Continued
 - heuristic cost optimization of Federal Telpak Network, 29326
 - investigations of artificial stimulation of ULF waves in ionosphere and magnetosphere, magic mode, 29436
 - join local radio station, Army Guard communications, electronics, 32492
 - National Weather Service communications handbook, 22153
 - naval shore electronics criteria, VLF, LF, and MF communication systems, 20723
 - navigation and communications, USSR study, 30344
 - objective speech, quality measurement of communication channel, 31990
 - on-the-job training to 3-skill level in communication center operations specialty, estimated cost, 22364
 - Orbita-2 satellites communications station, USSR study, 30367
 - publications, price list, 16463
 - relieve broadcasters of equal-time requirement with respect to candidates for President and Vice-President, hearings, 26261, 31137
 - stability of multi-station satellite communications system, USSR study, 30369
 - telecommunications via certain guided wave structures, 27063
 - use of Federal Aviation Administration system, Federal aviation regulations, 18292
 - USSR, herald of communications (periodical), 18419
 - see also* Military communications—Mobile communication systems—Optical communications—Space communications—Telecommunications—Telephone—Television—Tropospheric scatter communications.
- Communications Political Action Committee, annual report, 26003
- Communism:
 - assault on freedom, compendium of theoretical and policy statements by communist movement, 30048
 - human cost of communism in Vietnam—
 - compendium, 21355
 - myth of no bloodbath, hearing, 23062
 - problems (periodical), 18819
 - theory and practice, hearings, 21253, 24864
 - USSR, Kommunist (periodical), translations, 18971
 - world strength of Communist Party organizations, 31877
- Communist countries:
 - expansion of East-West trade with Communist countries (address), 25962
 - normalizing commercial contacts with Socialist states (address), 28230
 - overview of United States trade prospects with Communist countries (remarks), 21106
 - projections of population of Communist countries of Eastern Europe, by age and sex, 1972–2000, 26351
 - U.S. trade with Communist areas in Eastern Europe and Asia, 30131
- Communist party of Soviet Union, party control in medical establishment, USSR study, 16183
- Communities, *see* Cities and towns.
- Community action agencies:
 - census data for community action, 21037
 - new municipal rules in human resource development, 21417
- Community centers:
 - better ways to help youth, 3 youth services systems, 25808
 - challenge of youth service bureaus, 30684
 - community mental health centers, program review, 27223
 - halfway houses and community treatment centers, guidelines and standards, 29148

Community centers—Continued

- Mental retardation facilities and community health centers construction act, text, 24867
- whom are community mental health centers serving? 16393
- Community College of Air Force, general catalog, 31926
- Community Development Corporation, General Manager, nomination of Alberto F. Trevino, jr., hearing, 31136
- Community development programs :
 - changing demand for local capacity, analysis of functional programming and policy planning, 25271
- Chicago, Ill., oversight on housing and urban development programs, hearings, 28522
- community development evaluation series, 21766-767, 25271, 26525, 27581, 31414
- community development, magazine, 23415, 31413
- consolidation, simplification and improvement of laws relating to urban development, report, 15714
- coordinating Federal assistance in community, 21767
- expansion arts program, guidelines for funding assistance for community arts projects, 32491
- Federal domestic assistance, catalogs, 18053, 23613, 30401
- homes, etc., publications, price list, 16462
- Housing and urban development—
 - act, explanation, 17229
 - basic laws and authorities, 24846-847
 - laws and authorities, temporary extension, reports, 28340, 31079
- Sweden, 21801
- United Kingdom, 26528
- how USDA can help you involve youth in community development, 28013
- HUD new communities program, oversight, hearings, 31014
- international housing, review of U.S. assistance to developing countries for housing and urban development, hearings, 15876
- Investments in housing and community development (address), 21806
- Job training and community services act, report, 29980
- local government participation in A-95, project notification and review system, 27581
- message from the President on state of the Union, 24817
- new-town-in-towns, strategy to save cities (address), 23449
- oversight on housing and urban development programs, hearings, 30010
- planned-unit development with homes association, 31328
- planned variations, program to enable cities to solve critical urban problems, 1st year survey, 21766
- rehabilitation and neighborhood conservation housing insurance program, 23431
- small community needs, study 17221
- soils interpretations for community planning and development, 27897
- stream quality preservation through planned urban development, 30198
- urban and regional planning research in USA, review of trends, 23451
- urban development, code of Federal regulations, 30222
- urban revitalization of central cities (remarks), 21805
- urban river, staff proposal for waterfront development in District of Columbia, 23719, 25562
- see also Redevelopment (city planning, etc.)
- Community Environmental Management Bureau, posters, 28246, 28248-249
- Community exchanges, commodity futures statistics, 1970-71 annual summary, 28020

Community facilities:

- Alternatives to Drug Abuse Conference, proceedings, 20530
- community action approach for prevention of burn injuries, 21117
- community-centered programs for persons charged with crimes, provide to reduce recidivism, hearings, 19986, 27349
- Community mental health centers act—
 - extend—
 - hearing, 23019
 - law, 32003
 - reports, 17017, 28353
 - history of program and current problems and issues, 24946
- correctional treatment in community settings, report of current research, 22068
- effective coordination of drug abuse programs, guide to community action, 26746
- getting help on reading outside of school, 28676
- Health facilities, manpower, and community mental health centers act, report, 17143
- installations site planning of community centers, Army technical manual, 28052
- Older-American community service employment act, law, 27089
- proceedings on alcoholism emergency care services, 22078
- railroad depots, unused, make into cultural centers, hearing, 19767
- what can communities do to improve reading programs? 28677
- Community health, *see* Health.
- Community health services, *see* Health.
- Community hospitals, inflation in pre-medical care period, 23977
- Community life :
 - reintegration of offender into community, 31551
 - to find way to services in your community, 25813
- Community manpower training and employment act, 17277
- Community property, community property and Federal income tax, 20391
- Community relations :
 - community based corrections in Des Moines exemplary project, 32413
 - deaf leadership training for community interaction, manual for grassroots leadership, 22209-A
- Community Relations Service :
 - annual report, 27070
 - budgetary cutbacks, hearings, 28423
 - organization, functions, etc., 27069
- Community supervision and services act, 19986, 27349
- Community surveys, community water supply study, analysis of national survey findings, 32539
- Community water supply study, analysis of national survey findings, 32539
- Commuter transportation, *see* Transportation.
- Comorin, Cape, summary of synoptic meteorological observations, Southwest Asian marine areas, 23892
- Compacts (interstate), *see* Interstate agreements.
- Companies :
 - gas supplies of interstate natural gas pipeline companies, 21552
 - tank units, Army field manual, 20981
- Comparative study of female and male air traffic controller trainees, 21033
- Comparison of advanced propulsion concepts for deep space exploration, 17725
- Comparison of exact and approximate evaluations of single-scattering integral in nucleon and deuteron elastic scattering, 20600
- Comparison of Federal salaries in statutory pay systems, 16943

INDEX 1973

- Comparison of 1970 and 1971 Air Force enlistees by draft-vulnerability category, 28030
- Comparison of State unemployment insurance laws, 17919-920, 25794
- Comparison standards for chromium plated 5.56MM, 7.62MM, and caliber .30, small arms barrel bores, 15964
- Compatibility, psychological compatibility in interplanetary flight, USSR study, 21841
- Compendium of Copyright Office practices, 18141
- Compendium of national health expenditures data, 23970
- Compendium of reports resulting from HUD research and technology funding, 27582
- Compendium on workmen's compensation, 29336
- Compensation, *see* Employer's liability and workmen's compensation—Pensions.
- Compensation of Federal representatives on Southern and Western Interstate Nuclear Boards, 17173
- Compensatory education, *see* Education.
- Competency to stand trial and mental illness, 31695
- Competition:
 - anticompetitive impact of oil company ownership of petroleum products pipelines, investigation—
 - hearings, 17096
 - report, 21186
 - anti-price discrimination legislation to foster business opportunities, hearing, 17274
 - competition in real estate and mortgage lending, hearings, 15912
 - competitive edge, economic impact of foreign metalworking (address), 21413
 - competitive problems in drug industry, summary and analysis, 17303
 - controls or competition, remedies for economic, social and political effects of economic concentration, hearing, 19987
 - drug industry, competitive problems, hearings, 15932, 27366
- Competitive marksmanship, training program, 17755, 26731
- Compilation of air pollutant emission factors, 29637
- Complaints:
 - complaint filing guide, how to file unfair labor practice complaint under Executive order 11491, in Federal Service, 30382
 - construction complaints handbook, 21778
 - equal opportunity complaint and compliance review reporting and control procedure, HUD, 31433
 - processing procedures for title 6 complaints and compliance reviews, HUD, 29074
- Complete orthonormal set of 2-dimensional Haar-functions, 27848
- Completeness and quality of response in North Carolina marriage follow-back survey, 30480
- Complexes, *see* Coordinates.
- Compliance, enforcement and reporting in 1972 under Labor-management reporting and disclosure act, 25370
- Composite materials:
 - effects of material composition on ablation performance of low-density elastomeric ablators, 29283
 - peculiarities of common deep point composite tapes, USSR study, 30370
 - tensor manipulations in complex coordinates with applications to mechanics of materials, 30592
 - USSR, translations, 30335
- Composition of coalbed gas, 29236
- Composition of matter, feasibility study of in-situ source monitoring of particulate composition by Raman and fluorescence scatter, 30185
- Compound type separation and characterization studies for 370° to 535° C boiling distillate of Gach Saran, Iran, crude oil, 30441
- Compounds, *see* Inorganic compounds—Magnesium—*also* names or classes of compounds or purpose for which used.
- Comprehensive framework studies, Missouri River basin, 16341-345, 17686-686A
- Comprehensive Health Planning Service, advocate of public interest, 25978
- Comprehensive older American services amendments of 1972, 26099
- Comprehensive planning assistance managing grant, 31431
- Compressed gases, *see* Gases.
- Compressibility, compressibility data for helium, nitrogen, and helium-nitrogen mixtures at 0°, 25°, and 50° C at pressures to 1,000 atmospheres, 16331
- Compressible boundary layer, *see* Boundary layer.
- Compressible flow, *see* Flow.
- Compressing:
 - compression debarking of—
 - branchwood chips from Finland, 17516
 - wood chips, 28959
- Compression wood, *see* Lumber.
- Compressors:
 - pumps and compressors, current industrial reports, 29771
 - two-stage high pressure-ratio centrifugal compressor, 26982
- Comptroller, Air Force comptroller (periodical), 17973
- Comptroller General, *see* General Accounting Office.
- Comptroller of Currency:
 - report 1971—
 - departmental edition, 19308
 - document edition, 19545
- Computations, *see* Numerical calculations.
- Computer programs/programming:
 - adjoint gamma-ray moments computer code, ADJGOM-I, 25556
 - ADMATCH users manual, 16747
 - analytical and experimental investigation of circulation control by means of turbulent Coanda jet, 17701
 - automated engineering document preparation system, finishes, military standard, 15955
 - card deck, software instructions for AIST-O system, USSR study, 20474
 - census 1970, geography, concepts, products, and programs, data access descriptions, 31969
 - CODAP, input standard (INPSTD) and variable generation (VARGEN) programs, 20943
 - COMBO, general-purpose program for searching, annotating, encoding-decoding, and reformatting data files, 20645
 - computer applications in radiology, conference proceedings, 25678
 - computer-controlled machines for dimensional inspection applications, 22497
 - data collection and correction, 22503
 - computer programs—
 - abstracts (periodical), 18143
 - for processing historic fire weather data for national fire-danger rating system, 28949
 - for thermodynamic and transport properties of hydrogen (Tabcode-II), 26763
 - information retrieval and data analysis, 27711
 - correction, update extension of geographic base (DIME) files, 22547
 - creation of Republic automated control system, USSR study, 25354
 - development of equilibrium air computer programs suitable for numerical computation using time-dependent or shock-capturing methods, 20591

Computer programs/programming—Con.
 digital-computer program for design-analysis of salient, wound pole alternators, 29266
 DIME workshops program, census use study, interim report, 28147
 fast Fourier transform microcode for Burroughs D-machine, 23884
 FORTRAN program—
 calculating critical speeds of rotating shafts, 31652
 calculating velocities and streamlines on hub-shroud and mid-channel flow surface of axial- or mixed-flow turbomachine, user's manual, 31639
 vortex lattice method for estimating subsonic aerodynamic characteristics of complex planforms, 31621
 gamma ray moments computer code, GAM-MOM-I, 26712
 handbook for conversion of IBM 360 application programs to Honeywell series 6000, 24978
 hazard evasion program for mine planning, 16339
 improved helicopter structural crashworthiness analytical and design techniques, test data and descriptions of unsymmetrical crash analysis computer program, 30759
 improved method for aerodynamic analysis of wing-body-tail configurations in subsonic and supersonic flow, 29253
 mathematical computer programs, compilation, 26684
 microprogrammed control unit (MCU) programming reference manual, 22173
 MINIMAX, to assemble machine code for interdata model 70 minicomputer on control-data 3800, 31724
 National Weather Service river forecast system, forecast procedures, 25621
 New Mexico work-effort analysis computer program, 17530
 OMNITAB II segmentation structure for SCOPE operating system, 17740
 part programming for numerical control machining and gaging, 22502
 plot command language translator program, 17454
 predicting softwood cutting yields by computer, 28965
 principles of multiprogramming for special purpose computers, USSR study, 25341
 set of debugging and monitoring facilities to improve diagnostic capabilities of compiler, 25558
 SHIP (simplified-Helmholtz-Integral program), fast computer program for calculating acoustic radiation and radiation impedance for free-flooded-ring and finite-circular-cylinder sources, 16443
 subroutine for calculation of CODEN check characters, 17742
 technical reviews and audits for systems, equipment and computer programs, military standard, 20075
 template converter program, 31320
 toxicology information program, 29372
 users' guide to OMNITAB command, "Statistical analysis," 26709
 user's manual for computer program for simulating intensively managed allowable cut, 25213
 WAVE, computer program for one-dimensional stress wave analysis in a time-dependent inelastic rock using a generalized Voigt model, 23640
see also Computer science—Probabilities (mathematics)—*also* names of programs or subjects for which programs have been made.

Computer science:
 developing specifications for low-cost computer system for secondary schools, 22063

Computer science—Continued
 Federal use and development of advanced information technology, Federal information systems and plans, 31023
 Computer specialists, examination announcement, 19279, 22595
 Computer tape, *see* Magnetic tape.
 Computerized geographic coding, series GE 60, 29725
 Computerized simulation, *see* Simulation—*also* subjects simulated.
 Computerized system for quantitative X-ray diffraction analysis of pyrite in coal, 29244
 Computers:
 control & information theory, weekly Government abstracts, 19069
 development of man-computer interaction, USSR study, 27643
 records, computers, and rights of citizens, report, 30292
 see also Differential analyzers—Electronic computers—Electronic data processing systems.
 Computing cameras with prism compensation, 16181
 Computing machines, *see* Calculating machines.
 Computing your tax under income averaging method, 20392
 Concentration by competing raw fuel industries in energy market and its impact on small business, 15782, 19626
 Concentration camps, U.S.S.R. labor camps, hearings, 26278
 Concentration tables, value-of-shipment concentration ratios annual survey of manufactures, 19192
 Concentrators, swirl concentrator as combined sewer overflow regulator facility, 20189
 Concept evaluation, recovery of floating oil using polyurethane foam sorbent, 17418
 Concepts in welfare program design, 30940
 Conceptual framework for diffusion of innovations in vocational and technical education, 30501
 Concord, N.H.:
 flood plain information, Merrimack River, 20119
 floods in Concord, N.H., 20140
 Concrete:
 aggregate concrete mixtures with high water-cement ratios, laboratory investigation, 20174
 asphalt concrete plants, background information for proposed new source performance standards, 29643, 30722
 concrete and concreting materials exposed to natural weathering, performance investigation, 31263
 deformed concrete reinforcing bars of non-alloys steel from Mexico, Tariff Commission report, 32586
 design criteria for concrete retaining walls, 23919
 effect of—
 load variations on flexural fatigue strength of plain concrete, 31319
 welding on fatigue life of high-strength reinforcing steel used in continuously reinforced concrete pavements, 31326
 fibrous concrete—
 construction for 70's, 25068
 technical information pamphlet on use for military facilities, 28691
 fracture mechanics applicability to Portland cement concretes, 26380
 materials and procedures for repair of spalls in concrete, 27439
 nonmetallic coatings for concrete reinforcing bars, coating materials, 27733
 resin concrete, literature review, 20169
 wastewater treatment studies in aggregate and concrete production, 26407
 Concrete beams, polymer concrete-reinforced concrete composite beams, 30162

INDEX 1973

- Condemnation of property, private, for public use, how Federal income tax applies, 21816
- Condensation:
 - characteristics and operation of cloud condensation nuclei collection/detection/recording instrument, technical manual, 22416
 - humidification in thermal life determination of motorette insulation systems, 23881
 - weak thermal points or thermal bridges, building research translations, 27728
- Condensed milk, *see* Milk.
- Condensers (vapors and gases):
 - basic properties of ice as related to performance of ice condensers, 24202
- Conditions for wave transformation in plasma with nonmonotonic longitudinal distribution, 21005
- Conditions of competition between U.S.-produced and foreign-produced asparagus, 26896
- Condominium housing, *see* Housing.
- Conduct of life, National Guard technicians, standards of conduct, 23734
- Conduction of heat, *see* Heat transfer.
- Conductivity (electric), *see* Electric conductivity.
- Conduits, survival of fish passing through spillways and conduits, compendium, 31238
 - see also* Electric conduits.
- Cone, Frederick L., social security beneficiaries under representative payment, 1970, 25704
- Cones:
 - conical section method for determining geometric configuration of planet by photographs taken from space, USSR study, 23536
 - evaluation of 2 tree shakers for harvesting cones, 27526
 - judging ripeness of seeds in Black Hills ponderosa pine cones, 28950
 - tables for supersonic flow of helium around right circular cones at zero angle of attack, 32484
- Confectionery:
 - current industrial reports, 18194
 - including chocolate products, current industrial reports, 29757
- Confederated Tribes of Warm Springs Reservation of Oregon, *see* Warm Springs Reservation.
- Conference committees:
 - committee prints, 19533, 29834
 - reports, 15681, 15690, 16955, 16957, 16990, 17004-5, 17013, 17015, 17154, 17199, 19608, 19615, 19617, 19621, 19623, 19634-638, 19641, 19652, 19655, 19633, 19666, 19668, 19682, 19686, 19692-696, 19703-704, 19709, 19711, 19714-15, 19717-719, 19722, 19725-727, 19729-730, 19733, 19886, 19923, 19938, 21179-180, 21183-185, 21312, 26090, 27120, 27126, 27134, 27154-155, 28326, 28351, 28376, 29859, 29867-868, 29872, 29874, 29878, 29886, 29890, 29989, 29996, 30993-994, 30999, 31002, 31105, 31108, 32035, 32039-40, 32052-54, 32069-70, 32105, 32116
- Conference on European Security, *see* European Security Conference.
- Conference on Immunization in Tuberculosis, status of immunization in tuberculosis in 1971, report of conference on progress to date, future trends and research needs, 16174
- Conferences, congresses, etc.:
 - calendar of environmental meetings, quarterly, 31303
 - conference at Quebec, 1944, diplomatic papers—
 - departmental edition, 17856
 - document edition, 16942
- Conferences, congresses, etc.—Continued
 - conference series, National Center for Health Services Research and Development, 27740
 - Construction Engineering Research Laboratory, conference proceedings series, 25068
 - conventions, 1973 national and international unions, State labor federations, professional associations, State employee associations, 29172
 - Defense Civil Preparedness Agency, catalog of courses and conferences, 31176
 - 18-month calendar of national meetings, 18251
 - international organization and conference series, 27908-909, 31847
 - scholar-diplomat seminars, 29537
 - 10th Lake States Forest Tree Improvement Conference and 7th Central States Forest Tree Improvement Conference, joint proceedings, 28923
 - see also* names of conferences, etc., also subjects of conferences.
- Confidential material:
 - alleged purchase of classified information by Members of Congress, hearings, 27188-189
 - census confidentiality/mid-decade sample survey bill, report, 32029
 - controlled accessibility to material in computer system, 30476
 - examination of financial statements of National Credit Union Administration for periods ended June 30, 1971 and 1972 limited by restriction on access to credit union examination records, GAO report, 32352
 - newsmen's privilege to protect confidential sources of news media, hearings, 19786
 - safeguarding classified defense information and materiel, 23423
- Configurations:
 - comparison of several methods for estimating low-speed stability for 2 airplane configurations, 20598
 - configuration control-engineering changes, deviations and waivers, short form, military standard, 20055
 - directional divergence characteristics of several high-performance aircraft configurations, summary, 20617
 - dynamic stability derivatives at angles of attack from -5° to 90° for variable-sweep fighter configuration with twin vertical tails, 20602
 - extension of capacity concept to dual-use runways and multi-runway configurations, 24024
 - improved method for aerodynamic analysis of wing-body-tail configurations in subsonic and supersonic flow, 29253
 - injections of neighborhood size 3 and 4 on set of configurations from infinite one-dimensional tessellation automata of two-state cells, 22405
 - resonance phenomena in configurations with helical magnetic axes when calculating toroidality, 21011
 - some problems of calculation of 3-dimensional boundary-layer flows on general configurations, 31611
 - space-periodic magnetic configurations, experimental determination of basic characteristics, 21001
 - stationary motion configurations of filament, USSR study, 20476
 - wind-tunnel investigation of effects of variation in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configuration, 32470
- Conglomerate corporations, *see* Corporations.
- Conglomerates, geology of gold-bearing conglomerates in northwestern Wyoming (series), 21731, 27568

Congo (Brazzaville):
 Congo-Zaire boundary study, 17865
 Congo (Kinshasa):
 mineral industry, minerals yearbook chapter, 20542
see also Zaire.
 Congo, Democratic Republic, *see* Zaire.
 Congress of United States:
 alleged purchase of classified information by Members of Congress, hearings, 27188-189
 availability of all information, except where executive privilege is invoked, require, hearings, 29911
 budgetary and fiscal information needs of Congress, GAO report, 20325
 Congress and termination of Vietnam war, study, 27320
 Congressional oversight of Executive agreements, hearings, 15913
 congressional record—
 daily, 18144
 index, 18145
 92d Congress, 1st session, bound volumes, 16842-843, 19309-315, 21122, 22651-653, 24291-297, 25981-983, 27071, 27073, 30897, 31995
 index, 27072
 congressional serial set, 19316-321, 25984-990, 27074-75, 29822-826, 30898-899, 31996-32001
 constitutional immunity of Members, legislative role in gathering and disclosing information, hearings, 27093
 court proceedings and actions of vital interest to Congress, reports, 16928, 24303, 32018-19
 print additional copies, report, 16995
 curb Federal spending, message from the President, 19552
 directory, 93d Congress, 1st sess.—
 official edition, 25980
 pictorial edition, 24290
 foreign affairs field, reports required by Congress, 27204
 franking privilege—
 clarify proper use, report, 26131
 special report, 24304
 Government information policies and practices, problems of Congress in obtaining information from executive branch, hearings, 17058
 growing bond, European Parliament and Congress, report on official visit to Congress by delegation of European Parliament, 17043
 impoundment control and 1974 expenditure ceiling, report, 30891
 improving congressional control over budget—
 compendium of materials, 24930
 hearings, 27092, 27332, 30035
 improving congressional control over budgetary outlay and receipts totals, 24302
 interim report, 26071
 improving fiscal and budgetary information for Congress, report, 16973
 increase flow of budget information to Congress, hearings, 27331
 inventory of congressional concern with research and development, bibliography, 17260, 27334
 laws—
 private, 15631-634, 16853-859, 19322-349, 28263-264
 public, 15635-658, 16860-927, 19350-530, 21129-135, 27076-89, 29827-831, 30900-936, 32002-17
 Legislative reorganization act of 1946 and 1970 relating to operation of Senate, 17301
 92d Congress, legislative review, report, 27271
 93d Congressional districts, map, 21071
 proceedings and debate, summary, pilot study, 29869

Congress of United States—Continued
 provide copies of daily and semimonthly Congressional record to libraries of certain U.S. courts, law, 16887
 report to Joint Committee on Congressional Operations, Congress of United States, implementation of sec. 201-205, 231-235, and 451 of Legislative reorganization act of 1970, GAO report, 29000
 reports to be made to Congress, 11st, 27109
 summary of major achievements, 92d Congress—
 1st session, 17120
 Jan. 21, 1971-Oct. 18, 1972, including statement by Mike Mansfield, 21303
 transmittal of executive agreements to, law, 16905
 war powers, define—
 hearings, 27211
 reports, 15700, 15814
 war powers of Congress and the President—
 House consideration, report, 32047
 reports, 30978, 31070
 Congress on Environmental Health, American Medical Association, proceedings, 28247
 Congressional Club, annual report, 27273
 Congressional Colleagues for Bob Barry, annual report, 24473
 Congressional Committee for Martin M. Horowitz, annual report, 22863
 Congressional committees:
 appropriations committees not advised on reprogramming of funds by Internal Revenue Service, GAO report, 27543
 committee organization in House, hearings, 29896, 31016
 estimates of impact of inflation on costs of proposed programs should be available to committees of Congress, GAO report, 21691
 hearings in records of U.S. Senate and Joint Committees of Congress, 20631
 House, proceedings in open session, strengthen requirements, reports, 24830, 26101
 Senate, amend rule 25, relative to open and closed sessions of committees, report, 27264
 Senate subcommittees, select, joint and special committees, 11st, 23029
 Congressional districts:
 data CCD-series, 15582
 index of institutions of higher education by State and congressional district, 31223
 93d Congress—
 atlas, 24231
 map, 21071
 population, 19211
 Congressional Medal of Honor, *see* Medal of Honor.
 Congressional Operations Joint Committee: committee prints, 16928, 24303-4, 32018-19
 hearings, 27093
 reports, 16973, 29869
 Congressional record, *see* Congress of United States.
 Congressional Research Service:
 Library of Congress, annual report, 24885
 studies, appropriations, 1974, hearings, 28384
 Congressional serial set, 15630, 16844-852, 19316-321, 21123-128, 22654-659, 24298-299, 25984-990, 27074-75, 28256-262, 29822-826, 30898-899, 31996-32001
 Conical shell, *see* Shells (structural).
 Conifers:
 coniferous forest ecosystems, 1st year progress in coniferous forest biome, research, 20303
 culture of mixed conifers, west-side Cascades, 23269

INDEX 1973

- Conifers—Continued
 economics of containerized conifer seedlings, 32347
 moisture stresses in Arizona mixed conifer seedlings, 16085
- Connecticut:
 census of business, 1967, selected services, 16702
 census of housing, 1970, housing characteristics for States, cities and counties, 15536
 census of population, 1970—
 characteristics of population, 31946
 detailed characteristics, 22518
 census of transportation, 1972, truck inventory and use survey, 20720
 county business patterns, 15583, 20730
 mineral industry, minerals yearbook chapter, 25457
 registry of minority contractors and housing professionals, listing in selected cities, 32383
- Connecticut AFL-CIO COPE Political Contributions Committee, *see* AFL-CIO Connecticut COPE Political Contributions Committee.
- Connecticut Federation of Republican Women's Clubs, annual report, 22799
- Connecticut River and Valley:
 flood plain information, 17381, 20115
 geologic and hydrologic maps for land use planning in Connecticut Valley with examples from folio of Hartford North Quadrangle, Conn., 21714
- Connectors (electric):
 connectors and couplers, electronic and electrical, Federal item identification guide, 23085
 electrical connector parts, Federal item identification guide, 24999
 Federal item identification guide, 24996
 insert arrangements for MIL-C-83733 rack to panel correctors, shell size—
 A, military standard, 20079
 B, military standard, 20080, 28618
 lightning arrestor-connector feasibility study, 26993
 testing and fabrication of wire-bond electrical connection, comprehensive survey, 22013
- Connectors (structural):
 turnbuckles, clevis/connector rod ends and tie rods, Federal item identification guide, 30116
- Conner, Howard E., steady-state solutions of discrete-velocity Boltzmann systems in restricted flow regions, 23874
- Connolly, John A., patent abstracts, U.S., solid waste management, 23202
- Conover, William S. II, Conover for Congress, annual report, 24564
- Conover for Congress political committee, annual report, 24564
- Conrad, C. Carson, physical conditioning through water exercises, 31772
- Conrad, G., diode and thermocouple airborne temperature sensors, 31725
- Conroy, George J., experimental investigations of open-cycle, vortex MHD generator, 21954
- Construction:
 achievement, mobility and draft, their impact on earnings of men, 26835
 aliens, their obligations under U.S. draft law, 17824
 comparison of 1970 and 1971 Air Force enlistees by draft-vulnerability category, 28030
 doctors draft, how special calls work, 26819
 draft information series, 17824-825, 20753-755, 26819
 draft, past, present, future, general description of Selective Service System, 20753
- Construction—Continued
 hardship deferment, questions and answers about extreme hardship deferments, 20754
 important factors in motivating AFROTC officer personnel in zero-draft environment, 25840
 perspective on draft, 17825
 registrants processing manual, 18853, 23954-955
 selective service and amnesty, administrative possibilities, hearing, 21358
 selective service news (periodical), 18902
 what happens next? explanation of procedural rights, options open to you now, 20755
 Conservation, *see* Land—Natural resources—*also* subjects
 Conservation of natural resources, *see* Natural resources.
 Consideration for preparation of operation and maintenance manuals, 31896
 Consolidated Freightways Corporation, motor carrier accident, 26671
 Consolidated master cross reference list, 20042
 Consolidated National Shoe Corp., footwear for women and children, Norwood, Mass., Tariff Commission report, 25778
 Constellation (U.S.):
 commemorative medals—
 law, 16892
 reports, 16958, 17130
 Constitution of United States:
 constitutional immunity of Members of Congress, 27093
 constitutional rights, investigation, report, 17131
 constitutional rights of American Indians, revise and republish certain documents, report, 32109
 individual rights, layman's guide, 15916
 our Constitution and Government, Federal textbook on citizenship, 31441, 32387
 simplified edition, 31442
 proposed amendments, 92d Cong., 1st sess., 23236
 provisions of Constitution and United States Code relating to Presidential elections, 17482
 records of Constitutional Convention of 1787, pamphlet describing microcopy, 31668
 taking issue, analysis of constitutional limits of land use control, 31174
 text, 21156, 21158, 28296, 29949
 Constitution Week, guide, 30301
 Construction, *see* Building—Construction industry—Earthwork and structures—Installations (military)—Roads and highways.
 Construction Engineering Research Laboratory:
 conference proceedings series, 25068
 preliminary reports, 25069-70, 28690-691, 31239-240
 technical manuscripts, 25071-72, 26379-380, 30160-162, 32200
 technical reports, 20105-108, 25073-74, 26581, 27438-440, 28692-694, 30163, 31241-244, 32201-202
 Construction Industry:
 census 1967, industry statistics, 16719
 construction authorized, Washington, D.C. area, 18148
 construction reports, 16751, 18148-154
 construction review, monthly industry report, 18155
 cooperation for future progress (remarks), 23586
 equal employment opportunity (remarks), 23584
 Executive Order 11246, contract compliance handbook, 23438
 heavy construction, except highway and street construction, contractors, 16719

Construction industry—Continued
 hometown plans for construction industry in New York State, civil rights aspects, 22582
 housing authorized by building permits and public contracts, construction reports, 24232
 value of new construction put in place, reports, 18154
 your rights as employee on Federal or Federally financed construction job, 29588
see also Building.
 Construction machinery, *see* Building machinery.
 Construction materials:
 clay construction products, summary for 1972, current industrial reports, 30839
 fibrous concrete construction for 70's, 25068
 metal-ceramic structural materials, USSR study, 17615
 polymerized lightweight structural elements, 30160
 smoke density chamber method for evaluating potential smoke generation of building materials, 22017
 structural steel, structural aluminum, steel joists, and cold-formed steel for buildings, 31932
 superlight structural alloys, USSR study, 30363
 Consuls:
 consular conventions, messages from President of United States, 15802-804
 consular officers, continued application of United States-United Kingdom convention, agreement with Fiji, 27914
 conventions with Poland, Romania, and Hungary, report, 24894
 despatches from U.S. consuls in—
 Antung, Manchuria, China, 1904-6, microfilm, pamphlet describing, 23698
 Bangkok, Siam, 1856-1906, microfilm, pamphlet describing, 23699
 foreign consular offices in United States, 29527
 Consultants:
 allowances for making nonprofit projects operation and use of housing consultants, HUD, 29065
 Commerce Committee expenditures for procurement of consultants, increase limitation, report, 28501
 Federal labor management consultant (periodical), 18319
 foreign curriculum consultant program for American schools, colleges, and State departments of education, 15991
 national roster of minority professional consulting firms, 24282
 Consulting services, *see* Consultants.
 Consumability of animals exposed to radiation in post attack situation, 29678
 Consumer Affairs Office:
 appropriations, 1974, hearings, 27178
 Federal advisory committees, annual report, 28539
 transportation topics for consumers (periodical), 18994
 Consumer credit, *see* Credit—Installment credit.
 Consumer education, approach to consumer education for adults, 28575
 Consumer finance companies, *see* Finance companies.
 Consumer Finance, National Commission, *see* National Commission on Consumer Finance.
 Consumer goods, *see* Commercial products.
 Consumer income, *see* Income.
 Consumer Information Center, appropriations, 1974, hearings, 27178
 Consumer Product Safety Commission, appropriations, 1974, hearings, 28384
 Consumer Safety Agency, establish, text and description of committee print of Consumer Safety act, 17246-247

Consumers:
 advertising substantiation, guidelines, 20655
 Agriculture and consumer protection act—law, 32011
 reports, 28380, 31005
 agriculture-environmental and consumer protection—
 appropriations for 1973, hearings, 26146
 appropriations, 1974, hearings, 27178, 28384
 beef prices and consumers (address), 20892
 brand names identical to products purchased and tested for use by Federal Government, 23246
 buying indicators, series, 15593, 21065, 29783
 consumer aid series, National Highway Safety Bureau, 23737, 25581
 consumer alert (periodical), 18156
 consumer bulletins, 20279, 30239
 consumer buying indicators, series, 22563
 Federal Supply Service, 16059, 23247-248, 26450, 28907, 32299
 Health, Education, and Welfare Department, 27576
 National Highway Safety Bureau, 23738
 consumer interest and retail industry (address), 27059
 consumer legislative monthly report, 18159
 consumer news (periodical), 18160
 Consumer product safety act—
 law, 19499
 reports, 16986, 19719
 consumer products by design, report on new foods, fabrics and materials from agricultural research, 29618
 consumer products warranties, provide disclosure standards against defect or malfunctions, report, 29970
 Consumer safety act, text and description of committee print of act, 17246-247
 consumer safety inspection series, position classification standard, 21090
 consumer safety series, position classification standard, 16821
 consumer warranty protection, hearings, 28421
 corporate policies and procedures on advertising & promotion, 20652
 credit protection act, amend, report, 15685
 current population reports, consumer buying indicators, series, 25937
 don't be gypped by false advertising, 20279
 environmental and consumer protection appropriations, 1973—
 law, 15651
 report, 15829
 FDA consumer—
 guide, 32301
 periodical, 18289
 financing American consumer, business report on consumer credit—
 committee reports, 20654
 summary report, 20654
 food dating, shoppers' reactions and impact on retail foodstores, 20914
 homemakers' opinions about dairy products and imitations, nationwide survey, 29625
 impact of gasoline marketing practices on consumer hearing, 27312
 industry, consumers, and public interest (remarks), 16826
 lack of authority limits consumer protection, problems in identifying and removing from market products which violate law, GAO report, 16096
 meat and poultry standards for you, 26934
 meat prices and public interest, 21199
 nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
 need for improved consumer protection in interstate land sales, GAO review, 28996

INDEX 1973

Consumers—Continued

- new for consumers, highlights of new Federal consumer publications, 18693
- price index—
 - city average and selected items, 18161
 - short description, 17668
- protect against inaccurate and unfair billing practices, report, 29968
- protecting consumer from potentially harmful shellfish (clams, mussels, and oysters), GAO report, 26483
- protection activities, improve, report, 28464
- protection and better products through initiatives in corporate responsibility, 17237
- publications, list, 23462
- related budget cuts, hearings, 32021
- responsive approaches to consumer complaints and remedies, 22018
- safety in marketplace, program for improvement of consumer product safety, 29327
- selected papers on consumerism in HMO movement, 31408
- service, USDA's report (periodical), 18904
- State consumer action, 1971 summary, 15935
- tire inflation and consumer, program to improve safety and economy, 22019
- transportation topics for consumers from Office of Consumer Affairs (periodical), 18994
- what does advertising do for consumer? resource paper, 25559
- see also Consumer education.
- Consumption (economics):
 - defense integrated materiel management manual for consumable items—
 - commodity oriented items, 28590
 - weapon system oriented items, 30089
 - fuels and electric energy consumed, 30799
 - see also Wool—also names or classes of commodities.
- Contact lenses, soft contact lens, hearings, 20017
- Contacts (electrical), see Electric contacts.
- Contagion and contagious diseases:
 - CDC veterinary public health notes, 18057
 - communicable disease control amendments, law, 19384
 - grants for communicable disease control, authorization, law, 19384
 - morbidity and mortality weekly report, 18653
- Containerization:
 - conference on tank containers, 31574
 - container barge service, report, 19628
 - foreign oceanborne trade of United States, containerized cargo on selected trade routes—
 - calendar year 1970, 20519
 - calendar year 1971, 25394
 - increasing efficiency and promoting containerization in U.S. foreign trade (address), 23620
 - intermodal container services offered by U.S. flag operators, 29193
 - intermodal transportation seminar (remarks), 25148
 - intermodalism in cargo transportation (remarks), 27506
 - merchant ship construction for containerized service in foreign trade (address), 23619
 - need for proposed intermodalism code regulating shipping in international ocean transportation (remarks), 27507
 - port operations (remarks), 16045
- Containers:
 - beverage container problem, analysis and recommendations, 20197
 - closures, current industrial reports, 18194, 30840
 - Conference on Refrigerated Containers, 27688
 - container barge service, report, 19628

Containers—Continued

- economics of containerized conifer seedlings, 32347
- glass, current industrial reports, 18194, 28158
- household and commercial utility containers Federal item identification guide, 32170
- industry report, 18162
- metal container machinery, industrial plant equipment handbook, 15943
- new shipping containers for cut roses, costs and performance, 20887
- opportunity for AEC to improve its procedures for making sure that containers used for transporting radioactive materials are safe, GAO report, 30258
- radioactive materials, marking and labeling of items, etc., military standard, 25024
- uranium hexafluoride handling procedures and container criteria, 21014
- see also Containerization—also types of containers.
- Contaminants:
 - cationic analysis of Byrd Station, Antarctica, ice core, 17374
 - fate of radioactive contaminants in water, 20735
 - pyrographic gross characterization of water contaminants, 28819
 - radiological risks relative to distribution of contaminated gas, 16663
 - removal of dissolved contaminants from mine drainage, 21504
 - water pollution aspects of street surface contaminants, 20203
- Contamination:
 - contributions of selected residual elements to radiation-embrittlement sensitivity of steel forgings, 27855
 - control of mercury contamination in freshwater sediments, 20201
 - herbicide contamination of surface runoff waters, 28826
 - mobile system for cleaning oil-contaminated beaches, development, 28822
 - on natural redistribution of surface contamination, 24199
 - recondition and reuse of organically contaminated waste sodium chloride brines, 30182
 - trace organic impurities in gaseous helium, 31622
 - see also Air pollution.
- Contemporary biographies from Large Soviet encyclopedia, 17598, 23529
- Contemporary research reactors, 17636
- Contests, tax information for sponsors of contests and sporting events, 20414
- Continental Airlines, Inc., accident, report, 22148
- Continental Shelf:
 - artificial islands and fixed structures, rules and regulations, 15610
 - Atlantic Continental Shelf and slope of United States sand-size fraction of bottom sediments, New Jersey to Nova Scotia, 21719
 - bottom-water temperatures on Continental Shelf, Nova Scotia to New Jersey, 32510
 - development of hard mineral resources of deep seabed, authorize, hearing, 15904
 - draft environmental statement, proposed 1973 Outer Continental Shelf, oil and gas general lease sale, offshore Mississippi, Alabama, and Florida, 31568
 - exploration methods for Continental Shelf, geology, geophysics, geochemistry, 20691
 - final environmental statement—
 - FES 73-19, proposed 1973 Outer Continental Shelf, east Texas general oil and gas lease sale, 29176
 - proposed 1972 Outer Continental Shelf oil and gas general lease sale, offshore eastern Louisiana, 23605

- Continental Shelf—Continued
law of the sea crisis, staff report on United Nations Seabed Committee outer Continental Shelf and marine mineral development, 12720-271
longshoremen's and harbor workers' compensation be extended to exploration and development of natural resources, 21372
mineral resources of deep seabed, development, authorize, hearings, 30046
questions and policy issues for oversight hearings on administration of Outer Continental Shelf act, 31498
regional shelf studies, guide to engineering design, 23148
underwater television survey of Atlantic outer continental margin near Wilmington Canyon, 31800
Continuing education, 26373
Continuous progress program, Williamsburg County, S.C., 21432
Continuum mechanics, theory of soil plasticity with indefinite angle of non-coaxiality, 30156
Contra Costa County, Calif., emergency disaster bill to prevent forest fires, reports, 28466, 32067
Contract Appeals, Corps of Engineers, Board of, *see* Engineers Corps Board of Contract Appeals
Contractions, *see* Abbreviations
Contractions, handbook, 26953
Contractor report NASA CR (series), 16347, 17692-701, 20582-593, 21972-976, 23669-673, 25519, 26680, 27705, 29250-260, 30448-453, 31603-616, 32454-462
Contractors:
census of construction industry, 1967, heavy construction, except highways and streets, 16719
contractor parts control and standardization program, military standard, 17336
cost certification guide for mortgagors, contractors, and independent public accountants, 20372
dealer and contractor guide to property improvement loans, 27583
Federal contractor job listing emphasizing employment of veterans, questions and answers on Secretary of Labor's regulation, 31572
further improvements needed in controls over Government-owned plant equipment in custody of contractors, GAO report, 20330
management of contractor data, 15494
registry of minority contractors and housing professionals, listing in selected cities, 32383-385
6th annual contractors' conference of artificial kidney-chronic uremia program, National Institute of Arthritis, Metabolism, and Digestive Diseases, 26739
urban business profile, building service contracting, 15974
Contracts:
electric system construction contract, labor and material, 17820
electric transmission, construction contract, labor & material, 26814
1969 census of agriculture, general information, value of products, economic class, contracts, 30792
Public Health Service, grants and awards, 1972, research contracts, 25600
solid waste management contracts, summaries, 17429
see also Government contracts
Contractual service requirements for automatic dishwashing machine accessory equipment and supplies, 28617
Contributions to economic geology (series), 27559
Contributions to general geology (series), 20342, 25251
Contributions to geochemistry (series), 20341
Contributions to hydrology of United States (series), 29033
Contributions to stratigraphy (series), 23331, 25253, 26494, 29004
Control, *see* Helicopters
Control areas and zones, *see* Airways
Control boards, human engineering analysis of airport lighting control panels and proposal for new design, 24047
Control in healthy and diseased organism, 27623
Control materials plan, short supply/anti-inflation export controls, hearings, 28399
Control of dwarf mistletoe in a heavily used ponderosa pine recreation forest, Grand Canyon, Ariz., 31374
Control of hazardous chemical spills by physical barriers, 28808
Control of mercury contamination in freshwater sediments, 20201
Control of mercury pollution in sediments, 20192
Control of mine drainage from coal mine mineral wastes, 28821
Control of surging in low-pressure pipelines, 23940
Control systems:
acquisition management systems list, DoD manual, 31178-179
advanced engine control program, 25865
analytical and experimental performance of optimal controller designs for supersonic inlet, 26689
Apollo experience report—
command and service module reaction control systems, 30455
guidance and control systems, engineering simulation program, 29292
aspects of organizing automated control system in medical industry, USSR study, 23531
automated control systems in housing and public utilities, USSR study, 17623
bioelectric control, USSR study, 31539
CAMAC instrumentation system, supplementary information, 21021
cardiac activity in man-operator in control process, characteristics, USSR study, 21876
communication and control systems—
mid-Pacific region, field review of maintenance, 31777
South Platte River projects, North Platte River projects, region 7, field review of maintenance, 31778
computers, control & information theory, weekly Government abstracts, 19069
configuration control-engineering, changes, deviations and waivers, short form, military standard, 20055
control techniques for mercury emissions from extraction and chlor-alkali plants, 27480
controls and associated equipment, Federal item identification guide, 15950
creation of Republic automated control system, USSR study, 25354
desalination plant operators chemical control guide, 25295
design and evaluation of an optical fine-pointing control system for telescopes utilizing digital star sensor, 31628
determining economic effectiveness of industrial automatic control systems, USSR study, 25352
drainage and erosion control facilities, field performance investigation, 28780
dynamics of rocket control systems with on-board digital computers, USSR study, 21844
effects of certain control-system nonlinearities on stability and pointing of attached double-gimbal experiment package in presence of random crew-motion disturbances, 29284

INDEX 1973

Control systems—Continued
 equal opportunity compliant and compliance review reporting and control procedure, HUD, 31433
 5th all-Union conference on control problems, reports, USSR, 21861
 gage calibration and control system, 22495
 ideation and automata, USSR study, 32406
 microprogrammed control unit (MCU) programming reference manual, 22173
 national emissions data system control device workbook, 29650
 optimal piecewise-constant control of dynamic systems with applications to Kalman filtering, 22166
 organization of control of scientific research, 31533
 organizing interface of hardware of local data control systems with M-6000 ASVT-M computer complex, USSR study, 30337
 robot-manipulator control algorithms, USSR study, 30360
 signal processing element—
 functional description, microprogrammed control unit, buffer store, and storage control unit, 22175
 users' reference manual, 22174
 STOL ride control feasibility study, 30453
 technical base of automated material and technical supply control system, USSR study, 17626
 techniques for generation of control and guidance signals derived from optical fields of spacecraft for detection and identification of landmarks, 17692
 urban freeway surveillance and control, state of art, 21539
 weapon control systems mechanics (electronics repairman), Air Force notice, 16637
 Control techniques for beryllium air pollutants, 24159
 Control theory:
 cybernetics and regulation theory, USSR study, 21874
 monitoring, control and disposal of tritium, selected bibliography, 29680
 Control towers, *see* Towers.
 Controlled accessibility bibliography, 30476
 Controlled discharge from W. P. Franklin Dam as means of flushing saline water from fresh-water reach of Caloosahatchee River, Lee County, Fla., 23336
 Controlled helicopter discharge, 20968
 Controlled myorelaxants and ganglioblockers with disulfide bond, 21865
 Controlled substances act, *see* Drugs.
 Controlled thermonuclear research, 21136, 24301
 Controllers, *see* Air Traffic controllers.
 Controlling chiggers, 30702
 Controlling eastern tent caterpillar, 26935
 Controlling greater wax moth, pest of honeycombs, 16595
 Controlling lophodermium needlecast on Scotch pine Christmas trees, 32320
 Controlling thermal pollution in small streams, 17423
 Controlling tomato diseases, 16594
 Controls (aircraft), *see* Aircraft.
 Controls or competition, 19987
 Convection of heat, *see* Heat transfer.
 Convention of American Instructors of the Deaf, proceedings of 45th meeting, 19803
 Conventions, *see* Conferences, congresses, etc.
 Conventions and treaties, *see* subjects.
 Convergence properties of Haar series, 27847
 Conversion (mutual to stock institutions), 27193
 Conversion of victoreen model 6 CDV 700 GM instruments for use with scintillation or BF₃ probes, 24194
 Conversion of worthless securities into cash, 27195
 Conversion prospects for 1973, 21542

Converters:
 image converter based on multi-layer semiconductor-dielectric structures, USSR study, 30342
 influence of method of liquefying vapor phase on flow characteristics of accelerator output of liquid-metal MHD-converter, USSR study, 21848
 optical materials investigation for ultraviolet down-converters, 20972
 template converter program, 31320
see also Electric current converters—Thermionic converters.
 Conveyors, damage to corn from pneumatic conveying, 26927
 Conway, John V., Conway for Congress annual report, 27101
 Conway for Congress, annual report, 27101
 Coody Creek, flood plain information, Coody Creek, Muskogee, Okla., 31249
 Cook, A. F.:
 discrete levels of beginning height of meteors in streams, 23958
 meteor research program, 17700
 yet another stream search among 2401 photographic meteors, 23958
 Cook, Ann K., NOAA (periodical), 18708
 Cook, G. Bradford, nomination, hearing, 26257
 Cook, Tacy, HUD challenge, 18471
 Cook County, Ga., ground-water resources and geology of Cook County, Ga., 23345
 Cook County Republican Committee, annual report, 24511
 Cook Inlet Basin, Alaska, oilfields and crude oil characteristics, 21946
 Cooke, Mont., Cooke City, Silver Gate, winter sports area, snowmobiling, cross country skiing, ice fishing, 23267
 Cookery:
 evaluating milling, cooking and processing characteristics required of rice varieties in United States, 25818
 Indians' food and cookery, 23458
 let's cook fish, 31712
 this is your manual of common sense fish cookery, 20683
 Cooking, *see* Cookery.
 Cooking appliances, current industrial reports, 16761
 Cooking utensils, *see* Kitchen utensils.
 Cooks, leadership development and training for Head Start coordinators of nutrition and cook managers, 21072
 Coolants:
 antifreeze/coolant, 23247
 coolant-side heat-transfer rates for hydrogen-oxygen rocket and new technique for data correlation, 25527
 fracture safety considerations for Hanford-N reactor coolant piping material, 22169
 Cooley, John H., site preparation for Jack pine on grayling sands, 16073
 Cooley, Richard L., principles of ground-water hydrology, 20156
 Cooley's anemia, *see* Anemia.
 Cooling:
 cold-air investigation of turbine for high-temperature-engine application, two-stage turbine performance, 20609
 design and cold-air investigation of turbine for small low-cost turbofan engine, 20610
 flow through wire-form transpiration-cooled vane, 30462
 report on current standards for air-cooled heat exchangers, 28088
 see also names of commodities.
 Cooling systems, marine thermoelectric cooling systems, USSR study, 20453
 Cooling towers, methods for calculating thermal parameters of cooling towers, USSR study, 30353
 Coombs, Charles A., Treasury and Federal reserve foreign exchange operations, 23244, 32298
 Cooney, Patrick L., Cooney for Congress Committee, annual report, 26029

- Cooney for Congress Committee, annual report, 26029
- Cooper, Barbara S.:
compendium of national health expenditures data, 23970
national health expenditures, fiscal year 1972, 22240
- Cooper, G. Arthur:
eocene brachiopods from Eua, Tonga, 25256
new Brachiopoda from Indian Ocean, 23960
Permian brachiopods of west Texas, 23959
Vema's Brachiopoda (recent), 23961
- Cooper, Franklin D.:
mineral industry of—
Pennsylvania, 16301
Virginia, 16310
- Cooper, Glenn A.: oak, American wood, 31355
- Cooper, J. A.: lightning arrestor-connector feasibility study, 26993
- Cooper, John S.: tributes upon his retirement from Senate, 19810
- Cooper, Paul: turbulent fluid friction of rotating disks, 31607
- Cooper-Hewitt Museum of Decorative Arts and Design, Winslow Homer, selection from Cooper-Hewitt collection, Smithsonian Institution, 23967
- Cooperation:
backbone of effective law enforcement, FBI report, 31549
intergovernmental cooperation through the IPA, 27046
Mutual development and cooperation act—hearings, 31022
report, 32064
see also International cooperation.
- Cooperative approach to cargo security in trucking industry, 32601
- Cooperative Extension Service, got a forestry problem? extension foresters can help, 25828
- Cooperative fishery unit report for 1971-72 school year, 23985
- Cooperative forest fire control, program financing, Federal, State and private funds, 23268
- Cooperative Gulf of Mexico estuarine inventory and study, Florida, phase 1, area description, 25629
- Cooperative housing, *see* Housing.
- Cooperative Investigation of Caribbean and Adjacent Regions, 23815-816
- Cooperative science programs in Latin America, 32516
- Cooperative State-Federal sheep and cattle scabes eradication, progress report and epidemiology, 22395
- Cooperative State-Federal tick eradication activities, 1971 fiscal year, 16641
- Cooperative water resources research and training, 23465
- Cooperatives, cooperative individualized reading project, 27774
see also Farmers' cooperative organizations.
- Coordinates:
description of a-B filter in cartesian coordinates, 32526
grid calibration by coordinate transfer, 23814
space groups and lattice complexes, 29312
tensor manipulations in complex coordinates with applications to mechanics of materials, 30592
- Coordinating Federal assistance in community, 21767
- Coordination compounds, stability constants of metal coordination compounds complexes of N-ethylethylenediamine and 2-(ethylthio)-ethylamine, 21949
- Coordination of United States and Guam income taxes, 19657
- Coordination tests, handedness and adaptation to distortions of size and distance under water, 26641
- Coosa River, Rome, Floyd County, Ga., special flood hazard information report, 28772
- Coots, hunting, possession, transportation and importation, 1972-73, Federal regulations, 16487, 20781
- Copeland, Mark L.:
dispersion strengthening of internally oxidized iron-aluminum alloys, 21944
reducing surface hot shortness of copper-bearing steels, 20575
- Copenhagen Formation, distribution of Middle Ordovician Copenhagen Formation and its trilobites in Nevada, 17539
- Copepods, genus Argulus (Crustacea, Branchiura) of United States, 17434
- Copernicus, Nicolaus:
8-cent commemorative stamp (poster), 25795
500th anniversary, commemorative medal, authorize hearings, 28396
- Copernicus, Nicolaus, Week, *see* Nicolaus Copernicus Week.
- Copp, Howard D.: stilling basin hydraulics and downstream fish migration, 31238
- Copper:
analysis of geometry of fractures in San Manuel copper mine, Ariz., 25497
copper-base mill and foundry products, current industrial reports, 15585, 25920, 27030
copper industry annual supplement, 25412
copper recovery from chalcopryite by roast-leach procedure, 25516
creep and other properties of zinc-copper-titanium alloys annealed after rolling, 16333
duties, suspension on certain forms of copper, continue, reports, 29986, 30985
economic appraisal of supply of copper from primary domestic sources, 30415
economics of byproduct metals, copper system, 27696
effect of copper and silicon on selected mechanical properties of hot-rolled medium-carbon steels, 31590
effects of copper on locomotor orientation of fish, 28794
geochemistry of porphyry copper environment in Battle Mountain district, Nev., 29024
industry—
mineral industry survey, monthly, 18166
quarterly report, 18165
report, 1972 annual statistical supplement, 31994
mill and foundry products, current industrial reports, 18194A
minerals yearbook chapter, 25443
physical aspects of copper cementation on iron, 27700
prevention of tin-lead overhang in plated copper-clad printed wiring boards, final report, 26985
recovery of copper from converter slags by flotation, 16330
recovery of zinc, copper, silver, and iron from zinc smelter residue, 30431
reducing surface hot shortness of copper-bearing steels, 20575
scattering of 42-MeV alpha particles from copper-65, 31642
simulation in situ leaching of copper from porphyry ore, 29242
tube fittings, copper and copper alloy, wrought, or cast solder ends, 28912
- Copper Harbor Conglomerate (middle Keeweenaw) on Isle Royale, Mich., and its regional implications, 26508
- Copper mills:
copper-base mill and foundry products, current industrial reports, 15585
inventories of shapes, current industrial reports, 18194-195
- Copper sulfate, mineral industry survey, monthly, 18167

INDEX 1973

- Copper sulfides, autogenous smelting of copper sulfide concentrate, 23655
- Coppinger, Neil W., newsletter for research in psychology, 18705
- Copying processes, chemical compounds, photographic and copy processing, Federal Item Identification guide, 26313
- Copyright :
 - catalog of copyright entries, 21389, 23078-79, 24965, 27373-374, 28576, 30072, 31167-168, 32156
 - code of Federal regulations, 30225
 - copyright deadlines, 20021
 - copyright law of U.S., 24972
 - copyright time limits, 24969
 - copyrights for contributions to periodicals, 24970
 - examination and review of administration and statutes, subcommittee report, 26237
 - general information, 24966
 - letters, diaries, and similar personal manuscripts, 24971
 - limitations on information furnished by Copyright Office, 20020
 - musical composition, general information, 17314
 - new versions and reprints, 24968
 - protection, extend duration—
 - law, 19493
 - report, 19645
 - radio and television programs, general information, 30074
 - recording rights in musical compositions, 31169
 - section 1 of Title 17, U.S. Code, 20023
 - status of work, how to investigate, 26294
 - statutes relating to, investigation, report, 17129
 - time limits, 1st term, renewal, new versions, etc., 23080
 - universal copyright convention, revised Paris July 24, 1972, hearing, 15895
- Copyright Office :
 - certified copies of Copyright Office, records, 24967
 - circulars, 17314, 20020-23, 23080, 24966-972, 30073-74
 - compendium of practices, 18141
 - limitations on information furnished, 20020
 - Register of Copyrights, annual report, 31170
 - regulations, 27375
- Coquille River Falls Research Natural Area, general information, 21617
- Coral, *see* Corals.
- Coral reefs and islands, atoll research bulletins, 25695, 26820-821
- Corals :
 - Pennsylvania carbonates, paleoecology, and rugose colonial corals, north flank, eastern Brooks Range, Arctic Alaska, 21733
 - Project Tugboat, explosive excavation of harbor in coral, 26391
 - Silurian rugose corals of Klamath Mountains region, Calif., 17535
- Cord, measurement and reduction of noise from detonating cord used in quarry blasting, 17685
- Cordage, fiber cordage, Federal Item Identification guide, 27384
- Cordella, Calif. :
 - flood plain information, 20117
 - floods, Green Valley, Dan Wilson, and Suisun Creeks, 20134
- Cordova-Campos, Juan M., relief, 27116-I
- Core drilling :
 - achievements, cost and administration of Ocean sediment coring program, GAO report, 20324
 - rotary drilling and coring in permafrost, deep core drilling, core analysis and bore hole thermometry at Cape Thompson, Alaska, 21440, 28689
- Cores :
 - deep rotary core drilling in ice, 28688
 - Foraminifera of North Pacific Ocean, 27570
- Cores (reactor), *see* Reactors (atomic).
- Coring rigs, *see* Ice coring rigs.
- Corliss, William R. :
 - interplanetary pioneers—
 - operations, 26682
 - summary, 21981
 - system design and development, 25521
- Corn :
 - damage to corn from pneumatic conveying, 26927
 - energy budget at earth's surface water relations and stomatal response in corn field, 22404
 - fertilizer used on selected crops in selected states, 1971 (corn for grain, cotton, soybeans for beans, wheat), 20820
 - futures, commitments of traders, 18140
- Cornell, John T., airman, official magazine of Air Force, 17982
- Cornell University, workshop on energy and environment, 21342
- Cornwell, Arthur W., sales potential and market shares, 16473
- Corona (solar), *see* Sun.
- Corporate secrecy, *see* Trade secrets.
- Corporation for Public Broadcasting, *see* Public Broadcasting Corporation.
- Corporations :
 - corporate policies and procedures on advertising & promotion, 20652
 - corporate reorganization releases, SEC, 18168
 - corporations and Federal income tax, 23479
 - disclosure, best protection for corporation as well as investor (address), 30620
 - doing foreign banking or financing that maintains reserve accounts with Federal reserve banks, 25191
 - economic report, conglomerate merger performances, empirical analysis of 9 corporations, staff report, 28913
 - election as to possession-exclusion treatment, report, 16968
 - exclude from scope of prohibitions against Government contractors in making Federal election contributions, reports, 19649, 19910
 - farm corporations, financial analysis, 29617
 - foreign, withholding of tax, 31500
 - income tax returns, statistics, 25305
 - initiatives in corporate responsibility for consumer protection and better products, 17237
 - manufacturing, quarterly financial report, 18836
 - multinational corporations—
 - aid or threat to our economy, hearings, 27317
 - and United States foreign policy, hearings, 31141
 - compendium of papers for Subcommittee on International Trade of Committee on Finance, 26265
 - regulation Q, NOW accounts, investment in State housing corporations, hearings, 27194
 - role of giant corporations in American and world economies—
 - corporate secrecy, overviews, hearings, 17305
 - hearings, 20016, 26293, 28573, 31166
 - yields on newly issued corporate bonds, 23245
 - yields on recently offered corporate bonds, 28906
 - see also* Manufactures and manufacturers.
- Correctional institutions, *see* Prisons and prisoners—Reformatories.

- Correctional officers, can you change this man, examination announcement, 21083
- Correctional rehabilitation, *see* Rehabilitation of Criminals.
- Corrections:
- census users' guide and summary tape, technical documentation, 22548
 - Federal and State parole systems, 15763
 - prisons, prison reform, and prisoners' rights, Michigan, 15764
- Corrective action, *see* Discipline.
- Correlated studies of Vancouver Lake, hydraulic model study, 17421
- Correlated studies of Vancouver Lake-water quality prediction study, 21500
- Correlation (statistics):
- retrieval of dispersive and convective transport phenomena in fluids using stationary and unstationary time domain analysis, 31630
- Correlation functions:
- correlation for temperature profiles in plane of symmetry downstream of jet injected normal to crossflow, 17724
 - study of density fluctuations of L-I stellarator by correlation method, 22458
 - summary of experience with use of isotopic correlation safeguard techniques, 22470
- Correlation of ASTM exposure test for evaluating durability of fire-retardant treatment of wood, 32340
- Correlations of phase-boundary pressures of condensate fluid system with compositions modified by added butane, 30436
- Correlators, action of dither in digital matched filters, 27851
- Correll, Donovan S., aquatic and wetland plants of southwestern United States, 17432
- Correspondence:
- Defense Supply Agency manual, 28592
 - form letters internal revenue catalog, 26539
 - general correspondence of Secretary of Commerce, 1929-1933, pamphlet describing microfilm, 27718D
- Correspondence schools and courses, American environment, home study course for SCS employees, 30637
- Correspondent banks, *see* Banks and banking.
- Correspondents, Soviet correspondents report motor trip through United States, USSR study, 29137, 31520
- Corrick, John D.:
- cobalt, 20554
 - mineral industry of—
 - Greece, 16278
 - Oregon, 25467
 - Spain, 20548
- Corro, Ann, selling in Spain, 31205
- Corrosion and anticorrosives:
- corrosion resistance of metals in hot brines, literature review, 32448
 - stress-corrosion cracking in high strength steels and titanium and aluminum alloys, 16453
- Corruption, fraud and corruption in management of military club systems, 30034
- Corsets, brassieres, girdles, and allied garments, current industrial reports, 16756, 29756
- Cortese, Frank V., Cortese for Congress Committee, annual report, 24549
- Cortese for Congress Committee, annual report, 24549
- Cortex, fine structure of cortex in lichen family Parmellaceae viewed with scanning-electron microscope, 25696
- Cortland County Republican Committee, annual report, 24708
- Corzine, Harold A., monthly weather review, 18652
- Cosby, John C., heavy duty vehicle driving pattern and use survey, final report, New York City, 30727
- Cosmetics:
- commercial import detentions, monthly report, 18138
 - FD information materials for food and cosmetics industries, 21593
 - Food, drug, and cosmetic act, 20283
 - text, 26171
 - read the label, 23259
 - safe use of eye cosmetics, 21600
 - we want you to know what we know about cosmetics, 25196
- Cosmic rays:
- cosmic rays in Earth's magnetic field, 30464
 - data on solar-geophysical activity associated with major ground level cosmic ray events of January 24 and September 1, 1971, 30172
 - interkosmos satellites study cosmic rays, 21846
 - LUIN, code for calculation of cosmic ray propagation in atmosphere, 29675
 - table of type NM-64 cosmic ray neutron monitor counting rates as function of solar modulation of galactic cosmic rays expressed in terms of the Ehmert potential, 21013
- Cosmonauts, psychological characteristics of activity, 27718
- Cost:
- cost analysis of—
 - clearing ponderosa pine watershed, 28946
 - water pollution control, bibliography, 27494
 - cost benefits—
 - analysis of selected radiation pasteurized foods, 21020
 - in shelters, 20028
 - cost estimate/cost data for home mortgage insurance, 21779
 - opportunities to reduce costs in acquiring properties resulting from defaults on home loans, GAO report, 20335
 - report of task force on reducing costs of defense systems acquisition, design-to-cost, commercial practice vs. Department of Defense practice, 28625
 - see also* subjects.
- Cost accounting, *see* Accounts and accounting.
- Cost-Accounting Standards Board:
- appropriations, 1973, legislative, law, 16873
 - appropriations, 1974, legislative—
 - hearings, 31129
 - report, 29991
- Cost and standard of living:
- Department of State indexes of living costs abroad and living quarters allowances, 19004
 - Impact of Federal programs to improve living conditions of migrant and other seasonal farm-workers, GAO report, 23319
 - living and working in Germany, guide for Department of Army civilians, 22432
- Cost effectiveness:
- cost effectiveness—
 - in water quality programs, 31266
 - of 3 different interior open-type offices, 25073
 - studies of vocational and technical education, 17350
 - why planning and what is cost effectiveness, municipal waste treatment, 16026
- Cost of living, *see* Cost and standard of living.
- Cost of living allowances, Department of State indexes of living costs abroad and living quarters allowances, 19004
- Cost of Living Council news, 18169

INDEX 1973

- Costa Rica :
background notes, 23990
country demographic profiles, 28148
economic trends and their implications
for United States, 23501
meat imported into U.S., trade agree-
ment, 16521
mineral industry, minerals yearbook chap-
ter, 25429
- Costrell, Louis, supplementary information
on CAMAC instrumentation system, 21021
- Cotter, Bill, Committee to Reelect Congress-
man, see Reelect Congressman Bill Cotter
Committee.
- Cotton :
broadwoven goods, current industrial re-
ports, 18194A
broadwoven gray goods, current industrial
reports, 25921, 28152
certain carded cotton yarns and woven
fabrics thereof, workers of Imperial
Cotton Mills, Eatonton, Ga., Tariff Com-
mission report, 29550
certain coarse cotton fabrics workers of
Clifton Plant (Converse, S.C.) of Wood-
side Division of Dan River, Inc., Tariff
Commission report, 20828
certain plain-woven cotton fabrics and
certain woven fabrics of manmade fibers,
Willingham Cotton Mills, Ga., Tariff
Commission report, 20829
certain woven fabrics of cotton and of
manmade fibers, Arkwright Mills, Inc.,
Spartanburg, S.C., Tariff Commission
report, 24058
cost of storing and handling cotton at
public storage facilities, 1971-72, pro-
jections for 1973-74, 28647
cotton and related data, 1930-67, statis-
tics, 1972 supplement, 22353
cotton cloth and yarn values, cotton prices
and mill margins etc., mill margin re-
port, 16582
cotton crop reports and general crop re-
ports, issue simultaneously, hearings,
19742
cotton manmade fiber staple and linters,
current industrial reports, 19237
cotton policy and cotton's progress (ad-
dress), 22330
cotton situation, 18175
effects on monoflow cotton gin air system
on ginning operations, lint quality, and
spinning performance, 20912
evaluation of USDA limb and stalk re-
mover for cleaning machine-stripped
cotton, 31908
fertilizer used on selected crops in selected
States, 1971 (corn for grain, cotton,
soybeans for beans, wheat), 20820
fiber and processing test results, 18170
summary, 17313, 29604
fiber quality and ginning and spinning per-
formance of new high-quality cottons,
Southeastern area, 16605
foreign agriculture circulars, 18380
futures—
acts and other laws, compilation, 19539
commitments of traders, 18139
trading and open contracts, 18393
imports of manufacturers, foreign trade
reports, 19005
knits in Western Europe, their impact on
cotton, 30246
long staple cotton review, 18594
man-made fiber staple, and linters, current
industrial reports, 18194
mill margins report, 18630
monthly cotton linters review, 18645
price statistics, monthly, 18174
prices, spot quotations, 18923
quality, 1971 crop, 22313
quality report for ginnings, 19027
research and promotion, appropriations,
1974, hearings, 28384
- Cotton—Continued
trade in cotton textiles, agreement with—
Brazil, 16524
China, 20818
Czechoslovak Socialist Republic, 31872
El Salvador, 17869
Korea, Republic, 25745
Nicaragua, 17901
Macao, agreement with Portugal, 25765
Pakistan, 16518
varieties planted—
in early producing sections of Texas,
27979
1969-73, 31907
weekly cotton market review, 19077
world's cottons, summary of cotton fiber
and processing test results, 27524
yarns and fabrics, workers of Otto Goe-
decke, Inc., Tariff Commission Report,
17911
see also names of manufactured articles
and materials.
- Cotton gins and ginning :
consolidated cotton report, 18171
cotton gin operating costs in—
Blacklands of Texas, 25825
lower Rio Grande Valley of Texas, 27999
West Texas, 28000
cotton ginnings by—
counties, 18172
States, 18173
cotton ginnings in United States—
crop of 1971, 31952
crop of 1972, 31953
effects on monoflow cotton gin air system
on ginning operations, lint quality, and
spinning performance, 20912
equipment, list by States and types, 31906
fiber quality and ginning and spinning
performance of new high-quality cot-
tons, Southeastern area, 16605
ginning studies of baled and field-
extracted, machine-stripped cotton,
22319
particulate emissions of cotton gin in
Texas stripper area, 26945
quality report for ginnings, 19027
- Cotton goods, see Cotton.
- Cotton mills, mill margins report, 16582
- Cotton seed, see Cottonseed.
- Cottonseed quality, crops, 30690
- Cottonseed oil, futures, trading and open
contracts, 18394
- Cottonwood, nitrogen fertilization increases
cottonwood growth on old-field soil, 21665
- Cottonwood County Republican Committee,
annual report, 22790
- Cottonwood Creek :
Deer Lodge, Mont., special flood hazard
information, 28773
flood plain information, 21454
floods, Visalia, Calif., 21472
- Cottrell, Wm. B., nuclear safety, technical
progress review, 18715
- Coughlin, Margaret N., creating independ-
ence, 1763-89, background reading for
young people, 23606
- Coughlin, R. E., stream quality preservation
through planned urban development, 30198
- Coughlin, R. Lawrence, Coughlin for Con-
gress Committee, annual report, 24330
- Coughlin for Congress Committee, annual
report, 24330
- Coulee Dam National Recreation Area,
Wash., general information, 31731
- Coulson, K. L., proposed calibration target
for visible channel of satellite radiometer,
22099
- Coulter, Olivia W., aging, 17961
- Council of Economic Advisers :
annual report—
departmental edition, 22195 A
document edition, 21166
member, nomination of Gary L. Seevers,
hearings, 31135

- Council on Energy Policy, establish, hearings, 26263
- Council on Environmental Quality :
annual reports, hearings, 19788, 24865
appropriations, 1974, hearings, 28384
coal surface mining and reclamation, report, hearing, 28542
Federal advisory committees, annual report, 28539
Federal environmental monitoring directory, 30080
member, nomination of Busterud, John, Willard, Beatrice, hearing, 19979
- Council on International Economic Policy, annual report, 25671
establish—
law, 19365
reports, 19614, 19621
extend hearings, 28518
membership, change, reports, 30999, 31068, 32050
- Counseling :
Army recruiting and career counseling journal, 18450
SCORE, Service Corps of Retired Executives, one part of Action, counselor's guidebook, 29592
teachers talk about their feelings, 30509
- Counselors :
armed services vocational aptitude battery 1973-74 counselor's manual, 32181
guidance counselor's handbook, 19147
Hanson teacher-returned counselor project, Milwaukee, Wis., 16002
- Counterfeits :
theft or conversion of blank money orders and unauthorized receipt, possession, or disposition of blank money order forms, U.S. Code definition of criminal actions, amend—
law, 16920
report, 15846
- Counters, rotating and reciprocating, Federal item identification guide, 31183
see also Proportional counters.
- Counties :
aid to cities, counties, and States availability and adequacy of relevant statistical population data, hearing, 23028
county business patterns, CPB series, 15583, 16753, 29726-753, 30818-835, 31954-959
publications order form, 30836
data book, 1972—
departmental edition, 30817
document edition, 30950A
household income in 1969 for States, SMSA's, cities, and counties, 30811
medicare health insurance for aged, amounts reimbursed by county, 20770, 27880
number of Chinese by counties of United States, 1970, map : 28199
number of Japanese by counties of United States, 1970, map, 28200
number of persons of Spanish origin by counties of United States, 1970, map, 29789
ranking agriculture counties, 24212
State and county mental hospitals, age, sex, and diagnostic composition of resident patients, 23766
see also Finance—*also* subjects involved.
- Countries. *see* Foreign countries.
- Country demographic profiles, 28148
- Country of origin, mother tongue, and citizenship for United States, 1970, supplementary report, 28125
- Countryman, Clive M. :
fire environment concept, 23271
fire whirls, why, when, and where, 16071
- County government. *see* Government.
- Coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems, 32257
- Couplers (radio) :
connectors and couplers, electronic and electrical, Federal item identification guide, 23085
- Couplings :
Federal item identification guide, 23095
scattering of 42-MeV alpha particles from copper-65, 31642
- Courses of study. *see* Curriculum.
- Court of Claims :
calendar, 18176
cases decided, 17315, 20024, 28579
collateral relief through its judgments, hearing, 19785
commissioners, retired, authorize recall to temporary assignments, law, 19357
judgments for compensation, implement—
law, 16912
report, 19849
providing for distribution of funds appropriated in satisfaction of certain judgments, report, 29877
retired commissioners, recall for temporary duty—
hearing, 19785
report, 17134
- Court of Customs and Patent Appeals, customs bulletin, weekly, 18199
- Courtenay, Walter R., Jr., environmental effects on toxaphene toxicity to selected fishes and crustaceans, 26403
- Courts :
allotment of space in Federal courthouses or in Federal buildings which include Federal courts, hearings, 21283
classification outline for decisions of National Labor Relations Board and related court decisions, 32501
court proceedings and actions of vital interest to Congress, reports, 16928, 24503, 32018-19
print additional copies, report, 16995
reducing court delays, 32412
space management and courts—
for courtrooms, jury assembly and deliberation, public waiting and security, etc., design handbook, 27653
summary, 25369
street crime in America, prosecution and court innovations, hearings, 29897
see also Courts of United States—District courts—State courts—Venue—*also* names or types of courts.
- Courts martial and courts of inquiry :
manual for courts martial annotation, 15506, 19166
military judges' guide, Army pamphlet, 20983
military justice handbook—
guide for summary court-martial trial procedure, 21174
trial guide for special court-martial, 26662
- Courts of inquiry. *see* Courts martial and courts of inquiry.
- appropriations, 1973—
law, 19473
report, 19704
- Courts of United States :
supplemental, proposal, 19568
appropriations, 1974—
hearings, 27183, 28388
report, 32051
supplemental, proposal, 26053
exemption of Federal judiciary from charges for space and services—
report, 32110
Federal court jurisdiction act, hearings, 17273
Federal judicial district of South Dakota—
amend, law, 15647
revise divisions, report, 15830
Federal judicial system, investigation and study, report, 26232
general Federal question jurisdiction, three-judge courts, hearings, 17273
jurisdiction and work, 29931

INDEX 1973

Courts of United States—Continued
 proposed rules of evidence for Federal courts and magistrates—
 extend time for congressional consideration—
 law, 27087
 reports, 26104-105, 26206
 hearings, 27230
 provide copies of daily and semimonthly Congressional record to libraries of certain U.S. courts, law, 16887
 register, 18852
 revision of jurisdiction of three-judge courts, report, 28496
 third branch, bulletin of the Federal courts, 18959
see also Courts—District courts.
 Covering leg 10 of cruises of drilling vessel, Glomar Challenger, Galveston, Tex. to Miami, Fla., 25638
 Covering leg 13 of drilling vessel Glomar Challenger, Lisbon, Portugal to Lisbon, Portugal, 22134
 Covering leg 19 of cruises of drilling vessel, Glomar Challenger, Kodiak, Alaska to Yokohama, Japan, 29404
 Covers, and doors, access, Federal item identification guide, 26315
 Covert, Norman M., recruiting and career counseling journal, 18850
 Cowardin, Lewis M., preliminary classification of wetland plant communities in north-central Minnesota, 31832
 Cowen, James L., nomination, hearing, 20001
 Cows:
 loose-housing for dairy cows, farm building plan, 19115
 milk house for dairy cows, 24135
 milk, revised estimates, 1965-69, milk cows, cows on farms, number of farms, milk, production disposition, income, 22356
see also Dairy herd improvement associations.
 Cox, Irene, studies in public welfare, handbook of public income transfer program, 16933
 Cox, R. G., effective hydraulic roughness for channels having bed roughness different from bank roughness, state-of-the-art report, 25094
 Coyne, John F., geographic survey of monoterpenes in loblolly and shortleaf pines, 21676
 Crab Creek, flood plain information, Youngstown, Mahoning County, Ohio, 28713
 Crab pots, dungeness crab pots, 23793
 Crabs, marketing of snow crab, 27796
see also King crabs—Tanner crabs.
 Cracking (fracturing):
 crack propagation studies in brittle materials, 31756
 fatigue crack growth from circular hole with and without high prior loadings, 17717
 stress-corrosion cracking in high strength steels and in titanium and aluminum alloys, 16453
 three-dimensional elastic stress and displacement analysis of—
 finite circular geometry solids containing cracks, 29287
 tensile fracture specimens containing cracks, 27713
see also Fracture of metals.
 Cracking of metals, *see* Fracture of metals.
 Craft, T. F.:
 dyestuff color removal by ionizing radiation and chemical oxidation, 26410
 evaluation of treatment plants by tracer methods, 15520
 Crafts, Donald investing in Yugoslavia, 31204
 Crafts, *see* Arts and crafts.
 Crafts, protective and custodial employees, *see* Government officials and employees.
 Craftsmen, *see* Labor.

Craig, William N., new vistas for competitive employment of deaf persons, 31787
 Craig, William O., Smithsonian torch (periodical), 18909
 Craig County, Okla., soil survey report, 29508
 Craig Bull for Congress Committee, annual report, 24465
 Craig County Republican Committee, annual report, 24389
 Craig Hosmer Committee, political committee, annual report, 25995
 Crandell, Dwight R., Pine Creek volcanic assemblage at Mount St. Helens, Wash., 29008
 Cranes (birds):
 hunting, possession, transportation and importation, 1972-73, Federal regulations, 16487, 20781
 trapping techniques for sandhill crane studies in Platte River Valley, 25715
 Cranes, derricks, etc., road and landing criteria for mobile-crane yarding systems, 26471
 Cranium, *see* Skull.
 Crash fires, *see* Fires.
 Crashes, *see* Aircraft accidents.
 Crashworthy landing gear study, 30758
 Crater Lake National Park, wilderness recommendation, 23832, 27825
 Craters:
 cratering in layered media, 26394
 middle course 2 cratering series, 32244
 military engineering applications of commercial explosives, introduction, 30168
 Craters of the Moon National Monument, general information, 26774
 Crates, Federal item identification guide, 28597
 Craven, Harold L., translog, 18992
 Crawfish, *see* Cambarus.
 Crawford, Ladell, effect of premortem stress, holding temperatures and freezing on biochemistry and quality of skipjack tuna, 22105
 Crawford, H. R., nomination, hearing, 26256
 Crawford, R. E., guide for design of shock isolation systems for ballistic missile defense facilities, 32202
 Crawford, Richard C., letter book of Arkansas Trading House, 1805-10, 25538
 Crawford County, Democratic Party, *see* Democratic Party of Crawford County.
 Crawford County Republican Executive Committee, annual report, 24413
 Crayfish, *see* Cambarus.
 CRC, *see* Civil Rights Commission.
 Creager, Joe S., covering leg 19 of cruises of drilling vessel Glomar Challenger, Kodiak, Alaska to Yokohama, Japan, 29404
 Cream, Bertram W., evaluation of trainer for sensor operators on Gunship, II aircraft, 20942
 Cream, fluid milk and cream report, 18373
 Creating independence, 1763-89, background reading for young people people, 23606
 Creation of large castings by investment process, final report, 26988
 Creative partnerships, Government and professional services, 31675
 Credit:
 be wise, consumers' quick credit guide, 16591
 brokers and dealers, regulations, 21580-583, 26447, 30233
 business credit and assistance, code of Federal regulations, 25175
 Consumer credit protection act, amend, report, 15685
 consumer credit, statistics, revision, 20276
 credit by banks for purpose of purchasing or carrying margin stocks, regulations, 20274, 21584-587, 28896, 30234
 credit by persons other than banks, brokers, or dealers, regulations, 30230
 extensions of credit by Federal reserve banks, regulation, 28894

Credit—Continued

- finance companies, monthly report, 18365
- financing American consumer, business report on consumer credit—
- committee reports, 20654
- summary report, 20653
- foreign credits by United States Government, 17918
- inaccurate and unfair billing practices, protect consumer, report, 29968
- interest rates and credit demands in United States (remarks), 21569
- mortgage credit analysis for project mortgage insurance, sec. 207, HUD handbook, 21794
- National Commission on Consumer Finance report, hearings, 32140
- securities credit by persons other than banks, brokers or dealers, regulations, 21576-578
- Truth in lending act, amend—
- hearings, 32139
- report, 29968
- truth in lending, amendments to act and amendments and interpretations of regulation Z, 25192
- see also Banks and banking—Installment credit—Loans—Production credit associations—Tax credit.
- Credit cards:
 - bank card and payments mechanism (remarks), 21565
 - trends and development in credit card banking (paper), 21591
- Credit sales, see Sales.
- Credit selling, see Sales.
- Credit unions:
 - interest charged on loans by credit unions and other lenders, 29338
 - statistics (periodical), 18177
 - see also Federal credit unions.
- Creek Indians, general information, 31456
- Creep of materials, diffusional creep and creep degradation in dispersion-strengthened alloy TD-NiCr, 23686
- Creep of metals:
 - creep and other properties of zinc-copper-titanium alloys annealed rolling, 16333
 - creep and rupture in heat resistant materials, USSR study, 26564
- Cressey, Rogers F., genus *Argulus* (Crustacea, Branchiura) of United States, 17434
- Crest-stage gaging stations in Oregon, 23337
- Cretaceous period:
 - Harebell formation (upper Cretaceous) and Pinyon conglomerate (uppermost Cretaceous and Paleocene), northwest Wyoming, 27568
 - Lower Cretaceous, Jurassic (?), and Triassic ostracoda from Atlantic Coastal Region, 21736
 - palynology of upper Campanian (Cretaceous) Judith River Formation, north-central Montana, 29022
- Crews, John H., Jr., fatigue crack growth from circular hole with and without high prior loading, 17717
- Crews, see Flight crews—Spaceship crews—Submarine crews.
- CRIB, mineral resources data bank of Geological Survey, 27561
- Cribb, Herschel, opportunity, 18736
- Crime and criminals:
 - architectural design for crime prevention, 26603
 - assistance, amendments, reports, 29886, 29996
 - cargo theft and organized crime, deskbook for management and law enforcement, 25790
 - classification of criminal behavior, seminar, 29146
 - community based corrections in Des Moines, exemplary project, 32413
 - crime and delinquency abstracts (periodical), 18178

Crime and criminals—Continued

- crime and delinquency monograph series, issues, 22069, 26745, 31695
- Crime control and safe streets act of 1968, amend, text, 24160
- crimes committed aboard aircraft, report, 17186
- criminal redistribution systems and their economic impact on small business—
- analysis, 17302
- appendix to analysis, 15931
- hearings, 31165
- criminal, society, and the victim, 32414
- deterrence of crime in and around residences, 30376
- directory of institutions for mentally disordered offenders, 16390
- effects of organized criminal activity on interstate and foreign commerce, hearings, 24919
- evaluation of crime control programs, 21890
- extradition and cooperation in penal matters, treaty with Uruguay, 28440
- Federal crime insurance program revised quick-reference rate tables and simplified manual, 30217
- Federal offenders in District Courts, 1970 data, 19099
- financial management for planning and action grants, to combat crime, 27653
- halfway houses and community treatment centers, guidelines and standards, 29148
- inventory of surveys of the public on crime, justice and related topics, 26606
- Law Enforcement Assistance Administration, etc., library book catalog—
- author catalog, 23571
- periodical catalog, 23572
- subject catalog, 21892
- title catalog, 25367
- law enforcement officers killed, summary, 26428
- legal sanctioning and social control, 22069
- legislative history of Omnibus crime control and safe streets act, index, 23569
- national strategy to reduce crime, report, 31599
- nationwide survey of mental health and correctional institutions for adult mentally disordered offenders, 23758
- Omnibus crime control and safe streets act, amend—
- hearings, 28552
- law, 32010
- reports, 21177, 21184, 28366, 30969
- organized crime and stolen securities, hearings, interim index, 15898
- Organized crime control act, amend, report, 15844
- organized crime in sports (racing), hearings, 23010
- organized crime, securities, thefts and frauds, hearings, 32146
- organized criminal influence in horseracing, report, 28379
- prevention of violence in correctional institutions, criminal justice monograph, 30377
- reintegration of offender into community, 31551
- research on street crime control, 31552
- select committee to investigate all aspects of crime, create and authorize, report, 26088
- selected topic digest STD series, 32414
- small business, crime against, hearings, 20015
- street crime in America—
- corrections approaches, hearings, 32075
- police response, hearings, 29897
- reduction through positive criminal justice responses, report, 28382
- print additional copies, report, 31091
- uniform crime reporting, quarterly release, 19021

INDEX 1973

- Crime and criminals—Continued
uniform crime reports, 31318
victims of crime, provide compensation,
report, 24905
see also Criminal justice (administration)—Criminal law—Criminal procedure—Prisons and prisoners—Rehabilitation of criminals.
- Crime, Select Committee on, House:
certain employees, authorize payment of
salaries, report, 26072
committee print, 27195
create and authorize, report, 26088
hearings, 17034, 19749-752, 21212, 23009-
10, 29897, 32075
investigations and studies, authorization
and expenses, report, 26130
reports, 28370, 28381-382, 29862
- Criminal jurisdiction, NATO status of forces
agreement, operations, report, 26238
see also Crime and criminals.
- Criminal justice (administration):
administration of criminal justice in
modern urban society (address), 32409
Alternatives to Drug Abuse Conference,
proceedings, 20580
Attorney General's report, Federal law
enforcement and criminal justice activi-
ties, 16210
change process in criminal justice, 30375
criminal justice agencies, 1971, lists—
Alabama, 23562
Arizona, 23563
Florida, 23564
Indiana, 23565
Louisiana, 20482
Minnesota, 20483
Mississippi, 23566
Missouri, 23567
North Carolina, 21889
Wisconsin, 23568
criminal justice monographs, 30375-378,
31550-552, 32411-412
directory of law enforcement and criminal
justice associations and research cen-
ters, 30474
Ethiopia, exchange of notes, 23033, 26198
expenditure and employment data for
criminal justice system, 27656
Federal system of criminal justice mes-
sage on state of the Union, 30946
national criminal justice, document re-
trieval, index, 20484
1972 directory of automated criminal jus-
tice information systems, 25368
proceedings of Conference on Criminal
Justice Universe, Omaha, Nebr., 16216
revolutionary activities directed toward
administration of penal or correctional
systems, hearings, 29921
volunteers in correctional programs, guide-
lines and standards for use, 17645
see also Crime and criminals—Justice.
- Criminal Justice, National Conference on,
see National Conference on Criminal
Justice.
- Criminal Justice Standards and Goals. Na-
tional Advisory Commission, *see* National
Advisory Commission on Criminal Justice
Standards and Goals.
- Criminal law:
analysis of pretrial delay in felony cases,
summary report, 16215
investigation, report, 17132
not the law's business?, examination of
homosexuality, abortion, prostitution,
narcotics and gambling in United
States, 26745
reform of Federal criminal laws, hearings,
21356-357, 24944
- Criminal procedure:
Bronx Sentencing Project of Vero Insti-
tute of Justice, experiment in use of
short-form presentence reports for adult
misdemeanants, 21894
investigation, report, 17132
- Criminal procedure—Continued
judicial disqualification, hearing, 30049
rules for District Courts, proposed amend-
ments, 24110
street crime in America prosecution and
court innovations, hearings, 29897
Criminals, *see* Crime and criminals.
- Cripples, children who received physicians'
services under crippled children's program,
1971 fiscal year, 26638
- Crisis in housing on upper Eastern Shore,
22578
Crisis in South Asia, 15914
Crissey, Marie S., vision, hearing, coordina-
tion and health in reading, 28674
Criteria and Standards Division, ORP/CSD
series, 17813
Criteria for fracture control plans, 22163
Critical materials, *see* Scarce materials.
Critical path analysis, scheduling arrival of
tobacco at auction warehouses, 31909
Critical point, transport properties of gases
and binary liquids near critical point,
20586
Critical two-phase flow for cryogenic fluids,
31676
Crockett County Democratic Executive Com-
mittee, annual report, 24570
Crom, Richard, effects of alternative mar-
keting margins for beef and pork, 30397
Cron, Theodore O., human needs, 18473
Cronmeyer, Cora rural manpower devel-
opments, 18881
Crook, Arthur G., Federal State-private
cooperative snow surveys for Alaska, 18350
Crook, Warren G., development of low-cost
cockpit/outside time sharing training
equipment, 24048
Crooked Creek:
flood plain information, 28706
floods, Marion County, Ind., how to avoid
damage, 28741
Crop insurance, *see* Agricultural insurance.
Crop lands, *see* Land.
- Crops:
crop production (periodical), 18179
crop production, prospective plantings for
1973, 23770
crops, nursery and greenhouse products,
forest products, census of agriculture,
general report, 31939
fertilizer used on selected crops in selected
states, 1971 (corn for grain, cotton, soy-
beans for beans, wheat), 20820
field acreage, yield, etc., 19134
field and seed crops, production, farm use,
sales, value, 25835
field crops production, farm use, sales,
value, 29542
leaf mesophylls of 20 crops, their light
spectra, and optical and geometrical
parameters, 24146
market outlook for U.S. crops (address),
25823
ornamental, market news service, 31914
planting prospective, 35 States, 24015
response of several crops to 6 herbicides in
irrigation water, 20937
seed crops—
forecast, 18895
prices, 18896
selected U.S. crop budgets, yields, inputs,
and variable costs, Southwest region,
27423
values, season average prices received by
farmers and value of production, 27935
weather and crop bulletin (periodical),
19081
see also Seeds—also names of crops.
- Crosby, Orlo A., flood stages and discharges
for small streams in North Dakota, 23341
Cross, Ralph H. III:
oil spills control manual for fire depart-
ments, 25111
small vacuum oil skimming system, 28801
Cross Bayou, Fla., railroad accident report,
20751

- Cross Bayou Canal :
Pinellas County, Fla., engineers report—
departmental edition, 26382
document edition, 26048
- Cross-coupling computer for Oceanographer's
Askania gravity meter, 25633
- Cross sections, design parameters for torsion
of sandwich strips having trapezoidal,
rectangular, and triangular cross sections,
26475
- Crossarms, *see* Poles.
- Crosslinking, radiation crosslinking of polymers
with segregated metallic particles,
25872
- Croswell, Thomas L., status of category 3
in Europe, 24046
- Crouch, G. L., Arsan in endrin treatments to
protect Douglas-fir seed from deer mice,
20316
- Crouch, Roger K., study of beryllium and
beryllium-lithium complexes in single-
crystal silicon, 21990
- Crouch, Tom, for Congress, *see* Tom Crouch
for Congress.
- Crow, Edward L., food retailing in Cleveland,
Ohio, metropolitan area with emphasis
on inner city, 16606
- Crow, Edwin L., effect of variability in received
power on probabilities of communication
and delay in land mobile communication
systems, 25976
- Crow Indians, general information, 31457
- Crowder, Dwight F., petrography of some
granitic bodies in northern White Mountains,
Calif.-Nev., 29023
- Crowder, J. U., control techniques for asbestos
air pollutants, 25852
- Crowe, Bernard J., fuel cells, survey, 29266
- Crown, Coat Front Co., Inc., relief, report,
19873
- CRREL, *see* Cold Regions Research and Engineering
Laboratory.
- Crude oil, *see* Petroleum.
- Cruelty to children, *see* Children.
- Cruises :
foreign cruise ships, customs regulations,
hearing, 21270
mall and cargo for cruise ships, hearings,
15771
- Crustaceans :
environmental effects on toxaphene toxicity
to selected fishes and crustaceans,
26403
toxicity of some insecticides to 4 species
of malacostracan crustaceans, 26849
see also Amphipods—Copepods—Ostracoda—Shrimps.
- Crutcher, Harold L., note on gamma distribution
computer program and graph paper,
31721
- Cryobiological studies and space biology
problems, 27641
- Cryoelectronics, *see* Electronics.
- Cryogenic Data Center, Current Awareness
Service publications, etc., list, 18180
- Cryogenic fluids, *see* Cryogenics.
- Cryogenic temperatures, *see* Cryogenics.
- Cryogenics :
critical two-phase flow for cryogenic fluids,
31676
cryobiological studies and space biology
problems, 27641
evaluation of several cryogenic turbine
flowmeters, 20644
flaw growth behavior in thick welded
plates of 2119-T87 aluminum at room
and cryogenic temperatures, 32477
publications and reports of interest in
cryogenics, list, 18180
some applications of cryogenics to high
speed ground transportation, 27726
thermophysical properties of parahydrogen,
17738, 26702
use of cryogenics to reclaim nonferrous
scrap metals, 2663
- Cryolite, minerals yearbook chapter, 16260,
25444
- Crystal, Ronald, report of workshop on lung
cell identification, isolation and culture,
30494
- Crystal structure, crystal structure transformations
in binary halides, 16358
- Crystal units, quartz crystal unit, Federal
item identification, guide, 28603
- Crystalline rocks, *see* Rocks.
- Crystallization :
crystallization history of lunar feldspathic
basalt 14310, 29029
quinary reciprocal salt system Na,K,Mg,
Ca/Cl₂SO₄, review of literature with
new data, 17537
- Crystallography :
cadmium telluride detectors, 2d interim
technical report, 29672
internal friction of single-crystal ice,
28686
space groups and lattice complexes, 29312
see also Crystals.
- Crystals :
crystal and glass industries machinery,
industrial plant equipment handbook,
26305
design and applications of holographic
system for crystal-growth studies, 27852
development of X-ray fluorescence spectroscopy
in elemental analysis of particulate
matter, evaluation of commercial
multiple crystal spectrometer instruments,
31273
explanatory notes on W. H. Zachariasen's
theory of X-ray diffraction in ideal
crystals, 30595
4th all-Union conference, growth of crystals,
papers, 23556
growth and structure of monocrystalline
semiconductor films, USSR study, 21928
in situ Ge(Li) and NaI(Tl) gamma-ray
spectrometry, 22474
logic and memory devices with magnetic
crystals, USSR study, 30333
physical phenomena related to crystal
growth in space environment, 32458
properties of crystalline bismuth selenide
and its use as Hall effect magnetometer,
23682
symposium on growth and synthesis of
semiconductor crystals and films, 27647
see also Crystallography—Liquid crystals.
CSD, *see* Criteria and Standards Division.
- Cserenyak, Frank J. :
mineral industry of—
Belgium and Luxembourg, 16270
Federal Republic of Germany, 16273
- Cuba :
economic geography of Cuba, Latin American
study, 23552
hijacking accord, hearing, 24854
hijacking of aircraft and vessels and other
offenses, agreement, 26884
index to official published documents relating
to Cuba and insular possessions of
U.S., 1876-1906, pamphlet describing
microfilm, 25533
mineral industry, minerals yearbook chapter,
20539
Soviet activities, hearings, 21231
statistical handbook on main sectors of
economy, 30332
- Cubans, refugees, assistance, appropriations,
1973, hearings, 15717, 15869, 17025
- Culbertson, J. K., summary of alluvial-channel
data from Rio Grande conveyance channel,
New Mexico, 21721
- Cullen, William C., guidelines for selection
of and use of foam polyurethane roofing
systems, 29324
- Culm, summary of demonstration methods for
extinguishing culm-bank fires, 29649
- Culp, Charles A., effect of suspension of bus
service on local peak hour traffic congestion,
case study, 30212
- Culpea harengus pallasi, *see* Herring.
- El cultivador de frutas y hortalizas y el
decreto, 22348

INDEX 1973

- Culton, Paul M., Operation Tripod toward rehabilitation involvement by parents of the deaf, workshop, Memphis, Tenn., 31788
- Culture:
- Bilingual Bicultural Demonstration Center, description, cost, evaluation, etc., 27772
 - cultural cooperation, agreement with Mexico, 16511
 - cultural relations, agreement with Socialist Republic of Romania, 25759
 - educational and cultural postal amendments, reports, 29881, 30996
 - international educational and cultural exchange (periodical), 18504
 - international information and cultural series, 23997
 - support for cultural activities, survey of United States and foreign governments, 15926
 - world cultural and natural heritage, protection convention, 26197
- Culture of mixed conifers, west-side Cascades, 23269
- Culture of sweet sorghum for sirup production, 27988
- Cumberland, Ky., flood plain information, Poor Fork, Cloverlick Creek, Looney Creek, 21453
- Cumberland County Republican Campaign Committee, annual report, 24761
- Cumberland County Republican Committee, annual report, 22841
- Cumberland Gap National Historical Park: addition to National Wilderness Preservation System, proposal, 23000
- interpretive prospectus, 27818
- wilderness recommendation, 27826
- Cumberland Island National Seashore: establish—
- hearings, 19774
 - law, 19465
 - reports, 15826, 19627
- Cumberland Plateau, yellow-poplar, loblolly pine, and Virginia pine compared in Cumberland Plateau plantations, 21664
- Cumberland River, meteorological criteria for extreme floods for four basins in Tennessee and Cumberland River watersheds, 30519
- Cummins, Joseph F., soil survey of Steele County, Minn., 32562
- Cumulated abridged index medicus, 26760
- Cumulated list of new medical subject headings, 1963-73, 25607
- Cumulus clouds, *see* Clouds.
- Cunner, annotated bibliography of cunner, *Tautoglabrus adspersus* (Walbaum), 30542
- Cunningham, John, rapidly deployable oil containment boom for emergency harbor use, 27461
- Cupsuptic Quadrangles, bedrock geology of Cupsuptic and Arnold Pond quadrangles, west-central Maine, 27553
- Curariform drugs, *see* Muscle relaxants.
- Curecanti National Recreation Area, general information, 29396
- Cureton, Thomas K.:
- Cureton's basic principles of physical fitness work (rules for conducting exercise), 31767
 - trends of research on prevention of physiological aging and value of exercise for fitness and health, 31773
- Curran, Brian D., area handbook for Mauritania, 24177
- Currency, *see* Money.
- Current business reports, 18183-189
- Current concepts on amphetamine abuse, proceedings, 25587
- Current discharge at selected stations in Pacific Northwest, 18190
- Current economic analysis series, 18376, 18490, 18905
- Current estimates from health interview survey, 27745
- Current fishery statistics, 16397-402, 17987, 18045, 18367-368, 18372, 18389-390, 18402, 18600, 18603, 18612-613, 18633, 18694, 18701, 18711, 18870, 18907, 18916, 18958, 19047, 20676-682, 22087, 89, 23783-790, 25610, 26761-763, 27794-795, 29374-376, 30514, 31710-711
- Current foreign policy, 16496, 17861, 20788-789, 22258, 23993, 29531
- Current housing reports, 18192
- Current index of technical briefs, 23956
- Current industrial reports, 15585-590, 16754-779, 18194-194A, 19237-244, 21056-57, 22549-555, 24233-235, 25917-931, 27030-31, 28149-170, 29754-775, 30837-851, 31960-963
- Current listing and topical index to vital and health statistics series 1962-72, 30479
- Current local announcements covering Washington, D.C., metropolitan area, AN 2002-WA, 18196
- Current medicare survey report, CMS series, 26834, 31808
- Current meters, field evaluation, addenda, 22114
- Current population reports, 18197
- Current regulation of private police, regulatory agency experience and views, 20486
- Currents, *see* Electric currents—Ocean currents.
- Curriculum:
- advanced air quality management courses, descriptions, 20948
 - air pollution training institute, curriculum description and recommendations, 30728
 - alcohol and alcohol safety, curriculum manuals, 22042-47
 - automotive mechanics, occupational performance survey, 29357
 - career education for leisure occupations, curriculum guidelines for recreation, hospitality and tourism, 28654
 - course manual for machine sources of X-rays, radiation exposure, 26806
 - Course manual for X-ray—
 - applications, 25680
 - measurements, 26807 - curriculum activities guide to water pollution and environmental studies—
 - activities, 16573
 - appendices, 17929 - curriculum guide, human relations in management for State and local agencies, instructor's manual, student workbook, 29046
 - Defense Civil Preparedness Agency, courses and conferences, 31176
 - directory of secondary schools with occupational curriculums, public-nonpublic, 30136
 - evaluation of technical training courses and students, some techniques, 22363
 - foreign curriculum consultant program for American schools, colleges, and States departments of education, 15991
 - foreign curriculum consultants in action, 25053
 - learning center evaluation, teaching undergraduate pilot training academic course in learning center, 28033
 - orientation courses conducted by Institute for Air Pollution Training, 20951
 - patterns of course offerings and enrollments in public secondary schools, 15994
 - pilot transition courses for complex single-engine and light twin-engine airplanes, 25138
 - professional and technical refresher courses, noncredit activities in institutions of higher education, 26373
 - refresher courses for private and commercial pilots, 23255
 - sourcebook of elementary curricular programs and projects from ALERT information system, 23143
 - suggested 2-year post high school curriculums, 30152, 31232

Curriculum—Continued
 vocational education, state instructional materials for trade and industrial occupations, 30153
 women in work force, development and field testing of curriculum materials, planning ahead for world of work, 26741
 Currie, Malcolm R., nomination, hearing, 28517
 Curry, Donald D., investigation of optical print media, initial survey, 20966
 Curtis, Carl T., agriculture in Australia and New Zealand, 32129
 Curtis, Emma, classification, class Q, science, 25386
 Curtis, Thomas B., nomination, hearing, 19954
 Curtis, W. F., fluvial sediment discharge to ocean from conterminous United States, 23333
 Curvature (mathematics):
 acoustic impedance of curved multilayered duct liners, 30458
 radiation from apertures in curved surfaces, 32456
 Curved holding chute for cattle, 31919
 Curves, see Curvature (mathematics).
 Custis-Lee Mansion, see Arlington House, Robert E. Lee Memorial.
 Custodians, urban business profile, building service contracting, 15974
 Custom-houses, see Customs administration.
 Customs, see Tariff.
 Customs administration:
 customs inspection station, San Ysidro, Calif., personnel problems, report, 26092
 pre-clearance activities in Canada, Bermuda, and Bahamas, hearings, 27179
 Customs Bureau:
 border inspection procedures, examination hearings, 15719
 examination and screening procedures at ports of entry, report, 19699
 inspectors, hazardous occupation classification for civil service retirement purposes report, 29860
 pre-clearance activities in Canada, Bermuda and Bahamas, hearings, 27179
 reorganization plan 2 of 1973, report, 29852
 Customs Court:
 cases adjudged, Customs Court reports, 21391, 28583
 customs, bulletin, weekly, 18199
 Customs districts:
 by continent, U.S. airborne foreign trade—report, 16793
 shipping weight and value, calendar year, reports, 22567, 29788
 U.S. foreign trade, schedule D, classification of customs districts and ports, 22546, 29724, 30857
 Customs houses, see Customs administration.
 Customs Service, single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
 Cut Bank, Mont., railroad accident investigation, 23951
 Cutler, Robert S., project SOAP, systems approach to biomedical research program management, case study, 27730
 Cutright, Phillips, achievement, mobility and draft, their impact on earnings of men, 26835
 Cutters (hand tools):
 testing of coal-cutter materials for incendivity and radiance of sparks, 21957
 Cutting, Bronson, Cutting air crash, case study in early Federal aviation policy, 27501
 Cutting fluids and compounds, working with cutting fluids, 16383
 Cuttings, see Reproduction.
 Cuyahoga County Republican Central Committee, annual report, 24366

Cuyahoga River:
 flood plain information, 17382, 20116
 floods—
 Kent, Ohio area, 17403
 Mantua and Hiram, Ohio, 20148
 Cyanide, treatment of complex cyanide compounds for reuse or disposal, 30195
 Cybernetics:
 artificial intelligence, USSR study, 26571
 cybernetics and regulation theory, USSR study, 21874
 East European abstracts, 17240
 Ideation and automata, USSR study, 32406
 self-regulation of neural mechanisms, USSR study, 21879
 USSR abstracts, 19036
 Cyborg, symbiosis of man and machine? 23559
 Cyclamates, payments of losses incurred by growers, manufacturers, etc., as result of barring use of cyclamates, hearings, 21352
 Cyclic intermediates, see Organic compounds.
 Cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminide coatings on IN-100 and via alloys in high-velocity gases, 17714
 Cyclones:
 role of organizational period of cyclone before becoming hurricane in NHRL circularly symmetric hurricane model, 30525
 statistical method of combining synoptic and empirical tropical cyclone prediction systems, 30533
 Sutcliffe development theory, investigation, 23673
 techniques for analysis and forecasting of tropical cyclone intensities from satellite pictures, 17773
 Cyclotrons:
 conditions of plasma heating at electron cyclotron resonance, 22439
 some characteristic features of formation of microwave discharge plasma in presence of magnetic fields greater than cyclotron, 22454
 Cylinders:
 flight tests of rotating cylinder flap on North American Rockwell YOY-10 aircraft, 21974
 investigation of some principles of electrodeposition of cylindrical magnetic films, USSR study, 30341
 measurement of demagnetizing fields in cylindrical magnetic films, USSR study, 30339
 Cylke, Frank K., Federal libraries, selected list of documents available through ERIC, 23607
 Cypress Creek:
 basin, Orange County, Fla., flooding, 17394
 floods, Houston metropolitan area, Tex., 28738
 Harris County, Tex., special flood hazard information, 28774
 Cyprus:
 background notes, 31835
 economic trends and their implications for United States, 31508
 map, 24249
 Cystinosis, summary of present knowledge of this disease, 26753
 Cytoxins, manual of tissue typing techniques, 31690
 Czapowskyj, Miroslaw M., lime retention in anthracite coal-breaker refuse, 25221
 Czechoslovakia:
 Czechoslovak Socialist Republic air transport services, agreement, 16509
 microbiological laboratory services, organization, USSR study, 27632
 mineral industry, minerals yearbook chapter, 25430
 trade in cotton textiles, agreement, 31872

INDEX 1973

D

D.C. Citizens for Hassan, annual report, 22916
D.C. Committee for John S. Monagan, annual report, 22685
D.C. Committee for Mario Biaggi, annual report, 26012
D.C. Committee for Reelection of William B. Widnall, annual report, 22828
D.C. Friends of Ancher Nelsen, annual report, 22684
D.C. Friends of Dexter Davis, annual report, 22930
D.C. Friends of Vic Veysey, annual report, 22780
D.C. Republican Primary Campaign Committee, annual report, 22740
D.R.I.V.E., *see* Democratic-Republican Independent Voter Education.
D-region, *see* Ionosphere.
Daane, J. Dewey:
 addresses, etc.—
 Sept. 11, 1973, 32294
 July 26, 1972, 20270
DACAS, drug abuse current awareness system, 18201
Dade County, Fla., hydrologic conditions during 1969 in Dade County, Fla., 16103
Dahms, Walter D., tree growth and water use response to thinning in 47-year-old Lodgepole pine stand, 31364
Dahms, Walter G., growth and soil moisture in thinned lodgepole pine, 20310
Dahomey:
 background notes, 17854
 Dahomey-Togo boundary study, 17862
 economic trends and their implications for United States, 21833
Dainty Maid Footwear, Inc., women's dress and casual shoes, Dainty Maid Footwear, Inc., Gettysburg, Pa., Tariff Commission report, 24073
Dairy barn, pole-frame construction, 19113
Dairy cattle, *see* Cattle—Cows.
Dairy farms, *see* Dairying.
Dairy herd improvement associations:
 national cooperative program, 18206
 USDA-DHIA cow performance index list, May 1972, registered cows calving between Aug. 1969 and Apr. 1971, 16584
Dairy industry, *see* Dairying.
Dairy products:
 dairy price supports, 1973, hearings, 28512
 homemakers' opinions about dairy products and imitations, nationwide survey, 29625
 price supports, hearings, 24839
 production, etc., monthly statistics, 18208
 production of manufactured dairy products, 29546
Dairying:
 comparison of milking operations in heringbone milking layouts for large herds in California, 19129
 dairy herd improvement letter, national cooperative improvement program, 18206
 dairy market statistics, 1972, annual summary, 24144
 dairy plants surveyed and approved for USDA grading service, list, 18207
 dairy situation (periodical), 18209
 foreign agriculture circulars, 18380
 publications sold by Superintendent of Documents, price list, 25673
Dakota County Republican Committee, annual report, 24386
Dakota Indians, *see* Sioux Indians.
Dakota sandstone, *see* Sandstone.
Dalbergia retusa, marine borer resistance of tropical wood Dalbergia retusa, preliminary investigation, 16449
Daley, J. C., radar sea returns, JOSS II, 30591
Dallas, Tex., area wage survey, 26617

Dallas County, Tex.:
 Rowlett Creek—
 flood plain information, 32218
 floods, 32241
Dallas County Democratic Executive Committee, annual report, 22839
Dallas County Republican Executive Committee, Tex., annual report, 22760
The Dallas Dam, fish passage report, 20100, 28683
Daly, Phyllis A., sensitivity analysis of relation of wellhead price to nuclear gas stimulation costs, 22483
Damage, *see* cause of damage, e.g. Floods.
Damage control, shipboard shock and Navy devices for its simulation, 16445
Damage-function analysis of neutron embrittlement in steel at reactor service temperatures, 16447
Damage to corn from pneumatic conveying, 26927
Damages:
 10-year limitation from time of defective or unsafe improvements on real property on actions arising out of death or injury in D.C.—
 law, 18504
 report, 19914
 see also Claims.
Damann, Kenneth E., Missouri River Basin plankton study, 17803
Dambeck, William J., geostationary satellite position and attitude determination using picture landmarks, 30527
Damping:
 damping capacity of soil during dynamic loading, review of laboratory methods of determining damping, 28781
 investigation of helicopter transmission noise reduction by vibration absorbers and damping, 20988
 structural system identification from—
 multipoint excitation, 24187
 single point excitation, 24188
 wave damping effects of fibrous screens, hydraulic model, investigations, 20172
Dams:
 Canyon Ferry, unit of Pick-Sloan Missouri Basin Program, 25683
 design of small dams, 30614
 enclosed weir for small streams in snow country, 32329
 national inspection program of non-Federal dams—
 law, 16886
 report, 15689
 safety of dams, national program, hearing, 21348
 sanitary survey of drinking water systems on Federal water resource developments, pilot study, 31899
 see also names of dams.
Dan River, Inc.:
 certain coarse cotton fabrics workers of Clifton Plant (Converse, S.C.) of Woodside Division of Dan River, Inc., Tariff Commission report, 20828
 wage chronology, May 1943-Jan. 1972, 23593
Dan Wilson Creek:
 flood plain information, 20117
 floods, Cordelia, Calif., 20134
Dana, George F., oil yields and stratigraphy of Green River formation's Tipton Member at Bureau of Mines sites near Green River, Wyo., 20574
Dancing aerobic dancing, rhythmic sport, 31766
Dane County Republican Party, *see* Republican Party of Dane County.
Dane County Republican Women, *see* Republican Women of Dane County.
Dangerous materials, *see* Hazardous substances, 81

- Daniels, Dominick V., Committee for Re-election, *see* Dominick V. Daniels for Re-election Committee.
- Daniels, Glenn E., atmospheric electricity criteria guidelines for use in aerospace vehicle development, 17718
- Dannenberg, R. O., recovery of precious metals from electronic scrap, 20576
- Dardenne Creek:
St. Charles County, Mo.—
flood plain information, 28707
floods, 28761
- Dark adaptation, interaction of age and alcohol on dark adaptation time, 16840
- Dark Brook, flood plain information, 25081
- Darney, Arsen, salvage markets for materials in solid wastes, 16033
- Darr, David R., production, prices, employment, and trade in Northwest forest industries, 18822
- Darwin, W. N., Tupelo, American woods, 17505
- Dasenbrock, R. R., algebraic manipulation by computer, 31754
- Data access descriptions, 15594, 19250, 28191, 31969
- Data acquisition:
applications of remote sensing techniques to buoy-based environmental data gathering, 30526
data acquisition systems in water quality management, 31306
data compilation for magnetospherically quiet periods, Feb. 19–23 and Nov. 29–Dec. 3, 1970, 30173
general information, procedures for collection, processing, classification, 1969 census of agriculture, 27003
improvements needed in collection of data for United States Postal Service's revenue and cost analysis system, GAO report, 23321
- MIDAS, modular interactive data acquisition system, description and specification, 31679
- net differences in interview data on chronic conditions and information derived from medical records, 32489
- oceanographic data exchange, World Data Center A, Oceanography, 20182, 27447
- Data elements, entitlement period I, Revenue Sharing Office, Treasury Dept., 27953
- Data of geochemistry, chemistry of igneous rocks, chemistry of peralkaline oversaturated obsidians, 23358
- Data processing, *see* Electronic data processing systems—Information storage and retrieval systems—Optical data processing.
- Data reduction, *see* Electronic data processing systems.
- Data retrieval, *see* Information storage and retrieval systems.
- Data storage and retrieval systems, *see* Information storage and retrieval systems.
- Databook, National Science Foundation, 23845, 25637
- Dates of latest editions, aeronautical charts, 18211
- Datronics Engineers, Inc., relief, 19819
- Daughters of American Revolution, National Society of, *see* National Society of Daughters of American Revolution.
- Davenport, Iowa:
area wage survey, 29169
census of population and housing, 1970, census tracts, 19214
- Davenport, Wash., test-observation well near Davenport, Wash., description and preliminary results, 23378
- David, John, remarks, Jan. 26, 1971, 29351
- Davidson, Helen J., water quality records for Hubbard Creek watershed, Tex., 16111
- Davidson County Republican Executive Committee, annual report, 24434
- Davies, Kenneth, ionospheric disturbances produced by severe thunderstorms, 26766
- Davies, Patrick H., effects of chemical variations in aquatic environments, lead toxicity to rainbow trout and testing application factor concept, 27449
- Davis, Celestia, reading and language development in first grade, 28671
- Davis, Daniel L., subsamples of set of symmetric, independent, identically distributed random variable which determines set of typical values, 23882
- Davis, Fred J.:
examination and proposed rehabilitation of Engenheiro Avidos Dam, Brazil, 23920
paper, May 3–5, 1966, 23943
- Davis, Hurley, effect of salinity on optical extinction of sea ice at 6328 Å, 31235
- Davis, John R., magnetic mode, investigations of artificial stimulation of ULF waves in ionosphere and magnetosphere, magic mode, 29136
- Davis, Karen, community hospitals, inflation in pre-medicare period, 23977
- Davis, R. L., gage calibration and control system, 22495
- Davis, Robert J., telescope catalog of ultraviolet stellar observations, 5068 objects measured by Smithsonian experiment aboard Orbiting Astronomical Observatory (OAO-2), 27878
- Davis, Robert T., water supply outlook and Federal-State-private cooperative snow surveys for Washington, 19063
- Davis, Theodore F., AEC news release index, 17355
- Davis County Republican Central Committee, annual report, 24616
- Davis Creek, flood plain information, 21456, 23172
- Davis, Dexter, Friends of, *see* D.C. Friends of Dexter Davis.
- Davissou, M. T., inspection of pile driving operations, 20105
- Dawson, W. A., measurement of salt-wedge excursion distance in Duwamish River estuary, Seattle, Wash., by means of dissolved-oxygen gradient, 20358
- Dawsonite:
estimating nahcolite and dawsonite content of Colorado oil shale from oil-yield assay data, 21947
evaluation of methods for determining nahcolite and dawsonite in oil shales, 31593
- Dawson's encephalitis, *see* Encephalitis.
- Day, James V., remarks, Aug. 20, 1973, 32286
- Day, Walter C., Project Tugboat, explosive excavation of harbor in coral, 26391
- Day care of children:
abstracts of state day care licensing requirements, family day care homes & group day care homes, 30866
comprehensive headstart, child development and family services act text, and section analysis, 21362
day care facts, 25807
day care licensing study, state and local day care licensing requirements, 30869
preschools under Fair Labor standards act, 16572
quantity recipes for child care centers, 32305
rights of children, 1972, appendix, selected readings on child abuse and day care, hearing, 20005
school age child care, primer for building comprehensive child care services, 21120
some problems in contracting for Federally assisted child-care services, Social and Rehabilitation Service, Dept. of Health, Education, and Welfare GAO report, 28939

INDEX 1973

- Day laborer protection act, 24849
 Daye, Charles J., Skylab payload shroud jet-tison tests, 17720
 Days, *see* names of special days.
 Dayton, Ohio :
 area wage survey, 27670
 transportation control strategy Dayton metropolitan area, 27482
 DBE, *see* Biological Effects Division.
 DC-8, *see* Airplanes.
 DC motors, *see* Electric motors.
 DCA, *see* Defense Communications Agency.
 DCAA, *see* Defense Contract Audit Agency.
 DCASR, *see* Defense Contract Administration Services region.
 DDT :
 evaluation of DDT and dieldrin in Lake Michigan, 17414
 identification of polychlorinated biphenyls in presence of DDT-type compounds, 20186
 Deadmore, Daniel L., cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminide coatings on IN-100 and via alloys in high-velocity gases, 17714
 Deaf :
 deaf leadership training for community interaction, manual for grassroots leadership, 22209A
 new vistas for competitive employment of deaf persons, 31787
 Operation Tripod toward rehabilitation involvement by parents of the deaf, workshop, Memphis, Tenn., 31788
 Deaf, Convention of American Instructors of, *see* Convention of American Instructors of the Deaf.
 Dealers :
 and contractor guide to property improvement loans, 27583
 automobile, truck, trailer, and farm implement dealers under Fair labor standards act, 26915
 cost of marketing U.S. livestock through dealers and public agencies, 27997
 credit regulations, 21580-583, 26447, 30233
 subject to provisions of title 1, National housing act, 28864
 Dean, W. G., study for development of aerothermodynamic test model materials and fabrication technique, 17694
 Dearborn County Democratic Central Committee, annual report, 24785
 Deason, Willard, nomination, hearings, 28529
 Death :
 brain death, bibliography, 22081
 coal-mine fatalities, mineral industry survey, monthly, 18121
 cohort mortality and survivorship, 25565
 death with dignity, inquiry into related public issues, hearings, 17214
 fatal and injury accident rates on Federal-aid and other highway systems, 26430
 infant mortality rates, relationships with mothers' reproductive history, U.S., 26721
 leading causes of death in selected areas of the world, 21370
 morbidity and mortality weekly report, 18653
 mortality of charter beneficiaries, 22227
 new rates of disability and death pension, 17308
 rights of children, 1972, examination of sudden infant death syndrome, hearing, print additional copies, report, 17151
 sudden infant death syndrome—
 bibliography, 23745
 hearing, print additional copies, report, 26229
 Death certificates, where to write for birth and death records of U.S. citizens who were born or died outside United States, 23726
 Debarking (wood), *see* Bark.
 Debate, limitation of, *see* Cloture.
 Debits, *see* Banks and banking.
 Debris :
 avalanches, including debris avalanches, bibliography, 23478
 traveling screen for removal of debris from rivers, 22102
 Debt :
 college housing debt service grant program for private institutions, 23447
 delinquent international debts owed to United States—
 hearings, 19772
 military collection efforts, hearings, 26162
 farm mortgage, 32193
 debt, 26357
 meeting your financial obligations, 31980
 name or symbol of Federal Government in collection of debts, prohibit misuse, report, 28370
 tax information on deduction for bad debts, 20418
 see also Agricultural credit—Public debt.
 Debye potentials, *see* Mathematics.
 Decalcomanias, Apollo 7-16 manned spacecraft decals (colored posters), 17691
 Decals, *see* Decalcomanias.
 Decapods, *see* Shrimps.
 Decatur County, Tenn., forest inventory statistics, 22286
 Decay (fruit) :
 postharvest wax-fungicide treatments of nectarines, peaches and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
 Decay (radioactive) :
 environmental gamma radiation from 16N
 decay in turbines of large boiling water reactor, 25877
 Decay (timber) :
 condition of 12-year-old glued-laminated stringer bridge with nailed-laminated deck, decay hazard aspects, 25205
 decay causes little loss in hickory, 20298
 decay in white fir top-killed by Douglas-fir tussock moth, 20313
 freezing decayed wood to facilitate ring counts and width measurements, 23286
 in residences, finding and keeping a healthy house, 28929
 Decelerators :
 flight test of erectable spacecraft used for decelerator testing at simulated Mars entry conditions, 20603
 static structural tests of 1.5-meter-diameter fabric attached inflatable decelerator, 17722
 Decision making :
 Federal agency decision-making, citizen involvement, responses to questionnaire, 23064
 introduction to decision making theory, USSR study, 17600
 Decisions, use of simulation models pertaining to best mix of aircraft, support personnel, spare parts, and level of repair, 30730
 see also names of courts or departments, etc., rendering decisions—*also* subjects.
 Decks, condition of 12-year-old glued-laminated stringer bridge with nailed-laminated deck, decay hazard aspects, 25205
 Declaration of Independence, text, 21158, 29949
 Declination, sight reduction tables for air navigation, 30125
 Decoders, tape playback and serial-time decoder for IFF flight test instrumentation, 22171
 Decomposition :
 catalytic decomposition of chloroform, 23877
 optimizing decomposition of carbonyl sulfide in electrical discharge, 21953

- Decompression:
involvement of CO₂ and calcium stores in decompression sickness, 30412
methemoglobin formation in humans during exposure to hyperbaric oxygen in standard Navy decompression treatment table, 25403
Decompression sickness, *see* Aeroembolism.
- Decontamination:
evaluation of data regarding efficiency of activated charcoal adsorbers at low gas phase iodine concentrations, 21031
research on removing radioactive fallout from farmland, 25838
- Decapods, *see* Shrimps.
- Decorating, apprenticeship and training standards, 15500
- Decoration and ornament, Bridgeport's Gothic ornament, Harrah-Wheeler House, 20767
- Decorations of honor, battle streamers of United States Navy, 16440
- Dedham Women's Republican Club, *see* Women's Republican Club of Dedham.
- Deductions, *see* Income tax.
- Dee, Norbert, environmental assessments for effective water quality management planning, 32250
- Deep rotary core drilling in ice, 28688
- Deep-sea amphipoda of Genus *Lepechinella* (Crustacea), 23962
- Deep Sea Drilling Project:
cruises of drilling vessel, *Glomar Challenger*—
Galveston, Tex. to Miami, Fla., 25638
Honolulu, Hawaii to—
Honolulu, Hawaii, 32517
Kodiak, Alaska, 30553
Kodiak, Alaska to Yokohama, Japan, 29404
Lisbon, Portugal to Lisbon, Portugal, 22134
San Cristobal, Panama, to Honolulu, Hawaii, 27831
- Deep-seated heat from earth, 29144
- Deep water port policy issues, 15902
- Deep water ports, 24960
- Deer:
classification of deer habitat in ponderosa pine forest of Black Hills, S. Dak., 16091
effects of wildfire on elk and deer use of ponderosa pine forest, 23295
Savannah River Plant deer herd, status, 16664
solar radiation affects radiant temperatures of deer surface, 16080
- Deer Creek:
flood plain information—
Brookings, Brookings County, S. Dak., 32206
Earlhart, Calif., 16009
- Deer Lodge, Mont., Cottonwood Creek Deer Lodge, Mont., 28773
- Defaults on FHA-insured mortgages, 19771
- Defectoscopy of metals, USSR study, 29138
- Defense, *see* National defense.
- Defense bonds, *see* Savings bonds.
- Defense budget, *see* Defense Department.
- Defense Civil Preparedness Agency:
annual statistical report, 24977
appropriations, 1974, hearings, 28393
catalogs of courses and conferences, 31176
civil preparedness, new dual mission, annual report, 31175
FG series, 20026A
HS series, 21392-396
information bulletin (periodical), 18491
instructor's guide IG series, 26299
miscellaneous publications MP series, 20027, 31176
Staff College, Battle Creek, Mich., catalog of courses, 20027
student manual SM series, 15938
- Defense Civil Preparedness Agency—Con.
technical reports, TR series, 20028-29, 28585, 30083
- Defense communications, *see* Military communications.
- Defense Communications Agency:
DCA circular, 17316
technical memorandum, 24978
- Defense Contract Administration Services region, annual historical summary, Atlanta, Ga., 17331
- Defense Contract Audit Agency:
auditing career, 23086
DCAAF series, 23086
- Defense contracts, *see* Government contracts.
- Defense Department:
annual report, 26343
appropriations, 1972, military procurement—
law, 16923
report, 19625
appropriations, 1973—
hearings, 15715, 15864
law, 19496
reports, 15861, 19624, 19703
military construction—
law, 19476
reports, 19711, 19898
military procurement—
hearings, 17225, 21200
report, 19623
supplemental, hearings, 27187
transfer provisions, 26055
appropriations, 1974—
hearings, 24840, 31008, 32073, 32132, 32135
reports, 29885, 30972, 31002, 31117
military procurement authorization—
hearings, 28515, 30007, 31132
reports, 29882, 32063
- Assistant Secretary, nomination of—
Brehm, William K., hearing, 31133
- Assistant Secretary of Defense nomination of—
Hill, Robert C., for International Security Affairs, hearing, 28516
Mendolia, Arthur I. and McClary, Terence E., hearings, 28517
- audit of payments from special bank account to Lockheed Aircraft Corporation for C-5 aircraft program, during quarter ended—
Sept. 30, 1972, GAO report, 21689
June 30, 1973, GAO report, 31378
- automated overseas employment referral program, area information manual, 30088
- better management needed over decisions to start full-scale development of minor weapons systems, GAO report, 17523
- cataloging and standardization program, semiannual report, 17032
- cataloging handbook, H series, 15939, 17317, 18353-354, 18356-358, 20030-31, 23084, 24980, 27376
- cataloging manual M series, 15940-941, 17318, 24981, 26302-303, 28588-589, 32161
- commanders digest (periodical), 18132
indexes, 15942, 20032, 27377
- contracts with foreign firms should be priced in local currency, 30254
- Defense cataloging and standardization act—
40th report to Congress, 15720
41st report to Congress, 24842
- Defense disposal manual, 32162
- defense industry bulletin (periodical), 18215
- defense, leased areas in Goose Bay, Newfoundland, agreement with Canada, 17883
- defense management journal, 18216
- definitions of tactical, prime, precise, and utility terminologies for classification of DOD mobile generator set family, military standard, 25019

INDEX 1973

Defense Department—Continued
 Department of Defense construction criteria manual, 23092
 Deputy Secretary, authorize additional—law, 19520
 report, 19929
 Deputy Secretary, nomination of William P. Clements, 24912
 Director of Research and Engineering, nomination of Malcolm R. Curie, hearing, 28517
 DOD directory of contract administration services components, 28593
 DoD pamphlets, 20382, 20087, 31493
 economics of Defense spending, look at realities, 20037
 enlisted aide program of military services, GAO report, 27547
 excess lands, making available for national park purposes, report, 19685
 Federal advisory committees, annual report, 28539
 final report to Congress by Secretary of Defense Melvin R. Laird, 24843, 25012
 format requirements for scientific and technical reports, 23108
 further improvement needed in—
 assisting military personnel in finding adequate housing near bases, Department of Defense, GAO report, 28993
 controls over Government-owned plant equipment in custody of contractors, GAO report, 20330
 greater use of flight simulators in military pilot training can lower costs and increase pilot proficiency, GAO report, 30258
 handbook DSAH series, 15943-948, 17320-324, 20034-36, 21398-402, 23087-90, 24982-989, 26305-310, 27378, 28591
 handbook H series, 18709-710
 High School News Service report (periodical), 18420
 in-flight escape systems for helicopters should be developed to prevent fatalities, Department of Defense, GAO report, 28995
 index of AMC-sponsored DA administrative publications and DOD publications, 30750
 life cycle costing series, 28607
 little progress by Defense Department, in acting on opportunities for significant savings by consolidating real property maintenance organizations, GAO report, 21695
 logistics aspects of Vietnamization, 1969-72, Defense Dept., GAO report, 25241
 maintainability, verification/demonstration/evaluation—
 aeronautical systems, military standard, 28609
 military standard, 27405
 manual DSAM series, 15949, 21403-404, 23091, 26311, 27379, 28592, 30091, 32163
 means for increasing use of defense technology for urgent public problems, GAO report, 21697
 military assistance—
 and commitments in Philippines, GAO report, 26478
 appropriations, 1973, hearings, 15869
 military construction authorization, 1973—
 law, 19474
 report, 19695
 military construction authorization, 1974, hearings, 32136
 military standards, 15955-970, 17332-337, 20046-80, 21409-411, 23104-115, 25013-27, 26335-338, 27403-414, 28606-622, 30121-122, 31193
 national heart, blood vessel, lung and blood program, program analysis, 30492
 nonappropriated fund and other resale activities, review, 19747

Defense Department—Continued
 operation MEDHIC, military experience directed into health careers, 21762
 potential for greater consolidation of maintenance workload in military services, Department of Defense, GAO report, 30259
 problems with U.S. military equipment prepositioned in Europe, GAO report, 26482
 procedures for evaluating reasonableness of petroleum pipelines rates need improving, GAO report, 16101
 procurement—
 acquisition of weapons systems, hearings, 15659, 32020
 data packages, military standard, 23110
 savings attainable by revising packaging in DoD, 27551
 Secretary, nomination of—
 Richardson, Elliot L., hearing, 24912
 Schlesinger, James R., hearing, 30007A
 should appropriated funds be used for transportation procured specifically for Armed Forces exchange goods? GAO report, 32356
 Special Subcommittee on Nonappropriated Fund Activities within Department of Defense, investigations, hearings, 19744
 specifications and standards index—
 alphabetical listing, 15954
 numerical listing, 20043, 23103
 supplements, 18219
 standardization documents, supply classification listing, 17330, 18355
 studies of calibration standards used in Department of Defense equipment oil analysis program, 23712
 telephone directory, 18220
 travel regulations, civilian personnel, 18527
 U.S. agreements with and assistance to free world forces in Southeast Asia show need for improved reporting to Congress on their status, GAO report, 30266
 use of formal advertising for government procurement can, and should, be improved, GAO report, 31385
 what should U.S. policy be for development assistance to Ecuador? GAO report, 25247
 worldwide communications, review, 19745
 Defense disposal manual, 17319
 Defense facilities, see Plants (industrial).
 Defense housing, see Housing.
 Defense industrial plant equipment, storage maintenance activities operations manual, 27379
 Defense industry bulletin (periodical), 18215
 Defense information, see Military information.
 Defense integrated materiel management manual for consumable items, 28590, 30089
 Defense Mapping Agency:
 H.O. publications, 27418-418B
 Hydrographic Center publications, 23120-121, 25031, 26344-345, 27418-418B, 28626-632, 30124-125, 31200-201, 32182
 Defense materials, see Materials.
 Defense procurement circular, 18217
 Defense Production Joint Committee, annual report, 28424
 Defense retail interservice support (DRIS) manual, 30090
 Defense Supply Agency:
 annual report, 30087
 defense retail interservice support (DRIS) manual, 30090
 DSA organization directory, 21402, 28591
 handbook DSAH series, 15943-948, 17320-324, 20034-36, 21398-402, 23087-90, 24982-989, 26305-310, 27378, 28591
 introduction of Defense Supply Agency, 28594
 manual DSAM series, 15949, 21403-404, 23091, 26311, 27379, 28592, 30091, 32163

Defense Supply Agency—Continued
 MILSTRIP, project codes, 30123
 Deferment from military service, *see* Con-
 scription.
 DeFiance County Republican Executive Com-
 mittee, Ohio, annual report, 22731
 Deficiency payment to certain wheat farm-
 ers, 19662
 Definitions and abbreviations, FAA, 18291
 Definitions, policy statements, and general
 rulings, 23425, 30297
 Definitive designs for Marine Corps facili-
 ties, 16432
 Definitive designs for naval shore facilities,
 16433-434
 Deflation (finance):
 price index for deflation of academic
 R & D expenditures, 16417
 Deflectors, Federal item identification guide,
 32166
 Defoliation, sampling populations of western
 spruce budworm and predicting defoliation
 on Douglas-fir in eastern Oregon, 27540
 Deforestation effects on soil moisture,
 streamflow, and water balance in central
 Appalachians, 32343
 Deformation (mechanics):
 determination of three-dimensional deforma-
 tion anisotropy in rock specimens,
 new method, 26488
 responses of prototype flexible pavements
 subjected to repetitive and static loads,
 31321
 tensile properties to 650° C. and deforma-
 tion structures in precipitation-strengthened
 titanium-aluminum alloy, 30460
 Deformed concrete reinforcing bars of non-
 alloy steel from Mexico, 32586
 Degasification:
 electronic simulator and training console
 for indication and degasification of
 poisons, USSR study, 17619
 methane emission rate study in deep Poca-
 hontas no. 3 coalbed mine in conjunc-
 tion with drilling degasification holes
 in coalbed, 23653
 Degeneration (pathology):
 macular degeneration, 27757
 DeGisi, S. L., effects of amine catalyst on
 compressive properties of urethan foam,
 28064
 Degradation:
 antidegradation, water quality standards,
 20858, 25130, 28845
 effects on trans α -hydroxyl groups in alka-
 line degradation of glycosidic bonds,
 32337
 environmentally degradable plastics, re-
 view, 28624
 thermal degradation, thermal oxidation
 and thermal analysis of high polymers,
 4, literature survey, 27417
 Degrees (colleges and universities):
 earned degrees conferred, 31222
 DeHlinger, P., Pacific SEAMAP 1961-70 data
 evaluation summary, 23813
 DeHuff, Gilbert L., manganese, 25454
 Dehydrators, *see* Dryers (industrial).
 Deicing, *see* Ice.
 De la Cruz, Nina, Russian, active introduc-
 tion, 20651
 de Laguna, Frederica, under Mount Saint
 Elias, history and culture of Yakutat
 Tlingit, 20760
 Delaney, Donald J., military review, 18627
 Delaney, James J., Keep Delaney in Congress
 Committee, annual report, 24737
 Delaware:
 census of housing, 1970, housing charac-
 teristics for States, cities, and counties,
 15537
 census of population, 1970—
 characteristics of population, 15573,
 25901
 detailed characteristics, 15573

Delaware—Continued
 census of transportation, 1972, truck in-
 ventory and use survey, 19231
 climatological data, 18089
 counties, population, estimates, 22560
 county business patterns, 30818
 electric rate book, 20254
 land clearing and wood use in Delaware,
 31361
 outdoor recreation potentials, summary of
 county appraisals of resource poten-
 tials, 17837
 precipitation data, hourly, 18440
 timber—
 industries of New Jersey and Delaware,
 27542
 preview of Delaware's resources, 28942
 wildlife management guide, 27890
 Delaware County Democratic Committee, an-
 nual report, 24658, 24768
 Delaware County Republican Central Com-
 mittee, annual report, 24435, 24439
 Delaware Indians:
 judgment funds, disposition—
 law, 19391
 report, 17159
 Delaware National Recreation Area:
 land acquisition funds, increase—
 law, 21133
 report, 21175
 Delaware River:
 basin, facts, etc., 17545
 declaration of nonnavigability for Penn's
 Landing project development—
 law, 19528
 report, 19934
 Delaware River Basin Commission:
 appropriations, 1974, hearings, 31130
 public works, appropriations, 1974—
 hearings, 27186
 laws, 19363, 32015
 reports, 29993, 30989
 Delaware Water Gap, National Recreation
 Area, N.J., Milford Section, interpretive
 prospectus, 27819
 Delay lines, Federal item identification
 guide, 24997
 Delineation of clustered points in 2 dimen-
 sions by measuring perimeters of convex
 hulls, 21940
 Delinquency, *see* Juvenile delinquency.
 Delinquent children, *see* Juvenile delin-
 quency.
 Delinquent international debts owed to
 United States, 19772
 Delinquent international debts to United
 States, military collection efforts, 26162
 Dellquescent-chemical maximum humidity
 indicator, 29667
 Dellums, Donald V., Citizens for Dellums,
 annual report, 24762
 Delmarva Peninsula, summary report on
 water resources, 26056
 Delta Air Lines, Inc., aircraft accident re-
 port, 31742
 Delta County Republican Committee, annual
 report, 22910
 Delta Fund, political organization, annual
 report, 24479
 Delta Mar (S.S.):
 rebuilding America's merchant marine (re-
 marks), 23225
 Delta Queen (steamboat):
 exemption from certain vessel laws—
 extend, reports, 30979, 31114-115
 until Nov. 1, 1978, hearings, 28426
 Delta wings, *see* Wings (aircraft).
 DeLury, Bernard E., nomination, hearing,
 28564
 Demagnetization, measurement of demag-
 netizing fields in cylindrical magnetic
 films, USSR study, 30339
 Demand, *see* Supply and demand.

INDEX 1973

- Democrat Executive Committee of Washington County, annual report, 24646
- Democratic Campaign Committee, annual report, 26036
- Democratic Congressional Dinner Committee, annual report, 24311
- Democratic, Independent Candidates Committee, *see* Independent Democratic Candidates Committee.
- Democratic National Committee, 1972 Committee, annual report, 24678
- Democratic Party of Buffalo County, annual report, 24609
- Democratic Party of Crawford County, annual report, 24626
- Democratic Party of Dodge County, annual report, 22979
- Democratic Party of Grant County, annual report, 22988
- Democratic Party of Green County, annual report, 24605
- Democratic Party of La Crosse County, annual report, 22986
- Democratic Party of Lafayette County, annual report, 24633
- Democratic Party of Polk County, annual report, 24636
- Democratic Party of St. Croix County, annual report, 24691
- Democratic Party—Trempealeau County, annual report, 24629
- Democratic Republican Independent Voter Education:
 Chapter 75, annual report, 24428
 Chapter 299 Committee Political Fund, annual report, 24555
 Chapter 662, annual report, 22769
 Chapter 695, annual report, 22921
 Committee Chapter, annual report, 24418
 Drive Chapter Local 175, annual report, 24326
 Greater Milwaukee, annual report, 22917
 Janesville Political Fund, annual report, 22821
 Joint Council of Teamsters No. 87, annual report, 22709
 Local 657, 22721
 Local 745, annual report, 24367
 Local Union 115, annual report, 28290
 Michigan Conference of Teamsters Political Fund, annual report, 24335
 Teamster's Colorado-Wyoming Committee, annual report, 24328
 Teamsters Local—
 218, annual report, 24641
 371 annual report, 22918
 795 annual report, 22717
- Democratic State Central Committee, annual report, 22846
- Democratic State Central Committee of California, annual report, 24362
- Democratic State Committee of Missouri, annual report, 24504
- Democrats of Monroe County, annual report, 24612
- Demography:
 average length of stay in short-stay hospitals, demographic factors, 1968, United States, 27751
 country demographic profiles, 28148
 demographic and social aspects of population growth, 25669
 Eagle Pass, Tex., people and problems, 28244
 factors related to drug abuse in submarine service, demographic data, 26643
 five-year plan for family planning services and population research programs, progress report, 17286
 international demographic data directory computerized information retrieval system, for demographic and family planning data, 21067
- Demography—Continued
 methods and materials of demography, 19255, 19257
 and related notes, 19256, 19258
 some demographic aspects of aging in United States, 24238
 ten State nutrition survey, 22569
see also Population.
- Demolition, *see* Wrecking.
- Demonstration of safety plugging of oil wells penetrating Appalachian coal mines, 16338
- Demonstration of waste disposal system for livestock wastes, 28824
- Dendrocoelopsis, *see* Triclad.
- Dendy, F. E., summary of reservoir deposition surveys made in United States through 1970, 29627
- floods, 32238
- De Neveu Creek:
 Fond du Lac River, Fond du Lac County, Wis.—
 flood plain information, 32211
- Denitrification, *see* Nitrification and denitrification.
- Denmark:
 background notes, 22252
 economic trends and their implications for United States, 23500, 31513
 educational exchange, financing programs agreement, 20816
 fisheries, conservation of Atlantic salmon, agreement, 17881
 market factors, 22634
 mineral industry, minerals yearbook chapter, 20538
 nontariff barriers affecting trade in agricultural products, Denmark, 20286
- Dennard, James E., Jr., resin concrete, literature review, 20169
- Dennett, Joan Temple, Federal women's program (address), 30518
- Dennison, V. Landon, Jr., review of pathogenesis of skin bends, 16246
- Density:
 accuracy of ballistic density departure tables, 1934-72, 22409
 double electrostatic probe for measuring density, temperature and velocity of flowing plasma, 25528
 liquid densities of oxygen, nitrogen, argon and parahydrogen, 25554
 product suitability of wood determined by density gradients across growth rings, 25225
 study of density fluctuations of L-I stellarator by correlation method, 22458
 thermophysical properties of helium-4 from 4.300 K with pressure to 15000 PSIA, 23708
 tree growth and water use response to thinning in 47-year-old lodgepole pine stand, 31366
- Dent, Frederick B.:
 addresses, etc.—
 Feb. 14, 1973, 22639
 Feb. 23, 1973, 22625
 Mar. 28, 1973, 24280
 Apr. 2, 1973, 24278
 Apr. 4, 1973, 24279
 Apr. 12, 1973, 25975
 Apr. 14, 1973, 25960
 Apr. 16, 1973, 25961
 Apr. 18, 1973, 25962
 Apr. 30, 1973, 25959
 May 8, 1973, 27059
 May 9, 1973, 27060
 May 21, 1973, 27061
 May 24, 1973, 27058
 May 31, 1973, 28230
 June 12, 1973, 28228
 June 20, 1973, 28229
 June 26, 1973, 29816
 Aug. 9, 1973, 30892
 nomination, hearings, 26262
- Dental care, *see* Dentistry.
- Dental caries, *see* Teeth.
- Dental health, *see* Teeth.

- Dental Health Division :**
 catalog, 16123
 directory, 26520
- Dental instrument and apparatus, medical and dental assemblies, kits, sets, and units, Federal item identification guide, 30104**
- Dental officers, see Dentists.**
- Dental research :**
 graduate training programs supported by training grants from National Institute of Dental Research, 22059
 research explores canker sores and fever blisters, 16388
 research grant awards, National Institute of Dental Health, 1972 funds, 32494
- Dental visits, volume and interval since last visit, 16369**
- Dentistry :**
 dental services for American Indians and Alaska natives, annual report, 23460
 dental visits, volume and interval since last visit, 16369
 do you hesitate to smile, 29196
 summer research opportunities for dental students, 1973, 20668
 tax deduction for medical and dental expenses, 20394
- Dentists :**
 economic controls on physicians and dentists, 26540
 income of physicians, osteopaths, and dentists, 1965-69, from professional practice, 22237
 practitioners, informational outline of Controlled substances act, 26675
- Denver, Colo. :**
 area wage survey, 26625
 financial and institutional arrangements for wastewater management, Denver SMSA, 32264
 1976 Denver Winter Olympics, planning design and construction of outdoor recreational facilities, hearing, 15909
 special flood hazard information report, Bear Creek, Denver metropolitan area, 28768
 transportation control strategy development for Denver metropolitan area, 27483
- Denver University, patterns for progress in aging, work study in social gerontology, 30689**
- Denver Winter Olympics, 15909**
- Denver Women's Republican Club, see Women's Republican Club of Denver.**
- Deoxidation of steel using waste aluminizing dross, feasibility study, 16337**
- DEP, see Electronics Products Division.**
- Department stores, see Stores.**
- Departmental time and cost reporting system, regional and field office instructions, 23424, 31422**
- Dependents :**
 child care and disabled dependent care, income tax deduction, 25301
 information for dependents travelling to oversea areas, 20985
 new rates of disability and death pension, 17308
 your exemptions and exemptions for dependents, 20428
 see also Armed Forces—Pensions.—Veterans.
- Deportation :**
 suspension, recession—
 Guereca-Morales, Jesus, 19821
 Todd, Donald T., 19821
- Deposition, see Sedimentation and deposition.**
- Depository libraries, see Libraries.**
- Depreciation :**
 class life asset depreciation range system, 21826
 sales and other dispositions of depreciable property, tax information, 25304
 tax information, 21826
- Depreciation—Continued**
 tax treatment of capital recovery (investment credit, accelerated depreciation and amortization)—
 general tax reform, panel discussions, 26188
 panel discussion, 27251
- Depressants, protect public health and safety in District of Columbia by amending laws, report, 19674**
- Depression (psychology) :**
 depressive disorders, 31699
 depressive illnesses, major public health problem, 32497
 learning about depressive illnesses, 22074
 nursing care of manic depressive patient, 25597
- Depressive illnesses, major public health problem, 32497**
- Depth charges, see Explosives.**
- Deputy marshals, see Marshals.**
- DeQuincy, La. :**
 flood plain information, Buxton Creek and tributaries, 28700
 floods, Buxton Creek, 28760
- Derick, Charles, flow augmenting effects of additives on open channel flows, 30189**
- Derivation of non-Boussinesq set of equations for atmospheric shear layer, 32256**
- Dermatology, index of dermatology, monthly guide to literature in clinical dermatology, etc., 18483**
- Derr, Albert J., photography equipment and techniques, survey of NASA developments, 25522**
- Derr, V. E. :**
 applications of remote sensing techniques to buoy-based environmental data gathering, 30526
 remote sensing of troposphere, 16037
- Derron, Donald T., disabled widows, 22231**
- Derycke, Richard J., some preliminary results of 1971 aircraft microwave measurements of ice in Beaufort Sea, 30528**
- Derzay, Raymond, hearing conservation for mineral industry, 26648**
- DES, see Diethylstilbestrol.**
- Des Moines, Iowa :**
 area wage survey, 16234
 community based corrections in Des Moines, exemplary project, 32413
- Des Moines River, West Fork, and Perkins Creek, Windom, Minn., flood plain information, 32225**
- Des Plaines, Ill., population, special census 31966**
- Desalination :**
 analysis and summary report of operation Guantanamo Naval Base Desalination Facility, 20385
 case studies of desalted water for irrigation, 25297
 desalination of agricultural tile drainage, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21520
 desalination plant—
 laboratory procedures manual, 25294
 operators chemical control guide, 25293
 economics and use of large scale electro-dialysis plants on selected tidal estuarial waters, 17564
 feasibility of desalting municipal water supplies in Montana, 20387
 Freeport test facility, Freeport test bed, materials test center, 23468
 guides for submission of engineering and development proposals, 21813
 ion exchange color and mineral removal from kraft bleach wastes, 31283
 Roswell test facility test bed, brackish water test center, etc., 23475
 saline water conversion, summary report, 26534
 use of naturally impaired water, bibliography, 27595

INDEX 1973

Desalting of sea water, *see* Sea Water.
 Desberg, Dan, French basic course, 22260
 Deschler, Lewis, Constitution, Jefferson's manual, and rules of House of Representatives, 28296
 Description of magnetic tape version of Bulletin of thermodynamics and thermochemistry, 26710
 Descriptions of advanced air quality management courses, 20948
 Descriptions of advanced engineering and enforcement courses, 20949
 Descriptive-associative logical test and its place in predicting adaptation to conditions of situation of uncertainty, 23526
 Descriptors, *see* Subject headings.
 Desegregation in education, *see* Discrimination in education—Race problems.
 Deserts, salinity problems in arid lands irrigation, literature review and selected bibliography, 23476
 Deshaies, John C.:
 social and health indicators system, 29723
 Los Angeles, census use study, 29722
 Design and applications of holographic system for crystal-growth studies, 27852
 Design (architectural), *see* Architecture.
 Design characteristics for national system to store, retrieve, and disseminate water data, 23338
 Design considerations of programmable pre-detection digital signal processor for radar applications, 27843
 Design criteria for concrete retaining walls, 23919
 Design guide for load suspension points, slings and aircraft hard points, 16655
 Design manual DM series, 20724-725, 25650-651, 27837-838, 30582
 cumulative index, 30582
 Design of simplified formation trainer, 22362
 Design of underground installations in rock, space layouts and excavation methods, 16650
 Designation of aircraft propulsion gas turbine engines, 20060
 Designing blast patterns using empirical formulas, comparison of calculated patterns with plans used in quarrying limestone and dolomite, with geologic considerations, 17679
 Designs (aircraft):
 analytical and experimental performance of optimal controller designs for supersonic inlet, 26689
 Apollo experience report, development of design-loads criteria, etc., for prelaunch, lift-off, and midboost conditions, 31646
 application of sonic-boom minimization concepts in supersonic transport design, 29277
 automated procedure for design to wing structures to satisfy strength and flutter requirements, 30456
 design and cold-air investigation of turbine for small low-cost turbofan engine, 20610
 design parameters for torsion of sandwich strips having trapezoidal, rectangular, and triangular cross sections, 26475
 improved helicopter crashworthiness analytical and design techniques development program, 30759
 interplanetary Pioneers, system design and development, 25521
 main rotor blades—
 expendable, design study, 28056
 sectionalized advanced design study, 20987
 7th aerospace mechanisms symposium, 23678
 727 noise retrofit feasibility, lower goal design, fabrication, ground and flight testing, 24030
 Designs (architectural), *see* Architecture.

Designs (decorative):
 office excellence, planning & designing to-day's Federal office, 21703
 Designs (Industrial):
 ballistic design methods for solid-fuel missiles, USSR study, 30328
 design and evaluation of an optical fine-pointing control system for telescopes utilizing digital star sensor, 31628
 design and experimental results for turbine with jet flap stator and jet flap rotor, 29257
 design and operation of artificial-recharge plant at Bay Park, N.Y., 30278
 design guide for home safety, 21768
 design of landing-mat-surfaced airfields for operation of C-5A aircrafts, 30167
 design requirements for standard hardware program electronic modules, 27407
 development and preliminary design of sorbent-oil recovery system, 27467
 development of design information for molecular-sieve type regenerative CO₂ removal systems, 31608
 digital-computer program for design-analysis of salient, wound pole alternators, 29286
 fabric design tables, engineering design handbook, 19157
 ground motion values for use in seismic design of trans-Alaska pipeline system, 21713
 guide for design of shock isolation systems for ballistic missile defense facilities, 32202
 human engineering guide to equipment design, 21407
 Locarno agreement, establishing international classification for industrial designs, agreement, 17895
 maintainability guide for design engineering design handbook, 20965
 minimum design standards for—
 mobile home parks, 31430
 community sewerage systems, 23437
 NAVSHIPS display illumination design guide introduction to light and color, 30597
 process design manual for—
 carbon adsorption, 16546
 phosphorus removal, 16547
 suspended solids removal, 16548
 upgrading existing wastewater treatment plants, 16549
 relationships between design characteristics of avionics subsystems and training cost, training difficulty, and job performance, 28031
 seismic design for buildings, Army technical manual, 25862
 Designs for preparation of vocational and technical teachers of socioeconomically disadvantaged youth, 21421
 Desmarais, Armand J., updating asymptotic data for use in objective analyses, 30532
 Desorption:
 gases desorbed from 5 coals of low gas content, 29239
 new technique for auger analysis of surface species subject to electron-induced desorption, 27716
 Despatches from United States consuls in Antung, Manchuria, China, 1904-6, 23698
 Despatches from United States consuls in Bangkok, Siam, 1856-1906, 23699
 Destination USA, 30555-558
 Desulphurization:
 chemical desulfurization of coal, report of bench-scale developments, 28805, 30179
 recent developments in desulfurization of fuel oil and waste gas in Japan, 30187
 Detailed occupation of employed persons by race and sex for U.S., 24221
 Detecting stored-product moths in peanut warehouse by using light traps and larval traps, 15474

- Detectors:**
 cadmium telluride detectors, 2d interim technical report, 29672
 development of portable radon detector, 26666
 electric detector system for recovering internally tagged menhaden, genus *Brevoortia*, 22107
 emotion detector experiments, USSR study, 17603
 experimental short-pulse X-ray detection system, 24031
 hazard-detecting instruments and apparatus, Federal item identification guide, 32169
 photonuclear activation analysis with GE (Li) detectors, compilations, 30594, 30596
 rapid detection system for organophosphates and carbamate insecticides in water, 23183
 solid-state amplifier for bridge circuit of mercury detector, 17684
 three-station lightning detection system, 20692
see also Radiation detection instruments—Thermal detectors.
- Detention camps, *see* Concentration camps.**
- Detergents.** development of method for NTA analysis in raw water, 20196
- Determinants:**
 expenditures for physicians' services in United States, 1948-68, 27741
 industrial location determinants, 1971-75 survey, 27419
 survey of industrial location determinants, 26352
- Determination of focal projections of internal organs in brain of man through isolation of useful signals, 27646**
- Determination of hydrogen in milligram quantities of titanium and its alloys, 29299**
- Determination of molecular contamination performance for space chamber tests, 29285**
- Determination of paleotectonic principal stress direction, including analysis of joints, by optical diffraction, 26658**
- Determining cholinesterase activity in animals' tissues following action of reversible inhibitors, 21868**
- Determining loss of wood substance in outside chip storage, comparison of two methods, 32338**
- Determining occupational emphases for high school program design, 27771**
- Determining presence thickness, and electrical properties of stratified media using swept-frequency radar, 23181**
- Deterrence of crime in and around residences, 30376**
- Detonations:**
 calculation of 2-dimensional flows with detonation, USSR study, 25361
 detonation of flammable cloud following propane pipeline break, Dec. 9, 1970, explosion in Port Hudson, Mo., 26668
 estimating water-shock-induced airblast from detonations in medium overlain with water, 26390
 geology of Sierra Madera cryptoexplosion structure, Pecos County, Tex., 29019
 nearly spherical constant power detonation waves driven by focused radiation, 29254
 symposium (International) on detonation, proceedings, 16442
see also Explosions—Nuclear explosions.
- Detonators, measurement and reduction of noise from detonating cord used in quarry blasting, 17685**
- Detoxification and Diagnostic Evaluation Center, St. Louis, Mo., general information, 29150**
- Detroit, Mich., census of housing, 1970, components of inventory changes, 28103**
- Deuel, David G., 1970 salt-water angling survey, 29376**
- Deuterium, liquid-vapor equilibrium in binary systems of He⁴ and He³ with nD₂ and nH₂, 22008**
- Deuterons, comparison of exact and approximate evaluations of single-scattering integral in nucleon-deuteron elastic scattering, 20600**
- Develop acceleration and brake monitor system, 24053**
- Develop operational system for evaluating and testing methods and instrument for determining effects of fuels and fuel additives on automobile emissions, 31277**
- Developing countries' external debt and U.S. foreign assistance, case study, 28986**
- Development (economics). *see* Economic development—Underdeveloped areas.**
- Development and validation of scores to predict officer career status, 28035**
- Development assistance, *see* Foreign aid.**
- Development concept, 23824**
- Development digest (periodical), 18225**
- Development of concept of plasma turbulence, 22463**
- Development of design information for molecular-sieve type regenerative CO₂ removal systems, 31608**
- Development of dissolved oxygen criteria for freshwater fish, 28791**
- Development of equilibrium air computer programs suitable for numerical computation using time-dependent or shock-capturing methods, 20591**
- Development of hard mineral resources of deep seabed, 15904**
- Development of high speed parallel hybrid boost bearing, 25519**
- Development of in-situ prototype diode laser system to monitor SO₂ across stack, 30184**
- Development of indwelling intracranial pressure sensor, 29671**
- Development of insect-resistant cotton bag, 24145**
- Development of Loran-C navigation and timing, 22003**
- Development of Peoples' Friendship University in Moscow, 26360**
- Development of portable radon detector, 26666**
- Development of probe for measuring 3-dimensional boundary layers, 16653**
- Development progress directory, Housing act, acquisition programs, 32371**
- Development of qualification standards, 24261**
- Developmental disabilities act extension and rights of mentally retarded, 30054**
- Developments in aging, 1973 and Aug.-Mar. 1973, report, 28461**
- Developments in cryoelectronics, 22012**
- Device and technique for handling red squirrels, 16489**
- Devices:**
 active list of permissible explosives and blasting devices approved before Dec. 31, 1972, 30414
 read the label, 23259
 scanning electron microscope examination of wire bonds from high-reliability devices, 32483
 superconducting—
 fixed point devices, preparation and use, 22005
 quarterly literature survey, 18946
 underwater search system, instruments, and devices USSR study, 26591
see also types of devices.
- Devil's Island, channel conditions Devil's Island Reach, Mississippi River, Mo. and Ill., hydraulic model investigation, 23180**
- Devine Canyon, petrology of welded tuff of Devine Canyon, southeastern Oregon, 27573**

INDEX 1973

- Devonian period, geology of Moxie pluton in Moosehead Lake, Jo-Mary Mountain area, Piscataquis County, Maine, 20344
- Dewatering, dewatering of mine drainage sludge, phase 2, 25118
- DeWeerd, John L., summary digest of Federal water laws and programs, 29413
- Deweesville, Tex., geology of oxidized uranium ore deposits of Tordilla Hill-Deweesville area, Karnes County, Tex., study of district before mining, 26509
- Dewey, D. H., evaluation of hydrohandling system for sorting and sizing apples for storage in pallet boxes, 19109
- Dewey, Lucretia M., directory of national unions and employee associations, 1971, including State labor organizations, developments since 1969, structure and membership, 21905
- Dewsnup, Richard L., summary digest of State water laws, 30576
- DHIA, *see* Dairy herd improvement associations.
- Diabetes:
literature index (periodical), 18226, 23744
sugar in diet, diabetes, and heart diseases hearings, 30063
- Diabetic retinopathy, *see* Retinopathy.
- Diagenesis, *see* Geology.
- Diagnosis:
diagnosis and treatment of poisoning by pesticides, 31764
primary diagnosis of discharges from general hospital psychiatric inpatient units, 1970-71, United States, 23762
we want you to know about diagnostic X rays, 31342
- Diagrams, *see* Phase diagrams.
- Dialysis, economics and use of large scale electrodialysis plants on selected tidal estuarial waters, 17564
- Diamond, Leonard, relief, 28312
- Diamond drilling, sample preparation variability in diamond-drill core from Homestake Mine, Lead, S. Dak., 20572
- Diamond Point Research Natural Area, general information, 21618
- Diaphragms (mechanical devices):
use of composite diaphragms in electro-winning of titanium, 16334
- Diaries, letters, diaries, and similar personal manuscripts, 24971
- Diathermy, survey of diathermy used in Pinellas County, Pa., 17815
- Diatomic molecules, *see* Molecules.
- Dibbles, T. W., Jr., stratigraphy of southern Coast Ranges near San Andreas, fault from Colmae to Maricopa, Calif., 27569
- Dick, Richard A.:
impact of blasting agents and slurries on explosives technology, 21938
study of fragmentation from bench blasting in limestone at reduced scale, 23654
- Dickinson, David S., Federal labor-management consultant, 18319
- Dickinson, F. N., USDA-DHIA cow performance index list, May 1972, registered cows calving between Aug. 1969 and Apr. 1971, 16584
- Dickinson College, Carlisle, Pa., 200th anniversary, extend Congressional congratulations, report, 17182
- Dickson, David H., fog dissipation techniques for emergency use, 20975
- Dickson, County, Tenn., forest inventory statistics, 24077
- Diadocerus westwoodii, initial releases of *Chrysocoris larchinellae* and *Diadocerus westwoodii* for biological control of larch casebearer in western United States, 32327
- Dictionaries:
catalogs, L.C. subject headings used, supp., 18935
economic and statistical terms, 29493
military and associated terms, 26557
technical electronic and definitions, military standard, 20070
- Diedrick, Raymond T.:
soil survey—
Pope County, Minn., 17845
Swift County, Minn., 26844
- Diego Garcia, naval communications facility on Diego Garcia, agreement with United Kingdom of Great Britain and Ireland, 22274
- Dieldrin, evaluation of DDT and dieldrin in Lake Michigan, 17414
- Dielectric amplifiers, *see* Amplifiers.
- Dielectric antennas, *see* Antennas.
- Dielectrics:
abstracts of report presented at 1st all-Union Conference on Metal-Dielectric Phase Transitions, USSR study, 17635
image converter based on multi-layer semiconductor-dielectric structures, USSR study, 30342
plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030
- Diem, Ngo Dinh, U.S. involvement in overthrow of Diem, 1963, 17258
- Dies, *see* Taps and dies.
- Diesel fuel, *see* Petroleum as fuel.
- Diet:
dietary management of hyperlipoproteinemia, 31688
obesity and fat diets nutrition and diseases, hearings, 27358
ten-State nutrition survey, 22569
see also Food.
- Diethylstilbestrol:
its use as drug for humans and in animal feeds, regulations, hearings, 17057
regulation, prohibit administration to any animal intended for use as food, hearing, 20004
- Difference equations, *see* Equations.
- Differences in speed of mentally processing displays containing information about "right" and "left", 26642
- Differential analyzers, MANIP, computer system for algebra and analytic differentiation, 31719
- Differential equations, *see* Equations.
- Differential magnetic measurements near cumulus clouds, 22421
- Differential pressure mercury manometer, 28068
- Differential thermal analysis, methods for calculating thermal parameters of cooling towers, USSR study, 30353
- Differential utilization of general hospital psychiatric inpatient units by whites and nonwhites, United States, 1970-71, 23763
- Differential utilization of psychiatric facilities by men and women, United States, 29365
- Differentials in dollar payments and primary payment sources, discharges from non-Federal general hospital psychiatric inpatient units, United States, 1970-71, 25595
- Diffraction:
computerized system for quantitative X-ray diffraction analysis of pyrite in coal, 29244
determination of paleotectonic principal stress direction, including analysis of joints by optical diffraction, 26658
diffraction of X-rays in aging alloys having different degree of volumetric discrepancy between precipitation phase and matrix, USSR study, 26565
evaluation of 200 mCi ⁵⁵Fe X-ray diffraction source in focusing and Debye-Scherrer analytical applications, 25871
explanatory notes on W. H. Zachariasen's theory of X-ray diffraction in ideal crystals, 30595
radiation from apertures in curved surfaces, 32456
standard X-ray, diffraction powder patterns, 20635
- Diffusers, pressure recovery performance of conical diffusers at high subsonic Mach numbers, 32460

Diffusion:

- beryllium and beryllium-lithium complexes in single-crystal silicon, study, 21990
- characteristics and operation of cloud condensation nuclei collection/detection/recording instrument, technical manual, 22416
- characteristics of turbulent diffusion parameters as related to stability, 20980
- conceptual framework for diffusion of innovations in vocational and technical education, 30501
- coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems, 32257
- derivation of non-Boussinesq set of equations for atmospheric shear layer, 32256
- diffusional creep and creep degradation in dispersion-strengthened alloy TD-NiCr, 23686
- field program designs for verifying photochemical diffusion models, 32254
- growth and decay of turbulent mixing in planetary boundary layer, 32252
- mass diffusion in self-confined rotating flow, 23672
- mean horizontal wind speed and direction variability at heights of 1.5 and 4.0 meters above ground level at WSMR, New Mexico, 22423
- measurement of transverse diffusion coefficient in SHF plasma, 20995
- methane diffusion parameters for sized coal particles, 21952
- on utility of m-6-8 potential function, 26704
- oxygen diffusion in wet air oxidation processes, 23875
- ratio of longitudinal and transverse diffusion coefficients in argon SHF discharge plasma, 20999
- transport properties of gases and binary liquids near critical point, 20586
- transverse diffusion of solutes in natural streams, 21722
- treatment of Alaskan species by double-diffusion and modified double-diffusion methods, 23301
- user's guide to diffusion/kinetics, DIFKIN, code, 32253
- Diffusion flames, *see* Flames.
- Diffusion welding, *see* Welding.
- Diffusional and metabolic components of nitrogen elimination through lungs, effects of pressure, 31580
- DiFruscia, Anthony R., Citizens for DiFruscia, annual report, 24734
- DiFruscia, Anthony R., Committee to Elect to Congress, *see* Elect Anthony R. DiFruscia to Congress Committee.
- Digest of African countries' economic development plans, 28639
- Digestion, total soil nitrogen analysis using micro-Kjeldahl digestion and portable distillation equipment, 31369
- Digests, *see* Index digests—names of departments, etc., issuing digests—*also* subjects.
- Diggers, tunnel workers and decompression illness, 17759
- Digital adaptive control systems, *see* Control systems.
- Digital-computer program for design-analysis of salient, wound pole alternators, 29286
- Digital computer systems, *see* Electronic data processing systems.
- Digital computers, *see* Electronic computers.
- Digital filters, digital processing of radiographic images, 29252
- Digital processing of radiographic images, 29252
- Dignity instead of desperation, 17345
- Dijkers, Robert D., Coordinated Evaluation System (CES) Project model documentation for building regulation, 27736

- Dillon, E. Scott, remarks, May 22, 1973, 22692
- DiMasl, Frank P., effect of vertical active vibration isolation on tracking performance and on ride qualities, 21975
- DIME (Dual Independent Map Encoding), *see* Geography.
- Dimension yields from alder lumber, 21666
- Diminishing barrier, report on school desegregation in 9 communities, 21081
- Dimitriadis, Basil:
 - association of automotive fuel composition with exhaust reactivity, 30433
 - interpretation of gas chromatographic spectra in routine analysis of exhaust hydrocarbons, 23651
- Dimitroff, George K., Air Force civil engineer, 17972
- Dimond, Nancy, Navy Supply Corps newsletter, 18687
- Dini, J. W., non-destructive testing of plated aluminum/stainless steel joint, 29679
- Dining rooms:
 - dining facility user-attitudes and environmental design research at Travis AFB, California, 31239
 - methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall at Chanute AFB, 32201
 - preparation and serving of food in garrison dining facility, Army technical manual, 28053
- Dinnat, R. M., cost effectiveness of 3 different interior open-type offices, 25073
- Dinner Committee in Honor of Congressman Bertram Podell, annual report, 22746
- Dinosaur National Monument, canyons, general information, 23477
- Diodes:
 - development of in-situ prototype diode laser system to monitor SO₂ across stack, 30184
 - diode and thermocouple airborne temperature sensors, 31725
 - in situ Ce(Li) and NaI(Tl) gamma-ray spectrometry, 22474
 - magneto-Schottky-diode-integrated circuits, 19158
 - transistors and diodes, workers of Buffalo, N.Y., plant of General Electric Co., Tariff Commission report, 32598
- Diplomacy:
 - diplomatic privileges and immunities to Mission of European Communities—law, 19430
 - report, 19680
 - international exchange, people's diplomacy in action, 23997
 - new diplomacy, trade takes front seat (address), 22629
 - opportunities and problems of regionalism, science, technology, and American diplomacy, 21230
 - science, technology, and American diplomacy, 21229, 28410
 - Vienna convention on diplomatic relations and optional protocol on disputes, 24005
- Diplomatic and consular service, *see* Government missions.
- Diplomatic list, 18231
- Diplomats, scholar-diplomat seminars, 29537
- Direct current, *see* Electric currents.
- Direct lift control, analytical and experimental investigation of circulation control by means of turbulent Coanda jet, 17701
- Direct mail advertising, broken promises, and shaken premises, 22627
- Direct method of determining methane content of coalbeds for ventilation design, 29238
- Direct solar radiation on various slopes from 0 to 60 degrees north latitude, 32345

INDEX 1973

Direct support, Air Force manpower standards, 24149
 Direction finding, *see* Radio direction finding.
 Direction, Navy Public Affairs monthly, 18232
 Directional stability, *see* Stability of aircraft.
 Directories:
 airport, airmen's information manual, 17445, 17984, 26427
 area wage surveys, 31565
 aviation medical examiners, 16678
 broker-dealer and investment adviser directory, 29463
 college student volunteer programs, 30686
 Congress of United States—
 93d Cong. 1st sess., 25980
 pictorial, 24290
 Dental Health Division, 26520
 directory of—
 automated criminal justice information systems, 25368
 contract administration services components, DOD, 28593
 field contacts for coordination of use of radio frequencies, 32279
 information resources in United States, biological sciences, 16239
 institutions for mentally disordered offenders, 16390
 law enforcement and criminal justice association and research centers, 30474
 minority media, 29817
 on going research in smoking and health, 27042
 postsecondary schools with occupational programs, public and private, 30135
 secondary schools with occupational curriculums, public-nonpublic, 30136
 State-USA rural development committees, 26424
 domestic programs fact book, 18235
 DSA (Defense Supply Agency) organization directory, 21402, 28591
 Economic Development Administration, approved projects, 21415, 28643
 education—
 education associations, 15989
 higher education, 1972-73, 20094
 public school systems, 17358, 23137
 FAA certified aviation maintenance technician schools, 31315
 Federal environmental monitoring directory, 30080
 Federal financial management directory, 31376
 Federal item name directory for supply cataloging—
 abbreviations and symbols, 27376
 alphabetic index of names, 18316
 numeric index of item name codes to Federal item identification, names, etc., 15939, 18317, 24980
 Federal juvenile delinquency and related youth development programs, handbook for juvenile delinquency planners, 27590
 Federal statistical, 29192
 food and agricultural export directory, 31349
 foreign consular offices in United States, 29527
 Forest Service organizational directory, 28922
 Government periodicals and subscription publications, 18641
 groups that can help, directory of environmental organizations, 16017
 halfway houses for mentally ill and alcoholics, 25588
 Health Services and Mental Health Administration, job directory, 25268
 Housing act development progress directory—
 acquisition programs, 32371
 Indian programs, 29079
 turnkey programs, 29080

Directories—Continued
 information resources in United States, social sciences, 29183
 Interior Department, directory of procurement offices, 16138
 International—
 demographic data computerized information retrieval system for demographic and family planning data, 21067
 investigators in psychopharmacology, 17765
 mail, 18508
 Job Corps Centers, Civilian Conservation Centers, Men's Centers, Residential Manpower Centers, Women's Centers, Residential Support Centers, 20489
 JPRS ad hoc publications, 1972 directory, reference aid, 25338
 local employment security, offices, 25372
 meat and poultry inspection program establishments, circuits and officials, 18233
 medicare providers and suppliers of services under health insurance for the aged, hospitals, extended care facilities, etc., directory, 25702
 military assistance program address directory, 15971, 17339-340, 23117-118, 25028-29, 26339, 28623, 31196, 32180
 minority groups, directory for research, 29657
 national unions and employee associations, 1971, including State labor organizations, developments since 1969, structure and membership, 21905
 national ZIP code directory, 26910, 31891
 rehabilitation facilities, national directory, region 10, 23947
 representative work education programs, 32195
 scientific directory and annual bibliography, 31703
 service area directory, Social Security Administration, 31812
 States—
 and area-wide comprehensive health planning agencies under sec. 314 of Public health service act, 22650
 merit systems, 19280
 metropolitan and regional clearing-houses under Office of Management and Budget, 25389
 technical personnel access directory, 28843
 telephone—
 Atomic Energy Commission, 19186
 Defense Department, 18220
 Interior Department, 21815
 Labor Department, 32430
 NASA headquarters, 18661
 State Department, International Development Agency, Arms Control and Disarmament Agency, 20791, 29538
 Overseas Private Investment Corporation, 31850
 Transportation Department, 18223
 Treasury Department, 18957
 U.S. Government purchasing and sales, 32551
 urban renewal directory, 29081
 VISTA fact book, 19048
 wage chronologies, 27682
 Water Resources Council, coordination directory for planning studies and reports, 25806
 Directors, health services, guide for project directors and health personnel, 21746
 Dirofilaria, laboratory technique for producing microfilariae of Dirofilaria, 15515
 Disability evaluation:
 economic validation of rating schedule for veterans' pensions, 21293
 expanding joint use of evaluation facilities by disability determination units and vocational rehabilitation, 17819
 persons with work disability, census of population, subject reports, 22533

Disability Insurance:
 answers for doctors, social security disability program, 22228
 disabled? find out about social security disability benefits, 16379
 if you become disabled, social security benefits, 31809
 Longshoremen's and harbor workers compensation act, amendments, 21372
 social security—
 benefit, statistics, monthly, 16480, 18638, 29502
 rulings, 18912
 your social security, 20772
 rights and responsibilities, disability benefits, 31815
see also Old-age, survivors, disability, and health insurance.

Disabled:
 acute conditions, incidence and associated disability, United States—
 July 1969–June 1970, 16370
 July 1970–June 1971, 29331
 aid to disabled, social security amendments, material related to H.R. 1, 19966
 aid to permanently and total disabled program, findings of 1970 APTD study, demographic and program characteristics, 23727
 blind and otherwise physically disabled in District of Columbia establish rights to participate in social and economic life—
 law, 19445
 report, 17200
 child care and disabled dependent care, income tax deduction, 25301
 Developmental disabilities services and facilities construction act—
 amend—
 hearing, 30054
 report, 28360
 extend appropriations authorizations—
 law, 32003
 report, 28353
 disabled—
 find out about social security disability benefits, 16479
 means of meeting medical care charges, 23971
 widows, 22231
 income of OASDHI beneficiaries and other disabled, 26833
 Limitation of activity due to chronic conditions, 1969–70 United States, 27746
 new rates of disability and death pension, 17308
 personal care and household help needs of noninstitutionalized disabled, 22229
 sensory and neurological disabilities, estimated numbers and cost, 27787
 social security survey, reports, 22229–231, 23971
 specially adapted housing for disabled veterans, questions and answers, 26914
 supplementary security income, report, 15860
 Veterans' Administration proposed revision of schedule for rating disabilities, 27372
 work disability of family heads by family income in 1969 for U.S., 24220
see also Disability Insurance—Handicapped—Pensions—Rehabilitation of the disabled—Veterans.

Disabled American Veterans:
 legislative recommendations, 1973, hearings, 27367
 recommendations 1973, hearings, 26183
 report, 1972 convention, 24806

Disadvantaged:
 Community manpower training and employment act bill text, section-by-section analysis, and background material, 17277
 do you need help? talent search and upward bound programs, 23136

Disadvantaged—Continued
 Federal programs for manpower services for the disadvantaged in District of Columbia, GAO study, 25245
 guidelines for identifying, classifying, and serving disadvantaged and handicapped under Vocational education amendments of 1968, 25054
 improving opportunities for employment of disadvantaged in State and local governments, guide for effective action, 30881
 methods of assessing disadvantaged in manpower programs, review and analysis, 26613
 productive employment of disadvantaged, guidelines for action, 30402
 selection and development of staff from disadvantaged groups (address), 29001
 some French initiatives in educating socially and culturally disadvantaged, 30151
 specialized language activities for rural disadvantaged, South Paris, Maine, 27778
see also Poor.

Disadvantaged children, *see* Children.

Disadvantaged youth, *see* Youth.

DiSalvo, Louis H., bacterial counts in surface open waters of Eniwetok Atoll, Marshall Islands, 25695

Disarmament:
 agreements, appropriations, 1973, hearings, 15715
 arms control and disarmament—
 agreements, 20963
 bibliography (periodical), 18008
 arms control in hydrospace, legal aspects, 17827
 arms control in light of SALT decisions, based on United States and Soviet positions during international negotiations, 27333
 Arms Limitation Standing Consultative Commission, agreement with Union of Soviet Socialist Republics, 26871
 documents, 24165
 limitation of strategic offensive arms, agreement with Union of Soviet Socialist Republics, 25749
 law, 19383
 reports, 19618, 21170
 military authorization request related to strategic arms limitation agreement, amend, hearings, 17225
 SALT agreements, text of treaty, 19548
 strategic arms limitation—
 SALT, delegations, status, privileges, and immunities, agreement with Switzerland, 26861
 talks agreement, military implications, hearings, 17029

Disasters:
 aircraft emergency procedures over water, 21093
 Buffalo Creek, W. Va., 17276
 hearings, 15921
 building practices for disaster mitigation, 23702
 capability of Naval petroleum and oil shale reserves to meet emergency oil needs, GAO report, 17524
 checklist guide for nuclear emergency operations planning, 30082
 concerning disaster relief, message from the President, 19554
 disaster assistance hearings, 32137
 disaster operations, handbook for local governments, 20026
 Disaster preparedness—
 and assistance act, draft of proposed legislation, 30952
 report, 20098
 disaster relief—
 act, amend, report, 19721
 appropriations, 1973, supplemental—
 authorize hearings 15867
 law 16897

INDEX 1973

Disasters—Continued

disaster relief—Continued
 SBA program, administration, hearings, 23043
 disaster survey team report on events of Agnes, 25618
 educational assistance in major disaster areas, 1971 annual report, 27427
 emergency disaster bill to prevent forest fires in Alameda and Contra Costa Counties, Calif., report, 28466, 32067
 Emergency employment act—
 amend, hearings, 28403
 amend reports, 29981, 32068
 interim assessment, 17279
 emergency food and medical services, committee print, 23063
 emergency health care services report, 30963
 emergency loan program, source of funds for farmers and ranchers to disaster areas, reports, 26073, 26077, 27134
 Emergency medical services act, report, 15711, 32116
 emergency planning in communications and electronics equipment industries, 20082
 Emergency rail facilities restoration act—
 hearing, 19953
 law, 19516
 reports, 19713, 19860
 environment, problems, solutions and emergency preparedness, 20029
 Federal agency contacts for natural disaster, 31417
 Federal disaster relief legislation to investigate adequacy and effectiveness, hearings, 28571
 Federal plan for natural disaster warning and preparedness, 30517
 Flood disaster protection act, report, 29870, 29880
 food stamp facts, disaster situations, 27523
 highway emergency relief, additional appropriations, authorize, law, 16882
 home mortgage insurance for disaster victims, and for outlying area properties, etc., 23430
 hospital outpatient and emergency activities, selected references, 29034
 military medical helicopter services to civilians in emergencies, authorize, report, 28336
 national emergency—
 readiness of Federal personnel management, manual, 18337
 standby regulations and instructions, FPM supplement, 18340
 natural, civil defense role, 21394
 natural disaster survey reports, 23799, 25618
 nuclear and natural, civil defense role, 21392
 predisaster assistance for eucalyptus trees in California, hearing, 30012
 preservation of human resources during national crisis HEW emergency preparedness programs, 32368
 reduce interest rate on Small Business Administration disaster loans, law, 16893
 State statutes on emergency medical services, 29043
 tax information on disasters, casualty losses and thefts, 26545
 teacher's manual for your chance to live, 26299
 warning, emergency operations, and support programs, civil defense role, 21395
see also Relief work.
 Disbursements, distribution of medicare benefit disbursements by type, 25701
 Disbursing officers:
 attorneys and agents registered to practice before U.S. Patent Office, 29443
 deputy disbursing officer, and certifying officers and employees of Government Printing Office, 29960

DISC, *see* Domestic International Sales Corporation.

Discharge:
 adverse action, law and regulations, FPM manual supplement, 18333
 controlled discharge from dam as means of flushing saline water from fresh-water reach of Caloosahatchee River, Lee County, Fla., 23336
 localization of wave transformation region in superhigh-frequency discharge plasma, study, 21006
 need to control discharges from sewers carrying both sewage and storm runoff, GAO report, 26480
 prediction approach to finite population sampling theory, application to hospital discharge survey, 29329
 Discharge of indebtedness, *see* Debts.
 Discharges (electric), *see* Electric discharges.
 Discipline, discipline is not a dirty word, 21969
 Disclosure in accounting:
 disclosure, best protection for corporation as well as investor (address), 30620
 SEC disclosure system, real estate and oil and gas (address), 30628
 Discounts, member bank borrowing, portfolio strategy, and management of Federal Reserve discount (paper), 21570
 Discovering Prince William Forest, 32514
 Discovering yourself in brain age, journey to universe of inner space, 26754
 Discrete functions, steady-state solutions of discrete-velocity Boltzmann systems in restricted flow regions, 23874
 Discrete levels of beginning height of meteors in streams, 23958
 Discrimination, *see* Race problems.
 Discrimination in education:
 diminishing barrier, report on school desegregation in 9 communities, 21081
 education act extends discrimination and minimum wage provisions, 22304
 Federal financial assistance for deprived students and removal of dual school system, report, 21169
 financial aspects of equality of educational opportunity and inequities in school finance, 17249
 5 communities, their search for equal education, 22577
 higher education guidelines, Executive Order 11246, 32367
 public school desegregation, leading court decisions, 17071
 remaining dual school systems shall be abolished, hearings, 15729, 17037, 23012
 school busing, hearings, 15765
 title 4 and school desegregation, study of neglected Federal program, 22590
 toward equal educational opportunity, study report, 21332
 Discrimination in employment:
 Age discrimination in employment act interpretative bulletin, 24098
 broadening equal employment opportunities for women (remarks), 32428
 economic data, equal employment, opportunity program, state of Arizona, 17816
 education act extends discrimination and minimum wage provisions, 22304
 Education Office discrimination against women, hearings, 23014
 EEO counseling, Army Department, 24167
 employment problems of women, classic example of discrimination 28848
 employment profiles of minorities and women in SMSA's of—
 16 large cities, 23207
 17 large cities, 30206
 equal employment opportunity—
 act, 17280
 legislative history, 31155
 complaint and compliance review, reporting and control procedure, HUD, 31433

Discrimination in employment—Continued
 equal employment opportunity—con.
 Federal employment, newsletter, 18268
 governments of City of Tacoma and
 county of Pierce, Wash., 22579
 is law (poster), 25133
 report, 20236
 State and local governments, guide for
 affirmative action, 24259
 trucking, industry at crossroads, 21525
 Executive Order 11246, contract compli-
 ance handbook, 23438
 expanding opportunities, women in Fed-
 eral Government, 27045
 Federal women's program (address), 30518
 improving opportunities for employment of
 disadvantaged in State and local govern-
 ments, guide for effective action, 30881
 minorities and women—
 availability data, 32366
 utilization in public utilities industry.
 Equal Employment Opportunity Com-
 mission, hearings, 25134
 Negro employment in South, State and
 local governments, 25373
 promise vs. performance, status of equal
 employment opportunity in nation's gas
 and electric utilities, 17442
 recent advances toward equal employment
 opportunities (remarks), 23585
 SBA's equal employment opportunity com-
 pliance program, 25693
 sex discrimination in employment—
 brief highlights of major Federal laws
 and order, 22303
 Federal civil rights act, title 7, State
 fair employment practices, law, execu-
 tive orders, 29590
 unemployment and racial discrimination
 in employment, oversight hearings,
 23011
 women in federally assisted programs, in
 employment and in education extend
 equal pay act to prohibit, hearings, print
 additional copies, report, 16998
 Discrimination in housing:
 fair housing, U.S.A., Spanish edition, 23454
 Federal government's role in achievement
 of equal opportunity in housing, hear-
 ings, 15766
 processing procedures for title 6 complaints
 and compliance reviews, HUD, 29074
 role of Farmers Home Administration in
 achievement of equal opportunity in
 housing, 19787
 understanding fair housing, 25947
 your housing rights, live where you want
 to live, Spanish edition, 21809
 Discrimination reaction, pitch discrimination
 in background noises up to 95 dB SPL,
 30410
 Discriminatory State taxation of interstate
 carriers, 15850
 Discs. *see* Disks.
 Discussion of engineering linguistics, 29136
 Diseases:
 acute conditions, incidence and associated
 disability, United States, July 1969-June
 1970, 16370
 control in healthy and diseased organism,
 USSR study, 27623
 leading causes of death in selected areas
 of the world, 21370
 limitation of activity due to chronic con-
 ditions, 1969-70, United States, 27746
 net differences in interview data on
 chronic conditions and information de-
 rived from medical records, 32489
 nutrition and disease—
 hearings, 28568, 30063
 obesity and fad diets, hearings, 27358
 respiratory diseases, task force report on
 problems, research approaches and needs,
 National Heart and Lung Institute Lung
 Program, 27761

Diseases—Continued
 water, diseases, and man, USSR study,
 17613
see also Contagion and contagious dis-
 eases—Diseases of animals—Diseases of
 plants—names or classes of diseases.
 Diseases of animals:
 animal morbidity report, monthly, 17994
 epizootological importance of Pasteurella
 pestis strains having various amino acid
 requirements, USSR study, 16187
see also names of diseases or animals af-
 fected.
 Diseases of insects using diseases to kill
 plant insect pests, research progress, re-
 port, 20884
 Diseases of plants:
 forest diseases of Pacific Northwest, 23273
 forest insect and disease conditions in U.S.,
 17506
 plant disease reporter, 18760
 rice diseases, 16593
 root diseases and soil microbiology, 21683
 tree hurts, too, infection of wounds cause
 decay, 30249
see also names of diseases of plants af-
 fected.
 Dishwashing machines:
 contractual service requirements for auto-
 matic dishwashing machine accessory
 equipment and supplies, 28617
 dishwashers, consumer information series,
 23248
 Disinfection and disinfectants:
 disinfection, water quality standards,
 20860
 criteria digest, 20223
 microstraining and disinfection of com-
 bined sewer overflows, phase 2, 25112
 pest control agents and disinfectants Fed-
 eral item identification guide, 32172
 Disks, turbulent fluid friction of rotating
 disks, 31607
 Dislocation of crystals, *see* Crystallography.
 Dismal Swamp:
 Great Dismal Swamp and Dismal Swamp
 Canal, preservation, authorize study—
 law, 16926
 report, 17003
 Dismal Swamp Canal:
 Great Dismal Swamp and Dismal Swamp
 Canal, preservation, authorize study—
 law, 16926
 report, 17003
 Dispatchers, dispatcher, emergency medical
 technician, training course, 20662
see also Aircraft dispatchers.
 Dispensers, liquid fueling and dispensing fa-
 cilities, 25651
 Dispersal of coal- and rock-dust deposits,
 16332
 Dispersion:
 atmospheric dispersion estimates, work-
 book, 22374
 diffusional creep and creep degradation in
 dispersion-strengthened alloy TD-NiCr,
 23686
 dispersing antiferromagnetic precursors to
 prepare magnetic fluids, 23652
 dispersion in solid water (series), 21722
 on utility of m-6-8 potential function,
 26704
 standard dispersant effectiveness and tox-
 icity tests, 28811
 Dispersion systems, laboratory evaluation of
 electrostatic dynamic fog dispersal concept,
 24049
 Displacement:
 calibration of displacement transducers,
 22498
 eardrum displacement following stapedius
 muscle contraction, 29198
 statistical prediction of impact displace-
 ment, due to wind effect on unguided
 artillery rocket, during powered flight,
 20978

INDEX 1973

- Displacement—Continued
 - three-dimensional elastic stress and displacement analysis of—
 - finite circular geometry solids containing cracks, 29287
 - tensile fracture specimens containing cracks, 27713
- Display panels, *see* Display systems.
- Display systems:
 - BESM-4 and SDS-1604A computer video-display and its application in processing spark and bubble-chamber photographs, USSR study, 25364
 - NAVSHIPS display illumination guide, introduction to light and color, 30597
 - potential reflection problems when using NAS model 3d display in vertical position in air route traffic control centers, evaluation, 24039
 - techniques used in display of sequential images received from geostationary satellites, survey, 22417
- Displays, *see* Exhibits.
- Disposal of cattle feedlot wastes by pyrolysis, 23189
- Disposal of radioactive wastes, 26568
- Disposal of refuse, *see* Refuse.
- Disposition of public assistance cases involving questions of fraud, 16371
- Disseminated silver-lead-zinc sulfide occurrence at Hans Peak, Routt County, Colo., 26493
- Dissertations (academic):
 - Soviet medical graduate study standards, USSR study, 17608
- Dissimilar metals, military standard, 15962
- Dissociation:
 - dissociation energies of some high temperature molecules containing aluminum, 23689
 - dissociation rate of bromine diatomics in argon heat bath, 23685
- Dissolved oxygen, water quality standards criteria digest, 20224
- Dissolved solids, 25128
- Distance measuring equipment, TACAN-DME false distance lock-on, 30654
- Distance (psychology):
 - ability of elementary and secondary school children to sense oncoming car velocity, 15625
- Distances:
 - distances between United States ports, 32505
 - elevations and distances in United States, 32360
 - improving distance estimation under water—
 - long-term effectiveness of training, 20531
 - use of monocular motion parallax, 31582
- Distillation apparatus, total soil nitrogen analysis using micro-Kjeldahl digestion and portable distillation equipment, 31369
- Distilled spirits, *see* Liquors.
- Distortion:
 - apparent object movement produced by head movement under water, 16247
 - handedness and adaptation to distortions of size and distance under water, 26641
 - improving distance estimation in water—clear and turbid, 20530
 - long-term effectiveness of training, 20531
- Distribution and evolution of radioelements after nuclear explosion, 16671
- Distribution centers, food distribution facilities for Wilkes-Barre and Scranton, Pa., 26939
- Distribution (economics):
 - criminal redistribution systems and their economic impact on small business—
 - analysis, 15931, 17302
 - hearings, 31165
 - see also* names of commodities.
- Distribution of α -tocopherol in human plasma lipoproteins, 28060
- Distribution of forage of skipjack tuna (*Euthynnus pelamis*), in eastern tropical Pacific, 22103
- Distribution of odd nitrogen in lower stratosphere and possible perturbations caused by stratospheric air transport, 32462
- Distribution of radionuclides in bottom sediments of Columbia River estuary,
- Distribution of total ozone content of atmosphere according to satellite observations, 21856
- Distribution (statistics):
 - attribute sampling inspection procedure based on hypergeometric distribution, 15526
 - neutron dose and fluence distributions in infinite air medium, 23711
- Distribution system, *see* Military supplies.
- District Courts:
 - Federal offenders, 1970, with criminal sentence analysis, 19099
 - Federal rules of appellate procedure, with forms, 15768
 - Florida District Court, analysis of decision of American Waterways Operators, Inc. et al. v. Askew, 17296
 - rules of criminal procedures proposed amendments, 24110
 - time study, 1969-70 Federal District Court time study, 30219
- District No. 27—USA—Committee on Political Education Voluntary Fund, annual report, 24792
- District of Columbia:
 - airports, Federal aviation regulations, 18300
 - Allen J. Ellender fellowships, provide for D.C.
 - law, 19436
 - report, 19896
 - appropriations, 1973, law, 16875
 - appropriations, 1974—
 - authorization, hearings, 28389
 - hearing, 27184, 31128, 32131
 - reports, 30972, 31002
 - area wage survey, 17664
 - best bets for returning veterans in Washington, D.C. area, 18027
 - blind and otherwise physically disabled establish rights to participate in social and economic life—
 - law, 19445
 - report, 17200
 - bus systems acquisition by WMATA in National Capital area—
 - law, 19447
 - legislative history of bill, 23056
 - report, 19911
 - census of housing, 1970—
 - components of inventory change, 30797
 - housing characteristics for States, cities, and counties, 15538
 - census of population, 1970—
 - characteristics of population, 29699
 - detailed characteristics, 19201
 - charter act, enact, report, 31069
 - code of laws, 1967 edition, supp., 23022
 - construction authorized, 18148
 - conveyance of land to National Firefighting museum and Center for Fire Prevention, Inc.—
 - law, 19422
 - report, 19892
 - county business patterns, 29731
 - current local civil service examinations covering metropolitan area, 18196
 - Dwight D. Eisenhower Bicentennial Civic Center—
 - build on Northwest D.C. site, authorize—
 - hearing, 17083, 17972
 - reports, 16993, 17019
 - construction, maintenance, and operation—
 - laws, 19450
 - report, 19858

District of Columbia—Continued
 election act, amend regarding times for
 filing certain petitions, regulating pri-
 mary election for delegates—
 hearings, 32143
 law, 32013
 reports, 32037, 32723
 electric rate book, 21553
 exclude D.C. police personnel records from
 public inspection—
 law, 19472
 report, 17201
 Federal programs for manpower services
 for the disadvantaged in District of
 Columbia, GAO study, 25245
 home rule, 1973, provide elected mayor and
 city council, hearing, 28531
 implied consent to test operators of motor
 vehicles for intoxication—
 law, 19449
 report, 17207
 incorporate National Inconvenienced
 Sportsmen's Association, report, 17019
 insurance act, amend—
 hearings, 32143
 law, 32012
 reports, 19670, 31111, 32036
 insurance, regulation of, improve laws,
 report 31111
 interstate agreement on qualification of
 educational personnel, authorize D.C. to
 enter, report, 27124
 legislating for Nation's Capital, report on
 activities, 92d Congress, 1st session,
 17248, 21330
 local climatological data, Washington,
 D.C.
 Dulles International Airport, 18592
 National Airport, 18592
 longshoremen's and harbor workers' com-
 pensation made applicable to District of
 Columbia workmen's compensation act,
 21372
 mayor and city council, elect, report, 31069
 Metropolitan Police Dept., examination an-
 nouncement, amendment, 22596
 payroll operations of District of Columbia
 government need improvement, GAO re-
 port, 20337
 programs and activities previously in-
 cluded in annual appropriations, legisla-
 tive authorization, report, 31112
 protect public health and safety by amend-
 ing narcotic depressant, stimulant, and
 hallucinogenic drug laws, report, 19674
 Public building act, amend—
 law, 29830
 reports, 27171, 31076
 public school finance programs, 1971-72.
 States, District of Columbia, and outly-
 ing areas, 23141
 public utilities, reimbursement of costs of
 relocation or abandonment losses—
 law, 19426
 report, 19902
 regular income limits for sec. 235-236
 housing, rev. pages, 23444
 rent control—
 act, hearing, 32144
 authority, establish, hearings, 29898
 regulation and stabilization, authorize
 report 32038
 Robert F. Kennedy Memorial Stadium, ad-
 ditional seats, hearing, 30016
 salary increases for District of Columbia
 police and firemen—
 law, 16910
 report, 16975
 substitute teachers retirement credits, law,
 19389
 taxicab meters, Public Service Commission
 study, authorize, hearing, 15889
 teachers, increase salaries and revise re-
 tirement benefits—
 law, 19448
 report, 19928

District of Columbia—Continued
 teachers' salary act amendments of 1972—
 hearing, 15726, 21331
 report, 19671
 10-year limitation from time of defective
 or unsafe improvements on real prop-
 erty on actions arising out of death or
 injury in D.C.—
 law, 19504
 report, 19914
 truck inventory and use survey, 24223
 urban river, staff proposal for waterfront
 development, 23719, 25562
 voting representation in Congress, hear-
 ing, 23065
 welcome to Washington, 27823
 youth act for prevention of juvenile
 delinquency, hearings, 21329
 District of Columbia Commission on Or-
 ganization of Government:
 report, 19549
 print additional copies report, 16997
 District of Columbia Committee for Dr. Roy,
 annual report, 24490
 District of Columbia Committee, House:
 calendar, 18545
 hearings, 15726, 29898
 investigations and studies, authorization
 and expenses, reports, 24831, 26089
 reports, 16952, 17019, 19582-583, 19670-
 671, 19674, 27124-125, 32036-38
 District of Columbia Committee, Senate:
 calendar, 18564
 committee prints, 17248, 21330, 23056
 hearings, 15884-889, 19961-962, 21329,
 21331, 28531, 30016, 32143-144
 legislating for Nation's Capital report on
 activities, 92d Congress, 17248, 21330
 reports, 17200-201, 17207, 19892, 19902,
 19911, 19914, 19928, 31069, 31076,
 31111-112, 32123
 District of Columbia Council:
 increase compensation of members, hear-
 ing, 15885
 members, nomination of Rockford H.
 Foster, Jerry A. Moore, Jr., and Mar-
 joria H. Parker, hearing, 15885
 District of Columbia Court of Appeals, see
 United States Court of Appeals for Dis-
 trict of Columbia.
 District of Columbia Insurance Guaranty As-
 sociation:
 establish—
 law, 32012
 reports, 19670, 31111
 District of Columbia metropolitan area:
 accommodations for handicapped on
 Metro system, hearing, 21287
 bus systems acquisitions by WMATA, hear-
 ings, 15884
 catalog for adult continuing educational
 opportunities, for government employees
 in Washington metropolitan area, 27049
 Federal library operations in metropolitan
 Washington, GAO report, 30262
 mental health resources in greater Wash-
 ington area, 32498
 rapid transit, Federal payment for addi-
 tional facilities, hearing, 15886
 Districts, see Special districts.
 Disulfides:
 controlled myorelaxants and ganglioblock-
 ers with disulfide bond, USSR study,
 21865
 role of mixed disulfide bonds in radiopro-
 tective effect of B-mercaptopoethylamine
 (MEA), USSR study, 16192
 Ditches, oxidation ditch sewage waste treat-
 ment process, 21540
 Divers:
 apparent object movement produced by
 head movement under water, 16247
 diver-rescue worker, guide, USSR study,
 26567
 faceplate, official magazine for divers of
 U.S. Navy, 18278

INDEX 1973

Divers—Continued

- improving distance estimation in water—clear and turbid, 20530
- long-term effectiveness of training, 20531
- intelligibility of hydrogen-speech at 200 ft. of seawater equivalent, 16249
- Navy diving manual, 27857
- pinger receiver, description, 22113
- speech intelligibility during exercise at normal and increased atmospheric pressures, 16248
- visual evoked responses for divers breathing various gases at depths to 1200 ft., 16252

Dividends, *see* Life Insurance.

Dividends from wood research, 25206, 32310

Dividers, *see* Frequency dividers.

Diving:

- available heated wet-suit protection for divers and swimmers, 31581
- effects of helium on mechanics of respiration, with clinical correlations, literature review, 32444
- electroencephalographic changes during saturation excursion dives to simulated seawater depth of 1000 feet, 25404
- intelligibility of processed helium speech at diving depths greater than 1000 feet, 20527
- methemoglobin formation in humans during exposures to hyperbaric oxygen in standard Navy decompression treatment table, 25403
- Navy diving manual, 27857
- optical and visual tests on Navy prototype hard hat diving system, 26646
- pathogenesis of skin bends, review, 16246
- simulated breathholding dives in dry and wet chambers on blood shifts into thorax, effect, 29199

Diving outfits:

- available heated wet-suit protection for divers and swimmers, 31581
- optical and visual tests on Navy prototype hard hat diving system, 26646

Divorce:

- divorces, analysis of changes, 1969, United States, 27753
- marriage, divorce, and remarriage by year of birth, 16780
- vital statistics of U.S., 25570

DME, *see* Distance measuring equipment.

DMI, *see* Manpower Intelligence Division.

DMRE, *see* Medical Radiation Exposure Division.

DNC, *see* Democratic National Committee.

Do you hesitate to smile? 29196

Do you need help? 23136

Docking (spacecraft), *see* Spacecraft.

Docks:

- terminals, docks, mooring locations and warehouses, list—
- Illinois River, 31254
- Mississippi River, 31255–257

Doctors, *see* Physicians.

Documentary films, *see* Motion pictures.

Documentation:

- automated engineering document preparation system military standard materials, 30121
- Coordinated Evaluation System (CES) Project model documentation for building regulation, 27736
- patent documentation use in—
- analyzing technological development trends, USSR study, 31523
- medium-term technological forecasting, USSR study, 31524
- yacht admeasurement and documentation, 15613
- see* Government publications—Records—subject of documents.

Documents Office, *see* Public Documents Department.

DoD, *see* Defense Department.

Dodge, F. C. W., trace-element contents of some plutonic rocks of Sierra Nevada batholith, 17526

Dodge County, Democratic Party, *see* Democratic Party of Dodge County.

Dodge County Republican Committee, annual report, 24502

Dodson, Harold L., fish kills caused by pollution in 1971, annual report, 23195

Doe, John, et al. petitioners, v. McMillan, court proceedings and actions of vital interest to Congress, 32019

Does cessation of negative stimulus cause activation of brain's emotionally positive zone? 20462

Dogs, scout dog training and employment, field manual, 24170

Doherty, J. R., on the prediction of Loran-D, 19305

Doing business with NATO, how U.S. companies can participate, 21414

Dolan, Francis X.:

- development of mobile system for cleaning oil-contaminated beaches, 28822
- pressure recovery performance of conical diffusers at high subsonic Mach numbers, 32460

Dole, Hollis M., remarks, Oct. 5, 1972, 21814

Dollars:

- dollars for food, fiscal year 1974 budget, 24955
- Par value modification—
- act amend—
- hearings, 24913, 26153
- reports, 24901, 26225, 28337
- background material, 17033
- size and shape of medical care dollar, 30635
- chart book, 17835

Dolomite, designing blast patterns using empirical formulas, comparison of calculated patterns with plans used in quarrying limestone and dolomite, with geologic considerations, 17679

Dolphins:

- bioenergetic and hydrodynamic aspects of dolphin swimming, USSR study, 27630
- complex form of behavior of dolphins *Tursiops truncatus* (Montagu), USSR study, 16203
- theoretical drawing of Black Sea dolphin *Tursiops truncatus mont.*, USSR study, 25386

Domestic and international transportation of U.S. foreign trade, 1970, 16786

Domestic-civilian agencies, *see* Government offices.

Domestic commerce, *see* Commerce.

Domestic Commerce Bureau:

- official texts, 18025
- press releases, 18776

Domestic International Sales Corporation, ship American bonus, how DISC corporations benefit by using U.S. flag ships, 17675, 21929

Domestic programs fact book, 18235

Domestic service, *see* Servants.

Domestic shipping and maritime policy, 20517

Domestic Shipping National Planning Conference, *see* National Planning Conference on Domestic Shipping.

Domestic tourism, 30555

Domestic volunteer service act, 29889

Dominican Republic:

- economic trends and their implications for United States, 26552
- gazetteer, official standard names, 21705
- meat, agreement, 22266
- military assistance, deposits under Foreign assistance act, agreement, 16515
- mineral industry, minerals yearbook chapter, 20539
- U.S. aid, public safety, and military assistance, 15893

- Dominick V. Daniels for Reelection Committee, annual report, 26026
- Don Reeves for Congress, annual report, 22835
- Donald, Gordon, development digest, 18225
- Donaldson, Coleman duP.:
atmospheric turbulence and dispersal of atmospheric pollutants, 32255
derivation of non-Boussinesq set of equations for atmospheric shear layer, 32256
- Donations, *see* Gifts.
- Donn, Leo A., national directory of rehabilitation facilities, 23947, 25686
- Donnelly, Warren H., effect of Calvert Cliffs and other court decisions upon nuclear power in the United States, 17265
- Don't be gypped, 20279
- Don't leave it all to experts, citizen's role in environmental decision making, 26397
- Dooley, James E., compound type separation and characterization studies for 370° to 535° C boiling distillate of Gach Saran, Iran, crude oil, 30441
- Doors, covers, access, Federal item identification guide, 26315
- Dope (coating materials):
effect of MeV electrons on ceria-doped solar cell cover glass, 29282
- Doppler effects, laser Doppler velocity measurements of swirling flows with upstream influence, 31610
- Doppler radar:
Doppler spectra—
analysis using minicomputer, 17777
wind wave studies, 27850
simulated real-time displays of Doppler radar velocity field, 25619
- Dorfman, Leon M., reactivity of hydroxyl radical in aqueous solutions, 30470
- Dorfman, William, projects, products, and services of National Center for Educational Statistics, 28679
- Dorman Mills, certain woven fabrics of wool, manmade fibers, and blends, including laminated fabrics, workers of Dorman Mills, Parsons, W. Va., Tariff Commission report, 24059
- Dorothy Franke Committee for Congress, annual report, 24706
- Dose, calibrator pilot study, 31680
- Dosimeters:
Investigation of thermoluminescent dosimeters for environmental monitoring, 22477
soldering accident dosimeter to film badge holder for radlac detecting element, process, military standard, 20069
- Dosimetry, marine products development irradiator program dosimetry and operations, 28087
- Doswell, Charles A., jr.:
iterative method for saturation adjustment, 22414
two-dimensional short-range fog forecast model, 22413
- DOT, *see* Transportation Department.
- Dotts, Robert L., Apollo experience report, spacecraft heating environment and thermal protection for launch through atmosphere of earth, 26687
- Doub, Albert, jr., tobacco in United States, production, marketing, manufacturing, exports, 28003
- Double Bridges Creek:
flood plain information, Geneva, Ala., 32208
floods in Geneva, Ala., Choctawhatchee River, Pea River, Double Bridges Creek, 32236
- Dougall, R. S., subcooled forced convection boiling of trichlorotrifluoroethane, 20592
- Doughty, D. A., characterization of valence state of iron in coal dust, 25503
- Douglas fir, *see* Fir.
- Douglas-fir tussock moths, *see* Tussock moths.
- Douty, H. M., labor law and practice in Great Britain, 20496
- Dover Shoe Manufacturing Co., women's dress and casual shoes, Somersworth, N.H., Tariff Commission report, 25786
- Doves, *see* Mourning doves.
- Dow Chemical Company:
evaluation of landing mat—
extruded aluminum 4 piece 4 by 4-ft. (MX18-E), 26388
extruded truss-web, 21480
XM20 and XM20E1 under heavy-duty load, 21479
- Dowdy, J. D., District Campaign Committee, *see* J. D. Dowdy District Campaign Committee.
- Dowling, J. J., Pacific SEAMAP 1961-70, data, bathymetry, magnetics and gravity, 17778-780
- Downey, Maureen E., starfishes from Caribbean and Gulf of Mexico, 26824
- Downie, Ronald K., relief, 28264, 28315, 28448
- Downing, Elaine P., annotated bibliography of Lake Ontario limnological and related studies, biology, 27454
- Downs, Eldon W., Air University review, 17978
- Downtown Republican Women's Club, annual report, 24687
- Downwash (aircraft):
fog dissipation techniques for emergency use, 20975
helicopter downwash applied to fog clearing, status summary, 22422
- Doyle, W. Harry, jr., sediment transport in Mississippi River tributary-Bayou Lafourche, La., 16115
- Draemel, Dean C., relationship between fabric structure and filtration performance in dust filtration, 31292
- Draft (military), *see* Conscription.
- Drafting, *see* Mechanical drawing.
- Drag (aerodynamics):
aircraft tire behavior during high-speed operations in soil, 16350
calculation of profile drag at high gas velocities and in presence of heat transfer, 16179
drag characteristics of disk-gap-band parachute with nominal diameter of 1.65 meters at Mach numbers from 2.0 to 3.0, 20601
effect of fineness ratio on boattail drag of circular-arc afterbodies having closure ratios of 0.50 with jet exhaust at Mach numbers up to 1.30, 29274
- Dragon, there lives a wicked dragon, environmental coloring book, 30199
- Drainage:
bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21520-522, 25126, 27498
drainage and erosion control facilities, field performance investigation, 28780
drainage of agricultural lands, 28098
drainage, why do we do it?, 31816
irrigation and drainage on farms, 1969 census of agriculture, 30794
optimization of Wellton-Mohawk drainage operations, 29458
publications, price list, 26797
sedimentation in small drainage basins (series), 16113, 20357
temporary detention of storm and combined sewage in natural underground formations, 30190
see also Mine drainage.
- Drains, maintaining subsurface drains, 16603
- Drake, Harold J.:
mineral industry of Republic of Korea, 25468
slag iron and steel, 16325
stone, 25487

INDEX 1973

- Drama:
and works prepared for oral delivery, catalog of copyright entries, 23079, 31167
stop, look, listen, children ahead, play of Headstart programs, 16119
- Drawings:
associated lists for Frankford arsenal engineering drawings, 15963
electric transmission, specifications & drawings, 26814
naval design manual, 27837
scientific and technical catalog of copyright entries, 28576, 31168
Winslow Homer, selection from Cooper-Hewitt collection, Smithsonian Institution, 23967
- Dredging:
correlated studies of Vancouver Lake-water quality prediction study, 21500
ecological effects of offshore dredging and beach nourishment, review, 27437
- Dreher, Robert C., experimental investigation of accelerometer-controlled automatic braking system, 26067
- Dresden Nuclear Power Station, aerial radiological measuring surveys, 25869
- Dressel, David L., initial report on systemizing information to identify and relate behavioral and physical design parameters, 25069
- Drew, Karl C., improving employee performance, bibliography, 15608
- Drewes, Harald:
Cenozoic rocks of Santa Rita Mountains, southeast of Tucson, Ariz., 21732
geochemical reconnaissance of Santa Rita Mountains, southeast of Tucson, Ariz., 27554
structural geology of Santa Rita Mountains, southeast of Tucson, Ariz., 30277
- Dried foods, *see* names or classes of foods dried.
- Dried milk, *see* Milk.
- Drift:
aerial spray adjuvants for herbicidal drift control, 28926
drift meter log operations, USSR study, 27636
- Drill corps, sample preparation variability in diamond-drill core from Homestake Mine, Lead, S. Dak., 20572
- Drill holes, *see* Boreholes.
- Drilling:
deep rotary core drilling in ice, 28688
drillability studies, percussive drilling in the field, 21942
drillers' logs in lithologic studies of Ogallala Formation of Southern High Plains of Texas, evaluation of use, 23339
methane emission rate study in deep Poca-hontas no. 3 coalbed mine in conjunction with drilling degasification holes in coalbed, 23653
percussive drilling with independent rotation, 21948
rotary drilling and coring in permafrost, deep core drilling, core analysis and bore hole thermometry at Cape Thompson, Alaska, 21440, 28689
sensitivity analysis of relation of well-head price to nuclear gas stimulation costs, 22483
- Drilling machinery, *see* Drills (tools).
- Drills (tools):
boring machines, industrial plant equipment handbook, 23090
deep rotary core drilling in ice, 28688
drill bits, counterbores, and countersinks, Federal item identification guide, 24998
drilling and tapping machines, industrial plant equipment handbook, 24989
Federal item identification guide, 30106
improved adapter for increment borer ratchet assembly, 25224
- Drills (tools)—Continued
presses, shearing, punching, boring, drilling, and tapping machine, Federal item identification guide, 28602
- Drinking water, *see* Water.
- Driscoll, George, basic data on economy of People's Republic of China, 16828
- DRIVE, *see* Democratic-Republican Independent Voter Education.
- Drivers, *see* Motor vehicle operators.
- Driving, *see* Automobile driving.
- Drone, *see* Helicopters.
- Drops, new method for generating water-drops of specified mass, 27737
- Dross, *see* Slag.
- Droughts:
African Sahel, crisis, hearing, 31021
site preparation and reforestation of droughty, acid sands, 22328
- Drownings, pool drownings and their prevention, 29042
- Drug abuse:
alcohol and drug abuse, interchange, lessons learned and other information, 22431
Alternatives to Drug Abuse Conference, proceedings, 20580
bibliography of drug abuse literature, 22038
citizen support for law enforcement efforts against drug related crime, 17688
clinical recognition and treatment, etc., 22433
cooperation in combating illicit international traffic in narcotics, etc., agreement with—
Argentina, 20809
Paraguay, 31864
current foreign policy, U.S. leads global war, 20788
DACAS, drug abuse current awareness system, 18201
drug abuse education, 17763
in pharmacy schools, 32186
Drug addict treatment and rehabilitation act, hearings, 15922
drug and alcohol abuse among U.S. military personnel and dependents, in Germany, 21516
drug use in America, problems in perspective, 27226
National Commission on Marihuana and Drug Abuse, report, 32441
social responses, 32440
drugs in our schools—
hearings, 17034, 19750-752, 21212, 23009
report, 28381
print additional copies, report, 32119
drugs in perspective, fact book on drug use and misuse, 20759
education act—
extend, hearings, 32077
oversight into administration, hearings, 19755
effective coordination of drug abuse programs, guide to community action, 26746
Federal strategy for drug abuse and drug traffic prevention, 29547
growing up in America, background to contemporary drug abuse, 30505
illicit use of dangerous drugs in United States, compilation of studies, surveys and polls, 20579
International narcotics control source book of conventions, protocol and multilateral agreements, 17689
prevention act, oversight, hearings, 21261
prevention materials for schools, 17751
resource book for drug abuse education, 22039
resource list for drug abuse literature, 23666

Drug abuse—Continued

- Special Action Office for Drug Abuse Prevention answers most frequently asked questions about drug abuse, 32565
- submarine service, factors related to drug abuse, 26643
- personality trait patterns as delineated by Minnesota multiphasic personality inventory, 30411
- tune in, drug abuse news for broadcasters about broadcasting, 19000
- veterans, comprehensive treatment and rehabilitative services, reports, 24897-898
- Veterans' drug and alcohol treatment and rehabilitation act—
 - report, 15849
 - testimony submitted to Veterans' Affairs Committee, 27370
- world drug traffic and its impact on U.S. security, hearings, 15920, 19991, 31152
- world narcotics problem, Latin American perspective, report of special study mission, 26138
- see also* Stimulants.
- Drug abuse education in pharmacy schools, 32186
- Drug Abuse Prevention Office, Federal advisory committees, annual report, 28539
- Drug Abuse Prevention Week, National, *see* National Drug Abuse Prevention Week.
- Drug addiction, *see* Drug abuse.
- Drug Enforcement Administration :
 - reorganization plan 2 of 1973—
 - hearing, 27214
 - reports, 27173, 29852
- Drug stores, *see* Stores.
- Druggists, *see* Pharmacists.
- Drugs :
 - adverse and toxic effects, toxicity bibliography, 18967
 - analytical methods for determination of controlled drugs in body fluids, 30446
 - blood level determinations of antiepileptic drugs, clinical value and methods, bibliography, 23770
 - Chemical and pharmaceutical products manufacturing machinery, industrial plant equipment handbook, 15944
 - code of Federal regulations, 27512-514, 28875-877
 - commercial import detentions, monthly report, 18138
 - Controlled substances act—
 - BNDD manual for pharmacist, 26674
 - text, 26171
 - diethylstilbestrol (DES), its use as drug for humans and in animal feeds, regulations, hearings, 17057
 - drug allergy (remarks), 29352
 - drug industry—
 - aids to compliance, 20281
 - competitive problems—
 - hearings, 15932, 27366
 - summary and analysis, 17303
 - drug information services, 2 operational models, complete drug information service in hospital, regional drug information network, 20658
 - drug interactions, annotated bibliography 1967-70 with selected excerpts, 20675
 - Drug listing act, law, 15649
 - drug use in America, problem in perspective, National Committee on Marihuana and Drug Abuse, report, 25391
 - drug utilization review with on-line computer capability at Los Angeles County General Hospital, 27883
 - drugs & microbes, slide presentation, announcement, 25548
 - drugs in our schools, report, 28381
 - drugs in perspective, fact book on drug use and misuse, 20759
 - FDA compilation of case studies of drug recalls, 27522
 - FDA drug bulletin, 18290

Drugs—Continued

- FDA interim index to evaluations published in Federal register for NAS-NRC reviewed drugs, 26454, 28917
- Federal food, drug, and cosmetic act, amend—
 - law, 15649
 - text, 26171
- Federal strategy for drug abuse and drug traffic prevention, 29547
- Food, drug, and cosmetic act, text, 20283
- illicit use of dangerous drugs in United States, compilation of studies, surveys and polls, 20579
- mailing of drug samples to Government officials for analysis, report, 16964
- milestones in U.S. food and drug law history, 23257
- narcotics and dangerous drugs, translations, 18978
- pharmaceutical industry, competition, present status, hearings, 27366
- pharmaceutical preparations, except biologicals, 1971, current industrial reports, 16774
- practitioners, informational outline of Controlled substances act, 26675
- prescription drug—
 - data summary, 17834
 - we want you to know what we know about, 25198
- problems in obtaining and enforcing compliance with good manufacturing practices for drugs, GAO report, 26481
- read the label, 23259
- Rx legend, FDA manual for pharmacists, 17493
- selected technical publications, 20284
- social seminar handbook, education, drugs and society, 22079
- sold over the counter, effect of promotion and advertising on competition, small business, and welfare of the public, hearings, 24963
- use of medicine, review of prescribed and nonprescribed medicine use, 22023
- we want you to know about drugs for food-producing animals, 30244
- see also* Drug abuse—Medicine—Narcotics — Pharmacology — Psychopharmacology — Psychotropic — Stimulants — *also* names of drugs.
- Drugs (containers) :
 - steel shipping, current industrial reports, 18194, 21056, 25928
- Drums (musical instruments) :
 - colonial drummer, rise of spirit of independence series, commemorative stamp (poster), 31888
- Drunkenness (criminal law) :
 - first aid for drunken driver begins in your office, 25581A
 - implied consent in D.C. to test operators of motor vehicles for intoxication—
 - law, 19449
 - report, 17207
- Dry cleaning :
 - Army fixed cleaning plant, Army technical manual, 25863
 - machinery from West Germany, determination of injury in investigation AA-1921-99 under Antidumping Act, 1921, as amended, 16541
 - urban business profile, 15975
- Dry Creek :
 - flood plain information, 20120
 - Roseville, Calif., 31250
 - floods in Salina, Kans., 20143
 - problems, 17404
 - outlet works, Warm Springs Dam, Dry Creek, Russian River Basin, Sonoma County, Calif., 25101
- Dry Creek Diversion, flood plain information, 20129

INDEX 1973

- Dry Turkey Creek :
flood plain information, 21445
floods in vicinity of McPherson, Kans., 21444
- Dry veneer volume losses in production of red and white fir plywood, 26473
- Dryers (Industrial) :
Industrial plant equipment handbook, driers, dehydrators, and anhydrators, 26306
prototype of continuous dryer developed by ITMO, Academy of Sciences, Belorussian SSR, USSR study, 21869
- Drying :
calendar for air-drying lumber in upper Midwest, 23283
look at and result of reorganizing drying research at Forest Products Laboratory (lecture), 23279
see also names of substances dried.
- Dryopidae, *see* Beetles.
- DSA, *see* Defense Supply Agency.
- Dual careers, longitudinal study of labor market experience, 26611
- Duarte, Calif., aircraft accident report, 23855
- Dubuque County Republican Central Committee, annual report, 22976
- Duchesneau, Thomas D., interfuel substitutability in electric utility sector of U.S. economy, economic report, 17489
- Duchon, Claude E., UVW anemometer dynamic performance study, 22411
- Ducks :
duck stamp data, information for collectors and conservationists, 17847
hunting, possession, transportation and importation, 1972-73, Federal regulations, 16487, 20781
see also Mallards.
- Duckworth, W. Donald :
old world Stenomitidae, preliminary survey of fauna, notes on relationships, and revision of Genus *Eriogenes* (Lepidoptera : Gelechioidea), 29491
type-material of North American clearwing moths (Lepidoptera : Sesiidae), 29492
- Ductility :
ductility of titanium alloys and atomic ordering in nickel chromium alloy, USSR study, 17631
effect of aging at 1040°C (1900°F) on ductility and structure of tantalum alloy, T-111, 20615
- Ducts, acoustic impedance of curved multilayered duct liners, 30458
- Duddles, Glenn A., application of plastic media trickling filters for biological nitrification systems, 30181
- Dueker, R. L., air pollution training institute, curriculum description and recommendations, 30728
- Dues, U.S. membership in International Police organization increase limit on dues, law, 16890
- Dugan, Jonathan V., Dugan for Congress Committee, annual report, 24569
- Dugan for Congress Committee, annual report, 24569
- Duke Power Company, fiche index for nuclear dockets, 22473
- Dulles International Airport :
general information, 17447
transit lines—
construction to Dulles from D.C. metropolitan center—
hearing, 19952
planning, report, 19859
to Dulles and Friendship Airports from D.C. metropolitan center, Federal payment for planning, authorize report, 32103
- Duluth, Minn. :
aircraft accident report, 29409
census of population and housing, 1970, census tracts, 19215
- Dumping (waste products), *see* Waste disposal.
- Dumps :
detecting hot areas in dumps with handheld infrared scanner, 29241
let's dump the dump, 17425
let's find a better way! mission 5000 eliminate dumps (posters), 29515
- Duncan, Rocky D., Apollo experience report evolution of attitude time line, 25326
- Duncan, William G., Costa Rica, country demographic profiles, 28148
- Duncanville, Tex., railroad accident report, 31791
- Dungeness crabs, crab pots, 23793
- Dunn, John P., relief, 19591, 27116D
- Dunn County Democratic Party, annual report, 24611
- Dupree, Walter G., jr., United States energy through the year 2000, 25299
- Duran, Gilbert, range management practices, 1970 investment costs, 20901
- Durham, N.C., area wage survey, 30390
- Durham County, N.C. :
flood plain information, 20113
floods in Research Triangle area, N.C., Burdens and Two Bottle Creeks, 20142
- Durham County Committee to elect Wense Grabarek, annual report, 26032
- Dushan, Joseph D., investigation of sutcliffe development theory, 23673
- Dust :
cost of storing and handling grain and controlling dust in commercial elevators, 1971-72, projections for 1973-74, 26354
relationship between fabric structure and filtration performance in dust filtration, 31292
runoff of oils from rural roads treated to suppress dust, 26406
see also Coal dust.
- Dust respirators, *see* Respiratory equipment.
- Dusting apparatus :
comparison of respirable dust concentrations measured with MRR and modified personal gravimetric sampling equipment, 30442
evaluation of machine-mounted dust collector, 30444
- Duties, *see* Tariff—*also* names or classes of articles imported.
- Dutton, E. J., modeling effects of clouds and rain upon satellite-to-ground system performance, 25967
- Duval County, Fla., surface water, 23376
- Duwamish River and Valley :
determination of mass balance and entrainment in stratified Duwamish River estuary, King County, Wash., 20359
measurement of salt-wedge excursion distance in Duwamish River estuary, Seattle, Wash., by means of dissolved-oxygen gradient, 20358
- Duxbury, Republican Women's Club, *see* Republican Women's Club of Duxbury.
- Dymovic, Andrew, effects of alternative beef import policies on beef and pork sectors, 17346
- Dvoracek, Peter, failure modes, effects and criticality analysis (FMECA) of category 3 instrument landing system, 20825
- Dvorak, Vernon F., techniques for analysis and forecasting of tropical cyclone intensities from satellite pictures, 17773
- Dvorsky, Louis A., square wave VOR tests, 30655
- Dwarf mistletoe, *see* Mistletoe.
- Dwellings, *see* Houses.
- Dwight D. Eisenhower Library, historic materials, 25532
- Dwight D. Eisenhower Memorial Bicentennial Civic Center :
build on Northwest D.C. site, authorize—
hearing, 17083, 19792
reports, 16993, 17009

Dwight D. Eisenhower Memorial Bicentennial Civic Center—Continued
 District of Columbia, construction, maintenance, and operation—
 law, 19450
 report, 19858
 Dye, Lucius W., weekly weather & crop bulletin, 19081
 Dye Ditch, special flood hazard information report, 20165
 Dyes and dyeing:
 certain dyeing products including logwood suspension of duty, extend, report, 19659
 dyestuff color removal by ionizing radiation and chemical oxidation, 26410
 extension of existing suspension of duty on dyeing and tanning materials, report, 29854
 Galveston Bay hurricane surge study, effects of proposed barriers on tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, hydraulic model investigation, 27445
 gonadotoxic and embryotoxic effect of food dye amaranth, USSR study, 17627
 industry wage survey, textile dyeing and finishing, 17665
 photodegradation of commercial dyes, study, 26411
 suspension of duty on certain dyeing materials, report, 29990
 synthetic dyes, production and sales, 20833
 Dynamic friction and wear of solid film lubricant during radiation exposure in nuclear reactor, 20604
 Dynamic frictional moment of ball bearing of a pendulum suspension, 16197
 Dynamic stability, *see* Stability of aircraft
 Dynamic tear tests of 3-in. thick aluminum alloys, 25658
 Dynamic thermal performance of experimental masonry building, 32481
 Dynamics:
 airfoil dynamic stall and its influence on helicopter control loads, 20991
 analytical evaluation of controllable twist rotor performance and dynamic behavior, 15513
 dynamic characteristics of two-stage variable-mass flexible missile with internal flow, 17695
 dynamic compatibility of rotary-wing aircraft propulsion components, 28059
 dynamic nuclear polarization, application to increase sensitivity and speed of nuclear precession magnetometers, USSR study, 29133
 dynamic observation in T-37 undergraduate pilot training (UPT) link trainers (T-4), 26950
 dynamic pathomorphological changes in cerebrocortical motor region in response to single lysergamide (LSD) administration (electronic microscopic investigation), 20461
 dynamic tear testing, method for $\frac{5}{8}$ inch metallic materials, military standard, 30122
 dynamic test of gears manufactured by advanced forging techniques, 31934
 guide for design of shock isolation systems for ballistic missile defense facilities, 32202
 PERFORM, performance optimizing computer program for dynamic systems subject to transient loadings, 30450
 research on structural dynamic testing by impedance methods—
 free body response, 24189
 structural system identification from multipoint excitation, 24187-188
 subsystems, 24190
 rocket control systems with on-board digital computers, 21844
 steady state and dynamic pressure phenomena in propulsion system of F-111 airplane, 31636

Dynamometers, combination and miscellaneous instruments, industrial plant equipment handbook, 24987
 Dyrness, C. T.:
 Brewer Spruce Research Natural Area, 21611
 Butter Creek Research Natural Area, 21613
 Diamond Point Research Natural Area, 21618
 soil surface conditions following balloon logging, 20300
 Dysprosium, evaluation of CaSO_4 : Dy and CaSO_4 : Tm TLD for measurement of small gamma-ray exposures, 25876

E

E. A. Mahoney, jr., Congress Committee, annual report, 24455
 Eagle Cap Wilderness:
 addition of Minam River Canyon and other areas—
 law, 19451
 report, 19684
 Eagle Pass, Tex., study of people and problems, 23244
 Eagle River, Alaska:
 Meadow Creek—
 flood plain information, 28715
 floods, 28751
 Eagles:
 Bald eagle protection act, amend—
 law, 19464
 report, 17178
 Ear:
 aural protector, sound, military standard, 25023
 eardrum displacement following stapedius muscle contraction, 29198
 hearing and related medical findings among children, race, area and socioeconomic differentials, 22030
 successful conditioning of stapedius muscle, 29200
 Eardrum displacement following stapedius muscle contraction, 29198
 Earlimart, Calif., Deer Creek and White River, flood plain information, 16009
 Early, John F., manufacturing quote rates, trends, cycles, and interindustry variations, 29161
 Early clinical drug evaluation units analyses sample output package, 25589
 Early retirement of postal employees, 15775
 Earplugs, use of circumaural earphones for attenuating ambient noise of bone conduction audiometry, 26645
 Earned degrees conferred, 31222
 Earning a living with sheep, 25135
 Earnings, *see* Wages
 Earth:
 bibliography of geology and mineralogy of rare earths and scandium to 1971, 26492
 deep-seated heat from earth, USSR study, 29144
 earth resources survey systems, proceedings of International workshop, 23675
 earth's main field, introduction to solar terrestrial activity for geomagnetic studies, 22095
 information capacity of gradient method of measuring earth's magnetic field, USSR study, 32405
 NASA earth resources survey program, weekly abstracts, 19067
 orbital stations and study of Earth from space, USSR study, 30345
 radiation balance of earth-atmosphere system from Nimbus 3 radiation measurements, 27715
 remote sensing—
 bibliography for earth resources, 23370
 for earth resources, agreement with—
 Brazil, 27916, 31855
 Mexico, 17874
 of earth resources, compilation of papers, 32094

INDEX 1973

- Earth—Continued
 riprap stability on earth embankments tested in large- and small-scale wave tanks, 20103
 Skylab, earth resources investigations, 29305
 Skylab experiments, remote sensing of earth resources, information for teachers, 29263
 studies of earth from space, USSR study, 31525
 symposium on significant results obtained from Earth Resources Technology Satellite-1—
 summary of results, 31664-664A
 technical presentations, 31618
 your world, my world, book for young environmentalists, 21527
see also Satellites—Terrestrial magnetism.
 Earth currents, marine magnetovariation station for studies by magnetotelluric soundings method, USSR study, 20451
 Earth movements, *see* Subsidence (earth movements).
 Earth orbits, *see* Orbits.
 Earth Resources Observation Systems, EROS data center, its design and construction, 31395
 Earth sciences, *see* Science.
 Earth Sciences Laboratories:
 NOAA technical memorandum, ERL-ESL series, 30522-524
 NOAA technical report, ERL-ESL series, 17776, 22096-97, 23804, 25625, 26768-770, 30541, 31723
 recorded and processed seismic data from 1971, San Fernando earthquake and aftershocks by Nevada Special Projects Party, 17776
 Earthquakes:
 abstracts of reports for United States, 17940
 Borrego Mountain, 23365
 comparison of results of dynamic seismic analyses of 2 identical structures located on 2 different sites, based on site seismograms from San Fernando earthquake, 22471
 earthquake research in NOAA, 26770
 field instrumentation studies of earth tremors and their geologic environments in central Utah coal mining areas, 26504
 geologic and seismologic aspects of Managua, Nicaragua, 29028
 information bulletin (periodical), 18237
 instrumentation studies of earth tremors related to geology and to mining at Somerset Coal Mine, Colorado, 21735
 need for national earthquake research program, GAO report, 16097
 Nicaragua report, hearing, 26156
 prediction program on national scale to avoid hazards to life and property, 24918
 preliminary determination of epicenters, monthly listing, 18771
 public service documentary film cleared for non-sponsored TV, 23082
 recommendations for shape of earthquake response spectra, 30782
 recorded and processed seismic data from 1971 San Fernando earthquake and aftershocks by Nevada Special Projects Party, 17776
 San Francisco Bay area, losses, data and analysis, 28847
 trans-Alaska pipeline system ground motion values for use in seismic design, 21713
 United States earthquakes, 17412
 vertical and horizontal earthquake spectra, study, 28092
 Earthwork and structures:
 quality construction for people (address), 23933
 Earthwork and structures—Continued
 statistical control of earth dam embankment construction, summary of Reclamation Bureau experience (paper), 23943
 see also Excavation.
 Eason, Sara, large-scale meat buying made easy, educational program, 22312
 East (Far East):
 agricultural data book, 15984
 agricultural situation, 1972 review and 1973 outlook, 26356
 economic and political developments, 27322
 foreign relations of U.S.—
 diplomatic papers—
 departmental edition, 17859
 document edition, 16937
 Far East, China—
 departmental edition, 30645
 document edition, 29837
 market profiles, 15621
 problems of Far East (USSR periodical), 18820
 East (Middle East):
 accessions list, Library of Congress American Libraries Book Procurement Center, Cairo, 17948
 census programs of several countries in Europe and Middle East, 26091
 European views on dependency of free world on Middle East oil, summary, 32358
 Middle East in crisis, problems and prospects, 15737
 Near and Middle Eastern series, 31848
 East (Near East):
 foreign relations of United States, 1947—
 departmental edition, 17858
 document edition, 16936
 Near East and South Asian series, 29536
 translation, 18979
 East (U.S.):
 designate certain lands in more populous eastern half of U.S. as wilderness areas, hearings, 26274, 31143
 fresh fruit and vegetable unloads in Eastern cities by commodities, States, etc., 25816
 protecting log cabins, rustic work, and unseasoned wood from injurious insects in Eastern U.S., 24127
 spruce budworm in Eastern United States, 27528
 strawberry culture, 15467
 East Asia, *see* Asia.
 East Bay, flood plain information, 21449
 East Bay Automotive Machinists lodge 1546, Machinists Nonpartisan Political League, annual report, 24525
 East China Sea, central and northern summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23887
 East coast, *see* Atlantic Coast.
 East Europe, *see* Europe.
 East Gary, Ind., railroad accident, report, 20749
 East Germany, *see* Germany.
 East Grand Forks, Minn., flood plain information, Red River of the North, 17391
 East North Central States, *see* Central States.
 East River, flood plain information, 17383
 East-West trade, *see* Commerce.
 East-West Trade Bureau, trade negotiations and changing attitudes (address), 25032
 Eastern Air Lines, Inc.:
 accident report, 23858
 incident report, 23853
 Eastern Africa, *see* Africa.
 Eastern Europe, *see* Europe.
 Eastern Marketing and Nutrition Research Service, publications and patents, list, 19102
 Eastern Shore, crisis in housing on upper Eastern Shore, civil rights aspects, 22578

Eastern States, *see* East (U.S.).
 Eastern tent caterpillars, *see* Tent caterpillars.
 Easton, Pa., area wage survey, 17658
 Eastport, Maine to Montauk Point, N.Y., marine weather services chart, 29417
 Eastport to Cape Cod, coast pilot, 16405
 EASTROPAC atlas, 23782, 29373
 Eaton County, Mich., flood plain information, Grand River, 23163
 Eaton Corporation Plant, automotive springs, clutch discs, and rear deck lid torsion bars, workers and former workers of Eaton Corporation Plant, Detroit, Mich., Tariff Commission report, 25776
 Eau Claire County Democratic Party, annual report, 24639
 Ebens, Richard J., geochemical anomalies of claypit area, Callaway County, Mo., and related metabolic imbalance in beef cattle, 29026
 Eberhardt, Arthur C., aircraft-pavement interaction studies, finite-element model of jointed concrete pavement on non-linear viscous subgrade, 31240
 Ebsen, Mark E., advanced hydrofluidic stabilization system, 22438
 ECA, *see* Economic Cooperation Administration.
 Eccleston, Barton H., effect of fuel front-end and midrange volatility on automobile emissions, 23656
 Echo, radar echo distribution in Arizona during July and Aug., study, 30538
 Echolocation (physiology):
 operating principle of echolocation system of marine animals, USSR study, 23544
 Echols, Robert M., product suitability of wood determined by density gradients across growth rings, 25225
 Eckerman, William C.:
 directory of institutions for mentally disordered offenders, 16390
 nationwide survey of mental health and correctional institutions for adult mentally disordered offenders, 23758.
 Echo ranging, *see* Sonar.
 ECO-Vote 1972, political committee, annual report, 22878
 Ecology:
 and impacts of forest insects of Pacific Northwest, 21606
 behavior and ecology of Asiatic elephant in southeastern Ceylon, 26823
 biology, ecology, and control of lodgepole needle miner, 25837
 biota of freshwater ecosystems, identification manuals, 17433-441, 31310, 32273
 brackish water clam *Rangia cuneata* as indicator of ecological effects of salinity changes in coastal waters, 30164
 career profiles in forestry, conservation, ecology, environmental management, 26462
 coniferous forest ecosystems, 1st year progress in coniferous forest biome, research, 20303
 crayfish (astacidae) of North and Middle America, 17441
 ecological and environmental effects from local fallout, beta and gamma radiation effects from close-in fallout, 16663
 ecological effects of offshore dredging and beach nourishment, review, 27437
 ecological forecasting and optimizing of biosphere, USSR study, 30362
 ecological research series, 17414, 21490, 26398-403, 27440-455, 28790-794, 30175, 31267-269, 32249
 ecological survey in eastern Chukchi Sea, WEBSEC, 24275
 ecological techniques utilizing radionuclides and ionizing radiation, selected bibliography, 21016

Ecology—Continued
 ecology of rest, USSR study, 27633
 meteorological and ecological monitoring of stratosphere and mesosphere, 17698
 population ecology of migratory birds, symposium, 26850
 preliminary ecological evaluation of effects of air cushion vehicles on Arctic tundra of northern Alaska, 21439
 recent reports of interest to plant ecologists, 23281
 see also Radioecology.
 ECOM, *see* Army Electronics Command.
 Economic aid, *see* Foreign aid.
 Economic Analysis Bureau:
 BEA quarterly econometric model, 31214
 press releases, 18776
 staff paper BEA-SP series, 23124, 31213-214
 Economic and Social Council, United Nations, increase size, amendment to Article 61 of Charter of United Nations, 29952
 Economic assistance, *see* Foreign aid.
 Economic availability of byproduct fluorine in United States, 25413
 Economic benefits from improvement in water quality, 25122
 Economic censuses printed reports series ECPR, 19250
 Economic conditions:
 American economy (address), 25961
 Commerce Department serving growing economy and growing people, 25963
 economic censuses printed reports series ECPR, 19250
 economic condition of air transportation industry, hearings, 21323
 economic indicators (periodical), 18247
 economic outlook (address), 22625
 economic review and FHLBB innovations (address), 23216
 economic trends and savings and loan industry (address), 21543
 economy during 1st half of 1972 (remarks), 28241
 employment and population changes, special economic reports series ES 20, 16787, 29784
 energy and fuel shortages, relationship to Nation's internal development, hearings, 17085
 environment and the economy, joint progress or parochial negativism (address), 21098
 foreign economic trends and their implications for United States, ET series, 16157-168, 17570-585, 18381, 20430-439, 21832-834, 23489-502, 25309-317, 27601-611, 29092-118, 30312-318, 31501-514, 32394-400
 franchising in economy, 22647
 impact of tax-exempt foundations and charitable trusts, 31015
 improving control of scientific-technical progress, USSR study, 26602
 inflation and other economic challenges (address), 24278
 interim review of economy, expanding economy of 1972 with industry projections at 1973, 20083
 international economic indicators, 28633, 31203, 32184
 international economic report of the President, 25671
 lessons from the Japanese (remarks), 25892
 1972 midyear review of economy—hearings, 16931
 report, 15661
 1972 OBERS projections economic activity in United States, 24103
 opportunities for a community in economic distress, 22196
 population and economic activity in United States, 1950-2020 for water quality management, 23205

INDEX 1973

Economic conditions—Continued
 problems and prospects in American economy (remarks), 21573
 problems in creating network of information and computer centers in Uzbekistan, for planning and controlling national economy, USSR study, 17622
 program for restoring National Economy by legislation (address), 32420
 relationship of log production in Oregon and Washington to economic conditions, 28963
 report of President to Congress—
 departmental edition, 22195A
 document edition, 21166
 extend time to file, law, 27082
 hearings, 27095
 reports, 24837, 26133
 science, technology, and economy—
 hearings, 15780
 study of the interrelationships for better investment procedures, 17094
 Soviet economic prospects for the seventies, 28269
 state of economy, message from the President, 24814
 strengthening America's position in world economy (remarks), 21108
 U.S. in the changing world economy (address), 21115
see also names of countries, States, etc.—
 also subjects.
 Economic controls, *see* Economic stabilization.
 Economic Cooperation Administration, Administrator, nomination of Paul G. Hoffman, hearings, 27324
 Economic development:
 accounting manual for multi-funded economic development districts, 20085
 administration's solutions for social and economic problems (address), 32429
 agriculture in Vietnam economy, system for economic analysis, 31218
 area overall economic development programs, guide, 23125
 automated management system for Union republic economy, USSR study, 25348
 balanced National growth and development, proposal for achieving, 22663
 capital markets and economic development, Kleinman plan, hearing, 21222
 China, mainland, hearings, 15660
 commerce today, development in business and technology, 18135
 current foreign policy, U.S. role in African development, 16490
 current materials development digest (periodical), 18225
 digest of African countries' economic development plans, 28639
 directory of approved projects, 21415, 28643
 district overall economic development programs, guide, 23126
 economic data, equal employment, opportunity program, state of Arizona, 17816
 economic development (periodical), 18246
 energy and fuel shortages, relationship to Nation's internal development, hearings, 17085
 energy, natural resources and research in agriculture, effects on economic growth and productivity for U.S., 32187
 establishing business in Indonesia, 24286
 Far East, 27322
 Federal Advisory Council on Regional Economic Development, 10th meeting, 19289
 financing economic development of Indians and Indian organizations—
 hearing, 15905
 report, 31086
 Fort Belknap Reservation area, resources and development potential, 31484
 Indian development, 25036
 market analysis for title 10 land development projects. HUD, 29071

Economic development—Continued
 monetary policy in controlling monetary aggregates, financing economic growth, and inflationary trends, 28905
 national development program through public works investment, hearings, 15929
 national economic accounting training programs for economists and statisticians from other countries, 20084
 Nixon administration and economic justice (address), 22630
 oceans are great new source of American economic development in today's international competition (address), 30893
 opportunities for a community in economic distress, 22196
 provide for financing economic development of Indians and Indian organizations—
 hearing, 31144
 report, 16978
 Public works and economic development act, amend—
 hearings, 26290, 27240
 law, 30919
 reports, 15708, 17209, 24834, 26106, 28450, 32035
 regional commission development plans, summaries, 28241A
 Regional Economic Development Research Conference, proceedings, 17344
 relationship of energy and fuel shortages to Nation's internal development, interim report, 17087
 Soviet economic prospects for the seventies, 28269
 U.S. assistance for economic development of Republic of Korea, GAO review, 31384
 Economic Development Administration:
 annual report, 27420
 directory of approved projects, 21415, 28643
 press releases, 18776
 research 1972 program, 15973
 research review, 28645
 role of USSR scientific centers in economic development outlined, USSR study, 25355
 savings and loan associations and national economic growth (address), 21541
 toward national growth and development policy, 1970-71 legislative and executive actions, 26272
see also Foreign aid.
 Economic geography, *see* Geography.
 Economic geology, *see* Geology.
 Economic growth, *see* Economic development.
 Economic Indicators (periodical), 18247
 Economic Joint Committee:
 annual report, extend time to file, law, 27082
 appropriations, 1974 legislative report, 29991
 committee prints, 15661, 16929-934, 19536, 21138, 21140, 22660-661, 22663, 24305, 24307-309, 25992, 27096, 28266-269, 29835, 30938-940, 32022-23
 hearings, 15659-660, 16930-932, 19534-535, 21139, 21141, 22662, 24306, 24310, 25993, 27094-95, 32020-21
 publications and policies governing their distribution—
 87th-92d Congresses, 22660
 87th-93d Congresses, 28266
 report, 26133
 Economic Opportunity, National Advisory Council on, *see* National Advisory Council on Economic Opportunity.
 Economic Opportunity Office:
 alleged misuse of OEO funds, hearings, 21239
 appropriations, 1973, hearings, 15866
 appropriations, 1974—
 hearings, 28387
 report, 30983

Economic Opportunity Office—Continued
 digest (periodical), 18720
 Director, nomination of Alvin J. Arnett, hearing, 31156
 dismantlement, United States District Court opinion and order, 29902
 Economic opportunity act, as amended, text, 27354
 evaluation of Office of Economic Opportunity's performance contracting experiment, in field of education, 27548
 Federal advisory committees, annual report, 28539
 impact of Federal programs to improve living conditions of migrant and other seasonal farmworkers, GAO report, 23319
 legal services program, accomplishments of and problems faced by its grantees, GAO report, 25240
 national anti-poverty plan, fiscal year 1963-72, OEC, hearings, 28540
 opportunity (monthly magazine), 18736
 pamphlets, 15981, 17345, 21417
 press releases, 18777
 voice for voiceless, Office of Economic Opportunity's programs for Spanish speaking, 15981
 Economic policy :
 approach to planning for Miccosukee Tribe of Indians of Florida, 31486
 controlling inflation and Federal budget (address), 25975
 digest of African countries' economic development plans, 28639
 domestic and international aspects (address), 27061
 economic and industrial affairs, Eastern Europe, translations, 18973
 Economic opportunity act—
 amend—
 hearings, 28404
 law, 16916
 report, 30968
 oversight into administration, hearings, 19756-757
 text, 27354
 United States District Court opinion and order relating to relationship between legislative and executive branches of Government and Economic opportunity act, 29902
 economic opportunity loan program, 27877
 economy and economic policy in 1972 (address), 28231
 Federal domestic assistance, catalogs, 18053, 23613, 30401
 financial management for planning and action grants, to combat crime, 27653
 interdependence between business and Government is good and necessary arrangement (remarks), 21107
 International economic policy act, amend—
 hearing, 28536, 28401
 reports, 29858, 31068, 32050
 International economic report of the President, 25671
 land planning analysis for title 10 land development projects, HUD, 29072
 new economic policy (address), 28226
 Nixon administration and economic justice (address), 22630
 population, distribution, and policy, 30601
 problem of inflation (address), 23243
 U.S. Foreign economic policy, implications for organization of Executive branch, hearings, 21235
 what should U.S. policy be for development assistance to Ecuador?, GAO report, 25247
 see also Economic stabilization—International cooperation.
 Economic Research Service :
 agricultural economic reports, 15982-983, 22323-325
 economics of agriculture, reports and publications, list, 20087

Economic Research Service—Continued
 ERS foreign series, 15984, 23130, 25038, 26355-356, 27424, 28649, 32191
 ERS series, 17347, 20087-89, 21418, 23129, 26353-354, 27421-423, 28647-648, 31216, 32188-190
 FDD field report, 31218
 foreign agricultural economic reports, 21419, 25040-42
 periodic reports, list, 25833
 reports, checklist, 18065
 Economic stabilization :
 act, amend—
 hearings, 23041, 28397
 message from the President, 24811
 reports, 24900, 26135, 26199, 27144, 27155
 challenge ahead, path to steady growth (remarks), 22626
 code of Federal regulations, 17467, 25159
 determining economic effectiveness of industrial automatic control systems, USSR study, 25352
 economic controls on physicians and dentists, 26540
 Economic stabilization program—
 freeze, 30073
 freeze and phase 4, 30079
 freeze facts, 28577
 phase 3, 26296
 background information, 26295
 regulations, questions & answers, 30076
 phase 4—
 announcement, 30075
 final regulations, 30077
 food regulations, 31171
 insurance, health and procedural regulations, 32157
 oil regulations, 31172
 President's economic stabilization program (address), 30892
 program (address), 32425
 regulations, questions and answers, 31173
 quarterly, report, 18248
 series, 26295, 28577, 30075-79, 31171-173, 32157
 economic stabilization regulations for HUD programs, HUD staff, 21776
 effect of new economic policy on employment and power (remarks), 17656
 Federal fiscal policy, 31339
 medical care price changes under economic stabilization program, 27885
 outlook for 1972, economy and phase 2 (remarks), 28237
 President Nixon's economic program (remarks), 28238
 program (remarks), 28242
 recodification, Pay Board, regulations, rulings and delegations of authority, 25545
 termination of Phase 2 economic stabilization regulations for HUD programs, 27584
 Economic validation of rating schedule, 24293
 Economics :
 automated management system for Union republic economy, USSR study, 25348
 BEA quarterly econometric model, 31214
 clerical geocoding manual, 1972 economic censuses, 16749
 criminal redistribution systems and their economic impact on small business, analysis, 17302
 Cuba, statistical handbook on main sectors, 30332
 dictionary of terms, 29493
 economic analysis of—
 automating small fluid milk plant, 24117
 cling peach production with emphasis on harvest mechanization, 27986
 economic and social effects of highways, summary and analysis, 21537

INDEX 1973

Economics—Continued

- economic appraisal of supply of copper from primary domestic sources, 30415
- economic aspects of population change, 29446
- economic censuses—
 - 1967, procedural history, 21066
 - 1972, publication output and major items collected, 27041
- economic evaluation of aircraft and spacecraft, USSR study, 32407
- economic feasibility—
 - of minimum industrial waste load discharge requirements, 28841
 - study of Fayetteville, N.C., treating Fort Bragg's waste water, 25074
- economic impact of—
 - cancelling use of 2,4,5-T in rice production, 26353
 - discontinuing farm use of lindane and BHC, 31216
 - reductions in defense spending, summary of research prepared for U.S. Arms Control and Disarmament Agency, 26958
- economic implications of water pollution abatement in family farm livestock production, 21418
- economic problems of world ocean, USSR study, 30366
- economic realities of reclaiming natural resources in solid waste, report, 17431
- economic report, conglomerate merger performance, empirical analysis of 9 corporations, staff report, 28913
- economically oriented production functions for slash and loblolly pine plantations, 23297
- economies and use of large scale electro-dialysis plants on selected tidal estuarial waters, 17564
- economics of—
 - aging, toward full share in abundance index to hearings, 29998
 - agriculture, reports and publications, Economic Research Service, 20087
 - air transport, 29302
 - byproduct metals—
 - copper system, 27696
 - lead, zinc, uranium, rare-earth, iron, aluminum, titanium and lithium systems, 26649
 - clean water, 21492
 - containerized conifer seedlings, 32347
 - Defense spending, look at realities, 20037
 - Federal subsidy programs, compendium of papers, 16920, 25992, 28267
 - ion exchange technology applied to municipal water quality improvement, 16141
 - mixed potassium-cesium seedling of an MHD combustion plasma, 23657
 - thinning stagnated ponderosa pine in sapling stands in pine-grass areas of central Washington, 25233
- interfuel substitutability in electric utility sector of U.S. economy, economic report, 17489
- International economic policy act, amend, report, 30999
- Intersectorial prediction in optimum planning system, RaS method prediction and measurement errors are present, USSR study, 17632
- joint committee report, 1973, report, 26133
- marketing economics research publications, reference list, 27421
- migration between States economic areas, census of population, subject reports, 15577
- minerals in world economy, minerals yearbook chapter, 25436
- new program for economic education of workers, USSR study, 17630

Economics—Continued

- pressing problems of economics and planning of health services, USSR study, 26581
- productivity and the economy, 30391
- relevance of Adam Smith to today's problems (address), 28897
- research in changing structure and economics of securities markets (address), 30626
- segregated ballast VLCCs, economic and pollution abatement analysis, 30403
- selected U.S.S.R. and Eastern European economic data, 30133
- social and economic—
 - characteristics by detailed industry for U.S., 28128
 - status of black population in United States, 29776
- strengthening America's position in world economy (remarks), 21108
- technical and economic trade-offs for geostationary orbit communications, resources, 28235
- USA, economics, politics, ideology (periodical), 19031
- where are we going? (address), 30629
- see also* Competition.—Land.
- Economics available through improved management of Navy shipboard inventories, 28987
- Economists, national economic accounting training programs for economists and statisticians from other countries, 20084
- Economos, C., analysis of variable properly turbulent boundary layers by means of modified compressibility transformation, 21976
- Economy and efficiency of international air travel by Government officials, 19773
- Economy approach lighting aids, 31316
- ECOSOC, *see* Economic and Social Council.
- Ecosystems, *see* Ecology.
- Ecsenius, additions to revisions of blindfish genera Ecsenius and Entomacodus, with description of 3 new species of Ecsenius, 16476
- Ector County Republican Party, annual report, 22903
- Ecuador :
 - agricultural commodities, agreement, 16532, 17902, 27923
 - area handbook, 26965
 - background notes, 29518
 - economic trends and their implications for United States, 26549
 - frog genus *Atelopus* in Ecuador (Anura, Bufonidae), 31801
 - other South American areas, mineral industry, minerals yearbook chapter, 16299
 - what should U.S. policy be for development assistance to Ecuador? GAO report, 25247
- ED & T report, 27526-527
- EDA, *see* Economic Development Administration.
- Eddy, William H., recovery of feldspar and glass sand from South Carolina waste granite fines, 16335
- Eddy currents, electric conductivity test for measurement of heat treatment of aluminum alloys, eddy current method, military standard, 25027
- Edelsberg, Edward, marine fisheries review (monthly), 18609
- Edgartown, Mass., certificates of registry, enrollment, and license issued 1815-1913 at Edgartown, Mass., pamphlet describing microfilm, 25537
- Edgewood Arsenal, disposition of real property assets, hearings, 31010
- Edltz Hook :
 - Port Angeles, Wash., beach erosion control project, engineers report—departmental edition, 30953
 - document edition, 31245

Edlund, Vernal E., recovery of copper from converter slags by flotation, 16330
 Edmundsen, Eldon Jr., marine radioecology, selected bibliography of non-Russian literature, 22489
 EDS, see Environmental Data Service.
 EDTA, effects of some antioxidants and EDTA on development of rancidity in Spanish mackerel (*Scomberomorus maculatus*) during frozen storage, 22104
 Education:
 adult basic education program statistics, students and staff data, 32194
 adult education, annual report, 26677
 alliance for educational progress (address), 25044
 Alternatives to Drug Abuse Conference, proceedings, 20580
 American education (periodical), 17993
 American Indian education, selected bibliography, 28652
 aviation education through building airplane, 28851
 building education into youth services, 32553
 cable television manpower, job descriptions and educational requirements, 24285
 career education, 21420
 address, 26359
 alive and well (address), 25046
 career education and equality of opportunity (address), 25047
 for leisure occupations, curriculum guidelines for recreation, hospitality and tourism, 28654
 case for revenue sharing (address), 25048
 catalog for adult continuing education opportunities for government employees in Washington metropolitan area, 27049
 Central Cities Educational Development Center description, evaluation, etc., 27773
 children in federally affected areas, 1971 annual report, 27427
 directories—
 higher education, 20094
 public school systems, 17358, 23137
 Drug abuse education act—
 amend, hearings, 32077
 oversight into administration, hearings, 19755
 drug abuse education in pharmacy schools, 32186
 early childhood education, 22062
 earnings by occupation and education, census of population, subject reports, 22534
 education amendments of 1972—
 extend sex discrimination and minimum wage provisions, 22304
 one year later (address), 30137
 education and report—
 business necessary merger (address), 28655
 learning, 10 years of progress, 29036
 new Federalism (address), 25049
 education directory, education, associations, 15989
 education for parenthood, 26361
 education in Thailand, some Thai perspectives, 20095
 Education of the handicapped act, amend—
 hearings, 28560, 29899
 report, 31077
 education of Spanish speaking, hearings, 15767
 education professions, 1971-72 annual report—
 differentiated staffings, state of art report, 27428
 need for teachers in our schools and colleges, 28656
 education programs, Department of Medicine and Surgery, Veterans' Administration, 30680
 education '72, progress report (address), 26362

Education—Continued
 educational accountability and evaluation, 15996
 educational and cultural postal amendments, reports, 29881, 30996
 educational attainment—
 by age, sex and race, 1970, for United States, 27021
 1970 census of population, 25910
 population characteristics, 19246
 educational benefits available for returning Vietnam era veterans, hearings, 21384, 24964
 educational characteristics of population of U.S., 1970 census, 21046
 educational commission, agreement with Korea, 17892
 educational planning, mathematical models, USSR study, 26576
 educational reform and renewal in contemporary Spain, 23139
 educational research in Europe, 17036
 educational statistics—
 digest, 17357, 31221
 to 1981-82, projection, 30150
 Educational technology act, hearings, 19758
 elementary and secondary public, statistics, fall 1972, advance report, 25051
 employment, discrimination against women, extend Equal pay act to prohibit, hearings, print additional copies report, 16998
 Environmental education—
 act, extend, report, 29887
 at Sylvania Visitor Center, 32311
 for Youth, Conservation Corps, 25207
 projects, brief description, 25052
 reference sources for development of programs and sites, 22116
 Environmental quality education act oversight into administration, hearing, 15728
 equal educational opportunities act—
 hearings, 15729, 17037, 19759, 21366, 23012
 reports, 19619, 21169
 evaluation of Office of Economic Opportunity's performance contracting experiment, in field of education, 27548
 exchange programs—
 agreement with—
 Denmark, 20816
 Germany, Federal Republic, 16529, 25752, 31860
 Pakistan, 25740
 international educational and cultural exchange (periodical), 18504
 Federal and State student aid programs, 1972, survey, 19807
 Federal education assistance programs, catalog, 15988
 Federal Government as employer of unskilled and undereducated, 22608
 financial aspects of equality of educational opportunities and inequities in school finance, 17249
 future belongs to those who prepare for it (address), 20905
 getting back to basics (address), 26364
 gifted and talented children, report, 19994
 goals and alternatives for education of minority group students in elementary and secondary schools, 17250
 guaranteed student loan program, interest subsidy provisions, delay effectiveness, hearings, 27199
 handbook for educational program audit, 28658
 Hungarian People's Republic, history, description, etc., errata, 23138
 If you really want an education, Air Force educational programs, 29653
 increase educational opportunities by providing grants for construction of elementary and secondary schools, etc., hearings, 15730

INDEX 1973

Education—Continued

Indian education act, hearings, 21216
 Indian education and Federal government (address), 26367
 indicators of educational outcome, 31224
 inequality in school financing, role of law, 21080
 information and educational exchange act, amend, law, 16898, 30930
 international education, completed research and instructional materials, bibliography, 26363
 learning to learn program, Jacksonville, Fla., model programs, compensatory education, 17365
 lifetime and recent migration by educational attainment for United States, 29715
 measure of success, Federal support for continuing education, 32453
 meeting our enemies, career education and humanities (address), 25055
 methodological appendix of research methods employed in Mexican American education study, 22585
 Mexican-American study, education in Texas, function of wealth, 15600
 migrant education, 21425
 bibliography, 28663
 model programs—
 compensatory education, 17363-365, 27772-778, 29359
 title 3, Elementary and secondary education act, order form, 29360
 national assessment and social indicators, 31225
 national assessment of educational progress—
 citizenship, 1969-70 assessment, group results for parental education, color, size, and type of community, 26370
 graphic materials, theme 2, reading, 30144
 literature released exercises, 28665
 literature, summary data, 30141
 reading and literature, report, 27431
 reading rate and comprehension, 26369, 28667
 reading, theme 8, critical reading report, 31227
 recognizing literary works and characters, literature, report, 28664, 32196
 responding to literature, theme 2, literature, report 27432
 science group and balanced group results for color, parental education, size and type of community, and balanced group results for region of country, sex, 30146
 selected essays and letters, 1969-70 assessment of writing report, 26371
 survey of reading habits, theme 4, literature (1970-71 assessment), report, 30142
 understanding imaginative language, national assessment of literature, report, 26368
 writing, group results A and B for objectively scored exercises, 30147
 writing, national results, writing mechanics, report, 21424
 written directions, reading, report, 28666
 National conference on high blood pressure education, report of proceedings, 27760
 National Institute of Education, appendix to hearings—
 alternative futures in American education, 19754
 educational research prospects and priorities, 19754
 purposes and process, readings in educational research, 19754
 National Institute of Education, brief outline of its history, status, and tentative plans, 30503
 new Federalism and education (speech), 26372

Education—Continued

new program for economic education of workers, USSR study, 17630
 our education, 30859
 outdoor education, selected bibliography, 27433
 programmatic research and development in education, positions, problems, propositions, 21427
 progress report of President's Commission on School Finance, 16458
 protected educational facilities in found space, guide to converting noneducational spaces into safe, healthful environments for education, 30083
 public—
 and private education assistance by payments to State educational agencies, hearings, 21221
 school finance programs, 1971-72 (States, District of Columbia, and outlying areas), 23141
 school systems in 1971-72, preliminary report, census of governments, 21039
 publications, price list, 22201
 question of opportunity, women and continuing education, 31601
 recent educational policy and legislative development abroad, 26375, 30151
 replication of bilingual education project, Albuquerque, N. Mex., 17367
 research and development for advancement of education, annual report, 21429
 research in education (periodical), 18864
 annual index, 23747
 semiannual index, 32406
 revenue sharing with States and local educational agencies, hearings, 21364
 school finance reform in Texas, civil rights aspects, 22588
 selected Office of Education publications and related information on international education, 28681
 send up more Sputniks, Russia woke us up to need for special education for gifted (address), 28682
 social seminar handbook, education, drugs and society, 22079
 some French initiatives in educating socially and culturally disadvantaged, 30151
 special education careers, programs for professional training in special education, 23144
 State departments—
 foreign curriculum consultant program, 15991
 State boards of education, and chief State school officers, etc., 25056
 State postsecondary education commissions, hearings, 28407
 statistics concerning Indian education, 31488
 statistics of trends, 26377
 strategies for implementation, White House Conference on Children, 16578
 Superintendent for Bureau of Refugees, Freedmen and Abandoned Lands records 1865-70, pamphlet describing microfilm, 26695
 tax information on educational expenses, 25307
 teachers, opportunities abroad, teaching, seminars, 15993
 this Administration's education record (address), 31234
 time for responsibility (address), 25059
 trainers guide to andragogy: its concepts, experience and application, 29497
 Turkey, educational system, 21422
 urban education, partnership for survival (address), 25061
 U.S. foreign aid to education, does Brazil need it? GAO report, 30267
 veterans' educational assistance allowances, increase rates, law, 19469

Education—Continued
 veterans, rates relating to, from 1917 to present, 26181
 Waterloo, Iowa, civil rights aspects, walk together, children, 24257
 windows to bureaucracy, report, 17690
 withholding of contributions for educational insurance, agreement with Panama, 24007
 year-round schools, hearings, print additional copies, report, 28459
see also Colleges and universities—Culture—Curriculum—Discrimination in education—Elementary education—High schools—Moral education—Naval education—Programmed instruction—Professional education—Schools—Secondary education—Teaching—Vocational education—*also* subjects taught.

Education and Labor Committee, House:
 administration and execution of laws within its jurisdiction oversight activities, report, 28321
 calendar, 18546
 committee prints, 15733, 17035-36, 17039, 17041-42, 19754, 19760, 19764-765, 27200, 27354, 29900, 29902
 hearings, 15727-732, 17037-38, 17040, 19753, 19755-759, 19761-763, 19766-767, 21213-221, 23011-015, 24848-850, 24949, 26154-155, 27196, 27198-199, 28403-407, 29899, 29901, 31017-20, 32076-78
 investigations and studies, authorization and expenses, reports, 26004, 26107
 major legislation, 92d Congress, 1st session, summary, 15733
 oversight activities, 92d Congress, summary, 21192
 reports, 15694, 16956, 19619, 19639, 19707, 21173, 21192, 24829, 26093, 26098-99, 26111, 26121, 27150, 27174, 28321, 28339, 28365, 29846, 29887, 29889, 30973, 32030, 32068
 summary of major legislative action, 92d Congress, 27200

Education Commission of the States:
 national assessment of educational progress—
 citizenship, 1969-70 assessment, group results for parental education, color, size, and type of community, 26370
 graphic materials, theme 2, reading, 30144
 literature, released exercises, 28665
 literature, summary data, 30141
 reading and literature, report, 27431
 reading rate and comprehension, 26369, 28667
 reading, theme 8, critical reading, report, 31227
 recognizing literary works and characters, literature reports, 28664, 32196
 responding to literature, theme 2, literature, report, 27432
 science, group and balanced group results for color, parental education, size and type of community, and balanced group results for region of country, sex, 30146
 selected essays and letters, 1969-70 assessment of writing, report, 26371
 survey of reading habits, theme 4, literature, (1970-71 assessment), report, 30142
 understanding imaginative language, national assessment of literature, report, 26368
 writing, group results A and B for objectively scored exercises, 30147
 writing, national results, writing mechanics, 21424
 written directions, reading, report, 28666

Education, National Institute, *see* National Institute of Education.

Education Office:
 administration of higher education programs, in foreign language and area studies, 1973-74, research and training opportunities abroad, 15997
 annual report, 1971, on administration of laws granting Federal aid to schools, 27427
 discrimination against women in employment and in grant and contract procedures, hearings, 23014
 international teacher exchange, value/summary of state regulations/U.S. Office of Education program, 28660
 PREP reports, 15995-996, 20096, 21425
 student loan insurance fund, 1971 and 1972, financial statements, GAO examination, 30956
 Educational associations, education directory, education associations, 15989
 Educational attainment by age, sex and race, 27021
 Educational boards and departments:
 State boards responsible for higher education, 16000
 State department of education—
 and Federal programs, 1970 annual report, 20097
 State boards of education, and chief State school officers, etc., 25056
 State postsecondary education commissions, hearings, 28407
 Educational Resources Information Center:
 ERIC Clearinghouse for Social Studies/Social Science Education, Interpretative Series, 26742
 Federal libraries, selected list of documents available through ERIC, 23607
 how to use ERIC, 22061
 research in education (periodical), 18864
 annual index, 23747
 semiannual index, 32496
 Educational surveys:
 education '72 progress report (address), 26362
 system for statewide evaluation of vocational education, 17353
 Educators:
 All-Union meeting of educators, USSR study, 26601
 how educators can help prevent pollution, 31298
 NASA report to educators, discovery, knowledge, benefits (periodical), 25520
 opinion leaders in organizational structure of 2 State divisions of vocational and technical education, 27770
see also Teachers.

Edwards, John P.:
 market factors in Israel, 28634
 selling in Lebanon, 16832

Edwards Air Force Base, sonic boom data related to tests conducted at White Sands, N. Mex., and Edwards Air Force Base, 24054

Edwards County, Ill., soil survey report, 17841

Edwards Underground Reservoir, Tex.:
 Guadalupe, San Antonio and Nueces Rivers and tributaries, Texas, engineers report—
 departmental editions, 26383, 27441
 document editions, 26043, 27106

EEC, *see* European Economic Community.

EEG, *see* Electroencephalogram.

EEOC, *see* Equal Employment Opportunity Commission.

EERO, *see* Explosive Excavation Research Office.

Effect of copper and silicon on selected mechanical properties of hot-rolled medium-carbon steels, 31590

Effect of deformed shanks, prebored lead holes, and grain orientation on elastic bearing constant for laterally loaded nail joints, 27533

INDEX 1973

Effect of fineness ratio on boattail drag of circular-arc afterbodies having closure ratios of 0.50 with jet exhaust at Mach numbers up to 1.30, 29274

Effect of overstory removal upon surface wind in black spruce bog, 16077

Effect of premortem stress, holding temperatures and freezing on biochemistry and quality of skipjack tuna, 22105

Effect of suspension of bus service on local peak hour traffic congestion, 30212

Effective coordination of drug abuse programs, guide to community actions, 27646

Effective dry methods of separating thermoplastic films from wastepapers, 32342

Effects of different reinterview techniques on estimates of simple response variance, 19251

Effects of material composition on ablation performance of low-density elastomeric ablators, 29283

Effects of pollution abatement on international trade, 25964

Effects of simulated artificial gravity on human performance, 21973

Effects of some antioxidants and EDTA on development of rancidity in Spanish mackerel (*Scomberomorus maculatus*) during frozen storage, 22104

Effects of stress history on resilient response of soils, 31243

Effects of temperature on growth and reproduction of aquatic snails, 27452

Effects on monoflow cotton gin system on ginning operations, lint quality, and spinning performance, 20912

Efforts to prevent heroin from illicitly reaching United States, 20327

Efficiency ratings:

- Head Start Project, evaluating performance and progress of staff, 26515
- Improving employee performance, bibliography, 15608
- National Guard technicians, technician performance rating plan, 30486
- recognition is your responsibility, of superior work for awards, 26673

Effluents:

- color removal from kraft pulp mill effluents by massive lime treatment, 25109
- disposal of uranium-mill effluent by well injection in Grants area, Valencia County, N. Mex., 30272
- gamma induced low temperature oxidation of textile effluents, study, 30193
- kraft effluent color characterization before and after stoichiometric lime treatment, 25113
- kraft pulping effluent treatment and refuse, state of art, 25117
- lake restoration by nutrient removal from wastewater effluent, Shagawa Lake project, 30175
- monitoring, control and disposal of tritium, selected bibliography, 29680
- solvent extraction of nitrate from titanium leacher effluent, 25508
- steam stripping odorous substances from kraft effluent streams, 28810
- treatment of complex cyanide compounds for reuse or disposal, 30195
- ultra high rate filtration of activated sludge plant effluent, 27476

Egg processing plants, *see* Eggs.

Eggs:

- bibliography and abstracts on research in Western Marketing and Nutrition Research Division, 20889
- chemical compounds authorized for use under USDA inspection program, list, 22399
- chickens, and turkeys, annual revisions, 1971, hatchery production, number of hatcheries and egg capacity, 25771
- eggs, chickens, turkeys, layers, potential layers, rate of lay, production, 26886
- foreign agriculture circulars, 18380

Eggs—Continued

- futures, commitments of traders, 18140
- indexed bibliography of eggs and young tunas and other scombrids (Pisces, Scombridae), 20700
- inventory, chicken and egg production, etc., 19137
- poultry and egg situation (periodical), 18768
- prices and price spreads for eggs, frying chickens, and turkeys in 12 major cities, 1966-71, 30718
- processing plants, chemical compounds authorized for use under USDA inspection programs, list, 28041
- production, disposition, cash receipts, and gross income—
 - monthly report, 18250
 - 1965-69, revised estimates, 22357
 - 1970-72, by States, 26885
- products—
 - liquid, frozen, dried production under Federal inspection, 18249
 - USDA, safeguard for quantity buyers, 29630
 - random sample egg production tests, U.S. and Canada, 1972 report, 27984
 - thermal effects on eggs, larvae, and juveniles of bluegill sunfish, 28792
- Egypt:
 - debt rescheduling under certain agricultural commodity and credit and loan agreements, agreement, 17899
 - map, 24250
- Ehrman, Madeline E., contemporary Cambodian, land and economy, 27906
- Eigenfunctions, extension of QZ algorithm for solving generalized matrix eigenvalue problem, 31634
- Eigenvalues, *see* Eigenfunctions.
- 8½ year record, mentally retarded workers in Federal service, 22597
- 18-month calendar of national meetings, 18251
- 18, 19, 20, will they vote? suggestions and resources for students and teachers, 17359
- 18th century English porcelain, 23796
- Ellberg, Joshut, Ellberg for Congress Reception Committee, annual report, 24489
- Ellberg for Congress Reception Committee, annual report, 24489
- Ellertsen, Donald E.:
 - mineral industry of Nebraska, 16294
 - potash, 25479
- Ellis, L. E., power system stabilization with high initial response excitation on large hydroelectric generators, 23936
- Elsele, G. R., consumability of animals exposed to radiation in post attack situation, 29678
- Eisenbeiss, G. K., international checklist of cultivated *Ilex*, *Ilex opaca*, 20890
- Eisenbauer, Charles M., gamma ray moments computer code, GAMMOM-1, 26712
- Eisenhower, Dwight D. Library, *see* Dwight D. Eisenhower Library.
- Eisenhower, Dwight D. Memorial Bicentennial Civic Center, *see* Dwight D. Eisenhower Memorial Bicentennial Civic Center.
- Eisenhower College:
 - Eisenhower dollar coin proceeds for grants to college—
 - hearings, 28396
 - reports, 28453, 29888
- Eisenlohr, W. S., jr., hydrologic investigations of prairie potholes in North Dakota, 21723
- Eisler, Ronald, annotated bibliography on biological effects of metals in aquatic environments, 26399
- Ejectors, two-dimensional slot nozzle ejectors with variable area mixing sections, analysis and testing, 29259
- Elastic constants, *see* Elasticity.
- Elastic scattering, *see* Scattering.

Elastic strain, *see* Strains and stresses.
 Elasticity:
 effect of deformed shanks, prebored lead holes, and grain orientation on elastic bearing constant for laterally loaded nail joints, 27533
 model tests of lined tunnels in jointed rock mass (strengthening of rock by chemical adhesive grouting), 28693
 periodic excitation of finite standard linear viscoelastic solid, 27440
 seismic exploration in cold regions, 21443
 WAVE, computer program for one-dimensional stress wave analysis in a time-dependent inelastic rock using a generalized Voight model, 23640
 Elastomers:
 effects of material composition on ablation performance of low-density elastomers ablaters, 29283
 environmental endurance testing of elastomeric pitch change bearings, 26981
 Elbourn, R. D., air traffic control radar beacon code assignment plan 3dl, 24050
 Elderly people, *see* Aged.
 El Dorado County Republic Central Committee, annual report, 24533
 Eldred, Kenneth M., far field noise generation by coaxial flow jet exhausts, 24028
 Eldridge, Maxwell B., larval fish survey of Humboldt Bay, Calif., 23809
 Elect Anthony R. DiFruscia to Congress Committee, annual report, 24599
 Elect Bill Henderson Committee, annual report, 22966
 Elect Billy G. Mills Committee, annual report, 22837
 Elect Bob McGrath to Congress Committee, annual report, 24632
 Elect Elizabeth Holtzman Committee, annual report, 24622
 Elect Evelyn Elledge Committee, annual report, 22957
 Elect Johnny Nelms to Congress Committee, annual report, 22896
 Elect Priscilla Ryan Committee, annual report, 24751
 Elect Rittenband Committee, annual report, 24701
 Elect Waltz to Congress Committee, annual report, 22946
 Elect Yvonne Brathwaite Committee, annual report, 24377
 Election as to possession-exclusion treatment, 16963
 Election Reform, Nonpartisan Commission on, *see* Nonpartisan Commission on Federal Election Reform.
 Elections:
 annual reports of political committees supporting candidate for House of Representatives, 24311-798, 25994-26040, 27097-105
 Campaign communications reform act, amend, reports, 28479, 31083
 campaign expenditures committee, reports, 21198, 24821
 campaign information, factual, 15795
 District of Columbia—
 act, amend regarding times for filing certain petitions regulating primary election for delegate—
 hearing, 32143
 law, 32013
 reports, 32037, 32123
 mayor and city council, elect, report, 31069
 Election Reform Commission act, draft of proposed legislation to establish, 27115
 employee representation, conducted by NLRB, report, 18657
 Federal—
 campaign act, hearings, 26261, 31137
 code of Federal regulations, 25172

Elections—Continued
 Federal—Continued
 exclude corporations and labor organizations from scope of prohibitions against making contributions, reports, 19910, 19649
 reform, hearings, 30069
 political cartoons in 1848 election campaign, 20766
 political committees supporting candidates for House of Representatives, annual reports, 22666-996
 presidential campaign activities of 1972, hearings, 31159
 presidential election of 1972, illegal, improper, or unethical activities, hearings, print additional copies, report, 28499
 provisions of Constitution and United States Code relating to Presidential elections, 17482
 union election cases under Labor-management reporting and disclosure act, 20494
 what factors influence union representation elections? 23602
 see also Voting.
 Electoral college, *see* Elections.
 Electric apparatus and appliances:
 characteristics of electrical part of atomic-electric plants USSR study, 32402
 electric housewares and fans, current industrial reports, 28153
 electrical control equipment, Federal item identification guide, 32167
 electrical equipment—
 field review of maintenance—
 Central Valley project, mid-Pacific region, 31779
 Hungry Horse project, Grand Coulee Dam Operation Office, Yakima project, 31780
 Minidoka projects, Central Snake projects, 31781
 field review of operation and maintenance—
 North Platte River projects, South Platte River projects, 31784
 Parker-Davis project, Yuma project, Boulder Canyon project, 31785
 electrical fittings, Federal item identification guide, 25000
 electrical terminations, welded, brazed and bonded, 29666
 marking of electrical and electronic parts, military standard, 20064
 miscellaneous electrical power and distribution equipment, Federal item identification guide, 31188
 preventive maintenance programs, 22504
 procedure for selection of electronic and electrical parts during equipment design, military standard, 28622
 see also names or types of apparatus.
 Electric arcs, ionization gauge characteristics of SA1463 triode electron tube and effects of internal gas pressure on pulse emission and arcing, 22484
 Electric batteries:
 batteries used with law enforcement communications equipment, 30379
 engineering evaluation of non-reserve zinc-air cells, 19159
 fuel cells, survey, 29266
 31-day battery-operated recording weather station, 23285
 Electric beams, aerodynamic and flow-visualization studies of 2 delta-wing entry vehicles of Mach 20.3, 31631
 Electric cables:
 insulated, current industrial reports, 15587, 29766
 power, fixed installation, Federal standard, 30237
 Electric charges, *see* Space charges.
 Electric circuits, *see* Circuits.
 Electric coils, windings, Federal item identification guide, 20041, 26334

INDEX 1973

- Electric conductivity:**
 aerial photographic and electromagnetic determination of sea surface and its conductivity, USSR study, 23553
 electric conductivity test for measurement of heat treatment of aluminum alloys, eddy current method, military standard, 25027
 of stream of hot powdered fuel, USSR study, 30368
 on transformation of electromagnetic waves into longitudinal oscillations in nonhomogeneous plasma in presence of perfectly conducting surface, 22443
see also Photoconductivity.
- Electric conductors:**
 high temperature superconductor Nb₃Ga, 31616
 superconducting quantum interference devices, operational guide for rf-biased systems, 22011
see also Semiconductors—Superconductors
- Electric conduits:**
 conduit components, Federal item identification guide, 27383
 conduit electrical, Federal item identification guide, 27383A
 fitting for conduit metal-rigid (thick-wall and thin-wall (EMT) type), Federal standards, 28910
- Electric connectors,** *see* Connectors (electric).
- Electric contacts:**
 brush, holder, electrical contact brush, Federal item identification guide, 26321
 tungsten electrical contact points, workers of Solon, Ohio, plant of Cleveland Refractory Metals Division of Chase Brass and Copper Co., Tariff Commission report, 26900
- Electric controllers:**
 electrical control equipment, Federal item identification guide, 32167
 using market share reports to estimate need on world market, 21101
- Electric current converters, converters, electrical, rotating,** Federal item identification guide, 21405
- Electric currents:**
 alternating current matrix-type separator, 30424
 direct- and alternating-current power transmission, USSR study, 17599
 Federal Aviation Administration electromagnetic pulse (EMP) protection study, 26891
 lightning criteria relative to space shuttles, currents and electric field intensity in Florida lightning, 20593
 power supplies, direct-current, rack-mounted, for ground-based training equipment, 25022
 theoretical and experimental studies of direct high-current discharges in vacuum, 22451
 use of dual electric probes for measuring fluctuations and fluctuating currents in turbulent plasma, 22444
see also Eddy currents.
- Electric discharges:**
 controlled helicopter discharge, 20968
 discharging of inductive power accumulator for generating short-front pulse, USSR study, 26589
 general principle of current heating processes of plasma in pulsed Z-discharges, 20997
 ion heating mechanism in modified Penning discharge, 20614
 ionic and neutral reactions in glow discharges of He-SO₂-CO mixture, 30425
 loudness function derived from data on electrical discharge rates in auditory nerve fibers, 29296
 measurement of plasma parameters in strong HF discharges, 22442
- Electric discharges—Continued**
 optimizing decomposition of carbonyl sulfide in electrical discharge, 21953
 probe method for recording ions produced by laser radiations in afterglow discharge plasma, 20993
 some characteristic features of formation of microwave discharge plasma in presence of magnetic fields greater than cyclotron, 22454
 theoretical and experimental studies of direct high-current discharges in vacuum, 22451
 theory of streamer breakdown, USSR study, 29143
- Electric energy,** *see* Electricity.
- Electric engineering:**
 East European abstracts, 18242
 USSR abstracts, 19037
- Electric equipment,** *see* Electric apparatus and appliances.
- Electric fans:**
 circulating, bracket and desk type, Federal standards, 28909
 circulating, column, rigid blades, non-oscillating Federal standard, 28908
 current industrial reports, 28153
- Electric fields:**
 cylindrical field mill system for measuring electric fields, description and instruction manual, 30520
 Electric and acoustic fields of fishes, use in commercial fishing, etc., USSR study, 31527
 external electric field recorded around animals, man, USSR study, 26583
 lightning criteria relative to space shuttles, currents and electrical field intensity in Florida lightning, 20593
 quasilinear theory of collisionless plasma in weak SHF electric field and constant magnetic field, 22441
 resonance phenomena during multiphoton ionization of xenon atom in electric field $E \sim 5 \times 10^7$ V/cm, 22452
 three-station lightning detection system, 20692
- Electric generators:**
 definitions of tactical, prime, precise, and utility terminologies for classification of DOD mobile electric power engine generator set family, military standard, 25019
 digital-computer program for design-analysis of salient, wound pole alternators, 29286
 emission characteristics of aircraft auxiliary power unit, 25510
 motors and generators, current industrial reports, 16769-770, 29768
 sets, engine driven, tests and instructions, military standard, 15961
see also Electric power plants.
- Electric heating, microwave plasma heating**
 experiments in Tuman-2 device, 22447
- Electric heating elements, immersion and nonimmersion,** Federal item identification guide, 26320
- Electric insulation,** *see* Insulation.
- Electric lamps:**
 base metal parts for incandescent illuminating articles, suitable for residential use, from Canada, 20827
 current industrial reports, 16759, 18194-194A, 19328, 28154
 fluorescent, ballasts, current industrial reports, 18194A, 25923, 30841
- Electric lighting,** *see* Electricity.
- Electric lines:**
 electric system construction contract, labor and material, 17820
 electric transmission—
 construction contract, labor and material, 26814
 specifications and drawings, 28815
- Electric machinery,** *see* Machinery.

Electric measuring instruments :
 industrial plant equipment handbook, electrical and electronic properties measuring and testing instruments, 24982
 using market share reports to estimate need on world market, 21101

Electric motors :
 design and performance calculations of miniature DC motors, calculation of magnetic circuit and performance, 22485
 development of manufacture of linear induction motor propulsion system for tracked air cushion research vehicle, 21559

Electric networks, reciprocity calibration of microphones under high ambient pressures, 20524

Electric plants, *see* Electric power plants.

Electric power, *see* Electricity.

Electric power distribution, *see* Electricity.

Electric power plants :
 analysis of engineering alternatives for environmental protection from thermal discharges, 27468
 characteristics of electrical part of atomic electric plants, USSR study, 32402
 hydroelectric plant construction cost and annual production expenses, 20249
 1000-MWe central station power plants investment cost studies, 24200-201, 22493, 25882
 planning and construction of thermal electric power plants (construction part), USSR study, 26561
 power systems, average rate and repayment studies, 23929
 report on current standards for air-cooled heat exchangers, 28088
 steam-electric plant—
 air and water quality control data, 27508
 construction cost and production expenses, 20250, 27509
see also Nuclear reactor power plants.

Electric probes, use of dual electric probes for measuring fluctuations and fluctuating currents in turbulent plasma, 22444

Electric propulsion, *see* Propulsion.

Electric pulses, *see* Pulses.

Electric railroads, transport statistics, 20443, 25322

Electric ranges, *see* Stoves.

Electric relays, erection and testing of zonal signal enhancer on Chollon-Ata-Orgochur radio relay line, USSR study, 21867

Electric resistance :
 calculating spreading resistance of linearly polarized electrodes, USSR study, 16184
 error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
 Lorenz ratios of technically important metals and alloys, 26706

Electric resistors :
 automated engineering procurement document preparation system, resistors, military standard, 20047
 radio frequency coils, molded ceramic capacitors, and fixed precision metal film resistors, certain workers of Dubois, Pa., plant of Alro Speer Electronic Components Division, Tariff Commission report, 22282
 trimmable film resistors, final report, 22469

Electric shock, facts about electroshock therapy, 22072

Electric stoves, *see* Stoves.

Electric switches, laser control of spark gaps, USSR study, 30354

Electric switchgear, switches, and associated hardware, selection and use of military standard, 31193

Electric toasters, *see* Toasters.

Electric transformers, divergent beam (Kossel) X-ray method and its uses in measuring strain contours in individual

Electric transformers—Continued
 grain of Fe-3 weight percent Si transformer sheet, 32482.

Electric utilities :
 interfuel substitutability in electric utility sector of U.S. economy, economic report, 17489
 promise vs. performance, status of equal employment opportunity in nation's gas and electric utilities, 17442
 sales of firm electric power for resale, by private electric utilities, by Federal projects, by municipalities—
 1966-70, 23226
 1967-71, 25153
 statistics of—
 privately owned electric utilities in U.S., classes A and B, 25152
 publicly owned electric utilities in U.S., 25871

Electric welding, *see* Welding.

Electric wire and wiring :
 aircraft electric wiring installation practices, organizational DS, GS and depot maintenance manual, 19173
 cast spider's web (development of micro-wire), USSR study, 20447
 devices and supplies, current industrial reports, 28170
 electrical terminations, welded, brazed, bonded, 29666
 insulated, current industrial reports, 15587, 29766
 microelectronic interconnection banding with ribbon wire, 29322
 power, fixed installation, Federal standard, 30237
 prevention of tin-lead overhang in plated copper-clad printed wiring boards, final report, 26985
 printed wiring—
 for electronic equipment, military standard, 15959
 for ground-based training equipment, military standard, 20071

Electric wiring, *see* Electric wire and wiring.

Electrical, *see* headings beginning Electric.

Electrical equipment, *see* Electric apparatus and appliances.

Electrical machinery, *see* Machinery.

Electrical Workers Committee on Political Education, International Brotherhood of, *see* International Brotherhood of Electrical Workers Committee on Political Education.

Electricians, I.C., 1 & C rate training manual, 25663

Electricity :
 all electric homes, annual bills, 16046
 Apollo experience report, lunar module electrical power subsystem, 20611
 application of shunt capacitors to rural electric system, 27874
 Bonneville Power Administration, generation and sales statistics, 16693
 certain background information for consideration when evaluating national energy dilemma, 25991
 clean electric power, 22501
 clean energy from coal, national priority, annual report, 22614
 concentration by competing raw fuel industries in energy market and impact on small business—
 hearings, 15782
 report, 19626
 conservation and efficient use of energy, hearings, 29913
 effect of variability in received power on probabilities of communication and delay in land mobile communication systems, 25976
 electric lighting fixtures, current industrial reports, 16760
 electric power industry, national power survey, 1970, guidelines for growth, advisory report, errata, 21558

INDEX 1973

Electricity—Continued

electric power statistics, 18252
 electrical and electronic properties measuring and testing instruments, 24982
 electrical power consumption for municipal wastewater treatment, 31291
 emergency fuels and energy allocation, hearing, 30041
 energy and environment, electric power, 32158
 energy and fuel shortages, relationship to Nation's internal development, hearings, 17085
 Federal energy research and development policies and future technological options, 15903
 Federal power act, regulations, 18835
 Federal Power Commission responsibilities with respect to electric power industry, interstate and wholesale aspects, 25154
 financial requirements of nation's energy industries, hearings, 28545
 Florida power interruptions, Apr. 1973, hearings, 32085
 fuels and electric energy—
 consumed, 30799
 used by industry groups, 1970 annual survey of manufactures, 16684
 hydroelectric power resources of United States, developed and undeveloped, 28870
 initiatives in energy conservation, 31139
 interfuel substitutability in electric utility sector of U.S. economy, economic report, 17489
 magnetohydrodynamic method of producing electrical energy, USSR study, 21854
 national electric rate book, 16047-51, 17457-466, 18667, 20252-259, 21553-557, 23227-229, 25155
 nuclear power and related energy problems, 1968-70, 21137
 power system stabilization with high initial response excitation on large hydroelectric generators, 23936
 publications, price list, 16463
 rural—
 electrification act, amend—
 hearings, 27173
 law, 30908
 electrification program, semi-annual statistical summary, 25691
 lines, story of cooperative rural electrification, 28002
 materials acceptable for use on systems of REA borrowers, lists, 18585, 25688-689, 27873
 restore direct loan programs—
 law, 30908
 reports, 26134
 sales of firm electric power for resale, by private electric utilities, by Federal projects, by municipalities—
 1966-70, 23226
 1967-71, 25153
 sales statistics, TVA retail distribution, 18253
 shocking, isn't it? we want you to know what we know about electrical safety (poster), 21598
 Swan Islands, electric power for certain facilities, agreement between United States and Honduras, supplementing meteorological program agreement, 24000
 theory of UHF and microwave measurements using power equation concept, 27727
 United States energy through the year 2000, 25299
 use of electricity in conjunction with 12-5-meter (hendrope) Gulf-of-Mexico shrimp trawl in Lake Michigan, 22106
 see also Atmospheric electricity.

Electroacoustic waves, electroacoustic apparatus of automatic monitor and measurement systems, USSR study, 20471
 Electroacoustics, effect of electroacoustic characteristics of low-fidelity circuitry upon speech intelligibility, 25406
 Electrochemical analysis, development of method for NTA analysis in raw water, 20196
 Electrochemical Analysis Section, summary of activities, July 1970-June 1971, 26701
 Electrochemistry :
 automated collection of transient data for electrochemical studies, 16643
 recovery of mercury from cinnabar ores by electrooxidation, 30428
 Electrodeposition, investigation of some principles of electrodeposition of cylindrical magnetic films, USSR study, 30341
 see also Electroplating.
 Electrodes :
 calculating spreading resistance of linearly polarized electrodes, USSR study, 16184
 method of implanting permanent diagnostic electrodes in corpus amygdaloideum of human brain, USSR study, 27637
 Electrodialysis, see Dialysis.
 Electrodynamics, recovering plastics from urban refuse by electrodynamic techniques, 25512
 Electroencephalograms :
 electroencephalographic changes during saturation excursion dives to simulated seawater depth of 1000 feet, 25404
 traces of emotional stimuli in EEG spectrum and SGR in humans with normal and impaired memory, USSR study, 26590
 Electroencephalography, electrophysiological correlates of mental activity, USSR study, 23543
 Electrogasdynamics, see Electrohydrodynamics.
 Electrohydrodynamics, laboratory evaluation of electrodynamic fog dispersal concept, 24049
 Electrolysis :
 molten salt electrowinning of magnesium-yttrium alloys, 23660
 use of composite diaphragms in electrowinning of titanium, 16334
 see also Electrochemistry.
 Electrolytes :
 aluminum electrolytic capacitors, workers of Tazewell, Va., plant of General Instruments Corp., Tariff Commission report, 25775
 electrolytic preparation and evaluation of tungsten bronzes, 20969
 electromotive force measurements on cells involving B-alumina solid electrolyte, 29298
 elevated atmospheric CO₂ on acid-base balance and red cell electrolytes of FBM submarine crew members, effects, 20526
 see also Polyelectrolytes.
 Electrolytic cells :
 electromotive force measurements on cells involving B-alumina solid electrolyte, 29298
 parallel plate transmission line Pockels cell, 23879
 Electromagnetic fields :
 circuits for studying interaction of high-frequency fields with plasma in linear devices, 20994
 high frequency potential, effect on propagation of fast waves along magnetoactive plasma layer, 21003
 hygienic problems of effect of microwave electromagnetic field on body, 16194
 procedures for conducting shipboard electromagnetic interference (EMI) survey, military standard, 27414
 random walk study of electron motion in helium in crossed electromagnetic fields, 31623

- Electromagnetic fields—Continued
 space-periodic magnetic configurations, experimental determination of basic characteristics, 21001
 wave field pressure, effect on longitudinal oscillations in plasma, 21004
 waves, instabilities and anomalous dissipation of parametric plasma in strong electromagnetic field of pumping wave, USSR study, 31534
see also Magnetic fields.
- Electromagnetic measurements:
 aerial photographic and electromagnetic determination of sea surface and its conductivity, USSR study, 23553
 electromagnetic metrology, current awareness service, abstracts of selected articles, 18254
 feasibility study of electromagnetic subsurface profiling, 20204
- Electromagnetic metrology, current awareness service, 18254
- Electromagnetic pulses, Federal Aviation Administration electromagnetic pulse (EMP) protection study, 26891
- Electromagnetic pumps, *see* Pumps.
- Electromagnetic radiation:
 anomalous absorption of electromagnetic waves in magnetized plasma, 22445
 anomalous nonlinear dissipation of high-frequency radio waves in plasma, USSR study, 31532
 atmospheric effects for ground target signature modeling, atmospheric transmission at 1.06 micrometers, 22415
 bibliography on propagation effects from 10 GHz-1000 THz of electromagnetic waves, 16837
 bremsstrahlung of relativistic plasma, 21007
 conditions for wave transformation in plasma with nonmonotonic longitudinal distribution, 21005
 electromagnetic radiation from simple sources in presence of homogeneous dielectric sphere, 29251
 electromagnetic radiation safety, USSR study, 26573
 excitation of electromagnetic waves in plasma by relativistic electron beam longitudinal waves, 21000
 generation of fast electrons through interaction of SHF wave with collisionless plasma, 20998
 high frequency potential, effect on propagation of fast waves along magnetoactive plasma layer, 21003
 investigation of alkaline phosphatase activity in persons dealing with electromagnetic emission generators of high, ultra-high and superhigh frequency, USSR study, 30357
 investigations of artificial stimulation of ULF waves in ionosphere and magnetosphere, magic mode, 29436
 localization of wave transformation region in superhigh-frequency discharge plasma, study, 21006
 nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455
 numerical study of electromagnetic scattering from ocean-like surfaces, 17697
 on transformation of electromagnetic waves into longitudinal oscillations in nonhomogeneous plasma in presence of perfectly conducting surface, 22443
 self-stress of electromagnetic waves in dense collisionless plasma, 22456
 study of amplitude of electromagnetic wave reflected from boundary of anisotropic plasma, 22450
 wave field pressure, effect on longitudinal oscillations in plasma, 21004
see also Microwaves.
- Electromagnetic spectrum, *see* Spectra.
- Electromagnetic waves, *see* Electromagnetic radiation.
- Electromagnetism:
 electromagnetic interference characteristics requirement for equipment, military standard, 26336
 procedures for conducting shipboard electromagnetic interference (EMI) survey, military standard, 27414
- Electromagnets, some calculated and experimental data concerning development of synchrotrons with steady-state field in energy range of 35-300 gigaelectronvolts, USSR study, 17616
see also Magnets.
- Electromotive force, electromotive force measurements on cells involving B-alumina solid electrolyte, 29298
- Electromyograph, electromyographic changes in articulation muscles during emotional shifts, USSR study, 26560
- Electron accelerators, *see* Accelerators.
- Electron beams:
 BEAMR, an interactive graphic computer program for design of charged-particle beam transport systems, 31640
 electron-beam welding in various spatial situations, USSR study, 16200
 excitation of electromagnetic waves in plasma by relativistic electron beam, longitudinal waves, 21000
 injection of relativistic electron beam into plasma, 21008
 liquid state spectral emissivities of titanium, vanadium, zirconium, molybdenum, and platinum in electron-beam furnace, 29233
 theory of wave interactions in beam-plasma systems in magnetic fields, 21010
 visit to USSR by U.S. Energetic Beam Team, Apr. 1-15, 1972, report, 15523
- Electron micrographs, micrographics, global market survey, 29119
- Electron microprobe, *see* Electron probes.
- Electron microscopes:
 dynamics of pathomorphological changes in cerebrocortical motor region in response to single lysergamide (LSD) administration (electronic microscopic investigation), USSR study, 20461
 fine structure of cortex in lichen family Parmellaceae viewed with scanning-electron microscope, 25696
 scanning electron microscope examination of wire bonds from high-reliability devices, 32483
- Electron microscopy, radiographic, petrographic, and SEM evaluation of ballistically loaded clay, 31261
- Electron paramagnetic resonance studies of viscous nematic liquid crystal, evidence counter to second-order phase change, 21988
- Electron paramagnetic resonance study of alignment induced by magnetic fields in 2 smectic-A liquid crystals not exhibiting nematic phases, 21989
- Electron probe microanalysis, rigorous correction procedure for quantitative electron probe microanalysis, 31677
- Electron probes:
 electron paramagnetic resonance studies—alignment induced by magnetic fields in 2 smectic-A liquid crystals not exhibiting nematic phases, 21989
 viscous nematic liquid crystal, evidence counter to second-order phase change, 21988
 scanning electron microscope examination of wire bonds from high-reliability devices, 32483
- Electron tubes:
 and associated hardware, Federal item identification guide, 26318
 circuitry, electronic voltage regulation, student guide, 22179

INDEX 1973

Electron tubes—Continued

- electronic receiving tube mounts, workers of Reynoldsville, Pa., plant of Erskine Industries, Inc., Tariff Commission report, 32588
- ionization gauge characteristics of SA1463 triode electron tube and effects of internal gas pressure on pulse emission and arcing, 22484
- test methods for electron tubes, 20067, 23112
- see also* Klystrons.
- Electronic amplifiers, *see* Amplifiers.
- Electronic computers:
 - algebraic manipulation by computer, 31751
 - aspects of organizing automated control system in medical industry, USSR study, 23531
 - automated engineering document preparation system military standard, materials, 30121
 - BESM-4 and SDS-1604A computer video-display, and its application in processing spark and bubble-chamber photographs, USSR study, 25364
 - conference on automation on scientific research through use of computer, USSR study, 20480
 - cross-coupling computer for Oceanographer's Askania gravity meter, 25633
 - Doppler spectrum analysis using minicomputer, 17777
 - drug utilization review with on-line computer capability at Los Angeles County General Hospital, 27883
 - dynamics of rocket control systems with on-board digital computers, USSR study, 21844
 - East European abstracts, 18240
 - geographic base file system, establishing continuing program, conference proceedings, 29725
 - handbook for conversion of IBM 360 application programs to Honeywell series 6000, 24078
 - House of Representatives, maintenance and improvement of ongoing computer services and investigation of additional services, provide funds, report, 27142
 - improving management in the Sel'khoztekhnika system, USSR study, 25357
 - Industry Advisory Committee on Office Machines and Computers, report, 19293
 - logic and memory devices with magnetic crystals, USSR study, 30333
 - machine analysis of biological structures, methods and techniques, USSR study, 17607
 - method for calculating mine ventilation pressure losses using computers and desk-top calculators, 29212
 - MINIMAX, FORTRAN computer program to assemble machine code for interdata model 70 minicomputer on control-data 3800, 31724
 - MODEM non-diversity digital data, 1200 bits per second, military standard, 20050
 - opportunity for greater efficiency and savings through use of evaluation techniques in Federal government's computer operation, GAO report, 16100
 - organizing interface of hardware of local data control systems with M-6000 ASVT-M computer complex, USSR study, 30337
 - potential errors in real-time streamflow data and methods of data verification by digital computer, analysis, 23326
 - principles of multiprogramming for special purpose computers, USSR study, 25341
 - problems in creating network of information and computer centers in Uzbekistan for planning and controlling national economy, USSR study, 17622

Electronic computers—Continued

- question-answering system for CAI, computer assisted instruction, model driven, 28028
- recent computational experience with method of phase and amplitude diagrams, 22168
- signal processing element functional description, microprogrammed control unit, buffer store, and storage control unit, 22175
- standard digital data clock-rate generator with programmable digital phase shift, 31755
- standard for fire protection of AEC electronic computer/data processing systems, 30781
- study of 6 university-based information systems, 29325
- symposium on simulation of computer systems, 29319
- technical base of automated material and technical supply control system, USSR study, 17626
- USSR abstracts, 19036
- see also* Cybernetics.
- Electronic data processing equipment, *see* Electronic data processing systems.
- Electronic data processing systems:
 - adaptive automatic systems, USSR study, 26580
 - applications of dual parameter analyzers in solid-state laser tests, 20979
 - approximate tests of independence in contingency tables from complex stratified cluster samples, 27743
 - automated collection of transient data for electrochemical studies, 16643
 - automated legislative record keeping system for Senate, feasibility study, 20014
 - automatic data acquisition system for underground measurements, 25509
 - business data processing occupational performance survey, 31693
 - CAMAC instrumentation system, supplementary information, 21021
 - census tabulation available on computer tape series, data access descriptions, 15549
 - civilian career in Coast Guard, 28219
 - computerized system for quantitative X-ray diffraction analysis of pyrite in coal, 29244
 - data collection and correction on computer controlled dimensional inspection machine, 22503
 - data processing of claims generated under Federal health benefit programs, hearings, 15742
 - design considerations of programmable pre-detection, digital signal processor for radar applications, 27843
 - determining economic effectiveness of industrial automatic control systems, USSR study, 25352
 - developing specifications for low-cost computer system for secondary schools, 22063
 - digital follow-up system for ship automation, USSR study, 26577
 - digital processing of radiographic images, 29252
 - equal opportunity complaint and compliance review reporting and control procedure, HUD, 31433
 - export mailing list and FTI data services, 31202
 - Federal ADP activities, 22509, 24204
 - Federal information processing standards publications, FIPS pubs, 18315, 20632-633, 25550, 27723-724, 29308-309, 30468, 31673
 - fiscal and ADP handbook, mortgage insurance, HUD, 23427, 29059, 31425
 - improving fiscal and budgetary information for Congress, report, 16973

- Electronic data processing systems—Con.
meteorological rocket data reduction program, general-purpose, 22420
- MIDAS, modular interactive data acquisition system, description and specification, 31679
- National Center for Health Statistics micro-data tape transcripts available for public use, 23722
- Federal information processing standards—1972 directory of automated criminal justice information systems, 25368
on application of Haar functions, 27846
organizing interface of hardware of local data control systems with M-6000 ASVT-M computer complex, USSR study, 30337
- performance comparison of labeling algorithms for calculating shortest path trees, 29323
- preparation and submission of data for approval of non-standard general purpose electronic test equipment, military standard, 15966
- processing EASTROPAC STD data and construction of vertical temperature and salinity sections by computer, 22100
- programmable computer interface for CAMAC, 26688
- quality control and measurement of non-sampling error in health interview survey, 27744
- recent developments in money transfers (address), 26446
- revisions needed in financial management policies of Federal Government's automatic data processing fund, GAO report, 27550
- standard for fire protection of AEC electronic computer/data processing systems, 30781
- synchronous signaling rates between data terminal and data communication equipment, 20633
- take-up reels for one-inch perforated tape for information interchange, category, hardware standard, subcategory, interchange codes and media, 29309
- technical base of automated material and technical supply control system, USSR study, 17626
- technical facilities of Sirena-1 data link system, USSR study, 30349
- technical reviews and audits for systems, equipment, and computer programs, military standard, 20075
- user's guide to NODC's data services, 26395
see also Computer programs/programming—Information storage and retrieval systems.
- Electronic detector system for recovering internally tagged menhaden, genus *Brevoortia*, 22107
- Electronic engineering:
discussion of engineering linguistics, USSR study, 29136
Moscow Institute of Electronic Engineering, how electronics is taught, 25339
- Electronic equipment:
cable fabrication and encapsulation, fy 73-1, quarterly report, 26986
compartment ambient conditions for support of electron equipment, interface standard for shipboard systems, military standard, 20073
conditions of plasma heating at electron cyclotron resonance, 22439
emergency planning in communications and electronics equipment industries, 20082
four instrumentation developments of general interest, 32542
installation practices for aircraft electric and electronic wiring, maintenance manual, 19173
joint electronics type designation system, military standard, 23106
- Electronic equipment—Continued
marking of electrical and electronic parts, military standard, 20064
photoelectronic and thermoelectronic instruments and their applications, USSR study, 31542
preparation and submission of data for approval of non-standard general purpose electronic test equipment, military standard, 15966
preventive maintenance programs, 22504
printed wiring for electronic equipment, military standard, 15959
procedure of selection of electronic and electrical parts during equipment design, military standard, 28622
reduced requirements for modular electronic equipment for aircraft, GAO report, 30261
selected electronic and associated products, current industrial reports, 19242
shipboard, maintainability design criteria handbook for designers, 16454
see also Electronics.
- Electronic measuring instruments, industrial plant equipment handbook, electrical and electronic properties measuring and testing instruments, 24982
- Electronic pile simulators, electronic simulator and training console for indication and degasification of poisons, USSR study, 17619
- Electronic Products Division, BRH/DEP series, 22206, 23914
- Electronic switches, switch rotary, Federal item identification guide, 15953
- Electronic technician, *see* Electronics mechanics.
- Electronic transformers, special considerations in use of geometric coding in transformer storage devices, USSR study, 16195
- Electronic voting in House of Representatives, 16994
- Electronics:
career fields, task difficulty and task aptitude benchmark scales, 25843
communications-electronics—
management of electromagnetic spectrum, 30753
1962-70, Vietnam studies, 16657
design requirements for standard hardware program electronic modules, 27407
developments in cryoelectronics, 22012
East European abstracts, 18242
electronic color separating or sorting machines from United Kingdom, determination of no injury to U.S. industry, Tariff Commission report, 32587
industrial plant equipment handbook, electrical and electronic properties measuring and testing instruments, 24982
integral sensor test system, military standard, 26338
join local radio station, Army Guard Communications, electronics, 32492
microelectronics—
articles, USSR study, 16208
interconnection bonding with ribbon wire, 29322
principles and problems, USSR study, 16178
test methods and procedures, military standard, notice, 20061
modular individualized learning for electronics training, MIL (series), 22179
naval shore electronics criteria—
general, 23867
installation standards and practices, 22158
line-of-sight microwave and tropospheric scatter communication systems, 20722
naval training facilities, 16430
NAVELEX calibration program, 16431
VLF, LF and MF communication systems, 20723
progress in electronics commemorative stamps (poster), 29568

INDEX 1973

Electronics—Continued
 publications, price list, 16463
 recovery of precious metals from electronic scrap, 20576
 technical electronic terms and definitions, military standard, 20070
 USSR abstracts, 19037
 volt-ampere characteristics of optically controlled avalanche transistor, 23542
see also Communications—Electronic equipment.

Electronics mechanics:
 aircraft control and warning radar repairman, Air Force notice, 16626
 electronics technicians, 3 & 2 communications, rate training manual, 27858.
 weapon control systems mechanics (electronics repairman), Air Force notice, 16637

Electrons:
 boundary-layer electron profiles for entry of blunt slender body at high altitude, 31637
 effect of MeV electrons on ceria-doped solar cell cover glass, 29282
 generation of fast electrons through interaction of SHF wave with collisionless plasma, 20998
 hydrated electron, selected specific rates of reactions of transients from water in aqueous solution, 29313
 low-energy electron impact rate coefficients for some atmospheric species, 16451
 method for finding D-region electron density distribution from L.F. broadband pulse measurements, 22641
 new technique for auger analysis of surface species subject to electron-induced desorption, 27716
 random walk study of electron motion in helium in crossed electromagnetic fields, 31623
 selected specific rates of reactions of solvated electron in alcohols, 17736
 theta pinch in electron-hole plasma with surface generation, 22464

Electrophoresis, preparative free-flow electrophoresis as method of fractionation of natural organic materials, 25755

Electrophysiology, *see* Physiology.

Electroplating:
 performance of 40-millimeter-bore ball bearings with lead- and lead-alloy-plated retainers in liquid hydrogen at 1.2 million DN, 20612
 preparation of aluminum alloys for electroplating, military standard, 27412

Electrorefining, *see* Smelting.

Electroslag, collection of annotations of foreign patents relating to electroslag refining, USSR study, 16202

Electroslag welding, *see* Welding.

Electrostatics:
 controlled helicopter discharge, 20968
 double electrostatic probe for measuring density, temperature and velocity of flowing plasma, 25528
 inertial guidance equipment, USSR study, 20469
 reduction of electrostatic charge in jet fuels during refueler loading, 22165
 theory of electrostatic suspension of sphere, USSR study, 30352

Electrotherapy, electro-analgesia, USSR study, 30359

Electrowinning, *see* Electrolysis.

Elementary education:
 Elementary and secondary education—act—
 title 1—
 ESEA case study, 21432-433
 handbook on performance objectives writing, 26365
 history of program for educationally deprived children, 17361
 parental involvement, why? what? how? 23140

Elementary education—Continued
 Elementary and secondary education—act—Continued
 title 3—
 annual report, 32533
 model programs, program descriptions order form, 29360
 Time for progress report of President's National Advisory Council on Supplementary Centers and Services, 32536
 expenditures and revenues for public elementary and secondary education, 27429
 preliminary statistics of State school systems, 28678
 Federal aid to public and private elementary and secondary education, summary of testimony, 21299
 Federal support, oversight, hearings, 21219
 financing of elementary and secondary education, hearings, 15730
 preprimary enrollment, 30148
 sourcebook of elementary curricula programs and projects from ALERT information system, 23143
 see also Elementary schools—Schools.

Elementary schools:
 alcohol and alcohol safety, curriculum manual, elementary level, 22042
 teacher's activities guide, 22043
 public elementary and secondary day schools pupils, instructional and non-instructional staff, instruction rooms, schools, and expenditures, statistics, 25057
 pupil mobility in public elementary and secondary schools during 1969-70 school year, 28680
 reading and language development in first grade, 28671
 statistics of—
 local public school systems, fall 1970, staff, 31229
 public elementary and secondary day schools, fall 1972, 31230
 when your child goes off to school, 26748
 see also Schools.

Elements (chemical), *see* Transition elements.

Elephant Butte Dam, Powerplant, and Reservoir, *see* Rio Grande Project.

Elephants, behavior and ecology of Asiatic elephant in southeastern Ceylon, 26823

Elevations, *see* Altitude.

Elevators, *see* Grain elevators.

Ellason, Robert E., keyed bugles in United States, 20768

Elimination of hazardous open canals, 15906

Elk Creek:
 flood plain information—
 Clarksburg and vicinity, Harrison County, W. Va., 32226
 Jellico, Tenn., 17380

Elk Hills, Calif.:
 lithologic characteristics—
 Pliocene rocks cored at Elk Hills, Kern County, Calif., 27552
 upper oligocene and miocene rocks drilled at Elk Hills, Kern County, Calif., 29005

Elk:
 effects of wildlife on elk and deer use of ponderosa pine forest, 23295
 sagebrush control with herbicide has little effect on elk calving behavior, 32331

Elkland Leather Co., Inc., sole leather, lln- ing, and wetting leathers, former workers of Elkland Leather Co., Inc., Elkland, Pa., Tariff Commission report, 20832

Elledge, Evelyn, Elect, Committee *see* Elect Evelyn Elledge Committee.

Ellender, Allen J.:
fellowships, provide for D.C.—
law, 19436
report, 19896

Eller, Anthony I., adaptation of NRL acoustic research tank facility for experiments in parametric sonar, with preliminary results, 32525

Ellicott Creek:
Lancaster and Alden area, N.Y. flood plain information, 28708
floods, 28762

Elligen, Dana C., supplemental bibliography of publications on energy, 17266

Elligraw Rayou, flood plain information, Sarasota County, Fla., 32220

Ellinwood, Everett H., current concepts of amphetamine abuse, proceedings, 25587

Ellipsoids, structure of space charge field of an ellipsoidal cluster of charged particles, 22462

Ellis, James, basic data on economy of East Germany, 28636

Ellis, James E., use of electricity in conjunction with 12-5-meter (headrope) Gulf-of-Mexico shrimp trawl in Lake Michigan, 22106

Ellsworth, Theodore R., Ellsworth for Congress Committee, annual report, 24547

Ellsworth for Congress Committee, annual report, 24547

Elm, American wood, 31353

Elmhurst, Ill., post office, certain employees, relief, 15810, 19335, 19588

Elochoman River, hydrology of four streams in western Washington as related to several Pacific salmon species, 23349

El Paso County Republican Central Committee, annual report, 22931

El Paso National Gas Co., merger legislation, hearings, 19780

El Salvador:
background notes, 31836
economic trends and their implications for United States, 20434
military assistance, deposits under Foreign assistance act, agreement, 17893
mineral industry, minerals yearbook chapter, 25429
synthesis, dynamics of health, analytic series on interactions of health and socioeconomic development, 20367
trade in cotton textiles, agreement, 17869
trade, meat imports, agreement, 16526

EM series, 23176, 31246

Embankments:
riprap stability on earth embankments tested in large- and small-scale wave tanks, 20103
statistical control of earth dam embankment construction, summary of Reclamation Bureau experience (paper), 23943

Embassies, see Foreign Service.

Embattled Katmai, history of Katmai National Monument, 16410

Emblems, new coinage design and data emblematic of Bicentennial of American Revolution, 32059

Embrittlement, see Fracture of metals.

Embryos, gonadotoxic and embryotoxic effect of food dye amaranth, USSR study, 17627

EMC, see Export Management Company.

Emergencies, see Accidents—Disasters.

Emergency augmentation of regular Coast Guard reservists, 16960

Emergency boards:
reports, investigate dispute between—
Long Island Rail Road Company and certain of its employees represented by Non-Operating Employees Conference Committee, 21434
Port Authority Trans-Hudson Corporation, and certain of its employees represented by, Brotherhood Railway Carmen of United States and Canada, 25062

Emergency department policy & procedure guidelines, 16130

Emergency employment amendments, 27150

Emergency employment assistance appropriations, 15868

Emergency ground-water supplies in Seattle-Tacoma urban complex and adjacent areas, Wash., 25250

Emergency health personnel act amendments of 1972, 19697, 21254, 21365

Emergency Loan Guarantee Board:
1st annual report, 16003
implementation of Emergency loan guarantee act, GAO report, 21694, 31380

Emergency Medical Services Administration:
establish—
hearings, 15753, 27220, 31153
report, 29874

Emergency medical services communications systems, 20369

Emergency petroleum allocation act, 28471

Emergency Petroleum and Gas Administration, what is the Administration? 23899

Emergency plan for industrial mobilization, 30132

Emergency powers, see War and emergency powers.

Emergency Preparedness Office:
abolish, hearing, 26271
Federal advisory committees, annual report, 28539
press releases, 18778
reorganization plan, hearing, 24861
Emergency rail services act amendments, 32122

Emery, Danl. handbook for manpower planners, 21054

Emf, see Electromotive force.

Eminent Americans, namesakes of Polaris submarine fleet, 21159

Eminent domain, eminent domain pool allotments, law, 19352

Emission:
air pollution aspects of emission sources, bibliography with abstracts—
petroleum refineries, 19150
primary aluminum production, 30720
primary lead production, 30721
pulp and paper industry, 29638
approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of A-12, 31653
bremsstrahlung of relativistic plasma, 21007
compilation of air pollutant emission factors, 29637
compiling comprehensive emission inventory, guide, 17427, 28834
control techniques for—
beryllium air pollutants, 24159
mercury emissions from extraction and chlor-alkali plants, 27480
criteria for recommended standard occupational exposure to coke oven emissions, 27765
exhaust emissions from diesel locomotives, pollution problems, progress report, 26734
fuel economy and emission control, 31295
geologic factors causing roof instability and methane emission problems, 30440
investigation of aircraft gas turbine combustor having low mass emissions, 30761
methane emission rate study in deep Pocahontas no. 3 coalbed mine in conjunction with drilling degasification holes in coalbed, 23653
monitoring instrumentation for measurement of sulfur dioxide in stationary source emissions, 28804
national emissions data system control device workbook, 29650

INDEX 1973

Emission—Continued
 national inventory of sources and emissions—
 asbestos, 29641
 beryllium, 29648
 cadmium, 29639
 nickel, 29640
 nationwide air pollutant emission trends, 1940-70, 28832
 nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455
 particulate emissions of cotton gin in Texas stripper area, 26945
 primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effect, 29294
 sulfur dioxide emission control by hydrogen sulfide reaction aqueous solution, citrate system, 30443
 transportation controls to reduce motor vehicle emissions in Salt Lake City, Utah, 29644
see also Exhaust emissions.
 Emission spectra, *see* Spectra.
 Emission spectroscopy, *see* Spectroscopy.
 Emissivity, *see* Radiation.
 Emmet County Republican Central Committee, annual report, 24627
 Emmett, William W., hydraulic geometry of some Alaska streams south of Yukon River, 23346
 Emmons, Ossie and others, relief, 19579, 27116B
 Emotions:
 electromyographic changes in articulation muscles during emotional shifts, USSR study, 26560
 emotion detector experiments, USSR study, 17603
 emotional stress during spaceflight, USSR study, 21862
 physiological characteristics of positive and negative emotional states, USSR study, 27638
 teachers talk about their feelings, 30509
 traces of emotional stimuli in EEG spectrum and SGR in humans with normal and impaired memory, USSR study, 26590
 EMP, *see* Electromagnetic pulses.
 Empire Medical Political Action Committee, annual report, 24398
 Empirical equations, *see* Equations.
 Employ the Older Worker Week, National, *see* National Employ the Older Worker Week.
 Employee appraisals, *see* Efficiency ratings.
 Employee benefit plans:
 code of Federal regulations, 26440, 30220
 employee pension and welfare benefit plan, strengthen and improve protection and interests of participants, report, 27291
 pensions plan terminations, 1972, study, 31886
 reduction-in-force retirement, and fringe benefit legislation, hearings, 21277
 retirement benefit plans, register, 23583
 Retirement income security for employees act—
 bill text, summary of major provisions, and background material, 24953
 hearings, 15925, 24952
 reports, 17175, 19882
 supplementary compensation in PATC industries, 27683
 see also Pensions.
 Employee development specialists, workshops in employee development, instructor's guide for States and local training officers, 27587
 Employee pensions, *see* Pensions.

Employee training:
 Environmental Protection Agency for water pollution control, 21284
 Federal employees, eliminate reporting requirements, report, 28367
 on-the-job training to 3-skill level in communication center operations specialty, estimated cost, 22364
 workshops in employee development, instructor's guides for State and local training officers, 27587
see also Apprentices.
 Employees:
 annual earnings and employment patterns of private nonagricultural employees, 30384
 detailed industry of employed persons by race and sex for U.S., 28126
 diplomatic missions, list, 18255
 employee compensation in private nonfarm economy, 29165
 employee incentive system for hospitals, 15628
 employees in nursing homes, U.S., 22031
 extend coverage of Fair labor standard act to include additional employees, report, 28507
 improvements in employee health care benefits, 23601
 improving employee performance, bibliography, 15608
 jointly administered legal services plans, hearings, 19761
 local-transit operating employees, union wages and hours, 31562
 protection to additional employees under Fair labor standards act—
 hearings, 30056
 report, 28976
 State employee associations conventions, 1973, list, 29172
 United States Postal Service safety program, 32088
 see also Employee benefit plans—Government officials and employees—*also* names of departments, etc., where employed.
 Employees' Compensation Appeals Board, decisions, 26378
 Employer-employee relations, *see* Industrial relations.
 Employers:
 Federal Government as employer of unskilled and undereducated, 22608
 what every employer needs to know about OSHA recordkeeping, 17672, 26616
 Employers liability and workmen's compensation:
 compendium on workmen's compensation, 29336
 digest of workmen's compensation decisions involving delayed injury from ionizing radiation exposure, 21032
 employee compensation in private nonfarm economy, 29165
 Longshoremen's and harbor workers' compensation act—
 amend—
 hearings, 21217
 law, 19501
 reports, 17158, 19639
 amendments, texts, etc., 17284, 21372
 Federal injury compensation 101 questions and answers about Federal employees' compensation act, 28862
 report, National Commission on State Workmen's Compensation Laws, 20660A
 State workmen's compensation laws, comparison of major provisions with recommended standards, 20099
 summary of report of National Commission on State Workmen's Compensation Laws, 16482
 when injured at work, facts about compensation for civilian employees of Federal government, 25142

Employers liability and workmen's compensation—Continued
 workmen's compensation—
 and radiation injury, studies, 21032
 for farmworkers, hearings, 23015
 payments and costs, 23975

Employment:
 act of 1946, as amended, with related laws, annotated, and rules, 32022
 annual earnings and employment patterns of private nonagricultural employees, 30384
 annual survey of manufactures, employment and labor costs for operating manufacturing establishments, 19191
 area trends in employment and unemployment, 18006
 census employment survey user's guide, 31566
 census of population, 1970, employment profiles of selected low-income areas, rural areas, microfiche order form, 23849
 collective bargaining in public employment and merit system, 32416
 Community manpower training and employment act bill text, section-by-section analysis, and background material, 17277
 comprehensive manpower reform, 1972, to allow States, Federal revenues for training and employing individuals, hearings, 19993
 concentrated employment program in New York City has not met its employment objectives, GAO report, 16095
 decentralization and state and local intergovernmental cooperation in developing rural housing and employment programs (remarks), 21807
 Defense Department automated overseas employment referral program, 30088
 effect of new economic policy on employment and power (remarks), 17656
 Emergency employment act—
 amend—
 hearings, 28403
 reports, 27150-151, 29981, 32068
 extend to provide public service employment to disadvantaged, etc., hearings, 28562
 Interim assessment, 17279
 emergency employment assistance appropriation, 1972, hearings, 15868
 employment and—
 earnings—
 1909-72, United States, 30383
 1939-71, States and areas, 21902
 periodical, 18256
 labor cost for operating manufacturing establishments, 21036, 28097
 manpower act, hearings, 21213
 population changes, special economic reports series ES 20, 16787, 29784
 retirement, recommended for action, White House Conference on Aging, 16577
 employment of—
 apprentices, 26920
 homeworkers in certain industries, 20856
 learners, 24099
 women in Federal Government, 1971, study, 24268
 employment profiles of—
 minorities and women in SMSA's of 17 large cities, 30206
 selected low-income areas, rural areas, publications order form, 22527
 employment services to veterans, year of action, 1972 fiscal year report, 25063
 employment situation, monthly release, 18259
 employment statistics of public television licensees, 30138
 employment status and work experience, 1970 census of population, 30808

Employment—Continued
 environmental quality control, finances and employment for selected large governmental units, 19261
 EST, engineers, scientists, technicians, 23577
 expenditure and employment data for criminal justice system, 27656

Federal—
 civilian employment by geographic area, annual report, 24269
 contractor job listing emphasizing employment of veterans, questions and answers on Secretary of Labor's regulation, 31572
 equal opportunity, newsletter, 18268
 mediator positions, 20247
 problems of the Spanish speaking, investigation report, 17069
 Spanish-speaking Americans, 22609
 women's program (address), 30518
 Forest Service, nonprofessional jobs, guide, 15477
 geographic divisions and States, changes, 29784
 government employment series, 31970
 guaranteed job opportunities for families, report, 15860
 guidelines for reevaluation of employment requirements and practices pursuant to Emergency employment act, 15604
 impact of grants to Indian tribes under Emergency employment act of 1971, GAO report to Committee on Labor and Public Welfare, Senate, 25248
 interviewer's handbook for selection and referral to training and placement, 20490
 job directory, Health Services and Mental Health Administration, 25268
 job patterns for minorities and women in private industry, Nation, State, industries, 20236
 Job security assistance act, material relating to administration proposal, 29939
 Job training and community services act, report, 29980
 jobs entry program, National Alliance of Businessmen, 23580
 jobs for which—
 college education is usually required, 26633
 high school education is generally required, 26631
 high school education is preferred, but not essential, 26632
 mentally handicapped, fresh views, special report (periodical), 18921
 National Alliance of Businessmen offering job opportunities to American labor force (remarks), 32424
 National Park Service, seasonal employment, 22133
 Negro employment in South, State and local governments, 25373
 new vistas for competitive employment of deaf persons, 31787
 Northwest forest industries, 18822
 NSF forecasts rise in company-funded research and development and R&D employment, 23848
 odd-job program, comprehensive guide, 16219
 older workers, Operation Mainstream can help, 23582
 opening doors for handicapped, publicity guide and activities calendar for State and local committees on employment of handicapped, 32535
 pension provisions affecting employment of older workers, 29174
 policy and supporting positions, print additional copies, report, 26200
 predictors of job tenure in lumber-plywood mill, 31362

INDEX 1973

Employment—Continued

preemployment inquiries, HUD, 29052
 productive employment of disadvantaged,
 guidelines for action, 30402
 public employment handbook, PEP, 20492
 public employment programs—
 annual report, 27663
 evaluation of first 18 months, 30055
 in selected rural and urban areas, De-
 partment of Labor, GAO report, 31388
 public sector labor relations in Northeast
 region, regional series, 21898
 public service programs for unemployed
 persons—
 interim assessment, 17279
 report, 29981
 questions and answers on retirement plans
 for self-employed, 20404
 retirement plans for self-employed indi-
 viduals, 21820
 security programs, Federal-State funds to
 finance cost of administering, report,
 19608
 selective placement in Federal civil ser-
 vice employment of physically handi-
 capped, etc., handbook, 19281
 self-employed—
 doctors of medicine under OASDHI,
 22238
 tax information, 26541
 standard metropolitan statistical areas
 and central cities, changes, 16787
 State and local government, 18924
 summary of State policy regulations for
 public sector labor relations, statutes,
 etc., 27664
 summer jobs in Federal agencies, opera-
 tions manual, 29812
 symposium on popular participation in
 manpower and employment development,
 20493
 tax credit for hiring people under WIN,
 16220
 trade, employment, and the labor min-
 istries (address), 21900
 unlawful hiring of nonauthorized aliens,
 report, 21171
 work measurement standards manyear al-
 lowances for area offices, HUD staff,
 21775
 workers covered by State unemployment
 insurance laws, 18257
 working for USA, how to apply for civil
 service job, what government can offer
 you as Federal worker, 28216
 working toward employment of handi-
 capped (remarks), 29451
 your rights as an employee on Federal
 or federally financed construction job,
 29588
 your rights under new work incentive
 program, 23589
 see also Civil service—Discrimination in
 employment—Government officials and
 employees—Labor—Manpower—Occu-
 pations—Veterans—Women—Work.
 Employment agencies, see Employment
 Offices.
 Employment management:
 FAA personnel practices, hearing, 15773
 local government approaches to capacity
 building in professional manpower plan-
 ning, 31414
 major collective bargaining agreements,
 layoff, recall, and worksharing proce-
 dures, 20499
 Employment of Handicapped, President's
 Committee on, see President's Committee
 on Employment of the Handicapped.
 Employment offices, Employment Service,
 from labor exchange to delivery system,
 forty years of progress, 27662
 Employment security offices, see Unemploy-
 ment insurance.

Employment Service:

from labor exchange to delivery system,
 forty years of progress, 27662
 manual for USES basic occupational lit-
 eracy test, development, 25375
 observance of 40th anniversary of Wag-
 ner-Peyser act, importance of Employ-
 ment Service to American workers' wel-
 fare (address), 29158
 statistics (periodical), 18258
 Employment Standards Administration, bul-
 letins, 17368, 20099, 23146
 Employment taxes:
 internal revenue bulletin, cumulative in-
 dex digest supplement system, 16149,
 18478
 IRS looseleaf regulations system, 18597
 Emry, Robert J., stratigraphy and prelimi-
 nary biostratigraphy of Flagstaff Rim
 area, Natrona County, Wyo., 30632
 Emulsions, sensitized materials, photo-
 graphic and copying, Federal item iden-
 tification guide, 27395
 En route air traffic control, 18260, 19152,
 26954, 30734
 Encapsulation (electronics), see Electronic
 equipment.
 Encephalitis:
 annual summary, Center for Disease Con-
 trol, neurotropic viral diseases surveil-
 lance, 31973
 reported arthropod-borne encephalitides in
 horses and other equidae, 22396
 subacute sclerosing panencephalitis, fact
 sheet, 22082
 Encephalogram, see Electroencephalogram.
 Encephalomyelitis:
 VEE vaccinations, reimbursement of own-
 ers and veterinarians for expenses, au-
 thorize, report, 17142
 Venezuelan equine encephalomyelitis,
 national emergency, vector control pro-
 gram, Texas and Louisiana, 22398
 Enclosed weir for small streams in snow
 country, 23229
 Enclosures, net radiation method for en-
 closure systems involving partially trans-
 parent walls, 31651
 Encyclopedias, contemporary biographies
 from Large Soviet encyclopedia, USSR
 study, 17598, 23529, 26592
 Endangered species, 28424
 Endangered species conservation act of 1972,
 19856, 19960, 29891, 29983
 Endau, Malaya, summary of synoptic mete-
 orological observations, southeast Asian
 coastal marine areas, 22181
 Endocrinology, index (periodical), 18261
 Endorsement for insurance for home mort-
 gage programs, 21782
 Endorsing objectives for just and effective
 ocean treaty, 27121
 Endrin, Arasan in endrin treatments to pro-
 tect Douglas-fir seed from deer mice, 20316
 Energy, see Atomic energy—Electricity—
 Force and energy—Radiant energy—Thermal
 energy.
 Energy conversion, catalytic combustion, pol-
 lution-free means of energy conversion?
 31274
 Energy Policy Council, establish, report,
 27285
 Energy powers, see War and emergency
 powers.
 Energy resources, see Power resources.
 Energy Task Force, briefings, 17089, 19794
 Enforcement of law, see Law enforcement.
 Engel, Al, for Congress, see Al Engel for
 Congress.
 Engelman, Gerald, lamb industry, economic
 study of marketing structure, practices,
 and problems, 29442
 Engelmann spruce, see Spruce.
 Engen, Glenn F., theory of UHF microwave
 measurements using power equation con-
 cept, 27727

Engenhelro Avidos Dam, examination and proposed rehabilitation, 23920
 Enggett, Mary Ellen, fishery publications, calendar year 1970, lists and indexes, 25630
 Enghardt, Hans G., ten-year growth of planted slash pine after early thinnings, 21678
 Engineer battalion, engineer battalions, airborne and automobile divisions, Army field manual, 24169
 Engineered performance standards, background information for proposed new source performance standards, 29643
 Engineering:
 associated lists for Frankford arsenal engineering drawings, 15963
 automated engineering document preparation system, military standard, 17332
 finishes, 15955
 fuseholders, 20049
 fuses, 17333
 materials, 30121
 resistors, 20047
 terminal boards, 20048
 washers, 15956
 changes in graduate programs in science and engineering, 1970-72 and 1972-74, 16418
 cold regions science and engineering monograph series, 32199
 configuration control-engineering, changes, deviations and waivers, short form, military standard, 20055
 defense communications system, installation standards, manual, 17316
 design handbooks, 19157, 20965
 East European abstracts, 18243
 engineer manual EM series, 23176, 31246
 engineering—
 and design—
 manual, 31246
 subsurface investigations, soils, 23176
 and scientific occupational groups, selected characteristics, 31741
 economic model for fish protein concentration processes, 22101
 evaluation of non-reserve zinc-air cells, 19159
 feasibility study of communications via subterranean waveguide, 22642
 optimization method with application to STOL-aircraft approach and landing trajectories, 17726
 engineering alternatives for environmental protection from thermal discharges, analysis, 27468
 examination announcements, 21084, 29808, 30875
 finite element method and geotechnical engineering in Bureau of Reclamation (talk), 26809
 fisheries handbook of engineering requirements and biological criteria, 31247
 fluoridation engineering manual, 31898
 future of challenging profession (address), 23921
 guides for submission of engineering and development proposals, 21813
 historic American engineering record, 16412
 hydrologic engineering methods for water resources development—
 hydrologic data management, 20155
 principles of ground-water hydrology, 20156
 requirements and general procedures, 20154
 water quality determinations, 28767
 immigrant scientists and engineers in United States, study of characteristics and attitudes, 31738
 Index of U.S. voluntary engineering standards, 22006
 Institute for Air Pollution Training and advanced courses, descriptions, 20949

Engineering—Continued
 journal of research, National Bureau of Standards, 18532
 management engineering policies and procedures, Air Force manual, 30732
 mechanical, industrial, civil and marine, application of modern technologies to international development, list of reports, 18000
 nuclear energy, environment and engineering education, proceedings of workshop, 28072
 regional shelf studies, guide to engineering design, 23148
 SCS national engineering handbook, 16484-485, 25707, 26838
 technical aids in science and engineering, examination announcements, 19285, 28215
 use of satellites in coastal engineering, 23149
 USSR abstracts, 19038
 see also Aeronautical engineering—Electronic engineering—Excavation—Industrial engineering—Marine engineering—Mechanical engineering—Military engineering—Petroleum engineering
 Engineering and Research Center, REC-ERC series, 22209, 23934-940, 32541-543
 Engineering equipment:
 East European abstracts, 18243
 USSR abstracts, 19038
 Engineering geology, contributions to engineering geology (series), 26488
 Engineering Mechanics Section, National Bureau of Standards, research and testing facilities, 25552
 Engineering technicians, examination announcement, amendment, 22598
 Engineers:
 architect-engineer selection bill—
 law, 19507
 report, 19879
 Coast Guard engineer's digest (periodical), 18123
 engineer (periodical), 18263
 immigrant scientists and engineers decline in FY 1972, and physicians increase sharply, 32519
 Marine Corps, operations, Fleet Marine Force manual, 25393
 1971 national survey of compensation paid scientists and engineers engaged in research and development activities, report, 21030
 persons in engineering, scientific, and technical occupations, current population reports, 30852
 Public Health Service, careers, 26803
 publications of interest to, list, 31356
 reemployment, 23577
 scientists, engineers and physicians from abroad, 20712
 see also Civil engineers—Nuclear effects engineers
 Engineers Corps, Army:
 Albuquerque District, history, 1st thirty-six years, 28695
 contract reports, 30164
 EP series, 27442
 facilities subject to user fees, reports, 28345, 32108
 Los Angeles District, report, 21477
 manuals, 23176, 31246
 pamphlet EP series, 26384
 projects, hearing, 31163
 public works appropriations—
 1973, law, 19363
 1974—
 hearings, 27186, 31130
 law, 32015
 reports, 29890, 29993, 30989
 recreation statistics, use of Corps projects, 26384

INDEX 1973

- Engineers Corps, Army—Continued
 report, civil works activities—
 departmental edition, 17369, 25064,
 25090, 30165
 document edition, 16938, 24799–800,
 29838
 rivers and harbors, flood control, new
 projects and monetary authorizations,
 reports, 19654, 19715, 19871
 technical services, construction in United
 States, 20534
 Engineers Corps Board of Contract Appeals,
 digest of decisions, 25075
 Engineman:
 1 & C rate training manual, 20729
 safety practices for lifeboatmen, able sea-
 men, and qualified members of engine
 department, manual, 27057
 Engines:
 automobile gas turbine, optimum cycle
 selection study, final report, 29642
 engine, gasoline- air-cooled, 3 BHP, 4-
 cycle, military design, and model 2A016,
 installation procedures, military stan-
 dard, 20063
 exhaust emission from uncontrolled vehi-
 cles and related equipment using in-
 ternal combustion engines—
 outboard motors, 29647
 small air-cooled spark ignition utility
 engines, 30726
 hazard from engines rebreathing exhaust
 in confined space, 30434
 internal combustion, current industrial re-
 ports, 16764, 30842
 stationary internal combustion engines in
 U.S., 30183
see also Turbines.
 Engines (aircraft):
 accidents involving engine failure/mal-
 function, U.S. general aviation, special
 study, 25648
 acoustic and aerodynamic performance of
 6-foot-diameter fan for turbofan engines,
 QF-1 fan in nacelle without acoustic
 suppression, 32466
 advanced engine control program, 25865
 airworthiness standards, Federal aviation
 regulations, 18294
 cold-air investigation of turbine for high-
 temperature-engine application, two-
 stage turbine performance, 20609
 complete aircraft and aircraft engines,
 current industrial report, 18194, 28150
 design and cold-air investigation of tur-
 bine for small low-cost turbofan engine,
 20610
 design and experimental results for tur-
 bine with jet flap stator and jet flap
 rotor, 29257
 dispersion of turbojet engine exhaust in
 flight, 31650
 effect of fineness ratio on boattail drag of
 circular-arc afterbodies having closure
 ratios of 0.50 with jet exhaust at Mach
 up to 1.30, 29274
 effects of fuel nozzle design on perform-
 ance of experimental annular combustor
 using natural gas fuel, 20620
 far field noise generation by coaxial flow
 jet exhausts, 24028
 type certificate data sheets and specifica-
 tions, 17980
 ultrasonic mass flowmeter for Army air-
 craft engine diagnostics, 26979
see also Rockets—Turbines.
 England, *see* Great Britain.
 English, Robert A., Apollo experience report,
 protection against radiation, 25524
 English Channel, lights and fog signals, list,
 16439
 English language:
 Federal textbook on citizenship, home
 study course, English and State Govern-
 ment, 30303, 31440
 Spanish English developmental program,
 Buffalo, title 1, ESEA case study, 21433
 Engman, Lewis A., nomination, hearings,
 20529
 Eniwetok Atoll, Marshall Islands:
 bacterial counts in surface open waters,
 25695
 recolonization of population of supratidal
 fishes, 25695
 Enlisted men, *see* Air Force—Army.
 Enlisted personnel, *see* Air Force—Armed
 Forces—Army—Navy.
 Enlisted women, *see* Army.
 Enlistment, *see* Recruiting and enlistment.
 Eno, Eugene, new method of controlling ra-
 dioactivity in laboratory waste water,
 21019
 Enrollment, *see* Colleges and universities—
 Elementary education—High schools—
 Schools.
 Ensminger, M. E., horsemanship and horse
 care, 19106
 Entemedor (U.S.S.):
 loan of vessels, agreement with Turkey,
 17885
 Enterprise statistics, series ES, 25938
 Entertainment, *see* Amusements.
 Enthalpy:
 ASRDI oxygen technology survey, thermo-
 physical properties, 17706
 low-temperature heat capacities and high-
 temperature enthalpies of sodium chro-
 mate, 23650
 Entiat Experimental Forest, first-year vege-
 tation after fire, reseeding, and fertiliza-
 tion on Entiat Experimental Forest, 31367
 Entomacrodus, additions to revisions of
 blennioid fish genera Ecsenius and Entoma-
 crodus, with description of 3 new species
 of Ecsenius, 16476
 Entropy, real gas turbulent boundary layers
 with variable edge entropy integral method
 for calculation, errata, 21986
 Entry into atmosphere, *see* Atmospheric
 entry.
 Envelopes, bags, envelopes, and shipping
 sacks, Federal item identification guide,
 30094
 Environment:
 action for environmental quality, stan-
 dards and enforcement for air and water
 pollution control, 28787
 agriculture-environmental and consumer
 protection—
 appropriations—
 1973, hearings, 26146
 1974, hearings, 27178, 28384
 all around you, environmental study guide,
 29175
 alternative futures and environmental
 quality, working papers, 31311
 American environment, home study course
 for SCS employees, 30637
 annotated bibliography on biological ef-
 fects of metals in aquatic environments,
 26399
 applications of remote sensing techniques
 to buoy-based environmental data gath-
 ering, 30526
 beef cattle feedlot site selection for en-
 vironmental protection, 21503
 behavior and impact of chemicals on
 forest environment, 21604
 behavior of materials in subsurface ocean
 environment, 17793
 biomedical and environmental research,
 AEC authorizing legislation, 1974, hear-
 ings, 28265
 calendar of environmental meetings, quar-
 terly, 31303
 career profiles in forestry, conservation,
 ecology, environmental management,
 26462
 catalog of research in aquatic pest control
 and pesticide residues in aquatic envi-
 ronments, 17931
 challenge of environment, primer on EPA's
 statutory authority, 16016, 21487

Environment—Continued

- Chesapeake National Park Service lightship for environmental awareness, 32513
- citizen action can get results, 17413
- citizens make difference, case studies of environmental action, 25670
- common environmental terms, glossary, 21489
- Congress and Nation's environment, environmental and natural resources affairs of 92d Congress, 24935
- conservation and development of our nation's fish and wildlife resources, environmental quality, and oceanography, compilation of Federal laws, 17072
- controlled, clean room and work station requirements, 28911
- Cornell workshop on energy and environment, 21342
- Council on Energy Policy, hearing, 24920
- curriculum activities guide to water pollution and environmental studies, activities, 16573, 17929
- development of case study of total effect of pesticides in environment, non-irrigated croplands of the Mid-West, 20867
- dining facility user-attitudes and environmental design research at Travis AFB, California, 31239
- don't leave it all to experts, citizen's role in environmental decision making, 26397
- draft environmental statement, proposed 1973 Outer Continental Shelf, oil and gas general lease sale, offshore Mississippi, Alabama, and Florida, 31568
- ecological and environmental effects from local fallout, beta and gamma radiation effects from close-in fallout, 16663
- economic impact of cleaner environment (address), 21491
- effects of—
 - agricultural pesticides in aquatic environment, irrigated croplands, San Joaquin Valley, 17932
 - chemical variations in aquatic environments—
 - blota and chemistry of Piceance Creek, 28790
 - lead toxicity to rainbow trout and testing application factor concept, 27449
 - toxic effects of aqueous aluminum to rainbow trout, 26401
- energy and environment, electric power, 32158
- energy, environment, and planning, Long Island Sound region, proceedings of Conference held at Brookhaven National Laboratory, 28070
- engineering alternatives for environmental protection from thermal discharges, analysts, 27468
- environment and—
 - economy, joint progress or parochial negativism (address), 21098
 - shipping controls (remarks), 27692
- environmental-acoustics atlas of Caribbean Sea and Gulf of Mexico marine environment, 22161
- environmental activities of international organizations, 1972 survey, 17241
- environmental and consumer protection appropriations, 1973—
 - law, 15651
 - report, 15829
- environmental applications of advanced instrumental analyses, assistance projects, fy 69-71, 28803
- environmental assessments for effective water quality management planning, 32250
- environmental chambers, industrial plant equipment handbook, 23087
- environmental compatibility, by law, municipal waste treatment, 16024

Environment—Continued

- Environmental Data Service (periodical), 18264
- environmental data system, hearing, 19790
- Environmental education—
 - act, extend, report, 29887
 - for Youth Conservation Corps, 25207
 - projects, brief description, 25052
 - reference sources for development of programs and sites, 22116
- environmental effects on toxaphene toxicity to selected fishes and crustaceans, 26403
- environmental endurance testing of elastometric pitch change bearings, 26981
- environmental film list, 32251
- environmental gamma radiation from ¹⁶N decay in turbines of large boiling water reactor, 25877
- environmental guide for U.S. Gulf Coast, 30482
- environmental healthfulness for migrant workers, hearings, 29924
- environmental impact statements—
 - 102 monitor (periodical), 18731
 - temporary partial exemption for issuing of permits to discharge waste into navigable waters, hearings, 15772
- environmental laws, highlights, 27456-458
- environmental monitoring series, 30176, 32252-259
- Environmental noise control act—
 - law, 19500
 - report, 15858
- environmental problems of Lake Tahoe basin, hearing, 17297
- environmental profiling system, model 9040-5C C.T.D.-SV., 27806
- Environmental protection—
 - act, 23053
 - hearings, 31138
 - statement of, Commerce Committee Senate, 17243
 - in synthetic rubber industry, sub-council report, 29348
 - research catalog, addendum, 21493
 - technology series, 17415-423, 20185-207, 21494-505, 23183-193, 25105-118, 26404-420, 27459-476, 28797-826, 30177-198, 31272-293, 32260-263
 - through public, and private development control, 30197
- environmental quality—
 - as it relates to health, selected references (periodical), 18899
 - as objective of water resources planning, 23061
 - control finances and employment for selected large governmental units, 19261
 - education act, oversight into administration, hearing, 15728
 - fourth annual report of Council on Environmental Quality, 32159
 - research, 15462
 - series, 16114, 20358-359
- environmental radioactivity surveillance guide, 23913
- environmental research by means of manned space stations, 21870
- environmental services, bibliography, 28827
- environmental statements, AEC authorizing legislation, 1974, hearings, 27090
- environmental strands, 20708
- environmentally degradable plastics, review, 28624
- fate and effect of Shell oil spill, Platform B, Block 26, South Timballer Bay, studies and investigations, final report, 17930
- Federal environmental monitoring directory, 30080

INDEX 1973

Environment—Continued

- Federal environmental pesticide control act—
 - environmental law, highlights, 27456
 - hearings, 19959
 - law, 19446
 - reports, 19692, 19844
- field instrumentation studies of earth tremors and their geologic environments in central Utah coal mining areas, 26504
- final environmental impact statement, rule making on polychlorinated biphenyls, 23256
- final environmental statement—
 - FES 73-19, proposed 1973 Outer Continental Shelf, east Texas general oil and gas lease sale, 29176
 - for prototype oil-shale leasing program—
 - letters received during review process, 32388
 - public hearings during review, 31495
 - proposed 1972 Outer Continental Shelf oil and gas general lease sale, offshore eastern Louisiana, 23605
- fire environment concept in forests, etc., 23271
- 'for purple mountain majesties, above the fruited plain', President Nixon's program for building a better environment, 24973
- forest fertilization, state-of-the-art review and description of environmental effects, 20191
- forest-range environmental production analytical system (FREPAS), 22329
- groups that can help, directory of environmental organizations, 16017
- growth and its implications for future on resources, environment and food supply, hearing, 29932
- highway and its environment, fourth annual awards competition, 21538
- housing and urban environment, report, print additional copies, report, 15840
- impact of growth on environment, hearings, 32153
- in productive harmony, environmental impact statements broaden Nation's perspectives, 16019
- inner city environment and role of Environmental Protection Agency, hearings, 17236
- interagency conference, proceedings, 28073
- international exposition on environment, Spokane, Wash., Federal participation, provide—
 - law, 19521
 - report, 19716
- interstate environment compact act, reports, 28504, 29955
- investigation of thermoluminescent dosimeters for environmental monitoring, 22477
- iodine-129 in environment around nuclear fuel processing plant, 25676
- laws and institutional mechanisms controlling release of pesticides into environment, 22301
- laws relating to water pollution control and environmental quality compilation, 26178
- lead, pesticides, man and environment, 32531
- learning about environment, 32436
- legal and administrative measures for protecting environment, USSR study, 29139
- legal compilation, statutes and legislative history, executive orders, regulations, guidelines and reports, solid waste, 32266
- life—pass it on, President's environmental merit awards program, 27477
- little rebellion, now and then, 25216
- man and his environment, USSR study, 29131, 31531
- man, biosphere and technology progress, USSR study, 29142

Environment—Continued

- material needs and environment today and tomorrow, final report, 31685
- meet Johnny Horizon, environmental action campaign to clean up America for our 200th birthday, 32389
- meeting Indiana's environmental protection needs, organizational and staffing requirements, 23197
- mercurial pesticides, man, and environment, 26422
- meteoroid impacts on Mars and secondary particle environment, 20606
- movement and impact of pesticides used for vector control on aquatic environment in the Northeast, 17933
- National environmental policy act—
 - administration, hearings, 15770
 - amend—
 - hearings, 15772
 - report, 19652
 - analysis of proposed legislative modifications, 30047
 - oversight and amend, hearings, 15769
 - public hearings during review, final environmental statement for prototype oil-shale leasing program, 31495
- national environmental study area, guide, 16414
- national forests in quality environment, action plan, 28932
- national parks centennial 1872-1972, parks, man and his environment, 23822
- nation's range resources, forest-range environmental study, 25209
- natural gas industry and environment, pollution problems, sub-council report, 23740
- natural resources and environment, report on state, message from the President, 24813
- nature environmental yardstick, 20353
- nuclear energy, environment and engineering education, proceedings of workshop, 28072
- occupational exposure to hot environments, criteria for recommended standard, 26736
- Offshore marine environment protection act, hearings, 30015
- our environment and our natural resources, indivisibly one, conservation yearbook, 17562
- participation by United States in United Nations environment program, hearings, 28409
- Environment, International Exposition on, *see* International Exposition on the Environment.
- Environmental chambers, *see* Environment.
- Environmental Data Service:
 - NOAA technical memorandum—
 - EDS-ESIC series, 17771-772, 20690, 29386-387
 - EDS-NODC series, 29388
 - NOAA technical report, EDS series, 31721
- Environmental education at Sylvania Visitor Center, 32311
- Environmental Financing Authority, appropriations, 1974, hearings, 28384
- Environmental health, *see* Health.
- Environmental Health Service, Public Health Service grants and awards, 1971 funds, 25598
- Environmental Information Symposium, National, *see* National Environmental Information Symposium.
- Environmental laboratories, environmental laboratory for social sciences, 25104
- Environmental pollution, *see* Pollution.
- Environmental Protection Agency:
 - administrator—
 - decision regarding suspension of 1975 auto emission standards, hearings, 27365, 31161
 - nomination of Russell E. Train, hearing, 31164

Environmental Protection Agency—Con.
 air pollution technical publications, 28788
 aircraft and airport noise, EPA report, 31160
 appropriations, 1974, hearings, 28384
 assessment of Federal and State enforcement efforts to control air pollution from stationary sources, GAO report, 32349
 awards register, grants assistance programs, 21486
 budget request responsibilities, hearings, 27364
 challenge of environment, primer on EPA's statutory authority, 16016, 21487
 current laws, statutes and executive orders, international statutes, 20183
 efforts to remove hazardous pesticides from channels of trade, GAO review, 28939
 EPA bulletin, 18265
 EPA citizens' bulletins, 18266
 EPA compendium of registered pesticides—
 insecticides, acaricides, molluscicides and anti-fouling compounds, 23904-906, 26793, 29445, 31765, 32529
 rodenticides and mammal, bird and fish toxicants, 20731A, 25668
 EPA log, weekly log of significant events, 18267
 EPA organization, Research and monitoring, Technology transfer, Water programs, and Permit program, 17424
 EPA/ORP series, 29456, 30612
 EPA Technology Transfer seminar publications, 30661-665
 finding your way through EPA, 23194
 grants administration manual, 21508
 Industrial Pollution Control Branch, projects, 25106
 Inner city environment and role of Environmental Protection Agency, hearings, 17236
 interim specifications for OR&M grant, contract and in-house reports, 26421
 interstate carrier water supply systems by States and EPA regions, inventory, 31296-297
 library system user's guide, 20218
 Middle Atlantic Region, 25121
 national heart, blood vessel, lung and blood program, program analysis, 30492
 need to control discharges from sewers carrying both sewage and storm runoff, GAO report, 26480
 need to improve administration of water pollution research, development and demonstration program, GAO report, 20334
 posters, 23204
 progress report, 20184
 publications—
 AP series, 15497, 16638, 19149-151, 20947, 22374, 24158-159, 25852, 27479-481, 28832-833, 29637-638, 30720-72
 APTD series, 17427, 22375-377, 27482-489, 28834-835, 29639-644, 30722-728, 31922
 questions and answers from EPA's 2d national citizens' briefing, 32269
 region V public report, 18851
 report to States, effects of pesticides in water, 28795
 Rocky Mountain Prairie Region, life, pass it on, PAO series, 31298-301
 telephone directory, 28844
 water pollution control, manpower development and training activities program, 21284
 Youth Advisory Board newsletter, 19093
 Environmental Quality Council, *see* Council on Environmental Quality
 Environmental Quality Office:
 appropriations—
 1974, authorization law, 30912
 1974-76 increase, authorization, report, 27147
 1975, authorization law, 30912

Environmental Research Center, National, *see* National Environmental Research Center.
 Environmental Research Laboratories:
 ERL program plan, 30201-202
 NOAA technical memorandum—
 ERI-AL series, 29389
 ERI-APCL series, 30520
 ERI-ARL series, 30521
 ERI-ESL series, 30522-524
 ERI-NHRL series, 30525
 ERI-NSSL (series), 23801, 25619-620, 29390
 ERL ORSS series, 31719
 NOAA technical report—
 ERI-AL series, 17777, 20693
 ERI-AOML series, 20691, 27802
 ERI-APCL (series), 23805, 27800, 31722, 31724, 20692
 ERI-ESL series, 17776, 22096-97, 23804, 25625, 30541, 31723
 ERI-MMTC (series), 23802
 ERI-POL series, 17775, 22094, 25624, 27801, 29391
 ERI-SEL series, 22095, 25262
 ERI-WMPO series, 29392, 31725
 ERI-WPL series, 23803, 25623, 30526, 30540
 progr ms and resources, 30204
 SESC, Space Environment Services Center, general information, 28846
 pesticide usage and its impact on aquatic environment in the Southeast, 20868
 physical phenomena related to crystal growth in space environment, 32458
 Pinchot Institute system for environmental forestry studies, 32313
 plants, people, and environmental quality, study of plants and their environmental functions, 25635
 population, resources, and environment, 22192
 President's 1973 environmental program, 30081
 problems of man's interaction with his natural environment, USSR study, 21881
 problems, solutions and emergency preparedness, 20029
 protected educational facilities in found space, guide to converting noneducational spaces into safe, healthful environments for education, 30083
 protection of man and environment, Federal environmental pesticide control act, supplemental report, 19841
 prototype of environmental civilization (address), 21512
 quality of life concept, potential new tool for decision makers, symposium and anthology, 28836
 radionuclide analysis of environmental samples, laboratory manual of methodology, 20736
 railroads and environment in rail freight operations, sub-council report, 23741
 remote sensing of troposphere, 16037
 research and development in progress biomedical and environmental research program, 22490
 response, report on actions for a better environment (periodical), 18868
 rural environmental assistance program, 27985
 hearings, 23005
 report, 24826
 2d annual National symposium on park, recreation, and environmental design, proceedings, 22186
 selected publications on environment, list, 27490
 socioeconomic environmental studies series, 20215, 23199, 25122, 27491-494, 28841, 30197-198, 31306, 32271
 Southern Conference on Environmental Radiation Protection from Nuclear Power Plants, proceedings, 20740

- Environmental Research Laboratories—Con.
Soviet-America working group on remote sensing of natural environment from space, meeting, 30364
space and man's environment (address), 31663
State fire control laws, general administration, environmental protection and pollution control, analysis, 21603, 25204
study of some indices of higher nervous activity of men subjected to underwater environment for many hours USSR study, 25335
summary analysis, summary and analysis of public response to proposed principles and standards for planning water and related land resources and draft environmental statement, 17937
surface mining and reclamation, environmental and economic assessment of alternatives, 27338
surface mining operations, regulate, hearings, 27346, 28550
there lived a wicked dragon, environmental coloring book, 30199
thermal effects on eggs, larvae, and juveniles of bluegill sunfish, 28792
United Nations—
Conference on Human Environment, report, 17086
program, U.S. participation, provide, reports, 27138, 27152, 32101
USAEC environmental research and development, summaries, 28081
water in urban environment, erosion and sediment, 16110
workshop on natural radiation environment, 25875
World Environmental Institute, need for establishing, 17240
your world, my world, book for young environmentalists, 21527
Environmental safety, *see* Safety of life.
Environmental Science Information Center:
ESIC, Environmental Science Information Center, general information, 20180
NOAA technical memorandum, EDS-ESIC series, 17771-772, 20690, 29386-387
Environmental Science Services Administration:
ESSA Research Flight Facility, facilities for airborne atmospheric research, 20686
technical report, 20686, 29382
Environons of Sverdlovsk, 30327
Enz, Richard W.:
proposed system for Arizona telemetry of mountain snow pack and related data, 17839
water supply outlook and Federal-State-private cooperative snow surveys for Arizona, 19056
Enzymes, low water volume enzyme deactivation of vegetables before preservation, 31278
Eocene period:
Eocene brachiopods from Eua, Tonga, 25256
geochemistry of lower Eocene sandstones in Rocky Mountain region, 25259
late Eocene fossils from Eua, Tonga, 25256
stratigraphic distribution of significant Eocene palynomorphs of Mississippi embayment, 26507
stratigraphy of Washakie Formation in Washakie Basin, Wyo., 27555
EP series, *see* Engineers Corps, Army—National Aeronautics and Space Administration.
EPA, *see* Environmental Protection Agency.
Ephemerides:
American ephemerides and nautical almanac, 29430
ephemeris of sun, Polaris, and other selected stars, 20510
Epicenter, *see* Earthquakes.
Epidemiologists, epidemiologist takes look at radiation risks, 25677
Epidemiology:
bibliography, 1969-70 epidemiology of mental disorders, 26743
Colombian expeditions to Noanama Indians of Rio Siguirisua and to Cofan and Ingano Indians of Putumayo, 25596
current bibliography of epidemiology, guide to literature of epidemiology, preventive medicine, and public health, 18182, 25608
50th anniversary of sanitary and epidemiological service, USSR study, 23558
setting up, development, and basic results of work done by Sanitary-Epidemiological Service of RSMSR during last 50 years, 16196
world epidemiology review, 19092
Epilepsy:
blood level determinations of antiepileptic drugs, clinical value and methods, bibliography, 23770
epilepsy bibliography, 1900-50, 29367
hope through research, 23769
Epitaxial deposition:
growth and structure of monocrystalline semiconductor films, USSR study, 29128
vapor phase epitaxy of gallium arsenide, 27854
Epizootic plague, *see* Plague.
Epizootiology, epizootiological importance of *Pasteurella pestis* strains having various amino acid requirements, USSR study, 16187
Eplee, R.E., retrieval and baling machine for polyethylene field cover, 22393
Epps, J. M., annotated bibliography of nematodes of soybeans, 26928
Epstein, Sidney, guidelines for police performance appraisal, promotion and placement procedures, 27654
Equal Educational Opportunity, Select Committee on, Senate:
committee prints, 15890, 17249-250, 19963, 21332
expenditures, supplemental, authorize, report, 15818
Equal employment opportunity, *see* Discrimination in employment.
Equal Employment Opportunity Commission:
annual report—
departmental edition, 30207
document edition, 29844
appropriations—
1973—
law, 19473
report, 19704
1974, hearings, 28388
general counsel, nomination of William A. Carey, hearing, 20002
member, nomination of Colston A. Lewis, hearing, 21374
poster, 25133
research reports, 23207, 28848, 30206
utilization of minority and women workers in public utilities industry, hearings, 25134
Equal pay for equal work, *see* Women.
Equality of treatment of military personnel in application of dependency criteria, 19878
Equations:
adjoint gamma-ray moments computer code, ADJMOM-I, 25556
calculative techniques for transonic flows about certain classes of wing-body combinations, 20584
Cholesky factorization and matrix inversion 26772
classical 8th- and lower-order Runge-Kutta-Nystrom formulas with new stepsize control procedure for special 2d-order differential equations, 29300

Equations—Continued

- computation of special data for Josephson junction circuit, 22010
- computer simulation of slamming and other waves-induced vibratory structural loadings on ships in waves, further studies, 22220
- designing blast patterns using empirical formulas, comparison of calculated patterns with plans used in quarrying limestone and dolomite, with geologic considerations, 17679
- estimating number of narcotic addicts, 20581
- forest stocking equations, their development and application, 28969
- forest survey cubic-foot volume equations, 31364
- how to use two computational strategies to solve simple system, identification problems, 25212
- integral, calculation of real-gas turbulent boundary layers with variable edge entropy, errata, 21986
- intersectorial prediction in optimum planning system, RaS method when prediction and measurement errors are present, USSR study, 17632
- iterative solution of integral equation for radiative transfer by using variational technique, 31632
- Jacobian variational principles and equivalence of 2d order systems of differential equations, 16446
- local net timber volume equations for Wisconsin, 28939
- methods for calculating thermal parameters of cooling towers, USSR study, 30353
- numerical study of electromagnetic scattering from ocean-like surfaces, 17697
- photochemical methods for purifying water, 20206
- program scores, ship structural response in waves, 22219
- qualitative study of complete set of solutions of differential equation of motion of test particle in equatorial plane of Kerr gravitational field, 27717
- quasilinear theory of collisionless plasma in weak SHF electric field and constant magnetic field, 22441
- steady-state solutions of discrete-velocity Boltzmann systems in restricted flow regions, 23874
- tensor manipulations in complex coordinates with applications to mechanics of materials, 30592
- theory of UHF and microwave measurements using power equation concept, 27727
- three-dimensional elastic stress and displacement analysis of finite circular geometry solids containing cracks, 29287

Equations of motion :

- application of matched asymptotic expansions to lunar and interplanetary trajectories, 31606
- comparison of advanced propulsion concepts for deep space exploration, 17725
- derivation of non-Boussinesq set of equations for atmospheric shear layer, 32256
- dynamic characteristics of two-stage variable-mass flexible missile with internal flow, 17695
- gyroscopicalizers, USSR study, 32403
- theory of disordered Heisenberg ferromagnets, 29276

Equations of state, equation of state of mixture of helium and nitrogen, USSR study, 21850

Equatorial Guinea, *see* Guinea.

Equilibrium :

- computer program for pit slope stability analysis by finite element stress analysis and limiting equilibrium method, 21943, 25495
- development of equilibrium air computer programs suitable for numerical computation using time-dependent or shock-capturing methods, 20591
- gases formed in underground nuclear explosion, chemical equilibria and potential applications, 21025
- implicit finite-difference solution to viscous shock layer including effects of radiation and strong blowing, 20622
- liquid-vapor equilibrium in binary systems of He⁴ and He³ with nD₂ and nH₂, 22008
- steady-state and dynamic pressure phenomena in propulsion system of F-111A airplane, 31636
- steady-state solutions of discrete-velocity Boltzmann systems in restricted flow regions, 23874
- thermodynamic and transport properties of gaseous tetrafluoromethane to chemical equilibrium, 31627
- Equine encephalitis, *see* Encephalitis.
- Equine encephalomyelitis, *see* Encephalomyelitis.
- Equine piroplasmiasis, *see* Piroplasmiasis.
- Equipment development ED & T report, 27526-527
- Equipments, *see* Military supplies—also names and types of equipment.
- Equitable Gas Company, natural gas distribution system, Pittsburgh, Pa., pipeline accident report, 30567
- Equity future of American equity market (address), 29466
- Equity Oil Company Plant, refraction surveys in Colorado, 30522
- Equivalence techniques for vibration testing, 17342
- ER 60 series, 19251, 22564
- Erath County, Tex., soil survey report, 26840
- Erbium oxide, germanium cell performance with erbium oxide and silicon carbide radiators, experimental study, 16644
- ERC, *see* Engineering and Research Center.
- Erection and testing of zonal signal enhancer on Chollon-Ata-Orgochaur radio relay line, 21867
- EREP (earth resources experiment package), *see* Sensors.
- Ergonomics, *see* Human engineering.
- ERIC, *see* Educational Resources Information Center.
- Erickson, Bernard J., predicting softwood cutting yields by computer, 28965
- Erickson, John R., moisture content and specific gravity of bark and wood of northern pulpwood species, 17514
- Erie County, N.Y., flood plain information, Ellicott Creek in the towns of Lancaster and Alden and in the village of Alden, N.Y., 28708
- Erie, Lake :
 - bibliography, 16142
 - investigation of mercury in St. Clair River-Lake Erie systems, 16574
 - south shore tributary loading data summary, 25805
- Erie, Pa., housing market analysis, 23218
- Erie County Democratic Committee, annual report, 24395
- Eriez Magnetics Corp., relief, 19828
- Erin, Tenn. :
 - Wells Creek and tributaries—flood plain information, 32224
 - floods, 32233
- ERL, *see* Environmental Research Laboratories.
- EROS, *see* Earth Resources Observation Systems.

INDEX 1973

- EROS Data Center, Sioux Falls, S. Dak., description of facilities, 25255
- Erosion:
- drainage and erosion control facilities, field performance investigation, 28780
 - erosion and sediment control in highway construction, guidelines, 17453
 - measurement of lateral erosion at proposed river crossing sites on Alaska pipeline, 23352
 - scour and fill, fanhead valley in urban southern California, 27567
 - water in urban environment, erosion and sediment, 16110
- see also* Soil erosion.
- Error analysis:
- analysis of errors of gimballess inertial navigation system, USSR study, 30355
 - analytical of potential errors in real-time streamflow data and methods of data verification by digital computer, 23326
 - description of α -B filter in cartesian coordinates, determining mean and covariance errors, 32526
 - error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
 - failure modes, effects and criticality analysis (FMECA) of category 3 instrument landing system, 20825
 - interferometric techniques in dynamic error monitoring, 22507
 - intersectorial prediction in optimum planning system, RaS method when prediction and measurement errors are present, USSR study, 17632
 - set of debugging and monitoring facilities to improve diagnostic capabilities of compiler, 25538
- Error codes, 30086
- Error-correcting codes, subroutine for calculations of CODEN check characters, 17742
- Errors, quality control and measurement of nonsampling error in health interview survey, 27744
- ERS, *see* Economic Research Service.
- Erskine, Christopher F., landslides in vicinity of Fort Randall Reservoir, South Dakota, 26502
- Erskine Industries, Inc., electronic receiving tube mounts, workers of Reynoldsville, Pa., plant of Erskine Industries, Inc., Tariff Commission report, 32588
- ERTS (earth resources technology satellites), *see* Satellites.
- Ervin, Charles W., nomination, hearing, 19999
- Erving Shoe Co., Inc., Lowell, Mass., women's dress shoes, Erving Shoe Co., Inc., Lowell, Mass., Tariff Commission report, 32599
- Erwin, Terry L., studies of subtribe Tachyina (Coleoptera, Carabidae, Bembidini), revision of neotropical genus *Xystosomus* Schaum, 29489
- Erwin-1 production well, city of Gallup, McKinley County, N. Mex., 20348
- Erythrocytes, *see* Blood.
- ESC, *see* Extension Service.
- Escambia County, Fla., flood plain information, 21449
- Escape systems, in-flight escape systems for helicopters should be developed to prevent fatalities. Department of Defense, GAO report, 28995
- Esch, Marvin, Committee to Reelect, *see* Committee to Reelect Marvin Esch.
- Esch, Marvin, Congressional Campaign Committee, *see* Marvin Esch Congressional Campaign Committee.
- Esch, Marvin, Support Committee, *see* Marvin Esch Support Committee.
- Eschenroeder, A. Q., field program designs for verifying photochemical diffusion models, 32254
- Escondido Creek, flood plain information, 21446
- ESEA (Elementary and secondary education act), *see* Elementary education.
- Eshel, A., thermal effects on clearance and stiffness of foil journal bearings for Brayton cycle turboalternator, 20587
- Eshleman, Edwin D., Eshleman for Congress Committee, annual report, 25996
- Eshleman, Paul W., thermal wave flowmeter for measuring combined sewer flows, 27464
- Eshleman for Congress Committee, annual report, 25996
- ESIC, *see* Environmental Science Information Center.
- Eskimos, and their Federal relationship, 16137
- ESL, *see* Earth Sciences Laboratories.
- Espenshade, G. H., geology of Moxie pluton in Moosehead Lake, Jo-Mary Mountain area, Piscataquis County, Maine, 20344
- ESSA, *see* Environmental Science Services Administration.
- Essential rail services continuation act, 29978
- Essex County Democratic Committee, annual report, 24427
- Essex County Republican Committee, annual report, 24772
- Establishing and managing young apple orchards, 16592
- Establishment handling or processing agricultural commodities under Fair labor standards act, 26917
- Estampillas de alimentos para la familia, 17496
- Estate tax, *see* Inheritance and transfer tax.
- Estes, Carl L., *see* Carl L. Estes Dam and Lake.
- Estimated use of water in United States in 1970, 23335
- Estimated world fertilizer production capacity as related to future demand, 30670
- Estimates of gross national product for non-Communist countries, 27613
- Estimates of nature and extent of lead paint poisoning in United States, 20649
- Estimating auto occupancy, review of methodology, 16040
- Estimating Dunning's site index from plant indicators, 31368
- Estimating force and power requirements for crosscut sheering of roundwood, 16082
- Estimating number of narcotic addicts, 20581
- Estimating productivity on sites with low stocking capacity, 31372
- Estimating staffing for municipal wastewater treatment facilities, 29589
- Estonian Soviet Socialist Republic, creation of Republic automated control system, USSR study, 25354
- Estuaries:
- characteristics of estuarine sediments of United States, 17538
 - cooperative Gulf of Mexico estuarine inventory and study, Florida, phase I, area description, 25629
 - distribution of radionuclides in bottom sediments of Columbia River estuary, 30273
 - economics and use of large scale electro-dialysis plants on selected tidal estuarial waters, 17564
 - estuarine and marine pollution, selected studies, bibliography, 20738
 - estuarine pollution, bibliography, 27591
 - Grays Harbor, Wash., south jetty study, hydraulic model investigation, 17408
 - protecting America's estuaries, report, 16988
- Ethanes, subcooled forced convection boiling of trichlorotrifluoroethane, 20592
- Ethanol, *see* Alcohol.
- Ethics:
- current ethical issues in mental health, 27780
 - human self-development, our moral heritage, Army pamphlet, 26963

Ethiopia:
 administration of justice, exchanges of notes, 23033, 26193
 economic trends and their implications for United States, 25315
 map, 24251
Ethnic types:
 bibliography on ethnicity and ethnic groups, 26744
 characteristics of population by ethnic origin, 28172
 establishing Federal racial/ethnic data system, 23463
 annotated bibliography, 23464
 multi-ethnic literature in high school, mental health tool, 30508
 to know or not to know, collection and use of racial and ethnic data in Federal assistance programs, 22591
Ethnology, bibliography on ethnicity and ethnic groups, 26744
Ethylenediaminetetraacetic acid see EDTA.
Etiology:
 special virus cancer program, 17743
 studies in enlisted submariner motivation, etiological factors related to devoluting of submarine school candidates, 16251
 virus-cancer program, 32486
Etowah River, Rome, Floyd County, Ga., special flood hazard information report, 28772
Ettle, Robert Erwin, oceanography of Grand Banks region of Newfoundland and Labrador Sea, 30891
Eua Island, see Tonga Islands.
Eucalyptus:
 emergency assistance to prevent forest fires in Alameda and Contra Costa Counties, Calif., report, 32067
 predisaster assistance for eucalyptus trees in California, hearings, 30012
Eugene, Oreg., ground water in Eugene-Springfield area, southern Willamette Valley, Oreg., 30286
Eulogies, see Memorial services.
EURATOM, see European Atomic Energy Community.
Eureka, Calif., microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418
Eureka, Calif., to Canadian border, marine weather services chart, 29418
Eureka to Point Conception, Calif., marine weather services chart, 29419
Europe:
 census programs of several countries in Europe and Middle East, 26091
 commercial nuclear power in Europe, interaction of American diplomacy with new technology, 21229
 conference on security and cooperation in Europe, current foreign policy, 16498
 current foreign policy, 1973, year of Europe (address), 29530
Eastern—
 agricultural machinery and equipment in developing countries and Eastern Europe, global market survey, 25318
 agricultural statistics, 1950-70, 28649
 economic and industrial affairs, translations, 18973
 foreign relations of U.S., diplomatic papers—
 departmental edition, 17857
 document edition, 16935
 market profiles, 24289
 political, sociological, military affairs, translations, 18974
 scientific abstracts, 18238-245
 scientific affairs, translations, 18975
 selected U.S.S.R. and Eastern European economic data, 30133
 U.S. trade with communist areas, 30131
 educational research in Europe, 17036
 Europe and nuclear weapons, USSR study, 25334

Europe—Continued

European and British Commonwealth series, 16497-498, 29530, 32573-574
European housing subsidy systems, American perspective, 17556
European urban growth policies, 26529
European views on dependency of free world on Middle East oil, summary, 32358
 factfinding visit to Europe and Israel, health care systems, 24948
 financing new communities, Government and private experience in Europe and U.S., 29047
 implications of European community enlargement for U.S. tobacco exports, 27525
 labor-management relations in Europe, results of field investigation, 17039
 normalizing commercial contacts with Socialist states (address), 28230
 problems with U.S. military equipment prepositioned in Europe, GAO report, 26482
 projections of population of communist countries of Eastern Europe, by age and sex, 1972-2000, 26351
 readiness of Air Force in Europe, GAO report, 30260
 reference aid, glossary of abbreviations, acronyms, and terms used in West European press, West Europe study, 26599
 rural development programs, 27301
 status of category 3 for instrument landing systems, 24046
 tide tables, 31716
 United States troop levels in Europe, current foreign policy, 32574
 urban growth policies in 6 European countries, 23453
 vehicle free zones in city centers, European experience, 21802
 west coast, lights and fog signals, list, 22160
Western—
 agricultural situation, 1972 review and 1973 outlook, 26355
 market profiles, 21104
 status of LMFBR reheat, 1972, report of USA LMFBR sodium reheat team, 24197
 translations, 18991
European Atomic Energy Community:
 atomic energy, cooperation for peaceful uses, agreement, 27927
 cooperation act, amend, reports, 29883, 31093
European communities, see Europe.
European Economic Community:
 diplomatic privileges and immunities to Mission of European Communities—
 law, 19430
 report, 19680
 tax adjustments in international trade, GATT provisions and EEC practices, 26264
European Parliament, delegation, official visit to Congress, 17043
European recovery program:
 hearings, 30026
 U.S. assistance to European economic recovery, hearings, 27324
European Security Conference, U.S. participation, hearings, 19768
European War, 1914-18:
 pensions and priority entitlement to medical care and hospitalization, for veterans of World War I, hearings, 15785
 World War I pension act—
 hearing, 21388
 report, 19919
Enthynnus pelamis, see Tuna fish.
Eutrophication:
 correlated studies of Vancouver Lake-water quality prediction study, 21500
 role of sludge worms in eutrophication, 32249

INDEX 1973

- Eutrophication—Continued
weed harvest and lake nutrient dynamics, 31267
- Eutypella canker, *see* Canker (disease of plants).
- Evacuation, GPSS/360 computer models to simulate aircraft passenger emergency evacuations, 28093
- Evaluating adhesives for building construction, 20305
- Evaluating milling cooking and processing characteristics required of rice varieties in United States, 25818
- Evaluation and research program of 1960 censuses of population and housing, 19251, 22564
- Evaluation and research program, 1970 census of population and housing, 22536, 25913, 28132
- Evaluation of canal lining for salinity control in Grand Valley, 20193
- Evaluation of crime control programs, 21890
- Evaluation of item-by-item test administration, 30731
- Evaluation of methods for determining nahcolite and dawsonite in oil shales, 31593
- Evaluation of Office of Economic Opportunity's performance contracting experiment, 27548
- Evaluation of schools, *see* Educational surveys.
- Evaluation of several cryogenic turbine flowmeters, 20644
- Evaluation of treatment plants by tracer methods, 15520
- Evaluation of 200 mCi 55e X-ray diffraction source in focusing and Debye-Scherrer analytical applications, 25871
- Evaluation of two-stage 3 P sampling forest surveys, 23308
- Evaluation of USDA limb and stalk remover for cleaning machine-stripped cotton, 31908
- Evaluation report, interaction simulation, coordinated local-State vocational education planning, 17354
- Evans, Carson D., balance sheet of farming sector, 20895
- Evans, D. C., experimental investigation of a 4 1/2-stage turbine with very high stage loading factor, turbine design, 23670
- Evans, Dick, commerce today, coming developments in business and technology, 18135
- Evans, John O., herbicide contamination of surface runoff waters, 28826
- Evans, John R., nomination, hearing, 26257
- Evans, John S., boundary layer electron profiles for entry of blunt slender body at high altitude, 31637
- Evans, Frank, Coloradoans in Washington for, *see* Coloradoans in Washington for Frank Evans.
- Evansville, Ind., census of population and housing, 1970, census tracts, errata, 19216
- Evaporated milk, *see* Milk.
- Evaporation:
concentration of brines by spray evaporation, 16140
effect of fuel front-end and midrange volatility on automobile emissions, 23656
heat and water vapor exchange between water surface and atmosphere, 31284
steam stripping odorous substances from kraft effluent streams, 28810
- Evaporators, sanitary standards for milk evaporating and drying plants, military standard, 20056
- Evapotranspiration, and watershed research as related to riparian and phreatophyte management, abstract bibliography, 25828
- Everall, Paul F., urban freeway surveillance and control, state of art, 21539
- Everett Brown Carson for Congress, annual report, 24563
- Everett, John T., inshore lobster fishing, 23794
- Everett, Wash., area wage survey, 30388
- Everglades, Fla.:
Florida land and water resources study in Kissimmee-Everglades area, 27891
surface water records, 31397
- Everglades-Big Cypress National Recreation Area, establish, hearings, 17268
- Everglades National Park:
analysis of water level data, 20340
Everglades (poster), 26775
wildguide, 27809
- Everhart, W. Harry:
effects of chemical variations in aquatic environments, biota and chemistry of Piceance Creek, 28790
effects of chemical variations in aquatic environments, toxic effects of aqueous aluminum to rainbow trout, 26401
- Evidence:
rules of evidence proposed for United States courts and magistrates, 24812
hearings, 27230
law, 27087
reports, 26104-105, 26206
taking of evidence abroad in civil or commercial matters convention, agreement, 20805
testimony by FAA employees in legal proceedings, Federal aviation regulations, 18292
- Evolution:
evolution of changes in loose connective tissue under influence of optical quantum generator, USSR study, 21885
evolution of payments mechanism, 23239
evolution of ralls of South Atlantic Islands (Aves: Rallidae), 31802
- Examinations:
college level examination program, list of institutions participating, 21408
examining practices of civil service, 22599, 24263
State laws on reexamining drivers, 22057
see also Civil service—*also* type of subjects of examinations.
- Excavating machinery, materials handling research, bucket-wheel excavator, 26651
- Excavation:
annotated bibliography of explosive excavation related research, 25099
design of underground installations in rock space layouts and excavation methods, technical manual, 16650
explosions for canal construction, USSR study, 27627
Federal excavation technology program, 1971 annual report, 16038
fundamental concepts for rapid disengagement of frozen soil, phase 1, 30158
hole springing by successive detonations of small explosive charges, 26392
military engineering applications of commercial explosives, introduction, 30168
Project Trinidad, explosive excavation tests in sandstone and shale, 27443
Project Tugboat, explosive excavation of harbor in coral, 26391
- Exchanges (international), *see* International exchanges.
- Excise taxes:
devices other than stamps on distilled spirits containers to evidence tax payments, report, 19681
information on excise taxes for 1973, reported on form 720, 21818
Internal revenue bulletin, cumulative index-digest supplement system, 17566, 18479
IRS looseleaf regulations system, 18598
tax information for manufacturers of firearms, shells and cartridges, 20413

Excitation:
electromagnetic waves in plasma by relativistic electron beam, longitudinal waves, 21000
low-energy electron impact rate coefficients for some atmospheric species, 16452

Excitation—Continued
periodic excitation of finite standard linear viscoelastic solid, 27440
power system stabilization with high initial response excitation on large hydroelectric generators, 23936
quasistationary CO₂ laser with pulsed excitation, USSR study, 27625
scattering of 42-MeV alpha particles from copper-65, 31642
structural system identification from—
multipoint excitation, 24187
single point excitation, 24188

Executive agreements:
Congressional oversight, hearings, 15913
transmittal to Congress, law, 16905

Executive branch advisory committees, 16990

Executive classification of information, security classification problems involving exemption of Freedom of Information Act, report, 28347

Executive Committee of Republican Party, Willacy County annual report, 24382

Executive departments:
flood hazard evaluation guidelines for Federal executive agencies, 20874
Government Information policies and practices problems of Congress in obtaining information from executive branch, hearings, 17058
provide 4-year terms for heads of executive departments, report, 27289
public access to information from executive branch advisory groups, hearings, 21241
U.S. foreign economic policy, implications for organization of Executive branch, hearings, 21235
see also Government officials and employees—Government supplies.

Executive, Legislative, and Judicial Salaries Commission: appropriations, 1974, report, 29885
Federal salary act, amend, hearing, 31034

Executive Office of the President:
appropriations, 1973, law, 15640
appropriations, 1974—
hearings, 31012, 31131, 32135
reports, 29885, 31117
certain officers to be subject to confirmation by Senate, reports, 26220, 26227, 27279
growth, 1955-73, report, 17078
growth of office, letter from Morris K. Udall to Thaddeus J. Dulski regarding report, 17078

Executive orders, see President of United States—also subjects.

Executive privilege, availability of all information to Congress, except where executive privilege is invoked, require, hearings, 29911

Executive Reorganization Subcommittee, Senate, funds, additional, provide, report, 15821

Executives:
Active Corps of Executives, one part of ACTION, 29594
executive manpower in Federal service, 30877
executive schedule positions in Department of Justice, report, 21178
Federal salary act, amend—
hearings, 30066, 31034
reports, 29973, 32060
leadership in public service, bibliography, 29576
positions in supergrade levels, report on executive manpower in Federal service, 17077
Score, Service Corps of Retired Executives, one part of ACTION, 29593

Executives—Continued
counselor's guidebook, 29592
swearing-in procedures for HUD executives, 25273

Executors, see Administrators.

Exemption of Federal judiciary from charges for space and services, 32110

Exemption of servicemen and veterans' life insurance for Federal and State inheritance or estate tax purposes, 15677

Exercise:
horse barn indoor exercise area, farm building plan, 22343
speech intelligibility during exercise at normal and increased atmospheric pressures, 16248
see also Physical fitness.

Exhaust emissions:
aircraft emissions, impact on air quality and feasibility of control, 21485
association of automotive fuel composition with exhaust reactivity, 30433
automobile emission control, state of art as of Dec. 1972, 32246
automobile gas turbine, optimum cycle selection study, final report, 29642
demand for platinum to reduce pollution from automobile exhausts, 23641
develop operational system for evaluating and testing methods and instruments for determining effects of fuels and fuel additives on automobile emissions, 31277
dispersion of turbojet engine exhaust in flight, 31650
effect of fuel additives on chemical and physical characteristics of particulate emissions in automotive exhaust, 31275
effect of fuel front-end and midrange volatility on automobile emissions, 23656
emission characteristics of aircraft auxiliary power unit, 25510
exhaust emissions from uncontrolled vehicles and related equipment using internal combustion engines—
outboard motors, 29647
small air-cooled spark ignition utility engines, 30726
far field noise generation by coaxial flow jet exhausts, 24023
hazard from engines rebreathing exhaust in confined space, 30434
interpretation of gas chromatographic spectra in routine analysis of exhaust hydrocarbons, 23651
low NO emission combustor for automobile gas turbine engines, 31922
oxygenates in automotive exhaust gas, estimation of levels of carbonyls and non-carbonyls in exhaust from gasoline fuels, 23649
relationship between SAE smoke number and jet aircraft smoke visibility, 24025
site alteration effects from rocket exhaust impingement during simulated Viking Mars landing, nozzle development and physical site alteration, 30448
suspension of 1975 auto emission standards, decision of administrator of Environmental Protection Agency, hearings, 27365, 31161
transportation control strategy—
Denver metropolitan area, development, 27482-483
Houston area, development, 27486
Minneapolis and St. Paul, Minn., 27487
Philadelphia, City of, State, implementation plan, 27485
Phoenix-Tucson air quality area, 27474
Spokane, Wash., 27489

Exhaust gases, see Exhaust emissions.

Exhaust systems, airborne noise control for vertically stacked bathrooms with mechanical exhaust systems, 26469

Exhibitions:
ballooning, 1782-1972, exhibition, 31665
exhibitor's export market guide (series), 18509

INDEX 1973

Exhibitions—Continued

- international exposition on environment, Spokane, Wash., Federal participation, provide—
law, 19521
report, 19716
- international expositions, protocol amending 1928 convention, 29951
- proposed Federal participation in international exposition at Spokane, Washington, in 1974, 15622
- see also* subjects.

Exhibits:

- differences in speed of mentally processing displays containing information about "right" and "left", 26642
- recording quizboard, device for evaluating interpretive services, 20319
- Eximbank, *see* Export-Import Bank of United States.

Exobiology, *see* Life on other planets.

- Expanding joint use of evaluation facilities by disability determination units and vocational rehabilitation, 17819

Expanding opportunities, women in Federal Government, 27045

Expansion (thermal):

- numerical thermal plume model for vertical outfalls in shallow water, 27469
- thermal effects on clearance and stiffness of foil journal bearings for Brayton cycle turboalternator, 20587

Expansion arts program, guidelines for funding assistance for community arts projects, 32491

Expansion of gases, *see* Gas Expansion.

- Expéditions. Antarctic, *see* Antarctic regions.

Expendable main rotor blade study, 28055.

- Expenditures, *see* names of departments, etc.—*also* subjects for which expenditures are made.

Expenditures of United States Government:

- combined statements, 22305
- Federal fiscal policy, 31339
- impoundment control and 1974 expenditure ceiling, report, 30991
- see also* Budget of United States—Finance.

Expansion tubes, expansion tube flow quantities for real-gas mixtures and comparison with experimental results, program for calculating, 17713

Experience placements, mental health career development program, 23752

Experiment planning, *see* Planning.

Experiment stations, *see* Agricultural experiment stations.

Experimental Safety Vehicles, International Technical Conference, *see* International Technical Conference on Experimental Safety Vehicles.

Experimental surgery, *see* Medicine—Surgery.

Experimental technology incentives program, 27720-722

Experiments and experimentation, *see* subjects.

Expiring laws, 28514

Explorations:

- exploration methods for Continental Shelf, geology, geophysics, geochemistry, 20691
- Soviet marine geological exploration, basic problems, 25349
- United States' forecasts for study and exploration of world ocean, USSR study, 25358

Explore! visitor's guide to discovery in national forests, 29632

Explorer, *see* Satellites.

Explosions:

- detonation of flammable cloud following pipeline break, Dec. 9, 1970, explosion in Port Hudson, Mo., 26668
- explosions for canal construction, USSR study, 27627
- hole springing by successive detonations of small explosive charges, 26392

Explosions—Continued

- mine roof vibrations from underground blasts, Pilot Knob, Mo., 30437
- prediction of airblast overpressures from underground explosions, 17376
- prediction of ground-shock-induced airblast overpressures for subsurface explosions from peak vertical spall velocity, 17378
- Project Trinidad, explosive excavation tests in sandstone and shale, 27443
- rock damage from small charge blasting in granite, 30429
- see also* Detonations—Nuclear explosions.
- Explosive Excavation Research Laboratory, mission, objectives, organization and programs, 20109
- Explosive Excavation Research Office, technical reports, 17376-378

Explosives:

- active list of permissible explosives and blasting devices approved before Dec. 31, 1972, 30414
- card-gap and projectile impact sensitivity measurements, compilation, 30418
- Civil War explosive ordnance, guide to safe inerting, 29439
- explosives and blasting agents, industrial in United States, consumption, 23633-634
- Federal laws relating to explosives, amendments of 1973, report, 29965
- Impact of blasting agents and slurries on explosives technology, 21938
- Industrial explosives and blasting agents, consumption in United States, 31583
- methods and evaluation of explosive fracturing in oil shale, 25506
- middle course 2 cratering series, 32244
- military engineering applications of commercial explosives, introduction, 30168
- Project Tugboat, explosive excavation of harbor in coral, 26391
- revenue rulings, etc., internal revenue bulletin, cumulative, index-digest supplement system, 17567, 18480
- safety and performance tests for qualification of explosives, 20728
- solvents and explosives to recover heavy oil, 21961

Expo-74, *see* International Exposition on the Environment.

Export-Import Bank of United States:

- appropriations, 1973—
hearings, 15717, 15869, 17025
law, 19497
reports, 16989, 16991, 19729, 19887
- appropriations, 1974, hearings, 32132
- audit, GAO report, 27544
- audit report, 29843
- aviation export financing, 32274
- Board of Directors, Member, nomination of Mitchell P. Kobelinski, 31136
- improved management information system needed for Eximbank's capital loan program, GAO report, 23320
- relending programs could be made more effective in promoting U.S. exports, GAO report, 23325

Export Management Company:

- EMC (Export Management Company), your export department, 16156
- BMC, your export department, 30126

Exports:

- airborne, foreign trade, shipping weight and value, customs district and content, reports, 16793, 19013, 22567, 29788
- clarifying Webb-Pomerene act needed to help increase U.S. exports, GAO report, 23350
- Commerce Department services for developing export trade (address), 25033
- commercial offices abroad need substantial improvements to assist U.S. export objectives, GAO report, 20326

Exports—Continued

- control—
 - bulletin, 18272
 - policy, 32127
 - regulations, 18273, 23504, 28642
 - report, 18271
- crops, surplus removal, statutes, compilation, 25820
- Equal export opportunity act and International economic policy act—
 - law, 19365
 - report, 19621
- exhibitor's export market guide (series), 18509
- expansion activities, authorize, hearings, 21322
- Export administration act, amend—
 - law, 19365
 - reports, 19614, 19621, 30997, 32049
- export mailing list and FTI tape services, 31202
- exporting, introductory guide, 17586
- financing exports, guide, 23503
- foreign trade reports, 15597, 19007, 19010, 19014
- France's institutional food market, developments and prospects for U.S. exports, 25042
- implications of European community enlargement for U.S. tobacco exports, 27525
- indexes of U.S. exports and imports by economic class, 16788
- International economic policy act extend and amend, hearing, 38401
- licenses approved and reexports authorized, list, 18274
- made in U.S.A., 25319
 - 7 surprising facts about exporting, 29120
- manufacturers' sales and orders of durable goods, current industrial reports, 18194
- Mutual defense assistance control act (Battle act), report, 26858
- new markets are necessary for significant improvement in export of American products (address), 28228
- outlook for agricultural exports in 1973 (remarks), 26942
- relending programs could be made more effective in promoting U.S. exports, GAO report, 23325
- short supply/anti-inflation export controls, hearings, 28399
- small business, role in export trade and foreign investment—
 - hearings, 19797
 - report, 19734
- statistical classification, schedule B, 16794, 18888
- survey of origin of exports of manufacturing establishments in 1971, current industrial reports, preliminary report, 31963
- U.S. commodities as related to output, 28195
- using market share reports to—
 - analyze needs of Federal Republic of Germany, 21100
 - estimate needs of electric measuring and controlling instruments on world market, 21101
- waterborne, foreign trade reports, 19012
- world area by commodity groupings, annual foreign trade reports, 29787, 30855
- world markets for U.S. exports (series), 18509
- see also* Commerce—*also* names of classes of articles exported.

Expositions, *see* Exhibitions.

Exposure :

- criteria for recommended standard, occupational exposure, 25583-584, 26735-738, 27764-765
- effects on populations of exposure to low levels of ionizing radiation, 25517
- environmental exposure to nonionizing radiation, 30612

Exposure—Continued

- occupational exposure to noise, criteria for recommended standard, 25584
- Express companies, Federal loan guarantee assistance for carriers of express, report, 19863
- EXPRO '73, 21506
- Ex-service men, *see* Veterans.
- Ex-service women, *see* Veterans.
- Extended care facilities, *see* Nursing homes.
- Extended torsional tests of interlocked blastem satellite boom, 32476
- Extending scope of nursing practice, 29037
- Extension of capacity concept to dual-use runways and multi-runway configurations, 24024
- Extension Service :
 - circular ESC (series), 20237, 25135
- Extension Service review (periodical), 18275
 - see also* Cooperative Extension Service.
- Extension work, moving forward, community development, 19123
- Extensions of credit by Federal reserve banks, 28894
- Extortion, civil remedies for victims of racketeering activity and theft, report, 24902
- Extraction (chemistry) :
 - control techniques for mercury emissions from extraction and chlor-alkali plants, 27480
 - extraction and germination of Kadam seeds, 25935
 - extraction of manganese from Georgia amber ores by sulfuric acid-ferrous sulfate process, concurrent extraction and centrifuge tests, 21950
 - solvent extraction of nitrate from titanium leacher effluent, 25508
 - solvent extraction status report, 27459
- Extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687
- Extradition :
 - extradition and cooperation in penal matters, treaty with Uruguay, 28440
 - treaty with—
 - Argentina, 15799, 25753
 - Italy, 29950
- Extramural program of research on aging, of National Institute of Child Health and Human Development, 31691
- Extraterrestrial life :
 - problem of extraterrestrial civilizations and its philosophical aspects, USSR study, 26574
 - space medicine and extraterrestrial life, USSR study, 31543
 - theories on extraterrestrial life, USSR study, 20467
- Extrusion processes :
 - application of hot-isostatic pressing, hydrostatic extrusion, and deformable-die tube tapering processes to production of titanium-6Al-4V tapered tubes, 26980
 - evaluation of Dow Chemical Company extruded aluminum 4-piece 4-by-4-Ft. landing act (MX18-E), 26388
- Eye protectors, laws requiring helmets and eye protection for motorcyclists, 22055
- Eyeglasses, *see* Spectacles.
- Eyes :
 - eye examination findings among children, U.S., 17747
 - results of clinical surveys for microwave ocular effects, lecture, 26804
 - safe use of eye cosmetics, we want you to know what we know about, 21600
 - see also* Cataracts.

F

- F. F. Good Government Fund, annual report, 24721
- F-5, *see* Fighter planes.
- F-14, *see* Fighter planes.
- F-111 A, *see* Fighter planes.

INDEX 1973

F-layer, *see* Ionosphere.
 FAA, *see* Federal Aviation Administration.
 Fabrication, *see* names of materials fabricated.
 Fabrics, *see* Textiles—also names of materials.
 Facenlate, 18278
 Faces of Africa, diversity and progress, repression and struggle, 15735
 Facility management handbook, 16640, 2238.
 Fackler, William C., equivalence techniques for vibration testing, 17342
 Facsimiles, Library of Congress, facsimile series, 16240
 Factorization of meromorphic functions, 26786
 Factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length aspen, 22321
 Factors affecting use of coal in present and future energy markets, 27339
 Facts about adolescence, 20670
 Facts about autism, 22070
 Facts about college mental health, 22071
 Facts about electroshock therapy, 22072
 Facts about group therapy, 23753
 Facts about mental health of children, 2207.
 Facts, Army R.O.T.C., 26959
 Factual campaign information, 15795
 Faculty (schools):
 differentiated staffings, state of art report, 1971-72 annual report on people who serve our schools and colleges as required by Education professions development act, 27428
 see also Teachers.
 Fading (radio), *see* Radar.
 Fahey, Thomas D., lumber recovery from Douglas-fir thinnings at bandmill and 2 chipping canters, 20311
 Fallor, Kenneth M., medals of United States Mint, issued for public sale, 23663
 Failure analysis, *see* Error analysis.
 Failure free system, *see* Reliability (mechanics).
 Fair employment practice, *see* Discrimination in employment.
 Fair hearings in public assistance, 31684
 Fair Housing, *see* Discrimination in housing.
 Fair labor standards act, *see* Labor standards.
 Fair trade, *see* Prices.
 Fairbanks, Alaska, gold-lode deposits, Fairbanks mining district, Central Alaska, 30417
 Fairest one of all, 26463
 Fairfax City Republican Committee, annual report, 22824
 Fairfax County Republican Committee, annual report, 24394
 Fairfield, Idaho, aircraft accident report, 23854
 Fairfield County Republican Executive Committee, annual report, 22716
 Fall out, *see* Radioactivity.
 Fall River, Mass., census of population and housing, 1970, census tracts, errata, 19217
 Falling Creek:
 flood plain information, 21447
 floods, how to avoid damage, 21460
 Fallout, *see* Radioactivity.
 Following, virgin-land grain raising, analysis, USSR study, 17640
 Falls County, Tex., water shed work plan for watershed protection and flood prevention, Pond Creek watershed, 20012
 Falls Creek:
 basin, Indiana, engineers report—departmental edition, 20110
 document edition, 19569
 Families:
 AFDC recipients, assessments completed and referrals to manpower agencies by welfare agencies under Work incentive programs, 18015
 aid to families with dependent children, report, 15860

Families—Continued

child and family resource program, guidelines for child development, oriented family resource system, 24252
 child care arrangements of AFDC recipients, under work incentive program, 18067
 comprehensive headstart, child development, and family services act, text, and section analysis, 21362
 families and individuals, facts about relocation, 31416
 families in expanded food and nutrition education program, comparison of food stamp and food distribution program participants and nonparticipants, 31911
 families with children, programs, 30019
 family composition, census of population, 1970, subject reports, 29708
 family economics review, 18280
 family fare, guide to good nutrition, 16597
 family income in 1969 by family characteristics for United States, 29712
 food consumption of households in Northeast, 1965-66 seasons and year, 15471
 food for family with young children, 30700
 food makes the difference, ideas for economy minded families, 20923
 FPL designs meet family housing needs, 21668
 growth potential of family camping market, 26476
 household and family characteristics, 22556
 by type, current population report, 28174
 income in 1969 of families and primary individuals in owner and renter occupied housing units for U.S., 19199
 low-income families in—
 feeding infants and small children, practices, 17678
 1969, by type, age, and race of head, 27022
 mobile homes and low-income rural families, 25037
 money income in 1971 of families and persons in U.S., 21064
 nativity and parentage composition of families of foreign stock, for United States, 1970, supplementary report, 28129
 persons by family characteristics, 1970, census of population, 24218
 plumbing facilities by persons per room and by income in 1969 of families and primary individuals, for United States, 27009, 29695
 profile of clients with monthly family incomes less than \$150 who were rehabilitated during 1971, 31789
 rental and cooperative housing for lower income families, 31428
 selected labor force characteristics of persons and families for U.S., 29711
 seriveses to AFDC families, annual report to Congress, 22646
 social security information for young families, 29505
 sources and structure of family income, 1970, census of population, 24219
 your rights under new work incentive program, 23589
 work disability of family heads by family income in 1969 for U.S., 24220
 see also Income.
 Family fare, guide to good nutrition, 16597
 Family planning, *see* Birth control.
 Family support, *see* Support (family).
 Family Week, National, *see* National Family Week.
 Fans, and impellers, Federal item identification guide, 31184
 see also Electric fans—Turbine fans.
 FAR, *see* Foreign Area Research Coordination Group.

- FAR Documentation Center, *see* Foreign Affairs Research Documentation Center.
 Far East, *see* East (Far East).
 Far field noise generation by coaxial flow jet exhausts, 24028
 Farberow, Norman L., bibliography on suicide and suicide prevention, 16339
 Fares, *see* Motorbuses.
 Fargo, N. Dak.:
 census of population and housing, 1970, census tracts, 19218
 Red River of the North—
 flood plain information, 28724
 floods, 28752
 Faribault County Republican Committee, annual report, 22732
 Farkas, Ruth L., nomination, hearings, 26268
 Farley, Judith, Library of Congress publications in print, 1973 list, 29185
 Farm animals, *see* Livestock.
 Farm buildings:
 building plans—
 comfort station for campgrounds, 22340
 dairy barn, pole-frame construction 19113
 farrowing and nursery building for swine, 28006
 farrowing houses, 19119
 sows, 22342
 slotted floor, 22339
 swine, environmentally controlled, 20919
 feeder for cattle, liquid supplement, 22341
 fertilizer storage building, 40' rigid frame, 19118
 free-stall barn drive-through type, 19117
 hog house, modified A type, 20915
 horse barn indoor exercise area, 22343
 hutches for rabbits, 29628
 livestock market, 20917
 loose-housing for dairy cows, 19115
 low-income houses, 2 or 4 bedrooms, frame construction, 20918
 milk house for dairy cows, 24135
 pallet bins, 20921
 portable stalls for calves, 28007
 poultry house, cage layers, 20920, 25827
 deep pit, 26941
 squeeze chute for cattle, 31918
 trench silo, concrete construction, 19114
 2-stall horse barn, 19116
 ventilation system for cold, free-stall barns, 28005
 plumbing repairs, 20904
 wood products for selection and use, 15465
 Farm credit, *see* Agricultural credit.
 Farm Credit Administration:
 annual report—
 departmental edition, 30209
 document edition, 29839
 appropriations, 1973, hearings, 26146
 Farm crops, *see* Crops.
 Farm employees, *see* Farm labor.
 Farm equipment, *see* Farm implements and machinery.
 Farm implements and machinery:
 agricultural machinery and equipment in developing countries and Eastern Europe, global market survey, 25318
 automobile, truck, trailer, and farm implement dealers under Fair labor standards act, 26915
 current industrial reports, 19239, 29760
 equipment, labor, expenditures, chemicals, census of agriculture, 1969, general report, 30791
 farm machines and equipment, 1972, current industrial report, 28155
 Farm income, *see* Income.
 Farm index (periodical), 18283
 Farm labor:
 agricultural development and farm employment in India, 21419
 Farm labor—Continued
 agricultural labor-management relations, hearings, 24848
 equipment, labor, expenditures, chemicals, census of agriculture, 1969, general report, 30791
 farm workers—
 occupational safety and health, oversight, hearing, 21215
 rural America, 1971-72, hearings, 19995, 21367
 Federal and State statutes relating to farmworkers, 23066
 health services for domestic agricultural migrant workers, 1972, hearing, 21368
 hired farm working force—
 1971, statistical report, 15982
 1972, statistical report, 25819
 impact of Federal programs to improve living conditions of migrant and other seasonal farmworkers, GAO report, 23319
 legislative proposals relating to labor-management relations in agriculture, summaries, 17042
 migrant manpower programs, hearings, 19762
 monthly report, 18284
 workmen's compensation for farmworkers, hearings, 23015
 see Agricultural occupations.
 Farm machinery, *see* Farm implements and machinery.
 Farm management, *see* Farms.
 Farm mechanics, *see* Mechanization.
 Farm mortgages, *see* Mortgages.
 Farm prices, *see* Prices.
 Farm products, *see* Agricultural products.
 Farm relief, *see* Agriculture.
 Farm workers, *see* Farm labor.
 Farmer Cooperative Service:
 educational circulars, 17443
 general reports, 31312
 information series, 20238, 25136, 26425, 28849
 Farmers:
 accounting methods allowed farmers, tax incentives and consequences, 23129
 deficiency payment to certain wheat farmers in southern wheat belt, report, 19662
 economic success story (address), 20891
 farm management, farm operators, 1969
 census of agriculture, 30790
 farmers, speak up about transportation rates, 28011
 Federal income tax. inspection of returns by Agriculture Dept., 27176
 fruit and vegetable grower and PACA (Perishable agricultural commodities act), 20925
 Spanish edition, 22348
 how farmer and rancher can help prevent pollution, 31300
 how to report your income for social security, 17831
 increasing impact of Federal estate and gift taxes on farm sector, present law and proposed changes, 30696
 inquiry into spread between retail food prices and prices received by farmers, hearings, 29892
 limited resource farmers, proceedings of workshop, 30669
 publications, list, 23462
 sale of crop insurance to farmers under 21, law, 15641
 tax guide, 20395
 your future is looking upward (address), 22361
 see also Farmers' cooperative organizations.
 Farmers' bulletins, 15467-468, 16592-595, 19107, 20903-904, 24127-129, 26933, 27990, 30698-699

INDEX 1973

Farmers cooperative organizations:
 analysis of emerging cooperatives, 1965-70 financed by Farmers Home Administration, 20238
 bargaining in a modernizing agriculture, proceedings, 27499
 cooperative approach to outdoor recreation, 26423
 cooperatives in agribusiness, 17443
 foreign trade of cooperatives, statistical supplement, 25136
 improving management of farmer cooperatives, 31312
 news for farmer cooperatives, 18703
 potential for cooperative distribution of petroleum products in South, 28849
 Farmers Home Administration:
 analysis of emerging cooperatives, 1965-70, 20238
 consolidation act, amend law, 16914
 emergency loan program—
 hearings, 24838
 report, 24906
 farm mortgage lending experience, 20090, 23132, 26358
 housing conditions in areas served by Farmers Home Administration housing programs, 1970, by States, 15483
 inadequate housing and poverty status of households, areas served by Farmers Home Administration programs, 1970, by States, 28022
 role of Farmers Home Administration in achievement of equal opportunity in housing, 19787
 rural credit program, nonfarm enterprises to supplement farm income, 30711
 rural rental housing, rural credit program, 29633
 Farmers' lung disease, *see* Pneumonia.
 Farmfest—U.S.A. and World Ploughing Contest participation, President to invite States of Union and foreign nations, law, 16908
 Farmingdale CTA Committee on Political Education, annual report, 28292
 Farms:
 census, 1970, farm-nonfarm residence for counties in United States, rural population—
 microfiche order form, 22143
 supplementary reports, 15570, 15579
 changes in farm production and efficiency, summary report, 28018
 conservation plan, what it is, 20922
 Consolidated farm and rural development act, amend, report, 24906
 cost situation, 25039
 economic impact of—
 discontinuing farm use of lindane and BHC, 31216
 water pollution abatement in family farm livestock production, 21418
 eminent domain pool allotments, 19352
 farm corporations, financial analysis, 29617
 farm management, farm operators, 1969 census of agriculture, 30790
 farm operations—
 facts about relocation, 31415
 general tax reform, panel discussions, 26188
 farm payment limitations, 17217
 farm population, 28171
 estimates, 1910-70, 29635
 farm program—
 administration, hearing, 19944
 appropriations, 1974, hearings, 28384
 capitalization of benefits into land value, 17347
 extend, hearings, 26247, 30000, 32128
 studies and data, 27299
 farm real estate—
 historical series data, 1850-1970, 28648
 market developments, 23133
 taxes, recent trends and developments, 23134

Farms—Continued
 farms, number, use of land, size of farms, 1969 census of agriculture, 30789
 FHA emergency loan program, restore, hearings, 24838
 general information, value of products, economic class, contracts, 1969 census of agriculture, 30792
 impoundment of funds for farm and rural programs, hearings, 26248
 income of farm-related population, 1970, census of population, 28124
 irrigation and drainage on farms, 1969 census of agriculture, 30794
 land ownership, use, and distribution, hearing, 19995
 milk, revised estimates, 1965-69, milk cows, cows on farms, number of farms, milk, production, disposition, income, 22356
 Oxon Hill children's farm, Oxon Hill, Maryland, 30547
 population, series Census ERS, 28171
 possibility of reducing nitrogen in drainage water by on farm practices, bioengineering aspects of agricultural drainage, San Joaquin Valley, Calif., 27498
 real estate market development, 30134
 replenishing underground water supplies on farm, 16601
 research on removing radioactive fallout from farmland, 25838
 revised estimates, 1959-70, number of farms, land in farms, 22355
 rural credit program, nonfarm enterprises to supplement farm income, 30711
 '73 farm safety campaign, Mr. farmer, don't get caught up in your work, 22352
 slaughtering, cutting, and processing beef on farm, 30699
 taxation of farm operations, panel discussions, 27251
 type of farm, 1969 census of agriculture, 30793
 who owns the land? farm workers in rural America, hearing, 19995
see also Farm labor.
 Farnes, Phillip E., water supply outlook and Federal-State-private cooperative snow surveys for Montana, 19059, 20778
 Farnsworth, George, DIME geographic base file package, census use study for automated address coding, 16748
 Farr, Richard S., remarks, Jan. 26, 1971, 29349
 Farragut, Robert N., effects of some antioxidants and EOTA on development of rancidity in Spanish mackerel (*Scomberomorus maculatus*) during frozen storage, 22104
 Farrow, Richard A., new method for determination of three-dimensional deformation anisotropy in rock specimens, new method, 26488
 Farrowing and nursery building for swine, 28006
 Farrowing house, 19119, 22339, 22342
 Farwell Mountain quadrangle, general geology of Hahns Peak and Farwell Mountain quadrangles, Routt County, Colo., 26490
 FAS, *see* Foreign Agricultural Service.
 Passer, Paul J., nomination, hearing, 28565
 FAS, *see* Foreign Agricultural Service.
 Fast announcement service (periodical), 18285
 Fast Fourier transform microcode for Burroughs D-machine, 23884
 Fast neutrons, *see* Neutrons.
 Fast reactors, *see* Reactors (atomic).
 Fasteners, *see* Fastening.
 Fastenings:
 fasteners used in design and construction of aerospace mechanical system, military standard, 20074, 21411, 23113
 threaded fasteners, Federal item identification guide, 23102

Fatalities, *see* Death.
 Fate of radioactive contaminants in water, 20735
 Fate of trace constituents of coal during gasification, 31272
 Fatemi, Mohammad, explanatory notes on W. H. Zachariasen's theory of X-ray diffraction in ideal crystals, 30595
 Fathom, surface ship & submarine safety review, 18286
 Fatigue:
 masking as indicator of neural fatigue, preliminary study, 20529
 use of oxygen for reducing fatigue of man in flight, USSR study, 27626
 Fatigue of materials, *see* Strains and stresses.
 Fats, *see* Oils fats—Waxes.
 Faulkner, Fran, public roads, journal of highway research, 18332
 Faults (geology):
 geology of Isla Desecheo, P.R. with notes on great southern Puerto Rico fault zone and quaternary stillstands of sea, 17536
 petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
 tectonic events at intersection between Hope fault and Purcell Trench, northern Idaho, 16106
 Fauna:
 benthic faunal surveys in San Francisco Bay, review, 29011
 branchiobdellid (Annelida, Clitellata) fauna of mesoamerica summary, 29490
 endangered species of wild fauna and flora, convention on international trade, 28439
 stratigraphy and ammonite fauna of Graneros shale and Greenhorn Limestone near Pueblo, Colo., 23360
 Fay, Leo G., problem solving exercises, National Reading Center, 21426
 Fayette Countians for Tom Ward, annual report, 24534
 Fayette County, Pa.:
 soil survey report, 29509
 underclay deposits of Somerset and eastern Fayette Counties, Pennsylvania, 21709
 Fayette County Republican Committee, annual report, 22830
 Fayette County Republican Executive Committee, annual report, 24375
 Fayetteville, N.C. economic feasibility study of Fayetteville, N.C. treating Fort Bragg's waste water, 25074
 FCC, *see* Federal Communications Commission.
 FCM, *see* Federal Coordinator for Meteorological Services and Supporting Research.
 FDA, *see* Food and Drug Administration.
 FDD field report, 31218
 FDD series, 18360
 Fear, fear runs deep, report of open meeting, Sommerville, Tenn. civil rights aspects, 22580
 Feasibility demonstration of aerial surveillance spill prevention system, 25127
 Feasibility of applying fringe multiplication techniques to stress analysis in 3 dimensions, 20107
 Feasibility of desalting municipal water supplies in Montana, 20387
 Feasibility study of electromagnetic subsurface profiling, 20204
 Feasibility study of in-situ source monitoring of particulate composition by Raman or fluorescence scatter, 30185
 Feasibility study, VA hospital building system, 24090
 Feaster, J. Gerald, families in expanded food and nutrition education program, comparison of food stamp and food distribution program participants and nonparticipants, 31911

Feces, winter survival of fecal indicator bacteria in subarctic Alaskan river, 20190
 Fecundity:
 birth expectations data, June 1971, current population survey, 15591
 expectations and fertility, June 1972, current population reports, 27032
 fertility of women by education and family income for U.S., 29718
 problems in interpretation and projection of fertility changes in continuing program of population projections, 22566
 FED facts, 16815, 25950, 31980
 Feddern, Henry A., field guide to angelfishes (Pomacanthidae) in western Atlantic, 23807
 Federal advisory committee act, 17144
 Federal Advisory Council on Regional Economic Development, 10 meeting, 19289
 Federal agencies, *see* Government offices.
 Federal aid, *see* Grants-in-aid—also subjects.
 Federal assistance programs:
 action for retarded, recommendations to President on Federal programs, 22193
 benefit-cost analyses of Federal programs, compendium of papers, 21138
 changing demand for local capacity, analysis of functional programming and policy planning, 25271
 coordinating Federal assistance in community, 21767
 discrimination against women, extend Equal pay act to prohibit, hearings, print additional copies, report, 16998
 estimates of impact of inflation on costs of proposed programs should be available to committees of Congress, GAO report, 21691
 Federal assistance review, special report, 26519
 Federal disaster relief legislation to investigate adequacy and effectiveness, hearings, 23571
 Federal domestic assistance—
 catalog, create, report, 17194
 1972 catalog, 18053, 23613
 1973 catalog, 30401
 Federal education assistance programs, catalog, 15988
 Federal programs—
 control environmental pollution from Federal Government activities, basic documents, 32247
 manpower services for the disadvantaged in District of Columbia, GAO study, 25245
 fishing vessel operators, need to establish priorities and criteria for managing, GAO report, 25242
 impact of programs to improve living conditions of migrant and other seasonal farmworkers, GAO report, 23319
 impoundment of funds for farm and rural programs, hearings, 26248
 inventory of Federal programs supporting health manpower training, 26521
 loan guarantee for carriers of express, report, 19863
 measure of success, Federal support for continuing education, 32453
 opportunities to improve effectiveness and reduce costs of homeownership assistance programs, GAO report, 21698
 overall view of issues involved in current proposals for Federal aid to State and local governments, 15788
 national economic accounting training programs for economists and statisticians from other countries, 20084
 problems in administration of public welfare programs, hearings, 15662, 16932
 report to President, Federal programs for retarded, review and evaluation, agency reports, 22197

INDEX 1973

Federal assistance programs—Continued
 responsive federalism, report to the President on Federal assistance review, 27687
 rural environmental assistance program, reinstate program, hearings, 23005
 State and local fiscal assistance act—
 overall view, 19970
 per capita comparisons of distributions to large cities, selected small cities, and rural areas, 19970
 reports, 15673, 15679
 summary of Senate amendments to bill, 21297
 State departments of education and Federal programs, 1970 annual report, 20097
 students, grants-in-aid, eligibility determinations, etc., 28561
 to know or not to know, collection and use of racial and ethnic data in Federal assistance programs, 22591
 Federal Aviation Administration:
 Administrator, nomination of Alexander P. Butterfield, hearings, 28529
 airworthiness directives, 18292
 contractions used in air traffic control, etc. handbook, 16639, 18163, 22382
 electromagnetic pulse (EMP) protection study, 26891
 enforcement procedures, Federal aviation regulations, 18292
 FAA aircraft program data feedback (periodical), 18276
 FAA—AM series, 16679–682, 19187, 21033–34, 22510–511, 24205, 28093, 29684–686, 30785–788
 FAA aviation news (periodical), 18277
 FAA personnel practices, hearing, 15773
 Federal aviation regulations, 18291–301, 20239, 21532, 23209–210
 definitions and abbreviations, 18291
 fees for copying and certifying FAA records, Federal aviation regulations, 18292
 film catalog, 1972, list, etc., 21531, 28852
 handbook series, 27502, 28853
 national aviation system—
 FAA 10 year plan, 27503
 policy summary, 27504
 nondiscrimination in federally assisted programs, Federal aviation regulations, 18292
 publications, price list, 27869
 report RD series, 20825–826, 24023–55, 25774, 30654–655
 rule making procedures, Federal aviation regulations, 18292
 safety regulations, standards, etc., hearings, 23045
 technical standard order authorization, Federal aviation regulations, 18292
 use of communication system, Federal aviation regulations, 18292
 Federal budget for 1974, 28390
 Federal buildings, *see* Public buildings.
 Federal Bureau of Investigation:
 annual report, 21534
 Director, nomination of—
 Gray, Louis P. III, hearings, 27351
 Kelley, Clarence M., hearings, 31150
 story, 28855
 Federal Bureau of Prisons:
 library book catalog—
 author catalog, 23571
 subject catalog, 27655
 title catalog, 25367
 Federal careers for journeymen in printing crafts, examination announcement, 15602
 Federal careers for technicians in engineering and physical science, 22598
 Federal civil rights enforcement effort, 25948
 Federal civil service, *see* Civil service.
 Federal coal mine health program in 1971, annual report, 21763

Federal Communications Commission:
 actions in docket cases, reports, 18302
 annual report, 28859
 appropriations, 1973—
 law, 19359
 report, 16957
 appropriations, 1974—
 hearings, 27185, 30005
 reports, 23377, 29963, 32069
 decisions and reports, bound volumes, 26429, 28856–858, 32280
 decisions, reports, public notices, and other documents (periodical), 18303
 effect of FCC requirements on small market broadcaster, hearings, 26292
 employee responsibilities and conduct, FCC rules and regulations, 18304
 experimental actions, reports, 18302
 FCC monitoring of employees' telephones—
 hearings, 21256
 report, 21194
 fundamental changes needed to achieve effective enforcement of radio communication regulations, GAO report, 20329
 general actions, reports, 18302
 major matters pending before Federal Communications Commission, 17238
 maritime services, radio stations on land, shipboard, etc., rules and regulations, 18307
 memorandum opinions, etc., 18618
 organization, FCC rules and regulations, 18304
 overview, hearing, 26260
 practice and procedure, FCC rules and regulations, 18304
 press releases, 18779
 public notices, 18302, 18779
 rules and regulations, 18304–313, 23214, 25139
 Federal contractor job listing emphasizing employment of veterans, questions and answers on Secretary of Labor's regulation, 31572
 Federal contracts, *see* Government contracts.
 Federal Coordinator for Meteorological Services and Supporting Research, FCM series, 20687, 25616, 29383–384
 Federal Council on Aging, *see* Aging, Federal Council on.
 Federal credit unions:
 accounting manual for Federal credit unions, 25574
 facts about credit unions, 31686
 Federal credit union act and related statutes, 25575, 26724
 National Credit Union Administration—
 financial statement, 1971 and 1972 GAO examination, 32352
 rules and regulations, 18666
 programs, annual report, 16374
 supervisory committee manual for Federal credit unions, 25577
 Federal Crop Insurance Corporation, audit fiscal year 1972, GAO report, 21687, 24802
 Federal Deposit Insurance Corporation:
 annual report, 17451
 audit, fiscal year, 1972, GAO report, 27545
 Director, nomination of George A. LeMaitre, hearing, 31136
 Federal domestic assistance programs, *see* Federal assistance programs.
 Federal election campaign act, 26261, 31083, 31137
 Federal election reform, 30069
 Federal elections campaign act of 1973, 28479
 Federal employees, *see* Government officials and employees.
 Federal Employees Compensation Office, pamphlets, 25142, 28862
 Federal Employees Pay Council, pay comparability adjustments, 1973, supplemental to President's report, 24871
 Federal employment, *see* Civil service—Employment.

Federal environmental monitoring directory, 30050.
 Federal environmental pesticide control act, 27456
 Federal expenditures, *see* Economies in National Government—Finance—subjects for which expenditures are made.
 Federal expenditures at San Clemente and Key Biscayne, 29893
 Federal fair employment practices act, *see* Discrimination in employment.
 Federal Financing Bank:
 establish, 27252
 hearings, 15787, 24879
 reports, 28478, 30981
 summary of bill, 17111
 summary of proposal, 26191
 summary of testimony, 17113
 Federal flood insurance act, *see* National flood insurance.
 Federal government, *see* Civil service—Government—Government offices.
 Federal grading services, *see* Grading of commercial products.
 Federal guidelines, pretreatment of discharges to publicly owned treatment works, 31897
 Federal Highway Administration:
 Administrator, nomination of Norbert T. Tiemann, hearing, 31162
 press releases, 18760
 R & D highway transportation research and development studies, 30214
 report FHWA-RD series, 17454, 30215, 31319-326
 report on 1971 activities—
 departmental editions, 16379-380
 document edition, 15670
 Federal Home Loan Bank Board:
 appropriations, 1973—
 law, 19359
 report, 16957
 appropriations, 1974—
 hearings, 30005, 31011
 report, 28377
 economic review and FHLEB innovations (address), 23216
 economic trends and savings and loan industry (address), 21543
 financial statements—
 1971, GAO examinations, 21692, 24803
 1972, GAO examination, 32351
 future is now (address), 21544
 journal, 18314
 press releases, 18781
 statutes and regulations manual, 17995, 20244
 Federal Home Loan Bank System, statutes and regulations, manual, supplement, 17995
 Federal home loan banks:
 financial statement—
 1971, GAO examination, 21692, 24803
 1972, GAO examination, 32351
 Federal Home Loan Mortgage Corporation, work in progress. Federal Home Loan Mortgage Corporation's role in establishing national secondary mortgage market (address), 21547
 Federal Hospital Insurance Trust Fund, *see* Board of Trustees of Federal Hospital Insurance Trust Fund.
 Federal Housing Administration:
 appropriations, 1974, hearings, 30005
 defaults on FHA-insured mortgages, hearings, 19771
 definitions, policy statements and general rulings in administering insured mortgage and low-rent housing programs of HUD-FHA, 23425, 30297
 FHIA form 2053, wood infestation report, 26526
 FHA monthly report of operations, 18363
 FHA regulations, 28865
 financial statements pertaining to insurance operations, GAO examination, 15664, 28991

Federal Housing Administration—Continued
 fiscal instructions for—
 HUD-FHA offices, sec. 236, handbook, 25282
 use by Agriculture Department for home mortgages to be insured by HUD-FHA, 25279
 home mortgage insurance—
 area trends, 23222, 26432
 State trends, 21548, 26433
 HUD-FHA comparison of cooperative and condominium housing, 21769
 HUD-FHA underwriting analysis, 21777
 insuring authorities, temporary extension, reports, 28340, 31079
 low cost housing trends of 1-family homes insured by FHA under sec. 211(d) (2), 18362
 press releases, 18782
 property improvement loan insurance, FHA regulations, 25146
 soil sampling and testing for residential developments, technical study, report, 16135
 temporary extension of FHA mortgage insurance authority—
 law, 19433
 reports, 16992, 19906
 trends of home mortgage characteristics, 18364
 Federal information processing standards, *see* Information storage and retrieval systems.
 Federal information systems and plans, Federal use and development of advanced information technology, 31023
 Federal Insurance Administration:
 Federal crime insurance program revised quick-reference rate tables and simplified manual, 30217
 financial statements, GAO examination, 15671, 30255
 National flood insurance program, fiscal year 1971, financial statements, GAO examination, 20328
 Federal item identification guides:
 abrasives, 26312
 aircraft launching, landing and ground handling equipment, 31180
 airframe structural components, 24990
 automobiles, buses, and trucks, 30092
 badges, buttons, and insignias, 30093
 bags, envelopes, and shipping sacks, 30094
 ballasts and starters, 32164
 bands, neckwear, and handkerchiefs, 32165
 bearing antifriction, 30095
 bearings, mounted, 24991
 belts, straps, and related items, 27380
 block and tackle, 28595
 books, maps, and other publications, 28596
 bottles and jars, 17325
 boxes and crates, 28597
 brackets, 30096
 brooms, mops, sponges, and squeegees, 23093
 business machines, 24992
 capacitors, fixed, 30097
 caps, radiator and tank, change, 23094
 capstans, hoists, winches, and windlasses, 24993
 casters, 24994
 chain and wire rope, 30098
 chemical analysis instruments, 28598
 chemical compounds, photographic and copy processing, 26313
 chemical products, 24995
 chemicals, 26314, 31181
 cloth, 27382, 31182
 conduit components, 27383
 conduit, electrical, 27383A
 connectors and couplers, electronic and electrical, 23085
 connectors, electrical, 24996
 controls and associated equipment, 15950
 converters, electrical, rotating, 21405
 counters, rotating and reciprocating, 31183
 couplings, 23095

INDEX 1973

Federal item identification guides—Con.

covers and doors, access, 26315
 deflectors, 32166
 delay lines, 24997
 drill bits, counterbores, and countersinks, 24998
 electrical connector parts, 24999
 electrical control equipment, 32167
 electrical fittings, 25000
 electrical insulators and insulation materials, 26316
 electrical rotating machinery, 26317
 electron tubes and associated hardware, 26318
 fans and impellers, 31184
 fiber cordage, 27384
 filter elements, 26319
 flanges, pipe, 27385
 fuels, liquid and solid, 31185
 furnaces and space heaters, 25001
 furniture—
 general household and office, 27386
 office, 28509
 gases—
 compressed and liquefied, 17326
 fabricated and window, observation, 25002
 gears and gear clusters, 32168
 gloves, mittens, and sleeves, 30099
 handles, 28600, 30100
 hazard-detecting instruments and apparatus, 32169
 heating elements, electrical, immersion, and nonimmersion, 26320
 hinges, 30101
 holder, electrical contact brush, 26321
 hose—
 air duct and air breathing, 30102
 pipe, and tube fittings, quick disconnect and self-sealing, 26322
 tubing, and hose and tubing assemblies, 26323
 hospital furniture, equipment, utensils, and supplies, 26324
 household and commercial utility containers, 32170
 ink, 27387
 inner tube, pneumatic tire, 20038
 insulation sleeving, electrical, 26325
 insulation, thermal, 23096
 insulators, electrical, 27388
 jumpers, sweaters, and undershirts, 31186
 keys and pins, 21406
 laboratories and related apparatus, 30103
 laboratory equipment and supplies, 27389
 lampholders, 27390
 lamps, 25003
 lathes, milling machines, and shapers, 27391
 lens, lighting, 15951
 lift trucks, fork, platform, and pallet, 25004
 lights, 31187
 liquid and gas flow, liquid level, and mechanical motion measuring instruments, 23097
 lubrication fittings, 15952, 26326
 medical and dental assemblies, kits, sets, and units, 30104
 metal bars, rods, wires, sheets, plates, and shapes, 30105
 metal materials, ores, minerals and alloys, 28601
 medical type components and accessories, 26327
 miscellaneous electrical power and distribution equipment, 31188
 miscellaneous items, 17327
 miscellaneous materials handling equipment, 26328
 miscellaneous waxes, oil, and fats, 32171
 nails, staples, and tacks, 25005
 nonelectrical lighting fixtures, 26329
 nuts, 31189
 packing and packing bulk materials, 27392
 paper and paperboard, 25006

Federal item identification guides—Con.

parachutes, aerial pick-up, delivery and recovery, 23098, 26330
 paving breaker and rock drill accessories, 30106
 personal toiletry articles, 27393, 30107
 pest control agents and disinfectants, 32172
 photographic equipment and accessories, change, 20039
 pin, piston, 30108
 pipe and tube, metallic, 23099, 30109
 presses, shearing, punching, boring, drilling, and tapping machine, Federal item identification guide, 28602
 projectiles, 26331
 propellers and test clubs, 31190
 pumps, liquid, general purpose, 25007
 quartz crystal unit, 28603
 ranges, electric, gas, and oil burning, 26232, 30110
 rings, wiping and sealing, 23100
 rivets, rivet caps, and collars, Federal item identification guide, 30111
 roller assembly, journal bearing, 23101
 rope, cable, and chain fittings, 27394
 screening and fencing, mesh, 26333
 sensitized materials, photographic and copying, 27395
 sets, kits and outfits, 32173
 shaft collars and hub clamps, 32174
 shaft, propulsion, ship, 28604
 shielding gasket, electronic, 17328
 shoe materials, 25008
 soil pipe fittings, 27396
 speed changers and components, 30112
 strainer elements, 27397, 32175
 structural shapes, nonmetallic, 30113
 surgical catheters, drains and tubes, 30114
 surgical dressings, 17329
 switch, rotary, 15953
 tableware, 32176
 taps, dies and chasers, hand and machine, 28605
 tents and tarpaulins, 32177
 terminal boards, 30115, 31191
 threaded fasteners, 23102
 threaded studs, 25009
 time measuring instruments, 27398
 tires, pneumatic and solid, 28606
 transmission and belts, conveyor, 27381
 trousers and shirts, 20040
 turnbuckles, clevis/connector rod ends and tie rods, 30116
 typewriters and office composing machines, 27399
 underwater sound equipment, 32178
 vacuum pumps, 27400
 valves—
 poppet, engine, 30117
 regulating, 27401
 visible record equipment, 31192
 washers, 30118
 wearing rings, 30119
 welding and heat treating equipment, 32179
 windings, 20041, 26334
 windshield wiper component parts, 25010
 wrapping and packaging machinery, 27402
 wrenches and components, hand, non-powered, 25011
 Federal item name directory for supply cataloging, 15939, 18316-317, 24980, 27376
 Federal jobs overseas, 24265
 Federal Judicial Center, annual report, 16044
 Federal judicial system, 26232
 Federal labor laws, 17928, 18318, 22300, 24095, 26918, 31895
 Federal Labor Relations Council, appropriations, 1974, reports, 29885, 31117
 Federal land, *see* Public lands.
 Federal land banks, farm mortgage lending experience, 20090, 23132, 26358
 Federal lands, *see* Public lands.
 Federal leasing and disposal policies, 28543

Federal Library Committee, newsletter, 18370
 Federal manual for supply cataloging, 15940, 17318, 24981, 26302-303, 28588-589, 32161
 Federal Maritime Commission :
 appropriations, 1973, law, 19473
 appropriations, 1974, hearings, 28388
 Commissioner, nomination of Ashton C. Barrett, hearing, 19954
 container barge service, sole jurisdiction, report, 19628
 decisions—
 bound volume, 20246
 separates, 18320
 FMC-ICC jurisdiction, hearings, 15771
 orders, notices, rulings and decisions, 18738
 oversight and authorization, hearings, 21271
 press releases, 18783
 shipping laws, enforcement, facilitate, law 15653
 SP series, 16045, 21549-550, 23223-225, 25147-150, 27506-507, 28866-868, 32286
 Federal Mediation and Conciliation Service :
 annual report, 28869
 appropriations, 1973—
 hearings, 15866
 reports, 16987, 19615, 21311
 veto message, 19556
 appropriations, 1974—
 hearings, 28387
 Federal Mediation and Conciliation Service
 report, 30983
 employment opportunities, mediator positions, 20247
 Federal metal and nonmetallic mine safety act (oversight), 24850
 Federal Metal and Nonmetallic Mine Safety Board of Review :
 appropriations, 1973, law, 19355
 appropriations, 1974—
 hearings, 31126
 report, 29861
 Federal meteorological handbooks, 19290, 25965, 28232
 Federal motor vehicle safety standards and regulations, 16377, 17757, 18322
 Federal news clip sheet, 18323
 Federal offenders in United States District Courts, 1970, with criminal sentence analysis, 1967-71, 19099
 Federal Open Market Committee :
 minutes of meetings, pamphlet describing microfilm, 25541
 regulation relating to open market operations of Federal reserve banks, 25183
 rules of organization, availability of information and of procedure, 25184, 28898
 Federal paperwork burden, 17304
 Federal payment for additional rapid transit facilities, 15886
 Federal personnel manual, *see* Civil service.
 Federal plan for meteorological rocket observations, 29383
 Federal plan for meteorological services and supporting research, 29385
 Federal plan for natural disaster warning and preparedness, 30517
 Federal planning, *see* Economic policy.
 Federal Power Commission :
 annual report—
 departmental edition, 27510
 document edition, 27108
 appropriations, 1974, hearings, 27186
 civil rights responsibilities, 17068
 Commissioner, nomination of—
 Morris, Robert H., hearings, 28529
 Springer, William L., hearings, 28529
 FPC news, weekly compilation of press releases, etc., 18387
 informal explanation of organization and work, 25154

Federal Power Commission—Continued
 1970 national power survey, advisory report, 21558
 P series, 28870
 practice and procedure rules, 18342
 public works appropriations, 1973, law, 19363
 public works appropriations, 1974—
 law, 32015
 reports, 29993, 30989
 R series, 16046
 regulations under Federal power act, 18855
 reports, opinions, decisions and orders, monthly, 18341, 20248, 21551
 S series, 20249-251, 21552, 23226, 25151-153, 27508-509, 28871
 Federal Prison Industries, Inc. :
 annual reports, 22200, 30604
 appropriations, 1973, law, 19473
 financial statements, GAO examination, 28300, 28990
 Federal probation, 18343
 Federal procurement regulations, FPR amendments, 18344
 Federal programs, *see* Federal assistance programs.
 Federal property, *see* Public property.
 Federal protection of Indian resources, 15915, 21353, 26276
 Federal R&D funding continues to rise, 16419
 Federal railroad safety authorization act of 1973, 28506
 Federal register, 18345
 index, 18346
 Federal regulations, *see* Code of Federal regulations—*also* names of departments, etc., issuing regulations—*also* subjects.
 Federal Republic of Germany, *see* Germany.
 Federal research natural areas in Oregon and Washington, guidebook for scientists and educators, 20231, 21607-650, 23270
 Federal reserve agents fund, transactions, 18496
 Federal reserve banks :
 authority, rules regarding delegation, 28899-900, 30235
 collection of checks and other items by Federal reserve banks, 21579
 condition statement, 18279
 extensions of credit by Federal reserve banks, regulation, 28894
 Federal reserve act, amend, report, 15714
 hours, opening and closing official, and holidays, 18723, 21572
 interdistrict settlement fund, transactions, 18496
 open market operations, 30228
 regulation, 25183
 reserve positions of major reserve city banks, 18867
 reserves of member banks, regulations, supplement, 28995
 State member banks of Federal reserve system, 25191
 see also headings beginning Federal reserve.
 Federal reserve bulletin, 18347
 Federal reserve member banks :
 assets, liabilities, monthly report, 18017
 banking and monetary statistics, 21567
 changes in State bank membership, weekly announcement, 18063
 deposits, reserves, and borrowings, weekly report, 18224
 income, 1972 statistical release, 27520
 interest on deposits, Federal reserve regulations, 20273, 30232, 32296-297
 member State banks equity transactions and ownership of directors, etc., monthly summary, 18942
 money stock measures, in billions of dollars, etc., 18637
 reserve of member banks, regulations, 20272, 21574-575, 30229, 32295
 reserves, factors affecting, 18279

INDEX 1973

- Federal reserve member banks—Continued
 - revision of money stock measures and member bank reserves and deposits, 26448
 - state member banks—
 - Federal reserve system, 25191
 - list, supplement, 18925
 - Federal reserve monthly chart book, financial and business statistics, 18348
 - Federal reserve par lists, 18349, 25186
- Federal reserve system:
 - foreign exchange operations, 32298
 - functions and responsibilities of Federal reserve system and payments (remarks), 21588
 - integrity of Federal Reserve policies (remarks), 20275
 - member bank borrowing, portfolio strategy, and management of Federal reserve discount (paper), 21570
 - objectives and responsibilities (address), 32293
 - treasury and Federal Reserve foreign exchange operations, 23244
- Federal Reserve System Board of Governors:
 - annual report, 28889
 - applications and reports received, or acted on announcement, 18002
 - authority, rules regarding delegation, 21590, 25190, 28899-900, 30235
 - historical chart book, long-range financial and business statistics, 17484
 - hours, opening and closing, official and holidays of Federal reserve banks, 18723
 - press releases, 18784
 - publications, lists, 16055, 23240, 25185, 32292
 - recent regulatory changes in reserve requirements and check collection, 17485
 - regulation Q and NOW accounts, extend certain laws, hearings, 26254
 - regulation series, 20272-274, 21574-587, 25189, 26447, 28894-896, 30229-234, 32295-297
 - research library, recent acquisitions, 18865
 - statistical releases, 18023
- Federal retirement system, *see* Civil service pensions—Retirement.
- Federal rules of appellate procedure, with forms, 15768
- Federal savings and loan associations:
 - combined financial statements, 28863
 - own stock in and invest in loans to State housing corporations, allow—
 - law, 32017
 - report, 31003
 - regulation Q, NOW accounts, investment in State housing corporations, hearings, 27194
- Federal Savings and Loan Insurance Corporation:
 - appropriations, 1974, hearings, 30005
 - financial statements—
 - 1971, GAO examination, 21692, 24803
 - 1972, GAO examination, 32351
 - savings and loan associations, combined financial statements, 28863
 - statutes and regulations, manual, supplements, 17995, 20244
- Federal service, *see* Civil service.
- Federal specifications, *see* Government supplies.
- Federal spending, is it out of control? 28979
- Federal standards, 16060-63, 23249-250, 28908-912, 30237-238, 32300
 - index, 23253
- Federal-State-local relations, *see* Intergovernmental relations.
- Federal-State-private cooperative snow surveys, 32560
- Federal statistical directory, 29192
- Federal strategy for drug abuse and drug traffic prevention, 29547
- Federal supply catalog, *see* Government supplies.
- Federal supply classification, groups and classes, 23084
- Federal supply code, *see* Government supplies.
- Federal Supply Service, list of commodities, normally purchased by Federal Supply Service, 21592
- Federal support to universities and colleges, 22137, 32518
- Federal test method standards, 16064, 17486-487, 23251-252
- Federal Trade Commission:
 - act, amend—
 - hearings, 28421
 - report, 28464
 - appropriations, 1974, hearings, 27178
 - calendar, 18042
 - clarifying Webb-Pomerene act needed to help increase U.S. exports, GAO report, 32350
 - Commissioner, nomination of Lewis A. Engman, hearings, 28529
 - consumer bulletins, 20279, 30239
 - decisions, bound volume, 23254, 27521, 28914, 31340
 - jurisdiction over financial institutions and truth-in-savings legislation, hearings, 32138
 - news summary, 18359
 - press releases, 18785
 - Public health cigarette smoking act, report to Congress by FTC on enforcement, etc., 17490
 - staff report to Federal Trade Commission on ad substantiation program, 17242
 - statutes, 20280
 - and court decisions, 25193, 26451
 - tar and nicotine content of cigarettes, 17752
- Federal transportation policy, SST again, 24305
- Federal turnaround on aid to airports, 25137
- Federal use tax on civil aircraft, 27596
- Federal water pollution control act, 17015, 17199, 19679, 21302
- Federal women's program, 30518
- Federal youth programs, discussion paper, 28046
- Federally coordinated program of research and development in highway transportation, 32280A
- Federation of Republican Women, 3d District, political committee, annual report, 22947
- Federoff, D. R.:
 - coal, Pennsylvania, 25441
 - anthracite, 16259
- Feed, *see* Food for animals—Food for livestock.
- Feed grain, *see* Grain.
- Feed situation, 18360
- Feedback, *see* Learning.
- Feedback, FAA aircraft program data, 1827^a
- Feeders, feeder for cattle, liquid supplement, 22341
- Feeding the child with a handicap, 30404
- Feelings, *see* Emotions.
- Feedlots:
 - beef cattle, site selection for environmental protection, 21503
 - cattle in Pacific Northwest, 32248
 - national animal feedlot wastes research program, 25116
- Fees:
 - air passenger fees, State and local charges, reports, 15699, 15707, 17139
 - attorneys' fees for property loss or damage sustained in transportation, hearing, 21255
 - buying a home? don't forget those closing costs, 23414
 - FAA records, fees for copying and certifying, Federal aviation regulations, 18292
 - facilities subject to user fees at Federal areas report, 31084

Fees—Continued

- Federal areas for outdoor recreation collection of fees at sites containing Federal equipment and improvements, hearings, 28547
- International postage rates and fees, general information, 16564
- Fehlberg, Edwin, classical 8th- and lower-order Runge-Kutta-Nystrom formulas with new stepsize control procedure for special 2d-order differential equations, 29300
- Felck, George, control of mercury contamination in freshwater sediments, 20201
- Feinberg, Harry A., announcement of highway safety literature, 17996
- Feist, W. C., determining loss of wood substance in outside chip storage, comparison of two methods, 32338
- Feldman, Saul, administration in mental health, 22066
- Feldspar:
and related minerals, mineral industry survey, 29204
minerals yearbook chapter, 20556
recovery of feldspar and glass sand from South Carolina waste granite fines, 16335
- Fell, H. A., statistical techniques in machine tools, evaluation and process quality control, 22508
- Fellman, David, foreign trade regulations of Canada, 19300
- Fellowships:
Allen J. Ellender fellowships, provide for D.C.—
law, 19436
report, 19896
National biomedical research fellowship, traineeship, and training act, reports, 28350, 29997, 30965
national program of health research fellowships, establish, hearings, 27224
- Felony, *see* Criminal law.
- Females, *see* Women.
- Fence posts, preservative treatments and service life of fence posts in Puerto Rico, 1972 progress report, 28954
- Fences, screening and fencing, mesh, 26331
- Fences (receivers of stolen goods), *see* Receiving stolen goods.
- Fenimore, Watson, Federal Home Loan Bank Journal, 18314
- Fenner, Don D., sound velocity structure of northern Indian Ocean, 29432
- Fergus County Republican Central Committee, annual report, 22938
- Ferguson, Joe H., Ferguson for Congress Committee, annual report, 24585
- Ferguson for Congress Committee, annual report, 24585
- Ferrante, Michael J., low-temperature heat capacities and high-temperature enthalpies of sodium chromate, 23650
- Ferrets, black-footed ferret, characteristics, 22248
- Ferris, Steven H.:
apparent object movement produced by head movement under water, 16247
improvement of absolute distance estimation under water, use of monocular motion parallax, 31582
improving absolute distance estimation in clear and in turbid water, 20530
improving distance estimation under water, long-term effectiveness of training, 20531
- Ferris, V. R., genera of freshwater nematodes (Nematoda) of eastern America, 32273
- Ferrites, ferrite rod antenna arrays for Loran-C receivers, 20967
- Ferroalloys, minerals yearbook chapter, 20557
- Ferromagnets, *see* Magnets.
- Ferrous sulphate, extraction of manganese from Georgia amber ores by sulfuric acid-ferrous sulfate process, concurrent extraction and centrifuge tests, 21950

Fertility, *see* Fecundity.

- Fertilization of plants:
first-year vegetation after fire, reseeding, and fertilization on Entiat Experimental Forest, 31367
- forest fertilization—
state-of-the-art review and description of environmental effects, 20191
symposium proceedings, 28925
seed orchard tree as pollen sampler, model and example, 21656
- Fertilizers:
disposal of cattle feedlot wastes by pyrolysis, 23189
estimated world fertilizer production capacity as related to future demand, 30670
fertilizer abstracts (periodical), 18361
fertilizer storage building, 40' rigid frame, 19118
fertilizer used on selected crops in selected states, 1971 (corn for grain, cotton, soybeans for beans, wheat), 20820
industry wage survey, 21908
inorganic materials and related acids, current industrial reports, 18194
1973 fertilizer situation, 28650
nitrogen—
fertilization increases cottonwood growth on old-field soil, 21665
phosphate, potash; fertilizer supply, 1972-73, 30694
potential fertilizers for developing countries, 30671
resource adjustment in fertilizer industry with emphasis on Michigan, 19110
selective irrigation return flow quality abstracts, 20205
selecting fertilizers for lawns and gardens, 24130
supply, 15463
- Festivals, festival USA 1973, activities, 29574
- Feth, J. H., water in urban environment series, 2000
- Fever ticks, *see* Cattle ticks.
- Ffolliott, Peter F., forest stocking equations, their development and application, 28969
- FHA, *see* Farmers Home Administration—Federal Housing Administration.
- FHLBB, *see* Federal Home Loan Bank Board.
- FHWA, *see* Federal Highway Administration.
- Fiala, Alan D., determination of mass of Jupiter from study of 57 Mnemosyne, 30583
- Fiber board, *see* Pulpboard.
- Fiber bonding and tensile stress-strain properties of earlywood and latewood handsheets, 32339
- Fiber stresses, *see* Strains and stresses.
- Fiberboard, *see* Pulpboard.
- Fiberboard boxes, *see* boxes.
- Fibers:
agricultural act, amend, report, 28380
assure consumers of plentiful supplies at reasonable prices—
law, 32011
report, 31005
certain woven fabrics of wool, manmade fibers, and blends, including laminated fabrics, workers of Gonic Division of Rindge Industries, Inc., Tariff Commission report, 24060
fiber cordage, Federal item identification guide, 27384
fiber quality and spinning and spinning performance of new high-quality cottons, Southeastern area, 16605
fibrous concrete construction for 70's, 28668
hollow fiber technology for advanced waste treatment, 27460
man-made fiber textile products, trade, agreement with Republic of China, 30652

INDEX 1973

Fibers—Continued

- roll laminating fiber overlays on low-grade ponderosa pine lumber, 23307
- stocks of wool and related fibers, current industrial reports, 30850
- trade in wool and man-made fiber textile products, agreement with Malaysia, 31854
- vegetable, foreign agriculture circulars, 18380
- wool and man-made fiber textile products, trade agreement with Macao, 26868
- see also* names of certain plants, textiles, etc.

Fibrin, fibrinolysis, thrombolysis, and blood clotting, bibliography, 27759

Fibrinolysis, *see* Fibrin.

Fibrous concrete construction for 70's, 25068

Fibrous glass, *see* Glass.

Fiche index for nuclear dockets, 22473, 25873, 28075, 29673-674

Field, Richard, water pollution and associated effects from street salting, 30192

Field army, *see* Army.

Field crops, *see* Crops.

Field evaluation of effects on hearing and general habitability of own-ship echo-ranging during submarine patrol, 20523

Field fortifications, 15505

Field guide for Civil War explosive ordnance, 29439

Field guide to angelfishes (Pomacanthidae) in western Atlantic, 23807

Field instrumentation studies of earth tremors and their geologic environments in central Utah coal mining areas, 26504

Field manuals, *see* names of departments, etc., issuing field manuals.

Field of USSR and U.S. management science surveyed, 23527

Field office processing, HUD handbook, 21773, 23422, 30296

Field operations and enforcement manual for air pollution control, 22375-376

Field procedures in connection with reports on relocation activities, 30295

Field processing of project reports on audit and findings, 29054

Field program designs for verifying photochemical diffusion models, 32254

Field repairs of EHV bushing oil leaks, 25874

Field-replaceable rotor blade pocket study, final report, 28058

Field test report on interoceanic acoustic release devices, 31728

Fielding, E.M., NCUA bulletin, 18691

Fife and Drum Corps, 28046

5th District Federation of Republican Women (of Iowa), annual report, 24529

5th symposium (International) on detonation, 16442

59th Assembly District Democratic Council, annual report, 24553

Fight against cattle fever ticks, 26943

Fighter planes:

- dynamic stability derivatives at angles of attack, from -5° to 90° for variable-sweep fighter configuration with twin vertical tails, 20602

- effects of in-flight thrust reverser on stability and control characteristics of single-engine fighter airplane model, 17716

- F-111A, steady-state and dynamic pressure phenomena in propulsion system, 31636

- investigation of coaxial jet noise and inlet choking using F-111A airplane, 31649

- maneuver and buffet characteristics of fighter aircraft, 31625

- privileges and immunities for personnel under F-5 program, agreement with Saudi Arabia, 17900

- status of procurement of F-14 weapon system as of June 1, 1972, GAO report, 25244

Fighter planes—Continued

- tactical air power and F-14 appropriations, 1974, authorization, hearings, 31132

Figs, canned kadota, standards for grades, 29611

FIIG, *see* Federal item identification guides.

Fiji Islands:

- alien amateur radio operators, agreement, 17894

- background notes, 29519

- consular officers, continued application of United States-United Kingdom convention, agreement, 27914

- mineral industry, minerals yearbook chapter, 20540

- Peace Corps agreement, continuing in force, agreement, 20793

Filaments (electric):

- stationary motion configurations of filament, USSR study, 20476

Filbert, A.S., Navy lifeline, navy safety journal, 25655

Files and filing (documents):

- geographic base file system, establishing continuing program for electronic computers, conference proceedings, 29725

- National Military Command System information processing system 360 formatted file system (NIPS 360 FFS), NIPS processing handbook, 28586

- NIPS formatted file system (360 FFS) user's manual—

- file maintenance (FM), 31177

- job preparation, 30085

Filipinos in United States, census of population, 1970, subject reports, 30807

Filling:

- and emptying system Ice Harbor Lock, Snake River, Wash., hydraulic model investigations, 28685

- navigation conditions and filling and emptying system, New Bankhead Lock, Black Warrior River, Ala., hydraulic model investigation, 20176

Fillmore, Calif.:

- Santa Clara River and Sespe Creek—flood plain information, 20128

- floods, 20152

Fillmore County Republican Committee, annual report, 22815

Fills, scour and fill, fanhead valley in urban southern California, 27567

Film slides, *see* Filmstrips.

Film strips, *see* Filmstrips.

Films (chemical):

- flow-field measurements around Mars lander model using hot-film anemometers under simulated Mars surface conditions, 17710

- growth and structure of monocrystalline semiconductor films, USSR study, 29128

- polymer film overlay system for mercury contaminated sludge, 20219

- printed vinyl films from Brazil and Argentina, Tariff Commission report, 32594

- symposium on growth and synthesis of semi-conductor crystals and films, 27647

Films (coatings):

- dynamic friction and wear of solid film lubricant during radiation exposure in nuclear reactor, 20604

- growth and structure of monocrystalline semiconductor films, USSR study, 29128

- see also* Oil films.

Films (metallic), *see* Metallic films—Thin films.

Films (photography):

- health careers film guide, 16395

- see also* Filmstrips—Motion pictures.

Filmstrips:

- drugs & microbes, slide presentation, announcement, 25548

- excerpts from 35 mm slide presentation by Office of Chief of Naval Operations, 25654, 30585

Filmslides—Continued

National Archives, list, 20624
see also Filmstrips.

Filmstrips:

catalog of copyright entries, 24965, 32156
film fare, catalogue of film and filmstrips
produced by Housing and Urban Development Department, 25272
Library of Congress catalog, 18577
what's happening to food prices? narrative
guide for filmstrip and slide set C-192,
31992

Filter elements, see Filters and filtration.

Filters and filtration:

action of dither in digital matched filters,
27851
activated carbon treatment of raw sewage
in solids-contact clarifiers, 26419
application of plastic media trickling filters
for biological nitrification systems,
30181
centrifugals, separators and filters, industrial
plant equipment handbook, 26307
denitrification by anaerobic filters and
ponds, bio-engineering aspects of agriculture
drainage, San Joaquin Valley, Calif., 21521
description of a-B filter in cartesian coordinates,
32526
field study of nitrification with submerged
filters, 23193
filter elements, Federal item identification
guide, 26319
filters and networks, selection and use of,
military standard, 15967, 20072, 28615
fluidized bed clarification as applied to
wastewater treatment, 21497
Holography and Optical Filtering Conference,
proceedings, 29264
hydrodynamic flux control for waste water
application of hyperfiltration systems,
28820
phase-contrast enhancement without spatial
filters for seismic holography, 25499
phosphorus removal by trickling filter
silms, 31290
relationship between fabric structure and
filtration performance in dust filtration,
31292
ultra high rate filtration of activated
sludge plant effluent, 27476
using holographic matched filters in correcting
phase discontinuities in antenna
apertures, USSR study, 27650
see also Kalman filters.

Filtration, see Filters and filtration.

Final environmental statement for prototype
oil-shale leasing programs, 31495

Final phase 4, regulations, 30077

Finan, Martha, there lived a wicked dragon,
environmental coloring book, 30199.

Finance:

accounting and finance manual, 21403,
32163
agricultural finance outlook, 23128
agricultural finance review, 31215
aviation export financing, 32274
budgetary and fiscal information needs of
Congress, GAO report, 20325
buying and financing mobile home, 32372
class 1, railroads, financial and operating
statistics, 23505
code of Federal regulations, 32288
conversion of worthless securities into
cash, 27195
daily statement of Treasury, 18203
debt rescheduling under certain agricultural
commodity and credit and loan
agreements, agreement with—
Egypt, 17899
Pakistan, 17905
Yugoslavia, 16502
elementary and secondary education, expenditures
and revenues, 27429

Finance—Continued

environmental quality control, finances
and employment for selected large governmental
units, 19261
farm corporations, financial analysis,
29617
Federal financial management directory,
31376
Federal financing authority—
summary of bill, 17111
summary of testimony, 17113
Federal Financing Bank, establish, report,
28478
Federal fiscal policy, 31339
Federal R&D funding by function, analysis,
23844
field processing of project reports on audit
and findings, 29054
financial and institutional arrangements
for wastewater management, Denver
SMSA, 32264
financial aspects of—
administration of grants-in-aid to State
and local governments, HUD, 31421
equality of educational opportunity and
inequities in school finance, 17249
financial developments, 20265-266, 26445,
28890
financial disclosure, investor confidence
and corporate credibility, (address),
29465
financial management policies of Federal
Government's automatic data processing
fund, revision needed, GAO report,
27550
financial planning manual for prepaid
health care manual, 23404
financial requirements of nation's energy
industries, hearing, 28545
financial statements—
Commodity Credit Corporation, report
of financial condition and operations,
16839
Federal Home Loan Bank Board—
Federal Home Loan Banks, and Federal
Savings and Loan Insurance
Corporation, GAO examination
24803
Federal Home Loan Bank Board, GAO
examination, 32351
Federal Home Loan Banks, GAO examination,
32351
Federal Housing Administration insurance
operations, GAO examination,
15664
Federal Housing Department, insurance
operations, GAO examination, 28991
Federal Insurance Administration, GAO
examination, 15671
Federal Prison Industries, Inc., GAO
examination, 28300, 28990
Federal Savings and Loan Insurance
Corporation, GAO examination, 32351
Government National Mortgage Association,
GAO examination, 16941
Housing and Urban Development Department,
GAO examination, 15671
National Credit Union Administration,
fy 1971 and 1972, GAO examination,
32352
National flood insurance program, GAO
examination, 15671, 30255
St. Lawrence Seaway Development Corporation,
GAO audits, 21688, 24801,
30252
Southwestern Federal power program,
financial progress and problems, GAO
report, 21699
student loan insurance fund 1971 and
1972, 30956
Tennessee Valley Authority, 25239,
26057, 30667
United States Capitol Historical Society
for year ended Jan. 31, 1972,
GAO report, 21690
Veterans Canteen Service for fy 1972,
GAO examination, 21693

INDEX 1973

Finance—Continued

financial statistics—
 CPB-qualified radio stations, 1970 fiscal year, 15990
 public television licensees, 30140
 financing exports, guide, 23503
 financing new communities, Government and private experience in Europe and U.S., 29047
 financing of elementary and secondary education, hearings, 15730
 fiscal and ADP handbook, mortgage insurance, 23427, 29059, 31425
 fiscal instructions—
 Agriculture Department for home mortgages to be insured by HUD-FHA, 25279
 HUD handbook, sec. 235 (1), 25278, 25282
 forest fire control, cooperative program, financing, 23268
 FSLIC-insured S&LA's combined financial statements, 28863
 government finances, GF series, 15595, 19252-254
 governmental, 15595
 improving congressional control over budgetary outlay and receipt totals, interim report, 26071
 improving fiscal and budgetary information for Congress, report, 16973
 joint financial management program, annual report, 30251
 local government finances in selected metropolitan areas and large counties, 19253
 low-rent housing financing handbook, 23441-442
 manufacturing corporations, quarterly report, 18836
 meeting your financial obligations, 31980
 mortgagees' guide, home mortgage insurance, fiscal instructions, 32374
 occupational survey of 7 accounting and finance civil service series, 22366
 power systems, average rate and repayment, studies, 23929
 program for reform of our financial system, 30962
 project fiscal procedures, HUD handbook, 21790, 25280
 provide for financing economic development of Indians and Indian organizations, hearing, 31144
 providing for financing economic development of Indians and Indian organizations, and for other purposes, report, 16978
 public school finance programs, 1971-72, States, District of Columbia, and outlying areas, 23141
 receipts—
 and outlays of United States Government, monthly statement, 18648
 expenditures, etc. of U.S. Government, combined statement, 22305
 selected services, monthly report, 18187
 recommendations for change in U.S. financial system, 32604
 rehabilitation financing, RAA programs handbook, 27585
 rent supplement fiscal handbook, HUD handbook, 25283
 residential, 1970 census of housing, 31942
 SBIC financing for small business, money for growth, 25694
 school finance—
 issues, 15890
 reform in Texas, civil rights aspects, 22588
 social development activities in Latin America promoted by Inter-American Foundation, fiscal year 1972, GAO report, 30264

Finance—Continued

State and local fiscal assistance act of 1972—
 general explanation, 24884
 law, 19442
 regulations governing payment of initial entitlements, 20845
 report, 19886
 summary of testimony, public hearings, 17116
 supplemental report showing distribution of funds, 15790
 State and local governments, employee retirement systems, 19252
 State reports on State and local government finances, 31941
 statistics, Federal reserve monthly chart book, 18348
 temporizing, major cause of uncertainty in financial community (remarks), 29483
 title 1 collection handbook, fiscal procedures, 23436
 treasury bulletin, 18995
 vessel building and financing in increasing energy imports (remarks), 25397
 see also Accounts and accounting—Credit—Deflation (finance)—Inflation (finance)—Nonappropriated funds.
 Finance Committee, Senate:
 additional expenditures, authorizing, report, 31109
 calendar, 18566
 committee prints, 17251-253, 19966-970, 21333-334, 21336, 23057-58, 24923, 26264-266, 27316, 27318-319, 30017-22
 hearings, 19965, 21335, 23059, 24924, 27317, 28532-534, 31140, 32145
 history, 27259
 print as Senate document, 26231
 professional staff members and clerical assistants, authorize additional report, 26215
 reports, 15813, 15860, 17211, 19882, 19924, 19932, 19935, 19937, 21310, 26209, 27267, 29954, 29958, 29986, 29990, 31068, 31120, 32106
 rules of procedure, 27318
 Finance companies:
 monthly report, 18365
 survey, 20277
 Financial assistance, see Foreign aid—Grants-in-aid—also subjects.
 Financial collapse of Penn Central Company, 15761
 Financial distress grants for schools of nursing, 21758
 Financial Federation, Inc., see F. F. Good Government Fund.
 Financial institutions, see Banks and banking.
 Financial planning in ambulatory health programs, 32487
 Financial statements, see Finance.
 Financial statistics, see Finance.
 Financing of Postsecondary Education, National Commission, see National Commission on Financing of Postsecondary Education.
 Finch, Warren L., stratigraphy, morphology, and paleoecology of fossil peccary herd from western Kentucky, 23366
 Finding and keeping a healthy house, 28929
 Finding your way through EPA, 23194
 Findings of 1970 AB study, demographic and program characteristics, 22036
 Findings of 1970 APTD study, demographic and program characteristics, 23727
 Findings of 1970 OAA study, demographic program characteristics, 22036
 Fine, Lenore, Engineer Corps, technical services, construction in United States, 20534
 Fine Arts Commission:
 appropriations, 1973, law, 19355
 appropriations, 1974—
 hearings, 28385, 31126
 report, 29861

- Finerty, Joseph M., employment and earnings (periodical), 18256
- Finger, Frederick G., toward developing quality control system for rawinsonde reports, 25622
- Finishes and finishing:
 automated engineering document preparation system, finishes, military standards, 15955
- Forest Products Laboratory natural finish, 17512
- Industry wage survey, textile dyeing and finishing, 17665
- Finishing beef cattle, 27990
- Finite-amplitude, shallow water-waves of periodically recurring form, 23150
- Finite difference method, two-dimensional slot nozzle ejectors with variable area mixing sections, analysis and testing, 29259
- Finite state machines, *see* Turing machines.
- Fink, F. W., proceedings of International Conference on Inner Shell Ionization Phenomena and Future Applications, 25870
- Finland:
 Ambassador, nomination of V. John Krebbiel, 26263
- background notes, 31837
- compression debarking of branchwood chips from Finland, 17516
- economic trends and their implications for United States, 21832, 30314
- foreign assistance, deposits under Foreign assistance act, agreement, 17896
- microbiological laboratory services, organization, USSR study, 27632
- mineral industry, minerals yearbook chapter, 16274, 16319
- Finn, Peter:
 alcohol and alcohol safety, curriculum manual, elementary level, 22042
- teacher's activities guide, 22043
- junior high level, 22044
- teacher's activities guide, 22045
- senior high level, 22046
- teacher's activities guide, 22047
- Finney, Joan, for Congress, *see* Joan Finney for Congress.
- Fintland, Nguyen T., relief, 15672, 27116K
- Fintland, Susan, relief, 27116K
- FIPS, *see* Information storage and retrieval systems.
- FIPS (Federal information processing standards), *see* Standards and standardization.
- Fire:
 Arasan in endrin treatments to protect Douglas-fir seed from deer mice, 20316
- decay in white fir top-killed by Douglas-fir tussock moth, 20313
- Douglas coast timber cruising grades, 28975
- dry veneer volume losses in production of red and white fir plywood, 26473
- lumber recovery from Douglas-fir thinnings at handmill and 2 chipping canters, 20311
- major outbreaks of Douglas-fir tussock moth in Oregon and California, 27529
- new timber cruising grades for coast Douglas-fir, 31371
- operations research approach to Douglas-fir thinning, 28964
- sampling populations of western spruce budworm and predicting defoliation on Douglas-fir in eastern Oregon, 27540
- twenty-one-year development of Douglas-fir stands repeatedly thinned at varying intervals, 23303
- weights and centers of gravity for red pine, white spruce, balsam fir, 16083
- Fire ants, *see* Ants.
- Fire clay, *see* Clay.
- Fire control, *see* Fires—Forest fires.
- Fire-cured tobacco, *see* Tobacco.
- Fire departments, oil spills control manual for fire departments, 25111
- Fire extinguishing, *see* Fires.
- Fire fighters, *see* Firemen (fire fighters).
- Fire Island National Seashore, general information, 16411
- Fire prevention, *see* Fires.
- Fire Prevention and Control, National Commission, *see* National Commission on Fire Prevention and Control.
- Fire protection, *see* Fires.
- Fire-resistant material:
 tests for analyzing incombustible content of coal mine dust using instruments employing gamma-ray backscatter technique, 25513
- toxic products from burning of fire resistant materials, 25515
- Fire retardants, *see* Fires.
- Fire whirls, why, when, and where, 16071
- Firearms:
 code of Federal regulations, 26444
- comparison standards for chromium plated 5.56MM, 7.62MM, and caliber .30, small arms barrel bores, military standard, 15964
- gun control act of 1968, text, 24160
- interstate traffic, provide for better control, text, 24160
- published ordinances, important information to gun dealers, 26955
- revenue rulings, etc., internal revenue bulletin, cumulative, index-digest supplement system, 17567, 18480
- State firearms control assistance act, text, 24160
- tax information for manufactures of firearms, shells and cartridges, 20413
- terminal ballistics in ordinary snow, small arms fire attenuation, 21441
- Firebrats, how to control them, 24133
- Firefighters, *see* Firemen (firefighters).
- Firefighting museum, tax exemption, equal rights for blind, medical records and police personnel records, hearing, 15887
- Firemen (firefighters):
 Federal—
 include in provision for hazardous occupation, law, 15648
- increase annuities, hearings, 31038
- salary increases for District of Columbia police and firemen—
 law, 16910
- report, 16975
- Fires:
 accident reports involving fire, 1970 analysis, 17687
- analysis of accident reports involving fire, 29246
- application of space program fire-retardant technology to housing, 31644
- correlation of ASTM exposure test for evaluating durability of fire-retardant treatment of wood, 32340
- fire research and safety—
 act, appropriations to carry out, law, 16868
- hearings, 19796
- fire safety in—
 highrise buildings for the elderly, hearings, 28510
- HUD-assisted multifamily housing projects, 32376
- fire service location-allocation models, 31678
- fire streams used with self-propelled oil spill skimmer, 28807
- fire whirls, why, when, and where, 16071
- insulation for crash fire protection of new flight recorders, evaluation, 24042
- matches and lighters in flammable fabric incidents, magnitude of problem, 22016
- predicting fire spread in Arizona's oak chaparral, 28968
- safety, occupational health and fire protection bulletin, VA, 18883
- standards for fire protection of AEC electronic computer/data processing systems, 30781
- summary of demonstration methods for extinguishing culm-bank fires, 29649

INDEX 1973

Fires—Continued

- use of fire streams to control floating oil, 28799
- see also* Forest fires—Mine fires.
- Firestone Tire and Rubber Co., wage chronology, 17667
- Firing, *see* Gunnery.
- Firms, *see* Business.
- First aid:
 - aidman's medical guide, 24171
 - first aid for drunken driver begins in your office, 25581A
- First Associates-National political committee, annual report, 24519
- First Bank System/Montana Good Government Program, annual report, 24744
- First Congressional District Republican Womans Club, annual report, 22929
- First District Republican Committee, annual report, 24475
- First International Meeting of Directors and Chiefs of Naval Material, 26783
- Fiscal accounting, *see* Accounts and accounting.
- Fiscal analyses, *see* Finance.
- Fiscal data for health authorities, 27227
- Fiscal management, *see* Finance.
- Fiscal policy, *see* Finance—Money.
- Fiscal year 1974 authorization for military procurement, research and development, construction authorization for SAFE-GUARD ABM, and active duty and selected reserve strength, 28515
- Fischer, Joseph, Federal rules of appellate procedure, with forms, 15768
- Fischer, William C. fire-weather observer's handbook, 25208
- Fish, Hamilton, Jr., Friends of Ham Fish, Jr., annual report, 26005
- Fish and fisheries:
 - Alabama landings, 17987, 20681
 - Buffalo River drainage basin, Tennessee Valley streams, their fish, bottom fauna and aquatic habitat, 30672
 - California landings, 18045
 - code of Federal regulations, 17481
 - commercial fisheries—
 - abstracts, 18137
 - research and development act, amend—law, 19515
 - report, 19667
 - common sense fish cookery, this is your, manual, 20683
 - conservation and development of our nation's fish and wildlife resources, environmental quality, and oceanography, compilation of Federal laws, 17072
 - conservation practices, signs of good hunting and fishing, 15481
 - cooperative fishery unit report for 1971-72 school year, 23985
 - cunner, *Tautoglabrus adspersus* (Walbaum), annotated bibliography, 30542
 - current fishery statistics, 16397-402, 17987, 18045, 18367-368, 18372, 18389-390, 18402, 18411, 18600, 18603, 18612-613, 18633, 18694, 18701, 18711, 18870, 18907, 18916, 18958, 19047, 20676-682, 22087-89, 23783-790, 25610, 26761-763, 27794-795, 29374-376, 30514, 31710-711
 - development of dissolved oxygen criteria for freshwater fish, 28791
 - effect of ionizing radiation on organism, problem of effect of radioactive water pollution on reproduction of commercial fishes, 26984
 - effects of copper on locomotor orientation of fish, 28794
 - electric and acoustic fields of fishes, use in commercial fishing, etc., USSR study, 31527
 - endangered species—
 - conservation of fish and wildlife threatened with extinction, report, 19856
 - conservation, protection, and propagation of fish, hearings, 28424

Fish and fisheries—Continued

- environmental effects on toxaphene toxicity to selected fishes and crustaceans, 26403
- Federal aid in fish and wildlife restoration, manual, 31826
- Federal laws and treaties on sport fish and wildlife, selected list, 31833
- fish and food organisms in acid mine waters of Pennsylvania, 26402
- fish and shellfish over coals, 20685
- fish and wildlife—
 - act, amend—
 - law, 19432
 - reports, 15680, 15857
 - miscellaneous bills, hearings, 19790
- Fish disease control act, report, 19899
- fish distribution report, 22246
- fish diversity on coral reef in Virgin Islands, 25695
- fish farmers, status of warmwater fish farming and progress in fish farming research, second report, 30641
- fish farming in 12 South Central States, species, acreage and number of farmers, 20682
- fish inventory data—
 - Fort Loudon Reservoir, 29559
 - Nickajack Reservoir, 24075
 - Pickwick Reservoir, 16550
 - South Holston Reservoir, 24076
 - Watauga Reservoir, 20839
- fish kills caused by pollution in 1971, annual report, 23195
- fish larvae collected from northeastern Pacific Ocean and Puget Sound during April and May 1967, 23808
- fish passage report—
 - Bonneville, The Dalles, John Day, McNary, Ice Harbor, Lower Monumental, Little Goose Dams, 20100
 - Columbia River projects, Bonneville, The Dalles, John Day, McNary; Snake River projects, Ice Harbor, Lower Monumental, Little Goose, Lock and Dam, Oreg. and Wash., 28683
- fish sticks, fish portions and breaded shrimp—
 - 1971 annual summaries, 20677, 25610
- fisheries—
 - agreements with—
 - Korea, 25757
 - Union of Soviet Socialist Republics, 25766
 - conservations of Atlantic salmon, agreement with Denmark, 17881
 - consideration of claims resulting from damage to fishing vessels and prevention of same agreement with Union of Soviet Socialist Republics, 26883, 32582
 - handbook of engineering requirements and biological criteria, 31247
 - northeastern Pacific Ocean, agreement with Union of Soviet Socialist Republics, 26882
 - shrimp, agreement with Brazil, 31857
 - United States, 29374
 - off coast, agreement with Japan, 25761
 - western region of middle Atlantic Ocean, agreement with Polish People's Republic, 17876
- fishery bulletin, 18369
- fishery facts, 23791-794
- fishery legislation of 1972, hearings, 15881
- fishery marketing development series, 20683, 31712
- fishery problems on high seas in western areas of middle Atlantic Ocean, agreement with USSR, 27929
- fishery products—
 - canned, annual summaries, 22087, 26762
 - imports and exports, 31710
 - industrial, annual summaries, 20678

Fish and fisheries—Continued
 fishery products—continued
 marine products development irradiator
 program, dosimetry and operations
 annual report, 28087
 packaged, 1970 annual summary, 20679
 fishery publications, lists and indexes,
 20697, 25630, 29394, 31726
 fishery statistics of United States, 16403
 fishes from national fish hatcheries, propa-
 gation and distribution, 22246
 fishing operations, northeastern Pacific
 Ocean, agreement with Union of Soviet
 Socialist Republics, 26881
 Florida landings, 16402, 18372, 20680,
 31711
 food fish, situation and outlook, 18376
 frozen fishery products, 16397, 18389-390,
 20676, 26763
 Georgia, landings, 16401, 18402
 grant-in-aid for fisheries program activ-
 ities, 30515
 human behavior aspects of fish and wild-
 life conservation, annotated bibliog-
 ography, 28927
 hydrodynamics of certain animals, USSR
 study, 20454
 impairment of flavor of fish by water pol-
 lutants, 26400
 industrial fishery products, situation and
 outlook, 18490
 inshore lobster fishing, 23794
 investigation of mercury in St. Clair
 River-Lake Erie systems, 16574
 investigations in fish control (series),
 20780
 king and tanner crab fisheries, agreement
 with Japan, 25760
 larval fish survey of Humboldt Bay, Calif.,
 23809
 let's cook fish, 31712
 Louisiana landings, 18600
 Maine landings, 18603
 marine fisheries review (monthly), 18609
 marine fishes of—
 California current and adjacent waters,
 23795
 Gulf and south Atlantic (poster), 29377
 North Pacific (poster), 20684
 marine game fish program, 25611
 Maryland landings, 18612, 23787, 27794
 Massachusetts landings, 18613, 26761
 mercury content in fish, sediment and
 water in Lake Oahe, S.Dak., preliminary
 investigation, 17934
 mercury concentrations in fish of Great
 Smoky Mountains National Park, 22482
 methods of estimating half-life of biolog-
 ical activity of toxic chemicals in water,
 20780
 Mississippi landings, 18633, 23789
 national policy with respect to support of
 U.S. fishing industry report, 28484
 New Jersey landings, 18694
 New York landings, 16398, 18701, 30514
 NOAA technical report, NMFS SSRF
 series, 25631-632
 North Carolina landings, 16399, 18741
 North Pacific fisheries act, amend—
 hearings, 15881
 law, 19405
 report, 19872
 Northwest Atlantic fisheries convention,
 protocol, 25731
 amendments, hearing, 19972
 report, 17124
 ocean fishery management, discussions and
 research, proceedings, 29393
 packaged fishery products, 1971 annual
 summary, 22088
 pollution as result of fish cultural activi-
 ties, 27450
 processed fishery products, 1971 annual
 summary, 23784
 progressive fish-culturist, 18825
 reciprocal fishing privileges, agreement
 with Canada, 31859

Fish and fisheries—Continued
 recolonization of population of supratidal
 fishes at Eniwetok Atoll, Marshall Isl-
 ands, 25605
 research vessels of National Marine Fish-
 eries Service, 20695
 residues of MS-22 in northern pike, mus-
 kellunge, and walleye, 20780
 Rhode Island, landings, 18870, 22089
 rodenticides and mammal, bird and fish
 toxicants, EPA compendium of pesti-
 cides, 20731A, 25668
 salt-water angling, 1970 survey, 29376
 seasonal distribution of tunas and bill-
 fishes in Atlantic, 25632
 Sequatchie River drainage basin, Ten-
 nessee Valley streams, their fish, bottom
 fauna, and aquatic habitat, 16552
 Shawnee Is camping, hiking, fishing, hunting,
 floating, fishing, scenery, 23314
 skipjack tuna fisheries in central and west-
 ern Pacific Ocean, review of literature
 on development, 26771
 South Carolina landings, 16400, 18916
 Southeast Fisheries Center Bionumeric
 code, fishes, 25631
 special scientific reports, fisheries series,
 20699-701, 23808-809, 26771, 27803,
 30542
 sport fishery abstracts, 18922
 statistical digests, 16403
 stilling basin hydraulics and downstream
 fish migration, 31238
 survival of fish passing through spillways
 and conduits, compendium, 31238
 test kitchen series, 20685
 Texas landings, 18958
 Virginia landings, 19047, 23788
 water hardness effects on toxicity of sev-
 eral organic and inorganic herbicides to
 fish, 26849
 water pollution and Caspian Sea fishing
 industry, USSR study, 17629
 winter sports area, Cooke City, Silver
 Gate, ice fishing, etc., 23267
 see also Fishing vessels—Shellfish—Wild-
 life—also names or classes of fish, e.g.
 Salmon—also headings beginning Fish.
 Fish as food, see Fish and fisheries.
 Fish bait, see Bait.
 Fish Creek, Greater Anchorage area, special
 flood hazard report, 20166
 Fish culture, see Fish and fisheries.
 Fish farming, see Fish and fisheries.
 Fish meal:
 engineering economic model for fish pro-
 tein concentration processes, 22101
 fish meal and oil, annual summaries, 23786
 production, monthly reports, 18367
 Fish oil:
 fish meal and oil, 1971 annual summary,
 23786
 production, monthly reports, 18367
 Fish sticks, fish sticks, fish portions, and
 breaded shrimp, annual summaries, 18368,
 20677, 23785, 25610
 Fish traps, hydraulic model studies of Scog-
 gins Dam fishtrap aeration and supply
 structure, 23939
 Fisher, Frank L.:
 ferroalloys, 20557
 mineral industry of Portugal, 20547, 29227
 Fisher, Frederick S., geochemical character-
 istics of mineralized breccia pipes in Red
 Mountain District, San Juan Mountain,
 Colo., 27558
 Fisher, Leonard Everett, brief outline of
 origins of glassmaker, silversmith, wig-
 maker and hatter in American colonies,
 22090
 Fisher, Walter, physical aspects of copper
 cementation on iron, 27700
 Fisher, Werner, space groups and lattice
 complexes, 29312

INDEX 1973

- Fisher Electronics Inc., radios, radio-phonographs, and loudspeaker systems, workers of Milroy, Pa., plant of Fisher Electronics, Inc., subsidiary of Emerson Electric Co., Tariff Commission report, 26899
- Fisher, O. C., Committee to Reelect, *see* Committee to Reelect O. C. Fisher.
- Fisheries, *see* Fish and fisheries.
- Fishermen :
 - expedite reimbursement of vessel owners for charges paid by them to obtain release of crews and ships illegally seized by foreign countries—
 - law, 19495
 - report, 19682
 - Fishermen's protective act, amend—
 - law, 19495, 19519
 - report, 19665, 19682
 - Fishery facts, 23791-794
 - Fishery products, *see* Fish and fisheries.
 - Fishery Services Division :
 - annual report, 31831
 - region 4, annual report, 29516
 - Fishes, *see* Fish and fisheries.
 - Fishing, *see* Fish and fisheries.
 - Fishing vessels :
 - Canadian or other foreign vessels, old and under size, prohibit issuance of licenses for use in American fisheries—
 - law, 19524
 - reports, 17020
 - fisheries, consideration of claims resulting from damage to fishing vessels or gear and prevention of same—
 - agreement with Union of Soviet Socialist Republics, 26883
 - protocol with USSR adding annex 2 to agreement, 32582
 - illegally seized by foreign countries, authorize reimbursement for damages—
 - law, 19519
 - report, 19665
 - need to establish priorities and criteria for managing assistance programs for U.S. fishing vessels operators, GAO report, 25242
 - prohibit use of certain small vessels in U.S. fisheries, hearing, 15881
 - seizure by foreign countries, hearings, 19790
 - Fishmeal, *see* Fish meal.
 - Fittings (auxiliary parts) :
 - electrical fittings, Federal item identification guide, 25000
 - fitting for conduit metal-rigid (thick-wall and thin-wall (EMT type), Federal standard, 28910
 - lubrication fittings, Federal item identification guide, 15952, 26326
 - rope, cable and chain fittings, Federal item identification guide, 27394
 - tetrafluoroethylene hose, high temperature, medium pressure, classification of defects, military standard, 20059
 - tube fitting, copper and copper alloy, wrought or cast solder ends, 28912
 - Fitzgerald, Gerald L., phase-contrast enhancement without spatial filters for seismic holography, 25499
 - Fitzgerald, Warren D., Fitzgerald for Congress Committee, annual report, 24591
 - Fitzgerald for Congress Committee, annual report, 24591
 - Fitzgerrell, R. G., prototype annular slot antenna measurements, 21113
 - Fitzpatrick, W. H., nutrition research in USSR, 17591
 - Fitzsimons General Hospital, Medical Research and Nutrition Laboratory, laboratory reports, 15515, 16658, 28060, 31931
 - Five communities, their search for equal education, 22577
 - Five Mile Creek :
 - flood plain information, 21448
 - floods in Leavenworth, Kans., 21464
 - Fixed rates and institutional membership, 27306
 - Fixed wing flight, 30751
 - Flags :
 - battle streamers of United States Navy, 16440
 - our flag, story, etc., 30944
 - print as House document and provide for additional copies, report, 15841
 - Flagstaff Rim, stratigraphy and preliminary biostratigraphy of Flagstaff Rim area, Natrona County, Wyo., 30632
 - Flake and his secret plan, 28245
 - Flame spraying, military standard, 23109
 - Flames :
 - chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-argon flames, 25500
 - experimental investigation of laminar gas jet diffusion flames in zero gravity, 32467
 - radical species profiles for methane-oxygen-argon flame, 30439
 - Flaming Gorge Reservoir, chemical quality of surface water in Flaming Gorge Reservoir area, Wyoming and Utah, 26512
 - Flammable fabrics, *see* Textiles.
 - Flammable gases, *see* Gases.
 - Flammability, *see* Inflammable materials.
 - Flanges, pipe, Federal item identification guide, 27385
 - Flannely, William G. :
 - research on structural dynamic testing by impedance methods—
 - free body response, 24189
 - structural system identification from—
 - multiport excitation, 24187
 - single point excitation, 24188
 - subsystems, 24190
 - Flaps (aircraft) :
 - design and experimental results for turbine with jet flap stator and jet flap rotor, 29257
 - effect of wing aspect ratio and flap span on aerodynamic characteristics of externally blown jet-flap STOL model, 31629
 - flight tests of rotating cylinder flap on North American Rockwell YOY-10 aircraft, 21974
 - investigation of effects of variations in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configurations, 32470
 - low-speed wind tunnel investigation of semispan STOL jet transport wing body with upper-surface blown jet flap, 29272
 - noise tests of mixer nozzle-externally blown flap system, 29278
 - Flash floods, 23797, 26781
 - Flash point, *see* Inflammable materials.
 - Flashers, intensity of control of flashers, 24035
 - Flat Tops Wilderness, designate parts of Routt and White River National Forests as wilderness, report, 19915
 - Flavors, flavor materials, synthetic organic chemicals, production and sales, 17913
 - Flaw growth behavior in thick welded plates of 2219-T87 aluminum at room and cryogenic temperatures, 32477
 - FLEC, *see* Federal Library Committee.
 - Fleck, D. C., purification of yttrium by electro-refining, 26661
 - Fleet, *see* Navy.
 - Fleet Marine Force manual FMFM series, 17673, 20516, 25392-393, 32442
 - Flegal, R. C., summary of demonstration methods for extinguishing culm-bank fires, 29649
 - Fleischer, Michael, data of geochemistry, chemistry of igneous rocks, chemistry of peralkaline oversaturated obsidians, 23358

Flesher, Martha G., Army Reserve magazine, 18012
 Fletcher, B. P.:
 evaluation of flared outlet transitions, 20171
 model study of Trotters Shoals spillway, hydraulic model investigation, 28785
 Fletcher, James C., address, Mar. 17, 1973, 31663
 Flexible GI interest rate authority in VA, 30992
 Flexibility:
 evaluation of structural layers in flexible pavement for aircraft traffic, 28782
 laboratory load tests on buried flexible pipe, reinforced plastic mortar (RPM) pipe, 32543
 Flies:
 horse bots, how to control them, 25822
 kill those flies for clean house, 22346
 studies of collection, rearing and biology of blackfly (*Cnephia ornithophilla*), 27901
 Flight:
 aerospace safety (periodical), 17959
 design of simplified formation trainer, 22362
 dispersion of turbojet engine exhaust in flight, 31650
 fixed wing, technical manual, 30751
 flight evaluation of methods for predicting vortex wake effects on trailing aircraft, 23681
 flight information publication, U.S. Government, Pacific chart supplement, 19028
 flight instructors, certification, Federal aviation regulations, 18299
 flight of aircraft with partial and unbalanced thrust, 29301
 flight services, handbook, 22384
 flight tests—
 advanced geometry boron blades, 28057
 and evaluation of heliport lighting for IFR, 24055
 erectable spacecraft used for decelerator testing at simulated Mars entry conditions, 20603
 guide, private pilot airplane, 31341
 of rotating cylinder flap on North American Rockwell YOY-10 aircraft, 21974
 glider flight instructor, written test guide, 20241
 in-flight safety of passengers and flight attendants aboard air carrier aircraft, special study, 29411
 information manual, international, amendments, 18506
 instructor, airplane written test guide, 26453
 insulation for crash fire protection of new flight recorders, evaluation, 24042
 international information manual, 28037
 longitudinal aerodynamic parameters of Kestrel aircraft (XV-6A) extracted from flight data, 29295
 MAC flyer (periodical), 18601
 methods and techniques of airframe strength flight tests, 31660
 pilot's handbook of aeronautical knowledge, 17491
 problems of space biology, tissue oxygen under extreme flight factors, 31659
 rules, Federal aviation regulations, 18296
 S-67 aircraft feel augmentation system flight, evaluation, 16656
 services, handbook, 18371, 30735
 727 noise retrofit feasibility, lower goal design, fabrication, ground and flight testing, 24030
 Smithsonian annals of flight, 26692
 statistical prediction of impact displacement due to wind effect on unguided artillery rocket during powered flight, 20978

Flight—Continued
 use of oxygen for reducing fatigue of man in flight, USSR study, 27626
 VOR TACAN low altitude flight check summary, 24041
 see also Space flight.
 Flight crews:
 aircrew protection requirements nonnuclear weapons threat, military standard, 20065, 23111
 auditory effects of noise on air-crew personnel, 24205
 flight crewmember certificates, Federal aviation regulations, 18297, 20239
 other than pilots, certification, Federal aviation regulations, 18297, 20239
 Flight instruction, see Flight.
 Flight instruments, see Aeronautical instruments.
 Flight of fugitives, see Crime and criminals.
 Flight simulation, see Simulation.
 Flight simulators, greater use of flight simulators in military pilot training can lower costs and increase pilot proficiency, GAO report, 30256
 Flight training, see Flight.
 Flinger, F. L., mineral industry of Norway, 25466
 Flint, Russell F., fluvial sediment in Salem Fork watershed, W. Va., 16113
 Flint River and Valley, Apalachicola-Chattahoochee-Flint Basins, plan for development of land and water resources of southeast river basins, 17924
 Floating equipment, free floating endless belt oil skimmer, 20188
 Flood control, see Floods.
 Flood in Geneva Ala., Choctawhatchee River, Pea River, Double Bridges Creek, 32236
 Flood insurance, see National flood insurance.
 Flood relief, see Floods.
 Floods:
 adequacy of national weather service's hurricane and flood warning system, hearing, 19770
 Agnes floods, post-audit of effectiveness of storm and flood warning system of National Oceanic and Atmospheric Administration, report, 26676
 Athens, Ohio, Hocking River, 28749
 Auburn, Mass., 25086
 Belmont County, Ohio, 17397
 Big Sandy River, Wayne County, W. Va., 25065
 Big Wills Creek, vicinity of Valley Head, Ala., 28759
 Black Hills, S. Dak., June 9, 1972—impacts and implications, 28928 survey, 23799
 Roane County, Ky., Ohio River, 28750
 Buffalo Bayou, Shepherd Drive to Barker Dam, Houston metropolitan area, Tex., 28733
 Buxton Creek area of DeQuincy, La., 28760
 central Luzon area of Philippines, report of Daniel K. Inouye, 19805
 Clear Creek, Houston metropolitan area, Tex., 28735
 Colorado and Gunnison Rivers, Grand Junction, Colo., 28736
 Colorado River and Rifle, Government, and Hubbard Gulch Creeks, Rifle, Colo., 28737
 control—
 improvements, rivers and harbors, compilation, departmental edition, 26385
 rivers and harbors, and multi-purpose projects, public works authorizations, reports, 19654, 19715, 19871
 Cypress Creek Basin, Orange County, Fla., 17394
 Cypress Creek, Houston metropolitan area, Tex., 28738
 Dardenne and Belleau Creeks, St. Charles County, Mo., 28761

INDEX 1973

Floods—Continued

- Ellicott Creek area of Lancaster and Alden, N.Y., 28762
- flash floods—
 - general information, 26781
 - treacherous torrent (poster), 23797
- Flood control act, amend, reports, 28345, 31084, 32108
- flood disaster—
 - protection act, report, 29870, 29880
 - seminar, Feb. 27, 1970, Sacramento, Calif., 19791
- flood hazard—
 - evaluation guidelines for Federal executive agencies, 20874
 - information report, Lodi Branch, Floresville, Tex., 28696
- flood insurance, limitation increase, 27079
- flood plain information—
 - Agua Hedionda Creek, Pacific Ocean to Buena, San Diego County, Calif., 32204
 - Alamo and Ulatis Creeks, Vacaville, Calif., 32203
 - Aliso Creek, Orange County, 31248
 - Arkansas River and tributaries—
 - Fort Smith, Ark., 20112
 - Little Rock, Ark., 16007
 - Pulaski County, Ark., 28697
 - Ashuelot River, Keene, N.H., 32205
 - Back Creek in Roanoke County, Va., 23158
 - Bayou Plaquemine Brule, Church Point, La., 25076
 - Big and Little Walnut Creeks, Austin, Tex., 28698
 - Big Sandy River—
 - Boyd County, Ky., 23160
 - Wayne County, W. Va., 25077
 - Big Thompson River, Loveland, Colo., 16008
 - Big Wills Creek, vicinity of Valley Head, Ala., 28699
 - Big Wood River, Bellevue, Hailey, Idaho and vicinity, 17379
 - Brookings, Brookings County, S. Dak., Deer Creek, 32206
 - Burdens and Two Bottle Creeks at Research Triangle area, Durham County, N.C., 20113
 - Buxton Creek and tributaries, DeQuincy, La., 28700
 - Catoma Creek, vicinity of Montgomery, Ala., 20114
 - Cedar Bayou, Houston metropolitan area, Tex., 28701, 28734
 - Choctawhatchee River, Pea River, Double Bridges Creek, Geneva, Ala., 32208
 - Cibola Creek, vicinity of Universal City and Schertz, Tex., 32209
 - Clear Fork and Elk Creek, Jellico, Tenn., 17380
 - coastal areas—
 - St. Lucie County, Fla., 23161
 - Sarasota, County, Fla., 32210
 - coastal flooding—
 - Chesapeake, Va., 28702
 - Portsmouth, Va., 28703
 - Colorado and Gunnison Rivers, Grand Junction, Colo., 28704
 - Colorado River and Rifle, Government, and Hubbard Gulch Creeks, Rifle, Colo., 28705
 - Connecticut River, West River and Whetstone Brook, Brattleboro, Vt., 17381
 - Connecticut, White, Mascoma Rivers, Thetford, Norwich, Hartford & Hartland, Vt., Lyme, Hanover, Lebanon, & Plainfield, N.M., 20115
 - Cody Creek, Muskogee, Okla., 31249
 - Crooked Creek and Williams Creek, Marion County, Ind., 28706

Floods—Continued

flood plain information—continued

- Cuyahoga River—
 - city of Kent, and Franklin Twp., Portage County, Ohio, 17382
- Mantua and Hiram, Portage County, Ohio, 20116
- Dardenne and Belleau Creeks, St. Charles County Mo., 28707
- Deer Creek and White River, Earlimart, Calif., 16009
- De Neveu Creek, Fond du Lac River, main stem, East Branch, West Branch, Fond du Lac, County, Wisconsin, 32211
- Dry Creek and tributaries, Roseville, Calif., 31250
- Dry Turkey and Bull Creeks, McPherson, Kans., 21445
- East River and tributaries, city of Green Bay and Brown County, Wis., 17383
- Ellicott Creek in towns of Lancaster and Alden and in the village of Alden, Erie County, N.Y., 28708
- Escondido Creek, San Diego County, Calif., 21446
- Falling Creek, Chesterfield County, Va., 21447
- Five Mile Creek, Leavenworth, Kans., 21448
- Genesco Creek, Genesco, Ill., 32212
- Glade Creek, Vinton, Va., 23162
- Grand River—
 - Ingham County, Eaton County, Mich., 23163
- Red Cedar River and Sycamore Creek, Lansing, Mich. and vicinity, 23164
- Grants Creek, Town Creek, Salisbury, N.C., 32213
- Green Valley, Dan Wilson, and Suisun Creeks, Cordella, Calif., 20117
- Greens and Halls Bayous, Harris County, Tex., 28709
- Guadalupe River, Santa Clara County, Calif., 23165
- Gulf of Mexico, Big Lagoon, Santa Rosa Sound, Pensacola Bay, East Bay, vicinity of Pensacola, Escambia and Santa Rosa Counties, Fla., 21449
- Hassayampa River, vicinity of Wickenburg, Ariz., 17384
- Hickory Creek, Balch Springs and Kleberg, Tex., 17385
- Hobbe Creek, Springville, Utah, 31251
- Hocking River, Athens, Ohio, 28710
- Independence, Mo., 32221
- Kansas and Big Blue Rivers, Manhattan, Kans., 21450
- Kings River, Sanger, Calif., 20118
- Lick Creek and Little Buck Creek, Marion County, Ind., 28711
- Little Eagle Creek and tributaries, Marion County, Ind., 28712
- Logan River, Logan, Utah, 31252
- Lookingglass River, Clinton County, Mich., 23166
- Lower River Rouge, Wayne, Mich. and vicinity, 23167
- Lower St. Vrain Creek, Boulder County, Colo., 17386
- Mahoning River—
 - and Crab Creek, Youngstown, Campbell, Struthers, Lowellville, Mahoning County, Ohio, 28713
- Niles - McDonald - Girard-Weathersfield township, Trumbull County, Ohio, 28714
- Meadow Creek—
 - Albemarle County and Charlottesville, Va., 17387
 - Eagle River, Alaska, 28715
- Mechums River, Albemarle County, Va., 28716
- Merrimack River, Concord, N.H., 20119

Floods—Continued

flood plain information—continued
 Merrimack-Shawsheen-Spicket Rivers,
 Lawrence, Methuen, Andover & North
 Andover, Mass., 25078
 Mill Creek, Ripley, W. Va. and vicinity,
 16010
 Mill Creek-Sevenmile Creek, Nashville,
 Tenn., 28717
 Moores Creek, Albemarle County and
 Charlottesville, Va., 16011
 Mulberry and Little Mulberry Creeks,
 Mulberry, Ark., 21451
 Mulberry Creek, Dry Creek, Salina,
 Kans., 20120
 Naches River, city of Naches and vi-
 cinity, Wash., 17388
 Neuse River—
 Adkin Branch, Kinston, N.C., 21452
 Stoney Creek, and Little River,
 Goldsboro, N.C., 20121
 North Fork Rivanna River, Albemarle
 County, Va., 28718
 North Fork St. Lucie River, St. Lucie
 County, Fla., 25079
 North Fort Catawba River, Armstrong
 Creek, McDowell County, N.C., 20122
 North Platte River, Casper, Wyo., 32207
 Ohio and Beaver Rivers, Beaver County,
 Pa., 31253
 Ohio River—
 Boone County, Ky., 28719
 Brooke County, W. Va., 20123
 Cabell County, Wayne County, W.
 Va., 32215
 Columbiana County, Ohio, 20124
 Hancock County, W. Va., 17389
 Jefferson County, Ohio, 20125
 Monroe County, Ohio, 23168
 Wetzel County, W. Va., 23169
 Orofino Creek, Whiskey Creek, Idaho
 and vicinity, 32216
 Passumpsic and Moose Rivers, town of
 St. Johnsbury, Vt., 23170
 Piques Run, Pleasant Run, and Bean
 Creek, Marion County, Ind., 28720
 Poor Fork, Cloverlick Creek, Looney
 Creek, city of Cumberland, Ky., 21453
 Portage Open Bay and Main Ditch vi-
 cinity of Portageville, Mo., 28721
 Provo River and Slate Canyon Creek,
 Provo, Utah, 23171
 Quinebaug River, Cady Brook, South-
 bridge, Mass., 25080
 Rabbit Creek, Anchorage, Alaska, 28722
 Red Cedar River, Ingham County, Mich.,
 28723
 Red Creek and Genesee River, in towns
 of Brighton and Henrietta, Monroe
 County, N.Y., 17390
 Red River of the North—
 Fargo, N. Dak.-Moorhead, Minn.,
 28724
 Grand Forks, N. Dak.-East Grand
 Forks, Minn., 17391
 Roaring Fork River and Castle and
 Hunter Creeks, Aspen, Colo., 32217
 Rock Creek, Independence, Mo., 20126
 Rock River, Poplar Creek, Luverne and
 vicinity, Minn., 17392
 Rowlett Creek, Dallas and Collins
 Counties, Tex., 32218
 San Diego Creek and Peters Canyon
 Wash, Orange County, Calif., 20127
 Sand and Cottonwood Creeks and lower
 Kaweah River, Visalia, Calif., 21454
 Sandy Hook Bay and Raritan Bay shore
 areas, Monmouth County, N.J., 32219
 Santa Clara River and Sespe Creek,
 vicinity of Fillmore, Calif., 20128
 Sheboygan River and Mullet River,
 Sheboygan County, Wis., 21455
 Smoky Hill River, Saline River, Dry
 Creek Diversion, Salina, Kans. 20129
 Sope Creek, vicinity of Marietta, Ga.,
 28725

Floods—Continued

flood plain information—continued
 South Creek, North Creek, Catfish
 Creek, Clower Creek, Elligraw Bayou
 and Matheny Creek, Sarasota County,
 Fla., 32220
 South Fork Rivanna River, Albemarle
 County, Va., 28726
 South Fork Salt River and Davis Creek,
 Mexico, Mo., 21456, 23172
 Southbridge, Mass., Aug. 1955, 17401
 Spring and Willow Creeks, Houston,
 metropolitan area, Tex., 28727
 Steamboat & Pleasant Valleys, Nev.,
 20130
 Stevens Branch-Winooski River, Barre,
 Vt., 28728
 Still and Mad Rivers, town of Win-
 chester, Conn., 23173
 Stone, Dark and Kettle Brooks, Auburn,
 Mass., 25081
 Sulphur Fork, Springfield, Tenn., 23174
 Sun River, Great Falls, Mont., 32214
 Talkeetna River, Susitna River, Chu-
 litna River, Talkeetna, Alaska, 17393
 Tiger and Caney Creeks, Meyers Bayou,
 Anderson and Terry Gullies, Vidor,
 Tex., 20131
 Upper River Rouge, Minnow Pond Drain,
 Bell Branch and Tarabusi Creek,
 Wayne and Oakland Counties, Mich.,
 23175
 Upper St. Vrain Creek, Boulder County,
 Colo., 21457
 Virgin River and Fort Pierce Wash.
 vicinity of St. George, Washington
 County, Utah, 32222
 Walla Walla County, Wash., Kooskoo-
 skie and vicinity, Mill Creek, 28729
 Wapsipinicon River and Malone Creek,
 Independence, Iowa, 32223
 Ward Creek and tributaries, Baton
 Rouge, La., 23159
 Warm Spring Creek, Ketchum, Idaho,
 and vicinity, 28730
 Wells Creek and tributaries, Erin, Tenn.,
 32224
 West and North Branches, Rocky River,
 Medina County, Ohio, 16012
 West Fork, Des Moines River and Per-
 kins Creek, Windom, Minn., 32225
 West Fork River and Elk Creek, Clarks-
 burg and vicinity, Harrison County,
 W. Va., 32226
 Whitehead Creek, St. Joseph, Mo., 21458
 Wilson and Wildwood Creeks, San
 San Bernardino County, Calif., 28731
 Winooski and North Branch-Winooski
 Rivers, city of Montpelier, Vt., 28732
 Winooski River, Colchester, Burlington
 and Winooski, Vt., 32227
 Wolf Creek, Lawton, Okla., 21459
 Yalobusha River and tributaries, Gre-
 nada, Miss., 20132-133
 floods—
 Agua Hedionda Creek, Pacific Ocean to
 Buena, San Diego County, Calif.,
 32237
 Alamo and Ulatis Creeks, Vacaville,
 Calif., 32228
 Aliso Creek, Orange Co., Calif., 32229
 Back Creek, in Roanoke County, Va.,
 21469
 Beaver County, Pa., 32234
 Big Sandy River, Boyd County, Ky.,
 21436
 Big Wood River, Bellevue, Hailey, Idaho
 & vicinity, 20146
 Brooks County, W. Va., 17398
 Burlington, Colchester, Winooski, Vt.,
 Winooski River, 32235
 Catoma Creek, vicinity of Montgomery,
 Ala., 20147
 Columbiana, County, Ohio, 17399
 Concord, N.H., 20140

INDEX 1973

Floods—Continued

- floods—continued
- Cuyahoga River—
 - area of Kent, Ohio, 17403
 - Mantua and Hiram, Ohio, 20148
- Dry Turkey Creek and Bull Creek, vicinity of McPherson, Kans., 21444
- Fond du Lac River and De Neveu Creek, Fond du Lac County, Wis., 32238
- Fort Smith, Ark., Arkansas River, 20101
- Geneva Ala., Choctawhatchee River, Pea River, Double Bridges Creek, 32236
- Grants Creek and Town Creek, Salisbury, N.C., 32239
- Green Valley, Dan Wilson, and Suisun Creeks, Cordella, Calif., 20134
- Greens and Halls Bayous, Harris County, Tex., 28739
- Hancock County, W. Va., 20141
- Hobble Creek, Springville, Utah, 32230
- Jefferson county, Ohio, 17400
- Kings River, Sanger, Calif., 20145
- Kinston, N.C., Neuse River and Adkin Branch, 21463
- Leavenworth, Kans., Five Mile Creek, 21464
- Logan River, Logan, Utah, 32231
- Manhattan, Kans., Kansas River and Big Blue River, 21465
- Monroe County, Ohio, 21466
- Naches River, vicinity of Naches, Wash., 21470
- 1968 in United States (series), 23393
- North Fork Catawba River and Armstrong Creek, McDowell County, N.C., 20149
- Ohio River, past and future, Cabell County, Wayne County, West Va., 32240
- proofing regulations, 27442
- Provo River and Slate Canyon Creek, Provo, Utah, 21471
- Pulaski County, Ark., Arkansas River, 28684
- Red Creek and Genesee River area of Brighton and Henrietta, N.Y., 20150
- Research Triangle area, N.C., Burdens and Two Bottle Creeks, 20142
- Rock Creek, Independence, Mo., 20151
- St. Joseph, Mo., Whitehead Creek, 21467
- Salina, Kans. on Smoky Hill River, Saline River, Dry Creek, 20143
- survey along proposed TAPS route, Alaska, 23342
- Talkeetna, Alaska, Talkeetna River, Susitna River, Chulitna River, 17402
- Umpqua River, Oregon, profiles, 29014
- Virgin River and Fort Pierce Wash. St. George, Washington County, Utah, 32232
- Wells Creek and tributaries, Erin, Tenn., 32233
- Winchester, Conn., 21468
- Geological Survey publications, list, 17546
- how to avoid damage—
 - Baton Rouge, La., 25083
 - Brattleboro, Vt., 20135
 - Cedar Bayou, Houston metropolitan area, Tex., 28734
 - Chesapeake, Va., 28740
 - Church Point, La., 25084
 - Crooked Creek and Williams Creek, Marion County, Ind., 28741
 - Falling Creek, Chesterfield County, Va., 21460
 - Glade Creek, Vinton, Va., 21461
 - Grand Forks area, 17395
 - Green Bay and Brown County, Wis., 20136
 - Hickory Creek, Balch Springs and Kleberg, Tex., 20137
 - Jellico, Tenn., 17396
 - Little Eagle Creek and tributaries, Marion County, Ind., 28742
 - Meadow Creek, Albemarle County and Charlottesville, Va., 20138
 - Mechums River, Albemarle County, Va., 28743

Floods—Continued

- how to avoid damage—Continued
- Mulberry, Ark., 21462
- North Fork Rivanna River, Albemarle County, Va., 28744
- Pogues Run, Pleasant Run and Bean Creek, Marion County, Ind., 28745
- Portage, Wis., 25085
- Portageville, Mo., 28746
- Portsmouth, Va., 28747
- South Fork Rivanna River, Albemarle County, Va., 28748
- Vidor, Tex., Tiger and Caney Creeks, Meyers Bayou, Anderson & Terry Gullies, 20139
- increase in flood insurance authorization—
 - law, 30914
 - report, 28467
- investigation of floods in Hawaii, progress report, 23350
- killer from the hills, flash flood, 30578
- lower Rio Grande basin, Texas, prevent, hearings, 19742
- Mahoning County, Ohio, 28754
- Meadow Creek, Eagle River, Alaska, 28751
- meteorological criteria for extreme floods for four basins in Tennessee and Cumberland River watersheds, 30519
- Mill Creek—
 - area of Nashville, Tenn., 28755
 - Kooskooskie and vicinity, Walla Walla Co., Wash., 28763
- Mulberry Creek, Dry Creek, flood problems at Salina, Kans., 17404
- National flood insurance—
 - act, amend, hearings, 28398
 - program, 21803, 30299
- North Fork, St. Lucie River, St. Lucie County, Fla., 25087
- Passumple and Moose Rivers, St. Johnsbury, Vt. 25088
- probability of exceeding capacity of flood-control system at National Reactor Testing Station, Idaho, 22478
- Rabbit Creek, vicinity of Anchorage, Alaska, 28757
- Red River of the North, Fargo, N. Dak.-Moorhead, Minn., 28752
- regulation of flood hazard areas to reduce flood losses, 24104
- Rowlett Creek, Dallas and Collins Counties, Tex., 32241
- St. Lucie County coastline, 25089
- Sand and Cottonwood Creeks and Lower Kaweah River, Visalia, Calif., 21472
- Santa Clara River and Sespe Creek, floods, vicinity of Fillmore, Calif., 20152
- Sheboygan River and Mullet River, flood areas, 20111
- Sope Creek, vicinity of Marietta, Ga., 28764
- South Dakota flood disaster, hearing, 15778
- special flood hazard information report—
 - Bayou Sara, Bayou Sara Creek, Norton Creek, Hells Swamp Branch, vicinity of Saraland, Ala., 20163
- Bear Creek—
 - Denver metropolitan area, 28768
 - St. Edward, Nebr., 28769
- Betz Road Ditch, city of Bellevue, Nebr., 17406
- Boulder Creek, city of Boulder, Colo., 20164
- Buffalo Bayou, Shepherd Drive to Barker Dam, Houston, Tex., 28770
- Clear Creek, Brazoria, Fort Bend, Galveston, and Harris Counties, Tex., 28771
- Cogsa, Etowah, and Oostanaula Rivers, Rome, Floyd County, Ga., 28772
- Cottonwood Creek, Deer Lodge, Mont., 28773
- Cypress Creek, Harris County, Tex., 28774
- Gallagher Creek, Meridian, Lauderdale County, Miss., 21474

Floods—Continued

- special flood hazard information report—continued
- greater Anchorage area, Chester, Campbell, Fish and Ship Creeks, 20166
- Kee Branch, Arlington, Tex., 21475
- Labette and Little Labette Creeks, Parsons, Kans., 28775
- Little Piney Creek and Newburg branch, Newburg, Mo., 16014
- Mud Creek, Broken Bow, Nebr., 28776
- North Fork Big Nemaha River and Town Branch Tecumseh, Nebr., 25091
- Pilchuk River, vicinity of Machlas, Wash., 32242
- Polecat and Rock Creeks, Sapulpa, Okla., 25092
- Tombigbee River, Aberdeen to Amory, Lower Town Creek, Monroe County, Miss., 17407
- White Oak Bayou, Cole Creek, Vogel Creek, Harris County, Tex., 28777
- Yockanookany River, Dye Ditch and Munson Creek, Kosciusko, Attala County, Miss., 20165
- Spring and Willow Creeks, Houston metropolitan area, Tex., 28765
- spring flood, 1973, Coast Guard helping others, 29815
- stages and discharge for small streams in North Dakota, 23341
- Steamboat Creek and tributaries, Steamboat and Pleasant Valleys, Washoe County, Nev., 20153
- Trumbull County, Ohio, 28756
- United States, 1968, summary, 23393
- Warm Springs Creek, Ketchum, Idaho, and vicinity, 28753
- watershed work plan for watershed protection and flood prevention, Pond Creek watershed, 20012
- Wetzel County, W. Va., 28758
- White Oak Bayou, Cole and Vogel Creeks, Houston metropolitan area, Tex., 28766
- White River Junction vicinity, Vermont and New Hampshire floods, 20144
- Wolf Creek, floods in vicinity of Lawton, Okla., 21482
- Floodways, ground water along Rio Bucana at Ponce, P.R., and effects of proposed floodway on ground-water quality, 23384
- Floors and flooring:
 - farrowing house slotted floor, 22399
 - mass thickness manual for walls, floors, and roofs, 28585
 - stabilization of hard maple flooring with polyethylene glycol 1000, 31370
- Flora, see Plants.
- Floresville, Tex., Lodi Branch, flood hazard information report, 28696
- Florida:
 - approach to planning for Miccosukee Tribe of Indians of Florida, 31486
 - census of business, 1971, major retail centers, 16690
 - census of housing, 1970, housing characteristics for States, cities, and counties, 15539
 - census of population, 1970, detailed characteristics, 22519
 - climate, 21483
 - climatological data, 18079
 - cooperative Gulf of Mexico estuarine inventory and study, Florida, phase 1, area description, 25629
 - county business patterns, 30819
 - criminal justice agencies, 23564
 - District Court, analysis of decision of American Waterways Operators, Inc., et al. v. Askew, 17296
 - draft environmental statement, proposed 1973 Outer Continental Shelf, oil and gas general lease sale, offshore Mississippi, Alabama, and Florida, 31568
 - electric rate book, 23227
 - estimates of population of counties, current population reports, 30854

Florida—Continued

- Florida land and water resources study in Kissimmee-Everglades area, 27891
- income limits for rent supplement housing, 20379
- landings, fish and shellfish, 16402, 18372, 20680, 31711
- Life Underwriters Political Action Committee, Florida, annual report, 24522
- lightning criteria relative to space shuttles, currents and electric field intensity in Florida lightning, 20593
- longtime testing of sugarcane varieties in southern Florida, 20885
- minerals industry, minerals yearbook chapter, 16275, 25458
- nutrient survey of surface waters in southern Florida during wet and dry season, 23354
- power interruptions, Apr. 1973, hearings, 32085
- precipitation data, hourly, 18430
- regular income limits for sec. 235-236 housing, 20374
- rehabilitation facilities, national directory, 25686
- southern water resources data, 31397
- truck inventory and use survey, 24224
- water resources, data, 23387-388
- Florida Frontier Rivers National Cultural Park, establish, hearings, 21246
- Florida Real Estate Political Education Committee, annual report, 24715
- Flotation:
 - Apollo experience report, command module uprighting system, 25525
 - beneficiation of Idaho kyanite-bearing materials, 27699
 - recovery of copper from converter slags by flotation, 16330
- Flour, food grain statistics, supplement, 15482
- Flour mills:
 - flour milling products, summary for 1971, current industrial reports, 28157
 - products, current industrial reports, 18194
- Flow:
 - accuracy of low-flow characteristics estimated by correlation of base-flow measurements, 21741
 - aerodynamic and flow-visualization studies of 2 delta-wing entry vehicles of Mach number of 20.3, 31631
 - analytical and experimental studies of shock interference heating in hypersonic flows, 31626
 - asymmetric hypersonic flow, 20590
 - boiling crisis and critical heat flux, 21022
 - calculation of 2-dimensional flows with detonation, USSR study, 25361
 - calculative techniques for transonic flows about certain classes of wing-body combinations, 20584
 - characteristics of water quality and streamflow, Passaic River Basin above Little Falls, N.J., 31400
 - cold-air investigation of turbine for high-temperature-engine application, two-stage turbine performance, 20609
 - compressible-flow preston tube calibrations, evaluation, 29273
 - correlation for temperature profiles in plane of symmetry downstream of jet injected normal to crossflow, 17724
 - coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems, 32257
 - critical two-phase flow for cryogenic fluids, 31676
 - design and cold-air investigation of turbine for small low-cost turbofan engine, 20610
 - double electrostatic probe for measuring density, temperature and velocity of flowing plasma, 25528

INDEX 1973

Flow—Continued

- dynamic characteristics of two-stage variable-mass flexible missile with internal flow, 17695
- expansion-tube flow quantities for real-gas mixtures and comparison with experimental results, program for calculating, 17713
- experimental and analytical study of one- and two-component flows in spherical chambers, 31609
- experimental study of heavy-mineral segregation under alluvial-flow conditions, 29564
- far field noise generation by coaxial flow jet exhausts, 24028
- flow and channel characteristics of 2 high mountain streams, 23306
- flow augmenting effects of additives on open channel flows, 30189
- flow characteristics of Georgia streams, 23343
- flow-field measurements around Mars lander model using hot-film anemometers under simulated Mars surface conditions, 17710
- flow into stratified reservoir, 17417
- flow of funds—
 - seasonally adjusted, 16057, 20268, 23241
 - unadjusted, 16058, 20269, 28891
- flow smoothing stations in municipal sewage systems, 28802
- flow through wire-form transpiration-cooled vane, 30462
- FORTTRAN program for calculating velocities and streamlines on hub-shroud and mid-channel flow surface of axial-or mixed-flow turbomachine, user's manual, 31639
- growth and decay of turbulent mixing in planetary boundary layer, 32252
- heated pipeline, some effects on groundwater flow in Alaska, 23374
- heavy mineral segregation under alluvial-flow conditions, experimental study, 20349
- high-speed flow past wings, 29258
- hydraulic jet flow of an ideal liquid and gas-liquid mixtures, USSR study, 16205
- improved method for aerodynamic analysis of wing-body-tail configurations in subsonic and supersonic flow, 29253
- influence of method of liquefying vapor phase on flow characteristics of accelerator output of liquid-metal MHD-converter, USSR study, 21848
- Investigation of flow fields within large-scale hypersonic inlet models, 29270
- irrigation management for control of quality of irrigation return flow, 31288
- Isua, Greenland, calculations of glacier flow for open-pit mine, 32198
- ice-surface heating and flow phenomena on space shuttle orbiters at large angles of attack and hypersonic speeds, 20621
- liquid and gas flow—
 - measuring instruments, Federal item identification guide, 23097
 - pressure, temperature, humidity and mechanical motion measuring and controlling instruments, 24986
- low-flow characteristics of streams in—
 - Albany County, N.Y., 23351
 - Puget Sound region, Wash., 23361
- low flows and temperatures of streams in Seattle-Tacoma urban complex and adjacent areas, Wash., 25249
- national study of streamflow data-collection programs, 30287
- numerical simulation of three-dimensional transonic flow with application to C-141 wing, 31624
- oxidation resistance of selected mechanical carbons, at 650° C in dry flowing air, 32478
- principles and measuring techniques of turbulence characteristics in open-channel flow, 23357

Flow—Continued

- qualification of miniature internal threads using air flow, 29665
- radiative coupled viscous flow with massive blowing, 26680
- relationship between sap-flow rate and sap volume in dormant sugar maples, 23284
- selected irrigation return flow quality abstracts, 20205, 32263
- solid-liquid flow in noncircular pipes, 25502
- some problems of calculation of 3-dimensional boundary-layer flows on general configurations, 31611
- steady-state solutions of discrete-velocity Boltzmann systems in restricted flow regions, 23874
- supercritical flow in curved channels, hydraulic model investigation, addendum, 21477
- supersonic flow of hot gases around bodies, USSR study, 16177
- tables for supersonic flow of helium around right circular cones at zero angle of attack, 32464
- technique for measuring hypersonic flow velocity profiles, 30457
- tests of mixed compression axisymmetric inlet with large transonic mass flow at Mach numbers 0.6 to 2.65, 21987
- thermal wave flowmeter for measuring combined sewer flows, 27464
- unsteady thermal boundary layers, analysis, 20618
- wind tunnel simulation and prototype studies of barrier flow phenomena, 20974
- see also* Vortex flow.
- Flow charts, flowchart symbols and their usage in information processing, 27723
- Flow of water, *see* Hydraulics.
- Flowcharts, *see* Flow charts.
- Flowers :
 - production and sales, etc., 26887
 - selected terminal wholesale markets for flowers, 30708
 - see also* Alfalfa.
- Flowmeters :
 - evaluation of several cryogenic turbine flowmeters, 20644
 - thermal wave flowmeter for measuring combined sewer flows, 27464
 - ultrasonic mass flowmeter for Army aircraft engine diagnostics, 26979
- Flows of mill residues to pulp and board manufacturers, Washington, Oregon, and California, 20322
- Floyd County, Ga., Coosa, Etowah and Costanaula Rivers, special flood hazard information report, 28772
- Flue-cured tobacco, *see* Tobacco.
- Fluerics, terminology and symbols, military standard, 21409
- Fluid flow, *see* Flow.
- Fluid milk and cream report, 18373
- Fluidics :
 - advanced hydrofluidic stabilization system, 22438
 - NAS contributions to fluidic systems, survey, 17707
- Fluidization, correlations of phase-boundary pressures of condensate fluid systems with compositions modified by added butane, 30436
- Fluidized bed reactors, fluidized bed clarification as applied to wastewater treatment, 21497
- Fluids :
 - chemical composition of naturally occurring fluids in relation to mercury deposits in part of north-central California, 27559
 - dispersing antiferromagnetic precursors to prepare magnetic fluids, 23652
 - glossary of selected terms useful in studies of mechanics of aquifer systems and land subsidence due to fluid withdrawal, 20362

Fluids—Continued

mass diffusion in self-confined rotating flow, 23672
preparing magnetic fluids by peptizing method, 21960
retrieval of dispersive and convective transport phenomena in fluids using stationary and nonstationary time domain analysis, 31630
turbulent fluid friction of rotating disks, 31607
see also Body fluids.

Flumes, summary of turbulence data from rivers, conveyance channels, and laboratory flumes, 23375

Fluno, J. A., be safe from insects in recreation areas, 16598

Fluorescence:

development of X-ray fluorescence spectroscopy in elemental analysis of particulate matter, evaluation of commercial multiple crystal spectrometer instruments, 31273
feasibility study of in-situ source monitoring of particulate composition by Raman and fluorescence scatter, 30185
optical materials investigation for ultraviolet downconverters, 20972

Fluorescent lamps, *see* Electric lamps.

Fluorescent penetrant, fluorescent probes in detection of insecticides in water, 28916

Fluoridation, fluoridation engineering manual, 31898

Fluorine, economic availability of byproduct fluorine in United States use of fluosilicic acid in manufacture of aluminum fluoride, and calcium fluoride, 25413

Fluorspar, minerals yearbook chapter, 16260, 23638, 25444

Fluosilicic acid, utilization of byproduct fluosilicic acid in manufacture of aluminum fluoride and calcium fluoride, economic availability of byproduct fluorine, 25413

Flutter (aircraft):

automated procedure for design of wing structures to satisfy strength and flutter requirements, 30456

Fluvial sediment discharge to ocean from conterminous United States, 23333

Fluvial sediment in Salem Fork watershed, W. Va., 16113

Flux:

hydrodynamic flux control for waste water application of hyperfiltration systems, 28820

waste glass as flux for brick clays, 21955

Flying, *see* Flight—Instrument flying.

FMC, *see* Federal Maritime Commission.

FMC Corp., Lewistown, Pa., viscose rayon wholly of continuous fibers, workers of rayon plant of American Viscose Division, 24071

FNS, *see* Food and Nutrition Service.

Foam:

air modulated vacuum oil recover collection of spilled oil (foams), 17416
concept evaluation, recovery of floating oil using polyurethane foam sorbent, 17418
fabrication of open cell polyethylene foam, 28063
guidelines for selection of and use of foam polyurethane roofing systems, 29324

Foamed plastics, *see* Plastics.

Focus, 18374

Focusing, evaluation of 200 mCi 55Fe X-ray diffraction source in focusing and Debye-Scherrer analytical applications, 25871

Fog:

fog dissipation techniques for emergency use, 20975
helicopter downwash applied to fog clearing, status summary, 22422
historical summary of activities in UC—FAA fog chamber, 24027
iterative method for saturation adjustment, 22414

Fog—Continued

laboratory evaluation of electrogasdynamic fog dispersal concept, 24049
measurements of laser extinction in ice fog for design of SEV pilotage system, 21437
microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418
monthly climatological charts of behavior of fog and low stratus at Los Angeles International Airport, 30537
statistical analysis of meteorological parameters during fog at 45 U.S. airports, final report, 24029
transmission of 2.0–3.4 micron infrared radiation in ice fog, 31237
two-dimensional short-range fog forecast model, 22413

Fog signals:

Hydrographic Center, list—
Norway, Iceland and Arctic Ocean, 30124
Pacific Ocean, western, etc., 27418B
Naval Oceanographic Office, list—
British Isles, English Channel and North Sea, 16439
Europe and Africa, west coast, etc., 22160
Greenland, North and South America, east coast, etc., 17790

Fogarty International Center proceedings, 16174

Foils, *see* Metal foils.

Folger, David W., characteristics of estuarine sediments of United States, 17538

Foliage, *see* Leaves.

Folk, Earl D., GPSS/360 computer models to simulate aircraft passenger emergency evacuation, 28093

FOMC, *see* Federal Open Market Committee.

Fomes annosus, in southeastern U.S., relation of environmental and biotic factors to stump colonization and losses in residual stand, 20936

Fomon, Samuel J., practices of low-income families in feeding infants and small children, 17678

Fond du Lac County, Wis.:

De Neuv Creek, and Fond du Lac River—flood plain information, 32211
floods, 32238
soil survey report, 31819

Fond du Lac River:

floods on Fond du Lac River and De Neuv Creek, Fond du Lac County, Wis., 32238
main stem, East Branch, West Branch, Fond du Lac County, Wisconsin, flood plain information, 32211

Fong, Elizabeth, set of debugging and monitoring facilities to improve diagnostic capabilities of compiler, 25558

Fontane, Darrell G., mathematical simulation of turbidity structure within an impoundment, hydraulic laboratory investigation, 25097

Food:

assure consumers of plentiful supplies at reasonable prices—
law, 32011
reports, 28380, 31005
bacteriological analytical manual for foods, 20282
code of Federal regulations, 27512–514, 28875–877
commercial import detentions, monthly report, 18138
consumer products by design, report on new foods, fabrics and materials from agricultural research, 29618
consumption of households in North Central region, 16600
cost benefit analysis of selected radiation, pasteurized foods, 21020
dollars for food, fiscal year 1974 budget, 24955

INDEX 1973

Food—Continued

emergency food and medical services, committee print, 23068
 energy value of foods, basis and derivation, 27987
 families in expanded food and nutrition education program, comparison of food stamp and food distribution program participants and nonparticipants, 31911
 family fare, guide to good nutrition, 16597
 FDA consumer guide, 32301
 FDA information materials for food and cosmetics industries, 21593
 Federal food, drug and cosmetic act, amend—
 hearing, 20004, 27222
 text, 26171
 federal food programs, 1973, hearings, 28567, 31157
 fish and food organisms in acid mine waters of Pennsylvania, 26402
 food, agricultural, and farm credit legislation, review, hearings, 26145
 food and agricultural export directory, 31349
 food and nutrition (periodical), 18375
 Food and Nutrition Information and Educational Materials Center, catalog, 30466
 food and your weight, 30701
 food consumption of households—
 money value of food and quality of diet, United States, north, south, 15472
 1965–66 seasons and year—
 Northeast, 15471
 south, 22333
 west, 22334
 food dating, shoppers' reactions and impact on retail foodstores, 20914
 food distribution facilities for Wilkes-Barre and Scranton, Pa., 26939
 Food, drug, and cosmetic act—
 amend hearings, 15754
 test, 20283
 food for children in pre-school centers, in summer programs, 16070
 food for fitness, daily food guide, 31913
 food for peace program, extend, hearings, 32071
 food grain statistics, supplement, 15482
 food makes the difference, ideas for economy-minded families, 20923
 food prices, increases, hearings, 28519
 food retailer and PACA, 29629
 food retailing in Cleveland, Ohio, metropolitan area with emphasis on inner city, 16606
 food selection for good nutrition in group feeding, 16599
 foodborne human salmonellosis, recommendations to Commissioner for control, 30243
 for family with young children, 30700
 France's institutional food market, developments and prospects for U.S. exports, 25042
 free and reduced price meal handbook, 30245
 freezing combination main dishes, 27991
 funds, summer lunch-pre-school feeding, extend, hearings, 20006
 gonadotoxic and embryotoxic effect of food dye amaranth, USSR study, 17627
 good foods coloring book, 31920
 growth and its implications for future on resources, environment and food supply, hearings, 29932
 Hawaii food irradiation program, 29676
 home delivered meals for older Americans, demonstration, final report and guidelines, 27977
 household consumption survey, 1965–66, reports, 15471–472, 16600, 22333–334
 how to buy food, lesson aids for teachers, 26931
 Indians' food and cookery, 23458

Food—Continued

inquiry into spread between retail food prices and prices received by farmers, hearings, 29892
 it's good food, keep it safe, 30714
 labeling and inspection, hearings, 21257
 Los Angeles wholesale food distribution facilities, 20911
 low water volume enzyme deactivation of vegetables before preservation, 31278
 messhall master at arms handbook, 22178
 milestones in U.S. food and drug law history, 23257
 national food situation, 18668
 nutrition program for the elderly, grants to States under Older Americans act, authorize, law, 16860
 pesticide analytical manual, methods which detect multiple residues, 25194
 phase 4, food regulations, 31171
 plentiful foods, PE series, 18762
 preparation and serving of food in garrison dining facility, Army technical manual, 28053
 prices, causes, etc., hearing, 19945
 productivity in food industry, preliminary study of problems and opportunities, report, 27863
 program, ASCS defense activities, 22321
 quality and its preservation in processed foods, conference proceedings, 20888
 read the label, 23259
 retail prices by cities, 18269
 selected technical publications, 20284
 special summer food service program—
 for children site, handbook, 28012
 sponsor handbook, 25830
 training manual, 25829
 storing perishable foods in home, 29623
 TV advertising of food to children—
 hearings, 27359
 nutrition education, 1973, hearings, 26286
 unused food assistance funds, food stamps, administration witnesses, hearings, 20007
 USDA grades—
 in buying food, how to use, 20906
 standards for food, how they are developed and used, 20926
 USDA standards for food and farm products, list, 29621
 we want you to know about—
 drugs for food-producing animals, 30244
 labels on foods, 31343
 nutrition, 31345
 what's happened to food prices? 28026, 31991
 narrative guide for filmstrip and slide set C-192, 31992
 world production and utilization situation, hearings, 30003
 your money's worth in foods, 27993
 your plentiful foods program, the program and you, 16608
 see also Canned foods—Nutrition—School lunches—also names of food.
 Food additives:
 nitrites and nitrates, regulation, report, 16974
 nutrition and human needs, national survey, hearings, 21381, 23069, 26285
 Food and Drug Administration:
 appropriations, 1974, hearings, 27178
 clinical experience abstracts, 18288
 FDA compilation of case studies of drug recalls, 27522
 FDA consumer (periodical), 18289
 FDA drug bulletin, 18290
 FDA information materials for food and cosmetics industries, 21593
 FDA interim index to evaluations published in Federal register for NAS–NRC review drugs, 26454, 28917
 FDA publications, 17492–493
 FDA regulation of new drug Serc, hearing, 21240

Food and Drug Administration—Con.
 lack of authority limits consumer protection, problems in identifying and removing from market products which violate law, GAO report, 16096
 national heart, blood vessel, lung and blood program, program analysis, 30492
 position classification standard for consumer safety series, Civil Service Commission, 16821
 posters, 21594, 21596, 21598, 23260-261
 problems in obtaining and enforcing compliance with good manufacturing practices for drugs, GAO report, 26481
 processed fruits and vegetables, potentially adulterated products need to be better controlled, sanitation in some plants needs improvement, GAO report, 23324
 protecting consumer from potentially harmful shellfish (clams, mussels, and oysters) GAO report, 26483
 Public Health Service grants and awards, 1971 funds, 25598
 selected technical publications, 20284
 strengthening and upgrading, authorize, hearing, 15755
 we want you to know about FDA, 17492
 Food and Nutrition Information and Educational Materials Center, catalog, 30466
 Food and Nutrition Service:
 careers, 25832
 FNS series, 16070, 17495-496, 23262, 26457, 27523, 30245, 31846-348, 32304-305
 publications, 23262
 Food, drug and cosmetic act, *see* Cosmetics—Drugs—Food.
 Food for animals, antibiotics in animal and poultry feeds, critical review of research, 20886
 Food for fish, alteration tests of Abernathy salmon diet, 17849
 Food for livestock:
 characteristics of rainfall runoff from beef cattle feedlot, 17419
 diethylstilbestrol (DES), its use as drug for humans and in animal feeds, regulations, hearings, 17057
 feed situation, 18360
 feed statistics, feed grains, corn, etc., 1971 supplement, 19130
 hedging potential in grain storage and livestock feeding, 22325
 Food handling, protect food, stay alert, 16069
 Food poisoning, salmonella and food poisoning, we want you to know what we know about, 21601
 Food processing:
 evaluating milling, cooking and processing characteristics required of rice varieties in United States, 25818
 national symposium on food processing wastes, proceedings, 21496
 pollution control costs and research priorities in animal slaughtering and processing industries, 27763, 30499
 Food sanitation, *see* Food handling.
 Food service workers, restaurants and food service employees under Fair labor standards act, 26921
 Food stamps:
 eligibility requirements, 32304
 estamillas de alimentos para la familia, 17496
 families in expanded food and nutrition education program, comparison of food stamp and food distribution program participants and nonparticipants, 31911
 food stamp counter-points, manual for cashiers, 20924
 food stamp facts, disaster situations, 27523
 food stamp program, 26457
 impact of food stamp program on 3 local economies, input-output analysis, 20089
 statutes, compilation, 25820

Food stores, *see* Stores.
 Foot-and-mouth disease:
 prevention, agreement with—
 British Honduras, 20808
 Honduras, 31858
 Panama, 22275
 prevention of foot-and-mouth disease and rinderpest, agreement with Nicaragua, 16535
 Foote, Donald E., soil survey of islands of Kauai, Oahu, Maui, Molokai, and Lanai, state of Hawaii, 17842
 Foote, Richard J., quarterly and shorter-term price forecasting models relating to cash and futures quotations for pork bellies, 30719
 Footnote, Journal of HEW Audit Agency, 21752
 Footwear, *see* Boots and shoes.
 For benefit of all mankind, practical returns from space investments, 17012
 For purple mountain majesties, above the fruited plain, 24973
 Forage plants:
 distribution of forage of skipjack tuna (*Euthynnus pelamis*) in eastern tropical Pacific, 22103
 feed statistics, 1971 supplement, 19130
 Foraminifera. Foraminifera of North Pacific Ocean, 27570
 Force and energy:
 energy, environment, and planning, Long Island Sound region, proceedings of Conference held at Brookhaven National Laboratory, Oct. 5-7, 1971, 28070
 energy research and development, task force report, 27242
 estimating force and power requirements for crosscut sheering of roundwood, 16082
 low-energy electron impact rate coefficients for some atmospheric species, 16451
 maximal control force capability of female pilots, preliminary study, 22510
 oil shale, potential source of energy, 21717
 seasonal snow-surface energy balance in forest opening, 25879
 7 ways to reduce fuel consumption in household heating through energy conservation, 22004
 United States energy through the year 2000, 25299
 Ford, Charles T., treatment of ferrous acid mine drainage with activated carbon, 25114
 Ford, E. J., jr., revision of genus *Petalium* LeConte in United States. Greater Antilles, and Bahamas (Coleoptera:Anobiidae), 29636
 Ford, Gerald R., jr., Ford for Congress Committee, annual report, 24487
 Ford for Congress Committee, annual report, 24487
 Ford Motor Company, wage chronology, 1941-73, 31563
 Forecasting spring wheat harvest before planting by inertial factors, 31517
 Forecasts:
 ecological forecasting and optimizing of biosphere, USSR study, 30362
 forecasting properties of coal seams in place, 21941
 forecasting wheat production in Turkey, 25040
 National Weather Service River Forecast System, forecast procedures, 25621
 patent documentation use in medium-term technological forecasting, 31524
 precipitation at Bakersfield, Calif., using pressure gradient vectors, 30539
 statistical method of combining synoptic and empirical tropical cyclone prediction systems, 30533
 survey and water supply forecasting, SCS national engineering handbook, 16485
 technological forecasting, introduction, 26381

INDEX 1973

Forecasts—Continued
 technology assessment and forecast, 28243
 two-dimensional short-range fog forecast model, 22413
 United States' forecasts for study and exploration of world ocean, USSR study, 25358
 updating of numerical precipitation guidance, 30534
see also Weather forecasts.
 Foreclosure of mortgages, *see* Mortgages.
 Foreign affairs, *see* International relations.
 Foreign Affairs Committee, House:
 calendars, 18547
 committee prints, 15734-737, 15741, 17043-51, 17053, 19769, 21223-224, 21226, 21229-230, 21232, 21234, 21237, 24856, 26158, 27204-210, 27212, 27325, 28410, 29905-907, 29909
 hearings, 15738-740, 15052, 19768, 21222, 21225, 21227-228, 21231, 21233, 21235-236, 23016, 24852-855, 24857, 26156, 26159-161, 27201-202, 27211, 28408-409, 28411, 29903-904, 29908, 29910, 31021-22, 32079-80
 investigations and studies, authorization and expenses, report, 26118
 investigations of U.S. foreign policy and overseas operations, report, 26100
 legislative review activities, 92d Congress, 21226
 report, 26064
 programs and activities scheduled to terminate during 93d Congress, 29905
 reports, 15700-704, 16967, 16969, 19618, 19680, 19716, 26064, 26126, 26132, 26138, 27121, 27127, 27137-138, 27205, 28349, 30978
 survey of activities, 92d Congress, 26158
 Foreign Affairs Research Documentation Center, accessions list, monthly, 18377
 Foreign Agricultural Agency, biographic register, 30643
 Foreign Agricultural Service:
 market promotion activity, report, 32028
 miscellaneous, FAS-M series, 17498-499, 27524-525, 30246, 31349-350
 promotional activities, hearings, 27213
 special reports, lists, 23266, 31351
 Foreign agricultural trade, *see* Agricultural products.
 Foreign agriculture, *see* Agriculture.
 Foreign aid:
 AID activities in Laos, hearing, 15891
 alternatives to bilateral economic aid, 30023
 American foreign policy in economic and political relationships with Organization of American States and Latin America, 30648
 application of modern technologies to international development, list of reports available for foreign use, 18000
 assistance to Cambodia, 30006
 budget estimates, etc. 1972, statements, 19802
 current foreign policy, U.S. assistance program in Vietnam, 16496
 delinquent international debts owed to United States—
 hearings, 19772
 military collection efforts, hearings, 26162
 deposits under Foreign assistance act, agreement with Finland, 17896
 developing countries' external debt and U.S. foreign assistance, case study, GAO report, 28986
 development digest (periodical), 18225
 economic assistance—
 agreement with—
 Bangladesh, 22267
 Japan, postwar, final settlement of obligations, 30653
 appropriations, 1973, hearings, 17025

Foreign aid—Continued
 Foreign assistance act—
 amend—
 message from the President transmitting draft of proposed legislation, 27113
 reports, 15815, 15859, 24926, 26228, 31116
 section-by-section analysis, 17049, 27206
 Ramseyer rule print, 19769
 section-by-section analysis of proposed amendments, 29907
 foreign assistance activities, 1973 further continuing—
 law, 19497
 report, 19729
 foreign assistance appropriations, 1972 and 1973, authorizations, staff memorandum, 17051
 foreign assistance appropriations, 1973—
 authorization, law, 16877
 hearings, 15717, 15869, 17025
 reports, 16989, 16991, 19887
 foreign assistance appropriations, 1974, hearings, 32132
 foreign assistance program, report 1971—
 departmental edition, 20440
 document edition, 19543
 Foreign military sales and assistance act—
 analysis of bill, 27328
 hearings, 28535
 foreign relief aid, hearings, 30026
 Foreign relief assistance act, hearings, 27324
 international housing, review of U.S. assistance to developing countries, hearings, 15876
 military assistance, deposits under Foreign assistance act of 1971, agreement with Republic of China, 16503
 Mutual development and cooperation act—
 hearings, 31022
 report, 32064
 population program assistance, aid to developing countries by United States, other nations, and international private agencies, 30322
 settlement of lend lease, reciprocal aid and claims, agreement with Union of Soviet Socialist Republics, 22272
 summary of United States aid to Jordan, GAO report, 30265
 technical cooperation, agreement with—
 Afghanistan, 23999, 32576
 Mexico, 15813
 U.S. agreements with and assistance to free world forces in Southeast Asia show need for improved reporting to Congress on their status, GAO report, 30266
 U.S. aid to population/family planning in Asia, 27209
 U.S. assistance—
 European economic recovery, hearings, 27324
 programs in Vietnam, 17022
 U.S. development aid, reorganization, comparison and summary analysis of some proposals, 29906
 U.S. foreign aid to education, Does Brazil need it? GAO report, 30267
 views on foreign assistance policy, 24928
 what should U.S. policy be for development assistance to Ecuador?, GAO report, 25247
see also Economic development.
 Foreign Area Research Coordination Group, FAR horizons (periodical), 18282
 Foreign assistance, *see* Foreign aid—Military aid.
 Foreign born:
 country of origin, mother tongue, and citizenship for United States, 1970, supplementary report, 28125
 immigrant scientists and engineers in United States, study of characteristics and attitudes, 31738

Foreign born—Continued
 nativity and parentage composition of families of foreign stock, for United States, 1970, supplementary report, 28129
 we, the American foreign born, 30863
 Foreign claims, *see* Claims.
 Foreign Claims Settlement Commission :
 annual report, 17504
 appropriations, 1973, law, 19473
 appropriations, 1974, hearings, 28388
 Foreign commerce, *see* Commerce.
 Foreign consular offices in United States, 29527
 Foreign countries :
 American students and teachers abroad, sources of information about overseas study, teaching, work and travel, 23135
 area studies, completed research and instructional materials, bibliography, 26363
 background notes, 16491-495, 17850-854, 22251-256, 23986-992, 25718-725, 26851-855, 27903-905, 29517-526, 30642, 31834-842, 32567-571
 commercial offices abroad need substantial improvements to assist U.S. export objectives, GAO report, 20326
 country demographic profiles, 28148
 Department of State indexes of living costs abroad and living quarters allowances, 19004
 digest of African countries' economic development plans, 28639
 Federal jobs overseas, 24265
 foreign curriculum consultants in action, 25053
 foreign economic trends and their implications for United States, ET series, 16157-168, 17570-585, 20430-439, 21832-834, 23489-502, 25309-317, 26547-553, 27601-611, 29092-118, 30312-318, 31501-514, 32394-400
 foreign flag ships owned by U.S. parent companies, oceangoing merchant type ships of 1,000 gross tons and over, 20518
 foreign language and area studies, educational programs, 1974-75, 31228
 foreign officials and official guests of United States, expended protection, provide—
 law, 19468
 reports, 15698, 15854, 19663
 foreign production and commercial reports, index, 18486
 foreign statistical publications, accessions list, 18385
 Immigration and Naturalization Service reports of passenger travel between United States and foreign countries, 21810
 international air travel by Government officials, economy and efficiency, hearings, 19773
 international marketing information service, 18509
 labor developments abroad, 18536
 national social service systems, comparative study and analysis of selected countries, 29495
 non-Communist countries, gross national product estimates, summary, 27613
 passenger travel to and from U.S., reports, 18475, 29085
 plant quarantine-import requirements—
 foreign countries, 24162
 logs and lumber, 30738
 quarantine requirements and procedures to prevent introduction and spread of exotic pests of mutual concern to member countries of North American Forestry Commission, 27531
 realities in lower income countries (address), 28651
 recent educational policy and legislative development abroad, 26375, 30151

Foreign countries—Continued
 restraint on travel to hostile areas, hearings, 15749, 28416
 significant NASA inventions available for licensing in foreign countries, 26686
 Soviet sea power presence, 30585
 summary, petroleum and selected mineral statistics for 120 countries, including offshore areas, 26510
 support for cultural activities, survey of United States and foreign governments, 15926
 suspend air service to any encouraging hijacking, authorize, report, 19846
 taking of evidence abroad in civil or commercial matters, convention, agreement, 20805
 U.S. foreign trade, schedule C, classification of country designations, 22568, 30856
 USDA and military cooperate to stop foreign invaders, 28015
 visa requirements of foreign governments, costs, etc., 25768
 youth travel abroad, what to know before you go, 30646
see also subject involved.
 Foreign currency, *see* Money.
 Foreign curriculum consultant program, 1973-74, for American schools, colleges, and State departments of education, 15991
 Foreign Direct Investments Office, press releases, 18776
 Foreign direct investment program, selected statistics, 20288
 Foreign exchange :
 how well are fluctuating exchange rates working? 30938
 rates, monthly, 18382
 rates, weekly, 18383
 Treasury and Federal Reserve foreign exchange operations, 23244, 32298
 Foreign flag ships owned by United States parent companies, 20513
 Foreign investments, *see* Investments.
 Foreign languages, *see* Language and languages.
 Foreign medical graduates, bibliography, 29039
 Foreign military sales, *see* Foreign aid.
 Foreign newspaper report, 23608
 Foreign oceanborne trade of United States, containerized cargo on selected trade routes, 20519, 25394
 Foreign policy, *see* International relations.
 Foreign Policy, Organization of Government for Conduct of, Commission, *see* Organization of Government for Conduct of Foreign Policy Commission.
 Foreign products, *see* Commerce.
 Foreign publications accessions list, 23416
 Foreign relations, *see* International relations.
 Foreign Relations Committee, Senate :
 calendar, 18567
 committee prints, 15896, 17045, 17254, 17256-59, 21337, 21339-340, 23060, 24927-928, 27204, 27320, 27325-326, 27328-329, 30023-25, 30027, 30029, 38031-32
 hearings, 15891-892, 15894-895, 19971, 24925, 26267, 27321, 27323-324, 27330, 28535-538, 30026, 30028, 30030, 30033, 31141
 historical series, 27324, 30026, 30028, 30033
 interim report on Agency for International Development's housing investment guaranty program, GAO report, 28983
 Investigations and studies, U.S. foreign policy—
 authorization and expenses, reports, 19842, 26219
 legislative history, 92d Congress, 26241, 27326

INDEX 1973

Foreign Relations Committee, Senate—Con.
reports, 15814-815, 15822, 15859, 17124,
17147-150, 17204-205, 19852, 19876,
19905, 19921, 19926, 24901, 24926,
26219, 26227-228, 27270, 28473-474,
28483, 28488, 28502, 29961, 29974,
31097, 31103, 31116, 32101
subcommittees, scope of coverage, rules,
etc., 27329

Foreign Scholarships Board, annual report,
32306

Foreign service:

buildings program, 1974 and 1975 authori-
zation—
hearings, 24853
law, 30920
report, 32039

departmental and foreign service series,
22257, 26856, 29527, 30643-644
embassy sites, conditions of construction,
agreement with Union of Soviet Socialist
Republics, 25754

Foreign Service building act, amend, re-
ports, 26126, 27117, 28474
grievance procedures, background mate-
rials, 15734
list, 18384

officers, key, of foreign posts, guide for
businessmen, 18534
property for chancery sites in D.C., pro-
vide improvements, report, 19926

Foreign Service Institute:
basic language course, French, 22260
contemporary Cambodian, land and econ-
omy, 27906

Russian, active introduction, 30651
Foreign statistical publications, accessions
list, 18385

Foreign trade, *see* Commerce—also names or
classes of commodities—also names of
countries.

Foreign Trade Zones Board, annual report,
26458

Foreign visitor arrivals, 25798, 27962, 30679
Foreigners, *see* Aliens.

Foreman, John W., evaluation of pollution
abatement procedures, Moraine State
Park, 27463

Forest conservation, *see* Forests and fore-
stry.

Forest fires:

analysis of State fire control laws, general
administration, environmental protection
and pollution control, 21603, 25204
building your safe campfire, guide for
leaders and youth, 24139

computer program for processing historic
fire weather data for National Fire-
Danger Rating System, 28949

cooperative control program, Federal,
State and private funds, 23268

crown fuels in forest stands, method of
evaluating, 25228

effects of wildfire on elk and deer use of
ponderosa pine forest, 23295

emergency disaster bill to prevent forest
fires in Alameda and Contra Costa
Counties, Calif., reports, 28466, 32067

fire control notes (periodical), 18366

fire environment concept, 23271

fire simulator, instructor's guide, 23272

fire weather—

and behavior of Little Sioux fire, 16084

observers' handbook, 25208

fire whirls, why, when and where, 16071

natural role of fire, 26468

wildfires—

statistics, annual, 32318

story of modern firefighting, 19122

you and forest fires, 22344

Forest lands, *see* Forests and forestry.

Forest management:

fairest one of all, eastern region forests,
26463

flow and channel characteristics of 2 high
mountain streams, 23306

Forest management—Continued

forestry returns evaluated for uneven-aged
management in 2 Appalachian woodlots,
20306

guidelines for obtaining natural regenera-
tion of white spruce in Alaska, 20294
improve forest inventory with access data,
measure transport distance and cost to
market, 25226

operations research approach to Douglas-
fir thinning, 28964

Spokane Indian Reservation forest inven-
tory analysis, 31487

Forest mensuration, *see* Forests and forestry.

Forest nurseries, nursery diseases of south-
ern hardwoods, 16075

Forest pest leaflets, 16072-75, 17507-510,
27528, 32312

Forest planting:

accelerated reforestation of national for-
ests, law, 15655

animal depredations on spot-seeded yellow-
poplar in central Tennessee, 28953

Engelmann spruce, 16088

field guide, 16089

first-year vegetation after fire, reseeding,
and fertilization on Entiat Experimental
Forest, 31367

horizontal planting of green ash cuttings
looks promising, 28952

hybrid mahogany recommended for plant-
ing in Virgin Islands, 28957

natural reforestation after logging on
Afognak Island, 20299

paper birch seed production in Tanana
Valley, Alaska, 21657

pocket gophers and reforestation in Pa-
cific Northwest, problem analysis, 27899

regenerating loblolly pine by direct seed-
ing, natural seeding, and planting, 28971

seed orchard tree as pollen sampler, model
and example, 21656

seeding black spruce on brushy lowland
successful if vegetation density kept
low, 16079

site preparation—

and reforestation of droughty, acid
sands, 22328

Jack pine on grayling sands, 16078

Forest products:

crops, nursery and greenhouse products,
forest products, census of agriculture,
general report, 31939

demand and price situation, 15478

explaining forest product selling behavior
of private woodland owners, 27538

export control policy, 32127

Forest Products Laboratory:

FPL designs meet family housing needs,
21668

FPL facility for evaluating strength-per-
formance of walls exposed to fire, 32341

look at and result of reorganizing drying
research (lecture), 23279

natural finish, 17512

publications, list—

dividends from wood, 32310

research, recent publications, 25206

drying of wood, 20292

furniture manufacturers and wood-
workers, 31358

interest to architects, 31356

timber products, milling and utilization,
31357

Forest research, *see* Forests and forestry.

Forest resources, *see* Forests and forestry.

Forest Service:

abolish certain regional offices and con-
solidate and change regional boundaries,
proposal, 32130

appropriations, 1973—

law, 19355

report, 16955

supplemental, hearings, 26149

appropriations, 1974, hearings, 26147,
31126

careers, women in Forest Service, 16607

Forest Service—Continued

Chief, appointment, require Senate confirmation report, 32120
 employment, nonprofessional, guide, 15477
 equipment development ED & T reports, 27526-527
 films available for educational purposes, list, 25211
 Forest Service comments on resolutions relating to National Forest System as adopted in 1971-72 by American National Cattlemen's Association, National Wool Growers Association and State livestock association, 25210
 general technical reports, 16076, 23276, 25212-213, 27529, 28923-929, 31359-360, 32313-314
 land conveyance to, report, 32055
 men who matched mountains, Forest Service in Southwest, 26467
 organizational directory, 28922
 program, non-game wildlife research in megalopolis, 32314
 reduction in number of employees, prohibit, report, 31092
 research accomplishments, 26466
 research notes, 16077-81, 17512-520, 20298-302, 21654-665, 23282-299, 25219-225, 26469-474, 27532, 28935-953, 31361-369, 32319-336
 research papers, 16082-93, 17521, 20304-321, 21666-678, 23300-308, 25226-233, 26475-476, 27533-541, 28954-972, 31370-374, 32337-347
 resources bulletins, 20322-323, 21679-682, 23309-312, 25234, 27542, 28973-974
 Rogue River, development, operation and management, 23001
 Forest survey cubic-foot volume equations, 31364
 Forest thinning:
 economics of thinning stagnated ponderosa pine in sapling stands in pine-grass areas of central Washington, 25233
 growth of planted slash pine under several thinning regimes, 21674
 large-crowned planted ponderosa pine respond well to thinning, 21659
 lumber recovery from Douglas-fir thinnings at band mill and 2 chipping can- ters, 20311
 operations research approach to Douglas- fir thinning, 28964
 ten-year growth of planted slash pine after early thinnings, 21678
 tree growth and water use response to thinning in 47-year-old Lodgepole pine stand, 31366
 twenty-one-year development of Douglas- fir stands repeatedly thinned at varying intervals, 23303
 user's manual for computer program for simulating intensively managed allow- able cut, 25213
 Foresters, got a forestry problem? extension foresters can help, 25828
 Forestry, see Forests and forestry.
 Forests and forestry:
 additional actions needed to minimize ad- verse environmental impacts of timber harvesting and road construction on forest land, GAO report, 25236
 Alabama forest industries, 21681
 analysis of forestry issues in 1st session of 92d Congress, 19974
 behavior and impact of chemicals on forest environment, 21604
 Canadian forest product shipped into North Central Region, 25227
 career profiles in forestry, conservation, ecology, environmental management, 26462
 coniferous forest ecosystems, 1st year pro- gress in coniferous forest biome, re- search, 20303

Forests and forestry—Continued

control of dwarf mistletoe in a heavily used ponderosa pine recreation forest, Grand Canyon, Ariz., 31374
 deforestation effects on soil moisture, streamflow, and water balance in cen- tral Appalachians, 32343
 ecology and impacts of forest insects of Pacific Northwest, 21606
 estimating productivity on sites with low stocking capacity, 31372
 evaluation of two-stage 3 P sampling for forest surveys, 23308
 explaining forest product selling behavior of private woodland owners, 27538
 first-year vegetation after fire, reseeding, and fertilization on Entiat Experimental Forest, 31367
 forest diseases of Pacific Northwest, 23273
 forest fertilization—
 state-of-the-art review and description of environmental effects, 20191
 symposium proceedings, 28925
 forest industries in Tennessee Valley counties, decade of progress, 26903
 forest insect and disease conditions in U.S., 17506
 forest inventory statistics—
 Alcorn-Tishomingo County unit, north- east Mississippi, 22287
 Avery-Watauga County unit, western North Carolina, 29561
 Carter-Johnson County unit, northeast Tennessee, 30668
 Decatur-Henderson County unit, west Tennessee, 22286
 Dickson-Hickman County unit, middle Tennessee, 24077
 Houston-Stewart County, unit, middle Tenn. 24078
 Jackson County unit, northeast Ala- bama, 29560
 Livingston-Lyon-Trigg County unit, western Kentucky, 24079
 forest pests leaflets, 26464-465, 27528
 forest-range environmental production analytical system (FREPAS), 22329
 forest resource report, 25200
 forest resources of Tennessee, 21680
 forest-site relationships within outbreak of lodgepole needle miner in central Oregon, 28962
 forest statistics for—
 Alabama counties, 28974
 central Alabama counties, 21682
 forest stocking equations, their develop- ment and application, 28969
 forest survey cubic-foot volume equations, 31364
 forestry bulletins, 22286-87, 24077-79, 29560-561, 30671
 Forestry Incentives act, hearing, 17023
 forestry research—
 highlights, 23274
 progress, McIntire-Stennis cooperative forestry research program, annual re- port, 20019
 future role of chemicals in forestry, 31360
 give a hoot don't pollute, forestry, '76, 23275
 glossary for forest tree improvement workers, 21651
 got a forestry problem? extension for- esters can help, 25828
 growth and soil moisture in thinned lodge- pole pine, 20310
 hydrologic simulation model of Colorado subalpine forest, 32346
 improve forest inventory with access data, measure transport distance and cost to market, 25226
 improved growth intercept method for estimating site index of red pine, 21671
 increased use of felled wood would help meet timber demand and reduce environ- mental damage in Federal forests, GAO report, 32353

INDEX 1973

Forests and forestry—Continued
 industries, Northwest, production, prices, employment, and trade, 18822
 initial assessment of mammal damage in forests of Southwest, 23289
 insect outbreaks in Oregon and Washington/States, 21652
 instrument for measuring tree crown width, 28944
 investment in precommercial thinning of northern hardwoods, 20307
 labor trends in southern forest industries, 28970
 materials to help teach forest conservation, list, 32317
 Missouri's primary forest products output and industries, 25234
 nation's range resources, forest-range environmental study, 25209
 natural role of fire, 26468
 nature and properties of some forest soils in White Mountains of New Hampshire, 32344
 photo plot bias, 28961
 physiology, behavior and genetics of forest insects, 23280
 Pinchot Institute system for environmental forestry studies, 32313
 publications, price list, 26798
 range 'rhythmic for 6th grade teachers, 20297
 research news for the midsouth, 18386
 research notes, 16077-81, 17512-520, 20298-302, 21654-665, 23282-299, 25219-225, 26469-474, 27532, 28935-953, 31361-369, 32319-336
 research opportunities and needs in taiga of Alaska, 31359
 research papers, 16082-93, 17521, 20304-321, 21666-678, 23300-308, 25226-233, 26475-476, 27533-541, 28954-972, 31370-374, 32337-347
 resources bulletins, 21679-682, 23309-312, 25234, 27542, 28973-974
 seasonal snow-surface energy balance in forest opening, 25879
 silvicultural systems for major forest types of U.S., 24126
 size of oak advance reproduction, key to growth following harvest cutting, 21670
 Spokane Indian Reservation forest inventory analysis, 31487
 tropical forests, available publications for distribution, list, 28930
 user's manual for computer program for simulating intensively managed allowable cut, 25213
 Wood supply and national forest lands investment act of 1973, report, 28494
see also Forest fires—Forest planting—Forest products—National forests—Site indexes—Timber—Trees—*also* names of forests.
 Forgeries:
 theft or conversion of blank money orders and unauthorized receipt, possession, or disposition of blank money order forms, U.S. Code definition of criminal actions, amend—
 law, 16920
 report, 15846
 Forgings:
 contributions of selected residual elements to radiation-embrittlement sensitivity of steel forgings, 27855
 heat treatment of 6 A 1-4 V titanium forgings to obtain high yield strength, 28066
see also names of metals being forged.
 Fork lift trucks, *see* Motortrucks.
 Forked Deer River:
 modification of west Tennessee tributaries feature, Mississippi River and tributaries project, Obion and Forked Deer Rivers, engineers report—
 department edition, 20159
 document edition, 19567

Form letters, *see* Correspondence.
 Forman, Royce G., flaw growth behavior in thick welded plates of 2219-T87 aluminum at room and cryogenic temperatures, 32477
 Format requirements for scientific and technical reports prepared by or for Defense Department, 23108
 Formation of inversion in CO-2-H₂O-H₂ gas mixture jet expanding through slit, 21845
 Forms, blanks, etc.:
 blank forms and other uncopyrightable works, general information, 30073
 Federal paperwork burden for small business, hearings, 17304
 operating forms, Federal manual for supply cataloging, 15941, 28588
see also names of departments, etc. issuing forms—*also* subjects.
 Formula for determination of costs of motor carriers of property, 29122
 Forrester, Magnus D., relief, 19342, 19602
 Forsyth, Ga., railroad employee accident report, 32545
 Forsyth County Republican Party, annual report, 22865
 Forsythe Golf Day—William Becker, political committee, annual report, 24483
 Fort, *see* name of fort, except when occurring as first word of name of town, etc.
 Fort Belknap Indian Community:
 lands, hold in trust—
 law, 15657
 report, 15855
 Fort Belknap Reservation:
 Fort Belknap Indian Reservation and Fort Belknap Builders, Inc., report of investigation, 17269
 resources and development potential, 31484
 Fort Bend County, Tex., Clear Creek, special flood hazard information, 28771
 Fort Bend County Republican Party, annual report, 24705
 Fort Berthold, N. Dak., structures, artifacts, 20704
 Fort Caroline National Memorial, general information, 20709
 Fort Laramie National Historic Site, interpretive prospectus, 22119
 Fort Lauderdale, Fla.:
 aircraft accident report, 23858
 area wage survey, 16222
 Fort Loudon Reservoir, fish inventory data, 29559
 Fort Matanzas National Monument, general information, 20707
 Fort Pierce Wash:
 floods, Virgin River and Fort Pierce Wash, St. George, Washington County, Utah, 32232
 vicinity of St. George Washington County, Utah, flood plain information, 32222
 Fort Pulaski National Monument, interpretive prospectus, 22120
 Fort Randall Reservoir, landslides in vicinity of Fort Randall Reservoir, South Dakota, 26502
 Fort Smith, Ark.:
 Arkansas River floods, 20101
 census of population and housing, 1970, census tracts, errata, 19219
 flood plain information, Arkansas River and tributaries, 20112
 Fort Vancouver National Historic Site:
 historic structures report, historical data, 27810
 interpretive prospectus, 22121
 Fort Worth, Tex.:
 aircraft accident report, 31742
 area wage survey, 25382
 census of housing, 1970, metropolitan housing characteristics, 15569
 Central Cities Educational Development Center, description, evaluation, etc., 27773
 Lone Star Gas Company, Fort Worth, Tex., pipeline accident report, 30568

- Fortenberry, Donald K., characteristics of black-footed ferret, 22248
- Fortifications, field, Army field manual, 15505
- FORTTRAN, *see* Computer programs/programming.
- Forts, *see* names of forts.
- Forsythe, Edwin B., Forsythe Golf Day—William Becker, annual report, 24483
- Forsythe Golf Day—William Becker, political committee, annual report, 24483
- Forwarders, *see* Freight forwarders.
- FOS series, 18287
- Fossil Butte National Monument: establish—
law, 19466
report, 19717
- Fossil fuels:
coal-fired fossil plant, 1000-MWe central station power plants investment cost study, 24201
1000-MWe control station power plants investment cost study, oil-fired fossil plant, 22493
- Fossils:
description of Tertiary mollusks, geology and paleontology of Canal Zone and adjoining parts of Panama, 29018
from Ordovician bioherm at Meiklejohn Peak, Nev., 21724
stratigraphy, morphology, and paleoecology of fossil peccary herd from western Kentucky, 23366
- Foster, Betty J.:
elementary and secondary education, fall 1972, statistics of public schools, advance report, 25051
public elementary and secondary day schools, pupils, instructional and non-instructional staff, instruction rooms, schools, and expenditures, statistics, 25057
statistics of public elementary and secondary day schools, fall 1972, 31230
- Foster, Bruce, performance concept in buildings, symposium proceedings, 16359
- Foster, David J., relief, 19324, 19831
- Foster, Nancy, freshwater polychaetes (Annelida) of North America, 17436
- Foster, Rockwood H., nomination, hearing, 15885
- Foster grandparent program, one part of ACTION, 26923
- Fouling organisms, EPA compendium of registered pesticides, antifouling compounds, etc., 23904-906, 26793, 29445, 31765, 32529
- Foulk, D. L., specifications for machine tools and gages, 22499
- Foundations (charitable and educational): tax exempt foundations and charitable trusts—
compliance with provisions of tax reform act of 1969, hearings, 28400
their impact on our economy, 31015
- Founding, creation of large castings by investment process, final report, 26988
- Foundries:
copper-base products, current industrial reports, 15585, 18194A, 27030
iron and steel, current industrial reports, 16766
- Fountain, Melvin, occupational outlook quarterly, 18719
- Fountain County Republican Central Committee, annual report, 24578
- Four C community coordinated child care, 22572
- Four-channel miniature radiotelemetric system for transmitting brain biopotentials, USSR study, 21871
- Four Corners Regional Commission: economic development plans, 28241A
press releases, 18786
- Four-dimensional world-wide atmospheric models (surface to 25km altitude), 17696
- \$465 billion debt limit, 19965
- Fourier transforms, *see* Transforms (mathematics).
- 4th Congressional District Democratic-Farmer-Labor Party, annual report, 22889
- 4th District Republican Central Committee, annual report, 22975
- 4th entitlement period allocations with adjustments for entitlement period 1, 2 & 3, 30673
- 4th payment, entitlement period 3, Office of Revenue sharing, 29566
- Fowles, R. S., materials handling research, penetration of selected/granular materials by wedge-shaped tools, 29232
- Fowl, *see* Poultry.
- Fowler, D. Lee, pesticide review, 30695
- Fowler, James L., laboratory technique for producing microfilariae of dirofilaria immitis in mosquitoes, 15515
- Fowler, Laurie G., alteration tests of Abernathy salmon diet, 17849
- Fox, Alan, income of newly entitled beneficiaries, 32557
- Fox, R. D., recondition and reuse of organically contaminated waste sodium chloride brines, 30182
- Fox Indians, Sacs and Foxes, general information, 31474
- Foxworthy, B. L., emergency ground-water supplies in Seattle-Tacoma urban complex and adjacent areas, Wash., 25250
- FPC, *see* Federal Power Commission.
- FPL facility for evaluating strength-performance of walls exposed to fire, 32341
- Fraas, Foster, alternating current matrix-type separator, 30424
- Fractionation:
preparative free-flow electrophoresis as method of fractionation of natural organic materials, 27575
radioactivity and its fractionation during underground nuclear explosions in granite medium, 15524
- Fracture mechanics applicability to portland cement concretes, 26380
- Fracture of metals:
contributions of selected residual elements to radiation-embrittlement sensitivity of steel forgings, 27855
criteria for fracture control plans, 22163
damage-function analysis of neutron embrittlement in steel at reactor service temperatures, 16447
dynamic tear testing, method for 1/4 inch metallic materials, military standard, 30122
effect of aging at 1040°C (1900°F) on ductility and structure of tantalum alloy, T-111, 20615
effect of neutron irradiation on fatigue crack propagation in types 304 and 316 stainless steels at high temperature, 23876
flaw growth behavior in thick welded plates of 2219-T87 aluminum at room and cryogenic temperatures, 32477
fracture safety considerations for Hanford-N reactor coolant piping materials, 22169
hydrogen environment embrittlement of metals, 27705
review of plane-stress fracture mechanics parameter K_{IC} determined using center-cracked tension specimen, 30589
specimen thickness effects on fatigue-crack-growth behavior and fracture toughness of 7075-T6 and 7178-T6 aluminum alloys, 27712
underground nuclear explosions, study of zones of fracturing, 16669
- Fractures:
analysis of geometry of fractures in San Manuel copper mine, Arizona, 25497
effect of sheet thickness on fracture resistance K_{IC} parameter for titanium alloys, 27845

INDEX 1973

- Fractures—Continued
fracturing in zone around blasthole, White Pine, Mich., 30430
methods and evaluation of explosive fracturing in oil shale, 25506
procedures used for sampling fracture orientations in underground coal mine, 29237
strengthening of fractured rock, pillars by use of small radial reinforcement pressures, 30432
- Fragmentation :
fragment and projectile penetration resistance of soils high-velocity fragment penetration into laboratory-prepared soil targets, 31259
study of fragmentation from bench blasting in limestone at reduced scale, 23654
- Frames, fertilizer storage building, 40' rigid frame, 19118
- France :
background notes, 32567
economic trends and their implications for United States, 21834, 29113
France's institutional food market, developments and prospects for U.S. exports, 25042
French approach to career education, 26375
mineral industry, minerals yearbook chapter, 20543
narcotic enforcement efforts by local government and American missions, report, 27229
notes from French Legation in U.S. to Department of State, 1789-1906, pamphlet describing microfilm, 25534
perchloroethylene from Italy, Japan, and France, determination of no injury, etc., Tariff Commission report, 24068
plant quarantine import requirements, 31930
quadrupartite agreement on Berlin and final protocol between USA and other governments, 27918
some French initiatives in educating socially and culturally disadvantaged, 30151
stainless steel wire rods from France, determination of injury, Tariff Commission report, 32595
- Franchises (business) :
exclusive territorial allocation not unlawful for soft drinks, etc., hearings, 24941, 27350
franchising in economy, 22647
- Francis, Richard E., loop-frequency as related to plant cover, herbage production and plant density, 23304
- Francis, Robert W., market factors in Denmark, 22634
- Franco, John J. :
channel conditions, Devil's Island Reach, Mississippi River, Mo. and Ill., hydraulic model investigation, 23180
model investigation, St. Clair River, effects of submerged sills, 17409
navigation conditions at confluence of Arkansas, Verdigris, and Grand Rivers, hydraulic model investigation, 25100
shoaling conditions, St. Louis Harbor, Mississippi River, hydraulic model investigation, 20177
- Frank, Robert M., course of growth response in relaxed white spruce, 10-year results, 27539
- Frank Caprio for Congress Headquarters, annual report, 24460
- Frank H. Pfeiffer Co., Inc., women's footwear, Tariff Commission report, 16544
- Frank Smith, Committee for, annual report, 22902
- Franke, Dorothy, Committee for Congress, *see* Dorothy Franke Committee for Congress.
- Frankel, Steven M., directory of representative work education programs, 32195
- Franking privilege :
mail management, postage accountability, 31423
Members of Congress, special report, 24304
telegraph and telephone, FCC rules and regulations, 18313
use of congressional frank, clarify—hearings, 24870
report, 26131
see also Mail matter.
- Franklin, Benjamin, 7-cent regular stamp (poster), 16559
- Franklin, Benjamin, Memorial Hall, *see* Benjamin Franklin Memorial Hall—Benjamin Franklin National Memorial.
- Franklin, Jerry F. :
Abbott Creek Research Natural Area, 21607
Ashland Research Natural Area, 21608
Bull Run Research Natural Area, 21612
Cedar Flats Research Natural Area, 21615
Cherry Creek Research Natural Area, 21616
Coguille River Falls Research Natural Area, 21617
Federal Research Natural Areas in Oregon and Washington, guidebook for scientists and educators, 20291
Gold Lake Bog Research Natural Area, 21619
Hades Creek Research Natural Area, 21621
Higley Creek Research Natural Area, 21622
Jackson Creek Research Natural Area, 21624
Lake Twentytwo Research Natural Area, 21625
Long Creek Research Natural Area, 21626
Maple Knoll Research Natural Area, 21627
Myrtle Island Research Natural Area, 21631
Neskowin Crest Research Natural Area, 21632
North Fork Nooksack Research Natural Area, 21633
Olaill Ridge Research Natural Area, 21635
Pigeon Butte Research Natural Area, 21638
Port Oxford Cedar Research Natural Area, 21640
Quinault Research Natural Area, 21642
research on coniferous forest ecosystems, 1st year progress in coniferous forest biome, 20303
Sister Rocks Research Natural Area, 21645
Twin Creek Research Natural Area, 23270
Wildcat Mountain Research Natural Area, 21647
Williamette Floodplain Research Natural Area, 21648
Wind River Research Natural Area, 21649
- Franklin, William M., availability of Department of State records, 23995
- Franklin, Ohio, flood plain information for township, Cuyahoga River, 17382
- Franklin County Lee for Congress, 24601
- Franklin County Republican Committee, annual report, 22855
- Franklin County Republican Executive Committee, annual report, 22786, 24491
- Franklin Delano Roosevelt Memorial Commission :
appropriations, 1973, law, 19355
appropriations, 1974, report, 29861
- Franklin Square Teachers Association, C.O.P.E., annual report, 24769
- Fraternal benefit societies, *see* Friendly societies.
- Fraud :
conversion of worthless securities into cash, 27195

- Fraud—Continued
disposition of public assistance cases involving questions of fraud, 1971 fiscal year, 16371
fraud and corruption in management of military club systems, 30034
organized crime, securities, thefts and frauds, hearings, 32146
- Freche, John C., effect of autoclave heat treatments on mechanical properties of prealloyed powder cobalt-base alloy HS-31, 23688
- Freden, Stanley C.:
symposium on significant results obtained from Earth Resources Technology Satellite-1—
summary of results, 31664-664A
technical presentations, 31618
- Frederich, A. J., requirements and general procedures, 20154
- Frederick, Md., reimburse for money paid saving U.S. Government military and hospital supplies, hearing, 21354
- Frederick County Republican Committee, annual report, 24478
- Frederick County, Republican State Central Committee, *see* Republican State Central Committee of Frederick County.
- Free and reduced price meal handbook, 30245
- Free body response, 24189
- Free enterprise, *see* Laissez faire.
- Free floating endless belt oil skimmer, 20188
- Free Political Campaign Fund, annual report, 24543
- Freeborn County Republican Committee, annual report, 22338
- Freed, C. N., effect of sheet thickness on fracture resistance K_{IC} parameter for titanium alloys, 27845
- Freedmen's Bureau, *see* Refugees, Freedmen, and Abandoned Lands Bureau.
- Freedom, John G., for Congress Committee, *see* John G. Freedom for Congress Club.
- Freedom of information act, *see* Public information.
- Freedom of Information Commission, establish, hearings, 29914
- Freedom of the press, *see* Liberty of the press.
- Freeman, J. J., action of dither in digital matched filters, 27851
- Freeman, K. C., culture of sweet sorghum for sirup production, 27988
- Freeman, Sigmund A., comparison of results of dynamic seismic analyses of 2 identical structures located on 2 different sites, based on site seismograms from San Fernando earthquake, 22471
- Freeport, Tex. Freeport test facility. Freeport test bed, materials test center, 23468
- Freestone, Frank J., runoff of oils from rural roads treated to suppress dust, 26406
- Freeways, *see* Roads and highways.
- Freeze, Paul D., bibliography of temperature measurement, 20640
- Freeze and phase 4, 30079
- Freeze drying, *see* Lyophilization.
- Freeze, economic stabilization program, 30078
- Freeze facts, 28577
- Freezing:
effect of premortem stress, holding temperatures and freezing on biochemistry and quality of skipjack tuna, 22105
feasibility of applying fringe multiplication techniques to stress analysis in 3 dimensions, 20107
freezing combination main dishes, 27991
freezing decayed wood to facilitate ring counts and width measurements, 23286
influence on heat exchange of freezing chemical reactions in non-equilibrium laminar boundary, USSR study, 16180
- Freiburger, Herbert J., nutrient survey of surface waters in southern Florida, during wet and dry season, 23354
- Freidlin, Julius N., U.S. direct investments abroad, 22635
- Freight:
commodity statistics—
annual report, 17508
motor carriers, 23506, 26554
cost of transporting by class 1 and 2 motor common carriers—
Eastern-central territory, 25320
Middle Atlantic region, 20441
South-Central territory, 16170
development of standard data base and computer simulation model for air cargo terminal, 23156
evaluation of potential effects of U.S. freight transportation advances on highway requirements, research phases, 25143
see also Shipments.
- Freight cars:
freight car shortages, report, 15828
increase number and improve utilization to meet current needs, hearings, 28528
inquiry into freight car shortages, hearings, 15752
painting standard for broad gauge freight cars, USSR study, 30358
shortage, alleviate—
hearings, 24909, 29926
report, 26208
- Freight forwarders:
freight forwarder-railroad rate contracts, authorize, hearings, 19956
revenues, expenses, and statistics of freight forwarders, 16171, 25321
transport statistics, 21837
- Freight rates:
farmers, speak up about transportation rates, 28011
single-factor rates under through bill of lading in foreign and domestic offshore commerce, hearings, 21269
through rates and joint rates between motor common carriers and common carriers by rail, express, and water, establish, hearing, 19956
- Freight trains, *see* Railroads.
- Freiman, S. W., crack propagation studies in brittle materials, 31756
- Frels, Edward D., modern management of hypertension, 26912
- Fremont Democratic Club, annual report, 24754
- Fremont Democratic Headquarters, annual report, 24741
- French, Alan D., French Committee, annual letter, 24451
- French approach to career education, 26375
- French Committee, political committee, annual report, 24451
- French Guiana:
and other South American areas, mineral industry, minerals yearbook chapter, 16299
background notes, 31838
economic trends and their implications for United States, 29115
map, 16804
- French language, basic course, 22260
- French Territory of Afars and Issas, background notes, 23987
- Frengley, Michael C., design study of expendable main rotor blades, 28056
- Freon, subcooled forced convection boiling of trichlorotrifluoroethane, 20592
- Frequencies:
absorption of SHF waves by plasma at upper hybrid frequencies, study, 22440
computation of spectral data for Josephson junction circuit, 22010
frequency stability specification and measurement, high frequency and microwave signals, 26705
HCN lasers, frequency and phase stabilization by locking to synthesized reference, 30473

Frequencies—Continued

- Investigation of alkaline phosphatase activity in persons dealing with electromagnetic emission generators of high, ultra-high and superhigh frequency, USSR study, 20357
- nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455
- penetration of waves into plasma at frequencies close to lower hybrid frequency, 22460
- see also Radio frequencies.
- Frequency band:
 - absorption of SHF waves by plasma at upper hybrid frequencies, study, 22440
 - anomalous nonlinear dissipation of high-frequency radio waves in plasma, 31532
 - generation of fast electrons through interaction of SHF wave with collisionless plasma, 20998
 - high frequency potential, effect on propagation of fast waves along magnetoactive plasma layer, 21003
 - investigations of artificial stimulation of ULF waves in ionosphere and magnetosphere magic mode, 29436
 - laboratory investigations of driven low frequency plasma oscillations, 29389
 - localization of wave transformation region in super-high-frequency discharge plasma, study, 21006
 - measurement of plasma parameters in in strong HF discharges, 22442
 - measurement of transverse diffusion coefficient in SHF plasma, 20995
 - method for finding D-region electron density distributions from L.F. broadband pulse measurements, 22641
 - naval shore electronics criteria, VLF, LF and MF communication systems, 20723
 - quasilinear theory of collisionless plasma in weak SHF electric field and constant magnetic field, 22441
 - R-0m experimental setup for studying interaction of high-frequency fields with plasma, 22467
 - ratio of longitudinal and transverse diffusion coefficients in argon SHF discharge plasma, 20999
 - Thompson scatter radar as aid to high-frequency direction finding, preliminary investigation, 16444
- Frequency dividers, precision frequency multivibrators, 28069
- Frequency modulation, see Radio frequency modulation.
- Frequency standards, standard digital data clock-rate generator with programmable digital phase shift, 31755
- Frequently asked questions about accrual accounting in Federal Government, 28980
- Fresh fruit, see Fruit.
- Fresh-water fauna:
 - biota of freshwater ecosystems, 32273
 - freshwater amphipod crustaceans (Gammaridae) of North America, 17437
 - freshwater isopods (Asellidae) of North America, 17439
 - freshwater leeches (Annelida: Hirudinea) of North America, 17440
 - freshwater planarians (Turbellaria) of North America, 17433
 - freshwater polychaetes (Annelida) of North America, 17436
 - freshwater sphaeriacean clams (Mollusca: Pelecypoda) of North America, 17435
 - freshwater triclads (Turbellaria) of North America—
 - genus Dendrocoelopsis, 25699
 - genus Polycelis, 23963
 - freshwater unionacean clams (Mollusca: Pelecypoda) of North America, 31310
 - genus Argulus (Crustacea, Branchiura) of United States, 17434
- Fresh-water fishes, see Fish and fisheries.

- Fretting corrosion, fretting of secondary-sealing candidate materials in air temperatures to 816° C, 23683
- Freund, G. A., topical meeting on water-reactor safety papers, 29669
- Frey, Lou, report concerning narcotic enforcement efforts in Hong Kong, Thailand, Burma, India, Lebanon, Greece, Turkey, France, and Netherlands, 27227
- Frey, Lou, Friends, of Committee, see Friends, of Lou Frey Committee.
- Frickel, Donald G., hydrology and effects of conservation structures, Willow Creek Basin, Valley County, Mont., 20355
- Friction:
 - auger analysis of oxygen and sulfur interactions with various metals and effect of sliding on these interactions, 30461
 - dynamic friction and wear of solid film lubricant during radiation exposure in nuclear reactor, 20604
 - friction and wear of selected metals and of carbons in liquid natural gas, errata, 25523
 - friction-induced surface activity of some hydrocarbons with clean and oxide-covered iron, 26690
 - friction losses in a lubricated thrust-loaded cageless angular-contact bearing, 31643
 - gyros, axis disturbance probability characteristics, bearing friction with forced based rotation, astatic gyro gimbal errors with drift, and horizontal pendulum energy dissipation, USSR study, 17620
 - internal friction of single-crystal ice, 28686
 - turbulent fluid friction of rotating disks, 31607
- Friday, John, crest-stage gaging stations in Oregon, compilation of peak data collected Oct. 1952–Sept. 1972, 23337
- Friedlander, Mona:
 - five-year plan summary—Hungary, 31206
 - Poland, 31207
- Friedman, Howard A., ESSA Research Flight Facility, facilities for airborne atmospheric research, 20686
- Friedman, Seymour, Friedman for Congress political committee, annual report, 24492
- Friedman for Congress, political committee, annual report, 24492
- Friel, J. V., control of hazardous chemical spills by physical barriers, 28808
- Friendly societies, private clubs and fraternal orders under Fair labor standards act, 26919
- Friends of Bill Anderson, political committee, annual report, 26011
- Friends of Bob Barry, annual report, 24472
- Friends of Carter Witt, annual report, 24573
- Friends of Gene Taylor for Congress, annual report, 28280
- Friends of Ham Fish, jr., political committee, annual report, 26005
- Friends of Jack Shaffer, political committee, annual report, 22940
- Friends of John S. Monagan, political committee, annual report, 22722
- Friends of Lou Frey Committee, political committee, annual report, 24574
- Friends of Lyle Taylor Committee, annual report, 28278
- Friends of Responsive Congress Committee, political committee, annual report, 22670
- Friends of Schmitz, political committee, annual report, 22764
- Friends of Yvonne Brathwaite, political committee, annual report, 22728
- Friendship International Airport, transit lines to Dulles and Friendship Airports from D.C. metropolitan center, Federal payment for planning, authorize, report, 32103
- Fringe benefits, see Employee benefit plans.

- Frint, Harold K. dynamic test of gears manufactured by advanced forging techniques, 31934
- Fritz, Lawrence, grid calibration by coordinate transfer, 23814
- Frogs, frog genus *Atelopus* in Ecuador (Anura, Bufonidae), 31801
- From Anne to Marianne (lecture), 29190
- From student to R.N. report of nurse career-pattern study, 21759
- From the old to the new 1972 standard industrial classifications for establishments, 16792
- Front Royal, Va., aircraft incident report, 22149
- Frost, Clyde M., hydrogenating shale oil at low space velocity, 26664
- Froth flotation process, restoration of beaches contaminated by oil, 23184
- Frozen foods, home care of purchased frozen foods, 29622
see also Cold storage—also names of classes of food frozen.
- Frozen ground:
 fundamental concepts for rapid disengagement of frozen soil, phase 1, 30158
 ionic migration and weathering in frozen Antarctic soils, 32459
 seismic exploration in cold regions, 21443
- Fruit:
 canned, foreign agriculture circulars, 18380
 citrus fruits, revised estimates, 1964-65 through 1969-70, production, use, value, by states, 15484
 cocktail, canned, standard for grades, 29608
 culture, etc., publications, price list, 16461
 deciduous, foreign agriculture circulars, 18380
 dried, foreign agriculture circulars, 18380
 for salad, standards for grades, 29609
 fresh—
 fruit and vegetable unloads FVUS (series), 24115, 25816, 26926, 30691-692
 market news, weekly summary, 18388
 prices, 1972, Chicago and New York City, 26946
 fresh shipment by—
 commodities, States, months, 30692
 States, commodities, countries, stations, 30691
 fresh, unloads—
 eastern cities, by commodities, States, etc., 25816
 41 cities, 26926
 southern cities, by commodities, States, etc., 24115
 fruit and vegetable grower and PACA (Perishable agricultural commodities act), 20925
 Spanish edition, 22348
 fruit situation, 18391
 market news service, 31914
 noncitrus—
 production, use, value, etc., 1970-71, by States, 20821-822
 revised estimates, 1964-70, production, use, value, 20933
 processed fruits and vegetables, potentially adulterated products need to be better controlled, sanitation in some plants needs improvement, GAO report, 23324
 processed, plants under USDA continuous inspection 20482
 processed standard for grade, 25817
 U.S. standards for—
 determination of fill weights, 27982
 inspection by variables, 27983
 winterfat fruits and seeds retain high viability 3 years in cold storage, 28948
 see also Citrus fruit—Stone fruit.
- Fruit cocktail, *see* Fruit.
- Fruits, *see* Fruit.
- Frizzell, Dale K., nomination, hearing, 27341
- Fry, Donald W., address, Mar. 15, 1973, 25033
- Fry, James E., jr., relief, 19587, 28313
- Fry, Margaret E., relief, 19587, 28313
- Fryberger, John S., rehabilitation of brine-polluted aquifer, 21495
- Fryburg, George C., electron paramagnetic resonance study of alignment induced by magnetic fields in 2 smectic-A liquid crystals not exhibiting nematic phases, 21989
- Fryingpan-Arkansas project, annual operating plan, 31774
- FSHFA series, 23791-794
- FSLIC, *see* Federal Savings and Loan Insurance Corporation.
- FTC, *see* Federal Trade Commission.
- Fuchs, Louis H., mineralogy, mineral chemistry, and composition of Murchison (C2) meteorite, 31799
- Fuchs, Victor R., determinants of expenditures for physicians' services in United States, 27741
- Fuel:
 comprehensive program of energy resources development will meet national needs (remarks), 23474
 concentration by competing raw fuel industries in energy market and impact on small business—
 hearings, 15782
 report, 19626
 develop operational system for evaluating and testing methods and instruments for determining effects of fuels and fuel additives on automobile emissions, 31277
 electric conductivity of stream of hot powdered fuel, USSR study, 30368
 emergency fuels and energy allocation, hearing, 30041
 energy, America, and you, 23467
 energy and fuel shortages, relationship to Nation's internal development—
 hearings, 17085
 interim report, 17087
 fuel and energy resources—
 Federal laws relating to compilation, 24863
 hearings, 15746, 17060
 summary of hearings, 21247
 fuel cells, survey, 29266
 fuel economy and emission control, 31295
 fuel specialist, Air Force notice, 16631
 fuels and electric energy—
 consumed, 30799
 used by industry groups, 1970 annual survey of manufactures, 16684
 fuels, liquid and solid, Federal item identification guide, 31185
 hydrocarbon, flammability properties, 30593
 interfuel substitutability in electric utility sector of U.S. economy, economic report, 17489
 oxidant-fuel-ratio-zoned rocket injector for high performance and ablative engine compatibility, design and evaluation, 17721
 potential for energy conservation, substitution for scarce fuels, staff study, 23145
 reduction of electrostatic charge in jet fuels during refueler loading, 22165
 retail prices and indexes, 18869
 7 ways to reduce fuel consumption in household heating, through energy conservation, 22004
 shortages, factors contributing to current shortages of natural gas, crude oil, residual oil, etc., hearings, 28544
 solid fuel ballistic missile design, USSR study, 27634
 supplemental bibliography of publications on energy, 17266
 survey of energy consumption projections, 17264

INDEX 1973

Fuel—Continued

- Tennessee Valley area, concentration by competing raw fuel industries in energy market and its impact on small business, investigation, report, 16970
- trends in oil and gas exploration, hearings, 26273
- United States energy through the year 2000, 25299
- see also Liquid fuels—Petroleum as fuel—also names of fuels.
- Fuel cells, see Electric batteries.
- Fuel gas, see Gas.
- Fuel oil, see Petroleum as fuel—Sludge (fuel oil).
- Fuel pumps, see Pumps.
- Fuel tanks, see Tanks (containers).
- Fuels, see Fuel—also Reactor fuels.
- Puentes, John F., and wife, relief, 27116F
- Fugill, John W. K., task difficulty and task aptitude benchmark scales for mechanical and electronics career fields, 25843
- Fuhr, J. R., bibliography on atomic line shapes and shifts, 16361
- Fulkerson, Frank B.:
 - barite, 20553
 - cermiculture, 25493
 - mineral industry of—
 - Maine, 25460
 - North Korea, 16297, 29224
 - Rhode Island, 25469
 - Vermont, 25473
- Full opportunity and national goal's and priorities act, 32115
- Full participation in international trade, 19843
- Full scale parallel activated sludge process evaluation, 20198
- Fullam, William F., papers in Library of Congress register, 29182
- Fuller, E. G., photonicuclear reaction data, indexes, etc., 26700
- Fulton, Richard H., Fulton for Congress Re-election Committee, annual report, 22964
- Fulton County Republican Central Committee, annual report, 22875, 22908
- Fulton for Congress Re-election Committee, annual report, 22964
- Fumigants, relative toxicity of chloropicrin, phosphine, EDC-CCl₄, and CCl₄-CS₂ to various life stages, 30693
- Fun in the making, 31976
- Functions (mathematical), see Mathematics.
- Fund raising, voluntary health and welfare agencies within Federal service, manual, 18608, 27048
- Fundamental changes needed to achieve effective enforcement of radio communication regulations, 20329
- Fundamental concepts for rapid disengagement of frozen soil, phase 1, 30158
- Fundamentals of military law, 24179
- Funds:
 - company funds push total industrial F & D spending to \$18 billion, 23847
 - Federal funds for research, development and other scientific activities, 22133
 - flow of funds—
 - accounts, annual flow, 16056
 - seasonally adjuster, 16057-058, 20268, 23241
 - unadjusted, 20269, 28891
 - funds by source, expended for public assistance payments and for administration, services and training, calendar year ended Dec. 31, 1972, 32554
 - highway funds, allow States and localities more flexibility in utilizing funds to improve efficiency of highways, hearings, 29935
 - should appropriated funds be used for transportation procured specifically for Armed Forces exchange goods? GAO report, 32356
 - State and local fiscal assistance act, supplemental report showing distribution of funds, 15790

Funds—Continued

- unauthorized use of funds for construction and alteration of public buildings, GAO report, 21701
- impoundment of appropriated funds—
 - by the President, 24929
 - for housing and urban development programs, hearings, 28523
 - President must notify Congress and provide procedures for showing disapproval and rectifying such impoundments, hearings, 28431, 29936
- Land and water conservation act, amend, hearings, 15908
- legislation needed to simplify Federal funding of State employment security agencies' administrative expenses, GAO report, 30257
- matching fund marketing service program, highlights of progress for 1971 and summary of ongoing work for 1972, 22314
- national patterns of R&D resources, 1953-73, funds and manpower in U.S., 27832
- private funds for mental health research, list, 31697
- see also Money—Nonappropriated funds—Public funds—also names of departments, etc., for which funds are used—also subjects for which funds are used.
- Fungi, long-term resistance in terrestrial fungi and termites, 31753
- see also names of fungi or fungous diseases.
- Fungicides:
 - benomyl-derived fungitoxicant for tree wilt disease control, 27532
 - Federal insecticide, fungicide, and rodenticide act, amend—
 - hearings, 19959
 - laws, 19446, 19844
 - reports, 19692, 19841
 - hot water and fungicides for control of mold on cantaloupes, 27995
 - postharvest wax-fungicide treatments of nectarines, peaches and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
- Fuqua, Don, Fuqua Congressional Campaign Committee, annual report, 24349
- Fuqua Congressional Campaign Committee, annual report, 24349
- Furer, Julius A., papers in Library of Congress, register, 32438
- Furlong, George T., emergency health, services digest, 29040
- Furnan, R. William, computer program for processing historic fire weather data for National Fire-Danger Rating System, 28949
- Furnaces:
 - furnaces and space heaters, Federal item identification guide, 25001
 - industrial furnaces, ovens and heat treating equipment, industrial plant equipment, handbook, 24984
 - liquid state spectral emissivities of titanium, vanadium, zirconium, molybdenum, and platinum in electron-beam furnace, 29233
- Furniture:
 - general household and office, Federal item identification guide, 27386
 - hospital, Federal item identification guide, 26324
 - household, current industrial reports, 19241
 - manufacturers and wood workers publications, list, 31358
 - mattresses, bedsprings, and other sleep furniture, current industrial reports, 15588
 - wood household furniture, except upholstered, industry wage survey, 30392
 - see also Office furniture and equipment.
- Fuseholders, automated engineering procurement document preparation system, military standard, 20049

Fuses (safety devices):
 automated engineering procurement document preparation system, fuses, military standard, 17333
 measurement and reduction of noise from detonating cord used in quarry blasting, 17685
 Fusion, ultra-sound cutting and fusing of biological tissue, USSR study, 26586
 Fusion (nuclear), *see* Nuclear fusion.
 Future belongs to those who prepare for it (address), 20905
 Future direction of U.S. policy toward Southern Rhodesia, 29904
 Future directions in social security, 26244, 27298, 32125
 Future is now, 21544, 29586
 Future of American equity market (address), 29466
 Future of challenging profession, 23921
 Future of smalltown and rural America, impact on small business, 19724
 Futures, *see* Commodity exchanges—Speculation.
 FVUS series, 24115, 25816, 26926, 30691-692

G

Gaarder, A. Bruce, teaching Spanish in school and college to native speakers of Spanish, 25058
 Gabon:
 economic trends and their implications for United States, 23495
 mineral industry, minerals yearbook chapter, 16276
 Gabriel, William J., relationship between sap-flow rate and sap volume in dormant sugar maples, 23284
 Gabrysich, R. K., records of wells in Harris County Tex., 23369
 Gach Saran, Iran, compound type separation and characterization studies for 370° to 535° C boiling distillate of Gach Saran, Iran, crude oil, 30441
 Gadway, Charles J.:
 reference materials, theme 4, reading, 30145
 written directions, reading, report, national assessment of educational progress, 28666
 Gages:
 gage calibration and control system, 22495
 gages, wrench opening, Federal standard, 30238
 specifications for machine tools and gages, 22499
 use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressures, 29280
see also Ionization gages—Vacuum gages.
 Gaging:
 overview of precision machining and gaging, 22494
 part programming for numerical control machining and gaging, 22502
 specialized gaging equipment, 22496
 Gaging stations, crest-stage gaging stations in Oregon, compilation, of peak data collected Oct. 1952-Sept. 1972, 23337
 Gainesville, Fla., census of housing, 1970, metropolitan housing characteristics, 28107
 Gaits, jogging guidelines, 31769
 Gajdusek, D. Carleton, annotated Anga (Kukukuku) bibliography, 26749
 Gale, John F., 1973 fertilizer situation, 28650
 Gales, Donald M., monthly climatological charts of behavior of fog and low stratus at Los Angeles International Airport, 30537
 Gallagher, Cornelius E., Committee for Reception, *see* Committee for Congressman Cornelius E. Gallagher Reception.
 Gallagher, R. H., method of limit point calculation in finite element structural analysis, 16347
 Gallagher Creek, special flood hazard information report, 21474
 Gallatin National Forest:
 designate certain lands as wilderness, hearing, 19982
 winter sports area, Cooke City, Silver Gate, ice fishing, etc., 23267
 Gallaudet College:
 appropriations, 1973, veto message, 19556
 appropriations, 1974, hearings, 31009
 Gallawa, R. L.:
 engineering feasibility study of communications via subterranean waveguide, 22642
 telecommunications via certain guided wave structures, 27063
 Gallegos, Gene, Citizens for, *see* Citizens for Gene Gallegos.
 Gallimore, William W., turkey industry, structure, practices, and costs, 27998
 Gallinules, hunting, possession, transportation, and importation, 1972-73, Federal regulations, 16487, 20781
 Gallium, high temperature superconductor nbsGa, 31616
 Gallium arsenide, vapor phase epitaxy of gallium arsenide, 27854
 Gallup, N. Mex., Erwin-1 production well, city of Gallup, McKinley County, N. Mex., 20348
 Galm, Sharon, welfare, administrative nightmare, 21140
 Galveston Bay:
 Galveston Bay hurricane surge study, effects of proposed barriers on—
 hurricane surge heights, calibration tests, hydraulic model investigation, 27444
 tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, hydraulic model investigation, 27445
 pollution of navigable waters of Galveston Bay and its tributaries, conference proceedings, 31294
 report on pollution affecting shellfish harvesting in Galveston Bay, Tex., 20872A
 Galveston County, Tex., Clear Creek, special flood hazard information, 28771
 Galvin, Cyril J., jr., finite amplitude, shallow water waves of periodically recurring form, 23150
 Gama Goat, M561, *see* Motortrucks.
 Gambla, map, 25270
 Gambino, Maria M., *see* Amaral, Maria M.
 Gamble, Roger L.:
 Aguirre Nuclear Plant, unit 1, Puerto Rico Water Resources Authority, 25873
 fiche index for nuclear dockets Oconee Nuclear Station, units 1, 2 and 3, Duke Power Company, 22473
 Gambling, not the law's business? monograph, 26745
 Gambling, Commission on Review of National Policy toward, *see* National Policy toward Gambling, Commission on Review of.
 Game and game birds, *see also* Wildlife—*also* names of special animals and birds.
 Game fish, *see* Fish and fisheries.
 Games:
 Arctic winter games, authorization, report, 28482
 fun in the making, 31976
see also Olympic games.
 Gamma function, *see* Mathematics.
 Gamma rays:
 absolute intensities of gamma rays from decay of ²³⁸U and ²³²Th, 22476
 adjoint gamma-ray moments computer code, ADJMOM-I, 25556
 ecological and environmental effects from local fallout beta and gamma radiation effects from close-in fallout, 16663
 environmental gamma radiation from ¹⁶N decay in turbines of large boiling water reactor, 25877

INDEX 1973

Gamma rays—Continued
 evaluation of CaSO_4 : Dy and CaSO_4 :
 Tm TLD for measurement of small
 gamma-ray exposures, 25876
 gamma induced low temperature oxida-
 tion of textile effluents, study, 30193
 gamma ray moments computer code,
 GAMMOM-I, 26712
 in situ Ge(Li) and NaI(Tl) gamma-ray
 spectrometry, 22474
 photonuclear activation analysis with
 Ge(Li) detectors, compilations, 30594,
 30596
 plutonium and americium measurement in
 humans by X- and gamma-ray spectral
 analysis, 25884
 tests for analyzing incombustible content
 of coal mine dust using instruments em-
 ploying gamma-ray backscatter tech-
 nique, 25513
 transmission of gamma rays through
 aluminum and laminated lead, aluminum
 slabs, 26991
 Gamma spectrometers, *see* Spectrometers.
 Gammaridae, *see* Amphipods.
 Ganglionic-blocking agents:
 controlled myorelaxants and ganglioblock-
 ers with disulfide bonds, USSR study,
 21865
 new curariform and ganglion-blocking
 agents, USSR study, 26596
 Gannon, Richard E., ARC-coal process de-
 velopment, 21091
 Gansner, David A., identifying regional op-
 portunities for accelerated timber man-
 agement, 25232
 Ganter, William A., modeling of atomic clock
 performance and detection of abnormal
 clock behavior, 26707
 GAO, *see* General Accounting Office.
 Gap switches, *see* Electric switchgear.
 Garbage, *see* Refuse.
 Garber, Miles C., soil survey of Lee County,
 Miss., 27896
 Garden Grove, Calif., area wage surveys,
 16224, 26628
 Gardening, bottle gardening, 20927
 Gardening, *see also* Gardens.
 Gardens:
 home and garden bulletins, 15469-470,
 16597-598, 20906-907, 22332, 24130-
 131, 25821, 26934-936, 27991-993,
 29622-623, 30700-706
 selecting fertilizers for lawns and gardens,
 24130
 thornless blackberries for home garden,
 26936
 Gardiner, Peter, comparison of total popu-
 lation figures from censuses taken around
 1970 with populations estimates for se-
 lected countries, 28194
 Gardner, Daniel E., foreign trade regulations
 of Republic of Ghana, 19299
 Gardner Pinnacles, natural history of Gard-
 ner Pinnacles northwestern Hawaiian Is-
 lands, 26820
 Garfield County Republican Central Commit-
 tee, annual report, 27104
 Garfinkel, S. B., dose calibrator pilot study,
 31680
 Garland, Thomas M.:
 determining discounted cash flow rate of
 return and payout time for onshore de-
 velopment wells, graphical method,
 25425
 engineering cost study of development
 wells and profitability analysis of crude
 oil production, 23639
 Garner, Dale E., soil survey of Warren
 County, Ohio, 26846
 Garner, Sara B., relief, 19326, 19832
 Garner, W. E., fiber quality and ginning and
 spinning performance of new high-quality
 cottons, Southeastern area, 1967 and 1968
 crop years, 16605
 Garner, William, disposal of cattle feedlot
 wastes by pyrolysis, 23189

Garrett, A. A., feasibility of artificially re-
 charging basalt aquifers in eastern Wash-
 ington, 23340
 Garrett, L. Bernard, implicit finite-difference
 solution to viscous shock layer including
 effects of radiation and strong blowing,
 20622
 Garrison Reservoir, N. Dak., structures, arti-
 facts, 20704
 Gartrell, Luther R., technique for measuring
 hypersonic flow velocity profiles, 30457
 Garvin, David, subroutine for calculation of
 CODEN check characters, 17742
 Garza, Andrew T., occupational survey of 7
 accounting and finance civil service series,
 22366
 Gas:
 calculation of profile drag at high gas
 velocities and in presence of heat trans-
 fer, 16179
 certain background information for con-
 sideration when evaluating national
 energy dilemma, 25991
 combined gas-laser pumping, USSR study,
 21843
 composition of coalbed gas, 29236
 crude petroleum, petroleum products, and
 natural gas liquids—
 District 5 petroleum statement,
 monthly, 18234
 monthly statement, 18759
 crude products, production and sales,
 22283
 draft environmental statement, proposed
 1973 Outer Continental Shelf, oil and
 gas general lease sale, offshore Missis-
 sippi, Alabama, and Florida, 31568
 drilling Atlantic Continental Shelf for oil
 and gas, (remarks), 31499
 economic evaluation of COED process plus
 char gasification, 22615
 effects of fuel nozzle design on perform-
 ance of experimental annular combustor
 using natural gas fuel, 20620
 energy and fuel shortages, relationship to
 nation's internal development, hearings,
 17085
 Equitable Gas Company, natural gas dis-
 tribution system Pittsburgh, Pa., pipe-
 line accident report, 30567
 evaluation of coal gasification technology,
 pipeline-quality gas, 24271
 experimental and analytical study of one-
 and two-component flows in spherical
 chambers, 31609
 fate of trace constituents of coal during
 gasification, 31272
 Federal Power Commission responsibilities
 with respect to natural gas industry,
 interstate and wholesale aspects, 25154
 final environmental statement—
 FES 73-19, proposed 1973 Outer Con-
 tinental Shelf, east Texas general oil
 and gas lease sale, 29176
 proposed 1972 Outer Continental Shelf
 oil and gas general lease sale, offshore
 eastern Louisiana, 23605
 friction and wear of selected metals and of
 carbons in liquid natural gas, errata
 25523
 gas supplies of interstate natural gas pipe-
 line companies, 21552
 hydraulic jet flow of an ideal liquid and
 gas-liquid mixtures, USSR study, 16205
 interstate compact to conserve oil and gas,
 extension and renewal, consent of Con-
 gress law, 16869
 ionization gauge characteristics of SA1463
 triode electron tube and effects of in-
 ternal gas pressure on pulse emission
 and arcing, 22484
 modular turbojet combustor burning
 natural gas fuel, experimental perform-
 ance, 32468

Gas—Continued

- national gas survey and synthetic fuel development, concentration by competing, raw fuel industries in energy market and its impact on small business, report, 19626
- natural—
 - act, amend, hearings, 19780, 21262
 - act, regulations under, 18856
 - hearings, 27311
 - factors contributing to current shortages, hearings, 28544
- Federal energy research and development policies and future technological options, 15903
- industry and environment, pollution problems, sub-council report, 23740
- initiatives in energy conservation, 31139
- liquefied, quarterly literature survey, 18581
- liquids—
 - mineral industry surveys, monthly, 18676
 - minerals yearbook chapter, 25476
 - minerals industry surveys, quarterly, 18677
 - minerals yearbook chapter, 25475
 - pipeline safety act of 1968, amend—
 - law, 16903
 - report, 19617
 - regulation and trans-Alaska pipeline, hearings, 16930
 - uniform system of accounts prescribed for companies, 19023, 26434
- oil and gas—
 - how to find abandoned wells, 25418
- imports—
 - hearings, 24934, 27336
 - locating uncharted wells, state-of-the-art, 25514
- optimization of coal gasification processes, 24270
- recent developments in desulfurization of fuel oil and waste gas in Japan, 30187
- role of gas-surface interactions in reduction of OGO 6 neutral particle mass spectrometer data, 27714
- sales by producers to interstate pipeline companies, 25151
- SEC disclosure system, real estate and oil and gas (address), 30628
- sensitivity analysis of relation of well-head price to nuclear gas stimulation costs, 22483
- trends in oil and gas exploration, hearings, 26273
- toward rational policy for oil and gas imports, 24933
- United States energy through the year 2000, 25299
- use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressures, 29250
- see also Gases.
- Gas and oil engines, see Engines.
- Gas appliances, principles of standardizing microclimate of individual gas-defense devices, USSR study, 25331
- Gas bearings, see Bearings (machinery).
- Gas chromatography, oil pollution source identification, 25110
- see also Chromatography.
- Gas-cooled reactors, see Reactors (atomic).
- Gas dynamics:
 - aerophysical research, USSR study, 27620
 - determination of molecular contamination performance for space chamber tests, 29285
- Gas equipment and appliances, see Gas appliances.
- Gas expansion, formation of inversion in $\text{CO}_2\text{-H}_2\text{O-N}_2$ gas mixture jet expanding through slit, USSR study, 21845
- Gas pipelines, see Pipe lines.
- Gas ranges, see Stoves.
- Gas stoves, see Stoves.

Gas turbines, see Turbines.

- Gas utilities, promise vs. performance, status of equal employment opportunity in nation's gas and electric utilities, 17442
- Gas wells, see Gas.
- Gasconde River, Osage (marais des cygnes)—
 - Gasconade drainage basins, cooperative State-Federal report on water pollution, 17808
- Gases:
 - breakage of floating ice by compressed gas blasting, 25067
 - compressed and liquefied, Federal item identification guide, 17326
 - conceptual design and cost study, sulfur oxide removal from power plant stack gas, magnesia scrubbing-regeneration, production of concentrated sulfuric acid, 31280
 - coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems, 32257
 - cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminide coatings on IN-100 and via alloys in high-velocity gases, 17714
 - detonation of flammable cloud following pipeline break, Dec. 9, 1970, explosion in Port Hudson, Mo., 26668
 - expansion-tube flow quantities for real-gas mixtures and comparison with experimental results, program for calculating, 17713
 - experimental investigation of laminar gas jet diffusion flames in zero gravity, 32467
 - feasibility of generating megagauss magnetic fields using high-pressure compressed gas linings, USSR study, 29140
 - gas flow measuring instruments, Federal item identification guide, 23097
 - gases desorbed from 5 coals of low gas content, 29239
 - gases formed in underground nuclear explosion, chemical equilibria and potential applications, 21025
 - Geneva protocol of 1925 prohibiting in war use of asphyxiating, poisonous or other gases, etc., hearings, 15892
 - heat transfer coefficients of dilute flowing gas-solids suspensions, 29261
 - hydrocarbon gases produced in simulated swamp environment, 16336
 - industrial, current industrial reports, 16762, 18194, 28159, 29765
 - kinetics and thermodynamics of processes of interaction of gases with liquid metals, summaries of symposium reports, 23530
 - liquid and gas flow, pressure, temperature, humidity and mechanical motion measuring and controlling instruments, 24986
 - liquid densities of oxygen, nitrogen, argon and parahydrogen, 25554
 - on utility of m-6-8 potential function, 26704
 - radiological risks relative to distribution of contaminated gas, 16668
 - real gas turbulent boundary layers with variable edge entropy, integral method for calculation, errata, 21986
 - sensitivity of hot-cathode ionization vacuum gages in several gases, 16351
 - sulfur dioxide, its chemistry as related to methods for removing it from waste gases, 30419
 - supersonic flow of hot gases around bodies, USSR study, 16177
 - supplementary bibliography of kinetic data on gas phase reactions of nitrogen, oxygen, and nitrogen oxides, 26699
 - transport properties of gases and binary liquids near critical point, 20586
 - see also Liquefied petroleum gases—also names of gases.

INDEX 1973

- Gasification, *see* Gas.
- Gaskets, shielding gaskets, electronic, Federal item identification guide, 17328
- Gasoline:
- gasoline shortage, national perspective, 30042
 - impact of gasoline marketing practices on consumer, hearing, 27312
 - industry marketing practices, hearings, 15917
 - motor—
 - summer 1972, petroleum products survey, 26654
 - winter 1971-72, petroleum products survey, 16256
 - winter 1972-73, petroleum products survey, 30421
 - oxygenates in automotive exhaust gas, estimation of levels of carbonyls and non-carbonyls in exhaust from gasoline fuels, 23649
 - problems of small business in gasoline marketing, hearings, 21292
- Gasoline engines, *see* Engines.
- Gastineau Channel, Alaska, navigation channel improvement hydraulic model investigation, 21481
- Gaston, J. Frank, why industry invests abroad, 27612
- Gastroenterology abstracts and citations (periodical), 18397
- Gastropods:
- Cenozoic fossil mollusks from western Pacific Islands; gastropods (Turritellidae through Strombidae), 21720
 - description of Tertiary mollusks, geology and paleontology of Canal Zone and adjoining parts of Panama, 29018
 - effect of anticholinesterase substances on action of acetylcholine and its analogues on neurons of gastropods, USSR study, 17637
- Gates, Richard H., annotated bibliography of explosive excavation related research, 25099
- Gateway National Recreation Area:
- establish—
 - law, 19517
 - report, 19718
- Gateway National Seashore, New York and New Jersey, establish, reports, 16981, 17008
- GATT, *see* General agreement on tariffs and trade.
- Gauges, *see* Gages.
- Gausman, H. W., leaf mesophylls of 20 crops, their light spectra, and optical and geometrical parameters, 24146
- Gazetteers, *see* Geographical names.
- GE series, 18400
- Gear cutting and finishing machines, industrial plant equipment handbook, 23090
- Gears:
- dynamic test of gears manufactured by advanced forging techniques, 31934
 - gears and gear clusters, Federal identification guide, 32168
- Geary, T. F.:
- hybrid mahogany recommended for planting in Virgin Islands, 28957
 - must Honduras pine be weeded frequently in Puerto Rico?, 28958
 - tree species for plantations in granitic uplands of Puerto Rico, 28956
- Geese, hunting and possession, transportation and importation, 1972-73, Federal regulations, 16487
- Geffen, William, command & commanders in modern military history. 2d Military History Symposium, proceedings, 16630
- Gehm, Harry, state-of-the-art review of pulp and paper waste treatment, 26420
- Gels, Gilbert, not the law's business? examination of homosexuality, abortion, prostitution, narcotics and gambling in United States, 26745
- Gelst, J. Michael, total soil nitrogen analysis using micro-Kjeldahl digestion and portable distillation equipment, 31369
- Gelber, Seymour, role of campus security in college setting, 26608
- Gelechioidea, *see* Stenomitidae.
- Gelfan, David, FAA aviation news, 18277
- Geller, Sidney B., universal dropout tester for magnetic storage media, 20646
- Gels, investigation of use of gel material for mine sealing, 23191
- Gem County Republican Women's Club, annual report, 24630
- Gems, *see* Precious stones.
- Genealogy:
- genealogical sources outside National Archives, 17731
 - records in National Achieves, 23695
- Genera of bamboos native to New World (Gramineae: Bambusoideae), 29488
- General Accounting Office:
- annual report—
 - departmental edition, 23315
 - document edition, 23003
 - answers to frequently asked questions, 28981
 - appropriations, 1973, legislative, law, 16873
 - appropriations, 1974, hearings, 32132
 - legislative—
 - hearings, 31129
 - report, 29991
 - Comptroller General decisions—
 - B (series), 18142
 - digests, 18229
 - index-digest, July 1, 1966-June 30, 1971, 17522
 - July 1, 1971-June 30, 1972, bound volume, 30250
 - monthly, 8212
 - GAO review (periodical), 18396
 - policy and procedures manual for guidance of Federal agencies, 18398
 - reports to Congress by Comptroller General of United States, 16094-16102, 17523-525, 20324-338, 21685-702, 23317-325, 25236-247, 26478-483, 28984-999, 30252-268, 31377-386, 32348-358, 37543-551
 - war victims in Indochina, GAO report, 19990
 - work with GAO for more effective government, 31390
- General agreement on tariffs and trade:
- agricultural trade and proposed round of multilateral negotiations, 32126
- Executive Branch GATT study—
- GATT provisions on compensation and retaliation, 30018
 - tax adjustments in international trade, GATT provisions and EEC practices, 26264
 - Finance Committee staff analysis of provisions which discriminate against U.S. commerce, etc., 19969
 - protocol for accession to agreement with Bangladesh, 26875
- General Electric Co., Buffalo, N.Y. plant, 32598
- General information concerning patents, 30600
- General Instrument Corp., aluminum electrolytic capacitors, workers of Tazewell, Va., plant, Tariff Commission report, 25775
- General Mills Good Government Fund, annual report, 26034
- General principle of current heating processes of plasma in pulsed Z-discharges, 20997
- General-purpose meteorological rocket data reduction program, 22420
- General rules and regulations under Investment act of 1940, 20752

General Services Administration :
 Administrator, nomination of Arthur F. Sampson, hearing, 31142
 appropriations, 1973—
 amendment, proposal, 19546
 law, 15640
 appropriations, 1974—
 hearings, 28393, 31131
 report, 31117
 basic laws and authorities, 20339
 GSA stock catalog, 17488
 new way, annual report, 26485
 press releases, 18787
 Procedures for implementation of memorandum of understanding between HUD and GSA, 30298
 revisions needed in financial management policies of Federal Government's automatic data processing fund, GAO report, 27550
 San Francisco regional office lease prospectus, hearing, 31040
 social security payment centers construct, hearing, 26289
 stockpile information, 18931
 use of formal advertising for government procurement can, and should, be improved, GAO report, 31385
 General stream use designations, water quality standards digest, 20225
 General suppression system design requirements for portable electric hand tools, 20068
 General tax reform, public hearings, 32095
 General technical reports, Forest Service, 16076, 23276, 25212-213, 27529, 28923-929, 31359-360, 32313-314
 Generation of accurate and uniform time scale with calibrations and prediction, 22009
 Generation of fast electrons through interaction of SHF wave with collisionless plasma, 20998
 Generators, standard digital data clock-rate generator with programmable digital phase shift, 31755
see also names or types of generators.
 Genesco, Inc., women's dress and causal shoes, Genesco, Inc., Nashville, Tenn., Tariff Commission report, 20835
 Genesee River :
 flood plain information, 17390
 floods, Brighton and Henrietta, N.Y., 20150
 Geneseo, Ill., flood plain information, Geneseo Creek, 32212
 Geneseo Creek, flood plain information, Geneseo, Ill., 32212
 Genesis, Gutenberg Bible, 1st page of Genesis from Library of Congress copy in facsimile, 16240
 Genetics :
 forest insects, 23280
 genetic engineering, evolution of technological issue, 23023
 genetics of white spruce, 28972
 social and psychological aspects of applied human genetics, bibliography, 25323
 Geneva, Ala. :
 flood plain information, Choctawhatchee River, Pearl River, Double Bridges Creek, 32208
 floods in Geneva, Ala., Choctawhatchee River, Pearl River, Double Bridges Creek, 32236
 Geneva conventions, Geneva protocol of 1925 prohibiting in war use of asphyxiating, poisonous, or other gases, etc., hearings, 15892
 Genocide, international convention on prevention and punishment of crime of genocide, ratification, report, 24893
 Gentlemen, you have decisions to make, 26960
 Geochemical prospecting, *see* Prospecting.

Geochemistry :
 contributions to geochemistry (series), 17526, 20341
 data of geochemistry, chemistry of igneous rocks, chemistry of peralkaline oversaturated obsidians, 23358
 exploration methods for Continental Shelf, geology, geophysics, geochemistry, 20691
 geochemical anomalies and alteration in Moenkopi formation, Skull Creek, Moffat County, Colo., 21734
 geochemical anomalies of claypit area, Callaway County, Mo., and related metabolic imbalance in beef cattle, 29026
 geochemical aspects of saturated hydrocarbon constituents of Green River oil shale-Colorado No. 1 core, 29231
 geochemical characteristics of mineralized breccia pipes in Red Mountain District, San Juan Mountains, Colo., 27558
 geochemical reconnaissance of Santa Rita Mountains, southeast of Tucson, Ariz., 27554
 geochemistry and diagenesis of tidal-marsh sediment, northeastern Gulf of Mexico, 20345
 geochemistry and potassium-argon ages of plutonic rocks in Battle Mountain mining district, Lander County, Nev., 29024
 geochemistry of lower Eocene sandstones in Rocky Mountain region, 25259
 geochemistry of porphyry copper environment in Battle Mountain district, Nev., 29024
 Integrated system of geologic mapping and geochemical sampling by light aircraft, 20491
 Geodesy, marine geodesy, USSR study, 26582
 Geographic aspects of housing inventory, 1970 census of housing, 31943
 Geographic divisions and States, employment and population changes, 29784
 Geographic mobility, mobility for States and nation, 1970, census of population, 29707
 Geographic Names Board :
 decision list, 18213
 gazetteers, 21705, 26486-487, 31391-392
 Geographic note, GE series, 18400
 Geographical areas serviced by Bell and independent telephone companies in U.S., 25966
 Geographical atlases, *see* Atlases.
 Geographical location codes, 16121
 Geographical names :
 Africa and Southwest Asia, official standard names, supplement, 21704
 Algeria, official standard names, 26486
 decision list, 18213
 gazetteers, 21705, 26486-487, 31391-392
 Haiti, official standard names gazetteer, 31391
 Hong Kong and Macao, official standard names, 26487
 Libya, official standard names gazetteer, 31392
 reference aid, guide to transliteration of Algerian Arabic place names, 21864
 Geography :
 ADMATCH users manual, 16747
 census geography series CG, data access descriptions, 31969
 census 1970, geography, concepts, products, and programs, data access descriptions, 31969
 clerical geocoding manual, 1972 economic censuses, 16749
 computerized geographic coding, series GE 60, 29725
 correction, update, extension of geographic base (DIVE) files, 22547
 DIME geographic base file package, census use study for automated address coding, 16748
 DIME workshops program, census use study, interim report, 28147
 economic geography of Cuba, Latin American study, 23552

INDEX 1973

Geography—Continued

- geographic base file system, establishing continuing program for electronic computers, conference proceedings, 29725
- geographic center of United States, 25612
- geographic note, GE series, 18400
- geographical atlases in Library of Congress, list, 29186
- geographical location codes, July 1, 1972, lists, 16121
- geography of science, past and present, USSR study, 25344
- quality of residential geographic coding, evaluation and research program, 22536
- Geohydrology, *see* Hydrogeology.
- Geological Survey:
 - Alaska program, 29012
 - basic-data contribution, 25249-250
 - bulletins, 17526-528, 20341-347, 21707-710, 23328-331, 25251-254, 26488-495, 27552-559, 29003-8, 30269-270, 31395, 32359
 - circulars, 21711-714, 23332-335, 26496, 27560-561, 29009-12, 30271
 - CRIB, mineral resources data bank, 27561
 - journal of research, 21715
 - motion picture film services, 20352
 - new reports about water in Pacific Northwest, list, 18698
 - popular publications—23356
 - announcement, 31393
 - posters, 21706
 - press releases, 18788
 - professional papers, 16105-108, 17531-542, 20354, 21718-739, 23358-367, 25256-259, 26497-510, 27562-573, 29018-29, 30272-283
 - publications—
 - lists, 16109, 29030
 - monthly list, 18697
 - on floods, list, 17546
 - relating to coal, 1882-1970, bibliography and index, 21710
 - reports and maps released only in open files, 29010
 - research, 16108, 21737-738
 - water supply papers, 16112-117, 17547-550, 20355-364, 21741-744, 23302-393, 25261-262, 26512, 27575, 29032-33, 30285-288, 31400-406

Geology:

- aeromagnetic, Bouguer gravity, and generalized geologic studies of Great Falls-Mission Range area, northwestern Montana, 21729
- and description of thorium-bearing veins, Lemhi Pass quadrangle, Idaho and Montana, 29003
- Army technical manual, 16648
- bedrock geology of Cupsuptic and Arnold Pond quadrangles, west-central Maine, 27553
- contributions to economic geology (series), 26489, 27559, 29007
- contributions to general geology (series), 20342, 25251
- designing blast patterns using empirical formulas, comparison of calculated patterns with plans used in quarrying limestone and dolomite, with geologic considerations, 17679
- determination of paleotectonic principal stress direction including analysis of joints by optical diffraction, 26658
- exploration methods for Continental Shelf, geology, geophysics, geochemistry, 20691
- feasibility study of electromagnetic subsurface profiling of geological formations, 20204
- field instrumentation studies of earth tremors and their geologic environments in central Utah coal mining areas, 26504
- finite element method and geotechnical engineering in Bureau of Reclamation (talk), 26809
- general geology of Hahns Peak and Farwell Mountain quadrangles, Routt County, Colo., 26490

Geology—Continued

- geochemistry and diagenesis of tidal-marsh sediment, northeastern Gulf of Mexico, 20345
- geologic and hydrologic maps for land use planning in Connecticut Valley with examples from folio of Hartford North, 21714
- geologic and seismologic aspects of Managua, Nicaragua, earthquakes of Dec. 23, 1972, 29028
- geologic effects of underground nuclear explosions in Sahara granite massif, research, 21023-24
- geologic factors causing roof instability and methane emission problems, 30440
- geologic maps of moon, list, 20351
- geologic studies of Bingham mining district, Utah (series), 26499
- Geological Survey research, 16108, 21737-738
- geology and—
 - ground-water characteristics of Hanford Reservation of Atomic Energy Commission, Washington, 26505
 - mineral deposits of Chulitna-Yentna mineral belt, Alaska, 29021
 - mineral deposits of upper Chulitna and Yentna Districts, south-central Alaska, (series), 29021
 - mineral resources of northern part of North Cascades National Park, Wash., 23328
 - oil resources of western Puente Hills, southern California, 21718
 - paleontology of Canal Zone and adjoining parts of Panama, description of Tertiary mollusks, 29018
 - phosphate deposits of Permian rocks in central western Montana, 26497
 - properties of materials exposed in USACRREL permafrost tunnel, 17371
 - uranium deposits, Shirley Basin area, Wyoming, 16107
- geology of—
 - gold-bearing conglomerates in northwestern Wyoming (series), 27568
 - gold-bearing conglomerates in northwestern Wyoming and adjacent States (series), 21731
 - Isla Desecheo, P.R., with notes on great southern Puerto Rico fault zone and quaternary stillstands of sea, 17536
 - Isle Royale National Park, Mich., (series), 25258, 26508
 - Moxie pluton in Moosehead Lake, Jo-Mary Mountain area, Piscataquis County, Maine, 20344
 - oxidized uranium ore deposits of Tor-dilla Hill-Deweesville area, Karnes County, Texas, study of district before mining, 26509
 - pre-Tertiary rocks in northern part of Yellowstone National Park, Wyo., 26506
 - Sierra Madera cryptoexplosion structure, Pecos County, Tex., 29019
 - Sun River Canyon area, northwestern Montana (series), 26501
 - Yellowstone National Park (series), 21730, 26506
- geomorphology and sediments of Chesapeake Bay entrance, 23151
- glacial and postglacial geologic history of Isle Royale National Park, Mich., 25258
- gravity and magnetic features as related to geology in Leadville 30-minute quadrangle, Colo., 23362
- gravity, magnetics, and geology of San Andreas fault area near Cholame, Calif., 26500
- Green River Formation, Colo., Utah, and Wyo., bibliography, 27560
- ground-water resources and geology of Cook County, Ga., 23345

Geology—Continued

- Harebell formation (upper Cretaceous) and Pinyon conglomerate (uppermost Cretaceous and Paleocene), northwestern Wyoming, 27568
- Huntington Lake quadrangle, central Sierra Nevada, California, analytic data, 21728
- Instrumentation studies of earth tremors related to geology and to mining at Somerset Coal Mine, Colorado, 21735
- integrated system of geologic mapping and geochemical sampling by light aircraft, 26491
- lunar geology, USSR study, 31536
- mineral resource evaluation of U.S. Forest Service Sierra Demonstration Project area, Sierra National Forest, Calif., 20354
- nuclear energy resources, geologic perspective, 32362
- precambrian geology of northern Bradshaw Mountains, Yavapai County, Ariz., 20343
- predicting probable roof fall areas in advance of mining by geological analysis, 29243
- preliminary geologic investigations of western St. Lawrence Island, Alaska, 26503
- preliminary report on geology and gold deposits of Rochford district, Black Hills, S. Dak., 26489
- reactions of nitrogenous and phosphatic compounds with soils and geologic strata, 17936
- reconnaissance geology of northern Yukon-Koyukuk province, Alaska, 27571
- research on geologic effects of underground nuclear explosions in Sahara granite massif, 16666
- shorter contributions to general geology (series), 21728, 26503, 27571
- Soviet-American working group on remote sensing of natural environment from space giving geologic interpretation of images of earth, 30364
- spontaneous modeling in natural processes, USSR study, 31541
- stratigraphic divisions and geologic history of Laney Member of Green River formation in Washakie Basin in southwestern Wyoming, 26495
- stratigraphy and geologic history of Montana Group and equivalent rocks, Montana, Wyoming, and North and South Dakota, 30281
- structural and stratigraphic framework, and spatial distribution of permeability of Atlantic Coastal Plain, North Carolina to New York, 23367
- structural geology of Santa Rita Mountains, southeast of Tucson, Ariz., 30277
- structural geology of Sun River Canyon and adjacent areas, northwestern Montana, 26501
- tectonic events at intersection between Hope fault and Purcell Trench, northern Idaho, 16106
- water resources and geology of Mount Rushmore National Memorial, S. Dak., 29032
- see also Chinle formation—Earth—Engineering geology—Jurassic period—Precambrian period—Reconnaissance (geologic)—Stratigraphy—Submarine geologic—Triassic period.
- Geomagnetism, see Terrestrial magnetism.
- Geometry:
- flight test of advanced-geometry boron blades, 28057
- hydraulic geometry of some Alaska streams south of Yukon River, 23346

Geology—Continued

- main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20585
- review of plane-stress fracture mechanics parameter K_{IC} determined using center-cracked tension specimen, 30589
- selected streamflow characteristics as related to channel geometry of perennial streams in Colorado, 23373
- three-dimensional elastic stress and displacement analysis of finite circular geometry solids containing cracks, 29287
- Geomorphology, see Geology.
- Geophysical instruments, geophysical instruments, USSR study, 31518
- Geophysical prospecting, see Prospecting.
- Geophysics:
- bibliography on marine geology and geophysics, 23816
- collected data reports on Aug. 1972 solar-terrestrial events, 30174
- data on solar-geophysical activity associated with major ground level cosmic ray events of Jan. 24 and Sept. 1, 1971, 30172
- exploration methods for Continental Shelf, geology, geophysics, geochemistry, 20691
- geologic prediction, development tools and techniques, for geophysical identification and classification of sea floor sediments, 23802
- geophysical abstracts, index, 29015
- geophysical field investigations (series), 21729, 23362, 26500, 30275
- geophysical studies in Yuma area, Ariz. and Calif., 30275
- geophysics and space data bulletin, 18401
- key to geophysical records documentation, 17411
- marine geophysical data catalog, 17411
- regional geophysical investigations in central Colorado Plateau, 30276
- solar-geophysical data (periodical), 18914
- Solar-Terrestrial Physics, report UAG series, 30172-174, 31265
- Soviet bloc research (periodical), 18917
- upper atmosphere geophysics, report UAG series, 19091
- World Data Center A for Solar-Terrestrial Physics preliminary compilation of data for retrospective world interval, 21484
- World Data Center A Solar-Terrestrial Physics, report UAG series, 23182
- George, Jean C., Everglades wildguide, 27800
- George, Tom A.:
- isotopic profiling snow gage report Mt. Hood, Oreg., 23378
- water supply outlook and Federal-State-private cooperative snow surveys for Oregon, 19061, 20779
- George, Yves Henri, nearly spherical constant power detonation waves driven by focused radiation, 29254
- George Mason College, for all the people? civil rights investigation, 22581
- George P. Miller-Leland W. Sweeney Bridge, across Oakland Harbor, Calif., designate, law, 19498
- George Rogers Clark National Historical Park, general information, 29397
- Georgetown, Colo., land conveyance in vicinity to Frank W. Whitenack, report, 19917
- Georgia:
- census of housing, 1970, housing characteristics for States, cities, and counties, 15540
- census of population, detailed characteristics, 19202
- census of transportation, 1972, truck inventory and use survey, 24225
- climatological data, 18080
- counties, population estimates, 28184
- county business patterns, 29732

INDEX 1973

Georgia—Continued

- Cumberland Island National Seashore, establish, report, 19627
- extraction of manganese from Georgia amber ores by sulfuric acid-ferrous sulfate process, cocurrent extraction and centrifuge tests, 21950
- flow characteristics of Georgia streams, 23343
- income limits for rent supplement housing, 20380
- income limits for sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
- landings, fish and shellfish, 18402
- annual summary, 16401
- mineral industry, minerals yearbook chapter, 16277
- pollution of interstate waters of lower Savannah River and its tributaries, conference proceedings, 26800
- precipitation data, hourly, 18431
- rehabilitation facilities, national directory, 25686
- Georgia Socialist Workers Campaign Committee, annual report, 24686
- Georgia, Straits of, estuary, protection, report, 16988
- Geostationary satellite position and attitude determination using picture landmarks, 30527
- Geothermal energy :
 - deep-seated heat from earth, USSR study, 29144
 - resources and research hearings, 21344
- Gerber, John, quality of life concept, potential new tool for decision makers, 28836
- Geriatrics, long-term institutional care and alternative solutions, 23626
- Gerloff, Gerald G., plant analysis for nutrient assay of natural waters, 28796
- Gerlow, Arthur R., economic impact of cancelling use of 2,4,5-T in rice production, 26353
- German, E. R., occurrence and distribution of selected metals in streams near Huntsville, Ala., 30271
- Germanium :
 - germanium cell performance with erbium oxide and silicon carbide radiators, experimental study, 16644
 - in situ Ge(Li) and NaI(Tl) gamma-ray spectrometry, 22474
- Germany :
 - drug and alcohol abuse among U.S. military personnel and dependents in Germany, 21316
 - drycleaning machinery from West Germany, determination of injury in investigation AA 1921-99 under Antidumping Act, 1921, as amended, 16541
 - East economy, basic data, 28636
 - East Germany mineral industry, minerals yearbook chapter, 25431
 - economic trends and their implications for United States, 16165, 27603
 - exchange programs, financing, agreement with Federal Republic of Germany, 31860
 - Federal Republic—
 - and German Democratic Republic, quadripartite agreement on Berlin and final protocol between USA and other governments, 27918
 - education, financing of Exchange programs, agreement, 25752
 - map, 19268
 - mineral industry, minerals yearbook chapter, 16273
 - foreign relations, U.S.—
 - departmental edition, 30943
 - document edition, 31845
 - living and working in Germany, guide for Department of Army civilians, 22432

Germination :

- effects of soil type and watering on germination, survival, and growth of Engelmann spruce, greenhouse, study, 16081
- extraction and germination of Kadam seeds, 28935
- germination and early growth of coastal tree species on organic seed beds, 20315
- Gerontology, patterns for progress in aging, work study in social gerontology, 30689
- Gerry E. Studds for Congress Committee, annual report, 24486
- Gershwin, George, Sc. commemorative stamp (American arts series) (poster), 22290
- Gertler, Dianne B., patterns of course offerings and enrollments in public secondary schools, 15994
- Get facts before buying land, 32373
- Get facts before investing in land, 23418
- Get off ground in Air Force Reserve, 24157
- Get your blood pressure taken before your number's up, 30510
- Getting back to basics, 26364
- Getting help on reading outside of school, 28676
- Getting ready to read, 28670
- GF series, 15595, 19252-254
- Ghana :
 - economic trends and their implications for United States, 29105
 - economy, basic data, 16831
 - foreign trade regulations, 19299
 - Ghana-Togo boundary study, 17864
 - Ivory Coast boundary, study, 30650
 - military assistance deposits under Foreign assistance act, agreement, 17887
 - mineral industry, minerals yearbook chapter, 16320
- Ghetos, *see* Race problems.
- GI bill of rights, *see* Veterans.
- Giachino, Fred E., air reservist, 17975
- Giannini, Amadeo, P., 21-cent regular stamp (poster), 27960
- Giant Cedars, nature trail, Kootenai, National Forest, 23277
- Gibbs, Carter B., Cambial dieback and tap-hole closure in sugar maple after tapping, 25222
- Gibbs, Harold L., development of portable radon detector, 26666
- Gibbs, W., Jr., dining facility user-attitudes and environmental design research at Travis AFB, California, 31239
- Gibson, Andrew E. :
 - nomination, hearing, 19954
 - remarks, Nov. 29, 1972, 22638
- Gibson, Campbell, expectations and fertility, June 1972, current population reports, 27032
- Gibson, Cecil R., Apollo experience report, service propulsion subsystem, 31648
- Gibson, David A., historical information relating to military posts and other installations, ca. 1700-1900, 25542
- Gibson, Edward G., quiet sun, 29265
- Gibson County Republican Central Committee, annual report, 24689
- Gift tax, *see* Inheritance and transfer tax.
- Gifted children, *see* Children.
- Gifts :
 - school lunch commodity donations report, 26121
 - travel, entertainment, and gift expenses, deducting from income tax, 20427
- Gila National Forest :
 - Aldo Leopold Wilderness, N. Mex., designate, report, 17163
 - boundaries, modify, law, 19399
- Gila Project, optimization of Wellton-Mohawk drainage operations, 29458
- Gila River and Valley :
 - channel changes of Gila River in Safford Valley, Ariz., 23361
 - Gila River phreatophyte project (series), 16105, 23361

- Gila River and Valley—Continued
water supply outlook and snow surveys, 19058
- Gila River Reservation, Snaketown Archeological Site, include in land for Hohokam Pima National Monument, law, 19455
- Gilbert, David W., Apollo experience report, guidance and control systems, engineering simulation program, 29292
- Gilbert, Gerald B., analysis and testing of two-dimensional slot nozzle ejectors with variable area mixing sections, 29259
- Giles County Republican Committee, annual report, 22671
- Gill, J. R., stratigraphy and geology history, of Montana Group and equivalent rocks, Montana, Wyoming, and North and South Dakota, 30281
- Gillespie, R. H.:
evaluating adhesives for building construction, 20305
hole springing, 26392
Project Sergius Narrows, summary of tests on Liesnoi Island, Alaska, 17377
- Gillette, Guy M., memorial addresses and other tributes on life and contributions, 28252
- Gilliland, Whitney, remarks, Apr. 17, 1973, 28208
- Gilsinn, Judith F.:
estimates of nature and extent of lead paint poisoning in United States, 20649
performance comparison of labeling algorithms for calculating shortest path trees, 29323
- Gimbals:
analysis of errors of gimballing inertial navigation system, USSR study, 30355
effects of certain control-system non-linearities on stability and pointing of attached double-gimbal experiment package in presence of random crew-motion disturbances, 29284
- Ginning, *see* Cotton gins and ginning.
- Gins, *see* Cotton gins and ginning.
- Ginseng, growing ginseng, 24129
- Girard, David H., list of intercepted plant pests, 1971, 28039
- Girard, Stephen, Girard estate coal lands in Pennsylvania, 23965
- Girard, Ohio, flood plain information, Trumbull County, Ohio, 28714
- Girdles, brassieres, and allied garments, current industrial reports, 18756, 29756
- Girl scouts, conservation activities for girl scouts, 24138
- Girls, body measurements for sizing of girls' apparel, 30477
- Girls' clothing, *see* Clothing.
- Give yourself a chance, the same way Art Frazier did, through National Guard, 16375
- Given, P. H., selection of coals for AVCO hydrogen plasma arc process for making acetylene, 28218
- Gjovik, L. R., treatment of Alaskan species by double-diffusion and modified double-diffusion methods, 23301
- Gjullin, C. M., mosquitoes of northwestern United States, 20935
- Glacial period, glacial and postglacial geologic history of Isle Royale National Park, Mich., 25258
- Glacier Bay National Monument, wilderness recommendation, 23833
- Glaciers, Isua, Greenland, calculations of glacier flow for open-pit mine, 32198
- Glade Creek:
flood plain information, 23162
floods, how to avoid damage, 21461
- Glasby, J. P., remote sensing bibliography for earth resources, 23370
- Glaser, Edward M., productive employment of disadvantaged, guidelines for action, 30402
- Glass, Alexander J., laser induced damage in optical materials, 20639
- Glass:
certain sheet glass, Tariff Commission report, 29551
containers, current industrial reports, 28158
crack propagation studies in brittle materials, 31756
crystal and glass industries machinery, industrial plant equipment handbook, 26305
economic studies of uses of glass fractions from municipal incinerator residues, 23642
effect of MeV electrons on ceria-doped solar cell cover glass, 29282
fabricated and window, observation, Federal Item Identification guide, 25002
fibrous, current industrial reports, 29761
flat, current industrial reports, 18194A
some experiments on stirring of viscous liquids, 27735
waste glass as flux for brick clays, 21955
see also Glass wool.
- Glass fibers, glass wool from waste glass, 26659
- Glass sand, *see* Sand.
- Glass wool, glass wool from waste glass, 26659
- Glassblowers, brief outline of origins of glassmaker, silversmith, wigmaker and hatter in American colonies, 22090
- Glasses, *see* Spectacles.
- Glassware:
consumer, scientific, technical, and industrial glassware, current industrial reports, 29758, 31961
Hobby protection act, antique glassware and china, hearing, 26167
see also names of articles manufactured from glass.
- Glen Canyon National Recreation Areas:
establish—
hearing, 15748
law, 19518
report, 17011
- Glenn, J. L., relations among radionuclide content and physical chemical and mineral characteristics of Columbia River sediments, 27562
- Glenn, James R., reports of National Resources Planning Board, 1936-43, 25536
- Glenns Ferry formation, stratigraphy of Glenns Ferry formation from Hammett to Hagerman, Idaho, 25251
- Glickstein, Howard A., inequality in school financing, role of law, 21080
- Glide path systems:
category 3 ILS ground guidance equipment STAN-38 glide slope tests at NAFEC on runway 4, test and evaluation, 24051
snow effects on image glide path systems, winter, 1971-72, 24045
- Gilders (aircraft):
glider flight instructor, written test guide, 20241
soaring meteorology for forecasters, 20718
- Global context, report of General Walt, 19991
- Global market surveys, 29119, 30319
- Glomar Challenger (drilling vessel):
leg 10 of cruises, Feb.-Apr. 1970, Galveston, Tex. to Miami, Fla., 25638
leg 13 of cruises, Aug.-Oct. 1970, Lisbon, Portugal to Lisbon, Portugal, 22134
leg 16 of cruises, Feb.-Mar. 1971, San Cristobal, Panama to Honolulu, Hawaii, 27831
leg 17 of cruises, Apr.-May 1971, Honolulu, Hawaii to Honolulu, Hawaii, 32517
leg 18 of cruises, May-July 1971, Honolulu, Hawaii to Kodiak, Alaska, 30553
leg 19 of cruises, July-Sept. 1971, Kodiak, Alaska to Yokohama, Japan, 29404

INDEX 1973

Glossaries :

- common environmental terms, glossary, 21489
- glossary for forest tree improvement workers, 21651
- glossary of selected terms useful in studies of mechanics of aquifer systems and land subsidence due to fluid withdrawal, 20362
- glossary of water resource terms, 24101
- reference aid, glossary of abbreviations, acronyms and terms used in West European press, West Europe study, 26599
- reference aid, standard translations of Chinese terms (revised), China study, 17609
- science policy, working glossary for members of Congress and professional scientists, 17093
- Glover, George E., microstraining and disinfection of combined sewer overflows, phase 2, 25112
- Gloves :
 - and mittens, 1972, current industrial reports, 29763
 - gloves, mittens, and sleeves, Federal item identification guide, 30099
- Glow discharges, *see* Electric discharges.
- Glue :
 - aerobic secondary treatment of plywood glue wastes, 28809
 - condition of 12-year-old glued-laminated stringer bridge with nailed-laminated deck, decay hazard aspects, 25205
- Glued joints, *see* Joints.
- Glycosides, effects of trans a-hydroxyl groups in alkaline degradation of glycosidic bonds, 32337
- Gneiss, petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
- GNMA, *see* Government National Mortgage Association.
- Gnos, A. Vernon, investigation of flow fields within large-scale hypersonic inlet models, 29270
- Go Idaho Committee, annual report, 22857
- Goats :
 - number and value, etc., 19138
 - sheep and goats inventory, 24018
- Goble, Jesse W., improved layout for fowl processing plant, 25824
- Goddard Space Flight Center, symposium on significant accomplishments in sciences, 32463
- Godfrey, E. Drexel, basic elements of intelligence, 21888
- Godfrey, George L., review and reclassification of larvae of subfamily Hadeninae (Lepidoptera, Noctuidae) of America north of Mexico, 16615
- Godshall, W. D., method for measuring and controlling web tension of corrugating medium during singlefacing process, 21655
- Goerlich, Robert F. :
 - defense industry bulletin (periodical), 18215
 - defense management journal, 18216
- GOES (geostationary scintillation environmental satellite), *see* Satellites.
- Goho, Curtis D., sawlogs sizes, comparison in two Appalachian areas, 32323
- Going abroad? an important message for U.S. citizens, 30713
- Gold, Ron, characteristics of NARA patients in aftercare during June 1971, 25586
- Gold :
 - geology of gold-bearing conglomerates in northwestern Wyoming, 21731
 - geology of gold-bearing conglomerates in northwestern Wyoming (series), 27568
 - gold anomaly in soil of West End Creek area, Yellow Pine District, Valley County, Idaho, 28496

Gold—Continued

- gold-lode deposits, Fairbanks mining district, Central Alaska, 30417
- high-resolution seismic survey of offshore area near Nome, Alaska, 23363
- mineral industry surveys, monthly report, 18403
- minerals yearbook chapter, 20559
- placer deposits of—
 - Alaska, 30270
 - Arizona, 21708
 - Nevada, 25252
 - New Mexico, 21707
 - Utah, 30269
- preliminary report on geology and gold deposits of Rochford district, Black Hills, S. Dak., 26489
- private ownership of gold, permit, hearings, 27307
- sedimentary process and distribution of particulate gold in Northern Bering Sea, 17531
- U.S. movements, monthly, 19015
- Gold (money) :
 - gold and central bank swap network for foreign currencies, hearings, 19534
 - gold, SDR's and central bank swaps, 28268
- Gold Lake Bog Research Natural Area, general information, 21619
- Goldberg, Joseph P., results of 1972 International Labor Conference, technological change and adherence to relevancy stressed, 21915
- Goldberg, Marvin C., remote sensing of water quality, 23371
- Goldberg, Murrey D., energy, environment, and planning, Long Island Sound region, proceedings of Conference held at Brookhaven National Laboratory, Oct. 5-7, 1971, 28070
- Golden Age passport program, Golden Eagle passport and Golden Age passport, general information, 26776
- Golden Eagle program, *see* Operation Golden Eagle.
- Golden Emblem Club, annual report, 24716
- Golden Gate National Cemetery, general information, 19164
- Golden Gate National Recreation Area :
 - establish—
 - hearings, 19977
 - law, 19514
 - report, 19912
- Golden Gate National Urban Recreation Area, establish, report, 16980
- Golden Gate-West Recreational Area, California, amendment to H.R. 16943 establishing area, hearing, 21205
- Goldman, A. J., continued analysis of capacity concept for runway and final-approach, path airspace, 24023
- Goldsboro, N.C., flood plain information, Neuse River, Stoney Creek, and Little River, 20121
- Goldstein, Harold T. :
 - from the old to the new 1972 standard industrial classifications for establishments, 16792
 - U.S. commodities exports and imports as related to output, 28195
- Goldstein, Jon H., effectiveness of manpower training programs, review of research on impact on poor, 16934
- Goldstein, Marcus S., income of physicians, osteopaths, and dentists from professional practice, 22237
- Golightly, D. W., studies of calibration standards used in Department of Defense equipment oil analysis program, 23712
- Golovin, Anne C., Bridgeport's Gothic ornament, Harrah-Wheeler House, 20767
- Gomez, Manuel :
 - forecasting properties of coal seams in place, 21941
 - statistical and spatial evaluation of sulfur and ash in coal seams, 20573

- Gomez, Richard B., atmospheric effects for ground target signature modeling, atmospheric transmission at 1.06 micrometers, 22415
- Gonads, gonadotoxic and embryotoxic effect of food dye amaranth USSR study, 17627
- Gongwer, Sharon, DIME workshops, interim report, census use study, 28147
- Gonic Division of Rindge Industries, Inc., certain woven fabrics of wool, manmade fibers, and blends, including laminated fabrics, workers of Gonic Division of Rindge Industries, Inc., Tariff Commission report, 24060
- Gonzales, Robert E., Dinner Committee, *see* Robert E. Gonzales Dinner Committee.
- Good foods coloring book, 31920
- Good Government Association of Union Bank, annual report, 26023
- Good Government Committee, annual reports, 22699, 24361
- Good Government Committee, Jane Pickens Langley for, *see* Jane Pickens Langley for Good Government Committee.
- Goode, Alan H., glass wool from waste glass, 26659
- Goodhue County Republican Committee, annual report, 24412
- Goodlow Mountain Research Natural Area, general information, 21620
- Goodman, Bernard, Cumberland Gap National Historical Park, interpretive prospectus, 27818
- Goodman, J. M., preliminary investigation of Thompson scatter radar as aid to high-frequency direction finding, 16444
- Goodman, Leroy V., American education, 17993
- Goodrich, D. C., selected terminal wholesale markets for flowers, 30708
- Goodsell, Wylie D., organization, cost, and returns, Northwest cattle ranches, 15983
- Goodson, Louis B., rapid detection system for organophosphates and carbamate insecticides in water, 23183
- Goodwin, Jyong Ok, relief, 15811
- Goodyear Aerospace Corporation, evaluation of Goodyear medium-duty aluminum honeycomb landing mat, 26387
- Goodykoontz, Jack H., noise tests of mixer nozzle-externally blown flap systems, 29278
- Googlin, J. M., overview of precision machining and gaging, 22494
- Goose Bay, Newfoundland, defense, leased areas agreement with Canada, 17883
- Gophers, *see* Pocket gophers.
- Gordon, C. K., STOL ride control feasibility study, 30453
- Gordon, Dale W., manufacturers' shipments, inventories, and orders, 15596, 21068
- Gordon, Evelyn W.:
average length of stay in short-stay hospitals, demographic factors, United States, 27751
utilization of short-stay hospitals, summary of nonmedical statistics, United States, 32490
- Gordon, Jean A. S., relief, 19585, 27116J
- Gordon, Ronald C., winter survival of fecal indicator bacteria in subarctic Alaskan river, 20190
- Gordon, William B.:
analytical necessary and sufficient condition for Riemannian manifold to be complete, 16452
Jacobian variational principles and equivalence of 2d order systems, 16446
- Goree, William S., superconducting devices and materials, quarterly literature survey, 18946
- Gorras Memorial Laboratory, annual report, 24805
- Gortner, David A., elevated atmospheric CO₂ on acid-base balance and red-cell electrolytes of FBM submarine crew members, effects, 20526
- Goswitz, Francis A., clinical uses of radio-nuclides, critical comparison with other techniques, proceedings of symposium held at Oak Ridge Associated Universities, Nov. 15-19, 1971, 28071
- Gotha, William F., direction, Navy public affairs monthly, 18232
- Gottschalk, Robert:
address, May 10, 1973, 27862
remarks, June 2, 1972, 22190
- Governing bodies of federally recognized Indian groups, 31443
- Government:
accountants and Government in an age of social change (address), 28976
aircraft noise impact, planning guidelines for local agencies, 30293
assessment of Federal and State enforcement efforts to control air pollution from stationary sources, GAO report, 32349
books on Indian history, problems, and relationship to Federal Government, list, 31449
census, 1972—
government organization, 31940
preliminary report, 21039
taxable property values and assessment, sales price ratios, 27005
contracting out Government work, hearing, 32090
creative partnerships, Government and professional services, conference proceedings, 31675
disaster operations, handbook for local governments, 20026
employment of women in Federal Government, 1971, study, 24268
equal employment opportunity in State and local governments, guide for affirmative action, 24259
expanding role of auditor in Government operations (address), 28978
- Federal—
ADP activities for fiscal year, summaries, 22509, 24204
advisory committees, uniform standards and procedures for establishment and operation, report, 17144
aid to State and local government, overall view of issues involved, 15788
as employer of unskilled and undereducated, 22608
financial management directory, 31376
first annual report of the President, 30602
fiscal policy, 31339
government's role in achievement of equal opportunity in housing, hearings, 15766
how Federal Government participates in activities affecting energy resources of United States, 27549
impact of installations on small business, report, 19611
Indian education and Federal Government (address), 26367
Indian policies from colonial period through early 1970's, 23456
minority group employment, 22610
name or symbol in collection of debts, prohibit misuse, report, 28370
national priorities, next five years, hearings, 25993
programs to control environmental pollution from Federal Government activities, basic documents, 32247
R&D funding by function, analysis, 23844
role, destination USA, 30557
supervisor's guide to labor relations in Federal Government, 30889
textbook on citizenship, English and State government, home study course, 30303

INDEX 1973

Government--Continued

Federal and State parole systems—
 hearings, 15763
 print additional copies, reports,
 28324, 28458
 Federal-State cooperative program for
 local population estimates, Apr. 1, 1970,
 test results, 25934
 Federal-State radiation control legislation,
 32302
 finances, 1970-71, 15595
 financial aspects of administration of
 grants-in-aid to State and local govern-
 ments, HUD, 31421
 frequently asked questions about accrual
 accounting in Federal Government,
 28980
 general government appropriations—
 hearings, 15719, 28393, 31131, 32135
 report, 31117
 governance and population, governmental
 implications of population change,
 23907
 government finances, GF series, 15595,
 19252-254
 Improving management for more effective
 government (lectures), 23316
 local—
 employment and payrolls, monthly,
 18924
 environmental quality control, finances
 and employment for selected large
 governmental units, 19261
 government approaches to capacity
 building in professional manpower
 planning, 31414
 government finances in selected metro-
 politan areas and large counties,
 19253
 government participation in A-95, project
 notification and review system,
 27581
 manpower, improved management, report,
 32057
 more concerted effort needed by Federal
 government on occupational safety and
 health programs for Federal employees,
 GAO report, 25235
 municipal governments eligible for tech-
 nical services, hearings, 21263
 Negro employment in South, State and
 local governments, 25373
 new Federalism and education (speech),
 26372
 noise source regulation in State and local
 noise ordinances, 27478
 our American Government, what is it, how
 does it work? print revised edition,
 report, 31090
 our Constitution and Government, Federal
 textbook on citizenship, 31441, 32387
 simplified edition, 31442
 paper specification standards, 21300,
 26194, 29946
 payroll operations of District of Colum-
 bia government, GAO report, 20337
 population, distribution, and policy, 30601
 public employment in 1972, 31970
 regional governance, promise and per-
 formance, substate regionalism and Fed-
 eral system, case studies, 30688
 relationship between legislative and exe-
 cutive branches of Government and
 Economic opportunity act, United States
 District Court opinion and order, 29902
 responsibilities for civil defense, 21396
 revenue sharing, its use by and impact on
 State governments, GAO report, 32355
 selling to U.S. Government, 31795
 separation of powers, investigations, au-
 thorization and expenses, report, 19904,
 19907
 separation of powers, study, report, 15823
 State action on local problems, 1972, in-
 formation, report, 29599

Government--Continued

State and local—
 borrowing anticipations and realiza-
 tions, 28903
 construction expenditure, 18147
 fiscal assistance act, summary of testi-
 mony, public, hearings, 17116
 human relations in management for
 State and local agencies, curriculum
 guide, instructor's manual, student
 workbook, 29046
 improving opportunities for employ-
 ment of disadvantaged in State and
 local governments, guide for effective
 action, 30881
 law enforcement officers group life in-
 surance, provide, report, 17157
 State and local government special
 studies, 19261
 State reports on State and local govern-
 ment finances, 31941
 State government, Federal textbook, 31440
 subsidy historical review, summary, 17024
 U.S. foreign credits, status, 17918
 water quality standards digest, compilation
 of Federal/State criteria, 20221-231,
 21524-526, 25128-131, 28845
 ways to improve records management prac-
 tices in Federal Government, GAO re-
 port, 31386
 workshops in employee development, in-
 structor's guides for States and local
 training officers, 27587
see also Intergovernmental relations.—
also headings beginning Government.
 Government agencies, *see* Government offices.
 Government contracts:
 acquisition of weapons systems, hearings,
 15659, 32020
 administration of contract studies could be
 improved, GAO report, 21635
 better management needed in civil agencies
 over selection of in-house or contract
 performance of support activities, GAO
 report, 30253
 codes of Federal regulations, 17471, 31338
 contracting out Government work, hearing,
 32090
 cost escalation in defense procurement con-
 tracts and military posture, 29894
 DOD directory of contract administration
 services components, 28593
 Environmental Protection Agency, interim
 specifications for OR&M grant, contract
 and in-house reports, 26421
 Executive order 11246, contract compliance
 handbook, 23438
 housing authorized by building permits and
 public contracts, construction report,
 16750, 18149, 30816
 identical bidding in public procurement,
 report of Attorney General, 25366
 NASA procurement directive, 18662
 NASA procurement regulation, 18664
 National Center for Health Services Re-
 search and Development, summary of
 grants and contracts, 22024
 National Science Foundation, 25640
 nongovernment organization codes for mili-
 tary standard contract administration
 procedures (MILCAP), United
 States and Canada—
 code to name, 18709
 name to code, 18710
 Office of Assistant Secretary for Research
 and Technology, HUD, contract and
 grant awards, 27586
 persons or firms currently debarred for vio-
 lations of various public contracts acts
 incorporating labor standards provi-
 sions, list, 18146
 physical research program, research con-
 tracts and statistical summary, 21029
 plight of service workers under Govern-
 ment contracts, 19764

Government contracts—Continued

procurement invitations, subcontracting leads, etc., Commerce business daily, 18134
 procurement law, 19167
 publications and final reports on contracts and grants, 1971-NESS, 30529
 R & D highway transportation research and development studies, 30214
 relief of certain corporations, associations, and individuals under Army Dept. Contract, 15806
 Renegotiation act as amended, regulations, 18857
 Renegotiation act, extend—
 administration's request, 29945
 hearings, 27249
 law, 30935
 Renegotiation Board proposal, 29943
 report, 28332, 32054, 32106
 summary of bill, 30021
 research, development and demonstration projects, 1970 grants and contract awards, 24102
 Service contracts act, amend—
 hearings, 21378
 law, 19407
 reports, 15694, 17162
 Service contract act, amendments, 21371
 Service contract act, extend to Canton Island—
 law, 30928
 report, 30973
 Government Creek :
 flood plain information, 28705
 floods, Rifle, Colo., 28737
 Government depository libraries, 26193
 Government employees, *see* Government officials and employees.
 Government employment, *see* Employment.
 Government Improvement Committee, annual report, 24384
 Government Improvement Group, annual report, 26016
 Government life insurance, *see* Life insurance.
 Government missions :
 employees of diplomatic missions, list, 18255
 foreign officials and official guests of United States, expanded protection, provide—
 law, 19468
 reports, 15698, 15854, 19663
 Government National Mortgage Association :
 appropriations, 1974, hearings, 30005
 financial statements, GAO examination, 16941, 25238
 temporary waiver of certain limitations applicable to purchase of mortgages, reports, 28340, 31079
 Government occupations, expanding opportunities, women in Federal Government, 27045
 Government offices :
 agency decision-making citizen involvement, responses to questionnaire, 23064
 automation and Federal library community, report on survey, 30398
 better management needed in civil agencies over selection of in-house or contract performance of support activities, GAO report, 30253
 cancelled careers, impact of reduction in force policies on middle-aged, 19941
 current regulation of private police, regulatory agency, experience and views, 20486
 Federal agencies and black colleges, 30218
 Federal agency contacts for natural disaster, 31417
 Federal employee assistance in reduction in force, hearings, 32091
 Federal facilities, movement to suburbs, civil rights aspects, 22586

Government offices—Continued

Federal, procurement policy, program area description of Experimental technology incentives program, 27721
 flood hazard evaluation guidelines for Federal executive agencies, 20874
 General Accounting Office policy and procedures manual for guidance of Federal agencies, 18398
 Government organization and employees title 5, United States Codes, 17294, 27362
 Government organization manual, 17483
 how Federal agencies have served the handicapped, 29448
 investigation of possible politicization of Federal statistical programs, report, 19690
 legislative reorganization acts of 1946 and 1970 relating to operation of Senate, 17301
 manpower, improved management, report, 27116M
 National environmental policy act, Federal agency, compliance, hearing, 15769
 National guard technicians, reduction in force, 26732
 need for Federal agencies to improve solid waste management practices, GAO report, 20333
 office excellence, planning & designing today's Federal office, 21703
 opportunity for greater efficiency and savings through use of evaluation techniques in Federal government's computer operation, GAO report, 16100
 proposed construction of Federal office buildings in Alaska, hearings, 23073
 provide Congress with information relating to budget requests, hearings, 27331
 records maintained by Government agencies, hearings, 24860
 reductions in force—
 in Federal agencies, 25950
 permit immediate retirement of certain Federal employees,
 law, 30915
 report, 28465
 retirement, and fringe benefit legislation, hearings, 21277
 regulatory agency budgets, appropriation requests, directly to Congress, hearings, 15899
 regulatory aspects of fuel oil supply analysis, 28835
 report to Joint Committee on Congressional Operations, Congress of United States, implementation of sec. 201-205, 231-235, and 451 of Legislative reorganization act of 1970, GAO report, 29000
 sale or distribution of mailing lists by Federal agencies, limit, hearings, 26163
 single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
 small business, impact of actions and policies by Federal regulatory agencies, hearings, 28434
 standards for audit of Governmental organizations, programs, activities & functions, 31389
 status progress, and problems in Federal agency accounting during 18 months ended June 30, 1973, GAO report, 32357
 summer jobs in Federal agencies, operations manual, 29812
 types of maps published by Government agencies, 23380
 union recognition in Federal Government, statistical report and listings by agency, etc., 30890
see also Government supplies.
 Government officials and employees :
 agency heads to draw checks in favor of financial organizations to other classes of recurring payments, extension of authority, law, 16885

INDEX 1973

Government officials and employees—Con.
 assessment/placement profile (APP) systems, 21772, 31418
 bonding of government officers and employees under act of Aug. 9 1953, operations for fiscal year 1972, report, 17079
 cancelled careers, impact of reduction in force policies on middle-aged, 19941
 catalog for adult continuing educational opportunities for government employees in Washington metropolitan area, 27049
 Civil Service Commission salary table 58, executive branch of Government, 27054
 complaint filing guide, how to file unfair labor practice complaint under Executive order 11491 in Federal service, 30382
 crafts, protective and custodial employees coordinated Federal wage system, FPM supplement, 18330
 current salary schedules of Federal officers and employees together with history of salary and retirement annuity adjustments, 21280-281
 digest and index of published decisions of Assistant Secretary for Labor-Management Relations pursuant to Executive order 11491, as amended, 27661
 displaced employee program, 30879
 questions and answers, 29806
 elimination of surety bonds for Federal Personnel, law, 16863
 employee appeal from adverse actions, 16815
 employee benefits and services, bibliography, 27051
 employee training in Federal service, 30888
 equal employment opportunity in State and local governments, guide for affirmative action, 24259
 estimating staffing for municipal wastewater treatment facilities, 29589
 executive manpower in Federal service, 30877
 expanding opportunities, women in Federal Government, 27045
 FCC monitoring of employees' telephones, report, 21194
 FED facts, 25950
 Federal civilian employee loyalty program—
 committee print, 21252
 report, 26066
 print additional copies, report, 31088
 Federal civilian employment by geographic area, annual report, 24269
 Federal civilian manpower statistics, monthly release, 18647
 Federal employee assistance in reduction in force, hearings, 32091
 Federal employee facts, 16815, 28213, 30878-879, 31980
 Federal employees—
 decisions and reports on rulings of Assistant Secretary of Labor for Labor-Management Relations, pursuant to Executive order 11491, 26609, 27660
 digest and index of published decisions of Assistant Secretary of Labor for Labor-Management Relations pursuant to Executive order 11491, as amended, 20488
 group insurance, waiver of deduction for periods of erroneous removal or suspension—
 law, 19458
 report, 19933
 Government organization and employees, United States Code, 17294
 group life insurance program, Civil Service Commission evaluation, 29934
 health benefits act, comprehensive amendments, hearings, 26177

Government officials and employees—Con.
 Federal employees—Continued
 health benefits program, review of administration, hearings, 21278
 information to consider in choosing health plan, 15605
 pay increase, message from the President, 19557
 political participation, 29807
 Federal news clip sheet, 18323
 Federal personnel, bimonthly statistics, 17952
 Federal salaries in statutory pay systems compared to salaries paid in private enterprise, message from President, 16943
 Federal sector, where we are, where we may be going, implications for managers, 29805
 Federal statutory pay systems in Jan. 1973, comparability adjustment ordered, report, 24810
 Government organizations and employees title 5, United States Code, 17294, 27362
 group life insurance, FPM manual supplement, 18335
 health benefits, FPM manual supplement, 18336
 here's looking at us . . . alcoholism and Federal workers, problem, policy, program, 24267
 immediate retirement of certain employees, permit, report, 27123
 improvements needed in survey of non-Federal salaries used as basis for adjusting Federal white-collar salaries, GAO report, 28994
 incentive awards program, 30878
 increase in Government's contribution under Federal employees' health benefits program, 31037
 information to consider in choosing health plan, 21089
 insurance coverage for U.S. nationals employed outside United States by Federal government, reports, 16965, 28346
 Interagency Auditor Training Center, bulletins, 19291, 29819
 interagency training program, catalog of courses, 16816
 international air travel by Government officials, economy and efficiency, hearings, 19773
 mailing of drug samples to Government officials for analysis, report, 16964
 more concerted effort needed by Federal government on occupational safety and health programs for Federal employees, GAO report, 25235
 need to improve language training programs and assignments of Government personnel overseas, GAO report, 23323
 negotiating equality for postal employees and uniformity in labor relations, hearings, 29933
 occupations of Federal white-collar workers, 15607
 pay comparability adjustments, 1973, supplemental to President's report, 24871
 permit immediate retirement of certain Federal employees—
 law, 30915
 report, 28465
 petition timeliness guide, how to determine "open" period during term of agreement for filing representation petition under Executive orders 11491, as amended, 26612
 policy and supporting positions—
 list, 23071
 print additional copies, 26200
 position-classification standards for general schedule (GS) positions, 18763

Government official and employees—Con.
postal employees, instructions and information, 18764
prevailing rate pay system employees, equitable fixing and adjusting rates of pay—
law, 15650
report, 19840
procedures for implementation of memorandum of understanding between HUD and GSA, 30298
proposals to reform Federal classification systems, hearings, 21275
public employment in 1972, 31970
public sector labor relations information exchange publications, 21898-900, 27664
questions and answers about temporary intergovernmental assignments, 25954
retired uniformed services personnel in Federal civilian service, Sept. 1972, study, 21282
retirement credit for services rendered, States and other government instrumentalities when under Federal funding, hearing, 32089
selected public-employee retirement systems, holdings, quarterly report, 18423
severance pay, what it is, 29811
standards for local preparedness, summary for public officials, 28584
standards of conduct for Federal-employee unions, rights of members, election of officers, reporting guide, 25371
State and local governments, retirement systems, finances, 19252
State, county and municipal personnel publications, 27052
State profiles, current status of public sector labor relations, 21899
States and political subdivisions employees shall be subject to National Labor relations act, hearings, 15731
supervising paraprofessionals, 20237
supervisor's guide to labor relations in Federal Government, 30889
tax information for U.S. Government civilian employees stationed abroad, 20416
training, reporting requirements concerning, eliminate, report, 28367
unemployment compensation, by industry and State, 18257
union recognition in Federal Government, statistical report and listings by agency, etc., 30890
when injured at work, facts about compensation for civilian employees of Federal Government, 25142
working for USA, how to apply for civil service job, what government can offer you as Federal worker, 28216
your rights as employee on Federal or Federally financed construction job, 29588
see also Civil service—Civil service pensions—*also* names of departments, etc., where employed.

Government Operations Committee, House:
activities, 92d Congress, 24858
1st session, interim report, 17055
summary, 21195
calendar, 18548
committee prints, 17054-55, 24858, 27215, 31024
hearings, 15742-745, 17056-58, 19770-773, 21238-240, 23017, 24859-861, 26162-163, 27213-214, 28412-413, 29911-916, 31023, 32081
investigations and studies, authorization and expenses, report, 26086
reports, 16972, 16974, 16988, 17022, 21195, 21241, 27128, 271713, 28347, 29852-523, 32028
rules, 27215

Government Operations Committee, Senate:
calendar, 18568
committee prints, 17260, 19973, 21341, 24930-931, 26272, 27334, 28539, 30036, 30039
hearings, 15897-900, 24929-931, 26269-271, 27331-333, 28540, 30034-035, 30037-038, 31142, 32146
investigations and studies, authorization and expenses, reports, 27261, 31086
reports, 15821, 17144, 17193-194, 19850, 19868, 19879-880, 26202, 26220, 27289, 32104
studies and investigations, authorization and expenses, report, 29971
Government periodicals, *see* Periodicals.
Government printing and binding regulations, 24886
Government Printing Office:
appropriations, 1973, legislative, law, 16873
appropriations, 1974, legislative—
hearings, 31129
report, 29991
erroneous payments of pay or allowances, to certain employees waiver of U.S. claims, report, 29994
functions of disbursing officer, deputy disbursing officer, and certifying officers and employees, revise United States Codes concerning, report, 29960
Public Printer, nomination of Thomas F. McCormick, hearing, 23074
Public Printer to adopt official seal, and to designate employees to administer oaths, authorize, report, 32112
style manual, 25263
word division, supplement, 30289
Government Procurement Commission:
recommendations, small business contracting community in labor surplus areas, etc., hearings, 32155
reports, 23396-399
index-bibliography-acronyms, 26513
summary, 26514
Government programs, *see* Federal assistance programs.
Government property *see* Public property.
Government publications:
Government reports—
announcements, 18405
index, 18406
topical announcements, 18407
guide to official publications in American libraries, French-speaking Central Africa, 27685
list of classes of United States Government publications available for selection by depository libraries, 17797, 23910
monthly catalog, 18641
non-GPO imprints received in Library of Congress, 1971, list, 16241
price lists, Public Documents Department, PL series, 16460-463, 17798-800, 22201, 23911, 25672-674, 26796-799, 27866-872, 29453, 30605-608
selected, list (periodical), 18900
State publications, monthly checklist, 18642
weekly Government abstracts—
building technology, 19068
computers, control & information theory, 19069
environmental pollution & control, 19070
management practice & research, 19071
materials sciences, 19072
transportation, 19073
see also names of departments, etc., issuing publications—*also* subjects.
Government regulation and control:
economic stabilization program—
freeze, 30078
freeze facts, 28577
phase 3, regulations, questions and answers, 30076

INDEX 1973

Government regulation and control—Con.
economic stabilization program—con.
phase 4, 30079
food regulations, 31171
oil regulations, 31172
regulations, questions and answers, 31173
Federal paperwork burden for small business, hearings, 17304
Federal regulatory policy, program area description of Experimental technology incentives program, 27722
small business, impact of actions and policies by Federal regulatory agencies, hearings, 28434
Government reorganization plans:
Customs Bureau, inspection of persons and documents, at U.S. ports of entry, 29852
Drug Enforcement Administration plan 2, of 1973, reports, 27173, 29852
Emergency Preparedness Office, Science and Technology Office and National Aeronautics and Space Council, hearing, 26271
enacted 92d Cong., 1st sess., 23236
Health, Education, and Welfare Department, comprehensive reorganization and reform, MEGA proposal, hearings, 24945
legislative reorganization acts of 1946 and 1970 relating to operation of Senate, 17301
reorganization plan—
no. 1 of 1973, Office of Emergency Preparedness, Office of Science and Technology, and National Aeronautics and Space Council, hearings, 24861
no. 2 of 1973—
amend, hearing, 28412
Drug Enforcement Administration, hearings, 27214
report to Joint Committee on Congressional Operations, Congress of United States, implementation of sec. 201–205, 231–235, and 451 of Legislative reorganization act of 1970, GAO report, 29000
Government securities, yields and prices, 19017
see also Treasury notes.
Government supplies:
directory of procurement offices, 16138
Federal manual for supply cataloging—
international cataloging, 26303
item identification, 24081, 26302, 32161
operating procedures, 15940
Federal procurement regulations, FPR amendments, 18344
Federal specifications and standards, index, 23253
supplements, 18484
Federal standards, 16060–63, 23249–250, 28908–912, 30237–238, 32300
Federal supply catalog—
consolidated master cross reference list, 20042
GSA stock catalog—
change bulletin list, 18351
identification list, 18352
Federal supply classification handbook—
alphabetic index, supplements, 18354
groups and classes, 23084
numeric index, of classes, 18353
Federal supply code for manufacturers—
excluding United States and Canada, 17317, 18358
United States and Canada—
code to name, 18357, 20031
name to code, 18358, 20030
Federal test method standards, 16064, 17486–487, 23251–252
Government Procurement Commission, report—
index-bibliography-acronyms, 26513
summary, 26514
GSA stock catalog, 17488

Government supplies—Continued
Government procurement, position and problems for small business, report, 19728
input and output codes, Federal manual for supply cataloging, 28589
International Development Agency, procurement regulations, 17960
list of commodities, normally purchased by Federal Supply Service, 21592
NASA procurement regulation, 18664
directive, 18662
Navy procurement directives, 18686
procurement invitations, subcontracting leads, etc., Commerce business daily, 18134
use of formal advertising for government procurement can, and should, be improved, GAO report, 31385
see also Military supplies.
GPO, *see* Government Printing Office.
GPSS/360 computer models to simulate aircraft, passenger emergency evacuation, 28093
Grabarek, R. Wense, Wake County Committee to Elect Wense Grabarek, annual report, 24624
Grabarek, Wense, Durham County to elect, *see* Durham County Committee to elect Wense Grabarek.
Grace, John L., jr., drainage and erosion control facilities, field performance investigation, 28780
Grad, Susan, relative importance of income sources of aged, 29504
Grade crossings, *see* Railroad crossings.
Gradient (mathematics):
forecasting precipitation at Bakersfield, Calif., using pressure gradient vectors, 30539
information capacity of gradient method of measuring earth's magnetic field, USSR study, 32405
measurement of salt-wedge excursion distance in Duwamish River estuary, Seattle, Wash., by means of dissolved-oxygen gradient, 20358
product suitability of wood determined by density gradients across growth rings, 25225
variable property turbulent boundary layers by means of modified compressibility transformation, analysis, 21976
Grading and marking (students):
educational accountability and evaluation, 15996
Grading of commercial products, dairy plants surveyed and approved for USDA grading service, 18207
see also Agricultural products—*also* names of products.
Grading sugar pine saw logs in trees, 20312
Graduate schools, *see* Colleges and universities.
Graduate students, *see* Colleges and universities.
Graduate work, *see* Colleges and universities.
Graduates:
foreign medical graduate, bibliography, 29039
increase graduates from health profession schools and improve quality of their education, GAO report, 17525
occupational outlook for college graduates, 20501
Graem Yates for Congress, annual report, 24449
Grafting (Botany):
revegetating devastated sites in New Mexico with western wheat-grass transplants, 32334
Grafting (physiology):
U.S. kidney transplant fact book, information from ACS/NIH Registry, 16387

- Gratton, Sue B., dynamic stability derivatives at angles of attack from -5° to 90° for variable-sweep fighter configuration with twin vertical tails, 20602
- Graham, Janet R., I & N reporter, 18474
- Graham, John L., aerobic secondary treatment of plywood glue wastes, 28809
- Grain:
- changing world needs for grains in 1970's (talk), 26932
 - cost of storing and handling grain and controlling dust in commercial elevators, 1971-72, projections for 1973-74, 26354
 - crop quality, 24113
 - culture, etc., publications, price list, 16461
 - facts about Russian grain sale (Interview), 22331
 - feed grain programs, questions and answers, 24121
 - feed statistics, 1971 supplement, 19130
 - foreign agriculture circulars, 18380
 - futures act, and other laws, compilation, 19539
 - grain trade with Russia (address), 16596
 - grains agreement with Union of Soviet Socialist Republics, 17898
 - hedging potential in grain storage and livestock feeding, 22325
 - market news, weekly summary and statistics, 18408
 - sheep and lambs on feed, 24019
 - stocks—
 - in all positions, quarterly report, 18933
 - in deliverable positions for Chicago Board of Trade, weekly report, 18932
 - of grain, oilseeds, and hay, revised estimates by States, 1964-70, farm and off-farm stocks, 20934, 25834
 - virgin-land grain raising, analysis, USSR study, 17640
 - world grain situation, 20091
 - see also names of grains.
 - Grain elevators, cost of storing and handling grain and controlling dust in commercial elevators, 1971-72, projections for 1973-74, 26354
- Grambart, James E., human engineering analysis of airport lighting control panels and proposal for new design, 24047
- Grand Banks, oceanography of Grand Banks region of Newfoundland and Labrador Sea, 30891
- Grand Canyon, control of dwarf mistletoe in a heavily used ponderosa pine recreation forest, Grand Canyon, Ariz., 31374
- Grand Canyon Complex, Ariz., wilderness recommendation, 27827
- Grand Canyon Monuments, certain lands to be additions to National Wilderness Preservation System, 23000
- Grand Canyon National Park:
- certain lands to be additions to National Wilderness Preservation System, 23000
 - protect and enlarge, hearings, 31145
 - South Rim, general information, 30549
- Grand-Cheriton River, drainage basins, co-operative State-Federal report on water pollution, 17804
- Grand Coulee Dam, operations office, region 1, electrical equipment, field review of maintenance, 31780
- Grand Forks, N. Dak.:
- flood plain information, Red River of the North, 17391
 - floods, how to avoid damage, 17395
- Grand Junction, Colo.:
- flood plain information, Colorado and Gunnison Rivers, 28704
 - floods on Colorado and Gunnison Rivers, 28736
- Grand jury, venue, to consider rights of citizens in proceedings, northern district of Texas, 27231
- Grand River:
- flood plain information, 23163-164
 - navigation conditions at confluence of Arkansas, Verdigris, and Grand Rivers, hydraulic model investigation, 25100
- Grand Sand Dunes National Monument wilderness recommendation, 27828
- Grand Teton National Park:
- addition to National Wilderness Preservation System proposal, 23000
 - general information, 31732
 - maps, 17786, 31736
 - wilderness recommendation, 23834
- Grand Traverse County Republican Committee, annual report, 22819
- Grand Trunk Western R.R., accident report, 22212
- Grand Turk Island, use by civil aircraft of airfield at Grand Turk Auxiliary Air Base, agreement with Great Britain, 20807
- Grand Valley:
- evaluation of canal lining for salinity control in Grand Valley, 20193
 - refraction, surveys in Colorado, 30522
- Grandparents, foster grandparent program, one part of ACTION, 26923
- Granite:
- gases formed in underground nuclear explosion, chemical equilibria and potential applications, 21025
 - geologic effects of underground nuclear explosions in Sahara granite massif, research, 21023-24
 - mechanical effects beyond close-in zone of underground nuclear explosion in granite, 21026
 - mechanical effects in close-in zone of underground nuclear explosion in granite, 21028
 - petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
 - petrography of some granitic bodies in northern White Mountains, Calif.-Nev., 29023
 - radioactivity and its fractionation during underground nuclear explosions in granite medium, 15524
 - recovery of feldspar and glass sand from South Carolina waste granite fines, 16335
 - research on geologic effects of underground nuclear explosions in Sahara granite massif, 16666
 - rock damage from small charge blasting in granite, 30429
 - study of two granites, 15525
- Granite soils, see Soils.
- Grant, Kenneth E., fall water supply summary for Nevada, 29507
- Grant County, Wis., Democratic Party of Grant County, annual report, 22988
- establish. authorization—
- hearing, 19978
 - law, 16907
 - report, 19847
- Grantham, J. B., sound insulation in modular motel, 26474
- Grants, N.Mex., disposal of uranium-mill effluent by well injection in Grants area, Valer-cia County, N.Mex., 30272
- Grants Creek:
- flood plain information, Salisbury, N.C., 32213
 - floods on Grants Creek and Town Creek, Salisbury, N.C., 32239
- Grants-in-aid:
- comprehensive planning assistance managing grant, 31431
 - Federal grant process, analysis of use of supplemental and categorical funds in model cities program, 26525
 - financial distress grants for schools of nursing, 21758
 - grant-in-aid for fisheries program activities, 1972, 30515

INDEX 1973

Grants-in-aid—Continued

- grants administration manual, 18409
- circular, 18410
- guideline manual, State planning agency grants, 21891, 29147
- improve management of Federal system, hearings, 15897, 19850
- National Center for Health Services Research and Development, summary of grants and contracts, 22024
- State and local fiscal assistance act—overall view, 19970
- per capita comparisons of distributions to large cities, selected small cities, and rural areas, 19970
- reports, 15673, 15679
- summary of Senate amendments to bill, 21297
- Uniform relocation assistance and land acquisition policies act of 1970, amend, report, 21185
- see also* subjects for which grants are made—also names of departments, etc.
- Granular materials:
 - effects of stress history on resilient response of soils, 31243
 - materials handling research—penetration of selected/granular materials by wedge-shaped tools, 29232
 - shear properties of several granular materials, 27698
- Granville County Lee for Congress, annual report, 28286
- Grapefruit, Indian River grapefruit promotion, report, 29959
- Grapes:
 - canned, standards for grades, 29610
 - growing American bunch grapes, 20903
- Graphic methods:
 - American Revolution Bicentennial symbol, guidelines for authorized usage, official graphics standards, 29654
 - BEAMR, an interactive graphic computer program for design of charged-particle beam transport systems, 31640
 - determining discounted cash flow rate of return and payout time for onshore development wells, graphical method, 25425
 - recent computational experience with method of phase and amplitude diagrams, 22168
- Graphic notices and supplemental data, airman's information manual, 17986
- Graphite:
 - development and evaluation of vacuum pressure gauge components from carbon and graphite, 20583
 - graphites and titanium alloys, USSR study, 20452
 - minerals yearbook chapter, 25445
 - oxidation resistance of selected mechanical carbons, at 650° C in dry flowing air, 32478
 - turbulent immersed wall jet of air on burning graphite surface, USSR study, 16182
- Grass, Galedia, Indian School journal, 18489
- Grasses:
 - culture, etc., publications, price list, 16461
 - revegetating devastated sites in New Mexico with western wheat-grass transplants, 32334
 - varieties in United States, 19103
- Grasses, *see also* Bamboo—Reed canary grass.
- Grasshoppers, control, 26933
- see also* Acrididae.
- Gratkowski, H., aerial spray adjuvants for herbicidal drift control, 28926
- Gratuities, tips, reporting for Federal tax purposes, 20406
- Gravel, minerals yearbook chapter, 25484
- Graves, Albert H., scheduling arrival of tobacco at auction warehouses, 31909
- Gravimeters:
 - cross-coupling computer for Oceanographer's Askaniya gravity meter, 26533

Gravimeters—Continued

- new GRK-1 quartz gravimeter, description, USSR study, 31526
- Gravimetry:
 - comparison of respirable dust concentrations measured with MRE and modified personal gravimetric sampling equipment, 30442
 - Pacific SEAMAP 1961-70 data, bathymetry, magnetics and gravity, 17778-780
- Gravitation, qualitative study of complete act of solutions of differential equation of motion of test particle in equatorial plane of Kerr gravitational field, 27717
- Gravity:
 - aeromagnetic, Bouguer gravity, and generalized geologic studies of Great Falls-Mission Range area, northwestern Montana, 21729
 - gravity and magnetic features as related to geology in Leadville 30-minute quadrangle, Colo., 23362
 - gravity current model applied to analysis of squall-line gust front, 25620
 - gravity, magnetics, and geology of San Andreas fault area near Cholame, Calif., 26500
 - Pacific SEAMAP 1961-70 data, 23810-813
 - simulated artificial gravity on human performance, effects, 21973
 - weights and centers of gravity for red pine, white spruce, balsam fir, 16083
- Gravity meters, *see* Gravimeters.
- Gravity (specific), *see* Specific gravity.
- Gray, Leo R., caustic dry peeling of cling peaches to reduce water pollution, its economic feasibility, 23232
- Gray, Louis P., III, nomination, hearings, 27351
- Gray, R. A., fracture safety considerations for Hanford-N reactor coolant piping material, 22169
- Gray, Robert W., evaluation of structural layers in flexible pavement, 28782
- Grays Harbor, Wash., Grays Harbor estuary, south jetty study, hydraulic model investigation, 17408
- Grayson County, Ky., soil survey, 25709
- Grayson County Republican Executive Committee, annual report, 22822
- Grease, oil, water quality standards criteria digest, 21524
- see also* Lubricants.
- Great Basin Experimental Range, auto tour, 20290
- Great Britain:
 - background notes, 25724
 - Bahamas long range proving ground, expanded use of Ascension Island, agreement, 31856
 - British Garrison of St. Augustine, 1763-84, historic resource study, 27811
 - British railways, advance passenger service technology, hearings, 15879
 - British siege of St. Augustine in 1740, historic resource study, 27812
 - certificates of airworthiness for imported aircraft, agreement, 26867
 - defense areas, facilities on North and South Calcos Islands, West Indies, agreement, 20792
 - drone launching facility, Anegada Island, agreement, 26877
 - economic trends and their implications for United States, 25314, 31512
 - 18th century English porcelain, brief guide to collection in National Museum of History and Technology, 23796
 - electronic color separating or sorting machines from United Kingdom, determination of no injury to U.S. industry, Tariff Commission report, 32587
 - European and British Commonwealth series, 16497-498, 29530, 32573-574
 - foreign trade regulations of United Kingdom, 25968

Great Britain—Continued
housing and urban development in United Kingdom, 26528
law and practice, 20496
lights and fog signals, list, 16439
microbiological laboratory services, organization, USSR study, 27632
mineral industry, minerals yearbook chapter, 25435
naval communications facility on Diego Garcia for U.S., agreement, 22274
nontariff barriers affecting trade in agricultural products, 23263
quadrupartite agreement on Berlin and final protocol between USA and other governments, 27918
satellites, furnishing of launching associated services, agreement, 26870
selling in United Kingdom, 19296
social security, agreement, 31868
study of British travel habits and patterns, 20851
use by Bahamian organizations of certain lands at U.S. Navy Base, Great Exuma Island, Bahamas, agreement, 25755
use by civil aircraft of airfield at Grand Turk Auxiliary Air Base, agreement, 20807
west coasts of England and Wales, sailing directions, 25031
Great Dismal Swamp, *see* Dismal Swamp.
Great Dismal Swamp National Wildlife Refuge, establish, report, 28363
Great Falls, Mont.:
aeromagnetic, Bouguer gravity, and generalized geologic studies, of Great Falls-Mission Range area, northwestern Montana, 21729
Sun River, flood plain information, 32214
Great Lakes:
Coast Guard light list, 22617
ice cover, 1970-71 winter, 31720
International Field Year for Great Lakes, IFYGL bulletins, 20689, 25617, 27799, 31718
marine weather services charts—
Lake Huron, Lake Erie and Lake Ontario, 29420
Lake Michigan and Lake Superior, 29421
modification of winter storms, weather control, etc., 31722
notice to mariners, 18713
pilot, surveys, 16404, 22091, 25613, 31713-715
promotion of safety on Great Lakes by means of radio, agreement with Canada, 31046
protecting aspen resource in Lake States, 21672
rules of the road, 21094
water levels, report, hearing, 28429
Great Lakes States:
agriculture in upper Great Lakes region, 1949-69, 22354
Lakes States pulpwood production dips to 4 million cords in 1971, 28938
pulpwood production in Lake States, 1972, by county, 32322
10th Lake States Forest Tree Improvement Conference and 7th Central States Forest/Improvement Conference, joint proceedings, Tree, 28923
Great Plains:
northern, Project Skywater atmospheric resources program, conference proceedings, review of draft plans for a precipitation management program, 23931
Reclamation's Great Plains weather modification program (paper), 23941
Great Sand Dunes National Monument:
addition to National Wilderness Preservation System proposal, 23000
wilderness recommendation, 23835
Great Smoky Mountains National Park:
mercury concentrations in fish of Great Smoky Mountains National Park, 22482

Great Smoky Mountains Nat'l Park—Con.
water in Great Smoky Mountains National Park, 23381
Great Soviet encyclopedia, *see* Bol'shaya Sovetskaya entsiklopediya.
Greater benefits to more people possible by better uses of Federal outdoor recreation grants, 20331
Greater use of flight simulators in military pilot training can lower costs and increase pilot proficiency, 30256
Greater wax moths, *see* Bee moths.
Greece:
area handbook, 22429
census programs of several countries in Europe and Middle East, 26091
economic trends and their implications for United States, 17578, 27611
legislative origins of Truman Doctrine to provide aid, executive session, hearings, 30028
military assistance, deposits under Foreign assistance act of 1971, agreement, 27915
mineral industry, minerals yearbook chapter, 16278
narcotic enforcement efforts by local government and American missions, report, 27229
plant quarantine import requirements, 20958-959, 28042, 30739
selling in Greece, 31208
6th fleet, decision to homeport in Greece, review, 21223
status of U.S. Navy personnel, agreement, 27913
U.S. assistance programs, hearings, 27324
Greek, Michael B., morbidity and mortality weekly report, 18653
Greely, Fort, physical properties of snow cover in Ft. Greely area, Alaska, 17372
Green, R. L., consideration for preparation of operation and maintenance manuals, 31896
Green, Edith, Green for Congress Committee, annual report, 24312
Green, Hugh L., evaluation of Harvey aluminum 1- by 12-ft. extruded light-duty landing mat with symmetrical butt-type end connectors, 20170
Green, James A., effects of simulated artificial gravity on human performance, 21973
Green, Judy S., bibliography, Labor-Management relations act, 1947, as amended by Labor-management reporting and disclosure act, 1959, supplement, 25604
Green, Marshall:
address, 1971; 22258
nomination, hearings, 26268
Green, Ralph F., optimization by pattern search method, 29562
Green Bay, Wis.:
area wage survey, 20503
flood plain information, East River and tributaries, 17383
floods, how to avoid damage, 20136
Green coffee inventories, imports, roastings, current business reports, 18185
Green County, Democratic Party, *see* Democratic Party of Green County.
Green County, Republican Party, *see* Republican Party of Green County.
Green County Republican Women's Club, annual report, 24753
Green for Congress Committee, annual report, 24312
Green River and Valley:
hydrology of four streams in western Washington as related to several Pacific salmon species, 23349
three faces of river below Flaming Gorge Dam, general information, 23477
Green River formation:
aragonite and genesis of carbonates in mahogany zone oil shales of Colorado's Green River formation, 25504

INDEX 1973

- Green River formation—Continued
 geochemical aspects of saturated hydrocarbon constituents of Green River oil shale-Colorado no. 1 core, 29231
 geology of Green River formation, Colo., Utah, and Wyo., bibliography, 27560
 oil yields and characteristics, of Green River formation oil shales at WOSCO Ex-1, Uintah County, Utah, 20577
 oil yields and stratigraphy, of Green River formation's Tipton Member at Bureau of Mines sites near Green River, Wyo., 20574
 stratigraphic divisions and geologic history of Laney Member of Green River formation in Washakie Basin in southwestern Wyoming, 26495
 X-ray mineralogy of Parachute Creek member, Green River formation, in northern Piceance Creek basin, Colo., 30282
- Green Valley Creek:
 flood plain information, 20117
 floods, Cordelia, Calif., 20134
- Greenberg, Gary, Greenberg for Congress Committee, annual report, 24777
- Greenberg, Louis P., viral tumorigenesis report, 17744
- Greenberg for Congress Committee, annual report, 24777
- Greene, George C., flow-field measurements around Mars lander model using hot-film, anemometers under simulated Mars surface conditions, 17710
- Greene, Robert C., petrology of welded tuff of Devine Canyon, southeastern Oregon, 27573
- Greene County Republican Executive Committee, annual reports, 22672, 22770
- Greenhouses, building hobby greenhouses, 27989
- Greenland, Donald C., weight loss of pond-raised channel catfish (*Ictalurus punctatus*) during holding in processing plant vats, 20699
- Greenland:
 Camp Century, cationic analysis of ice core, 17373
 lights and fog signals, 17790
 minerals industry, minerals yearbook chapter, 20538
 soluble particulates in ice from site 2, 31236
- Greens Bayou:
 flood plain information, Harris County, Tex., 28709
 floods, Harris County, Tex., 28739
- Green's function, theory of disordered Heisenberg ferromagnets using Green's functions, 29276
- Greenshields, Bruce L., agricultural reforms and productivity and trade in Chile since 1965, 23130
- Greenspan, Martin, engineering and instrumentation, journal of research, 18532
- Greenspoon, Gertrude N., mineral industry of Zambila, 16312
- Greenville, S.C., census of population and housing, 1970, census tracts, 28131
- Greenwald, Raymond A., Doppler spectrum analysis using minicomputer, 17777
- Greenway, W.R., desalination plant operators chemical control guide, 25295
- Greenwood, Bart W., American Revolution 1775-83, atlas of 18th century maps and charts, theatres of operations, 27842
- Greenwood, Joseph A., estimating number of narcotic addicts, 20581
- Greer, H. Douglas, summary of directional divergence characteristics of several high-performance aircraft configurations, 20617
- Gregg County, Tex., Republican Executive Committee, *see* Republican Executive Committee of Gregg County, Tex.
- Gregory, M. V., heterogeneous effects in fast breeder reactors, 28074
- Gregory, Robert H., arrowhead, 18013
- Grenada, Miss., flood plain information, Yalobusha River and tributaries, 20132-133
- Gretna, Fla., truck-automobile collision involving spilled methyl bromide on U.S. 90, highway accident, report, 30560
- Grezzo, Anthony D., condominiums, their development and management, 20371
- Grid systems, *see* Maps and charts.
- Grids, grid calibration by coordinate transfer, 23814
- Grievance procedures:
 employee appeals from adverse actions, 16815
 employee grievances handbook, HUD, 31419
 Foreign Service, background materials, 15734
 role of management representative in hearings, 29579
- Grinders:
 attachments and accessories for grinding machines, military standard, 28611
 industrial plant equipment handbook, 17324
- Grinding and polishing, large-scale continuous attrition grinding of coarse kaolin, 31589
- Grinding machines, *see* Grinders.
- Grise, Verner N., economic analysis of cling peach production with emphasis on harvest mechanization, 27986
- Grisson, M. Catherine, indexes to Atomic Safety and Licensing Appeal Board Issuances through Dec 1972, 25881
- Groceries, cost comparison of high and low ceilings in modern grocery warehouses, 29614
- Grocery stores, *see* Stores.
- Groemping, Franz A., annual earnings and employment patterns of private nonagricultural employees, 30384
- Groman, William A., forest fertilization, state-of-the-art review and description of environmental effects, 20191
- Gromov, N. N., economics of air transport, 29302
- Gross, Fred, factorization of meromorphic functions, 26786
- Gross, Peter L., analysis of current pulmonary research programs, 23735
- Gross national product:
 current market prices, non-Communist countries, calendar year 1970, summary, 27613
 expansion is continuing, reaching its full potential in 1974 (remarks), 21109
 growth rates and trend data by region and country, 27614
- Grote, Heinz H., MINIMAX, FORTRAN computer program to assemble machine code for Interdata model 70 minicomputer on control-data 3800, 31724
- Ground, *see* Earth.
- Ground control requirements for precision processing of ERTS images, 17529
- Ground effect, low-speed aerodynamic characteristics of fuselage model with various arrangement of elongated lift jets on V/STOL model, 31633
- Ground fit and compatibility tests of airborne stores, 20066
- Ground instructors, Federal aviation regulations, 18299
- Ground motion values for use in seismic design of trans-Alaska pipeline system, 21713
- Ground movements and mining damage, 25415
- Ground truth requirements for remote sensor data acquisition and analysis, 21478
- Ground water, *see* Hydrology—Water.
- Ground waves, *see* Radio waves.
- Group insurance, *see* Life insurance.
- Group medical practice, *see* Medicine.
- Groups that can help, directory of environmental organizations, 16017

Grouting:
 chemical grouting, engineering and design, 31246
 model tests of lined tunnels in jointed rock mass (strengthening of rock by chemical adhesive grouting), 28693
 Growing American bunch grapes, 20903
 Growing apricots for home use, 30705
 Growing blackberries, 19107
 Growing bond, European Parliament and Congress, 17043
 Growing bonsai, 30706
 Growing ginseng, 24129
 Growing lilacs, 30704
 Growing magnolias, 22332
 Growing up in America, background to contemporary drug abuse, 30505
 Growing vegetables, 20907
 Growth:
 and its implications for future on resources, environment and food supply, hearings, 29932
 balanced National growth and development, proposal for achieving, 22663
 course of growth response in relaxed white spruce, 10-year results, 27539
 effects of soil type and watering on germination, survival, and growth of Engelmann spruce, greenhouse study, 16081
 effects of temperature on growth and reproduction of aquatic snails, 27452
 4th All-Union conference, growth of crystals, papers, 23556
 germination and early growth of coastal tree species on organic seed beds, 20315
 growth and decay of turbulent mixing in planetary boundary layer, 32252
 growth and survival of northern plants at low soil temperature, growth response, organic nutrients, and ammonium utilization, 30157
 growth potential of family camping market, 26476
 guying to prevent wind sway influences, loblolly pine growth and wood properties, 21677
 how children grow, 17768
 impact of growth on environment, hearings, 32153
 improved growth intercept method for estimating site index of red pine, 21671
 National growth and distribution of population, roles of National and State Governments on policy levels, hearings, 15724
 nitrogen fertilization increases cottonwood growth on old-field soil, 21665
 nutrition, growth and development of North American Indian children, 17762
 plant growth by method of holographic interferometry, USSR study, 23557
 product suitability of wood determined by density gradients across growth rings, 25225
 report on national growth, 17343
 screening and assessment of young children at developmental risk, conference papers, 29447
 ten-year growth of planted slash pine after early thinnings, 21678
 toward national growth and development, policy, 1970-71 legislative and executive actions, 26272
 tree growth and water use response to thinning in 47-year-old Lodgepole pine stand, 31366
 Growth and structure of monocrystalline semiconductor films, USSR study, 29128
 Grubb, Hayes F., effects of coal mining on water resources of Tradewater River basin, Ky., 25261
 Grubbs, Michael R., recovering plastics from urban refuse by electrodynamic techniques, 25512

Gruber, Robert H.:
 records of Assistant Commissioner for State of Alabama Bureau of Refugees, Freedmen, and Abandoned Lands 1865-70, 26694
 records of Superintendent of Education for State of Alabama Bureau of Refugees, Freedmen, and Abandoned Lands, 1865-70, 26695
 Grumer, Joseph, minimum extinguishant and maximum oxygen concentrations for extinguishing coal dust-air explosions, 31594
 Grunewald, Richard J.:
 remarks—
 Sept. 13, 1972, 23584
 Sept. 22, 1972, 23585
 GSA, see General Services Administration.
 Guadalupe County, Republican Committee, see Republican Committee of Guadalupe County.
 Guadalupe Mountains National Park:
 addition to National Wilderness Preservation System proposal, 23000
 general information, 17784
 wilderness recommendation, 23836
 Guadalupe River and Valley:
 Edwards Underground Reservoir, engineers report—
 departmental editions, 26383, 27441
 document editions, 26043, 27106
 flood plain information, 23165
 Guadeloupe:
 economic trends and their implications for United States, 29115
 map, 16804
 Gualtieri, J. G., optical materials investigation for ultraviolet down-converters, 20972
 Guam:
 briefing on territorial matters, with text of Guam organic act, hearings, 28541
 census of agriculture, 1969, 16688
 census of housing, 1970, housing characteristics for States, cities, and counties, 24213
 census of population, 1970, characteristics of population, 28119
 county business patterns, 30835
 general information, 30306
 income taxes, coordinate with United States—
 law, 19529
 report, 19657
 nautical chart catalog, 29380
 organic act, amend, hearing, 19775
 War-in-the-Pacific National Historic Park, proposal, hearings, 24862
 Guam National Seashore, establish, hearings, 24862
 Guantanamo Naval Base Desalination Facility, analysis and summary report of operation, 20385
 Guarantees, see Warranties and guarantees.
 Guaranties and sureties:
 authorize aircraft loan guarantees—
 hearing, 15880
 law, 21131
 reports, 15848, 19653
 implementation of Emergency loan guarantee act, GAO reports, 21694, 31380
 investment guaranties, agreement with St. Vincent, 26863
 investment guaranties, agreement with Yemen Arab Republic, 31853
 Guards (persons):
 current regulation of private police, regulatory agency experience and views, 20486
 role of campus security officer in college setting, 26608
 Guatemala:
 background notes, 26853
 economic trends and their implications for United States, 17572
 map, 29794
 mineral industry, minerals yearbook chapter, 25429

INDEX 1973

Guatemala—Continued

- U.S. aid, public safety, and military assistance, 15893
- Guazzoni, G. E., experimental study of germanium cell performance with erbium oxide and silicon carbide radiators, 16644
- Gudkov, A. I.:
 - external loads and aircraft strength, 31657
 - methods and techniques of airframe strength flight tests, 31660
- Guereca-Morales, Jesus, deportation, suspension, recession, 19821
- Guidance:
 - career education (address), 26359
 - career education practice, 27768
 - guidance counselor's handbook, 19147
 - human self-development, our moral heritage, Army pamphlet, 26963
 - planning for Army National Guard officers, career, 27758
- Guidance systems:
 - Apollo experience report, guidance and control systems, engineering simulation program, 20292
 - category 3 ILS ground guidance equipment—
 - STAN-37 localizer tests at NAFEC on R/W-4, interim report, test and evaluation, 24033
 - STAN-38 glide slope tests at NAFEC on runway 4, test and evaluation, 24051
 - flight test and evaluation of heliport lighting for IFR, 24055
 - spacecraft and aircraft guidance systems, USSR study, 20456
 - techniques for generation of control and guidance signals, derived from optical fields of spacecraft for detection and identification of landmarks, 17692
- Guide for analyzing pesticide legislation, digest of state pesticide use and application laws, 32530
- Guided missiles, *see* Missiles.
- Guideline manual, State planning agency grants, 16211, 21891, 29147
- Guidelines and standards for use of volunteers in correctional programs, 17645
- Guidelines for developing or revising water quality standards, 28828
- Guidelines for library handbooks, 31569
- Guidelines for police performance appraisal, promotion, and placement procedures, 27654
- Guidelines for reevaluation of employment requirements and practices pursuant to emergency employment act, 15604
- Guidelines for weed control, 31912
- Guides, *see* names of departments, etc., issuing guides—*also* subjects.
- Guild, D. H., economics and use of large scale electroanalysis plants on selected tidal estuarial waters, 17564
- Guinea:
 - agricultural commodities, agreement, 17884
 - Equatorial Guinea, background notes, 26852
 - Liberia boundary, study, 23996
 - Sierra Leone, boundary, study, 30649
- Guinn, Nancy, important factors in motivating AFROTC officer personnel in zero-draft environment, 25840
- Gulf, *see* name of gulf, or place where located.
- Gulf Coast:
 - environmental guide for U.S. Gulf Coast, 30482
 - light list, Little River, S.C. to Rio Grande, Tex., 28222
 - nautical chart catalogs, 22092, 29379
 - shrimp data, 18411
 - annual summary, 27795
- Gulf States, bridges over navigable waters of United States, 24272
- Gulf Stream, monthly summary, the Gulf Stream (periodical), 18640
- Gullies, how to control a gully, 30698

- Gully control structures, how to control gully, 30698
- Gumtz, Garth D., restoration of beaches contaminated by oil, 23184
- Gunboat, *see* Warships.
- Gunnery, hearing protectors for use on firing ranges, 26604
- Gunnison River:
 - flood plain information, 28704
 - floods, Grand Junction, Colo., 28736
- Guns:
 - dealers, published ordinances of firearms, important information, 26955
 - Gun control act, questions and answers, 20953
- Guns, *see* Firearms.
- Gustafson, David H., employee incentive system for hospitals, 15628
- Gusts, *see* Winds.
- Gutenberg Bible, *see* Bible.
- Guthridge, Guy G., Antarctica journal of United States, 17997
- Gutierrez, M., four instrumentation developments of general interest, 32542
- Guyana:
 - basic data on economy, 28637
 - economic trends and their implications for United States, 31511
 - other South American areas mineral industry, minerals yearbook chapter 16299
 - radio communications between amateur stations on behalf of 3d parties, agreement, 17871
- Guying to prevent wind sway influences loblolly pine growth and wood properties, 21677
- Gwinnett County, Ga.:
 - mineral rights conveyance—law, 19332
 - reports, 19581, 19922
- Gyekenyesi, John P.:
 - three-dimensional elastic stress and displacement analysis of—
 - finite circular geometry solids containing cracks, 29287
 - tensile fracture specimens containing cracks, 27713
- Gypsum:
 - mineral industry surveys—
 - advance summaries, 21936, 31585
 - quarterly, 18412
 - minerals yearbook chapter, 25446
 - see also* Plaster.
- Gypsy moths:
 - gypsy moth, major pest of trees, 28009
 - help destroy gypsy moths, 29631
- Gyro compass, *see* Gyrocompass.
- Gyrocompass, gyros, heading indicator and compass effect, USSR study, 16199
- Gyroplanes, private and commercial pilot, gyroplane flight test guide, 16067
- Gyros, heading indicator and compass effect, 16199
- Gyroscopes:
 - biaxial gyrostabilizer and superconducting spherical suspension, USSR study, 23548
 - gyro instruments, USSR study, 30365
 - gyros, axis disturbance probability characteristics, bearing friction with forced base rotation, astatic gyro gimbal errors with drift, and horizontal pendulum energy dissipation, USSR study, 17620
 - gyroscope deviations and imbalance, USSR study, 30346
 - gyroscopes and gyromotors, USSR studies, 27628
 - gyrostabilizers, USSR study, 32403
 - inertial systems, USSR study, 23519
 - motion studies of gyro instruments and bipolar measurement error, 21857
 - navigational instruments, USSR study, 27651
 - performances of various types of gyroscopes discussed, USSR study, 29145
- Gyrostabilizers, 32403

H

- H. & R.E. & B.I.U. *see* Hotel & Restaurant Employees and Bartenders International Union.
- H. H. Scott, Inc., solid-state radio receivers, radio-phonograph combinations, loudspeakers, and amplifiers, Tariff Commission report, 27948
- H.O. publication, 16436-439, 17790, 22160, 23120-121, 23869-871, 25031, 26344-345, 27418-418B, 28626-632, 30124-125, 31200-201, 32182
- Haar functions, *see* Mathematics.
- Haas, Larry A.:
optimizing decomposition of carbonyl sulfide in electrical discharge, 21953
sulfur dioxide, its chemistry as related to methods for removing it from waste gases, 30419
- Habeas corpus, rules governing procedures, proposed amendments, 24110
- Habitability, field evaluation of effects on hearing and general habitability of own-ship echo-ranging during submarine patrol, 20523
- Habitat:
classification of deer habitat in ponderosa pine forest of Black Hills, S. Dak., 16091
human habitat and health, Congress on Environmental Health, American Medical Association, proceedings, 28247
- Hackberry, American wood, 31354
- Hackett, Gerald A., executive calendar, Senate, 18565
- Hackler, Larry W., wing leading edge fuel tank impact tests, 24044
- Hadeninae, *see* Lepidoptera.
- Hades Creek Research Natural Area, general information, 21621
- Hafnium, minerals yearbook chapter, 25494
- Hafka, Raphael T., automated procedure for design to wing structures to satisfy strength and flutter requirements, 30456
- Hage, Richard E., Better communities act, cities speak, 31412
- Hague Conference on Private International Law:
appropriations for participation by United States, amendment to joint resolution authorizing, law, 19428
U.S. contributions, report, 19852
- Hahn, Jerold T., local net timber volume equations for Wisconsin, 28939
- Hahns Peak quadrangle, general geology of Hahns Peak and Farwell Mountain quadrangles, Routt County, Colo., 26490
- Haidar, Walter, foreign trade regulations of Mexico, 19302
- Haig, Alexander M., jr., nomination, hearing, 19951
- Hailey, Idaho:
Big Wood River—
flood plain information, 17379
floods, 20146
- Hair, Dwight, demand and price situation for forest products, 15478
- Hair, *see* Wigs.
- Haiti:
background notes, 20785
gazetteer, official standard names, 31391
mineral industry, minerals yearbook chapter, 20539
trade, meat imports, agreement, 16519
- Hakodate, Japan, summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23889
- Hal Michaels Committee, political committee, annual report, 24470
- Hale, Allen:
police traffic services, basic training program—
course guide, 22049
instructor's lesson plans, 22050
student study guide, 22051

- Hale, B. H., site preparation and machine installation, 22500
- Hale, Mason E., jr., fine structure of cortex in lichen family Parmeliaceae viewed with scanning-electron microscope, 25696
- Hale, Samuel, jr., solid waste management, closing the circle, 25124
- Haleakala National Park:
addition to National Wilderness Preservation System, proposal, 23000
wilderness recommendation, 22127
- Hales, John E., jr., study of radar echo distribution in Arizona during July and August, 30538
- Halfway houses:
alcoholism halfway houses, general characteristics, 23767
community treatment centers, guidelines and standards, 29148
directory of halfway houses for mentally ill and alcoholics, 25588
selected characteristics of residents in alcoholism, halfway houses, 25593
- Halides, crystal structure transformations in binary halides, 16358
- Hall, Albert W., some loading conditions imposed by ground turning maneuvers with 3 jet transport airplanes, 23690
- Hall, Frederick C.:
Baird Basin Research Natural Area, 21609
Bluejoy Research Natural Area, 21610
Canyon Creek Research Natural Area, 21614
Goodlow Mountain Research Natural Area, 21620
Horse Ridge Research Natural Area, 21623
Metolius Research Natural Area, 21629
Mill Creek Research Natural Area, 21630
Ochoce Divide Research Natural Area, 21634
Pataha Bunchgrass Research Natural Area, 21636
Persia M. Robinson Research Natural Area, 21637
Pine Creek Research Natural Area, 21639
Pringle Falls Research Natural Area, 21641
Rainbow Creek Research Natural Area, 21643
Turnbull Pine Research Natural Area, 21646
Wolf Creek Research Natural Area, 21650
- Hall, James T., earning a living with sheep, 25135
- Hall, Kenneth R., certificates of registry, enrollment, and license issued at Edgartown, Mass., 1815-1913, 25537
- Hall, Richard, horticultural service businesses, dollar volumes and State rankings, 32189
- Hall effect, properties of crystalline bismuth selenide and its use as Hall effect magnetometer, 23682
- Hallbach, Paul F., radionuclide analysis of environmental samples, laboratory manual of methodology, 20736
- Hallmark (periodical), 18413
- Halls Bayou:
Harris County, Tex.—
flood plain information, 28709
floods, 28739
- Halpern, David, wind recorder, current meter and thermistor chain measurements in northeast Pacific, 22094
- Halverson, Howard G., seasonal snow-surface energy balance in forest opening, 25879
- Halvorson, Curtis H., device and technique for handling red squirrels, 16489
- Hamann, John A., improved methods and equipment for boning turkeys, 29615
- Hamersma, J. W., chemical desulfurization of coal, report to bench-scale developments, 28805, 30179

INDEX 1973

- Hamill, Peter V.V. :
height and weight of—
children, socioeconomic status, United States, 17749
youths 1-17 years, U.S., 23724
- Hamilton, R. M., seismicity of Pahute Mesa area, Nevada test site, 23372
- Hamilton County Republican Central Committee, annual report, 22843
- Hammond, R. E., oceanographic observations, North Atlantic Ocean Station DELTA, Aug. 27, 1967-Aug. 25, 1968, 28224
- Hammond Shoe Corporation, men's and boys' leather footwear, Tariff Commission report, 25781
- Hampton, Robert E., reappointment, hearings, 31158
- Hampton, Va., area wage survey, 29167
- Hampton Roads Republican Woman's Club, annual report, 22973
- Han River, basin, Korea, water resources study, 31786
- Hanamoto, B., effect of snow cover on obstacle-crossing performance of vehicles, 21442
- Hancock County, W. Va. :
flood plain information, Ohio River, 17389
floods, 20141
- Hancock County Republican Central Committee, annual report, 24551
- Hancock County Republican Executive Committee, annual report, 22707
- Hand tools :
compilation, 16349
general suppression system design requirements for portable electric hand tools, military standards, 20068
- Handbooks, *see* names of departments, etc., issuing handbooks—*also* subjects.
- Handedness and adaptation to distortions of size and distance under water, 26641
- Handicapped :
accommodations for handicapped on Metro system, hearing, 21287
citizen advocacy for handicapped, impaired and disadvantaged, overview, 16457
Education for the handicapped act, amend—
hearings, 28560, 29899
report, 31077
effectiveness of vocational rehabilitation in helping the handicapped, GAO report, 28988
Federal assistance to States and agencies for research and training in rehabilitation of report, 29987
feeding the child with a handicap, 30404
guidelines for identifying, classifying, and serving disadvantaged and handicapped under vocational education amendments, 25054
Head Start services provided to handicapped children, 30867
how Federal agencies have served the handicapped, 20448
number of pupils with handicaps in local public schools, spring, 28669
opening doors for handicapped, publicity guide and activities calendar for State and local committees on employment of handicapped, 32535
performance (periodical), 18753
programs for the handicapped (periodical), 18824
screening and assessment of young children at development risk, 26794
selective placement in Federal civil service employment of physically handicapped, etc., handbook, 19281
summer Head Start services to handicapped children, 28204
Wagner-O'Day act, amend, reports, 28493, 29853
- Handicapped—Continued
working toward employment of handicapped (remarks), 29451
see also Disabled.
- Handicapped, Office for, establish, report, 17165
- Handkerchiefs, Federal item identification guide, 32165
- Handles, Federal item identification guide, 23600, 30100
- Handling equipment, aircraft ground handling equipment, Federal item identification guide, 31180
- Hands :
clean hands, manos limpias, how to wash hands, 30241
handedness and adaptation to distortions of size and distance under water, 26641
Handsheets, fiber bonding and tensile stress-strain properties of earlywood and latewood handsheets, 32339
- Hanford reactors, *see* Reactors (atomic).
- Hanford Reservation, Wash., geology and ground-water characteristics of Hanford Reservation of Atomic Energy Commission, Wash., 26505
- Hang Kiu Wah, *see* Wah, Hang Kiu
- Hanging ten and higher education, 26366, 28659
- Hanks, Leland F., green lumber grade yields for subfactory class hardwood logs, 27537
- Hanley, H. J. M., on utility of m-6-8 potential function, 26704
- Hann, R. A., lecture, May 8, 1972, 23279
- Hann, Roy W., jr., hydrologic engineering methods for water resources development, water quality determinations, 28767
- Hanna, W. F., gravity, magnetics, and geology of San Andreas fault area near Cholame, Calif., 26500
- Hannon, Virginia, bibliography, 1969-70, epidemiology of mental disorders, 26743
- Hanover, N.H., flood plain information, Connecticut, White, Mascoma Rivers, 20115
- Hans Peak, Colo., disseminated silver-lead-zinc sulfide occurrence, 26493
- Hansen, Julia B., for Congress Committee, *see* Julia Butler Hansen for Congress Committee No. 2.
- Hansen, Julia Butler, Appreciation Committee, *see* Julia Butler Hansen Appreciation Committee.
- Hanson, A. A., grass varieties in United States, 19103
- Hanson, John, 6-cent postal card (poster), 16557
- Happy balance, 24192
- Happy Camp for Congress, political committee, annual report, 24313
- Harbor workers, *see* Longshoremen.
- Harbors :
flood control and multi-purpose projects, public works authorizations, reports, 19654, 19715, 19871
flood control, improvements, compilation—departmental edition, 26385
document edition, 21155
Offshore marine environment protection act, hearings, 30015
Ports and waterways safety act, 16872
Project Tugboat, explosive excavation of harbor in coral, 26391
rapidly deployable oil containment boom for emergency harbor use, 27461
shore termination for oil spill booms, 28800
see also Ports—*also* names of harbors or places where located.
- Hard-clams, *see* Clams.
- Hard woods, *see* Hardwoods.
- Hardesty, George K.C., NAVSHIPS display illumination design guide, introduction to light and color, 30597
- Hardin County Republican Executive and Central Committee, annual report, 22710

- Hardison, Clayton H., accuracy of low-flow characteristics estimated by correlation of base-flow measurements, 21741
- Hardness, hot hardness characteristics of austempered AISI M-50, Matrix II, WD-65, modified AISI 440-C, and super nitralloy, 29281
- Hardship deferment, questions and answers about "extreme hardship" deferments, 20754
- Hardt, John F., U.S.-Soviet commercial relations, interplay of economics, technology transfer, and diplomacy, 28410
- Hardware:
design requirements for standard hardware program electronic modules, 27407
standard hardware program modules, requirements for employing, military standard, 27406
- Hardwoods:
anthracnose of eastern hardwoods, 16074
Appalachian hardwoods for pallets, correlation between service and laboratory testing, 20304
burning to reduce understory hardwoods in Arkansas Mountains, 23298
green lumber grade yields for subfactory class hardwood logs, 27537
guide to hardwood log grading, 28924
investment in precommercial thinning of northern hardwoods, 20307
long length cuttings from no. 2 common hardwood lumber, 25229
new kind of end-glued joint for hardwood industry, 25223
northern bleached hardwood kraft pulp from Canada, determination of injury, etc., Tariff Commission report, 24066
nursery diseases of southern hardwoods, 16075
volume of selected hardwood species suitable for turnery bolts in Maine, 31363
- Hardy, Edward P., Jr., Health and Safety Laboratory fallout program, quarterly summary reports, 19180, 28078, 30773
- Hardy, Robert R., Campaign Fund, *see* Robert R. Hardy Campaign Fund.
- Hardy, Susan B., 1972 boundary and annexation survey, 29786
- Hare, Charles T.:
exhaust emissions from uncontrolled vehicles and related equipment using internal combustion engines—
outboards motors, 29647
small air-cooled spark ignition utility engines, 30726
- Hare, Donald B., catalog of tissue typing antisera, 23743
- Harebell Formation, Wyo.:
Harebell formation (upper Cretaceous) and Pinyon conglomerate (uppermost Cretaceous and Paleocene), northwestern Wyoming, 27568
sedimentary petrology and paleocurrents of Harebell formation, Pinyon conglomerate, and associated coarse clastic deposits, northwestern Wyoming, 21731
- Hargreaves, John R., Hargreaves for Congress Committee, annual report, 24509
- Hargreaves for Congress Committee, annual report, 24509
- Harley, John H., HASL procedures manual, 19183
- Harmful intruder, noise in the home, 16018
- Harmon, Hubert R., memorial lectures in military history (series), 19140, 24147
- Harmon, N. Y., railroad employee accident report, 32546
- Harmon Foundation:
select audiovisual records—
contemporary African art, still pictures, 22000
Negro art, 31671
- Harmony, in productive harmony, environmental impact statements broaden Nation's perspectives, 16019
- Harney, Brian M., application to remote sensing to air pollution detection and measurement, 26650
- Harper, William B.:
mineral industry of Alabama, 16261
natural gas, 25475
- Harpold, William C., relief, 19346, 19599
- Harral-Wheeler House, Bridgeport's gothic ornament, 20767
- Harrer, Joseph M., nuclear power reactor instrumentation systems handbook, 28085
- Harris, A. S., natural reforestation after logging on Afognak Island, 20299
- Harris, Carolyn, in productive harmony, environmental impact statements broaden Nation's perspectives, 16019
- Harris, Deane, Census Bureau methodological research, papers and reports, lists, 19194, 29688
- Harris, Elias J., method for calculating mine ventilation pressure losses using computers and desk-top calculators, 29212
- Harris, J. Donald, field evaluation of effects on hearing and general habitability of ownship echo-ranging during submarine patrol, 20523
- Harris, Ronald G., distribution of medicare benefit disbursements by type, 25701
- Harris, Sam P., State departments of education, State boards of education, and chief State school officers, etc., 25056
- Harris, Stanley S., nomination, hearing, 19962
- Harris, Suzanne, general correspondence of Office of Secretary of Commerce, 27718D
- Harris, Van T., wildlife research 1971 problems, programs, progress, 25716
- Harris, Walter M., Federal and Indian lands, coal phosphate, potash, sodium and other mineral production, royalty income and related statistics, 29013
- Harris County, Tex.:
Greens and Halls Bayous—
flood plain information, 23709
floods, 28739
records of wells in Harris County, Tex., 23369
special flood hazard information—
Clear Creek, 28771
Cypress Creek, 28774
White Oak Bayou, Cole Creek, Vogel Creek, 28777
- Harris-Intertype Corp., sheet-fed printing presses and industrial paper cutters, former workers of Dayton, Ohio, plant of Harris-Seybold Division, Tariff Commission report, 27947
- Harris-Seybold Division, *see* Harris-Intertype Corp.
- Harrison, Jack E., tectonic events at intersection between Hope fault and Purcell Trench, northern Idaho, 16106
- Harrison, Virden L., accounting methods allowed farmers, tax incentives and consequences, 23129
- Harrison, William L., soil failure under inclined loads, 21438
- Harrison County, W. Va., flood plain information West Fork River and Elk Creek, Clarksburg and vicinity, 32226
- Harrie, David T., liquid propellant rocket combustion instability, 21080
- Harry Belafonte Show Committee, annual report, 24584
- Harshman, E. N., geology and uranium deposits, Shirley Basin area, Wyo., 16107
- Hart, Annie L., day care facts, 25807
- Hart, B. A., geographical areas serviced by Bell and independent telephone companies in U.S., 25966
- Hartford, Vt., flood plain information, Connecticut, White, Mascoma Rivers, 20115
- Hartford North quadrangle, Conn., geologic and hydrologic maps for land use planning in Connecticut Valley with examples from folio of Hartford North, 21714

INDEX 1973

- Hartland, Vt., flood plain information, Connecticut, White, Mascoma Rivers, 20115
- Hartman, George S., U.S. Government purchasing and sales directory, 32551
- Hartranft, George J.:
polyurethane shroud designed to prevent TACAN outages, 24043
TACAN-DME false distance lock-on, 30654
- Harvesting:
additional actions needed to minimize adverse environmental impacts of timber harvesting and road construction on forest land, GAO report, 25236
evaluation of 2 tree shakers for harvesting cones, 27526
harvesting, storing, and packing apples for fresh market, regional practices and costs, 31917
merit, red rock and Potomac, tomato varieties adapted to mechanical harvesting, 16613
weed harvest and lake nutrient dynamics, 31267
- Harvesting machinery:
economic analysis of cling peach production with emphasis on harvest mechanization, 27986
retrieval and baling machine for polyethylene field cover, 22393
underwater oil harvesting technique, development and demonstration, 28813
- Harvey, George R., adsorption of chlorinated hydrocarbons from seawater by crosslinked polymer, 28806
- Harvey, John M., market diseases of stone fruits, cherries, peaches, nectarines, apricots and plums, 20899
- Harwood, David S., bedrock geology of Cup-suptic and Arnold Pond quadrangles, west-central Maine, 27553
- Has your child had lead test yet? 28246
- Hashish:
hashish trail, world drug traffic and its impact on U.S. security, hearings, 19991
research on marihuana and hashish, world drug traffic and its impact on U.S. security, hearings, 19991
- Hasbrouck, W. P., Amchitka geopiezomagnetic experiment, 30541
- Haskett, P. R., copper recovery from chalcopyrite by roast-leach procedure, 25516
- Hassan, Jeru-Ahmed, D.C. Citizens for Hassan, annual report, 22916
- Hassayampa River, flood plain information, Hassayampa River, vicinity of Wickenburg, Ariz., 17384
- Hastings, James F., Hastings Congressional Committee, annual report, 25997
- Hastings Congressional Committee, annual report, 25997
- Hatcheries, *see* Fish and fisheries—Poultry.
- Hatfield, William F., soil survey of Jefferson County, W. Va., 26841
- Hatley, Rolan M., availability of public transportation and shopping characteristics of SMSA households, 32283
- Hatters, brief outline of origins of glass-maker, silversmith, wig-maker and hatter in American colonies, 22090
- Haughey, Betty E.:
automobile safety belt activities book, grades 4-7, 26733
safety belt instructional booklet, 22053
safety belt instructional booklet, 22053
safety belts, instructor guide, 16378
- Haushild, W. L., radionuclides transport in Columbia River from Pasco to Vancouver, Wash., 27563
- Havasupai Indians:
general information, 31459
judgment funds, disposition—
law, 19373
report, 17160
- Haverhill, Mass., area wage survey, 16229
- Haviland, Virginia:
children's books, 1972 list of books for preschool through junior high school age, 26634
questions to artist who is also an author, conversation between Maurice Sendak and Virginia Haviland, 16242
wide world of children's books, exhibition for International Book Year, annotated catalog, 29191
- Hawaii:
aircraft accident report, 16425
census of business, 1967, selected services, 16703
census of housing, 1970, housing characteristics for States, cities, and counties, 15541
census of population, 1970, characteristics of population, 29700
census of transportation, 1972, truck inventory and use survey, 22539
climatological data, 18081
coast pilot, 26765
conservation needs inventory, 27889
county business patterns, 31956
electric rate book, 20255
estimates of population of Hawaii counties, current population reports, 25936
food irradiation program, 29676
hunting, possession transportation, and importation of migratory birds, in contiguous United States and in Hawaii, 1972-73, Federal regulations, 20781
investigation of floods in Hawaii, progress report, 23350
marine weather services chart, Hawaiian waters, 29422
mineral industry, minerals yearbook chapter, 25459
natural history of northwestern Hawaiian Islands—
Gardner Pinnacles, 26820
Kure Atoll, 26820
nautical chart catalog, 29350
pollution of navigable waters of Pearl Harbor and its tributaries, conference proceedings, 16028
precipitation data, hourly, 18432
President's Water Pollution Control Advisory Board, Honolulu, report, 28838
Public Interest protection act, hearing, 27310
surface water quality, 16116
tide tables, high- and low-water predictions, 25614
water resources, data, 23389
- Hawaii Dental Political Action Committee annual report, 22919
- Hawaiian Fruit Packers, Ltd., canned pineapple and pineapple juice, workers of Hawaiian Fruit Packers, Ltd., Kapa, Kauai, Hawaii, Tariff Commission report, 29549
- Hawaiian Islands, *see* Hawaii.
- Hawaiian waters, marine weather services chart, 29422
- Hawbaker to Congress Committee, annual report, 22719
- Hawk missiles, *see* Missiles.
- Hawksworth, Frank G., procedure for using yield simulation programs for dwarf mistletoe-infected lodgepole and ponderosa pine, 32328
- Hawley, C. C., geology and mineral deposits of upper Chulitna-Yentna, 29021
- Hawthorne, J. Russell, contributions of selected residual elements to radiation-embrittlement sensitivity of steel forgings, 27855
- Hay:
feed statistics, 1971 supplement, 19130
stocks of grain, oilseeds, and hay, revised estimates by States, 1964-70, farm and off-farm stocks, 20934, 25834
- Hay fever, clinical material in relation to hay fever (remarks), 29354

Hayes, Philip T., stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, 17528
 Haynes, Gilbert A., effect of MeV electrons on ceria-doped solar cell cover glass, 29282
 Hays, Wayne L.:
 Hays for Congress Committee, annual reports, 26000
 Columbiana County, 22883
 Hays County Republican Party, annual report, 24423
 Hays for Congress Committee:
 annual reports, 26000
 Columbiana County, 22883
 Hazard evasion program for mine planning, 16339
 Hazardous occupations, *see* Occupations.
 Hazardous substances:
 chemical data guide for bulk shipment by water, 25956
 Federal hazardous substances act—
 amend, reports, 19656, 29879
 text, 26171
 index to hazardous materials regulations, title 49, Code of Federal regulations, 26904
 interstate commerce, regulate to protect health and environment from hazardous chemical substances, hearings, 28419
 need for improved inspection and enforcement in regulating transportation of hazardous materials, Department of Transportation, GAO report, 28997
 oil and hazardous substances program series, 17930
 opportunity for AEC to improve its procedures for making sure that containers used for transporting radioactive materials are safe, GAO report, 30258
 packaging and handling for military aircraft transportation, Air Force manual, 29652
 Railroad safety and hazardous materials control act, amend, report, 29851
 risk concepts in dangerous goods, transportation regulations, special study, 16427
 Transportation control act, amend, report, 29851
 transportation of dangerous articles, etc., Federal aviation regulations, 18296
 transportation of hazardous materials, hearings, 23017
 Hazards:
 chemical rocket/propellant hazards, liquid and solid, aerospace medicine, 26952
 coal waste banks, list, 31496
 elimination of hazardous open canals, hearing, 15906
 hazard—
 detecting instruments and apparatus, Federal item identification guide, 32169
 elimination procedures for leaded paints in housing, 27734
 from engines rebreathing exhaust in confined space, 30434
 jet blast hazards, special study, 30566
 model airport hazard zoning ordinance, 21533
 new pumping system for a 150-kilovolt neutron generator to reduce present tritium hazard, 23914
 procedures for evaluating hazards to coal mining operations from hydrocarbon reservoirs, 29206
 target health hazards, 20731
 Head, apparent object movement produced by head movement under water, 16247
 Head Start Project, *see* Children.
 Headquarters, headquarters and headquarters company, etc., field manual, 19161
 Health:
 activities, calendar of national meeting, 18251

Health—(Continued)
 advocate of public interest, Comprehensive Health Planning Service, 25978
 alcohol—
 and health notes (periodical), 25585
 and you, HSMHA employee health program on alcoholism, HSMHA developing model program to combat alcoholism, 16038A
 health and research world, 29362
 ancillary health personnel in maternal and child health projects, use, 31576
 barriers to health care for older Americans, hearings, 31122, 32124
 better use of outpatient services and nursing care bed facilities could improve health care delivery to veterans, GAO report, 27546
 bibliography of epidemiology, preventive medicine and public health, 25608
 career in health statistics with National Center for Health Statistics, 23720
 careers guidebook, 23578
 CDC veterinary public health notes, 18057
 chart book on smoking, tobacco & health, 16797
 children and youth projects, comprehensive health care in low-income areas, 20521
 CHScene, notes from Community Health Service, 18070
 coal mine health and safety research program, 31584
 coal mine health seminar, 20536
 community mental health centers, cost-finding and rate-setting, 17766
 compendium of national health expenditures data, 23970
 control in healthy and diseased organism, USSR study, 27623
 criteria for recommended standard occupational exposure, 25583-584, 26735-738, 27764-765
 current estimates from health interview survey, 27745
 depressive illnesses, major public health problem, 32497
 directory of on-going research in smoking and health, 27042
 directory of State and areawide comprehensive health planning agencies under sec. 314 of Public Health Service act, 22650
 education programs, Department of Medicine and Surgery, Veterans' Administration, 30680
 emergency health care services, report, 30963
 emergency health services digest, 29040
 environmental—
 exposure to nonionizing radiation, 30612
 health effects research series, 28796, 31270-271
 health perspectives, 22064, 23748, 31694
 healthfulness for migrant workers, hearings, 29024
 quality as it relates to health, selected references (periodical), 18899
 facilities, Hill-Burton program, 1947-71, progress report, 21749
 farm worker occupational safety and health, oversight, hearing, 21215
 Federal coal mine health and safety act—
 annual report, Federal coal mine health program in 1971, 21763
 black lung benefits, 19992
 implementation, hearing, 19996
 moving forward in coal mine health and safety, report of Secretary of Interior of administration of act, 17563
 Federal health benefit programs administration, hearings, 15742
 fund-raising within Federal service for voluntary health and welfare agencies, manual, 27048

INDEX 1973

Health—Continued

general industry—
 guide for applying safety and health standards, 20730
 safety and health standards, 16455
 general purpose traineeships, grants for public health traineeships, 23406
 guide—
 grant and award programs, National Institutes of Health, 17767
 literature of epidemiology, preventive medicine, and public health, current bibliography of epidemiology, 18182
 repayment, deferment, and cancellation of health profession student loans, 23407
 happy balance, good nutrition, healthy person, 24192
 health and nutrition examination survey, 20659
 United States 1971-73, plan and operation, 26717
 health aspects of pesticides, abstract bulletin, 18417
 health careers film guide, 21760
 health characteristics of low income persons, 16367
 health consequences of smoking, Surgeon General's report, 29041
 health effects of environmental pollution, 32265
 health facilities series, 26517-518
 health guidelines for water and related land resources planning, development and management, 32609
 health maintenance organizations, provide assistance and encouragement for establishment and expansion, hearings, 15760
 Health programs extension act—
 law, 32003
 report, 28353
 health screening and treatment for children through medical, 30405
 health services—
 domestic, agricultural, migrant workers, 1972, hearing, 21368
 guide for project directors and health personnel, 21746
 migrant children, 21423
 reports (periodical), 18418
 research, bibliography, 16365
 rural America, 29619
 use, national trends and variations, 22022
 HEW health programs, oversight, hearing, 27219
 IISMHA employee health program on alcoholism, policies, procedures, and assignment of responsibilities, 21536
 human habitat and health, Congress on Environmental Health, American Medical Association, proceedings, 28247
 impact of health on earnings and labor market activity, 21916
 improving health care through research and development, 27876
 Indian health program, Public Health Service, 17555, 27589
 interested in environmental health? Operation MEDHIC, 21761
 international health programs, 1972, hearings, 19997
 inventory of Federal programs supporting health manpower training, 26521
 job safety & health (periodical), 18525
 long-term institutional care and alternative solutions, 23626
 longitudinal health survey, 31579
 look to future of Soviet public health, USSR study, 25360
 major health programs, fiscal data for health authorities expiring in 1973, tables, 27227
 mandatory safety standards, underground coal mines, 25427
 manpower, training Nation's health manpower, 16125

Health—Continued

marihuana and health, report to Congress, 19998
 Maternal and Child Health Service reports on promoting health of mothers and children, 23624
 maternal and child health services of State and local health departments, 25402
 medical and health related sciences thesaurus, 16396
 medicine and public health in People's Republic of China, 27617
 bibliography of Chinese sources, 29123
 meeting health manpower needs through more effective use of allied health workers, 29154
 more concerted effort needed by Federal Government on occupational safety and health programs for Federal employees, GAO report, 25235
 moving forward in coal mine health and safety, report of Secretary of Interior on administration of Federal coal mine health and safety act, 17563
 national health expenditures, fiscal year 1972, 22240
 National health research fellowship and traineeship act, hearings, 27224
 National Institute of Health Care Delivery act, report, 32100
 occupational health manual, improvement, treatment, prevention, manual, 27693
 occupational safety and health—
 act—
 implementation, hearings, 21369
 oversight and proposed amendments, hearings, 23013
 text, 24867
 maritime standards and interpretations, 30599
 other regulations and procedures, 27860, 31762
 optometrists employed in health services, 1968, United States, 27752
 phase 4, economic stabilization program, 32157
 physician's role in health delivery system, hearing, 24872
 prenatal-postnatal health needs and medical care of children, U.S., 26718
 pressing problems of economics and planning of health services, USSR study, 26581
 professions and occupation, join Life Corps, 27578
 protecting health of coal miners, inter-agency approach, 30500
 public health—
 act, explanation of H.R. 7274, 27228
 bibliography series, 16467, 30610
 cigarette smoking act—
 amend, text and background information, 29929
 amendments, hearings, 21321
 report to Congress by FTC on enforcement, etc., 17490
 code of Federal regulations, 17468
 laws, compilation, 24867, 26171
 traineeship program for professional personnel, hearing, 21377
 U.S.-U.S.S.R. cooperative agreements, 17095
 Public Health Service—
 act, amend—
 hearings, 19997
 report, 15711
 grants and awards—
 1971 funds, 25598
 1972 funds, 20674, 25599-600
 quality control and measurement of non-sampling error in health interview survey, 27744
 radiation control for Health and safety act—
 annual report to Congress on administration, 32026

Health—Continued

radiation control for Health and safety act—continued
 regulations for administration and enforcement, 22207
 radiological health programs, State and local, report, 25679
 radiosensitivity in prenatal, adolescent and adult animal, 17814
 regionalization of Veterans Administration's health care system, 27368
 relevance of prepaid group practice to effective delivery of health services (address), 16841
 reliability of estimates with alternative cluster sizes in health interview survey, 27742
 reporting health events in household interviews, effects of extensive questionnaire and diary procedure, 17746
 requirements and regulations governing interstate and international movement of livestock and poultry, State-Federal, 29655
 research facilities construction program, message from the President, 16944
 review and comment responsibilities of State and areawide comprehensive health planning agencies, 28251
 review of developments and progress in public health, USSR study, 26598
 safety, occupational health and fire protection bulletin, VA, 18883
 small business and Occupational safety and health act, report, 16976
 small fry smiles, guide for teaching dental health in community care programs, 17554
 smoking and health—
 bibliography, 16467, 30610
 bulletin (periodical), 18910
 social and health indicators system, census use studies—
 Los Angeles, 29722
 rural, Mound Bayou, Miss., 29723
 Soviet public health (USSR periodical), translations, 16918
 Spanish-language health communications teaching aids, list of printed materials and their sources, 31410
 survey of some health-related research and development at National Bureau of Standards (remarks), 21110
 synergism, dynamics of health, 17552-553, 20365-367, 25264
 target health hazards, 20731
 technology of health manpower utilization, uniform measurement and evaluation, 23776
 topics of study interest in medicine and public health in People's Republic of China, report of planned meeting, 21838
 towards systematic analysis of health care in United States, report to Congress, 29044
 training requirements of occupational safety and health standards, 26790
 trends of research on prevention of physiological aging and value of exercise for fitness and health, 31773
 unless you decide to quit, your problem isn't going to be smoking, your problem's going to be staying alive, 16798
 utilization of health services, indices and correlates, research bibliography, 25563
 Veterans' health care expansion act—
 hearings, 27246
 law, 32009
 report, 30995
 testimony submitted to Veterans' Affairs Committee, 27370
 vision, hearing, coordination and health in reading, 28674
 vital and health statistics—
 analytic studies, 25565
 data evaluation and methods research, 17746, 27742-744, 29329, 32489

Health—Continued

vital and health statistics—continued
 data from National health survey, 16367-370, 17747-749, 22026-32, 23724-725, 25566-567, 26718-720, 27745-751, 29330-331, 30481, 31682, 32490
 data from National vital statistics system, 26721, 27753
 data on National health resources, 25568-569, 27752, 29332, 31683
 documents and committee reports, 23723
 programs and collection procedures, 26717
 series, current listing and topical index, 22025, 30479
 voluntary health and welfare agencies, fund-raising within Federal service, manual, 18608
 what every employer needs to know about OSHA recordkeeping, 26616
see also Medical care—Medical personnel—Medicine—Mental health.
 Health and Environmental Science Office, TVA, annual report, 24074
 Health and Safety Laboratory:
 AEC fallout program, quarterly summary reports, 19180, 28078, 30773, appendix, 19181, 28077, 30774
 index, 19182
 HASL procedures manual, 19183
 Health boards and departments, review and comment responsibilities of State and areawide comprehensive health planning agencies, 28251
 Health Care Facilities Service, publications, 23401
 Health care institutions, *see* Health centers.
 Health careers film guide, 16395
 Health centers:
 accounting manual for health maintenance organizations, 21754
 Community mental health centers act, amend, reports, 26236, 28360
 factfinding visit to Europe and Israel, health care systems, 24948
 health facilities construction costs reduce with innovative techniques, new materials, etc., 21379
 health facilities, manpower, and community mental health centers act, report, 17143
 Health maintenance organization—
 and resources act of 1973 report, 27292
 authorize use for families of active duty uniformed services, report, 19620
 legislative proposals, comparison, 17066
 marketing services, technical publications 21755
 necessity for establishing, etc., 21765
 1973, provide assistance and encouragement for establishment and expansion, hearings, 31031
 objectives and issues, 21764
 provide assistance and encouragement for establishment and expansion, hearings, 15757-759
 questions and answers relating to subcommittee questionnaire, 17282
 some information descriptive of successfully operating, 29038
 inpatient health facilities as reported from 1969 MPI survey, 25569
 look to future of Soviet public health, USSR study, 25360
 marketing pre-paid health care plans, 22645
 medical record manual for ambulatory health centers, 30896
 mental health and learning, when community mental health centers and schools collaborate, 22075
 questions physicians are asking about HMOs and answers, 21756

INDEX 1973

- Health centers—Continued
 regional medical programs, oversight, hearing, 31032
 regionalization guidelines, 20853
 regionalization of Veterans Administration's health care system, 27368
 selected papers on consumerism in HMO movement, 31408
 utilization review program for health agencies, 19307
 Veterans' health care expansion act—
 hearings, 27246
 law, 32009
 report, 30995
see also Nursing homes.
- Health, Education, and Welfare Department :
 appropriations 1973—
 amendments, proposal, 19559
 hearings, 15866
 law, 19335
 reports, 16987, 19615, 21180, 21311
 supplemental—
 hearings, 26149
 proposal, 19808
 veto message, 19556
 appropriations, 1974—
 hearings, 26148, 27182, 28387, 28393,
 31009, 31126, 32132, 32135
 reports, 29861, 29885, 30983, 31117,
 32046
 Assistant Secretary for Education, nomination of Sidney P. Marland—
 hearings, 21376
 report, 21308
 Audit Agency journal, footnote, 21752
 catalog of assistance programs providing financial support and services to States, communities, organizations, individuals, 17551
 catalog of publications—
 cumulative issue, 21750
 quarterly, 18052
 common thread of service, historical guide to HEW, 16120
 comprehensive simplification and reform, MEGA proposal, hearings, 24945
 grants administration manual, 18409
 health programs, oversight, hearing, 27219
 impact of Federal programs to improve living conditions of migrant and other seasonal farmworkers, GAO report, 23319
 improvement needed in administration of program to provide medicare for welfare recipients, GAO report, 31381
 negotiated contracting process, guide for project officers, 23402
 operation MEDHC, military experience directed into health careers, 21762
 protecting consumer from potentially harmful shellfish (clams, mussels, and oysters) GAO report, 26483
 responsibility and responsiveness, 23403
 Secretary, nomination of Caspar W. Weinberger, hearings, 21335, 24945
 single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
 social service regulations under Social Security act, hearings, 28533
 training America's labor force, potential, progress and problems of vocational education, GAO report, 20338
 Under Secretary, nomination of Frank G. Carlucci, hearing, 21335
- Health effects of environmental pollution, 32265
- Health facilities, *see* Health centers.
- Health insurance :
 analysis of health insurance proposals during 92d Congress, 28435
 commercial health and accident insurance industry, is it competitive, can it provide adequate health care system, hearings, 27348
 digest of health and insurance plans, 1971 edition, 17669, 18227, 30394
- Health insurance—Continued
 factfinding visit to Europe and Israel, health care systems, 24948
 Federal employees—
 Federal personnel manual, supp., 18336
 health benefits—
 act, comprehensive, amendments, hearings, 26177
 active and retired Federal employees health benefits, annual report, 15601
 program, review of administration, hearings, 21278
 information to consider in choosing health plan, 15605
 financial planning manual for prepaid health care, 23404
 health insurance statistics—
 current medicare survey report, CMS series, 22232, 26334, 31808
 HI series, 22233-235, 23972, 29498-500, 32555
 how to claim medical insurance benefits, 17832
 improvements in employee health care benefits, 23601
 increase in Government's contribution under Federal employees health benefits program, hearing, 31037
 independent plans, 1971, description, etc., 27884
 information to consider in choosing health plan, 21089
 insurance coverage for U.S. nationals employed by Federal Government, report, 16965
 marketing pre-paid health care plans, 22645
 quantity-price relationships in health insurance, 23969
 social security rulings, 18912
 survey of veterans health insurance coverage and preference for hospital and outpatient care, 17103
 Health insurance, *see also* Medicare—Old age, survivors, disability and health insurance.
- Health maintenance organizations, *see* Health centers.
- Health Manpower Education Bureau, Nursing Division, selected publications, 25265
 Health personnel, *see* Medical personnel.
 Health professions, *see* Medical personnel.
- Health Sciences Uniformed Services University, *see* Uniformed Services University of Health Sciences.
- Health Service and Mental Health Administration :
 alcohol and you, HSMHA developing model program to combat alcoholism, 16038A
 appropriations, 1973—
 law, 15640
 report, 16955
 HSMHA employee health program on alcoholism, policies, procedures, and assignment of responsibilities, 21536
 HSMHA place for tomorrow's physicians, 25267
 job directory, 25268
 national heart, blood vessel, lung and blood program, program analysis, 30492
 poster, 27579
 public advisory committees roster of members, 16131, 23412, 26523, 32370
 publications, list, 20370
- Health service workers, use of ancillary health personnel in maternal and child health projects, 31576
- Hearing :
 adaptation to displaced hearing, non-pro-
 prioceptive change, 30407
 auditory effects of noise on air-crew personnel, 24205
 biblio-profile on human communication and its disorders, capsule state-of-the-art report with bibliography, 23768

Hearing—Continued
 binaural processing of speech in light air craft, 22511
 comparison of speech discrimination ability for simulated and real hearing loss at 3 and 6 KHZ, 25410
 effect of personal treatment of Navy subjects on hearing discrimination task, 20528
 field evaluation of effects on hearing and general habitability of own-ship echoing during submarine patrol, 20523
 hearing—
 and related medical findings among children, race, area and socioeconomic differentials, 22030
 conservation for mineral industry, 26648
 protectors for use on firing ranges, 26604
 loss at 3 kilohertz and chaba proposed clinical test of speech discrimination in noise, 25409
 loss, hope through research, 31700
 loudness function derived from data on electrical discharge rates in auditory nerve fibers, 29296
 peripheral auditory adaptation in psychoacoustical experiment, USSR study, 21847
 speech discrimination in noise and hearing loss at 3000 hertz, 23632
 speech, language and hearing program, guide for Head Start personnel, 26516
 use of circumaural earphones for attenuating ambient noise in bone conduction audiometry, 26645
 vision, hearing, coordination and health in reading, 28674
 Hearing aids:
 effect of electroacoustic characteristics of low-fidelity circuitry upon speech intelligibility, 25406
 performance measurement data and selection procedures, 25801
 Hearing examiner:
 examination announcement (administrative law judge), 19286
 labor-management relations examiner, National Labor Relations Board, 29370
 Hearn, George H.:
 addresses, etc.—
 August, 24, 1972, 16045
 Oct. 16, 1972, 21549
 Oct. 25, 1972, 21550
 Feb. 20, 1973, 25147
 Mar. 19, 1973, 25149
 Mar. 20, 1973, 25148
 Mar. 22, 1973, 25150
 Apr. 4, 1973, 28866
 May 3, 1973, 27506
 Heart:
 cardiac activity in man-operator in control process, characteristics, USSR study, 21876
 effects of altitude on Cebus apella monkey, 16658
 national heart, blood vessel, lung, and blood—
 act. law, 19368
 program—
 heart and blood vessel diseases, panel, report, 29343
 National Heart and Lung Advisory Council, report, 30488
 panel chairman, report, 29342
 program analysis, 29345, 30491-492
 summary, 29341
 radioisotope powered cardiac pacemaker program, 30766
 see also Artificial heart.
 Heart diseases:
 sugar in diet, diabetes, and heart diseases, hearings, 30063
 use of simple indicators for detecting potential coronary heart disease susceptibility in air traffic controller population, 16681

Heat:
 beating heat-wave weather, 16408
 deep-seated heat from earth, USSR study, 29144
 determining power conversion ratios and thermal efficiencies for atomic electric power plant, thermal layouts, USSR study, 25362
 dissociation rate of bromine diatomics in argon heat bath, 23685
 heat supply diagrams for USSR climatic regions, USSR study, 21882
 heated pipeline, some effects on groundwater flow in Alaska, 23374
 occupational exposure to hot environments, criteria for recommended standard, 28736
 thermal degradation, thermal oxidation and thermal analysis of high polymers, 4, literature survey, 27417
 thermophysical properties of—
 helium-4 from—
 2-1500 K pressures to 1000 atmospheres, 23709
 4-3000 R with pressures to 15000 PSIA, 23708
 parahydrogen from freezing liquid line to 5000 R for pressures to 10,000 PSia, 17738, 26702
 waste heat utilization, proceedings of national conference, 19177
 Heat and Mass Transfer, Institute, see Institute of Heat and Mass Transfer.
 Heat capacity:
 calorimeters for heat of solution and low-temperature heat capacity measurements, 17541
 ductility of titanium alloys and atomic ordering in nickel chromium alloy, 17631
 low-temperature heat capacities and high-temperature enthalpies of sodium chromate, 23650
 Heat engineering, heat engineering problems in nuclear centralized heating and power centers, USSR study, 21853
 Heat exchange, see Heat transfer.
 Heat exchangers, report on current standards for air-cooled heat exchangers, 28088
 Heat flux, see Heat transfer.
 Heat of solution, calorimeters for heat of solution and low-temperature heat capacity measurements, 17541
 Heat of vaporization, heat and water vapor exchange between water surface and atmosphere, 31284
 Heat pipes, see Pipe and pipe fittings.
 Heat resistant materials:
 creep and ruptures, USSR study, 26564
 features of heat-resistant steel recrystallization, USSR study, 26565
 heat resistance and sintering of nickel, USSR study, 26570
 increasing heat and impact resistance of zirconium-dioxide based ceramics, USSR study, 20470
 tin as alloying element in heat-resistant alloys, USSR study, 23515
 Heat shields, see Thermal protection.
 Heat transfer:
 application of phase-change technique to thin sections with heating on both surfaces, 32469
 ASRDI oxygen technology survey, thermophysical properties, 17706
 boiling crisis and critical heat flux, 21022
 calculation of profile drag at high gas velocities and in presence of heat transfer, 16179
 coolant-side heat-transfer rates for hydrogen-oxygen rocket and new technique for data correlation, 25527
 dynamic thermal performance of experimental masonry building, 32481

INDEX 1973

Heat transfer—Continued

- error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
- extended hydrodynamic theory of peak and minimum pool boiling heat fluxes, 30451
- heat and water vapor exchange between water surface and atmosphere, 31284
- heat transfer coefficients of dilute flowing gas-solids suspensions, 29261
- highpower and heat flux irradiation of uranium-plutonium carbides, fast reactor mixed carbide fuel element development program, 30772
- implicit finite-difference solution to viscous shock layer including effects of radiation and strong blowing, 20622
- influence of heat exchange of freezing chemical reactions in non-equilibrium laminar boundary, USSR study, 16180
- lee-surface heating and flow phenomena on space shuttle orbiters at large angles of attack and hypersonic speeds, 20621
- Lorenz ratios of technically important metals and alloys, 26706
- low temperature thermometry, interim report, 27732
- methods for calculating thermal parameters of cooling towers, USSR study, 30353
- net radiation method for enclosure systems involving partially transparent walls, 31651
- on utility of m-6-8 potential function, 26704
- subcooled forced convection boiling of trichlorotrifluoroethane, 20592
- transport properties of gases and binary liquids near critical point, 20586
- unsteady thermal boundary layers, analysis, 20618
- user's manual for three-dimensional heated surface discharge computations, 23190
- variable property turbulent boundary layers by means of modified compressibility transformation, analysis, 21976
- see also* Thermal radiation.

Heat treatment:

- autoclave heat treatments on mechanical properties of prealloyed powder cobalt-base alloy HS-31, 23688
- control of postharvest brown rot of sweet cherries with chemical and heat treatments, 19112
- electric conductivity test for measurement of heat treatment of aluminum alloys, eddy current method, military standard, 25027
- heat treating equipment, Federal Item Identification guide, 32179
- industrial furnaces, ovens and heat treating equipment, industrial plant equipment handbook, 24984
- 6 A 1-4 V titanium forgings to obtain high yield strength, 28066

Heaters, furnaces and space heaters, Federal Item Identification guide, 25001

Heath, Larman J., solvents and explosives to recover heavy oil, 21961

Heating:

- application of phase-change technique to thin sections with heating on both surfaces, 32469
- conditions of plasma heating at electron cyclotron resonance, 22439
- dynamic thermal performance of experimental masonry building, 32481
- general principle of current heating processes of plasma in pulsed Z-discharges, 20997
- household heating, 7 ways to reduce fuel consumption through energy conservation, 22004
- ion heating mechanism in modified Penning discharge, 20614

Heating—Continued

- plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030
- possible mechanisms of turbulent heating of plasma by ultrashort laser pulses, USSR study, 27622
- see also* Aerodynamic heating—Electric heating.
- Heating apparatus and supplies:
 - available heated wet-suit protection for divers and swimmers, 31581
 - heating and cooking equipment, current industrial reports, 16761
- Heating elements, *see* Electric heating elements.
- Heavy duty vehicle driving pattern and use survey, final report, New York City, 30727
- Heavy metals, *see* Metals.
- Heavy minerals, *see* Minerals.
- Heavy oils, *see* Petroleum.
- Heavy water reactors, *see* Reactors (atomic).
- Hebert, L. P., longtime testing of sugarcane varieties in southern Florida, 20885
- Hechler, Ken, Hechler for Congress Committee, annual report, 28271
- Hechler for Congress Committee, annual report, 28271
- Hedging potential in grain storage and livestock feeding, 22325
- Hedin, A. E., role of gas-surface interactions in reduction of OGO 6 neutral particle mass spectrometer data, 27714
- Hedlund, Arnold:
 - forest statistics for—
 - Alabama counties, 28974
 - central Alabama counties, 21682
- Hedman, E. R., selected streamflow characteristics as related to channel geometry of perennial streams in Colorado, 23373
- Heebink, B. G., some views on large structural particleboard panels, 23282
- Heede, Burchard H., flow and channel characteristics of 2 high mountain streams, 23306
- Hefley, Gifford, development of Loran-C navigation and timing, 22003
- Hefner, Jerry N., lee-surface heating and flow phenomena on space shuttle orbiters at large angles of attack and hypersonic speeds, 20621
- Held, Marjorie, WORLD wheat in foods of many lands, 16536
- Heidmann, L. J., initial assessment of mammal damage in forests of Southwest, 23289
- Helfner, Richard G., hedging potential in grain storage and livestock feeding, 22325
- Height and weight of children, socioeconomic status, United States, 17749
- Height and weight of youths 12-17 years, U.S., 23724
- Height finders, characterizing vegetation from existing source material for predicting munition height of burst in inaccessible areas, 31258
- Helser, Karl F., Helser for Congress Committee, annual report, 28282
- Helser for Congress Committee, annual report, 28282
- Helbing, Charles, short-stay hospitals under medicare, 1969, use and charges, by major discharge diagnosis, 32555
- Helburn, Nickolas, 18, 19, 20, will they vote? suggestions and resources for students and teachers, 17359
- Helgesen, John O., appraisal of ground water for irrigation in Little Falls area, Morrison County, Minn., 25262
- Helicopters:
 - advanced-technology high-capacity hoist-drive system, 16654
 - airfoil dynamic stall and its influence on helicopter control loads, 20991
 - analysis of Army helicopter inspection requirements, 22437

Helicopters—Continued

- analytical evaluation of controllable twist rotor performance and dynamic behavior, 15513
- certification and operations of scheduled air carriers with helicopters, Federal aviation regulations, 18297, 20239
- controlled helicopter discharge, 20968
- crashworthy landing gear study, 30758
- design guide for load suspension points, slings, and aircraft hard points, 16655
- design study of expendable main rotor blades, 28056
- downwash applied to fog clearing, status summary, 22422
- drone launching facility, Anegada Island, agreement with United Kingdom of Great Britain and Northern Ireland, 26877
- dynamic compatibility of rotary-wing aircraft propulsion components, 28059
- Emergency Medical Service, NHTSA experience to date, 25581B
- expendable main rotor blade study, 28055
- feasibility investigation for determining army helicopter gas turbine engine maximum power available, 26978
- flight test of advanced-geometry boron blades, 28057
- fog dissipation techniques for emergency use, 20975
- gust response including unsteady aerodynamic stall effects, 29663
- helicopterborne operations, Marine Corps manual, 20516
- improved structural crashworthiness analytical and design techniques developmental program, 30759
- in-flight escape systems for helicopters should be developed to prevent fatalities, Department of Defense, GAO report, 28995
- investigation of helicopter transmission noise reduction by vibration absorbers and damping, 20988
- load tension-member study, 22436
- main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20585
- measurements of velocity components in wake of full-scale helicopter rotor in hover, 24184
- military medical helicopter services to civilians in emergencies, authorize, report, 28336
- OH-6A phase 2 quiet helicopter program, 24183
- operational use of UH-1H helicopters in southeast Asia, 31935
- spring overriding aircraft clutch, 31936
- test results report and technology development report HLH/ATC compliant roller bearing development program, 24186
- tradeoff study for extended-life helicopter transmission, 26977
- vibration effects on helicopter reliability and maintenance, 30762
- Heliports, flight test and evaluation of heliport lighting for IFR, 24055
- Helium:
 - compressibility data for helium, nitrogen, and helium-nitrogen mixtures at 0°, 25° and 50° C at pressures to 1,000 atmospheres, 16331
 - effects of helium on mechanics of respiration, with clinical correlations, literature review, 32444
 - equation of state of mixture of helium and nitrogen, USSR study, 21850
 - intelligibility of processed helium speech at diving depths greater than 1000 feet, 20527

Helium—Continued

- ionic and neutral reactions in glow discharges of He-SO₂-CO mixture, 30425
- liquid-vapor equilibrium in binary systems of He⁴ and He³ with nD₂ and nH₂, 22008
- processing helium speech, proceedings of Navy-sponsored workshop, 25407
- random walk study of electron motion in helium in crossed electromagnetic fields, 31623
- tables for supersonic flow of helium around right circular cones at zero angle of attack, 32464
- thermophysical properties of helium-4 from—
 - 2-1500 K pressures to 1000 atmospheres, 23709
 - 4-3000 R with pressure to 15000 PSIA, 23708
- trace organic impurities in gaseous helium, 31622
- use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressures, 29280
- Hells Swamp Branch, special flood hazard report, 20163
- Helm, Lewis M., our environment and our natural resources, indivisibly one, conservation yearbook, 17562
- Helmets, laws requiring helmets and eye protection for motorcyclists, 22055
- Help destroy gypsy moths, 29631
- Help yourself guide to enlisted careers in Coast Guard, 28221
- Hem, J. D., chemical interactions of aluminum with aqueous silica at 25° C, 23392
- Hemagglutination, manual of tissue typing techniques, 31690
- Hemami, H., technique for generation of control and guidance signals derived from optical fields of spacecraft for detection and identification of landmarks, 17692
- Hematite, kinetics of CO reduction of hematite to magnetite and effect of silica, 23659
- Hemato-encephalic barriers changes in permeability of histo-hematic barriers under effect of microwaves, USSR study, 23521
- Hemisphere, Northern:
 - daily synoptic weather maps, 18202
 - monitoring Northern Hemisphere transmissions in Antarctica and some oblique sounding systems, USSR study, 23522
- Hemisphere, Western:
 - agricultural situation in Western Hemisphere, review of 1972 and 1973 outlook, 32191
- foreign relations of U.S.—
 - departmental edition, 22529
 - document edition, 21154
- genera of bamboos native to New World (Gramineae: Bambusoideae), 29488
- nutrition development and social behavior, conference proceedings, 27766
- Western Hemisphere immigration, hearings, 29930
- Hemlock, dwarf mistletoe, general information, 17509
- Hempstead County, Ark., water resources of Hempstead, Lafayette, Little River, Miller, and Nevada Counties, Ark., 30285
- Henager, C. H., concept evaluation, recovery of floating oil using polyurethane foam sorbent, 17418
- Henderson, Bill, Elect. Committee, *see* Elect Bill Henderson Committee.
- Henderson, Madeline:
 - automation and Federal library community, report on survey, 30398
 - interactive bibliographic systems, 29668
- Henderson County, Tenn., forest inventory statistics, 22286
- Henderson County Republican Central Committee, annual report, 24537
- Hendrickson, G. E., hydrology and recreation on cold-water rivers of Michigan's southern peninsula, 23382

INDEX 1973

- Hendrickson, Thomas N., treatment of complex cyanide compounds for reuse or disposal, 30195
- Hendron, A. J., jr., model tests of lined tunnels in jointed rock mass (strengthening of rock by chemical adhesive grouting), 28693
- Henley, John W.:
grading sugar pine saw logs in trees, 20312
Port-Orford-cedar, 32309
- Hennepin Anoka Republican Committee, annual report, 22912
- Hennepin County T Party, annual report, 24567
- Henning, Allen B., flight test of erectable spacecraft used for decelerator testing at simulated Mars entry conditions, 20603
- Henny, Charles J., analysis of population dynamics of selected avian species with special reference to changes during modern pesticide era, 22250
- Henoc, Jean, rigorous correction procedure for quantitative electron probe microanalysis, 31677
- Henrico County Democratic Committee, annual report, 24431
- Henrico County Republican Committee, annual report, 22817
- Henrietta, N.Y.:
Red Creek and Genesee River—
flood plain information, 17390
floods, 20150
- Henry County Republican Executive Committee, Ohio, annual report, 22720
- Hens, *see* Poultry.
- Herald of communications (USSR periodical), 18419
- Herbage, loop-frequency as related to plant cover, herbage production and plant density, 23304
- Herbert Hoover National Historic Site, general information, 23825
- Herbicides:
aerial spray adjuvants for herbicidal drift control, 28926
herbicide contamination of surface and runoff waters, 28826
herbicides ineffective in controlling southwestern dwarf mistletoe, 32333
response of several crops to 6 herbicides in irrigation water, 20937
sagebrush control with herbicide has little effect on elk calving behavior, 32331
water hardness effects on toxicity of several organic and inorganic herbicides to fish, 26849
see also Pesticides—Phenoxy herbicides.
- Heredity, *see* Genetics.
- Here's looking at us . . . alcoholism and Federal workers, problems, policy, program, 24267
- Heritage, *see* Tradition.
- Heritage Day, National, *see* National Heritage Day.
- Heritage Republican Women's Club, annual report, 22950
- Herlong, Sydney A., jr., address, May 18, 1972, 29464
- Herman, Francis R.:
freezing decayed wood to facilitate ring counts and width measurements, 23286
improved adapter for increment borer ratchet assembly, 25224
- Heroin:
can supply be stopped? 21339
efforts to prevent heroin from illicitly reaching U.S., GAO report, 20327
heroin being smuggled into New York City successfully, GAO report, 20332
U.S. heroin problem and Southeast Asia, committee print, 27210
world heroin problem, report of Special Study Commission, 15741
- Herrick, Allison B., area handbook for Greece, 22429
- Herring, Pacific herring, Alaska's fishery resources, fishery facts, 23792
- Herrmann, Frank A., jr.:
navigation channel improvement, Gastineau Channel, Alaska, hydraulic model, investigation, 21481
plans for reduction of shoaling in Brunswick Harbor and Jekyll Creek, Ga., hydraulic model investigation, 20175
- Hervey, John G., our Constitution and Government, Federal textbook on citizenship, simplified edition, 31442
- Hester, Frank J., review of literature on development of skipjack tuna fisheries in central and western Pacific Ocean, 26771
- Heterogeneous effects in fast breeder reactors, 28074
- Hetzler, Robert L., soil survey of Walsh County, N. Dak., 26845
- Heuristics, heuristic cost optimization of Federal Telpak Network, 29326
- HEW, *see* Health, Education, and Welfare Department.
- Heyder, Elly, studies of calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia, 16250
- HI, *see* Medicare.
- Hilawatha National Forest:
general information, 25214
Indian River country, 23278
- Hickenlooper, Bourke B.:
memorial addresses and other tributes, 23031
memorial services, print additional copies, report, 17152
- Hickman County, Tenn., forest inventory statistics, Dickson-Hickman County unit, middle Tennessee, 24077
- Hickory, decay causes little loss in hickory, 20298
- Hickory Creek:
flood plain information, 17385
floods, how to avoid damage, 20137
- Hidaka, F. T.:
low-flow characteristics of streams in Puget Sound region, Wash., 32361
low flows and temperatures of streams in Seattle-Tacoma urban complex and adjacent areas, Wash., 25249
- Hides and skins, *see* Leather, hides, and skins.
- Higgins, Bradford A., soil survey of Niagara County, N.Y., 25711
- Higgins, E. Eugene, inventory of physical facilities in institutions of higher education, fall 1969, 15992
- High blood pressure, *see* Blood pressure.
- High energy physics, *see* Atomic energy.
- High frequency, *see* Frequency band.
- High-grain, long-period seismograph station installation report, Albuquerque, N. Mex., 22097
- High Plains, *see* Llano Estacado.
- High-pressure reaction vessel system, installation, modification, and initial experiments, 21931
- High-pressure vibrating pressure transducer, 24185
- High-resolution seismic survey of offshore area near Nome, Alaska, 23363
- High School News Service, report (periodical), 18420
- High school students, *see* Students.
- High schools:
alcohol and alcohol safety, curriculum manual, senior high level, 22046
teacher's activities guide, 22047
determining occupational emphases for high school program design, 27771
developing specifications for low-cost computer system for secondary schools, 22063

High schools—Continued
 directory of schools with occupational programs, public-nonpublic—postsecondary, 30135
 secondary, 30136
 graduates, presidential scholars, 29450
 jobs for which high school education is—generally required, 26631
 preferred, but not essential, 26632
 multi-ethnic literature in high school, mental health tool, 30508
 patterns of course offerings and enrollments in public secondary schools, 15994
 public elementary and secondary day school pupils, instructional and non-instructional staff, instruction rooms, schools, and expenditures, statistics, 25057
 pupil mobility in public elementary and secondary schools during 1969-70 school year, 28680
 statistics of public elementary and secondary day schools, fall 1972, 31230
 status of world history instruction in American secondary schools, 21430
 Talent Search, Upward Bound, Special Services, application, information and program, manual, 25045
see also Schools—Secondary education.
 High seas, jurisdiction over, *see* Maritime law.
 High speed ground transportation: act, reports, 16554, 19610
 high speed ground and water demonstration project, hearing, 24921
 some applications of cryogenics to high speed ground transportation, 27726
 West coast corridor feasibility study act, report, 31081
 High-speed streams in solar wind, 31265
 High Temperature Institute, USSR: scientific research, 1972, most important results, 31546
 U-25 apparatus, research, 31546
 High temperature materials, *see* Refractory materials.
 High-temperature superconductor Nb₃Ga, 31616
 Higher education, *see* Colleges and universities.
 Higher institutions, *see* Colleges and universities.
 Highlights of MarAd port activities, 27689
 Highway Beautification Commission: appropriations, 1973, law, 19362
 appropriation, 1974, authorization, report, 29995
 extend time for final report—law, 27081
 reports, 26067, 26203
 Highway construction, *see* Roads and highways.
 Highway engineering, *see* Roads and highways.
 Highway motor vehicles, *see* Motor vehicles.
 Highway-railroad grade crossings, *see* Railroad crossings.
 Highway safety, *see* Safety of life.
 Highways, *see* Roads and highways.
 Higley Creek Research Natural Area, general information, 21622
 Hijacking, *see* Air piracy.
 Hiking, *see* Walking.
 Hill, J. W., studies to design and develop improved remote manipulator systems, 29255
 Hill, Robert C., nomination, hearing, 28516
 Hill, Thelma P., chemical composition of sedimentary rocks in Alaska, Idaho, Oregon, and Washington, 23364
 Hill-Burton program:
 Hill-Burton Is, general information of the program, 21748
 hospital survey and construction act, history of program and current problems and issues, 30057

Hill-Burton program—Continued
 progress report, 21749
 publications, 23401
 Hillsdale County Republican Committee, annual report, 22792
 Hilst, Glenn R., coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems, 32257
 Himebrook, Frank S., design and performance calculations of miniature DC motors, calculation of magnetic circuit and performance, 22485
 Himel, Chester M., fluorescent probes in detection of insecticides in water, 28816
 Hiner, Richard L., slaughtering, cutting and processing beef on farm, 30699
 Hinges, Federal item identification guide, 30101
 Hinkley, E. David, development of in-situ prototype diode laser system to monitor SO₂ across stack, 30154
 Hinshaw, Russell N., pollution as result of fish cultural activities, 27450
 Hipkins, Fred W., dungeness crab pots, 23793
 Hiram, Ohio:
 Cuyahoga River—
 flood plain information, 20116
 floods, 20148
 Hired farm workers, *see* Farm labor.
 Hiring practices, *see* Employment.
 Hiroshima, Japan, origin and findings of Atomic Bomb Casualty Commission, 25681
 Hirsch, Albert A., BEA quarterly econometric model, 31214
 Hirten, John E., nomination, hearing, 19954
 Hirudinea, *see* Annelids.
 Hiss, W. L., New Mexico work-effort analysis computer program, 17530
 Histamines, cellular histamine release and allergy (remarks), 29350
 Histology, behavior, and histogenesis of pelagosphaera larva of Phascolosoma agassizii, Sipuncula, 25697
 Histopathology, *see* Pathology.
 Historic American engineering record, 16412
 Historic resource study (series), 27811-816
 Historic sites:
 Chicago school of architecture, plan for preserving significant remnant of America's architectural heritage, 23823
 historic preservation plan for central area, General Neighborhood, Renewal Area, Savannah, Ga., 29050
 historically famous lighthouses, 15609
 landmarks, areas administered by National Park Service and related properties, 16409
 national historic landmark, Department of Treasury, 20844
 National historic preservation act, amend, reports, 28475-476
 national register of historic places, 1972, by States, 26777
 natural landmarks program, 29400
 preservation of—
 historic monuments, facilitate by conveyance to State and local governments, law, 16883
 historical and archeological data—
 hearings, 21249
 report, 28475
 historical properties program, proposed extension and expansion—
 hearings, 28415, 28549
 law, 30925
 report, 28371
 prospects for the past, study of notable architecture, Sheboygan, Wis., 31439
 publications, price list, 27866
see also names of historic sites, or places where located.

INDEX 1973

- Historic structure reports, 27810, 27830
- Historical chart book, 1972, Board of Governors of Federal Reserve System, 17484
- Historical injury experience in nonmetallic mineral industries (except stone and coal), 25424
- Historical injury experience in quarrying, 25421-423
- Historical Publications Commission, National, *see* National Historical Publications Commission
- Historical series, 30026, 30028, 30033
- Historically famous lighthouses, 15609
- History:
- American, publications price list, 29453
 - animal histology procedures of Pathological Technology Section of National Cancer Institute, 2020
 - historical materials in Dwight D. Eisenhower Library, 25532
 - historical series, Senate Committee on Foreign Relations, 27324
 - historically famous lighthouses, 15609
 - history of title I ESEA, program for educationally deprived children, 17361
 - National Park Service history series, 29399
 - Smithsonian opportunities for research and study in history, art, science, 16478
 - Smithsonian studies in history and technology, 20766-768, 23963, 31804
 - status of world history instruction in American secondary schools, 21430
 - see also* Military history—*also* names of departments, etc.—*also* subjects
- Hitchcock, Robert H., Hitchcock for Congress, annual report, 22756
- Hitchcock for Congress, annual report, 22756
- Hiza, M. J., liquid-vapor equilibrium in binary systems of He^1 and He^3 with $n\text{D}_2$ and $n\text{H}_2$, 22008
- Hobbies:
- building hobby greenhouses, 27989
 - Hobby protection act, antique glassware and china—
 - hearings, 26167
 - reports, 28327, 28334, 31094
 - how PEG helps hobbyist who works with wood, 20205
- Hobble Creek:
- Springville, Utah—
 - flood plain information, 31251
 - floods, 32230
- Hobbs, Horton H., Jr., crayfish (astacidae) of North and Middle America, 17441
- Hochull, Urs E., cold cathodes for sealed-off CO_2 lasers, 32474
- Hocking River:
- Athens, Ohio
 - flood plain information, 28710
 - floods, 28749
- Hodas, Rosita E., relief, 28445
- Hodgson, James D.:
- addresses, etc.—
 - May 23, 1972, 21901
 - July 27, 1972, 17652
 - Aug. 9, 1972, 16217
 - Aug. 12, 1972, 17656
 - Aug. 26, 1972, 23574, 23576
 - Sept. 11, 1972, 17653
 - Sept. 14, 1972, 23586
 - Sept. 20, 1972, 21895
 - Oct. 6, 1972, 23575
 - Nov. 4, 1972, 21896
 - Nov. 24, 1972, 21900
- Hodograph, hodographic approach to predicting inelastic strain at high temperature, 16353
- Hoduski, Bernardine E., environmental services, bibliography, 28827
- Hoekstra, Pieter, radar cross-section measurements of snow and ice, 23155
- Hoffman, Gertrude L., school age child care, primer for building comprehensive child care services, 21120
- Hoffman, John N., Girard estate coal lands in Pennsylvania, 23965
- Hoffman, John P., high-gain, long-period seismograph station installation report, Albuquerque, N. Mex., 22097
- Hoffman, Keith L., inpatient utilization of short-stay hospitals in each geographic division, U.S., 22032
- Hoffman, Paul G., nomination, hearings, 27324
- Hoffstedt, Donald J., flight test of advanced-geometry boron blades, 28057
- Hog cholera, cooperative State-Federal hog cholera eradication program, progress, report, 22397
- Hogs, *see* Swine.
- Hohokam Pima National Monuments: establish in vicinity of Snaketown Archeological site, Ariz.—
 - law, 19455
 - reports, 17002, 19918
- Hoists:
- advanced-technology high-capacity hoist-drive system, 16654
 - capstans, hoists, winches, and windlasses, Federal item identification guide, 24993
 - helicopter-load tension-member study, 22436
 - manual hoists from Luxembourg, Tariff Commission report, 23780
- Holabird, Fort, relocation of U.S. Army Intelligence School to Fort Huachuca, 17031
- Holanda, Raymond, sensitivity of hot-cathode ionization vacuum gauges in several gases, 16351
- Holbuhner, E. G., soil survey of Edwards and Richmond Counties, Ill., 17841
- Holdeman, James D.:
- correlation for temperature profiles in plane of symmetry downstream of jet injected normal to crossflow, 17724
 - dispersion of turbojet engine exhaust in flight, 31650
- Holden, Richard K., estimate of construction needs of higher education by 1980, 17360
- Holders, electrical contact brush, Federal item identification guide, 26321
- Holding, Robert E., nomination, hearing, 20009
- Holding companies:
- act of 1935, releases, SEC, 18422
 - bankers and the bank holding company (remarks), 30226
 - implications for banking of amended Bank holding company act (remarks), 26449
 - laws relating to securities, commission exchanges and holding companies, compilation, 22664
 - see also* Public utilities.
- Hole distribution (mechanics):
- fatigue crack growth from circular hole with and without high prior loading, 17717
 - qualification of miniature internal threads using air flow, 29665
- Hole springing, 26392
- Holidays, International Labor Organization convention 182, annual holidays with pay, text, 27114
- Holko, Kenneth H.:
- hot press and roll welding of titanium-6-percent-aluminum - 4 - percent - vanadium bar and sheet with auto-vacuum cleaning, 17723
 - improved diffusion welding technique for TD-NiCr sheet, 23691
- Hollick, Ann L., U.S. involvement in overthrow of Diem, 1963, 17258
- Hollinger, James P., measurements of distribution and volume of sea-surface oil spills, using multifrequency microwave radiometry, 30590

- Hollow fiber technology for advanced waste treatment, 27460
- Holloway, Ruth L., reading crisis in America, 26374
- Holly, international checklist of cultivated Ilex, Ilex opaca, 20890
- Hollywood, Fla., area wage survey, 16222
- Hollywood Hilltoppers Republican Women's Club, Federated, annual report, 24713
- Holmes, Beatrice H., state-water-rights laws and related subjects, supplemental bibliography, 15479
- Holmes, C. A., correlation of ASTM exposure test for evaluating durability of fire-retardant treatment of wood, 32340
- Holmes, Jim, acid mine drainage treatment by ion exchange, 20195
- Holography:
design and applications of holographic system for crystal-growth studies, 27852
- Holography and Optical Filtering Conference, proceedings, 29264
- phase-contrast enhancement without spatial filters for seismic holography, 25499
- plant growth by method of holographic interferometry, USSR study, 23557
- using holographic matched filters in correcting phase discontinuities in antenna apertures, USSR study, 27650
- Holsinger, John R., freshwater amphipod crustaceans (Gammaridae) of North America, 17437
- Holst, Al, Congressional Committee, *see* Al Holst Congressional Committee.
- Holston River, water quality and waste treatment requirements on upper Holston River, Kingsport, Tenn. to Cherokee Reservoir, 31902
- Holt, Perry C., summary of branchiobdellid (Annelida: Clitellata) fauna of mesoamerica, 29490
- Holtzman, Elizabeth, Committee to Elect, *see* Elect Elizabeth Holtzman Committee.
- Holyoke, Conn., census of population and housing, 1970, census tracts, 19224
- Home canning of meat and poultry, 15469
- Home care, *see* Medical care.
- Home care of purchased frozen foods, 29622
- Home cleaning, *see* Home economics.
- Home delivered meals for older Americans, demonstration, final report and guidelines, 27977
- Home economics:
clean electric ranges for clean house, instructions, 16610
- family economics review, 18280
- home and garden bulletins, 15469-470, 16597-598, 20906-907, 22332, 24130-131, 25821, 26934-936, 27991-993, 29622-623, 30700-706
- home economics education, instructional materials, compilation of abstracts, 20093
- homemakers—
opinions about dairy products and imitations, nationwide survey, 29625
- publications, list, 23462
- how homemaker can help prevent pollution, 31299
- kill those flies for clean house, 22346
- research reports, 16599
- storing perishable foods in home, 29623
- volunteer homemakers, picture story, 26944
- see also* House cleaning.
- Home labor, employment of homeworkers in certain industries, 20856
- Home loans, *see* Loans.
- Home of Franklin D. Roosevelt, National Historic Site, general information, 27817
- Home rule for cities, *see* Municipal home rule.
- Home work in industry, *see* Home labor.
- Homemakers, *see* Home economics.
- Homemaking, *see* Home economics.
- Homeowners, *see* Homes.
- Homer, Winslow, selection from Cooper-Hewitt collection, Smithsonian Institution, 23967
- Homes:
aboveground home shelter, 26298
- all electric homes, annual bills, 16046
- architectural handbook for building single-family dwellings for home mortgage insurance, 29061
- architectural processing and inspection for home mortgage insurance, 21780
- armed services housing for—
civilian employees, information and processing instructions for home mortgage insurance, 21785
- home mortgage insurance, HUD handbook, 21786
- buying a home? don't forget those closing costs, 23414
- characteristics of second home owners for United States, 28108
- construction, maintenance, community development, publications, price list, 16462
- cost estimate/cost data for home mortgage insurance, 21779
- design guide for home safety, 21768
- endorsement for insurance for home mortgage programs, 21782
- FHA—
insured mortgages—
area trends, 23222, 26432
- State trends, 21548, 26433
- regulations, amendments, mortgage insurance, 27505
- trends, characteristics of insured mortgages, 18364
- general program summary for sec. 203(b) for home mortgage insurance, 23426
- harmful intruder, noise in the home, 16018
- holder of first mortgages on homeowner properties made in 1967-71 and 1957-60 for United States, 1960 and 1971, supplementary report, 28110
- home-based child development program resources, bibliography, 30868
- home mortgage insurance fiscal instructions, mortgagees guide, 25277, 32374
- home mortgage programs, FHA monthly report of operations, 18363
- income of homeowners of mortgaged properties acquired in 1967-71, United States, 20696
- miscellaneous type home mortgage insurance, HUD, 20063
- mortgage insurance, FHA system, general information, 16132
- mortgage insurance for servicemen for home mortgage insurance, 21783
- one-family, insured by FHA under sec. 221(d)(2), trends, 18362
- open-end mortgages for home mortgage insurance, HUD handbook, 21787
- opportunities to improve effectiveness and reduce costs of homeownership assistance programs, GAO report, 21698
- our homes, 19263
- planned-unit development with homes association, 31328
- plumbing repairs, 20904
- processing instructions for home mortgage insurance under sec. 240-purchase of fee simple title from lessors, 21784
- purchase price of mortgaged homeowner properties acquired in 1967-71 for United States, 28111
- real estate tax data for homeowner properties for United States and regions, 28109
- reconsideration (before endorsement) for home mortgage insurance, HUD, 21781, 23249, 29062
- sec. 203(h), home mortgage insurance for disaster victims, sec. 203(i), home mortgage insurance for outlying area properties, etc., 23430
- tax deductions for homeowners, 21825

INDEX 1973

- Homes—Continued
tax information on selling your home, 20422
underwriting-technical direction for home mortgage insurance, 23428
veterans home-buying guide, 27966
when you return to a storm damaged home, 29082
who's home when, census statistics, 24247
see also Housing.
- Homes (institutions):
psychiatric halfway houses, general characteristics, 27784
see also Nursing homes.
- Homestake Mine, sample preparation variability in diamond-drill core from Homestake Mine, Lead, S. Dak., 20572
- Hometown plans for construction industry in New York State, 22582
- Homosexuality:
National Institute of Mental Health Task Force on Homosexuality, final report and background papers, 22077
not the law's business? monograph, 26745
- Honduras:
economic trends and their implications for United States, 17582
military assistance, deposits under Foreign assistance act of 1971, agreement, 16536
mineral industry, minerals yearbook chapter, 25429
prevention of foot-and-mouth disease and rinderpest, agreement, 31858
- Swan Islands—
cooperative meteorological program, agreement, 25732
electric power for certain facilities, agreement between United States and Honduras, supplementing meteorological program agreement, 24000
synthesis, dynamics of health, analytic series on interactions of health and socioeconomic development, 20365, 25264
trade, meat imports, agreement, 17878
treaty on Swan Islands, 20812
weather station, cooperative meteorological program at Choluteca, agreement, 16516
- Honduras pine, see Pine.
- Honey:
greater wax moth, pest of honeycombs, controlling etc., 16595
market news, monthly report, 18424
production—
1972 summary, 27936
number of colonies, etc., 1965-69, 19136
- Honeycomb structures, see Laminated materials.
- Hong Kong:
economic trends and their implications for United States, 29104
gazetteer, official standard names, 26487
Kanekalon wigs for Hong Kong, determination of no injury, etc., Tariff Commission report, 24063
mineral industry, minerals yearbook chapter, 25428
narcotic enforcement efforts by local government and American missions, report, 27229
wool and man-made fiber textile products, trade agreement, 25743
- Hooked rugs, see Rugs.
- Hooper, Edwin B., mobility, support, endurance, story of Naval operational logistics in Vietnam war, 20726
- Hoover, J. Edgar, commemorative medal, authorize, hearings, 28396
- Hoover, Thomas B., polarographic determination of NTA, 30191
- Hope, W. D., taxonomic hierarchy and checklist of genera and higher taxa of marine nematodes, 23964
- Hope Lake, Lake Hope mine drainage demonstration project, feasibility study, 27466
- Hopi Indians:
general information, 31458
partition of surface rights of Navajo-Hopi Indian land—
hearings, 28548
- Hopi Reservation:
partition of surface rights of Navajo-Hopi Indian land, authorize—
hearings, 19975
reports, 15687, 16953
- Hopkins, Sewell H., brackish water claim *Rangia cuneata* as indicator of ecological effects of salinity changes in coastal waters, 30164
- Hopper, Mary E., earned degrees conferred, 31222
- Hous:
foreign agriculture circulars, 18380
stocks of hops, 22281, 27939
- Horan, Donald M., SOLRAD 10 satellite, Explorer 44, 1971-058A, 22164
- Horn, J. D.:
survey of techniques used in display of sequential images received from geostationary satellites, 22417
wind tunnel simulation and prototype studies of barrier flow phenomena, 20974
- Horn, W. A., extension of capacity concept to dual-use runways and multi-runway configurations, 24024
- Hornbeck, Bernice M., knits in Western Europe, their impact on cotton, 30246
- Horning, Don O., historical summary of activities in UC-FAA fog chamber under contract ARDS-434, 24027
- Hornsby, Arthur G., prediction modeling for salinity control in irrigation return flows, state-of-the-art review, 26416
- Horonjeff, Robert, development of film techniques for runway lighting outage studies, 24026
- Horowitz, Loucele A., medical care price changes under economic stabilization program, 27885
- Horowitz, Martin M., Congressional Committee, see Congressional Committee for Martin M. Horowitz.
- Horse bots, see Flies.
- Horse racing, see Racing.
- Horse Ridge Research Natural Area, general information, 21623
- Horsemanship and horse care, 19106
- Horses:
horse barn indoor exercise area, farm building plan, 22343
horse safety guidelines, 25831
horsemanship and horse care, 19106
reported arthropod-borne encephalitis in horses and other equidae, 22396
Venezuelan equine encephalomyelitis, national emergency, vector control program, Texas and Louisiana, 22398
- Horstein, Bernard, appearance and visibility of thin oil films on water, 26405
- Horticultural products, see Nurseries (horticulture).
- Horticulture, horticultural service businesses, dollar volumes and State rankings, 32189
- Horton, Jack O., nomination, hearing, 24938
- Horton, Jerome S., evapotranspiration and watershed research as related to riparian and phreatophyte management, abstract bibliography, 25826
- Hose:
fittings, tetrafluoroethylene hose, high temperature, medium pressure, classification of defects, military standard, 20059
hose and hose assemblies, Federal item identification guide, 26323
hose, air duct and air breathing, Federal item identification guide, 30102
pipe, and tube fittings, quick disconnect and self-sealing, Federal item identification guide, 26322

Hose—Continued

- reinforced rubber and/or plastic hose, suitable for conducting liquids or gases, workers of Passaic, N.J., plant of Uniroyal, Inc., Tariff Commission, report, 27944
- Hoskins, Dalmer, women and social security, law and policy in five countries, 27886
- Hosmer, Craig, Committee, *see* Craig Hosmer Committee.
- Hospital apparatus and supplies:
 - hospital furniture, equipment, utensils and supplies, Federal Item Identification guide, 26324
 - selected references on hospital equipment, 30290
- Hospital attendants, nursing assistant, examination announcement, 27047
- Hospital facilities, veterans, *see* Medical care.
- Hospital insurance, *see* Medicare.
- Hospitalization, *see* Hospitals.
- Hospitalization insurance, *see* Medicare.
- Hospitals:
 - administrative services and facilities for hospitals planning guide, 26517
 - admissions to outpatient psychiatric services by age, sex, color and marital status, June 1970-May 1971, 27783
 - average length of stay in short-stay hospitals, demographic factors, 1968, United States, 27751
 - bibliography, 23401
 - community hospitals, inflation in pre-medicare period, 23977
 - coverage of nonprofit hospitals under National labor relations act, hearings, 21363
 - differential utilization of general hospital psychiatric inpatient units by whites and nonwhites 1970-71, United States, 23763
 - differentials in dollar payments and primary payment sources, discharges from non-Federal general hospital psychiatric inpatient units, United States, 1970-71, 25595
 - drug information services, 2 operational models, complete drug information service in hospital regional drug information network, 20658
 - emergency department policy & procedure guidelines, 16130
 - employee incentive system for hospitals, 15628
 - health facilities construction costs, reduce with innovative techniques, new materials, etc., 21379
 - Hill-Burton hospital survey and construction act, history of program and current problems and issues, 30057
 - Hill-Burton program, 1947-71, progress report, 21749
 - hospital insurance sample, inpatient hospital utilization, 26834
 - inpatient health facilities as reported from 1969 MPI survey, 25569
 - inpatient utilization of short-stay hospitals—
 - by diagnosis, 1968, United States, 27750
 - in each geographic division, U.S., 22032
 - institutional pharmacy practice in the 1970's, 16366
 - length of stay of discharges from general hospital psychiatric inpatient units, 1970-71, United States, 23764
 - Medical facilities construction and modernization act, extend appropriations authorizations—
 - law, 32003
 - report, 28353
 - Medicare, inpatient hospital services, 1967-68, by region, 29499
 - mortgage insurance for hospitals, guide, 21770-771, 29070

Hospitals—Continued

- National labor relations act, amend, extension to nonprofit hospital employees—
 - hearings, 31018
 - report, 16956
- outpatient and emergency activities, selected references, 29034
- party control in medical establishment, USSR study, 16183
- prediction approach to finite population sampling theory, application to hospital discharge survey, 29329
- primary diagnosis of discharges from general hospital psychiatric inpatient units, 1970-71, United States, 23762
- psychiatric services in general hospitals, 22076
- Public Health Service—
 - administration's proposal to dismantle major portion of system, hearings, 31033
- hospital—
 - closings, hearings, 21267
 - oversight, hearings, 19781, 31028
 - pharmacy residencies, 17801
- referral of persons to and from general hospital psychiatric inpatient units, 1970-71, United States, 23765
- regional medical programs, oversight hearing, 31032
- research on nurse staffing in hospitals, 31409
- short-stay hospitals under medicare, 1969, use and charges, by major discharge diagnosis, 32555
- solid waste handling and disposal in multi-story buildings and hospitals, summary, conclusions, and recommendations, 21516
- surgical operations in short-stay hospitals, 25567, 27749
- survey and construction act with amendments, 21144
- under Fair labor standards act, 24096
- uniform hospital abstract, minimum basic data set for patients, etc., 23723
- utilization of short-stay hospitals—
 - summary of nonmedical statistics, United States, 32490
 - under medicare by type of control and bed size, 29498
- see also* Mental institutions—Veterans hospitals—also names of hospitals or places where located.
- Hosterman, John W., underclay deposits of Somerset and eastern Fayette Counties, Pa., 21709
- Hot-cathode gages, *see* Ionization gages.
- Hot hardness characteristics of ausformed AISI M-50, Matrix II, WD-65, modified AISI 440-C, and super nitralloy, 29281
- Hot pressing, hot press and roll welding of titanium - 6 - percent=aluminum - 4 - percent-vanadium bar and sheet with auto-vacuum cleaning, 17723
- Hot water and fungicides for control of mold on cantaloups, 27995
- Hotel & Restaurant Employees and Bartenders, International Union H. & R.E. and B.I.U. Committee on Political Education annual report, 24371
- Hotels, hotels and motels under Fair labor standards act, 24097
- Hotz, Preston E., mineral resources of Salmon-Trinity Alps Primitive Area, Calif., 20346
- Houff, James N., improving area wage survey indexes, 25385
- Houghton County Republican Committee, annual report, 22806
- Hours of labor:
 - departmental time and cost reporting system, regional and field office instructions, 23424, 31422
 - 8-hour laws, compilation, 19538

INDEX 1973

Hours of labor—Continued
 Government officials and employees, FPM supplement, 18339
 how to keep time and pay records, under Fair labor standards act, 30682
 injury experience and worktime in solid mineral mining industries, minerals yearbook chapters, 25447-448
 minimum wage and maximum hours standards under Fair labor standards act, 23147
 quick look at hours worked under Fair labor standards act as amended in 1966, 25803
 union wages and hours—
 grocery stores, 27668
 local-transit operating employees, 31562
 House, Peter W., environmental laboratory for social sciences, 25104
 House Administration Committee, House: calendar, 18549
 investigations and studies, authorization and expenses, report, 26112
 reports, 15706, 16963, 16995-999, 19616, 19629, 19649, 24836, 26072, 26107-110, 26112-120, 26127-130, 27139-142, 28322-323, 28325, 28354-356, 28364, 29864
 House care, *see* Home economics.
 House cleaning, when to do house cleaning jobs, 19121
 House of Representatives:
 additional office allowance for certain officials, authorize, report, 27141
 appropriations—
 1973, legislative, law, 16873
 1974, legislative, report, 29991
 calendars and history of legislation, 18544
 Capitol police, reorganization of supervisory positions, report, 28364
 Clerk of the House, semiannual reports, 21160, 27110
 committee organization, hearings, 29896, 31016
 committee proceedings in open session, strengthen requirement, reports, 24830, 26101
 delegation to Mexico-United States Interparliamentary Group, conference report, 17048
 Democratic Steering Committee and Republican Conference, relating to payment of expenses, report, 27139
 disbursements, Clerk of the House, semiannual report, 27110
 documents, 15663-671, 16935-947, 19542-572, 21154-167, 22999-23004, 24799-819, 26041-63, 27106-115, 28297-304, 29837-844, 30942-962, 32024-26
 electronic voting, provide, report, 16994
 journal, 92d Cong., 2d Sess., 30941
 maintenance and improvement of ongoing computer services and investigation of additional services, provide funds, report, 27142
 members convicted of serious crime, sense of House concerning actions to be taken during appeals, report, 15674
 nongermane Senate amendments and other matters added to House-passed measures, provide means for House rejection, report, 19646
 payment of compensation for certain officers, report, 15706
 political committees supporting candidates for House of Representatives, annual reports, 22666-996, 24311-798, 25994-26040, 27097-105, 28270, 29836
 reports—
 private bills, 15672, 19573-606, 27116A-116M, 28305-320, 29845, 32027
 public bills, 15673-714, 16948-17022, 19607-734, 21168-198, 24820-837, 26064-143, 27116N-174, 28321-382, 29846-891, 30963-31006, 32028-70
 rules, 28296

House of Representatives—Continued
 rules of Committee on Government Operations, House, together with selected rules of House of Representatives, 27215
 Select Committee on House Restaurant, create, report, 26069
 Select Committee to Regulate Parking on House Side of Capitol, create, report, 26070
 select committee to study operation and implementation of rules 10 and 11 of House, create, reports, 24822-823
 Speaker to entertain motions to suspend rules during week of June 25, 1973, authorize report, 32045
 Suspension of rules, Oct. 10, 1972 and remainder of week report, 19661
 House Restaurant, Select Committee on, House:
 create, report, 26069
 funds for expenses incurred, provide, report, 26109
 Household appliances, major, current industrial reports, 28161
 Household goods:
 additional movements at Government expense of household goods and personal effects, or mobile homes, of dependents of Armed Forces members who are in missing status, authorize—
 law, 19410
 report, 19390
 electric houseware and fans, current industrial reports, 28153
 It's your move! 22177
 recent purchases and expectations to buy, survey data, 15593, 21065, 25937, 29783
 see also Furniture.
 Household pets, *see* Pets.
 Households:
 and family characteristics, by type, current population report, 28174
 availability of public transportation and shopping characteristics of SMSA households, 32283
 characteristics of Spanish language households, for United States, 31944
 food consumption of households—
 by money value of food and quality of diet, United States, north, south, 15472
 in the West, 1965-66 seasons and year, 22334
 south, 1965-66 seasons and year, 22333
 food consumption survey, 1965-66, reports, 15471-472, 16600, 22333-334
 household and family characteristics, 22556
 household heating, 7 ways to reduce fuel consumption through energy conservation, 22004
 household income in 1969 for States, SMSA's, cities, and counties, 30811
 household money income in 1972 and selected social and economic characteristics of households, 29782
 housing characteristics by household composition, 1970 census of housing, subject report, 25899
 inadequate housing and poverty status of households, areas served by Farmers Home Administration programs, 1970, by States, 28022
 marital status and living arrangements, population characteristics, 19245
 North Central region food consumption, 1965-66 seasons and year, 16600
 reporting health events in household interviews, effects of extensive questionnaire and diary procedure, 17746
 value and rent by household composition for United States, 1970, 31945
 year household moved into unit for United States, 27008
 see also Families.
 Housekeeping, *see* Home economics.
 Housewares, *see* Household goods.

Houses:

architectural handbook for building single-family dwellings for home mortgage insurance, 29061
clean refrigerator for clean house, 16609
deterrence of crime in and around residences, 30376
facility to evaluate three-dimensional performance of house modules, 26470
finding and keeping a healthy house, 28929
FPL designs meet family housing needs, 21665
full scale test on two-story house subjected to lateral load, 25549
hog house, modified A type, 20915
low-income houses, 2 or 4 bedrooms, frame construction, farm building plans, 20918
occupation and residence in 1965 statistics compared with census of population 1970, 29710, 29717
one housing unit owner occupied properties, construction report, residential alterations and repairs, expenditures, etc., 25916
processing procedures for insured multi-family projects utilizing industrialized housing systems, HUD, 29064
quality of residential geographic coding, evaluation and research program, 22536
recent purchases and expectations to buy, survey data, 15593, 21065, 25937, 29783
residence in 1965 for selected areas, 1970, supplementary report, 28130
residential finance, 1970 census of housing, 31942
soil sampling and testing for residential developments, technical study report, 16135
ventilation air inlets for dwellings, 23710
see also Housing.

Housing:

abandoned housing research, compendium, 31411
act, development progress directory, special report—
Indian programs, 29079
turnkey programs, 29080
urban renewal programs authorized by act, operations report, 18861
adequacy of Federal response to housing needs of older Americans, hearings, 19940, 21313
allowances for making nonprofit projects operation and use of housing consultants, HUD, 29065
application of space program fire-retardant technology to housing, 31644
applications, program reservations and preliminary loans handbook, 23446
armed services housing—
civilian employees, information and processing instructions for home mortgage insurance, 21785
home mortgage insurance, HUD handbook, 21786
audit guide for low-rent housing programs for use by independent public accountants, 25270
authorized by building permits and public contracts, construction reports, 16750, 18149, 24232, 30816
automated control systems in housing and public utilities, USSR study, 17623
career ladder and curriculum guide, instructor's manual—
code enforcement inspector and aide, 27580
housing management, 26524
zoning inspector and aide, 27580
census, 1960, evaluation and research program, 19251, 22564
census, 1970—
census tract memo series, 21053
census tracts, 15580-581, 16744-745, 19212-227, 28131

Housing—Continued

census, 1970—continued
characteristics for States, cities and counties, United States summary, 27007
characteristics of occupied housing units—
units in structure and tenure, 15572
year-structure built and tenure, 15571
components of inventory change, 27006, 28099-106, 29690-692, 30795-797
detailed housing characteristics, 19195
microfiche order form, 22139
publications order form, 22516
effects of different reinterview techniques on estimates of simple response variance, 19251
employment profiles of selected low-income areas, rural areas, publications order form, 22527
evaluation and research program, 22536, 25913, 28132
final reports, 15532-568, 16720-729, 19196-198, 21040, 24213, 25897
geographic identification code scheme, 16746, 19228-229
microfiche order form, 22145
publications order form, 22537
housing characteristics by household composition, subject report, 25699
housing characteristics for States, cities, and counties, bound volumes, 27007
housing of selected racial groups, 30798
metropolitan housing characteristics, 15569, 16730-731, 24214-216, 25893, 28107
microfiche order form, 22138
publications order form, 22513
occupied rural housing units, 15570
procedural history, 28133
publication and computer tape program, list, 29719
space utilization of housing inventory, 29693
subject reports, 25899, 28191, 29693-694, 30798
summary tapes, 6th count, 15594
supplementary reports, 15570-572, 19199, 27008-9, 28108-111, 31944-945
microfiche order form, 22140
publications order form, 22514-516
Chicago, Ill., oversight on housing and urban development programs, hearings, 28522
code of Federal regulations, 30222
college housing debt service grant program for private institutions, 23447
completions, construction reports, 18150
comprehensive planning assistance program administration, HUD handbook, 16133
conditions in areas served by Farmers Home Administration housing programs, 1970, by States, 15483
condominiums, their development and management, 20371
consolidation, simplification and improvement of laws relating to housing and urban development, authorize, report 15714
cooperative housing supplementary loan, 29067
crisis in housing on upper Eastern Shore, civil rights aspects, 22578
current reports—
housing characteristics, 18192
housing vacancies, 18192
market absorption of apartments, 18193
dealers, individuals subject to provisions of title 1, National Housing Act, 28864
decentralization and State and local inter-governmental cooperation in developing rural housing and employment programs (remarks), 21807

INDEX 1973

Housing—Continued

definitions, policy statements and general rulings in administering insured mortgage and low-rent housing programs of HUD-FHA, 23425, 30297
 design and development of housing systems for Operation Breakthrough, phase 1, feedback, 30294
 development progress directory, Housing act, acquisition programs, 32371
 economic stabilization regulations for HUD programs, 21776
 European housing subsidy systems, American perspective, 17556
 financial aspects of administration of grants-in-aid to State and local governments, HUD, 31421
 financial institutions to invest in State housing corporations, authorize, report, 27148
 fire safety in HUD-assisted multifamily housing, 32376
 fiscal instructions for—
 HUD-FHA offices, sec. 236, handbook, 25282
 use by Agriculture Department for home mortgages to be insured by HUD-FHA under sec. 235(1) and sec. 237 of National Housing Act, 25279
 for elderly for project mortgage insurance, 23435
 for elderly, status report, working paper, 24908
 further improvement needed in assisting military personnel in finding adequate housing near bases, Department of Defense, GAO report, 28993
 geographic aspects of housing inventory, 1970 census of housing, 31943
 hazard elimination procedures for leaded paints in housing, 27734
 housing and planning references (periodical), 18469
 housing and urban development—
 act—
 amend, law, 27079
 explanation, 17229
 basic laws and authorities, 24846-847
 in Sweden, 21801
 in United Kingdom, 26528
 laws and authorities, temporary extension, reports, 28340, 31079
 programs, oversight hearings, 28523
 trends (periodical), 18470
 housing and urban environment, report, print additional copies, 15840
 HUD-assisted housing maintenance handbook on safety, 32375
 HUD-FHA comparison of cooperative and condominium housing, 21769
 HUD International information series, 25288-289
 implementation of affirmative fair housing marketing regulations, 31434
 improved technology and removal of prevailing wage requirements, in federally assisted housing, provide for hearings, 15875
 inadequate housing and poverty status of households, areas served by Farmers Home Administration programs, 1970, by States, 28022
 income in 1969 of families and primary individuals in owner and renter occupied housing units for U.S., 19199
 income limits for—
 rent supplement housing, 20379-381, 23445, 29077
 sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
 initial quality and life-cycle costs in military family housing, 31241
 Interim report on Agency for International Development's housing investment guaranty program, GAO report, 28983

Housing—Continued

international housing—
 review of U.S. assistance to developing countries, hearings, 15876
 study, 17232
 investments in housing and community development (address), 21806
 low cost, trends of 1-family homes insured by FHA under sec. 221(d)(2), 18362
 low-rent—
 accounting handbook, 21798, 32377
 administration of program handbook, 17559, 23440, 26527
 housing financing handbook, 23441-442
 public housing construction guide, change, 23420
 public housing production control procedures handbook, 25288
 management of housing for elderly, guide, 23419
 management procedures, processing reports on audit and findings, handbook, 23439
 marital status and living arrangements of population in United States, 1970, supplementary report, 27023
 market analysis—
 Erie, Pa., 23218
 Milwaukee, Wis., 23219
 Nashua, N.H., 20245
 Pensacola, Fla., 23220
 Wilmington, N.C., 23221
 military—
 construction authorization, 1973—
 law, 19474
 report, 19695
 construction authorization, 1974, hearings, 32136
 family housing program, appropriations, 1973—
 law, 19476
 reports, 19632, 19711, 19898
 Milwaukee's poor, obstacles and possibilities, 22583
 minimum property requirements for proposed construction in housing credit shortage areas, 29583
 monetary policy, savings flows, and availability of housing finance (remarks), 30227
 mortgages involving experimental housing for—
 home mortgage insurance, 21788
 project insurance, HUD, 29068
 multi-family housing investments, tax considerations, 23452
 multifamily reports and forms catalog, change, 21799, 23443
 NBS lead paint poisoning project, housing and other aspects, 25557
 new one-family homes sold and for sale, construction reports, 18152
 Office of Assistant Secretary for Research and Technology, HUD, contract and grant awards, 27586
 Operation Breakthrough, general information, 26531
 opportunities to improve effectiveness and reduce costs of—
 homeownership assistance programs, GAO report, 21698
 rental assistance housing program, 25243
 opportunity for reducing interest costs under sec. 235-236 housing programs, GAO report, 20336
 outlook for 1973 (address), 23217
 oversight on housing and urban development programs, hearings, 30010
 planned-unit development with homes association, 31328
 population and housing characteristics for United States, by State, 21047
 population and housing, 1970, evaluation and research program, quality of residential geographic coding, 22536

Housing—Continued

procedures for implementation of memorandum of understanding between HUD and GSA, 30298
 processing procedures for insured multi-family projects utilizing industrialized housing systems, HUD, 29064
 projections of demand for housing by type of unit and region, 19104
 property disposition handbook, reconditioning acquired properties, 21796, 31427
 public housing at crossroads, National Capital Housing Authority, 1971, annual report, 20656
 registry of minority contractors and housing professionals, listing in selected cities, 32383-385
 regular income limits for sec. 235-236 housing, 20374-378, 23444, 29075
 Regulation Q, NOW accounts, investment in State housing corporations, hearings, 27194
 rent supplement fiscal handbook, HUD handbook, 25283
 rental and cooperative housing for lower income families, 31428
 rural rental housing, rural credit program, 29633
 small community needs, study, 17221
 soil sampling and testing for residential developments, 32379
 specially adapted housing for disabled veterans, questions and answers, 26914
 starts, construction reports, 18151-155, 21055
 subsidies—
 and housing policies—
 hearings, 24306
 report, 24307
 economics of Federal subsidy programs, 16929
 supplementary reports, publications order form, 22515
 suspension of subsidized programs, hearing, 26152
 technical assistance grants to nonprofit sponsors of low- and moderate-income housing, 29066
 termination of Phase 2 economic stabilization regulations for HUD programs, 27584
 understanding fair housing, 25947
 units authorized for demolition in permitting places—
 1970, construction reports, 16751
 1971, construction reports, 16752
 urban renewal directory, 29081
 Veterans Administration advertising guidelines for fair housing, 24093
 veterans home-buying guide, 27966
 Waterloo, Iowa, civil rights aspects, walk together children, 24257
 why here? Federal subsidies for homeownership, announcement of HUD film, 23455
 why tenant organizations? role for residents of rental housing, 29083
 see also Discrimination in housing—Discrimination in housing—Houses.

Housing and Urban Development Department:

adverse actions and appeals handbook, HUD, 31420
 allotments of salary to savings accounts and disposition of net pay checks, change, 21774
 allowances for making nonprofit projects operation and use of housing consultants, 29065
 annual report—
 departmental edition, 16134
 document edition, 15666
 appropriations, 1973—
 law, 19359
 report, 16957

Housing and Urban Development—Con.

appropriations, 1974—
 hearings, 27185, 28391, 30005, 31011, 31124, 31131
 reports, 28377, 29857, 29963, 32069
 architectural analysis and inspections for title 10 land development projects, HUD, 29073
 assessment/placement profile (APP) system, HUD, 21772, 31418
 Assistant Secretary, nomination of Sheldon B. Lubar, hearing, 31136
 awards for design excellence, 4th biennial, announcement and entry form, 23417
 compendium of reports resulting from HUD research and technology funding, 27582
 cooperative housing supplementary loan, 29067
 definitions, policy statements and general rulings in administering insured mortgage and low-rent housing programs of HUD-FHA, 23425, 30297
 Departmental time and cost reporting system, regional and field office instructions, 23424, 31422
 economic stabilization regulations for HUD programs, HUD staff, 21776
 employee grievances handbook, HUD, 31419
 equal opportunity complaint and compliance review reporting and control procedure, HUD, 31433
 field office processing of applicants, 21773, 23422, 30296
 field processing of project reports on audit and findings, 29054
 film fare, catalogue of films and filmstrips produced by Housing and Urban Development Department, 25272
 financial aspects of administration of grants-in-aid to State and local governments, HUD, 31421
 financial statements of—
 Government National Mortgage Association, GAO examination, 25238
 National flood insurance program GAO examination 15671 30255
 fire safety in HUD-assisted multifamily housing projects 32376
 fiscal instructions for—
 HUD-FHA field offices sec. 236 handbook 25282
 sec. 235(1) HUD handbook 25278
 use by Agriculture Department for home mortgages to be insured by HUD-FHA under sec. 235(1) and sec. 237 of National housing act, 25279
 foreign publications accessions list, 23416, 29048
 GNMA, Government National Mortgage Association, annual report, 29049
 greater benefits to more people possible by better uses of Federal outdoor recreation grants, GAO reports, 20331
 Housing Management Issues, initiation, clearances, and approval, handbook, 25287
 housing management procedures, processing reports on audit and findings, 23439
 how HUD helps with relocation, 29051
 HUD-assisted housing maintenance handbook on safety 32375
 HUD challenge (periodical), 18471
 HUD-FA comparison on cooperative and condominium housing, 21769
 HUD-FHA underwriting analysis, 21777
 HUD guide series, 17557-558, 20372, 21770-771, 23419-420
 HUD handbook, 16133, 17559, 19030, 20373-381, 21772-801, 23421-447, 25273-287, 26526-527, 27584-585, 29052-77, 30295-298, 31418-436, 32374-377
 HUD international—
 briefs, 21801-802, 28528
 information series, 25288-289
 special supplement, 26529
 urban renewal, supplement, 26530

INDEX 1973

- Housing and Urban Development—Con.
- HUD training handbooks, 32378-380
- interim merit staffing policy, 29053
- land planning analysis for title 10 land development projects proposed for mortgage insurance, HUD, 29072
- mail management, postage accountability, 31423
- management training courses, general information, 32381
- market analysis for title 10 land development projects proposed for mortgage insurance, HUD, 29071
- miscellaneous type home mortgage insurance, 29063
- mortgage insurance for hospitals, supplement, 29070
- mortgages involving experimental housing for project insurance, HUD, 29068
- new communities program, oversight, hearings, 31014
- newsletter, 18472
- 1971 statistical yearbook, 21804
- Office of Assistant Secretary for Research and Technology, HUD, contract and grant awards, 27586
- Office of General Counsel, organization, 23421
- opportunities to improve—
 - effectives and reduce costs of—
 - homeownership assistance programs, GAO report, 21898
 - rental assistance housing program, GAO report, 25243
 - model cities program in Kansas City, Mo., and Saint Louis, Mo., and New Orleans, La., GAO report, 32354
- opportunities to reduce cost—
 - acquiring properties resulting from defaults on home loans, GAO report, 20335
 - for interest under sec. 235-236 housing programs, GAO report, 20336
- personnel security program, 25274
- preemployment inquiries, 29052
- press releases, 18789
- procedures for implementation of memorandum of understanding between HUD and GSA, 30298
- processing procedures for—
 - insured multifamily projects utilizing industrialized housing systems, 29064
 - title 6 complaints and compliance reviews, HUD, 29074
- project fiscal procedures, 25280
- records control handbook, HUD, 29057-58, 31424
- reports management system, HUD, 29055
- safeguarding classified defense information and material, 23423
- Secretary, nomination of James T. Lynn—
 - hearing, 23042
 - report, 23034
- selected publications checklist, 21808
- State laws enacted in 1971 of interest to HUD, 25290
- supplemental loans for project mortgage insurance, HUD, 29069
- swearing-in procedures for HUD executives, 25273
- technical assistance grants to nonprofit sponsors of low- and moderate-income housing, 29066
- termination of Phase 2 economic stabilization regulations for HUD programs, 27584
- TS series, 16135
- Under Secretary, Assistant Secretaries, and General Counsel, nomination of Floyd H. Hyde, Michael H. Moskow, H. R. Crawford, Sol Mosher, and James L. Mitchell, hearing, 26256
- underwriting management and supervisory responsibilities, 29056
- urban transportation policies, report, 15665
- water and sewer programs, appropriations, 1974, hearings, 28384
- why tenant organizations? role for residents of rental housing, 29083
- work measurement standards manyear allowances for area offices, HUD staff, 21775
- Housing Insurance, *see* Mortgage Insurance.
- Houston, Tex.:
 - area wage survey, 16227
 - census of housing, 1970, components of inventory change, 30795
 - flood plain information—
 - Cedar Bayou, 28701
 - Spring and Willow Creeks, 28727
 - floods—
 - Buffalo Bayou, Shepherd Drive to Barker Dam, 28733
 - Cedar Bayou, how to avoid damage, 28734
 - Clear Creek, Houston metropolitan area, 28735
 - Cypress Creek, 28738
 - Spring and Willow Creeks, 28765
 - White Oak Bayou, Cole and Vogel Creeks, 28766
 - Manned Spacecraft Center, designate Lyndon B. Johnson Space Center—
 - hearing, 23037
 - law, 27083
 - report, 26207
 - special flood hazard information, Buffalo Bayou, Shepherd Drive to Barker Dam, 28770
 - transportation control strategy development, greater Houston area, 27486
- Houston County, Tenn., forest inventory statistics, Houston-Stewart County unit, middle Tenn., 24078
- Hovercraft, *see* Air cushion vehicles.
- Hovering, measurements of velocity components in wake of full-scale helicopter rotor in hover, 24184
- Hovey, Marcia J., job safety & health, 18525
- Hovious, J. C., identification and control of petrochemical pollutants inhibitory to anaerobic processes, 30180
- How children grow, 17768
- How fair labor standards act as amended in 1966 operates in our town, 27968
- How Federal agencies have served the handicapped, 29448
- How HUD helps with relocation, 29051
- How PEG helps hobbyist who works with wood, 20295
- How to buy beef steaks, 27992
- How to buy food, lesson aids for teachers, 26931
- How to control a gully, 30698
- How to investigate copyright status of work, 26294
- How to keep time and pay records under fair labor standards act, 30682
- How to sell to United States Department of Commerce, 29818
- How to use ERIC, 22061
- How USDA can help you involve youth in community development, 28013
- Howard, Amster K., laboratory load tests on buried flexible pipe, reinforced plastic mortar (RPM) pipe, 32543
- Howard, James O.:
 - logging residue, volume and characteristics, 31375
 - measurement of logging residue, alternative applications of line intersect method, 21682
- Howard, Mack, for Congress Committee. *see* Mack Howard for Congress Committee.
- Howard County Republican Central Committee, annual report, 24477
- Howard D. Austin for Congress Committee, annual report, 24654
- Howard L. Patterson, Jr. for Congress Committee, annual report, 24497
- Howard University:
 - appropriations, 1973, veto message, 19556
 - appropriations, 1974, hearings, 31009

- Howes, Walton L., loudness function derived from data on electrical discharge rates in auditory nerve fibers, 29296
- Howland, Robert M., sport fishery abstracts, 18922
- Howrey Lumber Co., relief, 15809
- Hoy, newsletter, 28094
- Hoyle, Merrill C., nature and properties of some forest soils in White Mountains of New Hampshire, 32344
- Hoyt, Charles D., mineral industry of South Dakota, 16306
- Hrutford, Bjorn F., steam stripping odorous substances from kraft effluent streams, 28810
- HS series, 21392-396
- HSMHA, *see* Health Services and Mental Health Administration.
- Huachuca, Fort, relocation of U.S. Army Intelligence School from Fort Holabird, Md., 17031
- Hualapal Indians, general information, 31459
- Hubbard, E. F., movement and dispersion of soluble pollutants in Northeast Cape Fear Estuary, N.C., 16114
- Hubbard, Harry B., jr., spray tower for application of microbial aerial sprays, 25230
- Hubbard, John H., feasibility of applying fringe multiplication techniques to stress analysis in 3 dimensions, 20107
- Hubbard County Republican Party, annual report, 24507
- Hubbard Creek, water quality records, 16111
- Hubbard Gulch Creek:
Rifle, Colo.,
food plain information, 28705
floods, 28737
- Hubbard, Ohio, motor carrier accident, 26672
- Hubbard Shoe Co., Inc., Rochester, N.H., footwear for men and women, Tariff Commission report, 32589
- Hubbell, D. W., distribution of radionuclides in bottom sediments of Columbia River estuary, 30273
- Hubbell Trading Post, general information, 16413
- Huber, N. King, glacial and postglacial geologic history of Isle Royale National Park, Mich., 25258
- Hubler, Eugene W., Hubler for Congress Committee, annual report, 24527
- Hubler for Congress Committee, annual report, 24527
- Hubs, hub clamps, Federal item identification guide, 32174
- Huckabee, John W., mercury concentrations in fish, Great Smoky Mountains National Park, 22482
- HUD, *see* Housing and Urban Development Department.
- Hudak, Richard A., temporary detention of storm and combined sewage in natural underground formations, 30190
- Huddle, Franklin P., science policy, working glossary, 17093
- Hudlow, Michael D., weather radar investigations on artillery test conducted in Panama Canal Zone, 20973
- Hudson, C. H., experimental study of differential effects of parole supervision for group of adolescent boys and girls, summary report, 25365
- Hudson, C. Michael, effect of specimen thickness on fatigue-crack-growth behavior and fracture toughness of 7075-T6 and 7178-T6 aluminum alloys, 27712
- Hudson Bay, basin, surface water quality, 31404
- Hudson County Regular Democratic Organization, annual report, 24776
- Hudson River and Valley, combined sewer overflow study for Hudson River conference, 25115
- Huebner, Walter E., design guide for load suspension points, slings and aircraft hard points, 16655
- Huffman, Harry, designs for preparation of vocational and technical teachers of socioeconomically disadvantaged youth, 21421
- Huffstutler, Clyde E., productivity in bakery products industry, 16238
- Hugh Purvis (USSR):
loan of vessel, agreement with Turkey, 17882
- Hughen, James H., use of self-focusing antenna for low-angle tracking, 31757
- Hughes, Warren A., statistics of local public school systems, fall 1970, staff, 31229
- Hughes Air West, accident report, 23855
- Hull, Hadlai A., nomination, hearing, 26252
- Hull, J. W.:
growing blackberries, 19107
thornless blackberries for home garden, 26936
- Hull, John E., hydrologic conditions during 1969 in Dade County, Fla., 16103
- Hull, William L.:
conceptual framework for diffusion of innovations in vocational and technical education, 30501
opinion leaders in organizational structure of 2 State divisions of vocational and technical education, 27770
- Hull for Congress Club, annual report, 22816
- Hull maintenance technicians, *see* Maintenance technicians.
- Hulls (ships):
salvage and repair, Army technical manual, 19172
- Human body, *see* Anatomy.
- Human cost of communism in Vietnam, 21355, 23062
- Human engineering:
analysis of airport lighting control panels and proposal for new design, 24047
development of man-computer interaction, USSR study, 27643
ergonomics, principles and recommendations, 30463
human factor in contemporary technology, USSR study, 26575
human habitat and health, Congress on Environmental Health, American Medical Association, proceedings, 28247
guide to equipment design, 21407
interaction of man-machine systems, USSR study, 23532
methodology in measurement of complex human performance, two-dimensional compensatory tracking, 19187
performance on expanded time bearing plot as function of bearing accuracy, 26640
physiological principles of aptitude for mass occupations, USSR study, 17628
potential reflection problems when using NAS model 3d display in vertical position in air route traffic control centers, evaluation, 24039
relationships between design characteristics of avionics subsystems and training cost, training, difficulty, and job performance, 28031
7th annual conference on manual control, proceedings, 17703
simulated artificial gravity on human performance, effects, 21973
space ergonomics, 31656
systemizing information to identify and relate behavioral and physical design parameters, 25069
- Human factors engineering, *see* Human engineering.
- Human habitat and health, proceedings of Congress on Environmental Health, American Medical Association, 28247
- Human needs (periodical), 18473, 29494
- Human race, *see* Man.
- Human relations, human relations in management for State and local agencies, curriculum guide, instructor's manual, student workbook, 29046
- Human resources, *see* Ability.
- Human rights, *see* Civil rights.

INDEX 1973

- Human self-development, our moral heritage, 26963
- Human services:
citizen advocacy for handicapped, im-
paired, and disadvantaged, overview,
16457
human needs (periodical), 18473, 29494
new municipal roles in human resource
development, 21417
- Humanities, support for cultural activities,
survey of United States and foreign gov-
ernments, 15926
- Humanities, National Endowment for, *see*
National Endowment for the Humanities
- Humboldt Bay, Calif., larval fish survey,
23809
- Humes, Donald H., meteoroid impacts on
Mars and secondary particle environment,
20606
- Humidification in thermal life determination
of motorette insulation system, 23881
- Humidity, deliquescent-chemical maximum
humidity indicator, 29667
- Humphrey, Cliff, for Congress Committee,
see Cliff Humphrey for Congress Com-
mittee
- Humphrey, Hubert H., Soviet and Polish
agriculture, observations, 24910
- Humtullips River, hydrology of four streams
in western Washington as related to sev-
eral Pacific salmon species, 23349
- Hungarian People's Republic, *see* Hungary
- Hungary:
air transport services agreement, 27930
consular convention—
message from President of United States,
15804
report, 24894
education in Hungarian People's Republic,
history, description, etc., 23138
five-year plan summary, 31206
map, 29795
mineral industry, minerals yearbook chap-
ter, 20544, 29216
settlement of claims, agreement with Hun-
garian People's Republic, 26879
- Hunger:
child nutrition programs, handbook for
volunteers, 17495
hunger in 1973, hearings, 31157
hunger in the classroom, then and now,
17292
1973, poverty in America, census statistics
for county level poor and story behind
them with review of food program ad-
ministration, 26284
nutrition and human needs, national sur-
vey, hearings, 20007
Seattle, Wash., unemployment, new poor
and hunger, 17293
war on hunger, report, 19052
- Hungry Horse project, electrical equipment,
region 1, field review of maintenance,
31780
- Hunt, James L.:
application of phase-change technique to
thin sections with heating on both sur-
faces, 32469
thermodynamic and transport properties
of gaseous tetrafluoromethane to chemi-
cal equilibrium, 31627
- Hunter Creek, Roaring Fork River, Aspen
Colo., flood plain information, 32217
- Hunting:
conservation practices, signs of good hunt-
ing and fishing, 15481
hunter safety programs, tax on bows and
arrows to provide funds—
law, 19485
reports, 19669, 19937
migratory birds, 1972-73, Federal regula-
tions, 16487, 20781
regulations series, 16487, 20781
Shawnee is camping, hiking, hunting,
floating, fishing, scenery, 23314
- Hunting—Continued
shooting animals from aircraft, provide for
effective enforcement of provisions to
prohibit—
law, 19432
reports, 15680, 15857
- Hunting and Fishing Day, National, *see* Na-
tional Hunting and Fishing Day
- Huntington, W. Va., Southern Airways, Inc.,
Tri-State Airport, aircraft accident report,
22147
- Huntington County Republican Committee,
annual report, 22836
- Huntington Lake, quadrangle, central Sierra
Nevada, Calif., analytic data, 21728
- Huntington's chorea, Huntington's disease
(Huntington's chorea), hope through re-
search, 22080
- Huntington's disease, *see* Huntington's
chorea
- Huntsville, Ala., occurrence and distribution
of selected metals in streams, near Hunts-
ville, Ala., 30271
- Hurley, Evelyn M., survey of finance com-
panies, 20277
- Huron, Lake, bibliography, 16143
- Hurricanes:
adequacy of national weather service's
hurricane and flood warning system,
hearing, 19770
analysis of Stormfury data using varia-
tional optimization approach, 29392
disaster survey team report on events of
Agnes, 25618
Galveston Bay hurricane surge study,
effects of proposed barriers on
hurricane surge heights, calibration
tests, hydraulic model investigation,
27444
tides, currents, salinities, and dye dis-
persion for normal tide conditions,
calibration tests, hydraulic model in-
vestigation, 27445
- Hurricane Agnes—
Agnes floods, post-audit of effectiveness
of storm and flood warning system of
National Oceanic and Atmospheric
Administration, report, 26676
concerning disaster relief, message from
the President, 19554
highway emergency relief additional ap-
propriations, authorize, law, 16882
preliminary report, 16428
rail facilities restoration—
hearing, 19953
law, 19516
reports, 19713, 19860
tropical storm Agnes, relief to victims,
message from the President, 19550
hurricane research progress report, 30203
naming, 20719, 23862
national hurricane operations plan, 29384
North Atlantic, devastating, 20th century,
27804
on role of organizational period in NHRL
circularly symmetric hurricane model,
30525
Project Stormfury, 20702
tropical storm and Atlantic hurricane,
17781
- Hurst, J. G., Lorenz ratios of technically
important metals and alloys, 26706
- Husbands and wives:
age at 1st marriage—
and children ever born for U.S. census
of population, supplementary report,
25912
census of population, 1970, 29709
tax treatment of single persons and mar-
ried persons where both spouses are
working, summary of testimony, 17117
young marrieds, 29791
- Huss, Ralph E.:
despatches from United States consuls in—
Antung, Manchuria, China, 1904-6,
23698
Bangkok, Siam, 1856-1906, 23699

- Huss, Ralph E.—Continued
records of Dept. of State relating to—
internal affairs of Brazil, 1910-29, microfilm pamphlets describing, 20627
political relations between—
Argentina and other States, 1910-29, microfilm, pamphlet describing, 25540
Panama and other States, 1910-1929, microfilm, pamphlet describing, 27718C
Turkey and other States, 1910-29, microfilm, pamphlet describing, 21996
United States and Turkey, microfilm, pamphlet describing, 21997
- Hussey, John A.:
embattled Katmai, history of Katmai National Monument, 16410
Fort Vancouver National Historic Site, Washington, historic structures report, historical data, 27810
- Hutchins, Pamela W., cancer chemotherapy reports, 18047, 18049
- Hutchinson J. Edward, Berrien County
Hutchinson for Congress Committee, annual report, 24668
- Hutchison, Marilyn K.:
coal mine health seminar, 20536
protecting health of coal miners, inter-agency approach, 30500
- Hutton, James, journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy to survey timber resources between Mermen-tau and Mobile Rivers, Nov. 1817-May 1819, with appendix etc., microfilm pamphlet describing, 21994
- Huvos, Joseph B.:
mineral industry of—
Albania, Denmark (including Greenland), Iceland, and Switzerland, 20538
East Germany, 25431
Hungary, 20544, 29216
North Dakota 25465
- Hybrid mahogany recommended for planting in the Virgin Islands, 28957
- Hyde, Floyd H., nomination, hearing, 26256
- Hyde Harold W., soil survey of Midland County Tex., 31822
- Hydrated lime, *see* Lime.
- Hydrates, hydrated electron, selected specific rates of reactions of transients from water in aqueous solution, 29313
- Hydraulic brakes, *see* Brakes.
- Hydraulic jet flow of an ideal liquid and gas-liquids mixtures, 16205
- Hydraulic mine filling, removal of dissolved contaminants from mine drainage, 21504
- Hydraulic presses, and industrial hydraulic valves, certain workers of Columbus, Ohio, plant of Denison Division of Abex Corp., Tariff Commission report, 17912
- Hydraulics:
effective hydraulic roughness for channels having bed roughness different from bank roughness, state-of-the-art report, 25094
hydraulic geometry of some Alaska streams south of Yukon River, 23346
hydraulic laboratory investigations—
mathematical simulation of turbidity structure within an impoundment, 25097
selective withdrawal from man-made lakes, 25102
simultaneous, multiple-level release from stratified reservoirs, 23178
hydraulic model investigations—
beach widening by perched beach concept Santa Monica Bay, Calif., 31264
channel conditions, Devil's Islands Reach, Mississippi River, Mo. and Ill., 23180

- Hydraulics—Continued
hydraulic model investigations—con.
evaluation of flared outlet transitions, 20171
filling and emptying system Ice Harbor Lock, Snake River, Wash., 28685
Galveston Bay hurricane surge study, effects of proposed barriers on—
hurricane surge heights, calibration tests, 27444
tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, 27445
Grays Harbor, Wash., south jetty study, 17408
Ice Harbor Lock, Snake River Wash. filling and emptying system 28685
model study of Trotters Shoals spillway, 28785
navigation channel improvement, Gastineau Channel, Alaska, 21481
navigation conditions and filling and emptying systems new Bankhead Lock, Black Warrior River, Ala., 20176
navigation conditions at confluence of Arkansas Verdigris, and Grand Rivers, 25100
outlet works stilling basin for Tallahala Dam, Tallahala Creek, Miss., 28784
outlet works, Warm Springs Dam, Dry Creek, Russian River Basin, Sonoma County, Calif., 25101
plans for reduction of shoaling in Brunswick Harbor and Jekyll Creek Ga., 20175
reflection characteristics of screen wave absorbers, H1902
St. Clair River, effects of submerged sills, 17409
Scoggins Dam fishtrap aeration and supply structure, 23939
shoaling conditions, St. Louis harbor, Mississippi River, 20177
spillway for Oakley Dam, Sangamon River, Ill., type 2 spillway, 23179
supercritical flow in curved channels, 21477
Trotters Shoals spillway, 28785
Vancouver Lake, correlated studies, 17421
wave damping effects of fibrous screens, 20172
wave transmission through rock structures, 25096
hydraulic testing and sampling of holes RB-E-01 and RBB-D-01, Project Rio Blanco, Rio Blanco County, Colo., 23347
hydraulic tests in hole UAe-1, Amchitka Island, Alaska, 23348
irrigation management for control of quality of irrigation return flow, 31288
physiographic and hydraulic studies of rivers (series), 27567
- Hydroacoustics, *see* Sound.
- Hydroballistics modeling, 2564
- Hydrocarbons:
adsorption of chlorinated hydrocarbons from seawater by crosslinked polymer, 28806
development of analytical procedures for determining chlorinated hydrocarbon residues in water and sediments from storage reservoirs, 22209
friction-induced surface activity of some hydrocarbons with clean and oxide-covered iron, 26690
fuels, flammability properties, 30593
geochemical aspects of saturated hydrocarbon constituents of Green River oil shale-Colorado no. 1 core, 29231
hydrocarbon gases produced in simulated swamp environment, 16336
interpretation of gas chromatographic spectra in routine analysis of exhaust hydrocarbons, 23651

INDEX 1973

- Hydrocarbons—Continued
 offshore petroleum studies, historical and estimated future hydrocarbon production from U.S. offshore areas and impact on onshore segment of petroleum industry, 25417
 procedures for evaluating hazards to coal mining operations from hydrocarbon reservoirs, 29206
 radiation halos and hydrocarbon reservoirs, review, 25419
- Hydrodynamics:
 bioenergetic and hydrodynamic aspects of dolphin swimming, USSR study, 27630
 extended hydrodynamic theory of peak and minimum pool boiling heat fluxes, 30451
 hydrodynamic flux control for waste water application of hyperfiltration systems, 28820
 hydrodynamics of certain animals, USSR study, 20454
 some hydrodynamic indices of body shape of pinnipeds, USSR study, 20466
see also Magneto-hydrodynamics.
 Hydroelectric power, *see* Electricity.
 Hydroelectric power plants, *see* Electric power plants.
 Hydrofluidic servoactuator development, 30763
- Hydrofolls, mortgage insurance, hearings, 15771
- Hydrogen:
 chemical kinetics in C-O-S and H-N-O-S systems, bibliography, 16360
 computer programs for thermodynamic and transport properties of hydrogen (Tabcode-II), 26703
 coolant-side heat-transfer rates for hydrogen-oxygen rocket and new technique for data correlation, 25527
 determination of hydrogen in milligram quantities of titanium and its alloys, 29299
 hydrogen environment embrittlement of metals, 27705
 influence of atmosphere of molecular hydrogen upon evolution of oxygen by leaves of *Tradescantia fluminensis* Vell, 23539
 intelligibility of hydrogen-speech at 200 ft. of seawater equivalent, 16249
 liquid densities of parahydrogen, 25554
 liquid-vapor equilibrium in binary systems of He^4 He^3 with ND_2 and NH_3 , 22008
 performance of 40-millimeter-bore ball bearings with lead- and lead-alloy-plated retainers in liquid hydrogen at 1.2 million DN, 20612
 selection of coals for AVCO hydrogen plasma arc process for making acetylene, 28218
 thermophysical properties of parahydrogen from freezing line to 5000 R for pressures to 10,000 Psia, 17738, 26702
 Hydrogen-ion concentration, acidity-alkalinity (pH), 20857
- Hydrogen sulfide, sulfur dioxide emission control by hydrogen sulfide reaction in aqueous solution, citrate system, 30443
- Hydrogenation, hydrogenating shale oil at low space velocity, 26664
- Hydrogeology:
 geohydrology of—
 Claiborne group (series), 27565
 eastern part of Pahute Mesa, Nevada test site, Nye County, Nev., 20350, 30274
 Needles area, Ariz., Calif., and Nev., 26498
 geophysical studies in Yuma area, Ariz. and Calif., 30275
- Hydrographs, storm hydrographs using double-triangle model, 29563
- Hydrohandling system, evaluation, for sorting and sizing apples for storage in pallet boxes, 19109
- Hydrologic simulation model of Colorado subalpine forest, 32346
- Hydrological Decade, International, *see* International Hydrological Decade.
- Hydrology:
 contributions to hydrology—
 Africa and Mediterranean (series), 21742
 Latin America and Antilles (series), 16112
 United States (series), 20360-361, 26512
 geologic and hydrologic maps for land use planning in Connecticut Valley with examples from folio of Hartford North, 21714
 Geological Survey research, 16108, 21737-738
 ground water hydrology of prairie pot-holes in North Dakota, 23359
 growth and hydrologic influence of European larch and red pine 10 years after planting, 25219
 hydrologic analysis and interpretation, 26511, 27574
 hydrologic conditions during 1969 in Dade County, Fla., 16103
 hydrologic effects of land use (series), 20355
 hydrologic engineering methods for water resources development—
 hydrologic data management, 20155
 principles of ground-water hydrology, 20156
 requirements and general procedures, 20154
 water quality determinations, 28767
 hydrologic investigations of prairie pot-holes in North Dakota, 1959-68, 21723
 hydrologic relationship of Jefferson County landfill leachate and Meramec Heights area springs, Jefferson County, Mo., 28829
 hydrologic significance of lithofacies of Cane River Formation or equivalents of Ark., La., Miss., and Tex., 27565
 hydrologic studies in Mid-Centinel region, 29016-17
- hydrology—
 and effects of conservation structures, Willow Creek Basin, Valley County, Mont., 1954-68, 20355
 and recreation on cold-water rivers of Michigan's southern peninsula, 23382
 4 streams in western Washington as related to several Pacific salmon species, 23349
 prairie potholes in N. Dak. (series), 21723, 23359
 hydrology of tidal streams (series), 20356
 morphometry of 3 small watersheds, Black Hills, S. Dak. and some hydrologic implications, 21675
 National Weather Service River Forecast System, forecast procedures, 25621
 publications, price list, 26797
 SCS national engineering handbook, 16484, 25707
see also Water.
- Hydrology Office, NOAA technical memorandum, NWS HYDRO series, 25621
- Hydrolysis, effects of trans α -hydroxyl groups in alkaline degradation of glycosidic bonds, 32337
- Hydrometeorology:
 experimental control of hydrometeorological factors for solution of agrometeorological problems, USSR study, 17641
 hydrometeorological reports, 30519, 32509
 radar image of surface of sea, USSR study, 17605
- Hydroplanning, high speed ground and water demonstration project, hearing, 24921

- Hydrospace, arms control in hydrospace, legal aspects, 17827
- Hydrostatics, application of hot-isostatic pressing, hydrostatic extrusion, and deformable-die tube tapering processes to production of titanium-6Al-4V tapered tubes, 26980
- Hydroxyl:
effects of trans a-hydroxyl groups in alkaline degradation of glycosidic bonds, 32337
reactivity of hydroxyl radical in aqueous solutions, 30470
- Hygiene, hygienic problems of effect of microwave electromagnetic field on body, 16194
- Hygienists, *see* Industrial hygienists.
- Hyperbaric atmosphere, *see* Atmosphere.
- Hyperbaric chambers, *see* Chambers.
- Hyperbaric facilities, 27838
- Hypercapnia:
Bohr effect in chronic hypercapnia, 30408
calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia, studies, 16250
mathematic analysis of reactions of human respiratory system to hypoxia and hypercapnia, 23534
- Hypergeometric functions, *see* Mathematics.
- Hyperia, pelagic amphipods of genus hyperia and closely related genera, Hyperiidae, 25698
- Hyperlipoproteinemia, *see* Lipoproteins.
- Hyperoxia:
hyperbaric oxygen breathing on rate of ethanol metabolism in man, studies on effect, 29197
simulated breathholding dives in dry and wet chambers on blood shifts into thorax, effects, 29199
speech intelligibility during exercise at normal and increased atmosphere pressures, 16248
- Hypersensitivity, *see* Sensitivity.
- Hypersonic aircraft, *see* Aircraft.
- Hypersonic flow, *see* Flow.
- Hypersonic speed, *see* Air speed.
- Hypertension, *see* Blood pressure.
- Hypnosis, notes of neurologist, USSR study, 17617
- Hypoxia, mathematic analysis of reactions of human respiratory system to hypoxia and hypercapnia, 23534
- I
- I & N reporter, 18474
- I. Jablow and Company, Inc., boys' shirts, robes, and pajamas, I. Jablow and Company, Inc., Philadelphia, Pa., Tariff Commission report, 29548
- I.R.S., *see* Internal Revenue Service.
- IAEA, *see* International Atomic Energy Agency.
- IBEW-COPE, *see* International Brotherhood of Electrical Workers Committee on Political Education.
- IBM computers, *see* Electronic computers.
- ICC, *see* Interstate Commerce Commission.
- Ice:
aircraft microwave measurement of ice in Beaufort Sea, 1971, some preliminary results, 30528
basic properties as related to performance of ice condensers, 24202
breakage of floating ice by compressed gas blasting, 25067
cationic analysis of—
Ryd Station, Antarctica, ice core, 17374
Camp Century, Greenland, ice core, 17373
conditions, weather and crop bulletin (periodical), 19081
Great Lakes ice cover, 1970-71 winter, 31720
icings developed from surface water and ground water, 32199
- Ice—Continued
internal friction of single-crystal ice, 28686
Isau, Greenland, calculations of glacier flow for open-pit mine, 32198
measurements of laser extinction in ice fog for design of SEV pilotage system, 21437
pavement snow and ice control, search for new technology, 23187
radar cross-section measurements of snow and ice, 23155
salinity on optical extinction of sea ice at 6328 Å, effect, 31235
soluble particulates in ice from site 2, Greenland, 31236
thickness, North American arctic and sub-arctic 1967-69, observations, 16006
transmission of 2.0-3.4 micron infrared radiation in ice fog, 31237
water pollution and associated effects from street salting, 30192
see also Sea ice.
- Ice coring rigs, deep rotary core drilling in ice, 28688
- Ice Harbor Dam, fish passage reports, 20100, 28683
- Ice Harbor Lock, filling and emptying system, hydraulic model investigations, 28685
- Iceland:
agricultural commodities, agreement, 31852
economic trends and their implications for United States, 20432
lights and fog signals, 30124
mineral industry, minerals yearbook chapter, 20538
- Iceings developed from surface water and ground water, 32199
- ICPRB, *see* Interstate Commission on Potomac River Basin.
- ICRC, *see* International Committee of the Red Cross.
- Ictalurus punctatus, *see* Catfish.
- Ida County Republican Central Committee, annual report, 22928
- Idaho:
beneficiation of Idaho kyanite-bearing materials, 27699
census of business, 1967, selected services, 16704
census of housing, 1970, housing characteristics for States, cities, and counties, 15542
chemical composition of sedimentary rocks in Alaska, Idaho, Oregon, and Washington, 23364
climatological data, 18082
counties, population estimates, 19248
county business patterns, 31958
final report of major mine fire disaster, Sunshine Mine, Sunshine Mining Company, Kellogg, Shoshone County, 27695
Go Idaho Committee, annual report, 22857
Idaho Superintendency of Indian Affairs, 1863-70, records, microcopy, pamphlet describing 20630
income limits for sec. 221(d)(3) below-market interest rate housing and exemption limits for sec. 235-236 housing, 29076
mineral industry, minerals yearbook chapter, 29217
1970 census of population, characteristics of population, 25902
precipitation data, hourly, 18433
quality of ground water in basalt of Columbia River Group, Washington, Oregon, and Idaho, 20360
rehabilitation facilities, national directory, 23947
Sawtooth National Recreation Area, establish. law, 16902
tectonic events at intersection between Hope Fault and Purcell Trench, northern Idaho, 16106

INDEX 1973

- Idaho—Continued
truck inventory and use survey, 22540
water resources, data, 23390, 31398
water supply outlook and snow surveys, 19058
Idaho State AFL-CIO COPE, annual report, 22766
Ideation and automata, USSR study, 32406
Identical bidding in public procurement, 25366
Identification:
aircraft and related products, Federal aviation regulations, 18292
application of nuclear technology to art identification problems, 22472
aquatic pests on irrigation systems, 23915
geologic prediction, development tools and techniques for geophysical identification and classification of sea floor sediments, 23802
how to use 2 computational strategies to solve simple system, identification problems, 25212
identification and control of petrochemical pollutants inhibitory to anaerobic processes, 30180
identification of polychlorinated biphenyls in presence of DDT-type compounds, 20186
identification of utility systems, 23667
illustrated guide to identification of some market disorders of head lettuce, 15476
item identification, Federal manual for supply cataloging, 24981, 26302, 32161
oil pollution source identification, 25110
truck-top markings for visual identification, 31885
Ideology:
ideologies in conflict, 15495
problems of modern ideological struggle and development of Socialist ideology and culture, USSR study, 21855
USA, economics, politics, ideology (periodical), 19031
If you become disabled, 31809
If you must smoke, 26722
If you really want an education, 29653
IFR, *see* Instrument flight rules,
IFYGL, *see* International Field Year for Great Lakes, 1972-73.
IGMR, *see* Indiantown Gap Military Reservation.
Igneous rocks:
and related mineral deposits of Barker quadrangle, Little Belt Mountains, Mont., 30279
data of geochemistry, chemistry of igneous rocks, chemistry of peralkaline oversaturated obsidians, 23358
in Bingham mining district, Utah, 26499
radiometric ages of igneous rocks from Pima, Santa Cruz, and Cochise Counties, southeastern Arizona, 27557
stratigraphic framework of Absaroka Volcanic Supergroup in Yellowstone National Park region, 21730
Ignition:
exhaust emission from uncontrolled vehicles and related equipment using internal combustion engines, small air-cooled spark ignition utility engines, 30726
testing of coal-cutter materials for incendiarity and radiance of sparks, 21957
Ihnat John P., signal processing element functional description, microprogrammed control unit, buffer store, and storage control unit, 22175
Ikrath, Kurt, ferrite rod antenna arrays for Loran-C receivers, 20967.
Iles Glorieuses, geomorphology and vegetation, 25695
Ilex opaca, *see* Holly.
Illegal aliens, 26173
Illicit use of dangerous drugs in United States, compilation of studies, surveys and polls, 20579
Illinois:
census of business, 1967, major retail centers, 16691
census of housing, 1970, housing characteristics for States, cities, and counties, 16722
census of population, 1970, detailed characteristics, 19203
census of transportation, 1972, truck inventory and use survey, 22541
channel conditions, Devil's Island Reach, Mississippi River, Mo. and Ill., hydraulic model investigation, 23180
climatological data, 18083
congressional districts, 93d Congress, 15582
counties, population estimates, 28177
county business patterns, 31957
electric rate book, 25155
prescription data, hourly, 18434
Illinois-California Express, Inc., motor carrier accident, Phoenix, Ariz., 27702
Illinois Central Railroad, accident report, 30569
Illinois Machinists Nonpartisan Political League, annual report, 22885
Illinois Real Estate Political Education Committee, *see* Real Estate Political Education Committee of Illinois.
Illinois River, terminals, docks, mooring locations and warehouses, list, 31254
Illiteracy, manual for USES basic occupational literacy test, development, 25375
Illness, *see* Diseases—Sick.
Illumination, *see* Lights and lighting.
Illustrated guide to the identification of some market disorders of head lettuce, 15476
Illustrators, examination announcement, 25952
Ilmenite, conversion of ilmenite to rutile by carbonyl process, 23658
ILO, *see* International Labor Organization.
ILS, *see* Landing (aircraft).
Imagery, coastal imagery data bank, interim report, 25066
Images:
digital processing of radiographic images, 29252
ground control requirements for precision processing of ERTS images, 17529
image converter based on multi-layer semiconductor-dielectric structure, USSR study, 30342
techniques used in display of sequential images received from geostationary satellites, survey, 22417
IMF, *see* International Monetary Fund.
IMIS (series), 18509
Imitation, marking requirements for imitation political and numismatic items manufactured or imported into U.S., reports, 28327, 28334, 31094
Imlay, Ralph W.:
Jurassic paleobiogeography of Alaska, 29025
Middle Jurassic (Bajocian) ammonites from eastern Oregon, 30280
Immigrants, *see* Immigration and emigration.
Immigration and emigration:
administrative decisions under immigration and nationality laws of U.S., supplemental index, 25292
illegal aliens, review of hearings, committee print, 27233
immigrant scientists and engineers—decline in FY 1972, and physicians increase sharply, 32519
study of characteristics and attitudes, 31738
Immigration and nationality act, amend—law, 19509
reports, 21171, 27130

Immigration and emigration—Continued
 laws—
 administrative decision, 27588
 general information, 16136
 migration and refugees assistance, appro-
 priations, 1973, hearings, 15717, 17025
 publications, price list, 17800
 subcommittee report, 92d Congress, 26234
 Western Hemisphere immigration, hear-
 ings, 29930
 Immigration and Naturalization Service:
 annual report, 25291
 I & N reporter, 18474
 interim decisions, 18497
 more needs to be done to reduce number
 and adverse impact of illegal aliens in
 United States, GAO report, 31382
 passenger travel between United States
 and foreign countries, reports, 18475,
 21810, 29085
 regional office operations, hearings, 32081
 Immigration inspectors, hazardous occupa-
 tion classification for civil service retire-
 ment purposes, report, 29860
 Immunity:
 Members of Congress, legislative role in
 gathering and disclosing information,
 hearing, 27093
 noise immunity of optical communica-
 tion lines (OLC) with frequency multi-
 plexing of discrete information chan-
 nels, USSR study, 16191
 see also Immunization.
 Immunization, status of immunization in
 tuberculosis in 1971, report of conference
 on progress to date, future trends and
 research needs, 16174
 Immunology:
 cellular immunology (remarks), 29351
 conference and workshop on cellular im-
 mune reactions to human tumor-asso-
 ciated antigens, 30478
 conference on immunology of carcinogene-
 sis, 25561
 Impact:
 behavior and impact of chemicals on for-
 est environment, 21604
 card-gap and projectile impact sensitivity
 measurements, compilation, 30418
 computerized unsymmetrical mathematical
 simulation and experimental verification
 for helicopter crashworthiness in which
 multidirectional impact forces are pres-
 ent, 30759
 ecology impacts of forest insects of Pacific
 Northwest, 21606
 impact of—
 blasting agents and slurries on explo-
 sives technology, 21938
 changing economic and monetary poli-
 cies on international trade, 21099
 Federal installations on small business,
 19611.
 Federal programs to improve living con-
 ditions of migrant and other seasonal
 farmworkers, 23319
 food stamp program on 3 local economies
 input-output analysis, 20089
 radiometry and photometry and role of
 NBS, 25555
 increasing heat and impact resistance of
 zirconium-dioxide based ceramics,
 USSR study, 20470
 large groups in boundary waters canoe
 area, their numbers, characteristics, and
 impact, 17515
 low-energy electron impact rate coefficients
 for some atmospheric species, 16451
 meteoroid impacts on Mars and secondary
 particle environment, 20606
 significance of Charpy-V test parameters
 as criteria for quenched and tempered
 steels, 23883
 statistical prediction of impact displace-
 ment due to wind effect on unguided
 artillery rocket during powered flight,
 20978

Impact—Continued
 wind leading edge fuel tank impact tests,
 24044
 Impedance:
 acoustic impedance of curved multi-
 layered duct liners, 30458
 impedance maps to predict effect of ir-
 regular, inhomogeneous ground of Loran
 C/D radio navigation systems, 27064,
 31989
 research on structural dynamic testing
 by impedance methods—
 free body response, 24189
 structural system identification from—
 multipoint excitation, 24187
 single point excitation, 24188
 subsystems, 24190
 SHIP (simplified-Helmholtz-integral pro-
 gram), fast computer program for cal-
 culating acoustic radiation and radia-
 tion impedance for free-flooded-ring and
 finite-circular-cylinder sources, 16443
 Impellers, and fans, Federal item identifica-
 tion guide, 31184
 Imperial Cotton Mills, certain carded cot-
 ton yarns and woven fabrics thereof,
 workers of Imperial Cotton Mills, Eaton-
 ton, Ga., Tariff Commission report, 29550
 Impingement, noise generated by impinge-
 ment of jet upon large flat board, 23684
 Implants, implantation of telemetering
 devices in skin of sea animals, USSR
 study, 20477
 Implementation of affirmative fair housing
 marketing regulations, 31434
 Implementation of amendments to improve
 work incentive program, 21334
 Implementation of Emergency loan guaran-
 tee act, Lockheed Aircraft Corporation
 Emergency Loan Guarantee Board, 21694,
 31380
 Implicit finite-difference solution to viscous
 shock layer including effects of radiation
 and strong blowing, 20622
 Implied consent to test operators of motor
 vehicles for intoxication, 17207
 Implied consent, warehouseman's lien and
 public utilities reimbursement, 15888
 Important factors in motivating AFROTC
 officer personnel in zero-draft environ-
 ment, 25840
 Imports:
 airborne, foreign trade reports, 19013
 commercial import detentions, monthly
 report, 18138
 effect of alternative beef import policies
 on beef and pork sectors, 17346
 foreign trade reports, 15597, 19005-6,
 19010, 19014
 general imports, commodity by world area,
 annual trade reports, 28196-197
 indexes of U.S. exports and imports by
 economic class, 16788
 special requirements on imports into
 Canada, 19297
 U.S. commodities as related to output,
 28195
 U.S. foreign trade, commodity by country,
 TSUSA, 28198
 waterborne, foreign trade reports, 19012
 see also Commerce—Tariff—*also* names
 or classes of articles imported—*also*
 subjects.
 Impounded funds, *see* Funds.
 Impounded water, *see* Water.
 Impoundment and reporting and review,
 29936
 Impoundment control and 1974 expenditure
 ceiling, 30991
 Impoundment of appropriated funds by the
 President, 24929
 Impoundment of funds for farm and rural
 programs, 26248
 Impoundment reporting and reviewing,
 28431

INDEX 1973

- Impression fabric of manmade fiber from Japan, 27945
- Imprints (in books):
 - non-GPO imprints, Government publications received in Library of Congress in 1971, selective checklist, 16241
 - pioneer imprints from 50 States, 29188
- Imprisonment, juvenile confinement institutions and correctional systems hearings, print additional copies, report, 26214
- Improte, Herbert, relief, 19325, 19834
- Improved adapter for increment borer ratchet assembly, 25224
- Improved growth intercept method for estimating site index of red pine, 21671
- Improved layout for fowl processing plant, 25824
- Improved management information system needed for Eximbank's capital loan program, 23320
- Improved method for aerodynamic analysis of wing-body-tail configurations in subsonic and supersonic flow, 29253
- Improved technology and removal of prevailing wage requirements in federally assisted housing, 15875
- Improving area wage survey indexes, 25385
- Improving congressional budget control, 27092
- Improving control of scientific-technical progress, 26602
- Improving employee performance, 15608
- Improving health care through research and development, 27876
- Improving management for more effective government, 23316
- Improving nickel extraction from oxide nickel ores, 21959
- Improving water quality management planning in nonmetropolitan areas, 28830
- Improvement of absolute distance estimation under water, use of monocular motion parallax, 31582
- Improvement of rivers and harbors, 21155
- Improvements needed in collection of data for United States Postal Service's revenue and cost analysis system, 23321
- Impulse test set, *see* Testing apparatus.
- Impurities (technology), *see* Contamination.
- In little old New York, by Anthony Angel, 20511
- In-process pollution abatement, 30661, 30663
- In productive harmony, environmental impact statements broaden the Nation's perspectives, 16019
- In situ evaluation of nutrient effects in lakes, 27451
- In situ Ge(Li) and NaI(Tl) gamma-ray spectrometry, 22474
- In the magnetic web, 21883
- Inaccurate and unfair billing practices, 32139
- Inauguration of the President, *see* President of United States.
- Incandescent lamps, *see* Electric lamps.
- Incendivity, *see* Ignition.
- Incentive awards, *see* Rewards (prizes, etc.).
- Incentive payments, implementation of amendments to improve work incentive program, 21334
- Incentives in industry, employee incentive system for hospitals, 15628
- Incinerators:
 - economic studies of uses of glass fractions from municipal incinerator residues, 23642
 - evaluation of field-type incinerator for human waste, theater of operations sewage treatment systems, 28692
- Incombustible material, *see* Fire-resistant material.
- Income:
 - aged population money income, 1971 and changes from 1967, 31811
 - capital gains and stock option income attributable to foreign sources to be given preferential tax treatment, authorize, report, 19938
 - children and youth projects, comprehensive health care in low-income areas, 20521
 - computing your tax under income averaging method, 20392
 - consumer income, series, 21062-64, 22562, 28189-190, 29782
 - employment and income in black community, trends and outlook (lecture), 25182
 - employment profiles of selected low-income areas, rural areas, microfiche order form, 23849
 - family income in 1969 by family characteristics for United States, 29712
 - farm income situation, 23131, 31217, 32192
 - farm income state estimates, 1959-72, 32192
 - farm related population, 1970 census of population, 28124
 - farmers, how to report your income for social security, 17831
 - health characteristics of low income persons, 16367
 - homeowners of mortgaged properties acquired in 1967-71, United States, 29696
 - household income in 1969 for States, SMSA's, cities, and counties, 30811
 - household money income in 1972 and selected social and economic characteristics of households, 29782
 - implications of income maintenance experiments issues in welfare administration, 24309
 - income in 1969 of families and primary individuals in owner and renter occupied housing units for U.S., 19199
 - income limits for—
 - rent supplement housing, 20379-381, 23445, 29077
 - sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
 - income-loss protection against illness, 23974
 - income of newly entitled beneficiaries, 32557
 - income of physicians, osteopaths, and dentists, 1965-69, from professional practice, 22237
 - income transfer programs, how they tax the poor, 21140
 - law, relief from real property taxes, hearings, 30038
 - low-income families in 1969, by type, age, and race of head, 27022
 - low-income population—
 - 1970 census of population, 31949
 - 1971, characteristics, 21062, 22562
 - 1972, characteristics, 28190
 - money income of families and persons in U.S., 21064
 - sample surveys, 21063, 28189
 - 1969 census of agriculture, general information, value of products, economic class, contracts, 30792
 - our incomes, 28202
 - plumbing facilities by persons, per room and by income in 1969, of families and primary individuals, for United States, 27009, 29695
 - profile of clients with monthly family incomes less than \$150 who were rehabilitated during 1971, 31789
 - realities in lower income countries (address), 23651
 - regular income limits for sec. 235-236 housing, 20374-378, 23444, 29075

Income—Continued

relative importance of income sources of aged, 29504
 rental and cooperative housing for lower income families, 31428
 retirement income security for employees—
 act of 1972, bill text, summary of major provisions and background material, 17289
 participating in pension and welfare benefit plans, 19882
 by mandating protective measures, 17175
 size distribution of family personal income, methodology and estimates for 1964, 31213
 studies in public welfare—
 how public welfare benefits are distributed in low-income areas, 27096, 30939
 income-tested social benefits in New York, adequacy, incentives and equity, 29835
 supplemental security income program for blind, aged and disabled, protection for those who might suffer loss of income and medicaid benefits under Jan. 1974 regulations, 28534
 tax information on investment income and expenses, 21828
 tax returns statistics—
 business, 21821
 individual, 25306
 taxable income and non-taxable income, 21830
 work disability of family heads by family income in 1969 for U.S., 24220
see also Families—also subject from which income is derived.

Income tax:

alternative to tax-exempt State and local bonds, for tax reform purposes, panel discussions, 27251
 American Samoans may be claimed as dependents for income tax purposes—
 law, 19505
 report, 19726
 amortization of pollution control facilities, tax information, 20389
 community property and Federal income tax, 20391
 computing your tax under income averaging method, 20392
 condemnations of private property for public use, how Federal tax applies, 21816
 corporations and Federal income tax, 23479
 corporations, election as to possession-exclusion treatment, report, 16968
 credit sales by dealers in personal property, 20393
 deductions—
 alimony payments, 23480
 child care and disabled dependent care, 25301
 contributions, 20398
 homeowners, tax information, 21825
 interest expense, 20399
 medical and dental expenses, 20394
 miscellaneous, 25303
 organizations contributions which are deductible, list, 18181
 repairs, replacements, and improvements, 27600
 taxes, 20400
 double taxation, convention with—
 Belgium, 20817
 Japan, 17873
 Norway, 25737
 estate and gift tax revision panel, discussion, 27250
 farmers, Federal, inspection of returns by Agriculture Dept., 27176

Income tax—Continued

farmers tax guide, 20395
 Federal, Armed Forces, information for 1972 returns, 17643
 Federal collection of State individual income taxes, authorize—
 committee print, 19970
 general explanation of act, 24884
 law, 19442
 reports, 15673, 15679, 19886
 summary of Senate amendments to bill, 21297
 foreign income taxation, panel discussion, 27251
 foreign scholars and educational and cultural exchange visitors, 20396
 general tax reform, panel discussions—
 alternative to tax-exempt bonds, 26188
 capital gains and losses, 26188
 farm operations, 26188
 minimum tax and tax shelter devices, 26188, 27251
 natural resources, 27250
 pensions, profit sharing, and deferred compensation, 26188, 27251
 reform and simplification, objectives and approaches, 24881
 tax treatment of—
 capital recovery (investment credit, accelerated depreciation and amortization), 26188
 real estate, 26188
 taxation of foreign income, 26188
 Guam, coordinate income taxes with United States—
 law, 19529
 report, 19657
 highlights of 1972 changes in tax laws, 20397
 installment and deferred payment sales, 20401
 interest equalization tax—
 extend—
 hearings, 23027
 law, 30903
 extension act of 1973, summary—
 committee print, 27319
 hearing, 27316
 reports, 27120, 27267
 highlights, 20402
 internal revenue bulletin, cumulative index-digest supplement system, 16149, 18476
 investment income and expenses, information, 21828
 IRS looseleaf regulations system, 18595
 older Americans, tax benefits, 21822
 organizations, how to apply for exemption, 27597
 questions and answers—
 on retirement plans for self-employed, 20404
 regarding original issue discount on savings deposit arrangements, tax treatment, 23481
 questions asked by U.S. taxpayers abroad, 20405
 regulation of income tax return preparers, hearings, 15745
 rental income and royalty income, 23483
 retirement income credit, 20407
 returns statistics—
 business, 21821
 corporations, 25305
 individual, 25306
 sale or other disposition of business or business interest, 26544
 sales and exchanges of assets, 20408
 sales and other dispositions of depreciable property, 25304
 simplify procedures for wage earners, hearings, 21141
 tax guide for U.S. citizens employed in U.S. possessions, 20411

INDEX 1973

Income tax—Continued
 tax information on—
 accounting periods and methods, 20417
 American scholars abroad, 20412
 business expenses, 21824
 civil service retirement and disability retirement, 20423
 deduction for bad debts, 20418
 disasters, casualty losses, and theft, 26545
 educational expenses, 25307
 interest equalization tax, 21827
 investment credit, 20419
 losses from operating a business, 26542
 moving expenses, 20420
 mutual fund distributions, 20421
 partnership income and losses, 21829
 pensions and annuities, 23485
 self-employment tax, 26541
 sponsors of contests and sporting events, 20414
 students and parents, 20415
 U.S. Government civilian employees stationed abroad, 20416
 United States savings bonds, 20424
 visitors to United States, 23484
 Tax policy review act, text, and material relating to proposed act, 17106
 tax proposals affecting private pension plans, summary of testimony, 21298
 tax reform subjects, press releases, 17107
 tax return preparation, Internal Revenue Service and commercial return preparer, hearing, 29916
 tax-sheltered annuity plans for employees of public schools and certain tax-exempt organizations, 25308
 tax treatment of—
 members of Armed Forces and civilian employees who are prisoners of war or missing in action, 32065
 single persons and married persons, where both spouses are working, summary of testimony, 17117
 survivor benefit plans of uniformed services, reports, 19673, 30980
 tax withholding and declaration of estimated tax, 20425
 taxable income and non-taxable income, 21830
 teaching taxes program, general and farm, teacher's guide, 20426
 tips, reporting for Federal tax purposes, 20406
 travel, entertainment, and gift expenses, deductions, 20427
 U.S. citizens abroad, tax return filing requirements, 23487
 United States tax guide for aliens, 21831
 valuation of donated property, 26546
 withholding of tax on resident aliens and foreign corporations, 31500
 your exemptions and exemptions for dependents, 20428
 your Federal income tax, for individuals, 20420
 Incorporate American Ex-Prisoners of War, 19583
 Incorporate National Inconvenienced Sportsmen's Association, 17019
 Increase in Government's contribution under Federal employees health benefits program, 31037
 Increased use of felled wood would help meet timber demand and reduce environmental damage in Federal forests, 32353
 Increasing heat and impact resistance of zirconium-dioxide based ceramics, 20470
 Increasing impact of Federal estate and gift taxes on farm sector, present law and proposed changes, 30696
 Increasing your lumber recovery, sawmill improvement program, 32315
 Independence, *see* Autonomy.
 Independence, Iowa:
 Wapsipicon River and Malone Creek, flood plain information, 32223

Independence, Mo.:
 flood plain information—
 Rock Creek, 20126
 Spring Branch, 32221
 floods on Rock Creek, 20151
 Independent Democratic Candidates Committee, annual report, 22834
 Independent public accountant audits public facility loans program, 25284
 Index digests:
 General Accounting Office decisions, 17522
 index-digest supplement system, internal revenue bulletin, cumulative, 16149, 17565-567, 18476-480
 Interior Department decisions, 18501
 published decisions of Assistant Secretary of Labor for Labor-Management Relations pursuant to Executive order 11491, as amended, 20488, 27661
 Index numbers:
 indexes of output per man-hour selected industries, 16237
 indexes of U.S. exports and imports by economic class, 16788
 price index for deflation of academic R & D expenditures, 16417
 see also subjects, e.g. Prices.
 Indexes:
 active registered investment companies under Investment company act of 1940, and related to investment advisers, principal underwriters, sponsors (i.e., depositors), and underlying companies, 29468
 administrative decisions under immigration and nationality laws of U.S., 25292
 AEC news release, 17955
 aeronautical engineering, 17708
 AMC publications and blank forms, 20964, 24166, 29658
 Atomic Safety and Licensing Appeal Board issuances, 25881
 biomedical and environmental research program, research and development in progress, 22490
 BRH publications, 20742
 broadcasting stations of the world—
 amplitude modulation—
 country and city, 17500
 frequency, 17501
 frequency modulation, 17502
 television stations, 17503
 Census Bureau, methodological research, 1963-71 key word subject index, 29687
 census, 1970, summary tapes, 28192
 code of Federal regulations, 25179
 cold regions scientific and technology, bibliography, 23154
 commanders digest (periodical), 20032, 26304, 27377
 Commerce Department publications, 15623, 31988
 congressional record, daily, 18145
 Defense Department, specifications and standards—
 alphabetical listing, 15954
 numerical listing, 23103
 appendix, 20043
 supplements, 18219
 Department of State indexes of living costs abroad and living quarters allowances, 19004
 design manual, cumulative index, 30582
 diabetes literature, 18226, 23744
 document retrieval index, national criminal justice, 20484
 endocrinology index, 18261
 engineering standards, U.S. voluntary, 22006
 environmental protection research catalog, 21493
 FDA interim index to evaluations published in Federal register for NAS-NRC reviewed drugs, 26454, 28917

Indexes—Continued

Federal item name directory for supply cataloging—
 abbreviations and symbols, 27376
 alphabetic index of names, 18316
 numeric index of Federal item identification guide to item name codes, 24980
 numeric index of item name codes to Federal item identification, names, etc., 15939, 18317
 Federal register, 18346
 Federal specifications and standards, 18484, 23253
 Federal supply classification—
 alphabetic index, 18354
 numeric index of classes, 18353
 fiche index for nuclear dockets, 22473, 25873, 28075, 29673-674
 fishery publications, calendar year 1967, lists and indexes, 31726
 foreign production and commercial reports, 16155, 17569, 18486
 general index, code of Federal regulations, 25179
 geophysical abstracts, 29015
 Government Procurement Commission, report, index-bibliography-acronyms, 26513
 Government reports, 18406
 hazardous materials regulations, title 49, Code of Federal regulations, 26904
 Health and Safety Laboratory fallout program, quarterly summary reports, 19182
 health consequences of smoking, 29041
 index medicus, 18481
 abridged, cumulated, 26760
 cumulated, 25606
 journal index, list, 23780
 index of dermatology, monthly guide to literature in clinical dermatology, etc., 18483
 index to transmittal sheets for VA regulations, program guide, 16571
 industries and occupations, 1970 census, classified, 29705
 institutions of higher education by State and congressional district, 31223
 journal of executive procedures of Senate, 92d Cong. 1st sess., 21301
 legislative history of Omnibus crime control and safe streets act, 23569
 legislative history of Water pollution control act, 1972 amendments, section by section, 26288
 Manpower Administration publications, 17654
 manpower reports of the President, 1963-72, 26610
 medical and health related sciences thesaurus, 16396
 military periodicals, Air University Library, 17977
 Missouri Basin Inter-Agency Committee, minutes of 1st-169th meetings, 26669
 Le Monde, 18485
 monthly labor review, v. 84-93, Jan. 1961-Dec. 1970, 29162
 NASA tech briefs, 31619
 National Aeronautics and Space Administration, appropriations, 1974, authorization, hearings, 32093
 National Conference on Weights and Measures, reports, 1905-71, 25553
 National Labor Relations Board, decisions and related decisions, classified index, 30511
 National Oceanographic Instrumentation Center, fact sheets, 32511
 nuclear science abstracts, 18717
 cumulative report number, with public availability citations, 25887
 numerical list of manufactured products (new (1972) SIC basis), 1972 census of manufactures, 31971
 ocean engineering reports, 31985

Indexes—Continued

official published documents relating to Cuba and Insular possessions of U.S., 1876-1906, pamphlet describing microfilm, 25533
 organized crime and stolen securities, hearings, interim index, 15898
 patents, 1971—
 list of patents, 22187
 subjects of inventions, 26792
 photonuclear reaction data, indexes, etc., 26700
 publications relating to coal, 1882-1970, bibliography and index, 21710
 recipes, Armed Forces recipe service, 19171, 24181
 Rehabilitation Services Administration, quarterly indices, 18859
 research grants, 27788
 research in education (periodical)—
 annual index, 23747
 semiannual index, 32496
 scientific and technical aerospace reports, 18889, 21991, 31662
 annual, 25529
 sea grant newsletter index, 17772
 sea grant publications index, 17771, 20690, 29386-387
 Securities and Exchange Commission decisions, 31792
 serial titles currently received by National Library of Medicine, 23779
 technical briefs, Small Business Administration, 23956
 trademarks, 22188
 21-year index, published hearings, studies and reports of Subcommittee to Investigate Administration of Internal Security Act and Other Internal Security Laws, 31151
 utilization of health services, indices and correlates, research bibliography, 25563
 Veterans Administration publications, 20852
 vital and health statistics series, current listing and topical index—
 1961-72, 22025
 1962-72, 30479
 India :
 accessions list—
 American Libraries Book Procurement Center, New Delhi, cumulative list of serials, annual supplement, 21918
 Library of Congress American Libraries Book Procurement Center, New Delhi, 17945
 agricultural development and farm employment in India, 21419
 bibliographical resources about India, annotated list of English-language reference works published 1965-70 in India, 15987
 developing countries' external debt and U.S. foreign assistance, case study, GAO report, 29886
 economic trends and their implications for United States, 20436, 29109
 foreign trade regulations, 15619
 India, Pakistan and Bangladesh, current information supplement, 17855
 issues in United States foreign policy, 29536
 minerals industry, minerals yearbook chapter, 16279, 29218
 narcotic enforcement efforts by local government and American missions, report, 27229
 South Indian sand cays, 25695
 Indian Affairs Bureau :
 appropriations, 1974, hearings, 28385
 Missouri River basin investigations project reports, 31484
 Planning Support Group, Billings, Mont., reports, 31485-486
 press releases, 18790
 realignment of central office, hearings, 32147

INDEX 1973

- Indian Affairs Bureau—Continued
safety progress report, 1970, zero in on safety, pacesetter for safety, 21811
seizure of headquarters, hearings, 21251
- Indian agencies, governing bodies of federally recognized Indian groups, excluding Alaska, 31443
- Indian Claims Commission :
appropriations, 1973—
law, 19355
report, 16955
appropriations, 1974—
authorization—
law, 30913
reports, 26223, 27132
hearings, 28385, 31126
report, 29861
providing for distribution of funds appropriated in satisfaction of certain judgments, report, 29877
- Indian Health Service :
appropriations, 1974, hearing, 28385
nursing careers, 17560
- Indian lands :
Federal and Indian lands, coal, phosphate, potash, etc., royalty income and related statistics, 29013
Federal lands within Warm Springs Reservation of Oregon declared held in trust by United States for Confederated Tribes—
law, 16918
reports, 15696, 15831, 19622
federally owned land declared in trust by United States for Stockbridge-Munsee Community, law, 19412
Federally owned lands within White Earth Reservation declared in trust by United States for Minnesota Chippewa Tribe, report, 15824
Interior Department decisions, 18498
leases, longer term, for lands located outside Indian reservations in New Mexico—
law, 19371
report, 19851
see also names of Indian tribes or reservations.
- Indian meal-moths, relative toxicity of chloropicrin, phosphine, EDC-CCl₄ and CCl₄-CS₂ to various life stages, 30693
- Indian Ocean :
central western, bibliography, 26821
lights and fog signals, list, 27418B
meteorological atlas of International Indian Ocean Expedition—
surface climate, 22135
upper air, 22136
new Brachiopoda from Indian Ocean, 23960
sound velocity structure of north Indian Ocean, 29432
- Indian Opportunity, National Council on, see National Council on Indian Opportunity.
- Indian Peaks area, Colo. :
designate as wilderness area—
law, 19457
report, 19698
- Indian reservations, Indian treaty reservation lands, authority of the President to return possession of lands placed in national forests and excluded from reservations as result of erroneous surveys, opinion of Attorney General, 16212
see also names of reservations.
- Indian River, country, Hiawatha National Forest, 23278
- Indian River County, Fla., promotion and advertising of Indian River grapefruit under marketing orders, amend, report, 29959
- Indian schools, statistics concerning Indian education, 31488
see also Education.
- Indian treaty reservation lands, opinion of Attorney General, 16212
- Indiana :
census of housing, 1970, housing characteristics for States, cities, and counties, 15543
census of population, 1970, detailed characteristics, 22520
climatological data, 18084
county business patterns, 30820
criminal justice agencies, 1971, list, 23565
4th District Republican Central Committee, annual report, 22975
income limits for rent supplement housing, 23445
meeting Indiana's environmental protection needs, organizational and staff requirements, 23197
Miami Indians of Indiana judgment funds, disposition, law, 16862
mineral industry, minerals yearbook chapter, 16280
population of Indiana counties, July 1, 1971 and July 1, 1972, estimates, 22559
precipitation data, hourly, 18435
racial conditions in Indiana penal institutions, 22587
Sixth District Republican Committee, annual report, 22995
10th District Republican Committee, annual report, 24590
truck inventory and use survey, 28136
Indiana Democratic State Central Committee, annual report, 24554
Indiana Dunes National Lakeshore, general information, 30546
Indianapolis, Ind., area wage survey, 26619
Indianapolis Women's Republican Club, annual report, 24727
- Indians :
Alaska natives, general information, 31444
American Indians—
and their Federal relationship, plus partial listing of other United States Indian groups, 16137
calendar, 29086
census of population, 1970, subject report, 30006
education, selected bibliography, 28652
number, by counties of United States, 1970, map, 25942
socio-economic profile, in Arizona and New Mexico, 22589
books on Indian history, problems and Indian relationships to Federal Government, list, 31449
California tribes, general information, 31450
code of Federal regulations, 26441
Colombian expeditions to Noanama Indians of Rio Siguirisua and to Cofan and Ingano Indians of Putumayo, 25596
commencing actions on behalf of tribe, band or group, extension of time, authorize—
hearing, 19983
law, 19417
reports, 15697, 19901
constitutional rights, revise and republish certain documents, report, 32109
dental services for American Indians and Alaska natives, annual report, 23400
Federal employment referral program, 23457
Federal Indian policies from colonial period through early 1970's, 23456
Federal protection of Indian resources, hearings, 15915, 21353, 26276
food and cookery, 23458
health, miscellaneous laws, 24867
health program, Public Health Service, 17555
Housing act, development progress directory, special report, Indian programs, 29079
impact of grants to Indian tribes under Emergency employment act of 1971, GAO report to Committee on Labor and Public Welfare, Senate, 25248

Indians—Continued

- importation of pre-Columbian sculpture and murals, prohibit, reports, 21179, 21310, 21312
- Indian business development program, establish within Interior Department, hearing, 31144
- Indian claims, statute of limitations, law, 19351
- Indian development, 25036
- Indian education act, hearings, 21216
- Indian education and Federal government (address), 26367
- Indian financing act, hearing, 31144
- Indian health program, 1955-73, 27589
- Indian leader (Haskell Indian Junior College, periodical), 18487
- Indian museums, list, 31490
- Indian record (periodical), 18488
- Indian School journal (periodical), 18489
- Indian self-determination act, report, 17136
- Indian tribes, Alaskan native villages, payment listing by county, entitlement period 3—
 - 3rd payment, 27958
 - 4th payment, 30674
- Indians in United States, select audiovisual records, 26696
- languages, 31462
- legends and myths, 31463
- music, 31465
- nutrition, growth and development of North American Indian children, 17762
- origin, 31468
- progress in achieving self-determination (remarks), 16139
- provide for financing economic development of Indians and Indian organizations—
 - hearings, 15905, 31144
 - reports, 16978, 31096
 - publications, price list, 26799
- records of Idaho Superintendency of Indian Affairs, 1863-70, microfilm pamphlet describing, 20630
- records of Montana Superintendency of Indian Affairs, 1867-73, microfilm, pamphlet describing, 21999
- references for young students, 31473
- religions and ceremonials, 23459
- Roswell Residential Training Center and related Indian vocational education policy, hearings, 24911
- Secretary of Interior Morton reports on Indian matters, 25298
- Southwest Indian report, 27044
- States and their Indian citizens, 21812
- statistics concerning Indian education, 31489
- Virginia and Potomac area, suggested reading list, 31480
- wars and local disturbances, 31481
- we the first Americans, 30862
- you asked about—
 - helping Indians, 31489
 - pictures of Indians, 31491
 - tribal claims against United States, 31492
- see also* names of reservations or tribes.
- Indiantown Gap Military Reservation, ROTC in review, summer camp IGMR, Annville, Pa., 16647
- Indicators:
 - social and health indicators system, census use study—
 - Mound Bayou, Miss, 29723
 - Los Angeles, 29722
 - see also* Position Indicators.
- Indochina:
 - our Asian neighbors, hearings, 28408
 - problems of war victims in Indochina, hearings, 19989
 - relief and rehabilitation of war victims in Indochina, hearings, 28556, 30053
 - situation in Indochina, Vietnam cease-fire agreement, hearings, 26157

Indochina—Continued

- termination of hostilities in Indochina subject to release of American prisoners and safe withdrawal of remaining forces, report, 16967
- war victims in Indochina, GAO report, 19990
- Indonesia:
 - accessions list, Library of Congress, Djakarta, 17946
 - agricultural commodities, agreement, 16510, 20810, 24011-14, 25747, 27934
 - economic trends and their implications for United States, 16158, 29100
 - map, 29796
 - mineral industry, minerals yearbook chapter, 16281
- Indoor-outdoor air pollution relationships, literature review, 20947
- Indoor-outdoor carbon monoxide pollution study, 32258
- Inductors, superconducting magnet systems, field windings and inductors, USSR study, 17642
- Industrial arbitration, Penn Central Railroad dispute, hearing, 26282
- Industrial characteristics, 30810
- Industrial classification, *see* Industry.
- Industrial College of Armed Forces:
 - catalog, 26556
- National Security Seminar—
 - background readings, 16175
 - general information, 29126
 - perspectives in defense management (periodical), 18755
- Industrial designs, *see* Designs (industrial).
- Industrial diseases, *see* Occupational diseases.
- Industrial education, *see* Technical education.
- Industrial engineering, application of selected industrial engineering techniques to wastewater treatment plants, 27471
- Industrial equipment, *see* Production equipment.
- Industrial fishery products, situation and outlook, 18490
- Industrial gases, 28159
- Induction heating, *see* Heating.
- Industrial hygiene, *see* Hygiene.
- Industrial hygienists, Federal career opportunities, announcement, 24258
- Industrial Issuers Advisory Committee, report, 23952
- Industrial launders and linen supply, 15976
- Industrial machinery, *see* Machinery.
- Industrial management, regional management of solid wastes, planning study, 27497
- see also* Management.
- Industrial materials, *see* Materials.
- Industrial mobilization, *see* Industry.
- Industrial plants, *see* Plants (industrial).
- Industrial Pollution Control Branch, Environmental Protection Agency, projects, 25106
- Industrial Pollution Control Council, National, *see* National Industrial Pollution Control Council.
- Industrial production, *see* Production.
- Industrial products, *see* Commercial products
- Industrial property, *see* Patents.
- Industrial Property, International Bureau for Protection of, *see* International Bureau for Protection of Industrial Property.
- Industrial relations:
 - agricultural labor-management relations, hearings, 24848
 - bibliography, Labor-management relations act, 1947, as amended by Labor-management reporting and disclosure act, 1959, supplement, 25604
 - career in labor-management relations as field examiner, 29369
 - challenge of ever more improved communication (address), 32427

INDEX 1973

Industrial relations—Continued

- complaint filing guide, how to file unfair labor practice complaint under Executive order 11491, in Federal Service, 30382
- compliance, enforcement and reporting in 1972, under Labor-management reporting and disclosure act, 25370
- cooperation for better future for both labor and management (speech), 29156
- coverage of nonprofit hospitals under National labor relations act, hearings, 21363
- decisions and reports on rulings of Assistant Secretary of Labor for Labor-Management Relations, pursuant to Executive Order 11491, 26609, 27660
- employer contributions to jointly administered trust funds established by labor organizations to defray costs of legal services—
 - hearings, 28405
 - reports, 28339, 29878, 32031
- employment relationship under Fair labor standards act, 22299
- Federal labor-management consultant (periodical), 18319
- is NLRB still alive (remarks), 31706
- joint labor-management trust funds for legal services—
 - bill text and background material, committee print, 27355
 - authorize—
 - hearings, 26280
 - report, 29989
- jointly administered legal services plans, 19761
- jurisdiction guide in administration of National labor relations act, 30512
- labor-management relations—
 - digest and index of published decisions of Assistant Secretary of Labor, 20488
 - examiner, where the action is, National Labor Relations Board, career opportunities, 29370
 - Federal Service—
 - answers to questions about Executive Order 11491, 19283, 28214
 - Executive order 11491 as amended, 19284
 - background and major provisions, 32415
 - digest and index of published decisions of Assistant Secretary of Labor, 27661
 - hearing, 30067
 - in Europe, results of field investigation, 17039
 - in public sector of States and political subdivisions, hearings, 15731
 - in public service, bibliography, 16820
 - program provisions and technical guidance, 18331
- Labor management relations act—
 - amend—
 - hearing, 28405
 - reports, 28339, 29878
 - rules of NLRB, 18879
- labor-management trust funds to defray costs of legal services, report, 28456
- labor relations—
 - in Federal service, guide to changes in regulations, 21897
 - in professional sports, hearings, 17040
- legislative proposals relating to labor-management relations in agriculture, summaries, 17042
- little Collyer grows up (remarks), 22086
- National Labor Relations Act—
 - amend, hearings, 31018
 - court decisions, 26757
 - litigation manual outline and litigation manual, 27792
 - summary, 26759, 31708

Industrial relations—Continued

- negotiating equality for postal employees and uniformity in labor relations, hearings, 29933
- non-profit hospitals, coverage under National labor relations act, provide, report, 16956
- Penn Central Railroad crew consist labor-management dispute, hearing, 24866
- petition timeliness guide, how to determine "open" period during term of agreement for filing representation petition under Executive order 11491 as amended, 26612
- protection and facilities to be afforded workers' representatives, ILO convention and recommendation, 30961
- public sector labor relations—
 - in Northeast region, 21898
 - information exchange publications, 21898-900, 27664
 - State profiles, current status, 21899
- questions and answers on role of Assistant Secretary of Labor for labor-management relations under Executive order 11491, labor-management relations in Federal service, 32419
- real America (speech), 31553
- standards of conduct for Federal-employee unions, rights of members, election of officers, reporting, guide, 25371
- summary of State policy regulations for public sector labor relations, statutes, etc., 27664
- supervisor's guide to labor relations in Federal Government, 30889
- unfair labor practices, case developments quarterly report, 18840
- Industrial safety, *see* Safety of life.
- Industrial wastes :
 - background information for proposed new source performance standards, 29643
 - biological removal of carbon and nitrogen compounds from coke plant wastes, 26415
 - economic feasibility of minimum industrial waste load discharge requirements, 28841
 - evaluations of waste sources in Calcasieu River basin, La., report, 20210
 - in-process pollution abatement—
 - metal-finishing facilities, 30661
 - poultry-processing facilities, 30663
 - industrial solid waste, staff report, 16382
 - influence of log handling on water quality, 25108
 - ion exchange color and mineral removal from kraft bleach wastes, 31283
 - kraft pulping effluent treatment of refuse, state of art, 25117
 - national symposium on food processing wastes, proceedings, 21496
 - northern Maine regional treatment system, 27492
 - olily waste disposal by soil cultivation process, 23186
 - Oregonians restore Willamette, joint citizen, State and Federal efforts clean river waters, 23198
 - pretreatment of poultry processing wastes, 30664
 - research, development and demonstration projects, 1970 grant and contract awards, 24102
 - solvent extraction status report, 27459
 - state-of-the art review of pulp and paper waste treatment, 26420
 - sulfur dioxide emission control by hydrogen sulfide reaction in aqueous solution, citrate system, 30443
 - tertiary treatment of combined domestic and industrial wastes, 30188
 - upgrading metal-finishing facilities to reduce pollution (series), 30661-662
 - upgrading poultry-processing facilities to reduce pollution (series), 30663-665

Industrial wastes—Continued
waste treatment—
metal-finishing facilities, 30662
poultry-processing facilities, 30665
wastewater treatment studies in aggregate
and concrete production, 26407

Industrial World Ahead, White House Conference on, *see* White House Conference on Industrial World Ahead.

Industries, *see* Industry—also names of industries.

Industry:
age and earnings by industry for U.S., supplementary report, 29713
annual survey of manufactures, 1971, general statistics for industry groups and industries, 25890
black male professionals in industry, study, 25374
company funds push total industrial R & D spending to \$18 billion, 1971, science, 23847
current industrial reports, 15585-590, 16754-779, 18194, 18194A, 19237-244, 21056-57, 22549-555, 24233-235, 25917-931, 27030-31, 28149-170, 29754-775, 30837-851, 31960-963
defense industry bulletin (periodical), 18215
detailed industry of employed persons by race and sex for U.S., 28126
determining economic effectiveness of industrial automatic control systems, USSR study, 25352
development of Leningrad scientific research, USSR study, 17634
economic and industrial affairs, Eastern Europe, translations, 18973
emergency plan for industrial mobilization, 30132
employment of homeworkers in certain industries, 20856
employment of learners, 24099
from the old to the new 1972 standard industrial classifications for establishments, 16792
general industry, guide for applying safety and health standards, 20730
index of industries and occupations, 1970, classified, 29705
industrial characteristics, census of population, 1970, subject reports, 30810
industrial civil defense handbook, 20082
industrial outlook, 1973, with projections to 1980, 22648
industry, consumers, and public interest (remarks), 16826
industry reports, 18066, 18155, 18162, 18165, 18818, 18834
interim review of economy, expanding economy of 1972, with industry projections for 1973, 20083
job patterns for minorities and women in private industry, Nation, State, Industries, 20236
link of census establishment and IRS corporation data, enterprise statistics, 25938
National Industrial Pollution Control Council's and industrial responsibility in bearing costs of pollution control (address), 22639
national survey of professional, administrative, technical, and clerical pay, 21909
occupation by industry, census of population, 19210
primary wood-product industries of Pennsylvania, 23309
radiation safety and protection in industrial applications, symposium proceedings, 22206
resource adjustment in fertilizer industry with emphasis on Michigan, 19110
review and synthesis of literature on job training in industry, 15998

Industry—Continued
safety and health standards for general industry, 16455
social and economic characteristics by detailed industry for U.S., 28128
spatial concentration of industry in Appalachia, analysis of potential for import substitution, 30747
supplementary compensation in PATC industries, 27683
timber industries of New Jersey and Delaware, 27542
UHF irradiation and worker in industry, USSR study, 20460
USSR industrial affairs, translations, 18986
value-of-shipment concentration ratios, annual survey of manufactures, 19188
wage survey, 17665, 31561
cigarette manufacturing, 16235
fertilizer, 21908
machinery manufacturing, 16236
water and industry, 25260
working with industrial solvents, 16385
working with lead in industry, 16384
see also Manufactures and manufacturers—also names or types of industry.

Industry Advisory Committee on Chemicals, report, 19292

Industry Advisory Committee on Office Machines and Computers, report, 19293

Inequality in school financing, role of law, 21080

Inert ordnance, *see* Ordnance.

Inertia, performance of DC-9 aircraft liquid nitrogen, fuel tank inerting system, 24034

Inertial guidance:
analysis of errors of gimballless inertial navigation system, USSR study, 30355
applied theory of inertial navigation, USSR study, 20455
inertial guidance equipment, USSR study, 20469
inertial navigation, USSR study, 26559, 30372
inertial systems, USSR study, 23519
low-cost inertial smoothing system for landing approach guidance, 29289
use of external information on linear velocity of vehicle for correcting inertial navigation systems, USSR study, 16201

Inertial navigation, *see* Inertial guidance.

Inertial systems, *see* Inertial guidance.

Infantile autism, *see* Autism.

Infantry:
communications in armored infantry and infantry (mechanized) divisions, field manual, 24172
infantry, Regular Army, Army lineage series, 20532
The Old Guard, Army's ceremonial unit and escort for the President, 3d U.S. Infantry, tradition of service to America, 22426

Infants:
cerebral palsy, mental retardation and other neurological and sensory disorders, collaborative study, bibliography, 26750
death, rights of children, 1972, examination of sudden infant death syndrome, hearing, print additional copies, report, 17151
infant care, 28206
infant mortality rates, relationships with mother's reproductive history, U.S., 26721
low-income families in feeding infants and small children, practices, 17678
prenatal-postnatal health needs and medical care of children, U.S., 26718
screening and assessment of young children at developmental risk, 26794
sudden infant death syndrome—
bibliography, 23745
hearing, print additional copies, report, 26229

Infiltration, *see* Water.

INDEX 1973

- Infinite series :
 - complete orthonormal set of 2-dimensional Haar-like functions, 27848
 - convergence properties of Haar series, 27847
 - on application of Haar functions, 27846
 - two-dimensional Haar-like transform, 27849
- Infirmaries, *see* Hospitals.
- Inflammable materials :
 - flammability, properties of hydrocarbon fuels, 30593
 - flammable fabrics programs, 22015
 - matches and lighters in flammable fabric incidents, magnitude of problem, 22016
 - United States and Canadian fabric flammability standards, 20647
- Inflation (finance) :
 - community hospitals, inflation in pre-medicare period, 23977
 - estimates of impact of inflation on costs of proposed programs should be available to committees of Congress, GAO report, 21691
 - lessons to be learned in controlling (remarks), 20270
 - monetary policy in controlling monetary aggregates, financing economic growth, and inflationary trends, 28905
 - 1972 midyear review of economy, 15661
 - Nixon administration and economic justice (address), 22630
 - problem of inflation (address), 23243
 - reduce serious inflationary impact of abnormal foreign demands for scarce materials, report, 32049
 - short supply/anti-inflation export controls, hearings, 28399
 - stemming inflation, 21435
 - Influence of crossflow on jet noise, 23671
 - Influence of log handling on water quality, 25108
 - Influence of method of liquefying vapor phase on flow characteristics of accelerator output of liquid-metal MHD converter, 21848
 - Influence of trigeminal stimulation on children's judgments of odor, 15627
 - Influenza vaccine, live virus influenza vaccine discoveries, hearing, 15756
 - Information, *see* Public information.
 - Information bulletins, *see* names of departments, etc., issuing bulletins.
 - Information capacity of gradient method of measuring earth's magnetic field, USSR study, 32405
 - Information centers, *see* Information services.
 - Information for Armed Forces, Office of, DoD pamphlets, 20382, 29087, 31493
 - Information interchange *see* Information storage and retrieval systems.
 - Information Office, Agriculture Dept., list, 23462
 - Information processing, take-up reels for one-inch perforated tape for information interchange, category, hardware standard, subcategory, interchange codes and media, 29309
 - see also* Information storage and retrieval systems.
 - Information series, 17349-352, 27768-769
 - Information services :
 - automated control systems in housing and public utilities, USSR study, 17623
 - drug information services, 2 operational models, complete drug information service in hospital, regional drug information network, 20658
 - Federal information processing standards publications, FIPS pubs, 18315, 20632-633, 25550, 27723-724, 29308-309, 30468, 31673
 - how you get help from Bureau of Mines (remarks), 32447
 - Information services—Continued
 - improved management information system needed for Eximbank's capital loan program, GAO report, 23320
 - information and referral services, reaching out to the aged with community services, 29600
 - information, please, guide to acquiring information from Department of Labor, 23579
 - NTIS information services, 29406
 - port information sources, 23622
 - public sector labor relations information exchange publications, 21898-900, 27664
 - scientific information services in water resources agency (paper), 23942
 - solid waste management, available information materials, 23201
 - state scientific-technical information systems, USSR study, 26578
 - see also* Information storage and retrieval systems.
 - Information storage and retrieval systems :
 - automated engineering document preparation system, military standard, materials, 30121
 - budgetary and fiscal information needs of Congress, GAO report, 20325
 - business data processing occupational performance survey, 31693
 - census tabulation available on computer tape series, data access descriptions, 15594
 - COMBO, general-purpose program for searching, annotating, encoding-decoding, and reformatting data files, 20645
 - computer programs, information retrieval and data analysis, 27711
 - conceptual framework for diffusion of innovations in vocational and technical education, 30501
 - controlled accessibility bibliography, 30476
 - CRIB, mineral resources data bank of Geological Survey, 27561
 - data acquisition systems in water quality management, 31306
 - data elements, entitlement period 1, Revenue Sharing Office, Treasury Dept., 27953
 - design characteristics for national system to store, retrieve, and disseminate water data, 23338
 - environmental data system, hearing, 19790
 - export mailing list and FTI tape services, 31202
 - Federal information processing standards publications, FIPS pubs, 18315, 20632-633, 25550, 27723-724, 29308-309, 30468, 31673
 - Federal information systems and plans, Federal use and development of advanced information technology, 31023
 - flowchart symbols and their usage in information processing, 27723
 - general information, procedures for collection, processing, classification, 1969
 - census of agriculture, 27003
 - hydrologic engineering methods for water development, hydrologic data management, 20155
 - information utilization by vocational educators, 30502
 - interactive bibliographic systems, forum proceedings, 29668
 - international demographic data directory computerized information retrieval system for demographic and family planning data, 21067
 - Introduction to botanical type specimen register, 30631
 - management information systems information processing systems exchange, 22427, 26961
 - medical information system, USSR study, 16193

- Information storage, etc.—Continued
- National Center for Health Statistics statement on release of data for individual elementary units and related matters, 23721
- national emissions data system control device workbook, 29650
- national heart, blood vessel, lung and blood program, program analysis, 29345, 30491-492
- National Military Command System information processing system 360 formatted file system (NIPS 360 FFS), 28587, 30084-86
- NIPS processing handbook, 28586
- NIPS formatted file systems 360 FFS—NIPS processing handbook, 28586
- user's manual—
- error codes, 30086
 - file maintenance (FM), 31177
 - job preparation, 30085
 - retrieval and sort processor (RASP), 28587
 - terminal processing (TP), 30084
- NIPS 360 FFS, an evaluation, final report, 25791
- objectives and requirements, 25550
- one-inch perforated paper tape for information interchange, 29308
- problems in creating network of information and computer centers in Uzbekistan, for planning and controlling national economy, USSR study, 17622
- processing of medical information and assessment of work capacity in space flight, USSR study, 17606
- procurement data packages, military standard, 23110
- recorded magnetic tape for information interchange, 27724
- (800 CPI, NRZI), 30468
- records control handbook, HUD, 29057-58, 31424
- reports management system, HUD, 29055
- special considerations in use of geometric coding in transformer storage devices, USSR study, 16195
- SRS research information—
- guide to use, instruction manual, 26828
 - system thesaurus, 25700
- state scientific-technical information systems, USSR study, 26578
- steam-electric plant air and water quality control data, 27508
- study of 6 university-based information systems, 29325
- synthetic bathymetric profiling system (SYNBAPS), 30584
- systemizing information to identify and relate behavioral and physical design parameters, 25069
- take-up reels for one-inch perforated tape for information interchange, category, hardware standard, subcategory, interchange codes and media, 29309
- toxicology information program, 29372
- user's guide to NODC's data services, 26395
- verification of operational SIRS R temperature retrievals, 25627, 23806
- see also Electronic data processing systems—also subjects.
- Information theory:
- computers, control & information theory, weekly Government abstracts, 19069
- DIME geographic base file package, census use study for automated address coding, 16748
- DIME workshops program, census use study, interim report, 28147
- see also Computer science.
- Information to consider in choosing health plan, 15605
- Information transfer between living cells, 23560
- Information utilization by vocational educators, 30502
- Infrared radio-meters, see Radiometers.
- Infrared rays:
- color presentation of thermograms for cancer research, 29249
 - detecting hot areas in dumps with handheld infrared scanner, 29241
 - oil spills surveillance system study, 28815
 - plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030
 - transmission of 2.0-3.4 micron infrared radiation in ice fog, 31327
- Infrared spectral transmittances, see Transmittances.
- Infrared spectrometers, see Spectrometers.
- Ingalls, John D., trainers guide to andragogy, its concept, experience, and application, 29497
- Ingalsbe, Gene, news for farmer cooperatives, 18703
- Ingebo, Robert D., effect of primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, 29294
- Ingham, Merton C., WEBSEC-70, ecological survey in eastern Chukchi Sea, 24275
- Ingham County, Mich.:
- flood plain information—
 - Grand River, 23163
 - Red Cedar River, 28723
- Inglis, Anthony, effects of water hardness on toxicity of several organic and inorganic herbicides to fish, 26849
- Ingots, see Brass—Bronze—Steel.
- Ingram, William M., estuarine and marine pollution, selected studies, 20738
- Inheritance and transfer tax:
- attorney, estate tax, career with Internal Revenue Service, 16148
 - estate and gift tax revision, panel discussions, 27250-251
 - estate and gift taxes, internal revenue bulletin, cumulative, index-digest supplement system, 17565
 - estate tax treatment of annuities in community property States, authorize improvement, reports, 19924, 19938.
 - Federal tax exemption for veterans' insurance benefits, provide, hearings, 17105
 - Federal tax guide for survivors, executors, and administrators, 21817
 - increasing impact of Federal estate and gift taxes on farm sector, present law and proposed changes, 30696
 - internal revenue bulletin, cumulative index-digest supplement, system, 18477
 - IRS looseleaf regulations system, 18596, 27599.
 - servicemen's and veterans' life insurance, exemption for Federal and State inheritance or estate tax purposes, report, 15677
- Inheritance tax, see Inheritance and transfer tax.
- Inhibitors:
- determining cholinesterase activity in animals' tissues following action of reversible inhibitors, USSR study, 21868
 - effect of LSD, chlorpromazine and organophosphorus cholinesterase inhibitors on brain, USSR study, 21860
 - oxidation resistance of selected mechanical carbons, at 650° C. in dry flowing air, 32478
- Inhomogeneous gases, see Gases.
- Initial assessment of mammal damage in forests of Southwest, 23289
- Initial mixing in coagulation processes, 20194
- Initial quality and life-cycle costs in military, family housing, 31241
- Initial releases of *Chrysocaris larinellae* and *Diadocerus westwoodii* for biological control of larch casebearer in western United States, 32327

INDEX 1973

- Initiatives in corporate responsibility, 17237
- Initiatives in energy conservation, 31139
- Injection of relativistic electron beam into plasma, 21008
- Injection wells, *see* Wells.
- Injections:
 - injections of neighborhood size 3 and 4 on set of configurations from infinite one-dimensional tessellation automata of two-state cells, 22405
 - primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effect, 29294
 - ⁷⁵Se-binding by rate plasma proteins after injection of ⁷⁵SeO₂, 31973
- Injectors, oxidant-fuel-ratio-zoned rocket injector for high performance and ablative engine compatibility, design and evaluation, 17721
- Injuries:
 - acute conditions—
 - incidence and associated disability, United States, July 1969–June 1970, 16370
 - July 1970–June 1971, 29331
 - certain problems of surgical aid in craniocerebral trauma, USSR study, 17639
 - child abuse, demonstration program for prevention, identification, and treatment, provide, hearings, 28557
 - coal-mine injuries and worktime, monthly report, 18122
 - community action approach for prevention of burn injuries, 21117
 - developing injury and damage reduction program in municipal police departments, guidelines, 29149
 - digest of workmen's compensation decisions involving delayed injury from ionizing radiation exposure, 21032
 - fatal and injury accident rates on Federal-aid and other highway systems, 26430
 - historical injury experience in—
 - metallic mineral industries, 1966-69, 29209-210
 - nonmetallic mineral industries (except stone and coal), 25424, 29211
 - quarrying, 25421-423
 - injury experience and worktime in solid mineral mining industries, 16255
 - by States, minerals yearbook chapter, 25448
 - minerals yearbook chapter, 25447
 - injury experience in—
 - coal mining, 30416
 - quarrying, 17680
 - when injured at work, facts about compensation for civilian employees of Federal government, 25142
 - zero in on safety campaign slips, trips, falls, 29084
 - see also* Employers' liability and workmen's compensation.
- Injury Control Research Laboratory, research report, ICLR-RR series, 15625-627, 16840
- Ink, Federal item identification guide, 27387
- Inland Sea, summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23888
- Inland waterways, *see* Waterways.
- Inlets, *see* Air inlets (aircraft).
- Inman, Ernest J., flow characteristics of Georgia streams, 23343
- Inner city environment and role of Environmental Protection Agency, 17236
- Inner tubes:
 - pneumatic, Federal item identification guide, 20038
 - pneumatic tire, 16063
- Innovation in law enforcement, 31550
- Inorganic chemistry, classification definitions, 16456
- Inorganic compounds:
 - air quality data for nonmetallic inorganic ions, 1969-70, from national air surveillance networks, 30724
 - inorganic chemicals, current industrial reports, 22550, 28160
 - occupational exposure to inorganic lead, criteria for recommended standard, 26737
- Inouye, Daniel K., report on recent disastrous floods in central Luxon area of Philippines, 19805
- Inpatient health facilities as reported from 1969 MFI survey, 25569
- Inpatient utilization of short-stay hospitals by diagnosis, 27750
- Inpatient utilization of short-stay hospitals in each geographic division, United States, 22032
- Input-output analysis, *see* Linear programming.
- Inquiry into freight car shortages, 15752
- INR, *see* Intelligence and Research Bureau.
- Insect attractants, procedures for electroantennometric investigation of insect attractants, USSR study, 25330
- Insect pests, *see* Insects.
- Insect traps, detecting stored-product moths in peanut warehouse by using light and larval traps, 15474
- Insect vectors, *see* Vectors (biological).
- Insecticides:
 - EPA compendium of registered pesticides, insecticides, etc., 23904-906, 29445, 31765, 32529
 - Federal insecticide, fungicide, and rodenticide act, amend—
 - hearings, 19959
 - laws, 19446, 19844
 - reports, 19692, 19841
 - fluorescent probes in detection of insecticides in water, 28816
 - pesticides, insecticides, they kill almost anything that crawls, we want you to know what we know about poison control (poster), 21596
 - rapid detection system for organophosphates and carbamate insecticides in water, 23183
 - toxicity of some insecticides to 4 species of malacostracan crustaceans, 26849
 - see also* names of insecticides—Pesticides.
- Insects:
 - be safe from insects in recreation areas, 16598
 - control, strawberry, 24128
 - cooperative economic insect report, 18164
 - damage, finding and keeping a healthy house, 28929
 - development of insect-resistant cotton bag, 24145
 - ecology and impacts of forest insects of Pacific Northwest, 21606
 - FHA form 2053, wood infestation report, 26526
 - forest insect and disease conditions in U.S., 17506
 - forest insects, outbreaks in Oregon and Washington States, 21652
 - initial releases of *Chrysocentrus laticinctus* and *Dicladocerus westwoodii* for biological control of larch casebearer in western United States, 32327
 - physiology, behavior and genetics of forest insects, 23280
 - protecting log cabins, rustic work, and unseasoned wood from injurious insects in Eastern U.S., 24127
 - using diseases to kill plant insect pests, research progress, report, 20884
 - worms and insects harmful to man, animals and plants, publications, price list, 17798
 - see also* names or classes of insects.
- Inserts, insert arrangements for MIL-C-83733; rack to panel connectors, military standard, 20079-80, 28618

Inshore lobster fishing, 23794
 Insignia, Federal item identification guide, 30093
 Inspection (industrial):
 analysis of Army helicopter inspection requirements, 22437
 attribute sampling inspection procedure based on hypergeometric distribution, 15526
 computer-controlled machines for dimensional inspection applications, 22497
 data collection and correction on computer controlled dimensional inspection machine, 22503
 field operations and enforcement manual for air pollution control, control technology and general source inspection, 22376
 warehouse-man's sample-lot inspection service, questions and answers, 29602
 see also names of articles, etc., inspected.
 Inspection of farmers' Federal income tax returns by U.S. Department of Agriculture, 27176
 Inspection services:
 food labeling and inspection, hearings, 21257
 single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
 State meat and poultry inspection costs, Federal contribution, increase, reports, 16979, 19640, 19677
 Inspectional analysis, architectural analysis and inspections for title 10 land development projects, HUD, 29073
 Inspectors:
 consumer safety inspection series, position classification standard, 21090
 Customs Bureau border inspection procedures, examination, hearings, 15719
 Federal mine inspector, examination announcement, amendment, 21086
 qualification of inspection personnel, magnetic particle and penetrant, military, standard, 20046
 sanitation handbook of meat and poultry inspection program, 15499
 see also Immigration inspectors—*also* types of inspectors.
 Installation practices for aircraft electric and electronic wiring, 19173
 Installations (military):
 construction—
 appropriations, 1973—
 law, 19476
 reports, 19632, 19695, 19711, 19898
 waiving points of order, report, 17006
 authorization, 1973—
 law, 19474
 report, 19695
 authorization, 1974, hearings, 32136
 drafting, technical manual, 25861
 management, Army technical manual, 24186
 standard operating procedures for major military construction, Army National Guard program, 17753
 defense disposal manual, 17319, 20033, 32162
 design of underground installations in rock space layouts and excavation methods, technical manual, 16650
 Engineers Corps, technical services, construction in United States, 20534
 fraud and corruption in management of military club systems, 30034
 historical information relating to military posts and other installations, ca. 1700-1900, pamphlet describing microfilm, 25542
 impact of Federal installations on small business, 19611
 installations site planning of community centers, Army technical manual, 28052

Installations (military)—Continued
 little progress by Defense Department in acting on opportunities for significant savings by consolidating real property maintenance organizations, GAO report, 21695
 military fields, instrument approach procedure charts, 18624
 naval communications facility on Diego Garcia, agreement with United Kingdom of Great Britain and Northern Ireland, 2274
 naval shore electronics criteria, installation standards and practices, 22158
 naval shore facilities, definitive designs, 16433-434
 port construction in theater of operations, 30169
 safety precautions for shore activities, Navy Department, 26789
 Installations (naval), *see* Installations (military).
 Installment credit:
 automobile installment credit developments—
 not seasonally adjusted data, 25180
 periodical, 18019
 seasonally adjusted data, 25181
 be wise, consumers' quick credit guide, 16591
 commercial banks, holdings, monthly report, 18158
 consumer credit—
 in United States, report of National commission on Consumer Finance, 25572
 monthly release, 18157
 installment and deferred payment sales, tax information, 20401
 Instant potato granules from Canada, 16542
 Institute for Air Pollution Training:
 advanced engineering and enforcement courses, descriptions, 20949
 advanced surveillance and laboratory courses, descriptions—
 folder A, 22378
 folder B, 22379
 chronological schedule for courses, 22380-381
 orientation courses conducted, 20951
 13 regional training locations, 20952
 Institute for Applied Technology, general information, 20638
 Institute for Basic Standards, general information, 20638
 Institute for Computer Sciences and Technology, general information, 20638
 Institute for Materials Research, general information, 20638
 Institute for Telecommunication Sciences, telecommunications research and engineering report, OT/TRER series, 16837, 19304-305, 21113, 22640-642, 25976
 Institute of Heat and Mass Transfer, prototype of continuous dryer developed by ITMO, Academy of Science, Belorussian SSR, USSR study, 21869
 Institute of High Temperatures, USSR Academy of Sciences, outstanding results of scientific research in 1971, 20448
 Institutional pharmacy practice in the 1970's, 16366
 Institutions:
 college housing debt service grant program for private institutions, 23447
 financial and institutional arrangements for wastewater management, Denver SMSA, 32264
 institutional membership on national securities exchanges, hearings, 21319
 laws and institutional mechanisms controlling release of pesticides into environment, 22301
 list of participating institutions, 21893
 offering trainee stipends in psychiatric mental health nursing for school year 1972-73 in graduate education, 17764
 role of institutional investors in stock market, 30020

INDEX 1973

Institutions—Continued
 survey of institutionalized adults, reports, 26833
 Instruction, *see* Learning—Programmed instruction—Teaching.
 Instruction report, Waterways Experiment Station, 28779
 Instructional materials, *see* Teaching.
 Instructional strategies for performance oriented technician course, 28034
 Instructions for mailers, 18492, 24086–87
 Instructors, *see* Teachers.
 Instructor's guide IG series, 26299
 Instrument approach procedure charts, *see* Maps and charts.
 Instrument flight rules:
 flight test and evaluation of heliport lighting for IFR, 24055
 IFR altitudes, Federal aviation regulations, 18301, 23210
 Instrument flying:
 attitude instrument flying, 26974
 instrument rating (airplane), written test guide, 17448
 techniques and procedures, Air Force manual, 22369
 Instrument landing, *see* Landing (Aircraft).
 Instrument makers, job grading standard for instrument maker, 30883
 Instrument making, *see* Instruments.
 Instrumentation:
 Apollo experience report, command and service module instrumentation subsystem, 31647
 Azotea Tunnel instrumentation program, San Juan-Chama Project, N. Mex., 32541
 CAMAC instrumentation system, supplementary information, 21021
 characteristics and operation of cloud condensation nuclei collection/detection/recording instrument, technical manual, 22416
 field instrumentation studies of earth tremors and their geologic environments in central Utah coal mining areas, 26504
 four instrumentation developments of general interest, 32542
 instrumentation studies of earth tremors related to geology and to mining at Somerset Coal Mine, Colorado, 21735
 journal of research, National Bureau of Standards, 18532
 marine magnetovariation station for studies by magnetotelluric soundings method, USSR study, 20451
 MIDAS, modular interactive data acquisition system, description and specification, 31679
 monitoring instrumentation for measurement of sulfur dioxide in stationary source emissions, 23804
 nuclear power reactor instrumentation systems handbook, 28085
 optical radiation measurements, photometric instrumentation of research, 20641
 programmable computer interface for CAMAC, 26688
 rock mechanics instrumentation for mine design, 25420
 water quality measurement and instrumentation, proceedings of symposium, 20737
 Instruments:
 automated water monitoring instruments for phosphorus contents, 32259
 combination and miscellaneous instruments, industrial plant equipment handbook, 24987
 develop operation system for evaluating and testing methods and instruments for determining effects of fuels and fuel additives on automobile emissions, 31277
 gyro instruments, USSR study, 30365
 hazard-detecting instruments and apparatus, Federal item identification guide, 32169

Instruments—Continued
 instrument fact sheet—
 IFS series, 17782–783, 22109–113, 31727, 32511
 National Oceanographic Instrumentation center, index, 32511
 liquid and gas flow, pressure, temperature, humidity and mechanical motion measuring and controlling instruments, 24986
 navigational instruments, USSR study, 27651
 problems of development of instrument making, USSR study, 26562
 selected instruments and related products, current industrial reports, 24235, 27031
 tests for analyzing incombustible content of coal mine dust using instruments employing gamma-ray backscatter technique, 25513
 underwater search system, instruments, and devices, USSR study, 26591
see also names and types of instruments.
 Insular Affairs Bureau, index to official published documents relating to Cuba and insular possessions of U.S., 1876–1906, pamphlet describing microfilm, 25533
 Insular possessions, *see* Outlying possessions.
 Insulation:
 acoustic field of infinite circular cylindrical transducer partially covered by layer of sound-soft material, USSR study, 17596
 development of closed pore insulation material, 31605
 electrical insulators and insulation materials, Federal item identification guide, 26316
 humidification in thermal life determination of motorette insulation systems, 23881
 insulation for crash fire protection of new flight recorders, evaluation, 24042
 sleeving, electrical, Federal item identification guide, 26325
 sound insulation in modular motel, 26474
 stability of and insulation leakage in high temperature resistance thermometers, investigation, interim report, 27731
 statistical analysis of truncated-data methods to shorten thermal-aging tests of electrical insulation, 22172
 thermal, Federal item identification guide, 23096
 weak thermal points or thermal bridges building research translation, 27728
 wire and cable, current industrial reports, 15587, 29766
 Insulators:
 electrical—
 and insulation materials, Federal item identification guide, 26316
 Federal item identification guide, 27388
 Insurance:
 comparison of actual experience under OASDHI system with short-range cost estimates, 22226
 computer program for primary insurance amount, 22225
 District of Columbia insurance act, amend—
 hearings, 32143
 law, 32012
 reports, 19670, 31111, 32036
 Federal crime insurance program revised, quick-reference rate tables and simplified manual, 30217
 Federal Housing Administration insurance operations—
 financial statements, GAO examination, 15664
 GAO examination, 28991
 flood insurance authorization, increase—
 law, 30914
 report, 28467

- Insurance—Continued
 free-enterprise, with regulatory standards on risk classification, most equitable to all (remarks), 23450
 National flood insurance act, amend, hearings, 28308
 national flood insurance program, 21803, 30299
 phase 4, economic stabilization program, 32157
 ship mortgage insurance, Merchant marine act, amend—
 law, 19437
 report, 19857
 student loan insurance fund, 1971 and 1972, financial statements, GAO examination, 30956
see also types of Insurance.
 Insurance agents, *see* Salesmen and salesmanship.
 Insured mortgages, *see* Mortgages.
 Integral equations, *see* Equations.
 Integral sensor test system, military standard, 26338
 Integrals, comparison of exact and approximate evaluations of single-scattering integral in nucleon-deuteron elastic scattering, 20600
 Integrated logistics support, implementation guide for DoD systems and equipments, 16651
 Integrated pest management, 21390
 Integrated system of geologic mapping and geochemical sampling by light aircraft, 26491
 Integration, *see* Race problems.
 Integrators, Rocky Mountain millivolt integrator for use with solar radiation sensors, 23294
 Integrity in Government Committee, annual report, 24651
 Intellect, malnutrition, learning, and intelligence, conference paper, 32534
 Intellectual Property, International Bureau of, *see* International Bureau of Intellectual Property.
 Intelligence, *see* Intellect.
 Intelligence (military science), *see* Military Intelligence.
 Intelligence and Research Bureau, INR, intelligence and research in State Dept., 25727
 Intelligence service, basic elements of intelligence, 21888
 Intelligibility:
 electroacoustic characteristics of low-circuitry fidelity effects upon speech intelligibility, 25406
 hydrogen-speech at 200 ft. of seawater equivalent, 16249
 processed helium speech at diving depths greater than 1000 feet, 20527
 speech discrimination in noise and hearing loss at 3000 hertz, 23632
 Intensity of control of flashers, 24035
 InterACTION, 18495
 Interaction between man and biosphere, 29130
 Interaction between marine organisms and oil pollution, 28793
 Interaction of age and alcohol on dark adaptation time, 16840
 Interaction of man-machine systems, 23532
 Interaction of ultrasound and biological tissues, 27872
 Interactive bibliographic systems, 29668
 Interagency Advisory Board on Land Use Policy, establish, report, 28489
 Interagency Auditor Training Center:
 bulletins, 19291, 29819
 Interagency Committee on Excavation Technology, Federal excavation technology program, 1971 annual report, 16038
 Interagency Committee on Handicapped Employees, establish, report, 29987
 Interagency Technical Committee on Heart, Blood Vessel, Lung, and Blood Diseases and Blood Resources, establish, law, 19368
 Interagency training programs, *see* Government officials and employees.
 Inter-American Development Bank:
 agreements Apr. 8, 1959, amendments approved by Board of Governors, 20802
 appropriations, 1973—
 hearings, 15717, 17025
 reports, 16989, 16991, 19887
 protocol to social progress, trust fund agreement, 20799
 Treasury Department management of U.S. participation, hearing, 21233
 U.S. system for appraising and evaluating Inter-American Development bank projects and activities, GAO report, 21700
 Inter-American Foundation:
 appropriations, 1973—
 further continuing—
 law, 19497
 report, 19729
 hearings, 15717, 15869, 17025
 reports, 16989, 16991, 19887
 appropriations, 1974, hearings, 32132
 social development activities in Latin America, fiscal year 1972, GAO report, 30264
 Inter-American relations, *see* American States.
 Inter-American republics, *see* American republics.
 Interdepartmental Council on Juvenile Delinquency:
 establish—
 law, 16891
 report, 17138
 Interest, *see* Interest and usury.
 Interest (psychology):
 background and interest tests, for Air Force officer stated career intent, validity, 26949
 Interest and usury:
 be wise, consumers' quick credit guide, 16591
 interest charged on loans by credit unions and other lenders, 29338
 Interest equalization tax—
 act, 2 year extension, administration request, 26192
 extend—
 hearings, 23027, 24924
 law, 30903
 press release, 24883
 reports, 24825, 24827, 27120, 27267
 summaries, 27316, 27319
 highlights, 20402
 summary and Treasury proposal for extension, 26190
 tax information, 21827
 Interest expense, income tax deduction, 20399
 Interest on deposits, Federal Reserve regulations, 20273, 30232, 32296-297
 Interest payments on time and savings deposits, extend certain laws—
 hearings, 26254
 laws, 30934, 32017
 reports, 27148, 28329, 31003
 Interest rates and credit demands in United States (remarks), 21569
 market interest rate for project mortgage insurance, 23434
 opportunity for reducing interest costs under sec. 235-236 housing programs, GAO report, 20336
 questions and answers regarding original issue discount on savings deposit arrangements, tax treatment, 23481
 reduce interest rate on Small Business Administration disaster loans, law, 16893
 Regulation, Q, NOW accounts, investment in State housing corporations, hearings, 27194
 Interest rates, *see* Interest and usury.
 Interested in environmental health? 21761

INDEX 1973

Interested Voters, political committee, annual report, 24341

Interfaces:

- adhesion at crystalline interfaces in rock, 26660
- interface standard for shipboard systems—compressed air service for surface ships, military standards, 27409
- military standards, 20073, 21410
- sewage/waste disposal for surface ships, military standards, 27410

MIDAS, modular interactive data acquisition system, description and specification, 31679

organizing interface of hardware of local data control systems with M-6000 ASVT-M computer complex, USSR study, 30337

programmable computer interface for CAMAC, 26688

Interference, *see* Radar interference.—Radio interference.

Interferometers:

- interferometric techniques in dynamic error monitoring, 22507
- plant growth by method of holographic interferometry, USSR study, 23557

Interfuel substitutability in electric utility sector of U.S. economy, economic report, 17489

Intergovernmental cooperation act, *see* Intergovernmental relations.

Inter-Governmental Maritime Consultative Organization, merchant ship position reporting systems, 22616

Intergovernmental relations:

- Advisory Commission on Intergovernmental Relations, annual report, 30687
- decentralization and state and local intergovernmental cooperation in developing rural housing and employment programs (remarks), 21807

Intergovernmental cooperation act—

- hearings, 15897
- report, 19850

Intergovernmental cooperation through the IPA, 27046

Issues in welfare administration, intergovernmental relationships, 24309

local government participation in A-95, project notification and review system, 27581

new federalism, impact of President's proposals between Federal Government and State and local governments, hearings, 28540

responsive federalism, report to the President on Federal assistance review, 27687

State action on local problems, 1972, information report, 29599

State air programs digest, 21518

State-local relations in comprehensive manpower reform, hearings, 19993

Interim merit staffing policy, 29053

Interim specifications for OR&M grant, contract and in-house reports, 26421

Interior and Insular Affairs Committee, House:

- calendar, 18550
- committee prints, 17063, 24863
- hearings, 15746-748, 17059-62, 19774-775, 21242-251, 24862, 26164-166, 27216-218, 28414-415, 29017-919, 31025-27, 38082-84
- investigations and studies—
- authorization and expenses, reports, 26083, 26127
- authorize travel expenses, report, 27129
- legislative and review activities, 92d Congress, summary, 21189
- reports, 15687, 15691, 15696, 15709-710, 15712, 16977-981, 16985, 17000-3, 17011, 19581, 19607, 19627, 19631, 19633, 19644, 19683-684, 19691, 19698, 19712, 21174-176, 21181, 21189, 24820, 27131-132, 28342, 28368, 28371, 29845, 29875-877, 29884, 31000, 32042, 32055-56, 32058

Interior and Insular Affairs Committee, Senate:

- additional expenses, authorize, report, 32117
- calendar, 18569
- committee prints, 15901, 17261-266, 17269, 17270-272, 19974, 19981, 21342-343, 23061, 24933, 24935, 27335, 27337-339, 27344, 30042-43, 30045, 30047
- hearings, 15902-911, 17267-268, 19975-980, 19982-983, 21344-350, 19975-24934, 24937, 24939, 26273-275, 27336, 27340-343, 27345-347, 28541-551, 30040-41, 30044, 30046, 31143-147, 32147
- investigations and studies, authorization and expenses, reports, 27262, 27295
- legislative review of 92d Congress, report, 27272
- questions and policy issues for oversight hearings on administration of Outer Continental Shelf act, 31498
- reports, 15819-820, 15824-827, 15831-832, 15836-837, 15855, 17128, 17135-136, 17155-156, 17159-161, 17166-170, 17202-3, 19845, 19847, 19851, 19854, 19864-865, 19895, 19897, 19900-901, 19903, 19912-913, 19915, 19917-918, 19920, 19922, 26204, 26223, 27272, 28462, 28471, 28475-477, 28481, 28489, 28497, 28503, 31072-73, 31084, 31096, 32121

Interior Department:

- additional actions needed to minimize adverse environmental impacts of timber harvesting and road construction on forest land, GAO report, 25236
- appropriations, 1973—
- hearings, 15716, 15865
- law, 19355
- report, 16955
- supplemental, hearings, 26149
- appropriations, 1974—
- amendment, proposal, 32025
- budget amendments, 31059
- hearings, 26147, 27180, 27186, 28385, 31126
- report, 29861
- saline water program authorization, hearing, 26166

Assistant Secretaries, nomination of John H. Kyl and Jack O. Horton, hearing, 24938

Assistant Secretary for Indian Affairs, establish, report, 29875

Assistant Secretary for Program Development and Budget, nomination of Laurence E. Lynn, Jr., hearing, 27341

Assistant Secretary of Interior for Energy and Minerals, nomination of Stephen A. Wakefield, hearing, 27340

authorizing Secretary of Interior to sell reserved mineral interests of United States in certain land in Missouri to Grace F. Sisler, 29845

capability of naval petroleum and oil shale reserves to meet emergency oil needs, GAO report, 17524

code of Federal regulations, 17469-470

decisions, 18498

- bound volume, 23466
- index-digest, 18501
- land appeals, 18499
- solicitor's opinions, 18500

directory of procurement offices, 16138

greater benefits to more people possible by better uses of Federal outdoor recreation grants, GAO report, 20331

increased use of felled wood would help meet timber demand and reduce environmental damage in Federal forests, GAO report, 32353

Indian business development programs within Interior Department to stimulate Indian entrepreneurship, hearing, 15905

Interior Department—Continued
 mining and minerals policy, 1973—
 2d annual report of Secretary of Interior under Mining and minerals policy act, 31497, 32390
 moving forward in coal mine health and safety, report of Secretary of Interior on administration of Federal coal mine health and safety act, 17563
 need for national earthquake research program, GAO report, 16097
 officials, orientation meeting with Members of House, hearings, 26165
 press releases, 18792
 public works appropriations, 1973, law, 19363
 public works appropriations, 1974—
 law, 32015
 reports, 29993, 30989
 saline water research and development progress reports, 16140-141, 17564, 20385-388, 25297
 Solicitor, nomination of Dale K. Frizzell, hearing, 27341
 southwestern Federal power program, financial progress and problems, GAO report, 21699
 telephone directory, 21815
 Under Secretary, nomination of John C. Whitaker, hearing, 24939
 water resources officials orientation and briefing on programs for House members, hearing, 27217
 Interior/exterior noise levels of over-the-road trucks, report of tests, 16363
 Interior nominations, 19979
 Interkosmos satellites study cosmic rays, 21846
 Interlocking directorates, communications carriers, applications, FCC rules and regulations, 18313
 Intermodal transportation, 21268
 Intermodalism, *see* Containerization.
 Intermountain Forest and Range Experiment Station, recent reports, list, 18847
 Internal auditor, Internal Revenue Service, 16150
 Internal combustion engines, *see* Engines.
 Internal friction of single-crystal ice, 28686
 Internal revenue:
 assessment lists, for Maine, 1862-66, 25544
 code, amend, report, 1935
 code of Federal regulations, 26442-443, 27515-518, 28879-885, 31329
 title 26 parts, 22390-391
 code of 1954, amend, report, 16968
 internal revenue assessment lists for—
 Kentucky, 1862-66, microfilm, pamphlet describing, 20628
 Louisiana, 1863-66, microfilm, pamphlet describing, 20629
 internal revenue bulletin, 18502
 cumulative index-digest supplement system, 16149, 17565-567, 18476-480
 semiannual, cumulative, 25302, 27598
see also Income tax—*also* names of certain taxes, e.g. Income tax.
 Internal revenue agents:
 career opportunities in Internal Revenue Service, 16151
 examination announcements, 22592-593
 Internal Revenue Service:
 annual report of Commissioner, 1972—
 departmental edition, 26543
 document edition, 26045
 appropriations committees not advised on reprogramming of funds by Internal Revenue Service, GAO report, 27543
 career opportunities—
 attorney, estate tax, 16148
 internal auditors, 16150
 internal revenue agent, 16151
 revenue officer, 16153
 tax auditors, 16154
 tax law specialist, 23486

Internal Revenue Service—Continued
 collection of taxpayers' delinquent accounts, GAO report, 31387
 form letters, Internal Revenue Service catalog, 26539
 legal careers, Chief Counsel's Office, 21819
 link of census establishment and IRS corporation data, enterprise statistics, 25938
 looseleaf regulations system—
 employment tax, 18597
 estate and gift tax, 18596, 27599
 excise taxes, 18598
 income tax, 18595
 procedure and administration, 18599
 new dimension in taxation, career opportunities, 17568
 press releases, 18793
 problems encountered by IRS in administering taxpayer assistance and compliance programs, hearing, 27303
 regulations governing practice of attorneys, certified public accountants, and enrolled agents before Internal Revenue Service, 17916
 Tax return preparation, Internal Revenue Service and commercial return preparer, hearing, 29916
 Internal Revenue Taxation Joint Committee, committee prints, 15790, 17115-117, 21296-299, 24884, 26192, 27253, 29945
 Internal security, *see* National security.
 Internal Security Committee, House:
 annual report, 28378
 committee prints, 19776, 21252, 29920
 hearings, 15749-750, 21253, 24864, 28416, 29921
 investigations and studies, authorization and expenses, report, 26129
 reports, 26066, 28378
 rules of procedure, 29922
 International Agency for Research on Cancer:
 appropriations, authorize, report, 15704
 U.S. contributions, authorize—
 law, 19425
 report, 17148
 International agreements:
 American-Mexican boundary treaty act, report, 19921
 international agreements other than treaties, require transmittal to Congress within 60 days after execution thereof, law, 16905
 treaties and other international agreements, 20819, 31876
 1776-1949 compilation, Nepal-Peru, 17909
 treaties in force, list, 25767
see also names of countries—*also* subjects.
 International Association of Rehabilitation Facilities, some current concerns of rehabilitation facilities presented at 3rd annual conference, 23948
 International Atomic Energy Agency:
 application of safeguards pursuant to non-proliferation treaty, agreement, 20796
 application of safeguards to cooperation, agreement with—
 Brazil, 17904
 Republic of Korea, 32580
 specialists' meeting on sodium-water reactions, summary report and papers, 16660
 International Bank for Reconstruction and Development:
 appointment of alternates for Governors, provide, report, 31097
 Bretton Woods agreements act, amend, report, 31097
 more effective United States participation needed in World Bank and International Development Association, GAO report, 23322

INDEX 1973

- International Biological Program, research on coniferous forest ecosystems, 1st year progress in coniferous forest biome, 20303
- International Book Year, wide world of children's books, an exhibition for International Book Year, annotated catalog, 29191
- International Boundary and Water Commission, United States and Mexico, United States section, remove certain limitations on annual operation and maintenance expenditures, report 16969
- International boundary study, 17862-866, 22261, 23996, 29532-534, 30649-650, 31846, 32575
- International Broadcasting Board :
establish—
hearings, 30030, 32079
report, 31103
- International Brotherhood of Electrical Workers, Committee on Political Education, annual report, 26027
- International Brotherhood of Pulp, Sulphite & Paper Mill Workers Political Education Program, annual report, 24343
- International Bureau for Protection of Industrial Property :
change name to International Bureau of Intellectual Property and authorize U.S. participation—
law, 19441
report, 17149, 19686
- International Bureau of Intellectual Property :
U.S. participation, authorize—
law, 19441
reports, 17149, 19686
- International cataloging Federal manual for supply cataloging, 26303
- International Center complex, 19926
- International Center for Foreign Chanceries, additional appropriations, authorize—
law, 30916
reports, 27172, 27270
- International Center for Scholars, Woodrow Wilson, *see* Woodrow Wilson International Center for Scholars.
- International checklist of cultivated Ilex, Ilex opaca, 20890
- International Children's Emergency Fund, *see* United Nations International Children's Emergency Fund.
- International Clergy Week in United States, designate, law, 27077
- International coal trade, 18503
- International coffee agreement, 1968, as extended, 31047
- International Commerce Bureau, press releases, 18776
- International Commercial Exchange, Inc., futures trading and open contracts, 18394
- International Commission for Northwest Atlantic Fisheries, Northwest Atlantic fisheries convention, protocol, report, 17124
- International Committee of the Red Cross, refugee relief in Khmer Republic, agreement, 27920
- International Conference on Photonic Reactions and Applications, proceedings, 30769
- International Conference on Strontium Metabolism, papers, 26989
- International Conference on Vietnam :
act, 26878
press conference by Secretary of State William P. Rogers following International Conference on Viet-Nam, 26860
- International cooperation :
application of modern technologies to international development, list of reports available for foreign use, 18000
commercial and economic representation abroad, staff report, 25390
conference on security and cooperation in Europe, current foreign policy, 16408
cultural cooperation, agreement with Mexico, 16511
- International cooperation—Continued
international health programs, 1972, hearings, 19997
- International housing, study, 17232
- United Nations General Assembly—
issues at 27th annual meeting, hearings, 21225
26th annual meeting, report, 21234
- International Council for Exploration of the Sea convention with other governments, 31873
- International Criminal Police Organization, U.S. membership, increase limit on dues, law, 16890
- International Decade of Ocean Exploration, progress report, 30171
- International demographic data directory, 21067
- International Demographic Statistics Center, research document series, 22566
- International Development Agency :
A.I.D. memory documents, quarterly, 17938
AID activities in Laos, hearing, 15891
appropriations, 1974, hearings, 32132
biographic register, 30643
current foreign policy, U.S. assistance program in Vietnam, 16496
developing countries' external debt and U.S. foreign assistance, case study, GAO report, 28986
field staff, Foreign Service list, 18384
procurement regulations, 17960
report of housing investment guaranty program, GAO report, 28983
summary of United States aid to Jordan, GAO report, 30265
telephone directories, 20791, 29538-539, 31850
U.S. foreign aid to education, does Brazil need it? GAO report, 30267
U.S. interests and activities in Nepal, 25246
war on hunger, monthly report, 19052
what should U.S. policy be for development assistance to Ecuador? GAO report, 25247
- International Development Association :
appropriations, 1973—
hearings, 15717, 15869, 17025
reports, 16989, 16991, 19887
more effective United States participation needed in World Bank and International Development Association, GAO report, 23322
- International directory of investigators in psychopharmacology, 17765
- International economic indicators, 28633, 31203, 32184
- International Economic Policy, Council on, *see* Council on International Economic Policy.
- International education, *see* Education.
- International exchanges :
education, financing of exchange programs, agreement with Federal Republic of Germany, 16529, 25752, 31860
foreign curriculum consultants in action, 25053
Foreign Scholarships Board, report on exchanges, annual report, 32306
higher education programs in foreign languages and area studies, 1973-74, research and training opportunities abroad, 15997
- International educational and cultural exchange (periodical), 18504
- International teacher exchange, value/summary of state regulations/U.S. Office of Education program, 28660
partners in exchange, 16500
people's diplomacy in action, 23997
Smithsonian Institution, annual report, 31803
Smithsonian International Exchange Service, annual report, 16477

- International exchanges—Continued teachers, opportunities abroad, 15993
U.S. social security mission to Union of Soviet Socialist Republics, 26837
see also International cooperation.
- International Exposition on Ecology and Environment, *see* International Exposition on the Environment.
- International Exposition on the Environment:
commemorative medal, authorize, hearings, 28396
Spokane, Wash., participation, provide—hearing, 21236
report, 17204
U.S. participation, message from the President, 19562
- International Field Year for Great Lakes 1972-73:
IFYGL bulletins, 20689, 25617, 27799, 31718
news release, 18505
International finance, *see* Investments.
- International Harvester Co., wage chronology, 1970-73, 32431
- International Health Agency, establish, hearings, 19997
- International housing, 15376
- International Hydrological Decade, 1965-74: contributions, 20154, 21742, 23333
International Field Year for Great Lakes, IFYGL bulletin, 20689
- International implication of energy situation, 16499
- International investments, *see* Investments.
- International labor (periodical), 18507
- International Labor Conference, results of 1972 International Labor Conference, technological change and adherence to relevancy stressed, 21915
- International Labor Organization:
convention 132, annual holidays with pay, text, 27114
convention and recommendations adopted—
invalidity, old-age, and survivors benefits, 28303
minimum wage fixing with special reference to developing countries, 28304
protection and facilities to be afforded workers' representatives, 30961
vocational training of seafarers and employment problems arising from technical developments on board ship, 30951
- International law:
current foreign policy, role of international law in combating terrorism, 23993
current laws, statutes and executive orders, Environmental Protection Agency, international statutes, 20183
digest, 29528
juridical problems in use of orbits for artificial earth satellites, USSR study, 31522
theoretical problems of conservation of Antarctic resources under international law, world wide study, 23555
U.S. contributions to Hague Conference on Private International Law and International (Rome) Institute for Unification of Private Law, report, 19852
see also Maritime law.
- International Monetary and Financial Policies, National Advisory Council, *see* National Advisory Council on International Monetary and Financial Policies.
- International Monetary Fund:
appointment of alternates for Governors, provide, report, 3109
Bretton Woods agreements act, amend, report, 31097
gold, SDR's and central bank swaps, 28268
- International narcotics control source book of conventions, protocol and multilateral agreements, 17689
- International negotiations, 27333
- International notams, 18510
- International organization nad conference series, 17867, 20790, 27908-909, 31847
- International Organization of Legal Metrology, establish, 26864
- International organizations:
environmental activities of international organizations, 1972 survey, 17241
extending certain privileges and immunities in Organization of African Unity, report, 29865
International organization and conference series, 17867, 20790, 27908-909, 31847
U.S. missions, field staffs, Foreign Service list, 18384
United States contributions, report, 27107
- World Health Organization, facilities, services, privileges and immunities for 23d session of Western Pacific Regional Committee, agreement, 16527
- International petroleum annual, 26652
- International plant protection, convention between United States and other governments, 25734
- International politics, *see* International relations.
- International population reports, 25035, 26351
- International postal service:
directory of international mail, 18508
postage rates and fees, general information, 16564
- International Radio Broadcasting Commission:
appropriations, 1973—
law, 19473
report, 19704
appropriations, 1974, hearings, 28388
- International relations:
American foreign policy in economic and political relationships with Organization of American States and Latin America, 30648
briefing on major foreign policy questions by Secretary of State William F. Rogers, hearing, 26267
code of Federal regulations, 28878
Congress to be kept better informed on foreign policy and national security by Central Intelligence Agency, report, 15822
crisis in South Asia, 15914
current foreign policy—
conference on security and cooperation in Europe, 16498
new Panama Canal treaty, 17861
1973, year of Europe, (address), 29530
role of international law in combating terrorism, 23993
search for new world monetary arrangements, 20789
southern Africa constant themes in U.S. policy, 25718
- U.S. assistance program in Vietnam, 16496
- U.S. leads global war on drug abuse, 20788
- U.S. trade prospects with People's Republic of China, realistic assessment, 22258
- United Nations, problems and opportunities, 17867
- United States troop levels in Europe, 32574
- foreign affairs research papers available, list, 18377
- foreign policy for 1970's—
comparative analysis of the President's 1972 foreign policy report to Congress, 17053
shaping durable peace—
departmental edition, 26795
document edition, 26063
- foreign policy implications of energy crisis, hearings, 23016

INDEX 1973

International relations—Continued

- foreign policy of U.S.—
 - and overseas operations, investigation by Foreign Affairs Committee, report, 26100
 - foreign economic policy, implications for organization of Executive branch, hearings, 21235
 - investigations and studies, authorization and expenses, report, 26219
 - 1972 report, 26857
 - policy and programs, hearings, 29908
 - State Department bulletin, 18221
- Foreign relations authorization act, law, 16877
- foreign relations of U.S.—
 - Far East, China—
 - departmental edition, 30645
 - document edition, 29837
 - general, United Nations, 1947—
 - departmental edition, 31844
 - document edition, 30942
 - Germany and Austria—
 - departmental edition, 30943
 - document edition, 31845
 - investigations and studies, authorization, report, 19842
 - Western Hemisphere—
 - departmental edition, 22259
 - document edition, 21154
 - foreign relations of U.S., diplomatic papers—
 - China—
 - departmental edition, 17859
 - document edition, 16937
 - conference at Quebec, 1944—
 - departmental edition, 17856
 - document edition, 16942
 - Eastern Europe, Soviet Union—
 - departmental edition, 17857
 - document edition, 16935
 - general foreign policy series, 16499, 17860, 20788-789, 23993-995, 26857-858, 27907, 29531, 30646-647
 - global context, report of General Walt on world drug traffic and its impact on U.S. security, 1991
 - India, Pakistan and Bangladesh, issues in United States foreign policy, 29536
 - international conflicts, USSR study, 25325
 - international economic policy act, amend, report, 31068
 - international economic report of the President, 25671
 - international information and cultural series, 23997
 - international negotiation, Chinese comment on Soviet foreign policy, 19973
 - legislation on foreign relations—
 - collection, 17045
 - with explanatory notes, 27325
 - legislative history of Committee on Foreign Relations, Senate, 26241
 - Middle East in crisis, problems and prospects, 15737
 - military force and international relations, USSR study, 26595
 - multinational corporations and United States foreign policy, hearings, 31141
 - necessity for strength in era of negotiation, current foreign policy, 29531
 - negotiation and statecraft, hearings, 26269, 30037
 - new China policy, its impact on United States and Asia, hearings, 21228
 - Nixon doctrine, USSR study, 23538
 - People's Republic of China—
 - in respect to United States foreign policy, discussion guide, 25726
 - issues in United States foreign policy, 20787
 - political relations between Panama and other states, 1910-1929, records of Department of State, pamphlet, describing microfilm, 27718C

International relations—Continued

- prevention of incidents on and over high seas, agreement with Union of Soviet Socialist Republics, 16523
- prospects for more rational world, reflections on international relations (testimony), 22257
- records of State Department relating to, political relations between Turkey and other states, 1910-29, microfilm, pamphlet describing, 21996
- reports required by Congress in foreign affairs field, 27204
- Soviet foreign policy and European security, 20478
- states of North Africa in 1970's, hearings, 17052
- teaching international relations, 17366
- tension and detente, congressional perspectives and Soviet-American relations, 27208
- U.S.-African interests, frank appraisal, 27902
- U.S. policy toward Southern Rhodesia, future direction, hearings, 29904
- United States and changing world, 27907
- United States and Communist China in 1949 and 1950, question of rapprochement and recognition, staff study, 21340
- United States and Japan, 14th Air Force Academy Assembly, proceedings, 25839
- United States-Chilean relations, hearing, 26160
- United States relations with Panama, hearings, 26161
- foreign policy mechanism, organization, functions, and management, USSR study, 27621
- Washington Summit, General Secretary Brezhnev's visit to United States, June 18-25, 1973, 32573
- world data handbook, issues in U.S. foreign policy, 17860
- see also* Alliances—International cooperation.
- International (Rome) Institute for Unification of Private law:
 - appropriations for participation by United States—
 - law, 19428
 - report, 19852
- International science notes (periodical), 23998, 25728, 29535
- International security, security supporting assistance appropriations, 1973, hearings, 17025
- International Statistical Programs Center, research document series, 28194
- International System of Units, *see* Weights and measures.
- International Technical Conference on Experimental Safety Vehicles, report of proceedings, 30498
- International telecommunications satellite organization (INTELSAT), agreement, 25763
- International Telephone and Telegraph Company:
 - and Chile—
 - multinational corporations and United States foreign policy, hearings, 31141
 - 1970-71, committee print, 30027
 - withholding and transfer of Securities and Exchange Commission files pertaining to ITT, legislative oversight, hearings, 28418
- International trade, *see* Commerce.
- International transit, *see* Transit (international).
- International visitors, 30556
- International voyage load line act, 32107
- Internationalization of capital markets, 29469
- Interparliamentary Group, Canada-United States, *see* Canada-United States Interparliamentary Group.

- Interparliamentary Group, Mexico-United States, *see* Mexico-United States Interparliamentary Group.
- Interparliamentary Union, conference, reports of United States delegation, 15736, 17044
- Interplanetary flight, *see* Astronautics.
- Interplanetary missions, *see* Venus (planet)—Planets.
- Interplanetary trajectories, *see* Trajectories.
- Interpolation, method of bivariate interpolation, and smooth surface fitting based on local procedures, 27065
- Interpretation of aeromagnetic survey of Amchitka Island area, Alaska, 17534
- Interpretation of trend in range condition from 3-step data, 31373
- Interpretative bulletins, Wage and Hour Division, 24098
- Interpretive prospectus, 22117-122, 23826, 27818-819
- Interpretive series, 26742
- Intersectorial prediction in optimum planning system, RaS method when prediction and measurement errors are present, 17632
- Interstate agreements:
- Interstate environment compact act, reports, 28504, 29955
 - Kansas-Nebraska Big Blue River compact, consent of Congress, law, 16861
 - Maryland-Virginia seaward boundary agreements, consent of Congress—law, 19492
 - reports, 16983, 19936
 - North Carolina-Virginia seaward boundary agreement, consent of Congress—laws, 19492, 19513
 - reports, 16984, 19931
 - oil and gas compact, extension and renewal, consent of Congress, law, 16869
- Interstate and Foreign Commerce Committee, House:
- activity, 92d Congress, report, 21196
 - calendar, 18551
 - committee prints, 15762, 17066-67, 19783, 21264, 21379, 23021, 24867-868, 26171, 27225-228, 29927-929
 - hearings, 15751-760, 17064, 19777-782, 17064, 19777-782, 21254-263, 23018-20, 24865-866, 26167-170, 27219-224, 28417-421, 29923-926, 31028-32, 32085-86
 - historical data regarding creation and jurisdiction, 15762
 - investigations and studies, authorization and expenses, report, 26074
 - reports, 15695, 15699, 15711, 16966, 17016-17, 17021, 17065, 19653, 19656, 19697, 19713, 21194, 26122, 27156, 28327, 28338, 28348, 28350, 28353, 29851, 29871, 31001, 32043, 32048
 - subcommittee print, 15761
- Interstate carriers, *see* Carriers.
- Interstate commerce, *see* Commerce.
- Interstate commerce act, *see* Carriers—Railroads.
- Interstate Commerce Commission:
- annual report, 1972—
 - departmental edition, 20442
 - document edition, 19572
 - appropriations, 1973, law, 19362
 - appropriations, 1974—
 - authorization, report, 29995
 - law, 32016
 - report, 30977
 - Commissioners, nomination of—
 - Deason, Willard, hearings,
 - McFarland, Alfred T., hearings,
 - Montejano, Rudolfo, hearings,
 - Murphy, Rupert L., hearings,
 - O'Neal, A. D., Jr., hearings,
 - Wiggins, Chester M., hearings, 19955, 28529
 - continue essential rail transportation services, authorize, report, 29978
 - decisions (bound reports), 27615, 30323
 - Interstate Commerce Commission—Con. decisions (separates)—
 - finance, 18511
 - motor carrier, 18512
 - motor carrier finance, 18513
 - traffic, 18514
 - decisions, judicial review, improve, hearing, 32149
 - FMC-ICC jurisdiction, hearings, 15771
 - ICC procedures involving Marianna & Blountstown Railroad, inquiry, hearing, 23020
 - preparation and submission of quarterly and annual reports to ICC by classes 1 and 2 motor carriers of property, etc., 17589
 - small business, impact of actions and policies by Federal regulatory agencies, hearings, 28434
- Interstate Commission on Potomac River Basin:
- appropriations, 1974, hearing, 27186
 - public works appropriations, 1973, law, 19363
 - public works appropriations, 1974—law, 32015
 - reports, 29993, 30989
- Interstate compacts, *see* Interstate agreements.
- Interstate Land Sales Registration Office, need for improved consumer protection in interstate land sales, GAO review, 28996
- Interstate migration by State, 28127
- Interval training, 31768
- Interviewers, interviewer's handbook for selection and referral to training and placement, 20490
- Interviewing:
- effects of different reinterview techniques on estimates of simple response variance, census of population and housing, 19252
 - net differences in interview data on chronic conditions and information derived from medical records, 32489
 - quality control and measurement of non-sampling error, in health interview, survey, 27744
 - reliability of estimates with alternative cluster sizes in health interview survey, 27742
 - reporting health events in household interviews, effects of extensive questionnaire and diary procedure, 17746
- Intoxication, *see* Alcoholism—names of poisons.
- Intriligator, D. S., high speed streams in solar wind, 31265
- Introducing Maritime Administration, 25396
- Introduction to botanical type specimen register, 30631
- Introduction to civil preparedness, 21397
- Introduction to decision-making theory, 17600
- Introduction to solar terrestrial activity for geomagnetic studies, earth's main field, 22095
- Invariance of cross ratio applied to microwave network analysis, 20643
- Inventions:
- index of patents, subjects, 26792
 - NBS and inventive process (speech), 29314
 - significant NASA inventions available for licensing in foreign countries, 26686
- Inventories:
- economics available through improved management of Navy shipboard inventories, GAO report, 28987
 - forest inventory statistics—
 - Alcorn-Tishomingo County unit, northeast Mississippi, 22287
 - Decatur-Henderson County unit, west Tennessee, 22286

INDEX 1973

Inventories—Continued

- green coffee, current business reports, 18185
- improve forest inventory with access data, measure transport distance and cost to market, 25226
- inventory of—
 - Federal programs supporting health manpower training, 26521
 - physical facilities in institutions of higher education, 15992, 27430
 - surveys of the public on crime, justice and related topics, 26606
- manufacturers'—
 - current industrial reports, 18194
 - shipments and orders, 21068
 - shipments, inventories, and orders, 15596
 - value, 28095
- monthly wholesale trade, current business reports, 18188
- National Archives preliminary inventories series, 30467, 31669, 32480
- national inventory of library statistics practices, data collection on national, State, and local levels, 28668
- population sciences, Federal population research, 29356
- procedures for constructing and using task inventories, 32495
- real property leased to U.S. throughout the world, report, 29002
- real property owned by U.S. throughout the world, report, 26484
- records of War Manpower Commission, 32480
- see also* subjects of inventories.

Inventors:

- applicants for inventors' certificates or patents, priority rights in other countries, international agreement, implementation, law, 19353
- assistance to inventors and small R&D firms, program area description of experimental technology incentives program, 27720
- conference on public need and role of inventor, based on recommendation of National Inventors Council, 27719
- Inventors' Day, National, *see* National Inventors' Day.
- Inventory management specialist, 16632
- Inversion (mathematics):

- Cholesky factorization and matrix inversion, 26772
- formation of inversion in $\text{CO}_2\text{H}_2\text{O}-\text{N}_2$ gas mixture jet expanding through slit, 21845
- Laplace transform inversion by Fourier ~~series~~ expansion, 25072

- Investigation of alkaline phosphatase activity in persons dealing with electromagnetic emission generators of high, ultrahigh and superhigh frequency, 30357
- Investigation of attempts to subvert United States armed services, 15750
- Investigation of flow fields within large-scale hypersonic inlet models, 29270
- Investigation of mercury in St. Clair River-Lake Erie systems, 16574
- Investigation of optical print media, initial survey, 20966
- Investigation of photosensor aperture shaping in facsimile cameras, 16352
- Investigation of some principles of electrodeposition of cylindrical magnetic films, USSR study, 30341
- Investigation of thermoluminescent dosimeters for environmental monitoring, 22477
- Investigation of use of gel material for mine sealing, 23191

- Investigators:
- BNDD compliance investigator, 21968
- international directory of investigators in psycho-pharmacology, 17765

Investment advisers:

- broker-dealer and investment adviser directory, 29463
- index of active registered investment companies under Investment company act of 1940, and related investment advisers, etc., 29468

Investment casting, *see* Founding.

Investment companies:

- act, amended—
 - hearings, 27306
 - rules and regulations, 22213
- act of 1940, SEC releases, 18517
- current developments for investment companies (address), 29464
- index of active registered investment companies under Investment company act of 1940 and related investment advisers, principal underwriters, sponsors (i.e., depositors), and underlying companies, 29468
- mutual fund industry, living with change (address), 29473
- registered under act of 1940, 1972 list, 30622
- regulation of securities trading by members of national securities exchanges and sale of investment advisers of registered investment companies, report, 28487
- SBIC financing for small business money for growth, 25694
- tax information on mutual fund distributions, 20421

Investments:

- advisers act, amend, hearing, 27306
- District of Columbia, legal investments for trust funds, list, 23122
- for benefit of all mankind, practical returns from space investments, 17012
- foreign direct investments program, selected statistics, 20288
- get facts before investing in land, 23418
- implications on multinational firms for world trade and investment and for U.S. trade and labor, 23058
- independent oil producer and proposed Oil and gas investment act of 1972 (address), 29467
- interim report on Agency for International Development's housing investment guaranty program, GAO report, 28983
- international investment position of United States, developments in 1971 and U.S. direct investments abroad in 1971, 22635
- investing in Yugoslavia, 31204
- investment adviser regulation, subject too long neglected (address), 29470
- Investment advisers act, SEC releases, 18516
- Investment guaranties, agreement with Yemen Arab Republic, 31853
- investment in precommercial thinning of northern hardwoods, 20307
- investment income and expenses, tax information, 21828
- investment laws of selected African countries, 30130
- investments in housing and community development (address), 21806
- Minority enterprise small business investment act—
 - law, 21134
 - reports, 15834, 21172
- multi-family housing investments, tax considerations, 23452
- municipal capital market expansion with taxable bond sales, report, 15816
- 1000-MWe central station power plants, investment cost study, 24200-201
- oil-fired fossil plant, 22493
- pressurized water reactor plant, 25882
- public investments and population changes in 3 rural Washington State towns, 20894

Investments—Continued

- regulation Q, NOW accounts, investment in State housing corporations, hearing, 27194
- Small Business Administration and investment act, with amendments, 21151
- small business, role in export trade and foreign investment, hearings, 19797
- tax information on investment credit, 20419
- tax treatment of capital recovery (investment credit, accelerated depreciation and amortization), general tax reform, panel discussions, 26188, 27251
- taxation of foreign income, general tax reform, panel discussions, 26188
- U.S.-Canadian economic relations (remarks), 29121
- U.S. taxation of foreign direct investments survey of tax factors affecting investments, 26347
- why industry invests abroad, multinational corporation, studies on U.S. foreign investment, 27612
- see also* Capital.
- Investors:
 - America needs small investor (address), 29462
 - disclosure, best protection for corporation as well as investor (address), 30620
 - financial disclosure, investor confidence and corporate credibility, (address), 29465
 - foreign direct investors in U.S., list of foreign firms with some interest/control in American manufacturing and petroleum companies in U.S., 23488
 - investor relations and corporate credibility (address), 29471
 - role of institutional investors in stock market, 30020
 - search for clarity and certainties in securities transactions with more and more realistic information for investors (address), 29479
- Invoices, inaccurate and unfair billing practices, hearings, 32139
- Involvement of CO₂ and calcium stores in decompression sickness, 30412
- Iodides, *see* Radiiodide.
- Iodine:
 - evaluation of data regarding efficiency of activated charcoal adsorbers at low gas phase iodine concentrations, 21031
 - in situ Ge(Li) and NaI(Tl) gamma-ray spectrometry, 22474
 - iodine-129 in environment around nuclear fuel reprocessing plant, 25676
- Ion beams, nuclear and ion beam techniques for surface and near-surface analysis, 31752
- Ion exchange:
 - acid mine drainage treatment by ion exchange, 20195
 - economics of ion exchange technology applied to municipal water quality improvement, 16141
 - ion exchange color and mineral removal from kraft bleach wastes, 31283
- Ion rocket engines, *see* Rockets.
- Ione formation, radioelement and trace-element content, central California, 29007
- Ionia County Republican Committee, annual report, 24400
- Ionic and neutral reactions in glow discharges of He-SO₂-CO mixture, 30425
- Ionization:
 - applicability of perturbation theory in describing process of multiphoton ionization of an atom, 22459
- International Conference on Inner Shell Ionization Phenomena and Future Applications, Apr. 17-22, 1972, proceedings, 25870
- low-energy electron impact rate coefficients for some atmospheric species, 16451

Ionization—Continued

- resonance phenomena during multiphoton ionization of a xenon atom in an electric field E 5 x 10⁷ V/cm, 22452
- Ionization gages:
 - ionization gauge characteristics of SA1463 triode electron tube and effects of internal gas pressure on pulse emission and arcing, 22484
 - sensitivity of hot-cathode ionization vacuum gages in several gages, 16351
- Ionizing radiation:
 - digest of workmen's compensation decisions involving delayed injury from ionizing radiation exposure, 21032
 - dyestuff color removal by ionizing radiation and chemical oxidation, 26410
 - ecological techniques utilizing radionuclides and ionizing radiation, selected bibliography, 21016
 - effect of ionizing radiation on organism, problem of effect of radioactive water pollution on reproduction of commercial fishes, 26984
 - effects on populations of exposure to low levels of ionizing radiation, 25517
 - estimates of ionizing radiation doses in U.S., 1960-2000, 17813
- Ionosphere:
 - antennas and transionospheric propagation as related to ELF/VLF downlink satellite communications, conference proceedings, 27844
 - daily departures of foF₂ from monthly median, analysis and representation, 30895
 - investigations of artificial stimulation of ULF waves in ionosphere and magnetosphere, magic mode, 29436
 - ionosphere disturbances and their influence on radio communications, 29303
 - ionospheric data (periodical), 18518
 - ionospheric disturbances produced by severe thunderstorms, 26766
 - ionospheric research in USSR, 17614
 - ionospheric scintillation predictions for GOES, 25626
 - method for finding D-region electron density distributions from L.F. broadband pulse measurements, 22641
 - topside ionosphere during sunrise at mid-latitudes, 22406
- Ions:
 - air quality data for nonmetallic inorganic ions, 1969-70, from national air surveillance networks, 30724
 - cation transport in soils and factors affecting soil carbonate solubility, 28823
 - cationic analysis of—
 - Byrd Station, Antarctica, ice core, 17374
 - Camp Century, Greenland, ice core, 17373
 - ion heating mechanism in modified Penning discharge, 20614
 - ionic migration and weathering in frozen Antarctic soils, 32459
 - probe method for recording ions produced by laser radiation in afterglow discharge plasma, 20993
- Iowa:
 - Buchanan County Central Committee of Iowa, annual report, 24443
 - census of housing, 1970, housing characteristics for States, cities, and counties, 15544
 - census of population, 1970, detailed characteristics, 16733
 - City of Clinton Bridge Commission, convey bridges and other assets to State—
 - law, 19480
 - report, 15852
 - climatological data, 18085
 - countries, population estimates, 27038
 - county business patterns, 29733
 - Federation of Republican Women, 3d District, annual report, 22947

INDEX 1973

Iowa—Continued

- 5th District Federation of Republican Women (of Iowa), annual report, 24529
- Impact of energy crisis on Iowa, hearings, 15782
- James County Central Committee of Iowa, annual report, 22868
- Jefferson County Central Committee of Iowa, annual report, 22866
- Linn Chapter of Democratic Women's Activities, annual report, 24730
- mineral industry, minerals yearbook chapter, 16282, 32450
- Mitchell County Central Committee, annual report, 24446
- 1970 census of population, characteristics of population, 29701
- precipitation data, hourly, 18436
- registry of minority contractors and housing professionals, listing in selected cities, 32384
- 2nd District Democratic Convention Fund, annual report, 24433
- Sixth District Federation of Republic Women, annual report, 24521
- Third District Congressional Fund, annual report, 22800
- truck inventory and use survey, 28137
- water quality standards summary, 25132
- Iowa County Republican Organization, annual report, 24520
- Iowa Real Estate Political Education Committee, annual report, 24726
- Iowa River, *see* Upper Iowa River.
- IPA, *see* Intergovernmental relations.
- Iran :
 - economic trends and their implications for United States, 23502, 32398
 - establishing business in, 28635
 - map, 31975
 - military assistance, deposits under Foreign assistance act of 1971, agreement, 16534
 - mineral industry, minerals yearbook chapter, 17683, 29219
- Iraq, plant quarantine import requirements, 30740
- Ireland :
 - background notes, 22251
 - economic trends and their implications for United States, 25311, 29117
 - minerals industry, minerals yearbook chapter, 16283
 - non tariff barriers affecting trade in agricultural products, 23264
- Ireland, Lloyd C., labor trends in southern forest industries, 28970
- Iron :
 - and steel industry role in national defense (address), 27058
 - and steel scrap, mineral industry survey, monthly, 18519
 - characteristics of valence state of iron in coal dust, 25503
 - dispersion strengthening of internally oxidized iron-aluminum alloys, 21944
 - divergent beam (Kossel) X-ray method and its uses in measuring strain contours in individual grain of Fe-3 weight percent Si transformer sheet, 32482
 - economics of byproduct metals, 26649
 - effects of direct reduction upon mineral supply requirements for iron and steel production, 29207
 - friction-induced surface activity of some hydrocarbons with clean and oxide-covered iron, 26690
 - iron and steel scrap, minerals yearbook chapter, 25450
 - ore, mineral industry surveys—
 - annual, 23645
 - monthly, 18520
 - ore, minerals yearbook chapter, 25449
 - oxygen and sulfur interactions with clean iron surface and effect of rubbing contact on these interactions, 29290
 - physical aspects of copper cementation on iron, 27700

Iron—Continued

- phosphorous removal from Birmingham, Ala., calcareous iron ores, 25505
- preparation and homogeneity characterization of austenitic iron-chromium-nickel alloy, standard reference materials, 20636
- recovering rutile from titanium-enriched high-iron smelter slag, studies, 26667
- recovery of zinc, copper, silver, and iron from zinc smelter residue, 30431
- slag iron and steel, minerals yearbook chapter, 16325
- sulfatization-reduction of manganiferous iron ore, 30427
- world iron-ore pellet and direct-iron policy, 22649
- see also* Cast iron.
- Iron castings, *see* Castings.
- Iron mills, iron and steel plants, background information for proposed new source performance standards, 29643, 30722
- Iron ores, *see* Iron.
- Iron oxide, pigments, minerals yearbook chapter, 16316
- Iroquois Indians, Iroquois League, general information, 31460
- Irradiation. *see* Neutrons—Radiation—X-rays.
- Irradiators, marine products development irradiator program dosimetry and operations, annual report, 28087
- Irrigation :
 - and drainage on farms, 1969 census of agriculture, 30794
 - annual operating plan for federally owned reservoirs in Kansas River basin, 29457
 - appraisal of ground water for irrigation in Little Falls, area, Morrison County, Minn., 25262
 - aquatic pests on irrigation systems, identification guide, 23915
 - case studies of desalted water for irrigation, 25297
 - control of reed canary grass along irrigation systems, study, 26929
 - effects of agriculture pesticides in aquatic environment, irrigated croplands, San Joaquin Valley, 17932
 - irrigation efficiency, bibliography, 27594
 - irrigation management for control of quality of irrigation return flow, 31288
 - prediction modeling for salinity control in irrigation return flows, state-of-the art review, 26416
 - publications, price list, 26797
 - response of several crops to 6 herbicides in irrigation water, 20937
 - vegetation augmentation by reuse of treated active surface mine drainage, 21501
 - salinity problems in arid lands irrigation, literature review and selected bibliography, 23476
 - selected irrigation return flow quality abstracts, 20205, 32263
 - use of naturally impaired water, bibliography, 27595
 - use of water on Federal irrigation projects, water use research study, Boulder Canyon project, All American Canal System, Coachella Division, Calif., reports, 23944-945
 - water systems management workshop, lecture notes, 17818, 23946
- see also* Reclamation of land.
- Irrigation districts :
 - amend act of July 4, 1955, as amended, relating to construction of irrigation distribution systems—
 - hearing, 21345
 - law, 19419
 - report, 19895
- Irrigation projects, *see* Klamath Indian Irrigation project—Reclamation of land.
- IRS, *see* Internal Revenue Service.
- Irvine-Coast Republican Women, Federated, annual report, 24560

Irvine, Dallas, 1861-65, military operations, Official records of Union and Confederate Armies, guide index, main eastern theater of operations, checklist, 23697

Irwin, John N., II, statement, Apr. 10, 1972, 16499

Isaksen, Ivar S. A., distribution of odd nitrogen in lower stratosphere and possible perturbations caused by stratospheric air transport, 32462

Isla Desecheo, P. R., geology of Isla Desecheo, P.R. with notes on great southern Puerto Rico fault zone and quaternary stillstands of sea, 17536

Island lantern (periodical), 18521

Island news and comment, 25695

Islands of excellence, report of President's Committee on Mental Retardation, 29449

Isle of Wight County Republican Party Committee, annual report, 22948

Isle Royale, Mich.:

- Copper Harbor Conglomerate (middle Keweenawian) on Isle Royale, Mich., and its regional implications, 26503

Isle Royale National Park:

- geology of Isle Royale National Park, Mich. (series), 25258, 26508
- glacial and postglacial geologic history of Isle Royale National Park, Mich., 25258

Isolation:

- determination of focal projections of internal organs, in brain of man through isolation of useful signals, 27646
- effect of vertical active vibration isolation on tracking performance and on ride qualities, 21975
- guide for design of shock isolation systems for ballistic missile defense facilities, 32202

Isopods, freshwater isopods (Asellidae) of North America, 17439

Isosinglet approximation for nonelastic reactions, 20605

Isostasy, application of hot-isostatic pressing, hydrostatic extrusion, and deformable-die tube tapering processes, to production of titanium-6Al-4V tapered tubes, 26980

Isotopes:

- evaluation of practicability of radio-isotope thermal converter for artificial heart device, phase I final report, 30775
- isotopes and radiation technology, quarterly technical progress review, 18522
- isotopes development programs, 1972, research and development, progress reports on sponsored work, 24198
- isotopic profiling snow gage report, Mt. Hood, Oreg., 23978
- radioisotope powered cardiac pacemaker program, 30766
- seminar on use of stable isotopes in clinical pharmacology, proceedings, 16661
- summary of experience with use of isotopic correlation safeguard techniques, 22470
- telemetered profiling isotopic snow gauge, final report and specifications, 28062
- use of isotopes composition data to improve reactor calculational techniques, 21012
- see also names of isotopes, e.g. Uranium isotopes.

Isotopic profiling snow gage report, Mt. Hood, Oreg., 23978

Isotropy, method for prediction of stresses in isotropics inclusion or orebody of irregular shapes, 23648

ISP-30 series, 28148

Isquith, Robert N., Spanish-language health communications teaching aids, list of printed materials and their sources, 31410

Israel:

- accessions list, Library of Congress, American Libraries Book Procurement Center, Tel Aviv, 17947
- agricultural commodities, agreement, 17875, 25736
- and occupied territories, map, 19265
- binational science foundation, agreement, 25733

Israel—Continued

- census programs of several countries in Europe and Middle East, 26091
- economic trends and their implications for United States, 26553
- factfinding visit to Europe and Israel, health care systems, 24948
- Israel, 25-year perspective (address), 31848
- market factors, 28634
- recent Soviet emigration to Israel, 17047
- rural development programs, 27301

Issues in school finance, 15890

Issues in United States foreign policy, People's Republic of China, 20787

Istle, suspension of duty, extend, reports, 19660, 30984

Isua, Greenland, calculations of glacier flow for open-pit mine, 32198

Italy:

- background notes, 29520
- census programs of several countries in Europe and Middle East, 26091
- economic trends and their implications for United States, 20430, 27610
- extradition treaty with Italy, 29950
- loan of vessels, U.S.S. Pickrel and U.S.S. Volador, agreement, 20800
- mineral industry, minerals yearbook chapter, 20545
- perchloroethylene from Italy, Japan, and France, determination of no injury, etc., Tariff Commission report, 24068
- plant quarantine import requirements, 20960
- scientific cooperation, agreement, 24013
- selling in Italy, 30129

Itasca County Republican Committee, annual report, 22926

Item identification, see Identification.

Iteration (mathematics):

- iterative method for saturation adjustment, 22414
- iterative solution of integral equation for radiative transfer by using variational technique, 31632

ITOS (meteorological satellites), see Satellites.

ITOS 1 (meteorological satellites), see Satellites.

ITS, see Institute for Telecommunication Science.

It's good food, keep it safe, 30714

It's your move!, 22177

ITT, see International Telephone and Telegraph.

Ivory Club, Republican Party of Cameron County, annual report, 22864

Ivory Coast:

- economic trends and their implications for United States, 24607
- Ghana boundary, study, 30650
- map, 16802

J

J. C. Nichols Company, see J. C. Nichols Public Affairs Group of Employees.

J. C. Nichols Public Affairs Group of Employees, annual report, 24758

J. D. Dowdy District Campaign Committee, annual report, 22686

Jablon Seymour, origin and findings of Atomic Bomb Casualty Commission, 25681

Jablow and Company, Inc., see I. Jablow and Company, Inc.

Jack Lee for Congress Committee, annual report, 22895

Jack pine, see Pine.

Jackson, Laban, Mercer County Committee for Nixon-Nunn-Jackson, annual report, 23748

Jackson, Samuel C.:

- addresses, etc.—
- July 14, 1972, 23449
- Oct. 3, 1972, 21805
- Oct. 18, 1972, 21807

Jackson, Sherman, Hoy, newsletter, 28094

Jackson, Miss., area wage survey, 27676

INDEX 1973

- Jackson Chamberlain Committee, political committee, annual report, 26031
- Jackson County, Ala., forest inventory statistics, Jackson County unit, northeast Alabama, 29580
- Jackson County Democrats, annual report, 22990
- Jackson-County Republican Central and Executive Committee, annual report, 22693
- Jackson County Republican Central Committee, annual report, 22969
- Jackson Creek Research Natural Area, general information, 21624
- Jacksonville, Fla.:
 - area wage survey, 26623
 - learning to learn program, model programs, compensatory education, 17365
- Jacob, Heinrich G., engineering optimization method with application to STOL-aircraft approach and landing trajectories, 17726
- Jacobian variational principles and equivalence of 2d order systems, 16446
- Jacobsen, Josephine, lecture, May 1, 1972, 29190
- Jacobson, Thomas P. dynamic friction and wear of solid film lubricant during radiation exposure in nuclear reactor, 20604
- Jaffe, Sidney A., price index for deflation of academic R & D expenditures, 16417
- JAG journal, 16209, 17644, 18523, 20481
- JAG law review, 18524
- Jahn, Otto L., photoelectric color sorting of citrus fruits, 22358
- Jails, *see* Prisons and prisoners.
- Jamaica:
 - economic trends and their implications for United States, 16157
 - marine studies on north coast, 25695
 - mineral industry, minerals yearbook chapter, 20539
- James, Odette B., crystallization history of lunar feldspathic basalt 14310, 29029
- James, P. E., research on removing radioactive fallout from farmland, 25838
- James A. Byrne for Congress Campaign Committee, annual report, 22832
- James County Central Committee of Iowa, annual report, 22868
- James M. Wall for Congress Committee, annual report, 26040
- James Madison Memorial Building, summary account of Commission's part in planning of Library of Congress James Madison Memorial Building, 23510
- James River, drainage basin, cooperative State-Federal report on water pollution, 17810
- Jameson, Charles W., Citizens for Jameson Committee, annual report, 24764
- Jane Pickens Langley for Good Government Committee, annual report, 24745
- Janesville, Wis., Drive Janesville Political Fund, annual report, 22821
- Janiczek, Paul M., orbit of Polyhymnia and mass of Jupiter, 17788
- Janitors, *see* Custodians.
- Janssen, Melvin R., agriculture in upper Great Lakes region, 22354
- Janus, John B., tittle and delivered samples, analyses, 21956
- Japan:
 - American trade with Japan (address), 25960
 - bicycle speedometers from Japan, determination of injury to U.S. industry, Tariff Commission report, 16539
 - Claims of Trust Territory of Pacific Islands against Japan, agreement, 32579
 - collapsible baby strollers from Japan, Tariff Commission report, 26895
 - color television picture tubes from Japan, determination of no injury, etc., Tariff Commission report, 24061
- Japan—Continued
 - convention with Japan for protection of birds and their environment, report, 24895
 - defense, acquisition and production of additional F-4 EJ aircraft, and acquisition of RF-4 E aircraft, defense agreement with Japan, 26862
 - double taxation, convention, agreement, 17873
 - economic trends and their implications for United States, 25312, 31502
 - fisheries off United States coast, and salmon fisheries, agreement, 25761
 - impression fabric of manmade fiber from Japan, Tariff Commission report, 27945
 - Japan, analytical bibliography with supplementary research aids and selected data on Okinawa, Republic of China (Taiwan), Republic of Korea, 20984
 - Japan's World War II balloon bomb attacks on North America, 26692
 - king and tanner crab, agreement, 25760
 - mineral industry, minerals yearbook chapter, 20563
 - mutual defense assistance—
 - agreement, 22263
 - cash contribution by Japan, agreement, 16528
 - new China policy, its impact on United States and Asia, hearings, 21228
 - nitrogen oxide abatement technology in Japan, 30196
 - Omega navigational station, agreement, 25729
 - patents, trademarks, and licensing in Japan, 24288
 - perchloroethylene from Italy, Japan, and France, determination of no injury, etc., Tariff Commission report, 24068
 - postwar economic assistance, final settlement and agricultural commodities, agreement, 30653
 - production and acquisition of Hawk and Nike Hercules missile systems, agreement, 27922
 - protection of birds and their environment, agreement, 15800
 - recent developments of fuel oil and waste gas, 30187
 - roller chain from Japan, Tariff Commission report, 25783
 - rural development programs, 27301
 - sailing directions, 28630, 32182
 - selling in Japan, 15617
 - steel wire rope, Tariff Commission report, 32596
 - summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23887-889
 - synthetic methionine from Japan, Tariff Commission report, 27950
 - United States and Japan, 14th Air Force Academy Assembly, proceedings, 25839
 - wool and man-made fiber textiles, trade agreement, 25744
 - wool and polyester/wool worsted fabrics from Japan, 20837
- Japanese:
 - lessons from the Japanese (remarks), 28892
 - travel habits and patterns, 22206
- Japanese beetles, *see* Beetles.
- Japanese in United States:
 - census of population, 30807
 - number by counties, 1970, map, 28200
 - recovery of pre-World War II Yokohama Specie Bank deposits, authorize—
 - hearings, 17064
 - law, 19393
 - report, 17180
- Jarrett, Stanley M., final report of major mine fire disaster, Sunshine Mine, Sunshine Mining Company, Kellogg, Shoshone County, Idaho, 27895

- Jars, Federal item identification guide, 17325
- Jasinowski, Jerry J.:
economics of Federal subsidy programs, 16929, 25992, 28267
- Jasper County Richard Boehning for Congress, annual report, 22849
- Jasperoids, United States, its characteristics, origin, and economic significance, 21727
- Jaye, Fredric C., monitoring instrumentation for measurement of sulfur dioxide in stationary source emissions, 28804
- JCS, *see* Joint Chiefs of Staff.
- Jeffers, Robinson, 8-cent commemorative stamp (poster), 30677
- Jefferson, Thomas, Jefferson's manual of parliamentary practice, text, 28296
- Jefferson County, Mo., hydrologic relationship of Jefferson County landfill leachate and Meramec Heights area springs, Jefferson County, Mo., 28829
- Jefferson County, N.Y., soil survey report, 26841
- Jefferson County Ohio:
flood plain information, 20125
floods, 17400
- Jefferson County, Okla., soil survey report, 31820
- Jefferson County Central Committee of Iowa, annual report, 22866
- Jefferson County Republican Central Committee, annual report, 22823
- Jefferson County Republican Executive Committee, annual report, 22893
- Jefferson County, Republican Party, *see* Republican Party of Jefferson County.
- Jefferson, Thomas, University, *see* Thomas Jefferson University.
- Jefferson's manual, text, 29949
- Jekyll Creek plans for reduction of shoaling in Brunswick Harbor and Jekyll Creek, Ga., hydraulic model investigation, 20175
- Jellico, Tenn.:
flood plain information, Clear Fork and Elm Creek, 17380
floods, how to avoid damage, 17396
- Jellyfish, control program, extend to 1977, law, 19527
- Jenkins, John L., address, Oct. 5, 1972, 22623
- Jenkins, William L., nomination, hearing, 20011
- Jennings, Alan E., methodology in measurement of complex human performance, two-dimensional compensatory tracking, 19187
- Jennings, Jerry T.:
educational attainment, 19246
living arrangements of college students, 24236
- Jensen, C. R., mineral rights, conveyance to, report, 19913
- Jensen, Laron L.:
basic data on economy of—
Ghana, 16831
Morocco, 16830
foreign trade regulations of Morocco, 25970
selling in Algeria, 27066
- Jensen Manufacturing Division, loudspeakers workers of Chicago, Ill., plant of Jensen Manufacturing Division, Pemcor, Ill., Tariff Commission report, 20831
- Jerrold Electronics Corp., components of CATV and MATV systems, workers of Philadelphia, Pa., Tariff Commission report, 24057
- Jersey City, N.J., area wage survey, 27681
- Jesch, R. L., batteries used with law enforcement communications equipment, 30379
- Jesse, Edward V., structure of seasonal supply and demand in onion market, 22338
- Jet aircraft, *see* Aircraft.
- Jet airplanes, *see* Airplanes—Fighter planes.
- Jet blast hazards, 30566
- Jet engines, *see* Engines (aircraft).
- Jet fuels, *see* Fuel.
- Jet propulsion, effect of fineness ratio on boattail drag of circular-arc afterbodies having closure ratios of 0.50 with jet exhaust at Mach numbers up to 1.30, 29274
- Jets:
analytical and experimental investigation of circulation control by means of turbulent Coanda jet, 17701
correlation for temperature profiles in plane of symmetry downstream of jet injected normal to crossflow, 17724
formation of inversion in CO₂-H₂O-N₂ gas mixture jet expanding through slit, USSR study, 21845
low-speed aerodynamic characteristics of fuselage model with various arrangement of elongated lift jets on V/STOL model, 31633
noise generated by impingement of jet upon large flat board, 23684
pneumatic jet medical apparatuses, USSR study, 25359
turbulent immersed wall jet of air on burning graphite surface, USSR study, 16182
- Jetties, Grays Harbor, Wash., south jetty study, hydraulic model investigation, 17408
- Jettison, Skylab payload shroud jettison tests, 17720
- Jewett, R. P., hydrogen environment embrittlement of metals, 27705
- Jews, recent Soviet emigration to Israel, 17047
- Jim Adams for Congress Committee, annual report, 24700
- Jim Thorpe Day:
designate—
law, 30905
report, 27281
- Justo, James E., laboratory evaluation of electrogasdynamic fog dispersal concept, 24049
- Joan Finney for Congress, political committee, annual report, 24642
- Job analysis:
analysis of difficulty of jobs performed by first-term airmen in 11 career ladders, 29651
cable television manpower, job descriptions and educational requirements, 24285
guidelines for reevaluation of employment requirements and practices pursuant to Emergency employment act, 15604
job attitudes of air traffic controllers, comparison of 3 air traffic control specialties 29685
job grading standards, civil service—
instrument maker, 30883
machine tool operator, 30884
machinist, 30885
model maker, 30886
store worker, 21087-88
wood worker, 19282
job grading system for trades and labor occupations, 18329, 22601, 24264, 30880
job qualification system for trades, and labor occupations handbook, 29809
job you like, Air Force, 31927
occupational survey of 7 accounting and finance civil service series, 22366
predicting civilian position grades from occupational and background data, 25841
secretarial science occupational performance survey, 29358
task difficulty and task aptitude benchmark scales for mechanical and electronics career fields, 25843
- Job analysts, CODAP, input standard (INPSTD) and variable generation (VARGEN) programs, 20943

INDEX 1973

- Job Corps:
center developed training programs, Spanish tutorial materials, math, reading, 29152
directory, Job Corps Centers, Civilian Conservation Centers, Men's Centers, Residential Manpower Centers Women's Centers, Residential Support Centers, 2489
residential living manual, 16218
training young people (speech), 32422
Job description, *see* Job analysis.
Job performance, *see* Work.
Job preparation, computer system manual, 30085
Job safety & health, 18525
Job satisfaction, survey of factors relating to job satisfaction among VA nurses, 29578
Jobs, *see* Civil service—Employment—Job analysis—Occupations—Training.
Joe Minish Dinner Committee, annual report, 22725
Joerg, Karen:
criminal justice agencies in—
Alabama, 23562
Arizona, 23563
Florida, 23564
Indiana, 23565
Louisiana, 20482
Minnesota, 20483
Mississippi, 23566
Missouri, 23567
North Carolina, 21889
Wisconsin, 23568
Jogging, *see* Gaits.
Johler, J. Ralph, impedance maps to predict effect of irregular, inhomogeneous ground of Loran C/D radio navigation systems, 27064
John Buckley for Congress Committee, annual report, 22958
John D. Rockefeller, Jr. Memorial Parkway: establish in Wyoming—
law, 16906
report, 15691
general information, 31732
maps, 31736
John Day Dam, fish passage report, 20100, 28683
John E. Fogarty International Center for Advanced Study in Health Sciences, proceedings (series), 16174
John F. Kennedy Center for Performing Arts:
appropriations for nonperforming arts functions, hearing, 28572
appropriations, 1973—
hearings, 15716
law, 19355
report, 16955
nonperforming art functions, appropriations—
law, 30936
reports, 23344, 31078
John F. Kennedy International Airport, aircraft accident, 29410
John F. Kennedy Space Center, Kennedy Space Center story, 30447
John G. Freedom for Congress Club, annual report, 24544
John H. Ware for Congress Committee, annual report, 28270
John R. Rarick Century Club, annual report, 22825
John R. Rarick Congressional Campaign Fund (District Finance Committee), annual report, 24376
John Young Campaign Fund, annual report, 24321
Johnny Horizon, meet Johnny Horizon, environmental action campaign to clean up America for our 200th birthday, 32389
Johns, Thomas L., public school finance programs, 1971-72, States, District of Columbia, and outlying areas, 23141
Johnson Alice M., smallfry smiles, guide for teaching dental health in community care programs, 17554
Johnson, Bruce V., experimental and analytical study of one- and two-component flows in spherical chambers, 31609
Johnson, Clarence D., revision of genus Sennius of North and Central America (Coleoptera, Bruchidae), 28025
Johnson, E. G., jr., computation of spectral data for Josephson junction circuit, 22010
Johnson, Florence C., State workmen's compensation laws, comparison of major provisions with recommended standards, 20099
Johnson, James D., creative partnerships, Government and professional services, proceedings of 4th Users-Producers Conference, 31675
Johnson, Kendall L., enclosed weir for small streams in snow country, 32329
Johnson, L. M.:
humidification in thermal life determination of motorette insulation systems, 23381
statistical analysis of truncated-data methods, to shorten thermal-aging tests of electrical insulation, 22172
Johnson, Lyndon B.:
8-cent memorial stamp (poster), 30676
remarks of tribute to, print as House document, reports, 28322, 28457
Johnson, Lyndon B. National Historic Site, *see* Lyndon B. Johnson National Historic Site.
Johnson, Lyndon B., Space Center, *see* Lyndon B. Johnson Space Center.
Johnson, Marjorie S., reading readiness, what parents should know about it, 28672
Johnson, Maureen G.:
placer gold deposits of—
Arizona, 21703
New Mexico, 21707
Nevada, 25252
Utah, 30269
Johnson, Paul W., economic studies of uses of glass fractions from, municipal incinerator residues, 23642
Johnson, Raymond B., jr., operational use of UH-1H helicopters in Southeast Asia, 31935
Johnson, Robert C., economic availability of byproduct fluorine in United States, 25413
Johnson, Robert W., implications of European community enlargement for U.S. tobacco exports, 27524
Johnson, Thomas A., Army logistician, 18010
Johnson, U. Alexis, testimony, Aug. 8, 1972, 22257
Johnson, W. G., management oversight and risk tree MORT, 24195
Johnson, Wallis W., civil rights digest, 18071
Johnson County, Tenn., forest inventory statistics, Carter-Johnson County unit, northeast Tennessee, 30668
Johnson County Republican Central Committee, annual report, 22909
Johnson Shoes, Inc., women's dress and casual shoes, Manchester, N.H., Tariff Commission report, 29557
Johnston, Francis E., skinfold thickness of children 6-11 years, U.S., 22028
Johnston, Josephine E., report on cases included in Veterans Administration Central Cancer Registry, 29577
Johnston, Kenneth H., how to find abandoned oil and gas wells, 25418
Johnstone, L. M.:
mechanical equipment, field review of maintenance—
Columbia Basin project, Boise project, Yakima project, Pacific Northwest region, 31782
Rio Grande project, region 5, 31783
Join local radio station, Army Guard communications, electronics, 32492

- Joint Chiefs of Staff, JCS pub. series, 26557
 Joint Economic Committee:
 hearings, 15662
 President's economic report, extend time
 of transmission to Congress, law, 27076
 Joint electronics type designation system,
 23106
 Joint-Federal-State Land Use Planning
 Commission for Alaska:
 appropriations, 1973, law, 19355
 appropriations, 1974—
 hearings, 26147, 31126
 report, 29361
 Joint financial management improvement
 program, annual report, 30251
 Joint Ocean Surface Study (JOSS II):
 radar sea return, 30591
 Joint Oceanographic Institutions Deep
 Earth Sampling Program:
 Deep Sea Drilling Project, cruises of drill-
 ing vessel, Glomar Challenger—
 Galveston, Tex. to Miami, Fla., 25638
 Honolulu, Hawaii to Honolulu, Hawaii,
 32517
 Honolulu, Hawaii to Kodiak, Alaska,
 30553
 Kodiak, Alaska to Yokohama, Japan,
 29404
 Lisbon, Portugal, to Lisbon, Portugal,
 22134
 San Cristobal, Panama to Honolulu,
 Hawaii, 27831
 Joint Publications Research Service:
 JPRS ad hoc publications, 1972, directory,
 reference aid, 25338
 JPRS series, 16177-208, 17593-642,
 18238-245, 18419, 18485, 18752,
 18820, 18917-919, 18971-991, 19031,
 19034-40, 19045-46, 19092, 20446-
 480, 21840-886, 23512-561, 25325-
 364, 26559-602, 27619-652, 29128-
 145, 30327-373, 31516-548, 32402-
 408
 reference aid directory, 1957-72 serial
 publications, 21884
 Jointly administered legal services plans,
 19761
 Joints:
 determination of paleotectonic principal
 stress direction, including analysis of
 joints by optical diffraction, 26658
 discontinuities in welds by stereoradiog-
 raphy, examination, 20106
 effect of deformed shanks, prebored lead
 holes, and grain orientation on elastic
 bearing constant for laterally loaded
 nail joints, 27533
 introduction of discontinuities in high
 strength steel weldments, 25070
 keyed joint performance under heavy load
 aircraft, 32200
 mechanical tests for welded joints, mili-
 tary standard, 15960
 new kind of end-glued joint for hardwood
 industry, 25223
 non-destructive testing of plated alumi-
 num/stainless steel joint, 29679
 strength measurements on transistor
 header lead welds, 28065
 Joists, structural steel, structural alumi-
 num, steel joists, and cold-formed steel
 for buildings, 31932
 Jokerst, R. W., evaluation of adhesive-bond
 quality in telephone crossarms, after 16 to
 23 years of exterior exposure, 21667
 Jollet, Louis, opening of upper Mississippi
 River by Marquette and Jollet, commemo-
 rate, law, 30917
 Jo-Mary Mountain, geology of Moxie Pluton
 in Moosehead Lake, Jo-Mary Mountain
 area, Piscataquis County, Maine, 20344
 Jones, B. L., sediment transport in western
 tributaries of Sacramento River, Calif.,
 20357
 Jones, D. D., aerobic treatment of livestock
 wastes, 20216
 Jones, David C., investigation of nitrate
 problem in Runnels County, Tex., ground
 water, etc., 31289
 Jones, Fred O., landslides of Rio de Janeiro
 and Serra das Araras escarpment Brazil,
 22566
 Jones, Ian R., evaluation of practicability
 of radiolotope thermal converter for arti-
 ficial heart device, phase 1, final report,
 30775
 Jones, James R., denitrification by anaerobic
 filters and ponds, bio-engineering aspects
 of agricultural drainage, San Joaquin Val-
 ley, Calif., 21521
 Jones, John F., char oil energy development,
 interim report, 21092
 Jones, John R.:
 aspens, American wood, 26459
 moisture stresses in Arizona mixed conifer
 seedlings, 16085
 Jones, Judith Lea, homemakers' opinions
 about dairy products and imitations, na-
 tionwide survey, 29625
 Jones, Karen N., aviation medicine transla-
 tions, annotated bibliography of recently
 translated material, 16679
 Jones, Lawrence A., insuring crop and live-
 stock losses caused by restricted pesticide
 use, appraisal, 27422
 Jones, Mildred V., wool statistics and re-
 lated data, 1930-69, 28019
 Jones, R. E., airborne noise control for ver-
 tically stacked bathrooms with mechanical
 exhaust systems, 26469
 Jones, Ralph T., meeting Indiana's environ-
 mental protection needs, organizational
 and staffing requirements, 23197
 Jones, Richard H., in-process pollution abate-
 ment, upgrading poultry-processing facili-
 ties to reduce pollution, 30663
 Jones, Stanley H., surface-water investiga-
 tions at Barrow, Alaska, 32364
 Jones, Thomas W.:
 oak wilt, 16073
 pressure injection of solubilized benomyl
 for prevention and cure of oak wilt,
 32325
 Jones, W. Webster, milk sales in foodstores,
 pricing and other merchandising practices,
 20913
 Jones, William B., analysis and representa-
 tion of daily departures of foF2 from
 monthly median, 30895
 Jonesboro, Tenn., O'Nan Transfer Company,
 motor carrier accident investigation, 26670
 Jordan, B. Everett, tributes, upon retirement
 from Senate, 24888
 Jordan, Len B., tributes upon occasion of his
 retirement from the Senate, 21304
 Jordan, S. D., stellar chomospheres, 20595
 Jordan:
 economic trends and their implications for
 United States, 31505
 map, 28203
 mineral industry, minerals yearbook chap-
 ter, 16269
 radio communications between amateur
 stations on behalf of 3d parties, agree-
 ment, 24006
 summary of United States aid to Jordan,
 GAO report, 30265
 Jordan, B. Everett, Dam and Lake, *see* B.
 Everett Jordan Dam and Lake
 Josephson junctions, computation of spec-
 tral data for Josephson junction circuit,
 22010
 Joshua Tree National Monument, wilderness
 recommendation, 23837
 JOSS II, *see* Joint Ocean Surface Study
 (JOSS II)
 Journalists:
 newsmen's privilege, protect to assure free
 flow of information to the public, hear-
 ings, 28422
 testimonial privilege for newsmen, create,
 hearings, 28553

INDEX 1973

Journals:

- announcement of highway safety literature, abstract journal, 17996
- Antarctic journal of United States, 17997
- civil service, 18072
- Federal Home Loan Bank Board, 18314
- House of Representatives, 92d Cong., 2d sess., 30941
- JAG journal 18523, 20481
- journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy, to survey timber resources between Mermentau and Mobile Rivers, Nov. 1817-May 1819, with appendix, etc. microcopy, pamphlet describing, 21994
- journal of Charles Mason during survey of Mason and Dixon Line, Nov. 15, 1763-Sept. 11, 1765, microcopy, pamphlet describing, 21995
- journal of executive procedures of Senate, 92d Cong. 1st sess., index, 21301
- Journal of research—
 - National Bureau of Standards, 18530-532, 20634
 - U.S. Geological Survey, 21715
- Library of Congress quarterly, 18837
- National Cancer Institute, 18528
- Navy civilian manpower management, 18529
- Navy lifeline, naval safety journal (periodical), 25655
- prologue, journal of National Archives, 18826
- Senate, 92d Congress, 1st session, 15796
- Supreme Court, 18947
- see also Medical journals.
- Journals (machinery), see Bearings (machinery).
- Journymen, Federal careers in printing crafts, examination announcement, 15602
- Joyce, F. E., Jr., sulfatization-reduction of manganiferous iron ore, 30427
- JPRS, see Joint Publications Research Service.
- Juan de Fuca Ridge, and Sovanco Fracture Zone RP-5-OC-71, trackline and station operations, bathymetry, gravity, etc., 17775
- Juan de Fuca Strait:
 - currents observed in Juan de Fuca submarine canyon and vicinity, 25624
 - estuary, protection, report, 16988
 - pollution of interstate waters, Puget Sound, Strait of Juan de Fuca, and their tributaries and estuaries, transcript of conference, 26801-802, 29455
- Juan Morel Campos Bilingual Center, Chicago, Ill., model programs, compensatory education, 17364
- Judge Advocate General, Air Force, law review, 18524
- Judge Advocate General, Army, legal service, pamphlets, 18533
- Judge Advocate General, Navy:
 - JAG journal, 16209, 18523, 20481
 - cumulative index, 17644
 - Naval Reserve, authorize strength of officers in grade of rear admiral—
 - hearing, 21205
 - law, 19486
 - reports, 19701, 19885
- Judge advocates, additional compensation, authorization, hearing, 15871
- Judges:
 - administrative law judges, examination announcement, 19286
 - circuit, additional, appoint, hearing, 28555
 - Federal salary act, amend—
 - hearing, 30066, 31034
 - reports, 29973, 32060
 - judicial disqualification, hearing, 30049
 - judicial survivors annuity act, amend, law, 16901
 - military, guide, Army pamphlet, 20983

Judgments, see Claims.

- Judicial administration, see Justice Department.
- Judicial Circuits of United States, Commission on Revision, see Revision of Judicial Circuits of United States, Commission on.
- Judicial Conference of United States:
 - proceedings—
 - departmental editions, 16581, 24111, 27976, 29598
 - document editions, 19551, 24819, 28302
 - rules of criminal procedure, proposed amendments, 24110
 - Judicial disqualification, 30049
 - Judicial procedure, see Civil procedure—Criminal procedure.
 - Judiciary, see Courts of United States—State courts.
 - Judiciary Committee, House:
 - activities, summary, 92d Congress, report, 26065
 - calendar, 18552
 - committee prints, 17068-71, 19787, 27233, 29931
 - Federal rules of appellate procedure, with forms, 15768
 - hearings, 15763-767, 19784-786, 21266, 26172-174, 27230-232, 28422-423, 29930
 - history, 17070
 - investigations and studies, authorization and expenses, reports, 26081, 26116
 - reports, 15672, 15697-698, 16962, 16983-984, 19574-580, 19584-606, 19630, 19645, 19702, 21177, 26065, 26104, 27116-116L, 27130, 28305-320, 28352, 28366, 28370, 32027, 32041
 - Judiciary Committee, Senate:
 - calendar, 18570
 - committee prints, 15914, 15916, 19990, 21355, 23064, 24940, 24943, 30048, 30051, 31148, 31151
 - hearings, 15912-913, 15915, 15917-920, 17273-274, 19984-989, 19991, 21351-354, 21356-358, 23062-63, 23065, 24929, 24941, 24944, 26276-278, 27348-352, 28552-556, 30049-50, 30052-53, 31149-150, 31152, 32149, 32150
 - Investigations and studies—
 - authorization and expenses, report, 27266, 27294, 28460
 - separation of powers between branches of Government, authorization and expenses, reports, 19904, 19907
 - reports, 15693, 15806-812, 15817, 15823, 15830, 15833, 15842, 15844-847, 15854, 17129, 17131-134, 17137-138, 17157, 17171-174, 17176, 17179-185, 17187, 17191-192, 17197, 19812-839, 19848-849, 19866-867, 19873, 19883-884, 19904, 19931, 19936, 24902-905, 26206, 26222, 26232-234, 26237, 27280-284, 27286-287, 28442-449, 28454, 28480, 28486, 28496, 28504, 29965, 29975, 31063, 31074, 32109, 32148
 - Subcommittee on Constitutional Rights, list of publications, 24943
 - Subcommittee to Investigate Administration of Internal Security Act and Other Internal Security Laws, 21 year index to published hearings, studies, and reports, 31151
 - Judith River formation, palynology of upper Campanian (Cretaceous) Judith River formation, north-central Montana, 29022
 - Judy, R. W. Jr., dynamic tear tests of 3-in thick aluminum alloys, 25658
 - Julia Butler Hansen Appreciation Committee, annual report, 24643
 - Julia Butler Hansen for Congress Committee No. 2, annual report, 24683
 - Jumpers (clothing):
 - jumpers, sweaters, and undershirts, Federal item identification guide, 31186
 - Juneau, Alaska, aircraft accident report, 23857

- Juneau County Republican Organization, annual report, 24702
- Junior Federal assistant, examination announcements, 19277, 22603, 30873
- Junior high schools:
alcohol and alcohol safety curriculum manual, junior high level, 22044
teacher's activities guide, 22045
- Jupiter (planet):
determination of mass from study of motion of 57 Myemoseyne, 30583
orbit of Polyhymnia and mass of Jupiter, 17788
- Pioneer—
mission to Jupiter, 17730
21-month voyage to explore planet Jupiter, and other information on Jupiter, 16356
- Jurassic period:
Jurassic paleobiogeography of Alaska, 29025
Lower Cretaceous, Jurassic (?), and Triassic ostracoda from Atlantic coastal region, 21736
upper Triassic and pre-Morrison Jurassic rocks, 26490
see also Ammonites.
- Juridical problems in use of orbits for artificial earth satellites, 31522
- Jurinak, Jerome J., cation transport in soils and factors affecting soil carbonate solubility, 28823
- Jurisdiction, FTC jurisdiction over financial institutions and truth-in-savings legislation, hearings, 32138
- Jurors, *see* Jury.
- Jury:
juror qualification forms, revise to eliminate discrimination, etc.—
law, 19372
report, 17172
- Justice, inventory of surveys of the public on crime, justice and related topics, 26806
see also Criminal justice (administration).
- Justice Department:
annual report, 30374
appropriations, 1973—
law, 19473
report, 19704
appropriations, 1974—
amendment, proposal, 32025
hearings, 27183, 28388
report, 32051
- Attorney General, nomination of Elliot L. Richardson, hearings, 30052
- Attorney General's report, Federal law enforcement and criminal justice activities, 16210
- clarifying Webb-Pomerene act needed to help increase U.S. exports, GAO report, 32350
- efforts to prevent heroin from illicitly reaching U.S., GAO report, 20327
- executive schedule positions in Department of Justice, report, 21178
- judicial administration, code of Federal regulations, 32287
- legal activities, 30380
- opinion of Attorney General, 16212, 27657
separates, 18734
- PR series, 16213-215, 20486, 21894, 26806, 27658
- register, 18852, 20487
- single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
- Tax Division, opportunities for attorneys, 20485
- Justices, *see* Judges.
- Jutze, George A., guidelines for technical services of State air pollution control agency, 2377
- Juvenile delinquency:
Achievement Place, model for delinquency treatment, 30504
- Juvenile delinquency—Continued
challenge of youth service bureaus, 30684
crime and delinquency abstracts (periodical), 18178
crime and delinquency monograph series, issues, 22069, 26745, 31695
Federal juvenile delinquency and related youth development programs for juvenile delinquency planners—
analysis, 26533
directory and handbook, 27590
investigation and study—
hearings, 30050
report, 28486
new approaches to diversions and treatment of juvenile offenders, 32411
prevention and control act, amend—
hearings, 17038
law, 16891
report, 17138
Runaway youth act, reports, 17137, 31063
youth service bureaus—
and delinquency prevention, 27971
national study, 25809
- Juvenile detention homes, *see* Imprisonment.

K

- Kadam, *see* Cadam.
- Kahan, Archie M., paper, Oct. 16, 1972, 23941
- Kahn, Alfred J., child advocacy, report of national baseline study, 28205
- Kahn, Bernd, radiological surveillance studies at pressurized water nuclear power reactor, 32270
- Kaiser, H. Fred, forest-range environmental production analytical system (FREPAS), 22329
- Kakalik, James S.:
current regulation of private police, regulatory agency experience and views, 20486
law and private police, 16213
- Kallspel Indian Reservation, sale and purchase of lands, authorize, report, 19607
- Kalkaska County Republican Committee, annual report, 22726
- Kallen, David J., nutrition development and social behavior, 27766
- Kallio, Edwin, American basswood, 25199
- Kalman filters, optimal piecewise-constant control of dynamic systems, with applications to Kalman filtering, 22166
- Kaminsky, Edmund L., marine sanitation system demonstration, 30186
- Kamp, Carl O., jr.:
addresses—
Oct. 10, 1972, 23216
Oct. 18, 1972, 21541
Jan. 10, 1973, 23217
- Kamper, R. A., developments in cryoelectronics, 22012
- Kane, Ronald S., heat transfer coefficients of dilute flowing gas-solids suspensions, 29261
- Kane Basin, oceanographic observations, 22620
- Kaneps, Ansis G., covering leg 16 of cruises of drilling vessel Glomar Challenger San Cristobal, Panama to Honolulu, Hawaii, 27831
- Kaniuka, R. P., agricultural research, 17965
- Kansas:
Big Blue River compact with Nebraska, negotiation, consent of Congress, law, 16861
census of housing, 1970, housing characteristics for States, cities and counties, 15545
census of population, 1970—
characteristics of population, final reports, 27010
detailed characteristics, 15574
climatological data, 18086
counties, population estimates, 29780
county business patterns, 29734

INDEX 1973

Kansas—Continued

- mineral industry, minerals yearbook chapter, 16284
- precipitation data, hourly, 18437
- Real Estate Political Education Committee of Kansas, annual report, 24722
- registry of minority contractors and housing professionals, listing in selected cities, 32384
- stratigraphy and structure of Middle and Upper Ordovician rocks in Sedgwick basin and adjacent areas, south-central Kansas, 21726
- truck inventory and use survey, 28138
- water quality standards summary, 16034
- water resources data, 31399
- Kansas City, Kans., water quality and water source investigations, Missouri River and Kansas River, Kansas City, Kans., 28839
- Kansas City, Mo.:
 - area wage survey, 23597
 - opportunities to improve model cities program in Kansas City, Mo., and Saint Louis, Mo., and New Orleans, La., GAO report, 32354
- Kansas River and Valley:
 - annual operating plan for federally owned reservoirs in Kansas River basin, 29457
 - flood plain information, 21450
 - floods in Manhattan, Kans., 21465
 - water pollution report, 20739
 - water quality and water source investigations, Missouri River and Kansas River, Kansas City, Kans., report, 28839
- Kaolin, large-scale continuous attrition grinding of coarse kaolin, 31589
- Kaplan, P., further studies of computer simulation of slamming and other wave-induced vibratory structural loadings on ships in waves, 22220
- Kapnicky, George E., Kapnicky for Congress Committee, annual report, 24559
- Kapnicky for Congress Committee, annual report, 24559
- Kappel, Frederick R., nomination, hearing, 20009
- Karim, Bonne, preliminary study of maximal control force capability of female pilots, 22510
- Karnes County, Tex., geology of oxidized uranium ore deposits of Tordilla Hill-De-weesville area, Karnes County, Tex., study of district before mining, 26509
- Karsteter, William R., relief, 28311
- Kasemir, Heinz W., description and instruction manual for cylindrical field mill system, 30520
- Kasper, Henry W., test and evaluation of category 3 ILS ground guidance equipment STAN-37 localizer tests at NAFEC on R/W-4, interim report, 24033
- Kastenmeier, Robert W., Kastenmeier for Congress Trust Fund, annual report, 22977
- Kastenmeier for Congress Trust Fund, annual report, 22977
- Katmai National Monument:
 - embattled Katmai, history of Katmai National Monument, 16410
 - wilderness recommendation, 22128
- Katsanis, Theodore, FORTRAN program for calculating velocities and streamlines on hub-shroud and mid-channel flow surface of axial- or mixed-flow turbomachine, user's manual, 31639
- Katz, Bernard:
 - removal of oil from under piers, 27462
 - use of fire streams to control floating oil, 28799
- Katz, Lewis, analysis of pretrial delay in felony cases, summary report, 16215
- Katz, Richard G., United States and Canadian fabric flammability standards, 20647
- Katz, Sidney, effects of continued care, study of chronic illness in home, 26716
- Katzberg, Stephen J., investigation of photo-sensor aperture shaping in facsimile cameras, 16352

- Kauai Island, Hawaii, soil survey report, 17842
- Kaufman, Albert, flow through wire-form transpiration-cooled vane, 30462
- Kaufman, Cynthia, So, I have sickle cell trait . . . , 26756
- Kaweah River and Valley:
 - floods, Visalia, Calif., 21472
 - lower, flood plain information, 21454
- Kay, Evelyn R.:
 - directory of postsecondary schools with occupational programs, public and private, 30135
 - guidelines for identifying, classifying, and serving disadvantaged and handicapped under Vocational education amendments, 25054
- Kay, Joanne B., selling in Liberia, 15614
- Kaylor, John D., marine products development irradiator program, dosimetry and operations, annual report, 28087
- Kayser-Roth Shoes Division, Kayser-Roth Corp., New York, N.Y.:
 - footwear for men, Stetson plant, South Weymouth, Mass., Tariff Commission report, 30657
 - footwear for men and women, Freeport, Me. plant, Tariff Commission report, 29552
- Kazakh Soviet Socialist Republic, scientific activities, goals, and personnel in Uzbekistan and Kazakhstan, 20463
- Kazakhstan, see Kazakh Soviet Socialist Republic
- Kearney, Edward F., rules of the road, 20666
- Kee, James, Kee for Congress Campaign Committee, annual report, 22673
- Kee Branch, special flood hazard information report, 21475
- Kee for Congress Campaign Committee, annual report, 22673
- Keefe, Eugene K.:
 - area handbook for—
 - Poland, 28050
 - Romania, 15509
- Keene, N.H., flood plain information, Ashuelot River, 32205
- Keep Delaney in Congress Committee, annual report, 24737
- Keep Teno in Congress Committee, annual report, 24314
- Kelm, Kathleen M.:
 - foreign trade regulations of—
 - Bangladesh, 28641
 - India, 15619
 - Pakistan, 28640
- Kelsch, Bernard, application of nuclear technology to art identification problems, 22472
- Keith, J. S., analytical method for predicting pressure distribution about nacelle at transonic speeds, 31603
- Keith, Lawrence H., environmental applications of advanced instrumental analyses, assistance projects, fy 69-71, 28803
- Kelley, Clarence M., nomination, hearings, 31150
- Kelley, Joan, interACTION, 18495
- Kelly, Elizabeth C., FDA clinical experience abstracts, 18288
- Kelly, George F., redfish, 23791
- Kelly, James E., peridontal disease and oral hygiene among children, U.S., 22027
- Kelly, Robert C., selected annotated bibliography of civil, industrial, and scientific uses for nuclear explosions, 19185
- Kemp, Florence B., noncredit activities in institutions of higher education, 1967-68, professional and technical courses, 26373
- Kemper Management Campaign Fund, annual report, 27100
- Kemphues, Robert F., materials and procedures for repair of spalls in concrete, 27439
- Kenahan, C. B., Bureau of Mines research programs on recycling and disposal of mineral-, metal-, and energy-based wastes, 25426

- Kenis, William J., responses of prototype flexible pavements subjected to repetitive and static loads, 31321
- Kenk, Roman :
freshwater planarians, Turbellaria, of North America, 17433
freshwater triclads (Turbellaria) of North America—
genus *Dendrocoelopsis*, 25699
genus *Polycelis*, 23963
- Kennedy, H. E., jr., horizontal planting of green ash cuttings looks promising, 28952
- Kennedy, James S. :
mineral industry of territory of South-West Africa, 25471
rare-earth minerals and metals, 16324
- Kennedy, Robert B., People for Kennedy Committee, annual report, 24634
- Kennedy International Airport, see John F. Kennedy International Airport.
- Kennedy Space Center story, 30447
- Kennedy Stadium, see Robert F. Kennedy Memorial Stadium.
- Kent, Holger C., hydrofluidic servoactuator development, 30763
- Kent, Ohio :
flood plain information, Cuyahoga River, 17382
floods on Cuyahoga River area, 17403
- Kentucky :
census of housing, 1970, housing characteristics for States, cities, and counties, 16723
census of population, 1970, detailed characteristics, 22521
climatological data, 18087
counties, population estimates, 28182
county business patterns, 30821
electric rate book, 20256
internal revenue assessment lists for Kentucky, 1862-66, microfilm, pamphlet describing, 20628
Kentucky guide for classification, use and vegetative treatment of surface mine spoil, 17838
minerals industry, minerals yearbook chapters, 16285, 30423
precipitation data, hourly, 18438
regular income limits for sec. 235-236 housing, 20375
rehabilitation facilities, national directory, 25686
stratigraphy, morphology, and paleoecology of fossil peccary herd from western Kentucky, 23366
Strodes Creek member (upper Ordovician), new map unit in Lexington limestone of north-central Kentucky, 23331
truck inventory and use survey, 24226
- Kenya :
economic trends and their implications for United States, 16160, 32394
Kenya-Uganda boundary-study, 32575
mineral industry, minerals yearbook chapter, 16286
Somalia boundary study, 29533
- Kern, Pat, American students and teachers abroad, sources of information about overseas study, teaching, work, and travel, 23135
- Kern County, Calif., lithologic characteristics of pliocene rocks cored at Elk Hills, Kern County, Calif., 27552
- Kerosene stoves, see Stoves.
- Kessler, H. S., microelectronic interconnection bonding with ribbon wire, 29322
- Kessler, Kenneth J., Jr. :
eutypella canker of maple, 17510
sapstreak disease of sugar maple found in Wisconsin for first time, 17513
- Kessler, Theodore, analysis of trace elements in coal by spark-source mass spectrometry, 26662
- Ketchum, Idaho :
flood plain information, Warm Springs Creek, 28730
floods, Warm Springs Creek, 28753
- Ketones, synthesis and spectral properties of organophosphorus compounds containing keto group, USSR study, 23512
- Kettle Brook, flood plain information, 25081
- Keulegan, Garbis H. :
reflection characteristics of screen wave absorbers, 28783
wave damping effects of fibrous screens, hydraulic models, investigation, 20172
wave transmission through rock structures, hydraulic model investigation, 25096
- Kevane, Clement J., proceedings of 10th rare earth research conference, 30770
- Kewaunee County, Voluntary Republican Party, see Voluntary Republican Party of Kewaunee County
- Keweenaw rocks, see Rocks.
- Key Biscayne, Calif., security of the President, Federal expenditures on his properties, hearings, 29893
- Key level definitions for production facilitating jobs, 22604
- Key to aviation weather reports, 22154
- Key to field identification of anadromous juvenile salmonids in Pacific Northwest, 20696
- Key to geophysical records documentation, 17411
- Key to meteorological records documentation, 20181, 32245
- Key to oceanographic records documentation, 26395
- Key word in context, see Indexes.
- Keyed joint performance under heavy load aircraft, 32200
- Keyes, J. Wayne, analytical and experimental studies of shock interference heating in hypersonic flows, 31626
- Keys, see Locks and keys.
- Khmer Republic :
agricultural commodities, agreement 16537, 24001, 14009
area handbook, 25858
improvement of airfield facilities agreement, 32577
Khmer Republic (Cambodia), background notes, 29521
refugee relief, agreement between USA and International Committee of the Red Cross, 27920
- Kichline, James L., yields on recently offered corporate bonds, 28906
- Kickapoo Indians :
Kansas and Oklahoma tribes, judgment funds, disposition—
law, 19401
report, 19635
- Kidnaping, political kidnappings, 1968-73, study, 29920
- Kidneys :
diseases, renal disease and hypertension, Public Health Service cooperative study conference proceedings, 16039
extend kidney disease medicare coverage to railroad employees, their spouses and dependent children—
law, 30929
reports, 28348, 30964, 31067
kidney disease and artificial kidneys, 22058
U.S. kidney transplant fact book, information from AGS/NIH registry, 16387
see also Artificial kidneys.
- Kiefer, Irene :
making polyethylene more disposable, 26423
regional management of solid wastes, planning study, 27497
role of packaging in solid waste management, 23200
salvage industry, what it is, how it works, 28842

INDEX 1973

- Klevit, Mary B., research on women in world of work, review and synthesis, 17349
- Killsgaard, Thor H., mineral resources of Cloud Peak Primitive Area, Wyo., 20347
- Kilberg, William J., nomination, hearing, 28565
- Kille, Frederick O., jr., Kille for Congress Committee, annual report, 24316
- Kille for Congress Committee, annual report, 24316
- Killer from the bills, 30578
- Kilpatrick, F. A., tracer simulation study of potential solute movement in Port Royal Sound, S.C., 20356
- Kim, Ann G. :
composition of coalbed gas, 29236
gases desorbed from 5 coals of low gas content, 29239
hydrocarbon gases produced in simulated swamp environment, 16336
- Kimbell, Charles L., minerals in world economy, 25436
- Kimberling, William C., Kimberling for Congressman, Washington, D.C., Committee, annual report, 22891
- Kimberling for Congressman, Washington, D.C., Committee, annual report, 22891
- Kimon, Peter M., segregated ballast VLCCs, economic and pollution abatement analysis, 30403
- Kinard, Tommie C., *see* Tommie C. Kinard and Larry L. Ramsey.
- Kincannon, C. Burford, oily waste disposal by soil cultivation process, 23186
- Kindergarten, when your child goes off to school, 26748
- Kinematics :
orientation problems, kinematic and trihedron, USSR study, 27644
retrieval of dispersive and convective transport phenomena in fluids using stationary and nonstationary time domain analysis, 31630
- Kinesthesia, physiological principles of aptitude for mass occupations, USSR study, 17628
- Kinetics :
chemical kinetics in C-O-S and H-N-O-S systems, bibliography, 16360
selected specific rates of reactions of transients from water in aqueous solution hydrated electron, 29313
structural-kinetic study of oxidizability of nickel-chromium based alloys, USSR study, 26569
supplementary bibliography of kinetic data on gas phase reactions of nitrogen, oxygen, and nitrogen oxides, 26699
user's guide to diffusion/kinetics, DIFKIN, code, 32253
see also Chemical reactions.
- King, Charles M., jr., drug information services, 2 operational models, complete drug information service in hospital, 20658
- King, Irene A., bond sales for public school purposes, 25050
- King, Larry G., irrigation management for control of quality of irrigation return flow, 31288
- King, Martin L., commemorative medals, authorize, hearings, 28396
- King County, Wash., determination of mass balance and entrainment in stratified Duwamish River estuary, 20359
- King crabs :
fisheries, agreement with—
Japan, 25760
Union of Soviet Socialist Republics, 26880
- King William Republican Party, annual report, 22700
- Kings Canyon National Park, general information, 29402
- Kings River and Valley :
flood plain information, 20118
floods, Sanger, Calif., 20145
- Kingsley, Neal P., volume of selected hardwood species suitable for turnery bolts in Maine, 31363
- Kingston, N.Y., area wage survey, 16228
- Kinney, E. C., cooperative fishery unit report for 1971-72 school year, 23985
- Kinney, Jo Ann S. :
optical and visual tests on Navy prototype hard hat diving system, 26646
visual evoked responses for divers breathing various gases at depths to 1200 ft., 16252
- Kinslow, Ray, bumper-protected laminated spacecraft mainwalls, 29260
- Kinston, N.C. :
flood plain information, Neuse River, Adkin Branch, 21452
floods, Neuse River and Adkin Branch, 21463
- Kinzer, Gilbert D., cloud-to-ground lightning versus radar reflectivity in Oklahoma thunderstorms, 23801
- Kiowa Indians, general information, 31461
- Kirby, Jeffrey G., life expectancy of facilities, 28690
- Kirby, Robert M., soil survey of Anne Arundel County, Md., 27895
- Kirkpatrick, Robert L., traps, 15474
- Kirkville, Mo., Cutting air crash, case study in early Federal aviation policy, 27501
- Kissell, F. N., direct method of determining methane content of coalbeds for ventilation design, 29238
- Kissimmee River, Florida land and water resources study in Kissimmee-Everglades area, 27891
- Kissinger, Henry A. :
address, Apr. 23, 1973, 29530
nomination, report, 32099
- Kitchen utensils, cooking utensils, we want you to know what we know, 25195
- Kitchens, kitchen planning, HUD training handbook, 32378
- Kites, moored, Federal aviation regulations, 18296
- Kits, sets, kits and outfits, Federal item identification guide, 32173
- Kittatinny Delaware Water Gap National Recreation Area, interpretive prospectus, 23826
- Kittner, Dorothy R., digest of health and insurance plans, 1971 edition, 17669, 18227
- Kjeldahl method of determination, *see* Nitrogen.
- Klamath Indian Forest, Federal purchase of remaining lands retained by tribe, hearing, 15907
- Klamath Indian Irrigation project :
Modoc Point unit, cancel irrigation charges on non-Indian-owned lands—
law, 16889
report, 17135
- Klamath Indians
Klamath Indian Forest, Federal purchase, authorize report, 17128
termination of Federal supervision—
amend act, report, 28503
by purchase of all tribal lands held in trust, report, 27131
- Klamath Mountains, Silurian rugose corals of Klamath Mountains region, Calif., 17535
- Klassen, E. T., remarks, Apr. 30, 1973, 29573
- Kleberg, Tex. :
flood plain information, Hickory Creek, 17385
floods on Hickory Creek, Balch Springs, how to avoid damage, 20137
- Kleberg County Republican Finance Committee, annual report, 24417
- Kleerekoper, H., effects of copper on locomotor orientation of fish, 28794
- Kleffel, Dorothy :
statistical information program for utilization review in extended care facilities, 19306
utilization review program for home health agencies, 19307

- Klein, Herbert F., radiation safety and protection in industrial applications, symposium proceedings, 22206
- Klein, Peter D., proceedings of seminar on use of stable isotopes in clinical pharmacology, 16661
- Kleiner, George, developing specifications for low-cost computer system, for secondary schools, 22063
- Kleinkopf, M. Dean, aeromagnetic, Bouguer gravity, and generalized geologic studies of Great Falls-Mission Range area, northwestern Montana, 21729
- Kleinman, David T., capital markets and economic development, Kleinman plan, hearing, 21222
- Klement, Alfred W., jr.: estimates of ionizing radiation doses in United States, 17813
- Russian radioecology, bibliography of Soviet publications, with citations of English translations and abstracts, 21018
- terrestrial and freshwater radioecology, selected bibliography, 22488
- Klemm, Donald J., freshwater leeches (Annelida: Hirudinea) of North America, 17440
- Klen Boosters, political committee, annual report, 27105
- Klingensmith, Jeanne A., teaching children about safety belts, grades K-3, 20664
- Klinger, F. L.: mineral industry of—
Finland, 16274, 16319
Sweden, 25433
- Klingman, Charles L.: mineral industry of—
Maryland, 25461
People's Republic of China, 29226
- sodium and sodium compounds, 16326
- Klock, Glen O.: inexpensive water sampler, 23287
- Mission Ridge, case history of soil disturbance of revegetation of winter sports area development, 23236
- Kloman, Erasmus H., unmanned space project management, Surveyor and Lunar Orbiter, 20596
- Kluog, E. P., performance of DC-9 aircraft liquid nitrogen, fuel tank inerting system, 24034
- Klystrons, investigation of parasitic oscillations in KIU-12 klystron, originating when duration of modulating pulse is increased, USSR study, 17618
- Knack, Sally S., Mexican-American education in Texas, function of wealth, 15600
- Knapp, David G., review of geomagnetic research in NOAA, 26769
- Knapp, George L.: aeration of natural waters, bibliography, 32393
- artificial recharge of groundwater, bibliography, 26537
- sanitary landfills, bibliography, 16146
- Knight, Frances G., testimony, hearing, 15919
- Knit goods:
knits in Western Europe, their impact on cotton, 30246
- shipments of knit cloth, including interplant transfers, current industrial reports, 18194A, 19244
- see also names of articles.
- Knopf, Lucille, from student to RN, report of nurse career-pattern study, 21759
- Know before you go, hints for returning U.S. residents, 26297
- Know your money, 16470
- Knox County Republican Executive Committee, annual report, 24499
- Knudsen cells, see Knudsen pages.
- Knudsen gages, dissociation energies of some high temperature molecules containing aluminum, 23689
- Kobellinski, Mitchell P., nomination, hearing, 31136
- Koch, Ellis, design and operation of artificial-recharge plant at Bay Park, N.Y., 30276
- Koch, George S., jr., sample preparation variability in diamond-drill core from Homestake Mine, Lead, S. Dak., 20572
- Koch, Hugo K.: ophthalmology manpower—characteristics of clinical practice, 29332
- general profile, 25568
- podiatry manpower, general profile, 31683
- Koch, Marc S., relief, 19814
- Koch, Peter, utilization of southern pines, 15464
- Koch, R. K., liquid state spectral emissivities of titanium, vanadium, zirconium, molybdenum, and platinum in electron-beam furnace, 29233
- Koch, Robert C., weather modification, summary report, 1969-71, fiscal years, 29395
- Koelling, Gordon W.: mineral industry of—
Argentina, 16264
Colombia, 20562
Venezuela, 25472
- Koenig, Walter E., relief, 16858, 19822
- Koeninger, Jimmy G., evaluation report, interaction simulation, coordinated local-State vocational education planning, 17354
- Kofskey, Milton G., design and cold-air investigation of turbine for small low-cost turbofan engine, 20610
- Kolblarz-Sala, Anna, relief, 19604, 19825
- Kolm, Richard, bibliography on ethnicity and ethnic groups, 26744
- Kolz, A. L., multiple-use wildlife transmitter, 26847
- Kommunist (periodical): translations, 18971
- Komons, Nick A., cutting air crash, case study in early Federal aviation policy, 27501
- Kongsberg, Norway, high-gain, long-period seismograph station, installation report, 23804
- Koons, David A., quality control and measurement of nonsampling error in health interview survey, 27744
- Kooskooskie, Wash.: flood plain information, Mill Creek, 28729
- floods on Mill Creek, 28763
- Kootenai National Forest, Giant Cedars nature trail, 23277
- Konas, Frank A., soil survey of Fayette County, Pa., 29509
- Kopernik, Mikolaj, see Copernicus, Nicolaus.
- Kopray, Janos B., mathematical considerations about effects of guessing on tests variance, 20939
- Korea:
agricultural commodities, agreement, 24003
- economic trends and their implications for United States, 17579, 29094
- educational commission, agreement, 17892
- Korea and Philippines, Nov. 1972, committee print, 24927
- loan of vessel U.S.S. Larson, agreement, 26866
- North—
map, 29799
- mineral industry, minerals yearbook chapter, 16297, 29224
- translations, 18980
- Republic—
agricultural commodities, agreement, 25762, 27931
- atomic energy—
application of safeguards by IAEA to United States-Republic of Korea cooperation agreement, 32580
- cooperation for civil uses, agreement, 27933
- cotton textiles, trade agreement, 25745
- fisheries, agreement, 25757

INDEX 1973

Korea—Continued

Republic—Continued

- Han River basin, reconnaissance report, water resources study, 31786
- Japan, analytical bibliography with supplementary research aids, and selected data on Okinawa, Republic of China (Taiwan), Republic of Korea, 20984
- loan of U.S.S. Chevalier, agreement, 20806
- mineral industry, minerals yearbook chapter, 16305, 25468
- shellfish sanitation, agreement, 25756
- U.S. assistance for economic development of Republic of Korea, GAO review, 31384
- wool and man-made fiber textile products, trade agreement, 22277, 25743, 31875
- sailing directions for coast, 28631
- summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23887-889
- Korean War, 1950-53:
 - battle casualties and medical statistics, U.S. Army experience in Korean War, 24191
 - history of U.S. Army, policy and direction, 1st year, 20533
 - west Korea, Marine Corps operations, history, 21925
- Korhonen, Michael A., relief, 19595, 32027
- Korte, August F., synoptic climatological studies of precipitation in Plateau States from 850-, 700-, and 500-millibar lows during spring, 17774
- Kos, Joseph M., feasibility investigation for determining Army helicopter gas turbine engine maximum power available, 26978
- Kosciusko, Miss., special flood hazard information, report, 20165
- Kosciusko, Thaddeus, home, of, *see* Thaddeus Kosciuszko Home National Historic Site
- Kosciusko Home National Historic Site, *see* Thaddeus Kosciuszko Home National Historic Site
- Kosowski, Z. V., control of mine drainage from coal mine mineral wastes, 28821
- Koss Shoe Co., Inc., Auburn, Me., footwear for men, Tariff Commission report, 30656
- Kovalik, Milan J., better coke by using antissurants, results for Illinois no. 6 and high splint coals, 25498
- Kowalczyk, George, utilization of short-stay hospitals under medicare by type of control and bed size, 29498
- Koyukuk River and Valley, reconnaissance geology of northern Yukon-Koyukuk Province, Alaska, 27571
- Kraft paper, *see* Paper
- Kraft Pulp Mill, color removal from kraft pulp mill effluents by massive lime treatment, 25109
- Kramer, Milton A., comparison of analytical and structural behavior results for Morrow Point Dam, 23934
- Krasnoyarsk, N. V., summary report and papers of specialists' meeting on sodium-water reactors, 16660
- Krehbiel, V. John, nomination, hearings, 26268
- Kreis, Douglas R.:
 - beef cattle feedlot site selection for environmental protection, 21503
 - characteristics of rainfall runoff from beef cattle feedlot, 17419
- Kreittler, Bonnie, USDA employee newsletter, 19033
- Krickovic, Stephen, methane emission rate study in deep Pocahontas no. 3 coalbed mine in conjunction with drilling degasification holes in coalbed, 23653
- Kroger, Richard L., tagging and tag-recovery experiments with Atlantic menhaden, *Brevortia tyrannus*, 27803

- Krogh, Egil, jr., nomination, hearings, 26262
- Kron, Gerald E., catalog of colorimetric measures of stars on 6-color system of Stebbins and Whitford, 23868
- Krug, Doris N., evaluation of OEO Child Development Center, 23127
- Kruse, William H., effects of wildlife on elk and deer use of ponderosa pine forest, 23295
- Krystal, Sheila, educational accountability and evaluation, 15996
- Krzyzanowski, Richard L., relief, 16856, 19823
- Ku, H. H., users' guide to OMNITAB command, "Statistical analysis," 26709
- Kuala Trengganu, Malaya, summary of synoptic meteorological observations, southeast Asian coastal marine areas, 22181
- Kuay Ten Chang, *see* Chang, Kuay Ten
- Kuehn, D. G., ionic and neutral reactions in glow discharges of He SO₂-CO mixture, 30425
- Kuehn, Helmut A., Apollo experience reports, photographic equipment and operations during manned space-flight programs, 16354
- Kuhn, Peter M., observations of vertical transport of water vapor, ozone, and aerosols by thunderstorms, 27800
- Kuklis, Andrew:
 - mineral industry of—
 - Colorado, 16272
 - Italy, 20545
 - molybdenum, 20568
 - Kukukuku, *see* Anga
- Kupper, Louis, containers and packaging, quarterly industry report, 18162
- Kure Atoll, natural history of Kure Atoll, northwestern Hawaiian Islands, 26820
- Kursk Region, USSR, new construction projects in Kursk Magnetic Anomaly, USSR study, 26584
- Kurtz, Horace F. bauxite, 25437
- Kurtz, Ruth, special requirements on imports into Canada, 19297
- Kurzman, Marc G., drug abuse education in pharmacy schools, 32186
- Kusler, David J., demand for platinum to reduce pollution from automobile exhausts, 23641
- Kutter, Wolfgang, relief, 19336, 19603
- Kuus, Leo, selling in Yugoslavia, 30128
- Kuwait:
 - economic trends and their implications for United States, 26550
 - map, 16803
 - mineral industry, minerals yearbook chapter, 20564
- Kyanite, beneficiation of Idaho kyanite-bearing materials, 27699
- Kyl, John H., nomination, hearing, 24938
- Kyle, George M., outdoor recreation action (periodical), 18740
- Kyong Ok Goodwin, *see* Goodwin, Kyong Ok

L

- L.F., *see* Frequency band
- L series, 16812, 23082
- L-7 velocity seismograph shaking-table results, 25625
- LaBaffe, Ernest J., Citizens for LaBaffe, annual report, 24581
- Labeledz, Leopold, testimony, hearings, 30037
- Labels:
 - Cigarette labeling and advertising act, amend—
 - hearings, 21321
 - to include little cigars—
 - hearings, 29923
 - report, 32061
 - Fair packaging and labeling act, text, 26171
 - food labeling and inspection, hearings, 21257

Labels—Continued

guiding principles for responsible packaging and labeling, 23715
model state packaging and labeling regulation, 17733
radioactive materials, marking and labeling of items, etc., military standard, 25024
read the label, 23259
we want you to know about labels on—
foods, 31343
medicines, 31344
we want you to know what we know about nutrition labels on food, 31345
wool products labeling act, amend with respect to recycled wool, report, 31085
Labette Creek, special flood hazard information, Parsons, Kans., 28775

Labor:

annual survey of manufactures employment and labor costs for operating manufacturing establishments, 19191
better working conditions now and in the future (address), 21895
code of Federal regulations, 31330
colonial craftsmen, age of pride, program, 22090
current labor market developments, hearings, 27094
day laborer protection act of 1971, hearings, 24849
dual careers, longitudinal study of labor market experience, 26611
employment and labor costs for operating manufacturing establishments, 21036, 28097
Employment Service, from labor exchange to delivery system, 40 years of progress, 27662
exchange of ideas (speech), 32421
Federal Government as employer of unskilled and undereducated, 22608
impact of health on earnings and labor market activity, 21916
implications of multinational firms for world trade and investment and for U.S. trade and labor, 23058
indexes of output per man-hour, selected industries, 16237
Industrial peace (speech), 29157
International labor (periodical), 18507
Job opportunities for skilled craftsmen, civil service announcement, 31981
job qualification system for trades and labor occupations, 29809
labor and materials required for highway construction, 32434
labor developments abroad (periodical), 18536
labor in U.S.S.R., 20497
labor management case finder, FPM supplement, 18332
labor management relations (speech), 32423
labor offices in United States and Canada, 17368
labor statistics, 1972, handbook, 23591
labor trends in southern forest industries, 28970
major collective bargaining agreements, administration of seniority, 21903
management relations (remarks), 27691
monthly labor review, 18446
reprint, 16238, 21915-916, 23601-602, 25384-385, 29174, 32434
National Alliance of Businessmen offering job opportunities to American labor force (remarks), 32424
new program for economic education of workers, USSR study, 17630
Older Americans Community Service employment program, authorization and appropriation, report, 19855
older workers, Operation Mainstream can help, 23582

Labor—Continued

pension provisions affecting employment of older workers, 29174
plight of service workers under Government contracts, 19764
pre-retirement years, labor market experience of men, longitudinal study, 23581
selected labor force characteristics of persons and families for U.S., 29711
trade, employment, and the labor ministries (address), 21900
training America's labor force, potential, progress and problems of vocational education, GAO report, 20338
UHF irradiation and worker in industry, USSR study, 20460
women in work force, development and field testing of curriculum materials, planning ahead for world of work, 26741
women's role (remarks), 25376
work stoppages, monthly, 19089
worker alienation, 1972, research for solutions and technical assistance to companies, unions, etc., to combat problem, 15927
see also Farm labor—Labor laws—Manpower—Occupations.
Labor and Public Welfare Committee, Senate:
bill text and background material, committee print, 27355
calendar, 18571
committee prints, 15926, 17275-277, 17279-287, 17289-291, 19783, 19892, 19994, 19998, 21362, 21370-372, 21379, 23067, 24867-868, 24946, 24948, 24953-954, 26171, 26283, 27226, 27354, 30055, 30057-59, 30062, 31155
GAO report, 25248
hearings, 15921-925, 15927-928, 17278, 17288, 19993, 19995-997, 19999-20002, 20004-5, 21359-361, 21363-369, 21373-378, 24945, 24949-950, 24952, 26280-282, 27356-357, 28557-566, 30054, 30056, 30060-61, 31153-154, 31156
inquiries and investigations, expenses, report, 19893
investigations and studies, authorization and expenses, report, 27263
legislative review activity, 92d Congress, report, 26240
reports, 17158, 17143, 17162, 17164-165, 17175, 19855, 19875, 19893-894, 19896, 23035, 26236, 26240, 27274, 27291-292, 28451, 28456, 28493, 28498, 28507, 29954, 29962, 29966, 29976-977, 29980-981, 29984, 29987-988, 29997, 31067, 31077, 31082, 32100, 32114-115
Labor camps, U.S.S.R. labor camps, hearings, 26278
Labor Conference, International, see International Labor Conference.
Labor consultants, see Consultants.
Labor Department:
appropriations, 1973—
hearings, 15866
reports, 16987, 19615, 21311, 21180
supplemental, hearings, 26149
veto message, 19556
appropriations 1974, hearings, 26148, 27182, 28387, 31009
reports, 30983, 32046
Assistant Secretary for Employment Standards, nomination of Bernard E. DeLury, hearing, 28564
Assistant Secretary for Labor-Management Relations, nomination of Paul J. Fasser, hearing, 28565
black news digest, 18033
concentrated employment program in New York City has met its employment objectives, GAO report, 16095
decisions and reports on rulings of Assistant Secretary of Labor for Labor-Management Relations, pursuant to Executive order 11491, 28609, 27660

INDEX 1973

Labor Department—Continued

difficulties of Neighborhood Youth Corps in-school program and its management problems, GAO report, 23318
 digest and index of published decisions for labor-management relations, 20488
 digest and index of published decisions of Assistant Secretary for Labor-Management Relations pursuant to Executive order 11491, as amended, 27661
 Federal contractor job listing emphasizing employment of veterans, questions and answers on Secretary of Labor's regulation, 31572
 impact of Federal programs to improve living conditions of migrant and other seasonal farmworkers, GAO report, 23319
 information, please, guide to acquiring information from Department of Labor, 23579
 legislation needed to simplify Federal funding of State employment security agencies' administrative expenses, GAO report, 30257
 Library, list of recent additions, 18898
 more concerted effort needed by Federal government on occupational safety and health programs for Federal employees, GAO report, 25235
 noticias de la semana, news summary for Hispanics, weekly, 18714
 press releases, 18794
 public employment programs in selected rural and urban areas, Department of Labor, GAO report, 31388
 publications, list, 18696
 publications, 1966-June 1971, subject listing, 29155
 questions and answers on role of Assistant Secretary of Labor for labor-management relations under Executive order 11491, labor-management relations in Federal service, 32419
 Secretary, nomination of Brennan, Peter J., hearings, 24950
 Solicitor, nomination of William J. Kilberg, hearing, 28565
 telephone directory, 32430
 Under Secretary, nomination of, Richard F. Schubert, hearing, 28564
 women & work, news service, 27666
Labor disputes:
 emergency board report, investigate dispute between Long Island Railroad Company and certain of its employees, represented by Non-Operating Employees Conference Committee, 21434
 emergency board report, investigate dispute between Port Authority Trans-Hudson Corporation, and certain of its employees represented by Brotherhood Railway Carmen of United States and Canada, 25062
 handling of rail disputes under Railway labor act, 1950-69, 23592
 legislative proposals relating to emergency labor disputes pending before Labor and Public Welfare Committee, Senate, 17283
 Penn Central Railroad crew consist labor-management dispute, hearing, 24866
see also Strikes and lockouts.
Labor for America Committee, annual report, 24740
Labor force, *see* Labor.
Labor laws:
 and practice in Kingdom of Saudi Arabia, 29160
 compilation, 19538
 Federal labor laws—
 administered by Wage and Hour Division with regulations and interpretations, 17928, 18318, 22300, 24095, 26918, 31895
 and programs, layman's guide, 23146

Labor laws—Continued

labor law and practice in—
 China (Taiwan), 20495
 Colombia, 26615
 Great Britain, 20496
 Philippines, 26614
 National Labor Relations Board, case developments, quarterly report, 18840
 routes to reform of National Labor Relations Board decision-making (remarks), 31707
 what about a career in labor law? 27665
see also Employer's liability and workmen's compensation.
Labor legislation, *see* Labor laws.
Labor-management relations, *see* Industrial relations.
Labor-management reporting and disclosure act compliance, enforcement and reporting under act, 25370
Labor markets, *see* Labor.
Labor organizations, *see* Labor unions.
Labor relations, *see* Industrial relations.
Labor standards:
 employment relationship under Fair labor standards act, 22299
 Fair labor standards act—
 amend—
 hearings, 27198, 30056
 proposed principal provisions, comparison, 17287
 reports, 27174, 28361, 28507, 29976-977, 31105, 32070
 amendments of 1972, background material, 17275
 as applied to—
 automobile, truck, trailer, and farm implement dealers, 26915
 communications industry and news media, 26916
 construction industry, 24094
 equal pay for women, 27967
 establishments handling or processing agricultural commodities, 26917
 hospitals, 24096
 hotels and motels, 24097
 institutions of higher education, 29587
 minimum wage and maximum hours standards, 23147
 private clubs and fraternal orders, 26919
 small manufacturing establishments, 24100
 bill texts, section-by-section analyses, changes in existing law, and comparison of bills, 30059
 how it operates in our town, 27968
 proposed amendments, 30058
 residential care enterprises, 25804
 restaurants and food service employees, 26921
 retail drug stores, 26922
 how to keep time and pay records, 30682
 preschools under Fair labor standard act, 16572
 public contracts acts incorporating labor standards provisions, list of persons or firms currently debarred for violations, 18146
 quick look at hours worked under Fair labor standards act as amended in 1966, 25803
 Service contract act, extend coverage to Canton Island, report, 30973
Labor Statistics, North American Conference on, *see* North American Conference on Labor Statistics.
Labor Statistics Bureau:
 BLS report series, 20495-498, 26616-616, 29160
 BLS staff papers, 29161

Labor Statistics Bureau—Continued

- bulletins, 16222-237, 17658-667, 20499-509, 21902-914, 23590-600, 25378-383, 26617-629, 27667-681, 29162-171, 30383-393, 31556-364, 32431
- 1971 major programs, 17671
- 1973 major programs, 30395
- productivity and the economy, 30391
- publications, list, 23603, 30396
- publications, 1886-1971, numerical listings, annotations, subject index, 20502
- report series, 17672, 27683, 31566
- Labor supply, pre-retirement years, labor market experience of men, longitudinal study, 23581
- Labor turnover:
 - manufacturing quit rates, trends, cycles, and interindustry variations, 29161
 - suggestions for control of turnover and absenteeism, 23588
- Labor unions:
 - agricultural labor management relations, hearings, 24848
 - directory of national unions and employee associations, 1971, including state labor organizations, developments since 1969, structure and membership, 21905
 - employer contributions to jointly administered trust funds established by labor organizations to defray costs of legal services—
 - hearings, 28405
 - reports, 28339, 28456, 29878, 32031
 - exclude from prohibitions against Government contractors in making Federal election contributions, reports, 19649, 19910
 - joint labor-management trust funds for legal services—
 - authorize, hearings, 26280
 - report, 29989
 - bill text and background material, 27355
 - jointly administered legal services plans, hearings, 19761
 - national and international unions, conventions, 1973, list, 29172
 - the President respects labor's goals while striking balance for whole society (address), 17652
 - protection and facilities to be afforded workers' representatives, ILO convention and recommendation, 30961
 - right to strike and right to negotiate union shop by postal employees, hearings, 29933
 - role (address), 16217
 - selected earnings and demographic characteristics of union members, 20498
 - standards of conduct for Federal-employee unions, rights of members, election of officers, reporting guide, 25371
 - union election cases under Labor-management reporting and disclosure act, 20494
 - union recognition in Federal Government, statistical report and listings by agency, etc., 30890
 - union status and benefits of retirees, 31555
 - what factors influence union representation elections? 23602

Laboratories:

- analytical quality control in water and wastewater laboratories, handbook, 25788
- damping capacity of soil during dynamic loading, review of laboratory methods of determining damping, 28781
- desalination plant laboratory procedures manual, 25294
- laboratory analysis, 29031
- laboratory evaluation of dissolved oxygen analyzers, 22115
- laboratory evaluation of electrogas-dynamics for dispersal concept, 24049
- laboratory investigation of 4% in aggregate concrete mixtures with high water-cement ratio, 20174
- laboratory load tests on buried flexible pipe, reinforced plastic mortar (RPM) pipe, 32543

Laboratories—Continued

- laboratory technique for producing micro-filariae of *Dirofilaria immitis* in mosquitoes, 15515
- mobile psychoacoustic laboratory, 25405
- new method of controlling radioactivity in laboratory waste water, 21019
- radionuclide analysis of environmental samples, laboratory manual of methodology, 20736
- Reclamation Bureau field laboratories, 1971 survey, 23937
- see names of laboratories, or places where located—also types of laboratories e.g., Environmental laboratories.
- Laboratory animals, see Animals.
- Laboratory apparatus and supplies:
 - chemical analysis and laboratory instruments, change, 21399
 - instruments, industrial plant equipment handbook, 23089
 - laboratories and related apparatus, Federal item identification guide, 30103
 - laboratory equipment and supplies, Federal item identification guide, 27389
- Laboratory investigations of driven low frequency plasma oscillations, 29389
- Laboratory technique for producing micro-filariae of *Dirofilaria immitis* in mosquitoes, 15515
- Laborers, see Labor.
- Labor's Investment in Voter Education, annual report, 24408
- Labrador Sea, oceanography of Grand Banks region of Newfoundland and Labrador Sea, 30591
- Lac du Flambeau Band of Chippewa Indians, see Chippewa Indians.
- Lachter, Susan B., bibliography of drug abuse literature, 22038
- Lack of bilateral generalization of adaption to auditory rearrangement, 31578
- Lacquer and lacquering:
 - current industrial reports, 18194
 - Federal test method standard, 23251
- Lac Qui County Republican Committee, annual report, 22943
- La Crosse, E. Robert, getting ready to read, 28670
- La Crosse County, Wis., Democratic Party of La Crosse County, annual report, 22986
- Ladd, Harry S., Cenozoic fossil mollusks from western Pacific Islands; gastropods (Turritellidae through Strombidae), 21720
- Ladson, Charles L., description and calibration of Langley 6- by 19-inch transonic tunnel, 29271
- Lafayette County, Ark., water resources of Hempstead, Lafayette, Little River, Miller, and Nevada Counties, Ark., 30285
- Lafayette County, Democratic Party, see Democratic Party of Lafayette County.
- Laffey, James, teacher orientation handbook, 16001
- Lagoons:
 - cannery waste treatment by anaerobic lagoons and oxidation ditch, 25107
 - ground water in Tortuguero area, P.R., as related to proposed harbor construction, 23383
 - performance and state of lagoon technology, 30178
- Lagrange County Republican Central Committee, annual report, 24644
- Laguna Atascosa National Wildlife Refuge, general information, 31827
- Laird, Melvin R., Defense Department, final report to Congress, Jan. 1969-Jan. 1973, 24843, 25012
- Laird, Weldon, evaluation of USDA Hmb and stalk remover for cleaning machine-stripped cotton, 31908
- Laissez faire, initiatives in corporate responsibility for consumer protection and better products, 17237
- Lake, see name of lake except when occurring as first word of name of town, etc.

INDEX 1973

- Lake Charles, La., aircraft accident report, 16424
- Lake Committee for George E. Shipley, annual report, 24594
- Lake County Boehning for Congress Committee, annual report, 22850
- Lake County Federation of Republican Womens' Clubs, annual report, 24608
- Lake County Republican Executive Organization, annual report, 22724
- Lake Forest-Lake Bluff Women's Republican Club, *see* Women's Republic Club of Lake Forest-Lake Bluff.
- Lake Mead, report on pollution affecting Las Vegas, Wash, Lake Mead, and Lower Colorado River, Nevada, Arizona, and California, 20211
- Lake Mead National Recreation Area, general information, 25634
- Lake States, *see* Great Lakes States.
- Lake Survey Center, NOAA technical memorandum, NOS LSC series, 31720
- Lake Twentytwo Research Natural Area, general information, 21625
- Lakes:
- effect of silt and silt removal in prairie lake, 31269
 - in situ evaluation of nutrient effects in lakes on phytoplankton, 27451
 - mineralogy of suspended sediment in some Alaskan glacial streams and lakes, 23152
 - phosphorus release from lake sediments, 31268
 - selective withdrawal from man-made lakes, hydraulic laboratory investigation, 25102
 - weed harvest and lake nutrient dynamics, 31267
 - see also* names of lakes.
- Lambert, Robert W., documents on disarmament, 24165
- Lambs:
- lamb crop report, wool statistics, 24016
 - lamb industry, economic study of marketing structure, practices, and problems, 29442
 - number and classes, etc., 1965-70, 19138
 - on feed, 22280, 24019
 - early lamb crop, 26589
- Laminar boundary layer, *see* Boundary layer.
- Laminated materials:
- bumper-protected laminated spacecraft mainwalls, 29260
 - condition of 12-year-old glued-laminated stringer bridge with nailed-laminated deck, decay hazard aspects, 25205
 - evaluation of Goodyear medium-duty aluminum honeycomb landing mat, 26387
 - transmission of gamma rays through aluminum and laminated lead, aluminum slabs, 26991
- Lamination, roll laminating fiber overlays on low-grade ponderosa pine lumber, 23307
- Lamm for Congress Committee, annual report, 22698
- Lamont, William E., phosphorous removal from Birmingham, Ala., calcareous iron ores, 25505
- Lamp holders, Federal item identification guide, 27390
- Lampholders, *see* Lamp holders.
- Lamps, Federal item identification guide, 25003
- see also* Electric lamps.
- Lanal Island, Hawaii, soil survey report, 17842
- Lancaster, J. E., application of matched asymptotic expansions to lunar and interplanetary trajectories, 31606
- technical discussion, 30449
- Lancaster County Republican Committee, annual report, 24364
- Lancaster County, S.C., soil survey report, 31821
- Lancaster, N.Y.:
- flood plain information, Ellicott Creek, 28708
 - floods, Ellicott Creek, 28762
- Lancy, L. E., waste treatment, upgrading metal-finishing facilities to reduce pollution, 30662
- Land:
- acquisition for public airports, Federal aviation regulations, 18300, 21532
 - acquisition for recreational development and protection of natural resources—law, 19463
 - report, 19925
 - architectural analysis and inspections for title 10 land development projects, HUD, 29073
 - capitalization of farm program benefits into land value, 17347
 - Congress should reevaluate 160-acre limitation on land eligible to receive water from Federal water resources, projects, 23317
 - contemporary Cambodian, land and economy, 27906
 - development of case study of total effect of pesticides in environment, non-irrigated croplands of the Mid-West, 20867
 - drainage of agricultural lands, 28098
 - effects of agricultural pesticides in aquatic environment, irrigated croplands, San Joaquin Valley, 17932
 - farms—
 - number, use of land, size of farms, 1969
 - census of agriculture, 30789
 - revised estimates, 1959-70, number of farms land in farms, 22355
 - Federal Research Natural Areas in Oregon and Washington, guidebook for scientists and educators, 20291
 - separates, 21607-650, 23270
 - Florida land and water resources study in Kissimmee-Everglades area, 27891
 - geologic and hydrologic maps for land use planning, in Connecticut Valley, with examples from folio of Hartford North, 21714
 - get facts before buying land, 32373
 - get facts before investing in land, 23418
 - glossary of selected terms useful in studies of mechanics of aquifer systems and land subsidence due to fluid withdrawal, 20362
 - health guidelines for water and related land resources planning, development and management, 32609
 - hydrologic effects of land use (series), 20355
 - Indian claims, statute of limitations, law, 19351
 - Land and water conservation fund act, amend—
 - hearings, 15908
 - law, 15638
 - report, 31084
 - and related programs, hearings, 21243
 - collect special recreation use fees, amend, report, 28462
 - land and water resource accomplishments, Federal reclamation projects, 16469, 17817
 - land ownership, use, and distribution, farmworkers in rural America, hearing, 19995
 - land planning analysis for title 10 land development projects, HUD, 29072
 - land planning analysis, principles, and procedures for project mortgage insurance, HUD handbook, 21792
 - land planning data sheet handbook, 29060, 31426
 - Land use and planning assistance act, hearings, 27342, 30044
 - land use planning act, hearings, 29917
 - Land use policy and planning assistance act, report, 28489

Land—Continued

- land use survey, 23196
- market analysis for title 10 land development projects, HUD, 29071
- national land use policy—
 - background papers, 17272
 - legislation, 93d Congress, analysis of legislative proposals and State laws, 27344
- national land policy, planning, and management act, report, 24820
- National resources lands management act of 1972, report, 19865
- need for improved consumer protection in interstate land sales, GAO review, 28996
- people, land and water (address), 23927
- permitting suits against United States to adjudicate disputed land titles—
 - law, 19489
 - report, 13702
- planning bulletin, 31328
- providing for conveyance of certain mineral rights in and under lands in Onslow County, N.C., report, 29884
- salinity problems in arid lands irrigation, literature review and selected bibliography, 23476
- soil conservation (periodical), 18913
- soil surveys for land use planning in Alaska, 32563
- summary analysis, summary and analysis of public response to proposed principles and standards for planning water and related land resources and draft environmental statement, 17937
- taking issue, analysis of constitutional limits of land use control, 31174
- Uniform relocation assistance and land acquisition policies act of 1970, amend, report, 21185
- use classification system for use with remote-sensor data, 21712
- virgin-land grain raising, analysis, USSR study, 17640
- water resources regions and subregions for national assessment of water and related land resources, 20876
- Western New York river basins, Oswego River basin land resources, USDA report, 31921
- who owns the land? farm workers in rural America, hearing, 19995
- see also Natural resources—Public lands—Soil conservation.
- Land and Water Conservation Fund, appropriations, 1974, hearings, 27180
- Land clearing and wood use in Delaware, 31361
- Land-grant colleges, role of colleges for farmworkers in rural America amidst poverty and depression, hearing, 19995
- Land Management Bureau:
 - appropriations, 1974, hearings, 26147
 - director, appointment, require Senate confirmation, report, 32120
 - information bulletins, 32435
 - press releases, 18795
 - Rogue River, development, operation and management, 23001
 - technical bulletins, 30397
- Land Use Policy Administration Office:
 - establish, report, 28489
 - establish in Interior Department, hearings, 27342, 30044
- Lander County, Nev., geochemistry and potassium-argon ages of plutonic rocks in Battle Mountain mining district, Lander County, Nev., 29024
- Landfills, see Refuse.
- Landing (aircraft):
 - category 3 ILS ground guidance equipment—
 - STAN-37 localizer tests at NAFEC on R/W-4, interim report, test and evaluation, 24033
 - STAN-38 glide slope tests at NAFEC on runway 4, test and evaluation, 24051

Landing (aircraft)—Continued

- continued analysis of capacity concept for runway and final-approach path airspace, 24023
- design of landing-mat-surfaced airfields for operation of C-5A aircrafts, 30167
- develop acceleration and brake monitor system, 24053
- development of film techniques for runway lighting outage studies, 24026
- effect of shear on aircraft landing, 31612
- engineering optimization method with application to STOL-aircraft approach and landing trajectories, 17726
- equipment, Federal item identification guide, 31180
- extension of capacity concept to dual-use runways and multi-runway configurations, 24024
- failure modes, effects and criticality analysis (FMECA) of category 3 instrument landing system, 20825
- low-cost inertial smoothing system for landing approach guidance, 29289
- simulation study of diamond runway marks for aircraft approach guidance, 24037
- standard instrument approach procedures, Federal aviation regulations, 18301, 23210
- status of category in Europe, 25046
- Landing (spacecraft, see Spacecraft).
- Landing gear:
 - crashworthy landing gear study, 30758
 - loading conditions imposed by ground turning maneuvers with 3 jet transport airplanes, 23690
- Landing strips, see Runways (aeronautics).
- Landis, E. R., stratigraphic terminology of Dakota sandstone and Mancos shale, 31394
- Landlords and tenants:
 - military tenant, responsibilities, etc., 29087
 - rent controls, tenant's guide, 22199
 - why tenant organizations? role for residents of rental housing, 29083
- Landmarks, see Historic sites.
- Landscape:
 - landscape for living, 1972 yearbook of agriculture introduction (address), 20908
 - national forest landscape management, 24125
 - national parks and American landscape, 29334
- Landslides:
 - in vicinity of Fort Randall Reservoir, S. Dak., 26502
 - landslides of Rio de Janeiro and Serra das Araras escarpment, Brazil, 27566
- Landt, Eugene F., American woods, black walnut, 25201
- Lane, Clinton, literature review of effects of helium on mechanics of respiration, with clinical correlations, 32444
- Lane, Elizabeth, agricultural economics research, 17962
- Lane, Paul H.:
 - lumber yield from Sitka spruce in south-eastern Alaska, 20314
 - new timber cruising grades for coast Douglas-fir, 31371
 - timber cruising grades for coast Douglas-fir, 28975
- Lane County, Kans., soil survey report, 23983
- Laney, R. L., chemical quality of water in Tucson basin, Ariz., 17548
- Laney Shale Member, stratigraphic divisions and geologic history of Laney Member of Green River Formation in Washakie Basin in southwestern Wyoming, 26495
- Lang, Helen W., three-minute gas chromatographic analysis of main constituents of mine atmospheres, 21951
- Lange, G. Robert:
 - construction of unattended seismological observatory (USO) in permafrost, 28687

INDEX 1973

- Lange, G. Robert—Continued
 deep rotary core drilling in ice, 28688
 rotary drilling and coring in permafrost,
 deep core drilling, core analysis and
 bore hole thermometry, at Cape Thomp-
 son, Alaska, 21440
- Langley, Jane Pickens, for Good Government
 Committee, *see* Jane Pickens Langley for
 Good Government Committee.
- Language and languages:
 Bilingual Bicultural Demonstration Cen-
 ter, description, cost, evaluation, etc.,
 27772
 country of origin, mother tongue, and citi-
 zenship for United States, 1970, supple-
 mentary report, 28125
 discussion of engineering linguistics, USSR
 study, 29136
 foreign language and area studies, educa-
 tional programs, 1974-75, 31228
 foreign language, completed research and
 instructional materials, bibliography,
 26363
 higher education programs in foreign lan-
 guage and area studies, 1973-74, re-
 search and training opportunities
 abroad, 15997
 Indians, languages, 31462
 national origin and language, 1970, census
 of population, 31948
 need to improve language training pro-
 grams and assignments of Government
 personnel overseas, GAO report, 23323
 reading and language development in first
 grade, 28671
 replication of bilingual education project,
 Albuquerque, N. Mex., 17367
 specialized language activities for rural
 disadvantaged, South Paris, Maine,
 27778
 speech, language and hearing program,
 guide for Head Start personnel, 26516
 understanding imaginative language, na-
 tional assessment of literature, report,
 26368
see also names of languages.
- Lanier County, Ga., soil survey report, 31818
- Lannen, Margaret A., comparison of actual
 experience under OASHI system with
 short-range cost estimates, 22226
- Lansing, Mich., flood plain information,
 Grand River, Red Cedar River and Sycam-
 ore Creek, 23164
- Lanthanides, chemical thermodynamic prop-
 erties, tables for lanthanide (rare earth)
 elements, selected values, 29320
- Lao language, reference aid, abbreviations in
 Cambodian and Lao press, 23255
- Laos:
 AID activities in Laos, hearing, 15891
 area handbook, 26966
 bibliographic survey of literature, 29660
 military activities in and over, inquiry
 resolution, report, 28335
 mineral industry, minerals yearbook chap-
 ter, 25428
 prohibit use of any funds for combat activi-
 ties by U.S. forces—
 law, 32004
 report, 29866
 Thailand, Laos and Cambodia, Jan. 1972
 report, military situation, facts and fu-
 ture prospects, 17257
 Thailand, Laos, Cambodia and Vietnam,
 Apr. 1973, report, military situation,
 facts and future prospects, 30031
 war victims in Indochina, GAO report,
 19990
 Laos languages, *see* Lao language.
 Laotian language, *see* Lao language.
- LaPage, Wilbur F.:
 commercial campground industry in New
 Hampshire, report on 1971 campground
 census, 27536
 growth potential of family camping mar-
 ket, 26476
- Laplace transformations, *see* Transforma-
 tions (mathematics).
- Laqueur, Walter, testimony, hearing, 26269
- Lara, Joe M., 1969 Elephant Butte Reservoir
 sediment survey, 23935
- Larceny, cargo thefts, railroad industry,
 hearings, 20015
see also Theft.
- Larch, growth and hydrologic influence of
 European larch and red pine after 10 years
 of planting, 25219
- Larch casebearers, initial releases of *Chry-
 sochris larinellae* and *Dicladocerus west-
 woodii* for biological control of larch case-
 bearer in western United States, 32327
- Lard, commercial production, 26888
- Large groups in boundary waters canoe area,
 their numbers, characteristics, and impact,
 17515
- Large-scale continuous attrition grinding of
 coarse kaolin, 31589
- Large-scale meat buying made easy, educa-
 tional program, 22312
- Large Soviet encyclopedia, *see* Bol'shaya
 Sovetskaya entsiklopediya.
- Larsen, David N., explaining forest product
 selling behavior of private woodland own-
 ers, 27538
- Larson, David G., wage calendar, 26629
- Larson (U.S.S.):
 loan agreement with Korea, 26866
- Larvae:
 fish larvae collected from northeastern
 Pacific Ocean and Puget Sound during
 April and May 1967, 23808
 thermal effects on eggs, larvae, and ju-
 veniles of bluegill sunfish, 28792
see also names of insects, etc.
- Larynx, cancer, diagnosis, treatment, etc.,
 26713
- Laser beams comparison of advanced propul-
 sion concepts for deep space exploration,
 17725
- Lasers:
 ability of laser profilometer system to
 evaluate unprepared landing sites, anal-
 ysis, 30166
 applications of dual parameter analyzers,
 in solid-state laser tests, 20979
 atmospheric effects for ground target sig-
 nature modeling, atmospheric transmis-
 sion at 1.06 micrometers, 22415
 cold cathodes for sealed-off CO₂ lasers,
 32474
 combined gas-laser pumping, USSR study,
 21843
 development of in-situ prototype diode
 laser system to monitor SO₂ across stack,
 30184
 evolution of changes in loose connective
 tissue under influence of optical quan-
 tum generator, USSR study, 21885
 formation of inversion in CO-H₂O-N₂ gas
 mixture jet, expanding through slit,
 USSR study, 21845
 HCN lasers, frequency and phase stabiliza-
 tion by locking to synthesized refer-
 ence, 30473
 laser control of spark gaps, USSR study,
 30354
 laser Doppler velocity measurements of
 swirling flows with upstream influence,
 31610
 laser induced damage in optical materials,
 20639
 errata, 23707
 laser-induced sources for magnetic fields,
 17791
 laser irradiation and melanoma, 21852
 lasers and meteorology, USSR study, 23546
 measurements of laser extinction in ice
 fog for design of SEV pilotage system,
 21437
 noise immunity of optical communication
 lines (OLC) with frequency multiplexin
 of discrete information channels, USSR
 study, 16191

Lasers—Continued

- possible mechanisms of turbulent heating of plasma by ultrashort laser pulses, USSR study, 27622
- probe method for recording ions produced by laser radiation, in afterglow discharge plasma, 20993
- quasistationary CO₂ laser with pulsed excitation, USSR study, 27625
- salinity on optical extinction of sea ice at 6328 Å, effect, 31235
- stimulated coherent radiation devices, lasers, industrial plant equipment handbook 20036
- Lasker, Reuben, fishery bulletin, 18369
- Lassen Volcanic National Park: designate certain lands as wilderness—hearing 17059
- law, 19440
- reports, 17001, 19897
- Las Vegas Wash, report on pollution affecting Las Vegas Wash, Lake Mead, and Lower Colorado River, Nevada, Arizona, and California, 20211
- Lategola, Michael T., use of simple indicators for detecting potential coronary heart disease susceptibility in air traffic controller population, 16681
- Lateral separation, study approach, 24038
- Latest editions of U.S. Air Force aeronautical charts, 18537
- Lathes:
 - duty on copying shoe lathes, extension of suspension, report, 30938
 - metalworking, industrial plant equipment handbook, 21401
 - milling machines and shapers, Federal item identification guide, 27391
 - temporary suspension of duty on certain copying shoe lathes, report, 15686
- Latin America:
 - American foreign policy in economic and political relationships with Organization of American States and Latin America, 30648
 - contributions to hydrology of Latin America and the Antilles (series), 16112
 - cooperative science programs, 32516
 - market profiles, 24287
 - social development activities promoted by Inter-American Foundation, fiscal year 1972, GAO report, 30264
 - translations, 18976
 - world narcotics problem, Latin American perspective, committee print, 27212
 - report of special study mission, 26138
- Latitude:
 - sight reduction tables for air navigation, 30125
 - topside ionosphere during sunrise at mid-latitudes, 22406
- Latka, B. J., directory of law enforcement and criminal justice associations and research centers, 30474
- Lattice theories:
 - method of limit point calculation in finite element structural analysis, 16347
 - space groups and lattice complexes, 29312
 - structural analysis of longitudinal framed ships, 22215
 - vortex lattice FORTRAN program for estimating subsonic aerodynamic characteristics of complex planforms, 31621
- Laudani, Hamilton A., development of insect-resistant cotton bag, 24145
- Laugesen, Peter:
 - Journal of Charles Mason during survey of Mason and Dixon Line Nov. 15, 1963—Sept. 11, 1768, microcopy, pamphlet describing 21995
 - State Department territorial papers, Territory Northwest of River Ohio, 21998
- Launch vehicles, see Spacecraft.

Launching:

- Apollo experience report, development of design-loads criteria, etc., for prelaunch, lift-off and midboost conditions 31646
- spacecraft heating environment of thermal protection for launch through atmosphere of earth, 26687
- Launching facilities:
 - aircraft equipment, Federal item identification guide, 31180
 - drone launching facility, Anegada Island, agreement with United Kingdom of Great Britain and Northern Ireland, 26877
- Laundries, J. F., effective dry methods of separating thermoplastic films from waste-papers, 32342
- Laundry and laundries:
 - treatment and laundromat wastes, 26412
 - urban business profile, industrial laundries and linent supply, 15976
- Laurel County Republican Campaign Committee, annual report, 28291
- Lautzenheiser, Robert E., climate of Maine, 17410
- Lava Beds National Monument designate certain lands as wilderness area, report, 19900
- Lava Beds Wilderness Area:
 - establish—
 - law, 19424
 - reports, 17000, 19900
- Lavery, John E., relativistic time corrections for Apollo 12 and 13 17709
- Law:
 - collection of laws of USSR government on natural resources, USSR study, 29134
 - current laws, statutes and executive orders, Environmental Protection Agency, international statutes, 20183
 - inequality in school financing role of law, 21030
 - JAG law review, 18524
 - joint labor-management trust funds for legal services—
 - authorize—
 - hearings, 26280
 - reports, 29989
 - bill text and background material, 27355
 - Judge Advocate legal service, Army pamphlets, 18533
 - laws requiring seat belts, traffic laws, commentary, 22056
 - legal activities, Justice Department, 30380
 - legal careers, Chief Counsel's Office, IRS, 21819
 - legal proceedings, testimony by FAA employees and production of records Federal aviation regulations, 18292
 - legal sanctioning and social control, 22069
 - legal services program, accomplishments of and problems faced by its grantees, GAO report, 25240
 - operation of law permitting waiver of erroneous payments of pay, GAO report, 16099
 - publications, price list, 30605
 - published ordinances, firearms, important information to gun dealers, 26955
 - rating specialists, legal, compensation and pension service, training guide, 24091
 - relationship between law and scientific and technical progress USSR study, 16206
 - requiring physicians to report, traffic laws commentary, 20665
 - slip laws (private) 92d Congress, 15631-634, 16853-859, 19322-349
 - slip laws (private) 93d Congress 28263-264
 - slip laws (public) 92d Congress 15635-658, 16860-927, 18830, 19350-530 21129-135
 - slip laws (public) 93d Congress, 27076-89, 29827-831, 30900-936 32002-017

INDEX 1973

Law—Continued

State action on local problems, 1972, information report 29599
 State laws enacted in 1971 of interest to Housing and Urban Development Department 25290
 State statutes on emergency medical services, 29043
 State water-rights laws and related subjects, supplemental bibliography, 15479
 VISTA lawyers practice law, 29597
see also Codes of law—also Criminal law—also International law—Military law—also subjects.
 Law Day, pay tribute to law enforcement officers of United States, report, 26233
 Law enforcement:
 aircraft piracy amendments of 1971, reports, 15845, 17186
 assessment of Federal and State enforcement efforts to control air pollution from stationary sources, GAO report, 32349
 law, 32010
 reports, 28366, 29886, 29996, 30969
 Attorney General's report, Federal law enforcement and criminal justice activities, 16210
 batteries used with law enforcement communications equipment, 30379
 career ladder and curriculum guide, instructor's manual, code enforcement inspector and aide, 27580
 cargo theft and organized crime, deskbook for management and law enforcement, 25790
 change process in criminal justice, 30375
 citizen support for law enforcement efforts against drug related crime, 17688
 cooperation, backbone of effective law enforcement, 31549
 crime control and safe streets act, text, 24160
 criminal justice agencies, 1971, list—
 Alabama, 23562
 Arizona, 23563
 Indiana, 23565
 Mississippi, 23566
 Missouri, 23567
 North Carolina, 21889
 Wisconsin, 23568
 directory of law enforcement and criminal justice associations and research centers, 30474
 enforcement activities of SEC, interim report (address), 30621
 enforcement of Refuse act, report, 16972
 Federal civil rights enforcement effort, reassessment, report of Civil Rights Commission, 25948
 Federal personnel, increase annuities, hearings, 31038
 financial management for planning and action grants, to combat crime, 27653
 fundamental changes needed to achieve effective enforcement of radio communication regulations, GAO report, 20329
 guideline manual, State planning agency grants, 16211, 21891, 29147
 innovation in law enforcement, 31550
 Institute for Air Pollution Training, advanced courses, descriptions, 20949
 law and private police, 16213
 law enforcement officers killed, summary, 26428
 law enforcement standards program, LESP-RPT series, 23570, 30379
 law enforcement standards program, NILECJ-STD series, 26604
 library book catalog—
 author catalog, 17646, 23571
 periodical catalog, 23572
 subject catalog, 21892, 27655
 title catalog, 17647, 25367

Law enforcement—Continued

list of participating institutions, 21893
 pay tribute to law enforcement officers of United States, report, 26233
 research on street crime control, 31552
 ruminations and action on enforcement, SEC (address), 30627
 standards and measurement methods, legislation and enforcement problems, public hearings on noise abatement and control, 16030
 State and local government officers group life insurance program, provide, report, 17157
 volunteers in law enforcement programs, staff study, 17651
 Law Enforcement Assistance Administration:
 establishment, law, 32010
 future need, activities, etc. of Federal help in fighting crime, hearings, 26174
 LEAA news release, 18538
 LEAA newsletter, 18539
 Library book catalog—
 author catalog, 17646, 23571
 periodical catalog, 23572
 subject catalog, 21892
 title catalog, 17647, 25367
 list of participating institutions, 21893
 Law of Sea Conference, Special Representative of President and Chief of Delegation with rank of Ambassador, nomination of John R. Stevenson, report, 29953
 Law suits, *see* Actions at Law.
 Lawns, selecting fertilizers for lawns and gardens, 24130
 Lawrence, Mass.:
 area wage survey, 16229
 Merrimack-Shawsheen-Spicket Rivers, flood plain information, 25078
 Lawrence County Republican Committee, annual report, 22674
 Laws, *see* Codes of law—Labor laws—Law—also subjects.
 Lawson, Simpson F., above property rights, 24254
 Lawton, Okla.:
 flood plain information, Wolf Creek, 21459
 Wolf Creek floods, 21482
 Lawyers:
 Army lawyer (periodical), 18009
 attorney, estate tax, career with Internal Revenue Service, 16148
 attorneys and agents registered to practice before U.S. Patent Office, 29443
 attorneys' fees for property loss or damage sustained in transportation, hearing, 21255
 costs of legal services, joint labor-management trust funds to pay employees' share, hearings, 19761
 employer contributions to jointly administered trust funds established by labor organizations to defray costs of legal services—
 hearings, 28405
 reports, 28339, 29878, 32031
 Justice Department, Tax Division, opportunities for attorneys, 20485
 labor-management trust funds to defray costs of legal services, report, 28456
 legal careers, Chief Counsel's Office, IRS, 21819
 members of Armed Services who function as judge advocates and law specialists, additional compensation, authorization, hearing, 15871
 regulations governing practice before Internal Revenue Service, 17916
 SEC and bar have common task to assure integrity of securities markets (address), 30618
 Veterans Administration, Office of Chief Attorney, operating procedures, 16570
 VISTA lawyers practice law, 29597
 what about a career in labor law? 27665

Lawyers—Continued
work of Colorado lawyer with SEC (address), 29485
Lawyers for Young, political committee, annual report, 26038
Lay, C.M., interferometric techniques in dynamic error monitoring, 22507
Lay off policy, *see* Employment management.
Layman's guide to individual rights under United States Constitution, 15916
Layout, *see* Plants (industrial).
Lazarow, Arnold, diabetes, literature index, 18226, 23744
Lazarus, Steven, address, Jan. 16, 1973, 25032
Lazzara, Charles P., radical species profiles for methane-oxygen-argon flame, 30439
Lazzaroni, science and scientists in mid-nineteenth century America, 23843
LCC, *see* Life cycle costing.
Lea, Mildred V., current literature on venereal disease, 18195
Lea County Republican Central Committee, annual report, 22898
LEAA, *see* Law Enforcement Assistance Administration.
Leaching:
copper recovery from chalcopyrite by roast-leach procedure, 25516
extraction of manganese from Georgia umber ores, by sulfuric acid-ferrous sulfate process, cocurrent extraction and centrifuge tests, 21950
hydrologic relationship of Jefferson County landfill leachate and Meramec Heights area springs, Jefferson County, Mo., 28829
simulation in situ leaching of copper from porphyry ore, 29242
Lead:
air pollution aspects of emission sources, primary lead production, bibliography with abstracts, 30721
disposal from national stockpile, law, 16879
disseminated silver-lead-zinc sulfide occurrence at Hahns Peak, Routt County, Colo., 26493
economics of byproduct metals, 26649
effects of chemical variations in aquatic environments, lead toxicity to rainbow trout and testing application factor concept, 27449
industry, mineral industry survey, monthly, 18540
minerals yearbook chapter, 25451
occupational exposure to inorganic lead, criteria for recommended standard, 26737
performance of 40-millimeter-bore ball bearings with lead- and lead-alloy-plated retainers in liquid hydrogen at 1.2 million DN, 20612
prevention of tin-lead overhang in plated copper-clad printed wiring boards, final report, 26985
secondary lead smelters and refineries, background information for proposed new source performance standards, 29643, 30722
strength measurements on transistor header lead welds, 28065
survey of air and population lead levels in selected American communities, 31270
transmission of gamma rays through aluminum and laminated lead, aluminum slabs, 26991
working with lead in industry, 16384
see also Lead poisoning.
Lead paint poisoning in children, problem in your community? 31993
Lead, pesticides, man, and environment, 32531

Lead poisoning:
estimates of nature and extent of lead paint poisoning in United States, 20649
Flake and his secret plan, 28245
has your child had lead test yet? 28246
hazard elimination procedures for leaded paints in housing, 27734
Lead-based paint poisoning prevention act—
amend, reports, 28451, 32062
text, 24867
lead paint poisoning in children, problem in your community? 31993
lead paint poisoning, watch out for, Spanish edition, 25401
lead, pesticides, man, and environment, 32531
NBS lead paint poisoning project, housing and other aspects, 25557
old paint can poison your children (poster), 28248-249
parents, are your walls poisoning your children, 28250
preventing lead poisoning in children, 25943
working with lead in industry, 16384
Leadership:
deaf leadership training for community interaction manual for grassroots leadership, 22209A
executive, in public service, bibliography, 29576
group leadership guidelines, YOU-IN nursing program, 16126
leadership development and training for Head Start coordinators of nutrition and cook managers, 21072
leadership, vulnerability and promise (address), 28661
majority and minority leaders of Senate, print as Senate document, report, 31110
research on preparation of leadership personnel for vocational and technical education, review and synthesis, 17352
Leading edge, *see* Wings (aircraft).
Leading-edge serrations which reduce noise of low-speed rotors, 31645
Leadville, Colo., gravity and magnetic features as related to geology in Leadville 30-minute quadrangle, Colo., 23362
Leaf, Charles F.:
annual streamflow summaries from 4 subalpine watersheds in Colorado, 23276
computer simulation of snowmelt within Colorado subalpine watershed, 28966
hydrologic simulation model of Colorado subalpine forest, 32346
Leaf cast, controlling lophodermium needle-cast on Scotch pine Christmas trees, 32320
Leaflets, *see* names of departments, etc., issuing leaflets—*also* subjects.
Leak, William M., report of NRL progress, 18860
Leaks:
feasibility of plastic foam plugs for sealing leaking chemical containers, 31282
field repairs of EHIV bushing oil leaks, 25874
stability of and insulation leakage in high temperature resistance thermometers, investigation interim report, 27731
Learners, *see* Apprentices.
Learning:
about depressive illnesses, 22074
development of video system for rapid generation of learning sequences, 24148
education and learning, 10 years of progress, 29036
educational accountability and evaluation, 15996
getting ready to read, 28670
learning center evaluation—
measurement of students' attitudes toward undergraduate training learning centers, 28032

INDEX 1973

Learning—Continued

- teaching undergraduate pilot training academic course in learning center, 28033
- learning to learn program, Jacksonville, Fla., model programs, compensatory education, 17365
- malnutrition, learning, and intelligence, conference paper, 32534
- mental health and learning, when community, mental health centers and schools collaborate, 22075
- methodology in measurement of complex human performance, two-dimensional compensatory tracking, 19187
- model early childhood learning program, Baltimore, Md., 27775
- modular individualized learning for electronics training, MIL (series), 22179
- question-answering system for CAI computer assisted instruction, model driven, 28028
- reading and language development in first grade, 28671
- reading readiness, what parents should know about it, 28672
- reducing pressures in learning to read, 28675
- response factors and selective attention in learning from instructional materials, annotated bibliography, 22365
- vision, hearing, coordination, and health in reading, 28674
- Learning about environment, 32436
- Leary, Richard J., effects of direct reduction upon mineral supply requirements for iron and steel production, 29207
- Leary, Rolfe A., how to use 2 computational strategies to solve simple system, identification problems, 25212

Leases:

- Federal leasing and disposal policies governing management and development of energy resources on public lands, hearing, 28543
- final environmental statement—
 - FES 73-19, proposed 1973 Outer Continental Shelf, east Texas general oil and gas lease sale, 29176
 - for prototype oil-shale leasing program, 32388
 - public hearings during review, 31495
 - proposed 1972 Outer Continental Shelf oil and gas general lease sale, offshore eastern Louisiana, 23605
 - proposed 1973 Outer Continental Shelf, oil and gas general lease sale, offshore Mississippi, Alabama, and Florida, 31568
- Indian lands located outside Indian reservations in New Mexico, longer term—
 - law, 19371
 - report, 19851
- Mineral leasing act, amend—
 - hearings, 31026, 32083
 - report, 31000
- Leasure, William A., interior/exterior noise levels of over-the-road trucks, report of tests, 16363
- Leather goods, *see* Leather hides and skins.
- Leather, hides, and skins:
 - cattlehide, restrictions on exports, hearings, 19946
 - leather, methods of sampling and testing. Federal test method standard, 17486
 - sole leather, lining, and wetting leathers, former workers of Elkland Leather Co., Inc., Elkland, Pa., Tariff Commission report, 20832
- Leave of absence:
 - Government officials and employees, FPM supplement, 18339

Leave of absence—Continued

- members of Armed Forces who are in missing status to accumulate leave without limitation, authorize—
 - law, 19520
 - reports, 15688, 19927
- uniformed service members voluntarily extending tour of duty in hostile fire areas, special 30-day period of leave, extend authorization—
 - law, 19413
 - report, 19889
- Leavenworth, Kans.:
 - flood plain information, Five Mile Creek, 21448
 - floods, Five Mile Creek, 21464
- Leavenworth, Fort, 1823-80, special bibliography, 26968
- Leaves:
 - foliage plants, production and sales, etc., 26887
 - leaf mesophylls of 20 crops, their light spectra, and optical and geometrical parameters, 24146
 - segregation of foliage from chipped tree tops and limbs, 28936
 - see also* Defoliation.
- Lebanon:
 - air transport services, agreement, 26872
 - background notes, 27903
 - economic trends and their implications for United States, 23499
 - mineral industry, minerals yearbook chapter, 16269
 - narcoctic enforcement efforts by local government and American missions, report, 27229
 - selling in Lebanon, 16832
- Lebanon County, Republican County Committee, *see* Republican County Committee of Lebanon County.
- Lebanon, N.H., flood plain information, Connecticut, White Mascoma Rivers, 20115
- Lechtenberg, H. J., field study of viscous oil production by solvent stimulation, Wilmington, Calif., 21963
- Lectures, *see* Addresses, lectures, etc..
- Leeznar, William B., road to work, technical school training or directed duty assignment? 25842
- Lee, Howard N.:
 - Chapel Hill-Carrboro Lee for Congress committee, annual report, 22982
 - Franklin County Lee for Congress, annual report, 24601
 - Granville County Lee for Congress, annual report, 28286
- Lee, Jack, for Congress Committee, *see* Jack Lee for Congress Committee.
- Lee, John W., jr., tertiary treatment of combined domestic and industrial wastes, 30188
- Lee, Jong-Sen, optimal piecewise-constant control of dynamic systems with applications to Kalman filtering, 22166
- Lee, Lloyd A., additional sonic boom data related to tests conducted at White Sands, N. Mex., and Edwards Air Force Base, 24054
- Lee, Melba L., employment problems of women, classic example of discrimination, 28848
- Lee, Robert E., jr., cascade impactor network, 19149
- Lee, Robert P., artillery sound ranging computer simulations, 22412
- Lee, S. Young:
 - employment statistics of public television licensees, 30138
 - financial statistics of public television licensees, 30140
 - summary statistics of CPB qualified public radio stations, 31233
- Lee, T. G., smoke density chamber method for evaluating potential smoke generation of building materials, 22017

- Lee County, Miss., soil survey report, 27896
 Lee-surface heating and flow phenomena on space shuttle orbiters at large angles of attack and hypersonic speeds, 20621
 Leeches, see Annelids.
 Leeds, Alice A., psychopharmacology bulletin, 18828
 Leedy, Kathryn O., scanning electron microscope examination of wire bonds from high-reliability devices, 32483
 Leenheer, J. A., preparative free-flow electrophoresis as method of fractionation of natural organic materials, 27575
 LEEP (law enforcement education program), see Law enforcement.
 Leftovers (lecture), 29190
 Legacy of Alexander Orlov, 31148
 Legal and administrative measures for protecting environment, USSR study, 29139
 Legal compilation, statutes and legislative history, executive orders, regulations, guidelines and reports, solid waste, 32266
 Legal guide and case digest supplement, veterans' reemployment rights, 31894
 Legal guide for the soldier, 28047
 Legal procedures, see Law.
 Legal sanctioning and social control, 22069
 Legal Secretaries' Court Observance Week, National, see National Legal Secretaries' Court Observance Week.
 Legal services, see Law—Lawyers.
 Legal Services Corp., establish, report, 32030
 Legal Services Corporation, National, see National Legal Services Corporation.
 LeGear, Clara E., list of geographical atlases in Library of Congress, 29186
 Leggett, D. C., method for concentrating and determining trace organic compounds in atmosphere, 20104
 Legislation:
 consumer legislative monthly report, 18159
 legislation needed to simplify Federal funding of State employment security agencies' administrative expenses, GAO report, 30257
 legislative history of Noise control act, 17067
 92d Congress, 1st session, summary of major achievements, 17120
 recent educational policy and legislative development abroad, 26375, 30151
 see also labor law—Law—also subjects.
 Legislative appropriations, see Appropriations.
 Legislative bodies:
 Federal salary act, amend—
 hearing, 31034
 reports, 29973, 32060
 with respect to legislative salaries, hearing, 30066
 minimum age for membership in Legislature of Virgin Islands to be determined by Legislature, law, 16895
 Legislative history of Committee on Foreign Relations, 26241
 Legislative origins of Truman Doctrine, 30028
 Legislative reorganization act, see Congress of United States.
 Legislative review during 92d Congress by Senate Committee on Rules and Administration, 27271
 Legislative series, 22304
 Leighton, Hope I., solar-geophysical data (periodical), 18914
 Leissa, Arthur W., vibration of shells, 31617
 Leisure, career education for leisure occupations, curriculum guidelines for recreation, hospitality and tourism, 28654
 Leland, Trafford J. W., aircraft tire behavior during high-speed operations in soil, 16350
 LeMaistre, George A., nomination, hearing, 31136
 Lemhi Pass, quadrangle, geology and description of thorium-bearing veins, 29003
 Lemhi Tribe:
 judgment funds, successor Shoshone-Bannock Tribes of Fort Hall Reservation, disposition—
 law, 19377
 reports, 15710, 15832
 Lemnios, A. Z., analytical evaluation of controllable twist rotor performance and dynamic behavior, 15513
 Lemoore Naval Air Station, Calif., repayment to cover construction charges attributable to leased lands in Westland water district, law, 16888
 Lend-lease operations, settlement of lend lease, reciprocal aid and claims, agreement with Union of Soviet Socialist Republics, 22272
 Lending operations, see Loans.
 Length of stay of admissions to state and county mental hospitals, 1971, United States, 25592
 Length of stay of discharges from general hospital psychiatric inpatient units, 1970-71, United States, 23764
 Leningrad, Russian SFSR, development of Leningrad scientific research, USSR study, 17634
 Leningrad Scientific Research Institute of Hematology and Blood Transfusion, 40th anniversary, USSR study, 17604
 Lenses:
 impact-resistant eyeglass lenses, we want you to know what we know about, 21599
 lighting, Federal item identification guide, 15951
 method for determining resolving power of photographic lenses, 30472
 Lenski, J. W., Jr., test results report HLH/ATC compliant roller bearing development program, 24186
 Lentz, R. R., numerical study of electromagnetic scattering from ocean-like surfaces, 17697
 Leonard, B. F., gold anomaly in soil of West End Creek area, Yellow Pine District, Valley County, Idaho, 26496
 Leonard, Jerris, address, Nov. 17, 1972, 21887
 Leonard, Joseph T., reduction of electrostatic charge in jet fuels during refueler loading, 22165
 Leonard, Regis F., BEAMR, an interactive graphic computer program for design of charged-particle beam transport systems, 31640
 Leone, Oliver Q.:
 cleaning titanium alloy chips, 25496
 use of composite diaphragms in electro-winning of titanium, 16334
 Leopold, Aldo, Wilderness, see Aldo Leopold Wilderness.
 Lepidoptera:
 larvae of subfamily Hadeninae (Lepidoptera, Noctuidae) of America north of Mexico, review and reclassification, 16615
 type-material of North American clearwing moths (Lepidoptera:Sesliidae), 29492
 see also Moths—also Stenomidae.
 Lepper, C. Melvin, solid-state amplifier for bridge circuit of mercury detector, 17684
 LeProtti, Stan, motivation factor, LaSierra High School boys' physical education program, 31770
 Lerman, Robert I., income transfer programs, how they tax the poor, 21140
 Lerner, William:
 county and city data book, 1972, statistical abstract supplement—
 departmental edition, 30817
 document edition, 30951A
 Lescuré, William J., naval research reviews, 18680
 Lesotho:
 background notes, 16491
 basic data on economy, errata, 22631

INDEX 1973

LESP-RPT series, 23570, 30379
 Lessons from the Japanese (remarks), 28892
 Lessons to be learned, 20270
 Lessors, processing instructions for home mortgage insurance under sec. 240-purchase of fee simple title from lessors, 21784
 Lesueur County Republican Committee, annual report, 24510
 Letellier, J. P., parallel plate transmission line Pockels cell, 23879
 Let's cook fish, 31712
 Let's dump the dump, 17425
 Let's find a better way! mission 5000 eliminates dumps, 29515
 Letters:
 8c. post rider commemorative stamp, rise of spirit of independence series, 27959
 final environmental statement for prototype oil-shale leasing program, letters received during review process, 32388
 letter book of Arkansas Trading House, 1805-10, 25538
 letter from Morris K. Udall to Thaddeus J. Dulski, regarding report on growth of Executive Office of the President, 17076
 letters, diaries, and similar personal manuscripts, 24971
 see also Mail matter.
 Lettuce:
 illustrated guide to identification of some market disorders of head lettuce, 15476
 loads, ventilation of mechanical refrigerator cars to prevent carbon dioxide accumulation and brown stain, 27994
 nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
 Leukemia, progress against leukemia, research report, 26715
 Leuschner, William A., protecting aspen resource in Lake States, 21672
 LeVan, Herbert P., extraction of manganese from Georgia umber ores by sulfuric acid-ferrous sulfate process, cocurrent extraction and centrifuge tests, 21950
 Level of repairs, military standard, 25021, 28613
 Levell, John D., nomination, hearings, 19950
 Levine, Bernard B., remarks, Jan. 26, 1971, 29352
 Levine, Eugene, research on nurse staffing in hospitals, 31409
 Levine, Stanley R., oxidation at through-hole defects in fused slurry silicide coated columbium alloys kfs-85 and Cb-752, 31635
 Levinsky, E. S., analytical and experimental investigation of circulation control by means of turbulent Coanda jet, 17701
 Lewin, Joseph, may atom be worker not soldier, 28086
 Lewis, Colston A., nomination, hearing, 21374
 Lewis, Everett M., Jr., interaction of age and alcohol on dark adaptation time, 16840
 Lewis, John R., mineral industry of Malaysia, 16289
 Lewis, Mark F.:
 behavioral changes from chronic exposure to pesticides used in serial application, effects of phosdrin on performance of monkeys and pigeons on variable interval reinforcement schedules, 21034
 frequency of anti-collision observing responses by solo pilots as function of traffic density, ATC traffic warnings, and competing behavior, 30788
 Lewis, Richard W., phosphate rock, 25477
 Lewis, Trent R., toxicology of atmospheric sulfur dioxide decay products, 15497
 Lewis County Republican Committee, annual report, 24763
 Lewis, Fort, Washington, Army personnel center, proposed closure, hearing, 21204
 Lexington, Ky., area wage survey, 25380

Lexington/Rockbridge Republican Committee, *see* Rockbridge/Lexington Republican Committee.
 LF (low frequency), *see* Frequency band.
 Liability (law):
 convention on International liability for damage caused by space objects, consent of Congress, 17127
 guide to air shippers' rights, 27043
 see also Claims.
 Liaison teacher-returnee counselor project, Milwaukee, Wis., 16002
 Liberalization of disability and death pension, 19916, 31113
 Liberia:
 agricultural commodities, agreement, 17880
 background notes, 29522
 economic trends and their implication for United States, 26547
 Guinea boundary, study, 23996
 Liberia-Sierra Leone boundary, study, 22261
 mineral industry, minerals yearbook chapter, 16287, 29220
 selling in, 15614
 Liberty, assault on freedom, compendium of theoretical and policy statements by communist movement, 30048
 Liberty of the press:
 newsmen's privilege to protect confidential sources of news media, hearings, 19786
 testimonial privilege for newsmen, create, hearings, 28553
 Librarians:
 examination announcement, professional careers, 27053
 occupations in library science, 32417
 vacancy roster, Federal Government libraries, 18370
 Libraries:
 and the right to read, 28662
 automation and Federal library community, report on survey, 30398
 depository libraries, law governing and list, 26193
 depository libraries, list, 18641
 Environmental Protection Agency library system, user's guide, 20218
 Federal Government roster of libraries and vacancies, 18370
 Federal libraries, selected list of documents available through ERIC, 23607
 guidelines for library handbooks, 31569
 medical libraries, extend program for assistance, hearing, 21377
 National inventory of library statistics practices data collection and national, State, and local levels, 28668
 new serial titles—
 classed subject arrangement, 18699
 union list—
 alphabetical arrangement, 18700
 3d edition, 1971, cumulation, 27686
 occupations in library science, 32417
 provide copies of daily and semi-monthly Congressional record to libraries of certain U.S. courts, law, 16587
 Public Printer to designate library of highest appellate court in each State as depository library, authorize, law, 15643
 recommended books for military library, annotated bibliography, 26967, 26972
 review of Federal Library operations in metropolitan Washington, GAO report, 30262
 see also names of departments, etc.
 Library accessions:
 accession bulletin, solid waste information retrieval system, 17942
 Adjutant General's Office, Army Library, 18897
 Bangladesh, American Libraries Book Procurement Center, New Delhi, 27684, 32437
 Ceylon, American Libraries Book Procurement Center, New Delhi, 17943

Library accessions—Continued

- Eastern Africa, Library of Congress National Program for Acquisitions and Cataloging, Nairobi, Kenya, 17944
- Foreign Affairs Research Documentation Center, monthly list, 18377
- foreign publications accessions list, HUD, 23416, 29048
- foreign statistical publications, accessions list, 18385
- India, American Libraries Book Procurement Center, New Delhi, 17945
- cumulative list of serials, annual supplement, 21918
- Indonesia, Malaysia, Singapore and Brunei, Library of Congress National Program for Acquisitions and Cataloging, Jakarta, 17946
- Israel, American Libraries Book Procurement Center, Tel-Aviv, 17947
- Labor Department Library, 18598
- Middle East, American Libraries Book Procurement Center, Cairo, 17948
- Nepal, American Libraries Book Procurement Center, New Delhi, 17949, 29177
- Pakistan, American Libraries Book Procurement Center, Karachi, 17950, 29178
- Pakistan, American Libraries Book Procurement Centers, Karachi-Dacca, 21919
- Sri Lanka, American Libraries Book Procurement Center, New Delhi, 29179
- Library assistants, library technical assistant, suggested two-year post-high school curriculum, 31232
- Library Committee Federal, *see* Federal Library Committee.
- Library Joint Committee, committee print, 24885
- Library of Congress :
accessions—
 - Bangladesh, American Libraries Book Procurement Center, New Delhi, 27684, 32437
 - Ceylon, American Libraries Book Procurement Center, New Delhi, 17943
 - Eastern Africa, National Program for Acquisitions and Cataloging, Nairobi, Kenya, 17944
 - India, American Libraries Book Procurement Center, New Delhi, 17945
 - cumulative list of serials, annual supplement, 21918
 - Indonesia, Malaysia, Singapore and Brunei, National Program for Acquisitions and Cataloging, Djakarta, 17946
 - Israel, American Libraries Book Procurement Center, Tel-Aviv, 17947
 - Middle East, American Libraries Book Procurement Center, Cairo, 17948
 - Nepal, American Libraries Book Procurement Center, New Delhi, 17949, 29177
 - Pakistan, American Libraries Book Procurement Center, Karachi, 17950, 29178
 - Pakistan, quinquennial index, 1967-71, American Libraries Book Procurement Centers, Karachi-Dacca, 21919
 - Sri Lanka, American Libraries Book Procurement Center, New Delhi, 29179
- annual report—
 - departmental edition, 29180
 - document edition, 28297
- appropriations, 1973, legislative, law, 16873
- appropriations, 1974, legislative—
 - hearings, 31129
 - report, 29991
- calendar of events, 18043
- cataloging service bulletin, 18054

Library of Congress—Continued

- catalogs—
 - books, subjects, 18576, 29184
 - dictionary, subject headings used, supp., 18935
 - motion pictures and filmstrips, 18577
 - music and phonorecords, 23609
 - national union catalog, 18675
 - annual cumulation, 29187
- circulars, 27375, 31169
- classification—
 - additions and changes, quarterly list, 18535
 - class Q, science, 25386
 - facsimile series, 16240
 - geographical atlases, list, 29186
 - Government publications, non-GPO imprints received, 1971 list, 16241
 - information bulletin, 18578
 - Library of Congress publications in print, 1973, list, 29185
 - literary lectures presented at Library of Congress, 32439
 - Merrill Moore register of his papers, 20513
 - National Program for Acquisitions and Cataloging, accessions list—
 - Eastern Africa, 17944
 - Indonesia, Malaysia, Singapore and Brunei, 17946
 - Order Division automated system, 25388
 - PL 480 newsletter, 18579
 - Public law 480 project, accessions list—
 - Ceylon, 17943
 - India, 17945
 - India, cumulative list of serials, annual supplement, 21918
 - Israel, 17947
 - Middle East, 17948
 - Nepal, 17949, 29177
 - Pakistan, 17950, 21919
 - Pakistan, cumulative list of serials, annual supplement, 29178
 - Sri Lanka, 29179
 - publications, price list, 27870
 - quarterly journal, 18837
 - register of papers, Naval Historical Foundation Collection—
 - Bloch, Claude C., Julius A. Furer, John F. Shafroth, William H. Standley, 32438
 - Colby M. Chester, William F. Fullam, Samuel McGowan, Henry C. Mustin, 29182
 - special facilities for research in Library of Congress, 29189
 - summary account of Commission's part in planning of Library of Congress James Madison Memorial Building, 23510
- Library science, occupations, 32417
- Libya :
 - area handbook, 30754
 - economic trends and their implications for United States, 29092
 - gazetteer, official standard names, 31392
 - Libyan Arab Republic, foreign trade regulations, 25971
 - mineral industry, minerals yearbook chapter, 20565
- Libyan Arab Republic, *see* Libya.
- License plates, *see* Automobile license plates.
- Licenses :
 - abstracts of State day care licensing requirements, family day care homes and group day care homes, 30866
 - export licenses approved and reexports authorized, list, 18274
 - interim nuclear licensing report, 19613
 - licensing of personnel on certain vessels, hearing, 21325
 - patents, trademarks, and licensing in Japan, 24288
 - see also* classes of persons to whom, or subject for which, licenses are issued.
- Lichens, fine structure of cortex in lichen family Parmellaceae viewed with scanning-electron microscope, 25696

INDEX 1973

- Lichstein, Jacob H., visual field dependency in erect and supine positions, experimental investigation, 17715
- Licht, L., design, fabrication, and performance of foil journal bearings for Brayton rotating unit, 31604
- Lichtenstein, Lawrence M., remarks, Jan. 26, 1971, 29350
- Lick Creek, flood plain information, Marion County, Ind., 28711
- Licking County Republican Executive Committee, annual report, 22774
- Liebenow, Wilbur R., storage and treatment of combined sewer overflows, 17420
- Lieberman, Joel B., Bronx Sentencing Project of Vera Institute of Justice, experiment in use of short-form presentence, reports for adult misdemeanants, 21894
- Lieberman, M., oil pollution source identification, 25110
- Liechtenstein, *see* Switzerland.
- Lienhard, John H., extended hydrodynamic theory of peak and minimum pool boiling heat fluxes, 30451
- Liens, District of Columbia, lien for charges and expenses for household goods stored against depositor, provide, hearing, 15888
- Liesnoi Island, Project Sergius Narrows, summary of tests on Liesnoi Island, Alaska, 17377
- Life:
- life, pass it on, PAO series, 31298-301
 - lifetime and recent migration, 1970 census of population, 25909
 - pass it on, President's environmental merit awards program, 27477
 - quality of life concept, potential new tool for decision makers, symposium and anthology, 28836
 - unless you decide to quit, your problem isn't going to be smoking, your problem's going to be staying alive, 16798
- Life cycle costing:
- guide for system acquisitions, 28607
 - initial quality and life-cycle costs in military family housing, 31241
 - LCC series, 28607
 - Life expectancy of facilities, 28690
- Life insurance:
- digest of health and insurance plans, 1971 edition, 17669, 18227, 30394
 - Federal employees group insurance—annual report, 15601
 - FPM manual supplement, 18335
 - waiver of deduction for periods of erroneous removal or suspension—law, 19458
 - report, 19933
 - Federal employees' group life insurance program, Civil Service Commission evaluation, 29934
 - guaranteed renewable life, health and accident insurance contracts, authorize deduction for premiums, reports, 19924, 19938
 - insurance coverage for U.S. nationals employed by Federal Government, report, 16965
 - insurance operations, U.S. Government life insurance, 1973 regular dividend schedules, 22298
 - Public safety officers' group insurance act, report, 17157
 - public safety officers' group life insurance, authorize, report, 24904
 - review of veterans' insurance programs, hearings, 30070
 - servicemen's and veterans' life insurance, exemption from Federal and State inheritance or estate tax purposes, report, 15677
 - servicemen's group insurance—coverage for Ready Reserve, Retired Reserve and National Guard, report, 15675
 - Life insurance—Continued
 - servicemen's group insurance—continued
 - extend coverage for cadets and midshipmen, law, 15636
 - for reserve and national guard, hearings, 26184
 - U.S. national employed outside United States by Federal government, extend coverage, report, 28346
 - veterans' group life insurance, conversion from servicemen's group life insurance, provide—
 - hearings, 17105
 - report, 16950
 - Life insurance companies:
 - farm mortgage lending experience, 20090
 - timber loans by U.S. life insurance companies, 20321
 - Life on other planets, Soviet research on exobiology, USSR study, 21858
 - see also* Extraterrestrial life.
 - Life sciences, research contracts in life sciences, 26995
 - Life support systems:
 - medical supervision in pursuit of underwater sports, USSR study, 17612
 - visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29256
 - Life Underwriters Political Action Committee:
 - Florida, annual report, 24522
 - LUPAC—Wisconsin, annual report, 22939
 - Tennessee annual report, 24670
 - Virginia annual report, 24550
 - Lifeboatmen, safety practices for lifeboatmen, able seamen, and qualified members of engine department, manual, 27057
 - Lifetime and recent migration by educational attainment for United States, 29715
 - Lift (aerodynamics):
 - aerodynamic effects of five lift-ban pod arrangements on an unpowered V/STOL transport model, 29275
 - biaxial gyrostabilizer and superconducting spherical suspension, USSR study, 23548
 - low-speed aerodynamic characteristics of fuselage model with various arrangement of elongated lift jets on V/STOL model, 31633
 - low-speed wind tunnel investigation of semispan STOL jet transport wing body with upper-surface blown jet flap, 29272
 - noise tests of mixer nozzle-externally blown flap system, 29278
 - see also* Direct lift control.
 - Lifting:
 - design guide for load suspension points, slings and aircraft hard points, 16655
 - slinging and tiedown provisions for lifting and tying down military equipment, military standard, 15958
 - Light:
 - accuracy in spectrophotometry and luminescence measurements, conference proceedings, 29317
 - atmospheric transmission from 4 π light source to 2 π receiver, survey of studies, 22408
 - telescope catalog of ultraviolet stellar observations, 5068 objects measured by Smithsonian experiment aboard the Orbiting Astronomical Observatory (OAO-2), 27873
 - effect of salinity on optical extinction of sea ice, 31235
 - Investigation of optical print media, initial survey, 20966
 - spatial-temporal structure of light impulses in water, USSR study, 16207
 - Light air-cured tobacco market review, 29603
 - Light amplifiers, *see* Lasers.
 - Light lists, *see* Lights and Lighting.
 - Light traps, *see* Insect traps.
 - Light water, *see* Reactors (atomic).
 - Light water reactors, *see* Reactors (atomic).

- Lighters, *see* Mechanical lighters.
- Lightfoot, Jean H., multi-ethnic literature in high school, mental health tool, 30508
- Lighthouse Service:
master chief petty officer—
adjust pay, law, 19390
- Lighthouse Service, make pay comparable to basic pay of senior enlisted advisers of other Armed Forces, reports, 16961, 17188
- Lighthouses, historically famous lighthouses, 15609
- Lighting equipment, *see* Lights and lighting.
- Lighting fixtures, nonelectrical lighting fixtures, Federal item identification guide, 26329
- Lightle, Paul C.:
atropellis canker of pines, 32312
herbicides ineffective in controlling southwestern dwarf mistletoe, 32333
- Lightman, Joseph M., patents, trademarks, and licensing in Japan, 24288
- Lightning:
cloud-to-ground lightning versus radar reflectivity in Oklahoma thunderstorms, 23801
- lightning criteria relative to space shuttles, currents and electric field intensity in Florida lightning, 20593
- three-station lightning detection system, 20692
- Lightning arrestors, lightning arrestor-connector feasibility study, 26993
- Lights and lighting:
aircraft exterior lighting and marking for avoiding collisions, 20826
- Apollo experience report, crew station integration, lighting considerations, 30459
- Coast Guard list—
Atlantic and Gulf Coast and Antilles, 28222
Atlantic Coast, local, 24273
Great Lakes, 22617
Mississippi River system, 27056
Pacific Coast and Pacific Islands, 24274
- development of film techniques for runway lighting outage studies, 24026
- economy approach lighting aids, 31316
- flight test and evaluation of heliport lighting for IFR, 24055
- human engineering analysis of airport lighting control panels and proposal for new design, 24047
- Hydrographic Center, list—
Norway, Iceland and Arctic Ocean, 30124
Pacific Ocean, western, etc., 27418B
- illumination in atmosphere and on surface of Venus obtained by automatic interplanetary station Venera-8, USSR study, 31544
- interaction of age and alcohol on dark adaptation time, 16840
- lens, lighting, Federal item identification guide, 15951
- Lights, Federal item identification guide, 31187
- monetary value drivers place on comfort in night driving, 31322
- Naval Oceanographic Office, list—
British Isles English Channel and North Sea, 16439
Europe and Africa, etc., West coast, 22160
Greenland, North and South America, east coast, etc., 17790
- NAVSHIPS display illumination guide, introduction to light and color, 30597
- obstruction marking and lighting, 23211
- potential reflection problems when using NAS model 3d display in vertical position in air route traffic control centers, evaluation, 24039
- see also* Electric lamps—Electricity.
- Lignite, *see* Coal.
- Lignite tar, *see* Tar.
- Like-a-Fishhook Village, N. Dak., history, 20704
- Lilacs, growing lilacs, 30704
- Lilles, Kenneth J., continuous heavy liquid concentration of high-clay potash ores, 25501
- Lime, David W., large groups in boundary waters canoe area, their numbers, characteristics, and impact, 17515
- Lime:
color removal from kraft pulp mill effluents by massive lime treatment, 25109
- in 1971, mineral industry surveys, 21939
- Kraft effluent color characterization before and after stoichiometric lime treatment, 25113
- lime-cement combination stabilization, 30161
- lime retention in anthracite coal-breaker refuse, 25221
- mineral industry survey, monthly, 18580
- minerals yearbook chapter, 25452
- pilot plant demonstration of lime-biological treatment phosphorus removal method 32261
- production, sales, etc., 1972, mineral industry survey, 23646
- strength development and reaction products in lime-montmorillonite-water systems, 31325
- Limehouse J. Sidi, III, Limehouse for Congress, annual report, 24623
- Limehouse for Congress, annual report, 24623
- Limestone:
aggregate concrete mixtures with high water-cement ratios, laboratory investigation, 20174
- designing blast patterns using empirical formulas, comparison of calculated patterns with plans used in quarrying limestone and dolomite, with geologic considerations, 17679
- stratigraphy and ammonite fauna of Graneros shale and Greenhorn Limestone near Pueblo, Colo., 23360
- Strodes Creek member (upper Ordovician), new map unit in Lexington Himestone of north-central Kentucky, 23331
- study of fragmentation from bench blasting in limestone at reduced scale, 23654
- upper paleozoic Madera Group in Manzano Mountains, N. Mex., 25253
- Liming, *see* Lime.
- Limitation of debate, *see* Cloture.
- Limitations on information furnished by Copyright Office, 20020
- Limnology:
annotated bibliography of lake Ontario limnological and related studies, chemistry, 27453-455
- limnology of Yellowstone Reservoir and Big Horn River, 26398
- LINAC (linear electron accelerator), *see* Accelerators.
- Lincoln, J. Virginia, preliminary compilation of data for retrospective world interval, July 26-Aug. 14, 1972, report UAG, 21484
- Lincoln Back Country Wilderness in Montana, designate as wilderness area, proposal, law, 16899
- Lincoln Club of Orange County, annual report, 24353
- Lindane, economic impact of discontinuing farm use of lindane and BHC, 31216
- Lindell, Gary, R., changing market for hardwood plywood stock panels, 21669
- Linden, American basswood, American wood, description, etc., 25199
- Lindenmuth, A. W., predicting fire spread in Arizona's oak chaparral, 28963
- Lindsey, David A., sedimentary petrology and paleocurrents of Harebell Formation, Pinyon Conglomerate, and associated coarse clastic deposits, northwestern Wyoming, 21731

INDEX 1973

- Lindstedt, K. D., evaluation of treatment for urban wastewater reuse, 30177
- Line-of-sight microwave and tropospheric scatter communication systems, 20722
- Line spectra, *see* Spectral lines.
- Linear equations, *see* Equations.
- Linear programming:
forest-range environmental production analytical system (FREPAS), 22329
input-output analysis as predictive tool, 23124
- Linear systems, development and manufacture of linear induction motor propulsion system for tracked air cushion research vehicle, 21559
- Linens, urban business profile, industrial launderers and linen supply, 15976
- Liners, *see* Lining fabrics.
- Lines, *see* Electric lines.
- Lin-Fu, Jane S.:
preventing lead poisoning in children, 25943
sickle cell anemia, medical review, 16245
- Ling, Barbara A., social security beneficiaries in metropolitan areas, 31810
- Linguistics, *see* Language and languages.
- Lining fabrics, sole leather, lining, and welt-ing leathers, former workers of Elkland Leather Co., Inc., Elkland, Pa., Tariff Commission report, 20832
- Linings:
acoustic impedance of curved multilayered duct liners, 30458
evaluation of canal lining for salinity control in Grand Valley, 20193
- Link, Ernest G., soil survey of Fond du Lac County, Wis., 31819
- Link, Lewis E., jr.:
ability of laser profilometer system to evaluate unprepared landing site, analysis, 30166
ground truth requirements for remote sensor data, acquisition and analysis, 21478
- Link trainers, dynamic observation in T-37 undergraduate pilot training (UPT) Link trainers (T-4), 26950
- Linkletter, George O., soluble particulates in ice from site 2, 31236
- Linn Chapter of the Democratic Women's Activities of Iowa, annual report, 24730
- Lint, *see* Cotton.
- Linters, *see* Cotton.
- Lintz, Larry M., relationships between design characteristics of avionics subsystems and training cost, training difficulty, and job performance, 28031
- Lipoproteins:
dietary management of hyperlipoproteinemia, handbook for physicians and dietitians, 31688
distribution of α -tocopherol in human plasma lipoproteins, 28060
- Lippitt, Thomas, Lippitt for Congress, political committee annual report, 24723
- Lippitt for Congress, political committee, annual report, 24723
- Lipton, W. J., illustrated guide to identification of some market disorders of head lettuce, 15476
- Liquefied gases, *see* Gases—Liquefied petroleum gases.
- Liquefied petroleum gases, liquefied natural gas carriers, construction, hearings, 21270
- Liquid crystals:
electron paramagnetic resonance studies of—
alignment induced by magnetic fields in 2 smectic-A liquid crystals not exhibiting nematic phases, 21989
viscous nematic liquid crystal, evidence counter to second-order phase change, 21988
prospectus for development of liquid-crystal waveguides, 23885
- Liquid drops, *see* Drops.
- Liquid fuels:
fuels, liquid and solid Federal item identification guide, 31185
liquid fueling and dispensing facilities, 25651
primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effect, 29294
significance of flash point as indicator of flammability hazard of hydrocarbon fuels, 30593
- Liquid gas, *see* Gas.
- Liquid helium, *see* Helium.
- Liquid hydrogen, *see* Hydrogen.
- Liquid metals, *see* Metals.
- Liquid nitrogen, *see* Nitrogen.
- Liquid oxygen, *see* Oxygen.
- Liquid propellants, *see* Propellants.
- Liquid state spectral emissivities of titanium, vanadium, zirconium, molybdenum, and platinum in electron-beam furnace, 29233
- Liquid wastes, *see* Sewage.
- Liquids:
continuous heavy liquid concentration of high-clay potash ores, 25501
hydraulic jet flow of an ideal liquid and gas-liquid mixtures, USSR study, 16205
liquid and gas flow, pressure, temperature, humidity and mechanical motion measuring and controlling instruments, 24986
liquid chromatography of carbamate pesticides, 17422
liquid densities of oxygen, nitrogen, argon and parahydrogen, 25554
liquid flow and liquid level mechanical motion measuring instruments, Federal item identification guide, 23097
liquid-vapor equilibrium in binary systems of binary systems of He⁴ and He³ with nD₂ and nH₂, 22008
solid-liquid flow in noncircular pipes, 25502
some experiments on stirring of viscous liquids, 27735
thermophysical properties of parahydrogen from freezing liquid line to 5000 R for pressures to 10,000 PSIA, 17738, 26702
transport properties of gases and binary liquids near critical point, 20586
- Liquors:
devices other than stamps on containers to evidence tax payments, report, 19681
distilled spirits plants, Code of Federal regulations, 22300
laws, compilation, 22665
- List, Robert J., transport, deposition, and meteorological studies of nuclear debris in atmosphere, 30521
- Lister Hill National Center for Biomedical Communications, report to Congress, 27793
- Liston, Ronald A.:
effect of low visibility on performance of vehicle operators, 17375
observations of surface effect vehicle performance, 30159
- Lists, *see* names of departments, etc., issuing lists—also subjects of lists.
- Literacy, *see* Illiteracy.
- Literary lectures presented at Library of Congress, 32439
- Literature:
effects of helium on mechanics of respiration, with clinical correlations, literature review, 32444
indoor-outdoor air pollution relationships, literature review, 20947
literary lectures presented at Library of Congress, 32439
literature search series, 25609
multi-ethnic literature in high school, mental health tool, 30508
national assessment of literature, understanding imaginative language, report, national assessment of educational progress, 26368

Literature—Continued

- peninsular southeast Asia, bibliographic survey, Burma, Cambodia, Laos, Thailand, 29660
- reading and literature, national assessment of educational progress report, 27431
- recognizing literary works and characters, literature, national assessment of educational, progress report, 28664, 32196
- released exercises, 1970-71 assessment, national assessment of educational progress, 28665
- resin concrete, literature review, 20169
- resource list for drug abuse literature, 23666
- responding to literature, theme 2, literature, national assessment of educational progress report, 27432
- review of literature on endangered masked bobwhite, 22247
- solid waste management—
abstracts from literature, 20217
available information materials, 23201, 27496
- summary data, national assessment of educational progress, 30141
- survey of reading habits, theme 4, literature, national assessment of educational progress, report, 30142
- thermal degradation, thermal oxidation and thermal analysis of high polymers, 4, literature survey, 27417
- training evaluation and student achievement measurement, review of literature, 15485
- see also Medical literature.
- Lithium:
beryllium and beryllium-lithium complexes in single-crystal silicon, study, 21990
- economics of byproduct metals, 26649
- effect of aging at 1040° C (1900°F) on ductility and structure of tantalum alloy, T-111, 20615
- in situ Ge(Li) and NaI(Tl) gamma-ray spectrometry, 22474
- in surficial materials of conterminous U.S. and partial data on cadmium, 23334
- magnetic ordering in lithium-transition metal oxides with ordered rocksalt structures, 20971
- Lithium chloride, thermodynamics of molten mixtures of lithium chloride-potassium chloride at 640° C, 22407
- Lithofacies, hydrologic significance of lithofacies of Cane River Formation or equivalents of Ark., La., Miss., and Tex., 27565
- Lithology, see Rocks.
- Litigation, see Actions at law.
- Litter production by oak-mountainmahogany chaparral in central Arizona, 17518
- Litterbags, evaluation of their use, 20301
- Little Belt Mountains, Mont., Barker quadrangle, igneous rocks and related mineral deposits, 30279
- Little Buck Creek, flood plain information, Marion County, Ind., 28711
- Little Cottonwood Creek:
watershed, acquire, authorize—
hearing, 21350
report, 17167
- Little Eagle Creek:
flood plain information, Marion County, Ind., 28712
- floods, Marion County, Ind., how to avoid damage, 28742
- Little Falls, Minn., appraisal of ground water for irrigation in Little Falls, area, Morrison County, Minn., 25262
- Little Goose Lock and Dam, fish passage report, 20100, 28683
- Little Labette Creek, special flood hazard information, Parsons, Kans., 28775
- Little Mulberry Creek, flood plain information, 21451
- Little Piny Creek, Newburg, Mo., special flood hazard information report, 16014
- Little progress by Department of Defense in acting on opportunities for significant savings by consolidating real-property-maintenance organizations, 21695
- Little rebellion, now and then, 25216
- Little River:
flood plain information, 20121
inlet, North Carolina and South Carolina, engineers report—
departmental edition, 20157
document edition, 19564
- Little River County, Ark., water resources of Hempstead, Lafayette, Little River, Miller, and Nevada Counties, Ark., 30285
- Little Rock, Ark.:
area wage survey, 20504
Arkansas River and tributaries, flood plain information, 16007
- Little Sioux River, fire weather and behavior of Little Sioux fire, 16084
- Little Walnut Creek, flood plain information, Austin, Tex., 28698
- Live stock, see Livestock.
- Live virus influenza vaccine discoveries, 15756
- Livestock:
aerobic treatment of livestock wastes, 20216
computer processing of sales data on livestock auction market, 24134
cost of marketing U.S. livestock through dealers and public agencies, 27997
cost of operating trucks for livestock transportation, 22337
demonstration of waste disposal system for livestock wastes, 28824
economic implications of water pollution abatement in family farm livestock production, 21418
foreign agriculture circulars, 18380
Forest Service comments on resolutions relating to National Forest System as adopted in 1971-72 by American National Cattlemen's Association, National Wool Growers Association and State livestock associations, 25210
health requirements and regulations governing interstate and international movement, State-Federal, 29655
insuring crop and livestock losses caused by restricted pesticide use, appraisal, 27422
livestock and meat situation, 18589
livestock and meat statistics, 29634
livestock, poultry, livestock and poultry products, 1969 census of agriculture, 29689
livestock research, agreement with Bahamas, 27921
livestock waste management, bibliography, 21499
- market news—
service on livestock, meat and wool, 29624
weekly summary and statistics, 18590
meat and poultry inspection regulations, 29656
- meat animals—
farm production, etc., 27937
revised estimates, 1965-69, farm production, etc., 24141
national animal feedlot wastes research program, 25116
Packers and stockyards act, fair play in marketplace, 19124
publications sold by Superintendent of Documents, price list, 25673
- slaughter—
commercial slaughter, meat and lard production, etc., 26888
monthly report, 18591
see also Cattle.—Food for livestock.
- Living arrangements of college students, 24236
- Living conditions, see Cost and standard of living.

INDEX 1973

Livingood, John M., National Institute of Mental Health Task Force on Homosexuality, final report and background papers, 22077

Livingston County, Ky., forest inventory statistics, 24079

Livingston County Republican Committee, annual report, 22788

Llano Estacado :
 drillers' logs in lithologic studies of Ogallala Formation of Southern High Plains of Texas, evaluation of use, 23339

High Plains precipitation enhancement project, preliminary planning document, 30201

research, 30202

LMFBR (Liquid metal fast breeder reactor), see Reactors (atomic).

Load (aerodynamics) :
 rotorcraft external-load operations, Federal aviation regulations, 23209

Load (mechanics) :
 airfoil dynamic stall and its influence on helicopter control loads, 20991

Apollo experience report, development of design-loads criteria, etc., for prelaunch, lift-off, and midboost conditions, 31646

computer simulation of slamming and other wave-induced vibratory structural loadings on ships in waves, further studies, 22220

damping capacity of soil during dynamic loading, review of laboratory methods of determining damping, 28781

design guide for load suspension points, slings, and aircraft hard points, 16655

effect of deformed shanks, preholed lead holes and grain orientation on elastic bearing constant for laterally loaded nail joints, 27533

experimental investigation of a $4\frac{1}{2}$ -stage turbine with very high stage loading factor, turbine design, 23670

external loads and aircraft strength, 31657

fatigue crack growth from circular hole with and without high prior loading, 17717

friction losses in a lubricated thrust-loaded cageless angular-contact bearing, 31643

full scale test on two-story house subjected to lateral load, 25549

helicopter-load/tension-member study, 22436

loading conditions imposed by ground turning maneuvers with 3 jet transport airplanes, 23690

main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20585

maneuver and buffet characteristics of fighter aircraft, 31625

maximization and minimization of dynamic load factors, 27853

PERFORM, performance optimizing computer program for dynamic systems subject to transient loadings, 30450

responses of prototype flexible pavements subjected to repetitive and static loads, 31321

rotorcraft external-load operations, Federal aviation regulations, 18298

soil failure under inclined loads, 21438

tensor manipulations in complex coordinates with applications to mechanics of materials, 30592

Load lines :
 international convention, amendments, 31049

International voyage load line act, report, 32107

U.S. and foreign vessels, hearings, 32087

Loading, see Load (mechanics)—Unloading and lading.

Loan companies, see Finance companies.

Loans :

air carriers, Government guarantees, hearing, 19777

analysis of emerging cooperatives, 1965-70 financed by Farmers Home Administration, 20235

applications, program reservations and preliminary loans handbook, 23446

audit guide for public facility loans program for use by independent public accountants, 25284

authorize aircraft loan guarantees—
 hearing, 15880

law, 21131

report, 15848, 19653

bank lending practices, 1972 changes, 32290

buying a home? don't forget those closing costs, 23414

certain railroads for emergency rail facilities restoration of wreckage caused by natural disaster of June 1972—
 law, 19516

report, 19713, 19860

commercial and industrial, outstanding by industry, 18136

cooperative housing supplementary loan, 29067

dealers and contractor guide to property improvement loans, 27583

economic opportunity loan program, Small Business Administration, 27877

emergency loan program, source of funds for farmers and ranchers in disaster areas, reports, 26073, 26077, 27134

essential railroad facilities, restore or replace, authorize, hearing, 19953

Farmers Home Administration emergency loan program, report, 24906

FHA emergency loan program, restore, 24838

guaranteed student loan program, interest subsidy provisions, delay effectiveness, hearings, 27199

guide for repayment, deferment, and cancellation of health profession student loans, 23407

implementation of Emergency loan guarantee act, GAO report, 21694, 31380

improved management information system needed for Eximbank's capital loan program, GAO report, 23320

independent public accountant audits public facility loans program, 25284

Indian revolving loan fund—
 provide for financing economic development of Indians and Indian organizations, hearing, 31144

providing for financing economic development of Indians and Indian organizations, and for other purposes, report, 16978

interest charged on loans by credit unions and other lenders, 29338

minimum property requirements for proposed construction in housing credit shortage areas, 29583

opportunities to reduce costs in acquiring properties resulting from defaults on home loans, GAO report, 20335

peanut loan and purchase program, 1973, proposed changes—
 hearings, 28383

report, 28331

PCA borrowers 1971, their characteristics, their loans, 32275

profile of largest borrowers in 442 PCAs, 1971 sample survey, 32276

profiles of new PCA borrowers, 1971 sample survey, 32277

property improvement loan insurance, FHA regulations, 25146

property improvement loan, title, operating handbook, 31429

REA loan program, hearings, 27175

reduce interest rate on Small Business Administration disaster loans, law, 16893

relending programs could be made more effective in promoting U.S. exports, GAO report, 23325

- Loans—Continued
 repayment, deferment and cancellation of nursing student loans, guide, 25266
 rural credit program, nonfarm enterprises to supplement farm income, 30711
 rural electric and telephone direct loan programs—
 law, 30908
 restore, reports, 26134, 26210
 rural rental housing, rural credit program, 29633
 sec. 203(k), loan insurance for major home improvements, etc., 23430
 Small Business Administration, raise loan ceilings, reports, 30998, 31006, 31108
 State and local borrowing anticipations and realizations, 28903
 student loan insurance fund, 1971 and 1972, financial statements, GAO examination, 30956
 student loan program, effectiveness of amendments, delay law, 19361
 students, guaranteed loans, 1973, hearings, 31154
 supplemental loans for project mortgage insurance, HUD, 29069
 timber loans by U.S. life insurance companies, 20321
 title 1 collection handbook, fiscal policy, 23436
 veterans guaranty programs—
 amend Servicemen's readjustment act, report, 30992
 flexible GI interest rate authority in VA, report, 30992
 veterans home-buying guide, 27966
see also Agricultural credit—Banks and banking—Mortgage insurance—Mortgages.
 Lobbying, testimony on legislative activities by certain tax-exempt organizations, at public hearings, summary, 17115
 Loblolly pine, *see* Pine.
 Lobsters, inshore lobster fishing, 23794
 Local government, *see* Government.
 Local service air carriers' unit cost, 22574
 Local transit:
 bus systems acquisition by WMATA in National Capital area—
 law, 19447
 report, 19911
 bus system acquisitions in National Capitol area by WMATA, legislative history of bill, 23056
 construction of transit line to Dulles Airport, hearing, 19952
 Federal payment for additional rapid transit facilities for DC metropolitan area hearing, 15886
 planning of transit line to Dulles Airport, report, 19859
 transit lines to Dulles and Friendship Airports from D.C. metropolitan center, Federal payment for planning, authorize, report, 32103
 union wages and hours, local-transit operating employees, 31562
 urban mass transportation abstracts, 25799
 Urban mass transportation assistance act, financial assistance for operating expenses, hearings, 28402
 Local Union 364 Voter Education and Political Fund, annual report, 24797
 Localizers:
 category 3 ILS ground guidance equipment STAN-37 localizer tests at NAFEC on R/W-4, interim report, test and evaluation, 24033
 localization of wave transformation region in superhigh-frequency discharge plasma, study, 21006
 Locarno, Switzerland, agreement, establishing international classification for industrial designs, 17895
 Locating uncharted oil and gas wells, state-of-the-art, 25514
 Location identifiers, airport, etc., handbook, 18594
 Locke, Jerry, Kongsberg, Norway, high-gain, long-period seismograph station installation report, 23804
 Lockeford Plant Materials Center, plant materials highlights, 23981
 Lockette, Emory W., economic data, equal employment, opportunity program, state of Arizona, 17816
 Lockheed Aircraft Corporation:
 audit of payments from special bank account to Lockheed Aircraft Corporation, for C-5 aircraft program during quarter ended Sept. 30, 1972, GAO report, 21689
 audit of programs from special bank account to Lockheed Aircraft Corporation for C-5A aircraft program during quarter ended June 30, 1973, GAO report, 31378
 Implementation of Emergency loan guarantee act, GAO report, 21694, 31380
 Locks (hydraulic engineering), *see* names of locks
 Locks and keys, Federal item identification guide, 21406
 Lockwood, J. P., mineral resource evaluation of U.S. Forest Service Sierra Demonstration Project area, Sierra National Forest, Calif., 20354
 Locomotion, effects of copper on locomotor orientation of fish, 28794
 Locomotives, exhaust emissions from diesel locomotives, pollution problems, progress report, 26734
 Lode mining, *see* Gold.
 Lodgepole needle miner:
 biology, ecology, and control of lodgepole needle miner, 25837
 forest-site relationships within outbreak of lodgepole needle miner in central Oregon, 28962
 ponderosa pine needle miner in Colorado front range, 28943
 Lodgepole pine, *see* Pine.
 Lodi Branch, flood plain information, Floresville, Tex., 28696
 Loehner, Raymond C.:
 development and demonstration of nutrient removal from animal wastes, 23188
 pollution implications of animal wastes, forward oriented review, 30200
 Lof, George O. C., concentration of brines by spray evaporation, 16140
 Lofquist, William S., printing and publishing, quarterly industry, report, 18818
 Log books, drillers' logs in lithologic studies of Ogallala Formation of Southern High Plains of Texas, evaluation of use, 23339
 Log Cabins, protecting log cabins, rustic work, and unseasoned wood from injurious insects in Eastern U.S., 24127
 Logan River:
 flood plain information, Logan River, Logan, Utah, 31252
 floods, Logan River, Utah, 32231
 Logan, Utah:
 flood plain information, Logan River, Logan, Utah, 31252
 floods, Logan River, Utah, 32231
 Logging, *see* Lumbering.
 Logging residue, volume and characteristics, 31375
 Logging roads, *see* Roads and highways.
 Logic, *see* Reasoning.
 Logic (symbolic and mathematical):
 logic and memory devices with magnetic crystals, USSR study, 30333
 Logistics:
 Army logistician (periodical), 18010
 integrated logistics support, implementation guide for DoD systems and equipments, 16651

INDEX 1973

Logistics—Continued

logistics aspects of Vietnamization, 1969-72, Defense Dept., GAO report, 25241
use of simulation models pertaining to best mix of aircraft, support personnel, spare parts, and level of repair, 30730
see also Military art and science—Naval art and science.

Logs:

estimating force and power requirements for crosscut shearing of roundwood, 16082
export restrictions, hearings, 28520-521
grading sugar pine saw logs in trees, 20312
green lumber grade yields for subfactory class hardwood logs, 27537
guide to hardwood log grading, 28924
influence of log handling on water quality, 25108
log production in Washington and Oregon, historical perspective, 23311
method of estimating log weights, 20318
plant quarantine import requirements of foreign countries, 30738
relationship of log production in Oregon and Washington to economic conditions, 28963
sawlogs sizes, comparison in two Appalachian areas, 32323
softwood log and lumber export restrictions, report, 28490

Lomax, Harvard, on numerical simulation of three-dimensional transonic flow with application to C-141 wing, 31624

Lombardi, Raymond B., selling in Netherlands, 16835

LOMO VK-1/2 type small video tape recorder, 30336

Lone Peak Wilderness area:
designate, hearing, 21346
establish within Wasatch and Uinta National Forests, Utah, report, 17170

Lone Star Gas Company, Fort Worth, Tex., pipeline accident report, 30568

Loneragan, Bobbie D., education directory, 1971-72, education associations, 15989

Long, Robert W., nomination, hearings, 26249

Long Beach, Calif.:
area wage survey, 16224, 26628
census of housing, 1970, components of inventory change, 28104

Long Creek Research Natural Area, general information, 21626

Long Island R.R.:
accident investigation, summary report, 20750

emergency board reports, investigate dispute between Long Island Rail Road Company and certain of its employees, represented by Non-Operating Employees Conference Committee, 21434

Long Island Sound, energy, environment, and planning in region, proceedings of conference held at Brookhaven National Laboratory, 28070

Long range aid to navigation, *see* Loran.

Long range needs of aviation, report of Aviation Advisory Commission, Jan. 1973, 30784

Long-term institutional care and alternative solutions, 23626

Long-term resistance to terrestrial fungi and termites, 31753

Longfellow National Historic Site:
establish in Cambridge, Mass.—
law, 19498
report, 19644

Longitudinal aerodynamic parameters of Kestrel aircraft (XV-6A) extracted from flight data, 29295

Longitudinal health survey, 31579

Longleaf pine, *see* Pine.

Longobardi, John A., expandable main rotor blade study, 28055

Longshoremen:

Longshoremen's and harbor workers' compensation act amend—
law, 19501
reports, 17158, 19639
amendments, 21372
bill texts, etc., 17284
hearings, 21217
maritime manpower report, seafaring, longshore and shipyard employment, 16243

Longshoring, *see* Longshoremen.

Longtime testing of sugarcane varieties in southern Florida, 20885

A look at business in 1990, 24107

Look at business in 1990 (address), 28233
Look at it this way, it's a cutting machine, we want to know what we know about power mower safety (poster), 21594

Look to future of Soviet public health, 25360

Lookingglass River, flood plain information, 23166

Loomis, Phillip A., jr., nomination, hearing, 26257

Looms, broadwoven goods, summary of looms in place, current industrial reports, 16757

Looney Creek, flood plain information, 21453

Loops, loop-frequency as related to plant cover, herbage production and plant density, 23304

Loose-housing for dairy cows, farm building plan, 19115

Lopez Canyon National Wilderness Area, designate, hearing, 15911

Lorain County Democratic Central Committee, annual report, 22978

Loran:

Clark congressional delegation regarding its inspection of Coast Guard Loran A and C stations in Southeast Asia, 17073

ferrite rod antenna arrays for Loran-C receivers, 20967

impedance maps to predict effect of irregular, inhomogeneous ground of Loran C/D radio navigation systems, 27064, 31959

Loran C, navigation and timing, 22003

measurements of Loran-C skywave stability, 28236

on the prediction of Loran-D, 19305

Lorenz ratios of technically important metals and alloys, 26706

Los Alamos County, Republican Party, *see* Republican Party of Los Alamos County.

Los Angeles, Calif.:
area wage survey, 16224, 26628

census of housing, 1970, components of inventory change, 28104

social and health indicators system, census use study, 29722

wholesale food distribution facilities, 20911

Los Angeles County, Republican Central Committee, *see* Republican Central Committee of Los Angeles County.

Los Angeles International Airport, monthly climatological charts of behavior of fog and low stratus, 30537

Los Feliz Republican Women's Club, Federated, annual report, 24796

Los Gatos Republican Women, Federated, annual report, 24664

Losses from operating a business, 26542

Lost in the crowd? typists and stenographers, go Government, 22607

Lostwood National Wildlife Refuge, addition of part to National Wilderness Preservation System as Lostwood Wilderness, proposal, 23000

Lott, James:

polymer concrete-reinforced concrete composite beams, 30162

polymerized lightweight structural elements, 30160

Lott, Trent, for Congress Committee, *see* Trent Lott for Congress Committee.

- Lotteries, State conducted lotteries, report, 16962
- Loucks, Daniel P., selected annotated bibliography on analysis of water resource systems, 25300
- Loudness, *see* Sound.
- Loudspeakers:
- loudspeakers workers of Chicago, Ill., plant of Jensen Manufacturing Division, Peoria, Ill., Tariff Commission report, 20831
 - radios, radio-phonographs, and loudspeaker systems, workers of Milroy, Pa., plant of Fisher Electronics Inc., subsidiary of Emerson Electric Co., Tariff Commission report, 26899
 - solid-state radio receivers, radio-phonograph combinations, loudspeakers, and amplifiers, workers of H. H. Scott, Inc., Tariff Commission report, 27948
- Loughlin, Richard M., basic data on economy of Arab Republic of Egypt, 21105
- Louisiana:
- census of housing, 1970, housing characteristics for States, cities, and counties, 15546
 - climatological data, 18088
 - county business patterns, 30822
 - criminal justice agencies, 20482
 - electric rate book, 17458
 - fate and effect of Shell oil spill, Platform B, Block 26, South Timbalier Bay, studies and investigations, final report, 17930
 - final environmental statement, proposed 1972 Outer Continental Shelf oil and gas general lease sale, offshore eastern Louisiana, 23605
 - hydrologic significance of lithofacies of Cane River formation or equivalents, 27655
 - income limits for rent supplement housing, 23445
 - internal revenue assessment lists for Louisiana, 1863-66, microfilm pamphlet describing, 20620
 - landings, fish and shellfish, 18600
 - mineral industry, minerals yearbook chapter, 16288
 - 1970 census of population, characteristics of population, 28113
 - parishes, estimates of population, 22561
 - precipitation data, hourly, 18439
 - truck inventory and use survey, 28139
 - Venezuelan equine encephalomyelitis, national emergency, vector control program, 22398
- Louisville, Ky., area wage survey, 26627
- Love, Cuthbert M.:
- EASTROPAC atlas—
 - biological and nutrient chemistry data, etc., 29373
 - physical oceanographic and meteorological data from principal participating ships, 2d survey cruise, Aug.-Sept. 1967, 23782
- Love, J. D., Harebell formation (Upper Cretaceous) and Pinyon conglomerate (uppermost Cretaceous and Paleocene), northwestern Wyoming, 27568
- Love, Robert, carcinogenesis abstracts, 18051
- Loveland, R. B., differential magnetic measurements near cumulus clouds, 22421
- Loveland, Colo., Big Thompson River, flood plain information, 16008
- Lovering, T. G., United States, its characteristics, origin, and economic significance, 21727
- Low-cost inertial smoothing system for landing approach guidance, 29289
- Low energy electron impact rate coefficients for some atmospheric species, 16452
- Low-flow characteristics of streams in Puget Sound region, Wash., 32361
- Low flows and temperatures of streams in Seattle-Tacoma urban complex and adjacent areas, Wash., 25249
- Low frequency, *see* Frequency band.
- Low NO_x emission combustor for automobile gas turbine engines, 31922
- Low-rent housing, *see* Housing—Rent.
- Low-speed aerodynamic characteristics of fuselage model with various arrangements of elongated lift jets, 31633
- Low temperature thermometry, interim, report, 27732
- Low water volume enzyme deactivation of vegetables before preservation, 31278
- Lowder, Wayne M., environmental gamma radiation from ¹⁶N decay in turbines of large boiling water reactor, 25877
- Lowe, Jayne, what every employer needs to know about Occupational safety and health act recordkeeping, 17672, 26616
- Lowell, Carl E., cyclic and isothermal oxidation behavior at 1100° and 1200° C of nickel-20-percent-chromium, nickel-20-percent-chromium-3-percent-manganese, nickel-20-percent-chromium-3 percent-silicon, and nickel-40-percent-chromium alloys, 29288
- Lowellville, Ohio, flood plain information, Mahoning River, Mahoning County, Ohio, 23713
- Lowenstein, Allard K., Lowenstein for Congress Committee, annual report, 24552
- Lowenstein for Congress Committee, annual report, 24552
- Lowenstein, James G., Vietnam, May 1972, 17259
- Lowenthal, Marvin J., accuracy of ballistic density departure tables, 1934-72, 22409
- Lower Cape, Women's Republican Club, *see* Women's Republican Club of the Lower Cape.
- Lower Kitanning coalbed, Cambria County, Pa., geologic factors causing roof instability and methane emission problems, 30440
- Lower Merion-Narberth, Republican Committee, *see* Republican Committee of Lower Merion-Narberth.
- Lower Monumental Dam, fish passage report, 20100, 28683
- Lower Platte River, annual operating plan, for federally owned reservoirs in Lower Platte River basin, 29457
- Lower River Rouge, flood plain information, 23167
- Lower St. Vrain Creek, *see* St. Vrain Creek.
- Lower Town Creek, special flood hazard information report, 17407
- Lowery, Tamara C., teacher's manual for your chance to live, 26299
- Lowry, Tom, for Congress, *see* Tom Lowry for Congress.
- Lowson, M. V., source mechanisms for rotor noise radiation, 32454
- Loyalty:
- Federal civilian employees loyalty program—
 - committee print, 21252
 - report, 26066
 - print additional copies, report, 31088
- Lozar, Charles C., methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall at Chantute AFB, 32201
- Lozovov, George V., navigator, 18684
- L.P., *see* Liquefied petroleum gas.
- LSC, *see* Lake Survey Center.
- LSD, *see* Lysergic acid diethylamide.
- Luhar, Sheldon B., nomination, hearing, 31136
- Lubbock, Tex., area wage survey, 30387
- Lubinski, Frank E., Citizens for Lubinski for Congress, annual report, 24675
- Lubricants:
- dynamic friction and wear of solid film lubricant during radiation exposure in nuclear reactor, 20604
 - nucleonic sensor for detecting metal in recirculating lubricating oil systems, 20989

Lubricants—Continued

sales of lubricating and industrial oils and greases, current industrial report, 16776

Lubricating oils, *see* Lubricants.

Lubrication:

fittings, Federal Item Identification guide, 15952, 26326

friction losses in a lubricated thrust-loaded cageless angular-contact bearing, 31643

Lucas, Alfred M., avian anatomy, integument, 24123

Lucas, Edwin L., long length cutting from no. 2 common hardwood lumber, 25229

Lucas, William H.:
bathymetric and magnetic data from northeast Pacific 40° to 58°N., 125° to 16°W., 29391

Juan de Fuca Ridge and Sovanco Fracture Zone RP-5-OC-71, 17775

Luckew, Richard S., use of simulation models pertaining to best mix of aircraft, support personnel, space parts, and level of repair, 30730

Ludwig, A. H., water resources of Hempstead, Lafayette, Little River, Miller, and Nevada Counties, Ark., 30285

Luers, James K.:
effect of shear on aircraft landing, 31612
model of wind shear and turbulence in surface boundary layer, 31613

Lueschow, Lloyd A., evaluation of DDT and dieldrin in Lake Michigan, 17414

LUIN, code for calculation of cosmic ray propagation in atmosphere, 29675

Lujan, Manuel, jr., for Congress, *see* Manuel Lujan, jr. for Congress.

Lukas, J. S., arousal from sleep by noises from aircraft with and without acoustically treated nacelles, 32457

Lukens, H. R., instruction manual for oil slick identification by trace element patterns measured with neutron activation analysis, 15518

Lumber:

calendar for air-drying lumber in upper Midwest, 23283

compression wood formation and other characteristics of plantation-grown *Pinus caribae*, 28955

dimension yields from alder lumber, 21666

evaluation of adhesive-bond quality in telephone crossarms after 16 to 23 years of exterior exposure, 21667

flows of mill residues to pulp and board manufacturers, Washington, Oregon, and California, 20322

green lumber grade yields for subfactory class hardwood logs, 27537

increasing your lumber recovery, saw-mill improvement program, 32315

long length cuttings from no 2 common hardwood lumber, 25229

lumber recovery from Douglas-fir thinnings at bandmill and 2 chipping centers, 20311

lumber yield from Sitka spruce in south-eastern Alaska, 20314

noise generated by impingement of jet upon large flat board, 23684

plant quarantine import requirements of foreign countries, 30738

price of lumber and plywood, Banking and Currency Committee, investigation and study, authorize, report, 15692

production and mill stocks, current industrial reports, 16767

roll laminating fiber overlays on low-grade ponderosa pine lumber, 23307

shortages and rising prices of softwood lumber, hearings, 27309

see also Logs.

Lumbering:

accelerated roadbuilding on North Umpqua, economic analysis, 20317

Lumbering—Continued

average yarding distance on irregular-shaped timber harvest settings, 21658

factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length aspen, 32321

logging residue, volume and characteristics, 31375

measurement of logging residue, alternative applications of line intersect method, 21662

natural reforestation after logging on Afognak Island, 20299

road and landing criteria for mobile-crane yarding systems, 26471

soil surface conditions following balloon logging, 20300

Lumbermen, publications of interest to, list, 31356

Luminescence:

evaluation of CaSO_4 : Dy and CaSO_4 : Tm TLD for measurement of small gamma-ray exposures, 25876

identification of polychlorinated biphenyls in presence of DDT-type compounds, 20186

investigation of thermoluminescent dosimeters for environmental monitoring, 22477

see Light.

Lunar:

Note.—For other subject beginning Lunar, *see* Moon.

Lunar landings:

Apollo experience report, evolution of rendezvous-maneuver plan for lunar-landing missions, 31654

commemorative medals, authorize, hearings, 28396

Lunar modules, *see* Spacecraft modules.

Lunar orbiter, *see* Spacecraft.

Lunar surface, *see* Lunar topography.

Lunar topography, crystallization history of lunar feldspathic basalt 14310, 29029

Lunar trajectories, *see* Trajectories.

Lunches, *see* School lunches.

Lundlen, J. R., determining presence, thickness, and electrical properties of stratified media using swept-frequency radar, 23181

Lundquist, Dorothy M., bibliography of tree nut production and marketing research, 1965-71, 19120

Lungs:

diffusional and metabolic components of nitrogen elimination through lungs, effects of pressure, 31580

National heart, blood vessel, lung, and blood act, law, 19368

national heart, blood vessel, lung, and blood program—

lung diseases panel, report, 29344

National Heart and Lung Advisory Council, report, 30488

panel chairman, report, 29342

program analysis, 29345, 30491-492

summary, 29341

workshop on lung cell identification, isolation and culture, 30494

LUPAC, *see* Life Underwriters Political Action Committee.

Lurla, Saul M.:

accommodation and stereoacuity, 25408

effect of low levels of carbon monoxide on visual processes, preliminary study, 26644

handedness and adaptation to distortions of size and distance under water, 26641

masking as indicator of neural fatigue, preliminary study, 20529

vision through various scuba facemasks, 30409

Lush, Gerson H., Department of State newsletter, 18222

Lutz, John F.:
U.S. veneer species information, 26477
veneer species that grow in United States,
23300

Luverne, Minn., flood plain information, Rock
River, Poplar Creek, 17392

Luxembourg:
Ambassador, nomination of Ruth L.
Farkes, 26268
economic trends and their implications for
United States, 31504
manual hoists from Luxembourg, Tariff
Commission, report, 25780
mineral industry, minerals yearbook chap-
ter 16270
mutual defense assistance, agreement,
17889

Luzon, floods, report of Daniel K. Inouye,
19805

Lye, *see* Soda (caustic).

Lyford, Forest P., nature and extent of peat
deposits and possible effects of peat min-
ing on manmade features near Mescalero,
N. Mex., 23353

Lyle, Robert E., political committee, annual
report, 22733

Lyme, N. H. flood plain information Connecti-
cut, White, Mascota Rivers, 20115

Lymphoid tissue, *see* Tissues.

Lynam, John K., production and trade pros-
pects for Argentine oil-seeds and their
products, 31350

Lynch, M. T., U.S. Navy medicine, 19018

Lynndon B. Johnson National Historic Site,
Blanco & Gillespie Counties, Tex., histori-
cal data, 27813

Lynndon B. Johnson Space Center, Houston,
Tex.:
designate—
hearing, 23037
law, 27083
report, 26207

Lynn, James T.:
address, Oct. 3, 1972, 21096
nomination—
hearing 23042
report, 23034

Lynn, Laurence E., jr., nomination hearing,
27341

Lynne Skilken for Congress Committee, an-
nual report, 22712

Lynnworth, Lawrence C., ultrasonic mass
flowmeter for Army aircraft engine diag-
nostics, 26979

Lyometallurgy, *see* Leaching.

Lynwander, P., spring overriding aircraft
clutch, 31936

Lyon, Warren C., development of indwelling
intracranial pressure sensor, 29671

Lyon County Citizens for Stubblefield, an-
nual report, 24342

Lyon County, Ky., forest inventory statistics
24079

Lyns, Clarence F.:
Internal revenue assessment lists for—
Kentucky, 1862-66, 20628
Louisiana, 1863-66, 20629

Lyns, Edward T., development of analytical
procedures for determining chlorinated
hydrocarbon residues in waters and sedi-
ments from storage reservoirs, 22209

Lyophilization, freezing decayed wood to
facilitate ring counts and width measure-
ments, 23286

Lysergic acid diethylamide:
dynamics of pathomorphological changes
in cerebrocortical motor region in re-
sponse to single lysergamide (LSD)
administration (electronic microscopic
investigation). USSR study, 20461
effects of LSD, chlorpromazine and or-
ganophosphorous cholinesterase inhibi-
tors on brain, USSR study, 21860

Lystrom, David J., analysis of potential er-
rors in real-time streamflow data and
methods of data verification by digital
computer, 23326

Lysyj, Thor, pyrographic gross characteriza-
tion of water contaminants, 28819

M

MAA (medical assistance for aged), *see* Medi-
cal care.

MAC, *see* Military Airlift Command.

MAC Flyer, 18601

McAlpine, Robert G., American sycamore,
American wood, 32307

McAndrew, Donald W., water supply outlook
and Federal State-private cooperative snow
surveys for Nevada, 19060

Macao:
gazetteer, official standard names, 26487
trade in cotton textiles, agreement be-
tween U.S. and Portugal, 25765
wool and man-made fiber textile products,
trade agreement, 26868

McBride, Don, producing and marketing
catfish in Tennessee Valley, conference
proceedings, 16551

McCaill William F., remarks, Mar. 23, 1973,
29451

McCain, John S., nomination, hearings,
19950

McCambridge, W. F.:
mountain pine beetle, 16072
treatment height for mountain pine beetles
in front range ponderosa pine, 17520

McCarthy, L. T., jr., standard dispersant
effectiveness and toxicity tests, 28811

McCart, John M., halfway houses and com-
munity treatment centers, guidelines and
standards, 29148

McCarty, Robert D.:
thermophysical properties of helium-4
from—
2-1500 K pressures to 1000 atmos-
pheres, 23709
4-3000 R with pressure to 15000 PSIA,
23708
thermophysical properties of parahydrogen
from freezing liquid line to 5000 R for
pressure to 100000 Psia, 17738, 26702

McCarver, Jesse, and family, relief, 27116

McCauley, Orris D.:
forestry returns evaluated for uneven-
aged management in 2 Appalachian
woodlots, 20306
investment in precommercial thinning of
northern hardwoods, 20307

McClary, Terence E., nomination, hearing,
28517

McClenahan, James O., calibration of radio-
action detectors in ultraviolet region be-
tween 972-2500 Å, 20616

McClenon, Robert:
COMBO, general-purpose program for
searching, annotating, encoding-decod-
ing, and reformating data files, 20645
description of magnetic tape version of
Bulletin of thermodynamics and thermo-
chemistry, 26710

McClintic, Robert G., engineer, 18263

McClintock W. R., jr., soil survey of Mont-
gomery County, Tex., 20775

McClure, Floyd A., genera of bamboos na-
tive to New World (Gramineae: Bam-
busoideae), 29488

McColl, William F., jr., Physicians for McColl
for Congress, annual report, 24457

McConnell, Robert J., key to field identifica-
tion of anadromous juvenile salmonids in
Pacific Northwest, 20696

McCormick, Thomas F., nomination, hearing,
23074

McCormick County, S.C., geochemical sam-
pling in McCormick County, S.C., some
results, 29006

INDEX 1973

- McCowan, Brent H., growth and survival of northern plants at low soil temperature, growth response, organic nutrients, and ammonium utilization, 30157
- McCoy, Roger E., probability approach to sawtimber tree-value projections, 27535
- McCracken, J. David, information utilization by vocational educators, 30502
- McCulloch, Charles M., geologic factors causing instability and methane emission problems, Lower Kittanning coalbed, Cambria County, Pa., 30440
- McCullough, A. J., on scene, National Maritime SAR review, 18730
- McCucker, John J., Alfred, first continental flagship, 1775-78, 31804
- McDaniels, Garry, case studies of children in Head Start planned variation, 1970-71, Children in Head Start, 1970-71, supplemental report for Office of Child Development, 25944
- MacDonald, David J., stability constants of metal coordination compounds, complexes of N-ethylethylenediamine and 2-(ethylthio)-ethylamine, 21949
- McDonald, Jack :
McDonald for Congress Committee, annual report, 22970
19th for McDonald Committee, annual report, 22744
- MacDonald, Ray, chemistry of peralkaline oversaturated obsidians, 23358
- McDonald, Ohio, flood plain information, Trumbull County, Ohio, 28714
- McDonald for Congress Committee, annual report, 22970
- McDowell County, N.C. :
flood plain information, 20122
floods on North Fork Catawba River and Armstrong Creek, 20149
- McElroy, Robert C., hired farm working force, statistical reports, 15982, 25819
- MacFall, Emily A., mobile homes and low-income rural families, 25037
- MacFarland, Alfred T., nomination, hearings, 19955, 28529
- McGeachy, N. Hector, Jr., McGeachy for Congress, annual report, 22789
- McGeachy for Congress, annual report, 22789
- McGee, Dale A., soil survey of Clark County, Wash., 25708
- McGee, M. L., Committee of Architects Nationally for McGee, annual report, 24684
- McGee Creek Reservoir, reclamation feasibility investigation, authorize, report, 32121
- McGlamery, G. G., conceptual design and cost study, sulfur oxide removal from power plant stack gas, magnesla scrubbing-regeneration, production of concentrated sulfuric acid, 31280
- McGlashan, Thomas, documentation of clinical psychotropic drug trials, 25590
- McGowan, Samuel, papers in Library of Congress register, 29182
- McGowin, Charles R., stationary internal combustion engines in U.S., 30183
- McGrath, Bob, Club, Citizens for, *see* Citizens for Bob McGrath Club
- McGrath, Bob, Committee to Elect to Congress, *see* Elect Bob McGrath to Congress Committee
- McGraw, Joseph R., McGraw for Congress Club, annual report, 24674
- McGraw for Congress Club, annual report, 24674
- McGuire, John M., organic pollutant identification utilizing mass spectrometry, 32262
- McHarness, Donald D., field study of nitrification with submerged filter, 23193
- McHenry, Bruce, Delaware Water Gap, Milford, Section, National Recreation Area, N.J., interpretive prospectus, 27819
- MacInas, Wash., Pilchuk River, special flood hazard information, 32242
- Machine record codes, ADMATCH users manual, 16747
- Machine tool operators, job grading standard for machine tool operator, 30884
- Machine tools :
miscellaneous machine tools, industrial plant equipment handbook 15946
part programming for numerical control machining and gaging, 22502
portable machine tools, metalworking machinery accessories, and precision layout tools, industrial plant equipment handbook, 27378
site preparation and machine installation, 22500
some aspects of numerical control maintenance and training, 22505
specifications for machine tools and gages, 22499
statistical techniques in machine tools, evaluation and process quality control, 22508
- Machinery :
calculation of magnetic field in uniform air gap of electric machines, USSR study, 25326
controls and associated equipment, Federal item identification guide, 15950
cyborgs, symbiosis of man and machine? USSR study, 23559
drycleaning machinery from West Germany, determination of injury in investigation AA1921-99 under Antidumping act, as amended, 16541
electrical rotating machinery, Federal item identification guide, 26317
machining centers, way type machines, electrical and ultrasonic erosion machines, industrial plant equipment handbook, 24988
manufacturing, industry wage survey, 16236
marking, metal container, assembly, clean-work station and miscellaneous industry machinery, industrial plant equipment handbook, 15943
mechanical equipment—
Columbia Basin project, Boise project, Yakima project, Pacific Northwest region, field review of maintenance, 31782
Rio Grande project, region 5, field review of maintenance, 31783
method for measuring and controlling web tension of corrugating medium during singlefacing process, 21655
pulp and paper industries and size reduction machinery, industrial plant equipment handbook, 26308
rubber and plastics working machinery, industrial equipment handbook, 17321
7th aerospace mechanisms symposium, 23678
source mechanisms for rotor noise radiation, 32454
specialized machinery and ordnance machinery, industrial plant equipment handbook, 21400
specialized semiconductor, microelectronic circuit board manufacturing machinery, industrial plant equipment handbook, 26310
wrapping and packaging machinery, Federal item identification guide, 27402
see also names or types of machinery—
also subjects for which machinery is used
- Machinery Buyers Corporation, aircraft accident report, 31745
- Machines, *see* Machinery—*also* special kinds of machines, e.g. Shearing machinery (metal squaring)—Vending machines.
- Machining :
machining centers, way type machines, electrical and ultrasonic erosion machines, industrial plant equipment handbook, 24988

- Machining—Continued
microinch machining, 25885
overview of precision machining and gaging, 22494
- Machinists:
job grading standard for machinist, 30885
mate 3 & 2, rate training manual, 22180
national apprenticeship standards for automotive machinist, 28043
see also Aviation machinists.
- Machinists Nonpartisan Political League:
Beaver Lodge 1432, annual report, 24516
District Lodge No. 24, annual report, 24515
District Lodge No. 75, annual report, 22932
District No. 70, annual report, 22944
East Bay Automotive Machinists Lodge 1546, annual report, 24525
Local Lodge 1424, annual report, 24712
Oregon, Mount Hood Lodge No. 1005, annual report, 24514
Willamette Lodge No. 63, annual report, 22933
- Machinists Nonpartisan Political League Committee, annual report, 26030
- Machinists Nonpartisan Political League of Michigan annual report, 26024
- McHugh complex of south-central Alaska, 26494
- McIntyre, T., old house borer, 19108
- McIntire-Stennis act, *see* Forests and forestry.
- Mack Howard for Congress Committee, annual report, 24454
- McKay, George M., behavior and ecology of Asiatic elephant in southeastern Ceylon, 26823
- McKay, K. Gunn:
McKay Appreciation Committee, annual report, 26019
McKay for Congress, annual report, 26020
- McKean County Republican Committee, annual report, 22852
- McKee, Wilma M., safety review, 18885
- McKenney, Napeo D. R., social and economic status of black population in United States, 29776
- Mackerel, effects of some antioxidants and EDTA on development of rancidity in Spanish mackerel (*Scomberomorus maculatus*) during frozen storage, 22104
- Mackey, Alden C., Apollo experience report, development of design-loads criteria, etc., for prelaunch, lift-off, and midboost conditions, 31646
- Mackey, Billie B., endocrinology index, 18261
- McKinley, Marlene, investment laws of selected African countries, 30130
- McKinley County, N. Mex., Erwin-1 production well, city of Gallup, McKinley County, N. Mex., 20348
- Mackintosh, Barry, Booker T. Washington, appreciation of the man and his times, 29399
- McKnight, M. S., notes on weevils from trees and shrubs in North Dakota, 28945
- McLaughlin, James E., workshop on natural radiation environment, 25875
- McLaughlin, Patrick D., transportation in nineteenth-century America, survey of cartographic records, 31670
- MacLean, Collin D.:
estimating Dunning's site index from plant indicators, 31368
estimating productivity on sites with low stocking capacity, 31372
photo stratification improves Northwest timber volume estimates, 27541
- McLennan County Committee for Poage, annual report, 22741
- MacLeod, Anne, growing up in America, background to contemporary drug abuse, 30505
- McLeod County Republican Committee, annual report, 24546
- Maclura pomifera, *see* Osage-orange.
- Maclurolyra, *see* Bamboo.
- MacMahon, Brian, infant mortality rates, relationships with mother's reproductive history, U.S., 26721
- McMillan, John L., et al. v. Doe petitioners court proceedings and actions of vital interest to Congress, 32019
- MacMillan, Robert T., salt, 25483
- McMurray, Kay, nomination, hearing, 21375
- McNamee, Lawrence P.:
computer simulation and validation of Travis freight terminal facility, 27438
development of standard data base and computer simulation model for air cargo terminal, 23156
- McNary Dam, fish passage report, 20100, 28683
- McNickle, Rom K., proceedings, joint conference on alcohol abuse and alcoholism, 23754
- McNitt, Harold A., selling in Norway, 15616
- McNulty, J. Kneeland, cooperative Gulf of Mexico estuarine inventory and study, Florida, phase I, area description, 25629
- Macomber, William B., jr., nomination, hearings, 26268
- McPherson, Kans.:
Dry Turkey Creek and Bull Creek floods, 21444
flood plain information, Dry Turkey and Bull Creeks, 21445
- McQueen, I. S., soil-moisture and energy relationships associated with riparian vegetation near San Carlos, Ariz., 16105
- McQuilvey, R. S.:
principles and measuring techniques of turbulence characteristics in open-channel flow, 23357
summary of turbulence data from rivers, conveyance channels, and laboratory flumes, 23375
- Macular degeneration, 27757
- McVey, J. R., automatic data acquisition system for underground measurements, 25509
- McWah, Percy, benomyl-derived fungitoxicant for tree wilt disease control, 27332
- Mad River, flood plain information, 23173
- Madagascar:
Malagasy Republic—
area handbook, 31931
background notes, 32568
economic trends and their implications for United States, 30312
- Madden, Ray J., for Congress Committee, *see* Ray J. Madden for Congress Committee.
- Made in U.S.A., 25319
- Madera limestone, *see* Limestone.
- Madison, James, Memorial Building, *see* James Madison Memorial Building.
- Madison, R. J., chemical quality of surface water in Flaming Gorge Reservoir area, Wyo. and Utah, 26512
- Madison County, Ky., soil survey report, 29570
- Madison County Republican Central Committee, annual report, 22750
- Madison County Republican Central Committee of Indiana, annual report, 24588
- Madow, William G., net differences in interview data on chronic conditions and information derived from medical records, 32489
- Madras, summary of synoptic meteorological observations, southwest Asian marine areas, 22182
- Maek, William J., burnup determination for fast reactor fuels review and status of nuclear data and analytical chemistry methodology requirements, 29681
- Maglin, Robert R., western wood density survey, report no. 2, 23302
- Magazines, *see* Periodicals.
- Magistrates, *see* United States magistrates.
- Maglieri, Domenic J., sonic boom measurements for SR-71 aircraft operating at Mach numbers, etc., 17712
- Magnesia, *see* Magnesium oxide.

Magnesium :

- magnesium compounds, minerals yearbook chapter, 25453
- mill products, current industrial reports, 25924
- molten salt electrowinning of magnesium-yttrium alloys, 23660
- primary, quarterly report, 18817
- tolerances for aluminum alloy and magnesium alloy wrought products, Federal standard, 16062
- use of atomic absorption spectroscopy in determination of ug/liter concentrations of Na^+ , K^+ , Ca^{2+} , and Mg^{2+} , 17370
- Magnesium oxide, conceptual design and cost study, sulfur oxide removal from power plant stack gas, magnesite scrubbing-regeneration, production of concentrated sulfuric acid, 31280

- Magnetic anomaly detection, new construction projects in Kursk Magnetic Anomaly, USSR study, 26584

Magnetic circuits, see Circuits.

Magnetic fields :

- absorption of microwaves by plasma which is essentially nonuniform along magnetic field, 22453
- alternating current matrix-type separator, 30424
- biaxial gyrostatilizer and superconducting spherical suspension, USSR study, 23548
- biological effect of constant magnetic fields, USSR study, 21851
- calculation of magnetic field in uniform air gap of electric machines, USSR study, 25326
- cosmic rays in earth's magnetic field, 30464
- electron paramagnetic resonance study of alignment induced by magnetic fields in 2 smectic-A liquid crystals not exhibiting nematic phases, 21989
- feasibility of generating megagauss magnetic fields using high-pressure compressed gas linings, USSR study, 29140
- in the magnetic web, USSR study, 21883
- interaction of plasma streams with stationary, axially symmetric magnetic fields, 21009
- laser-induced sources for magnetic fields, 17791
- nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455
- quasilinear theory of collisionless plasma in weak SHF electric field and constant magnetic field, 22441
- R-Om experimental setup for studying interaction of high-frequency fields with plasma, 22467
- some characteristic features of formation of microwave discharge plasma in presence of magnetic fields greater than cyclotron, 22454
- theory of wave interactions in beam-plasma systems in magnetic fields, 21010
- three-station lightning detection system, 20692
- see also Electromagnetic fields.

- Magnetic material, transportation of magnetized materials, Federal aviation regulations, 18296

Magnetic measurements :

- differential magnetic measurements near cumulus clouds, 22421
- measurement of demagnetizing fields in cylindrical magnetic films, USSR study, 30339

- Magnetic mode, investigations of artificial stimulation of ULF waves in ionosphere and magnetosphere, magic mode, 29436

- Magnetic ordering in lithium-transition metal oxides with ordered rocksalt structures, 20971

- Magnetic particles, qualification of inspection personnel, magnetic particle and penetrant, military standard, 20046

Magnetic resonance :

- electron paramagnetic resonance—
 - studies of viscous nematic liquid crystal, evidence counter to second-order phase change, 21988
 - study of alignment induced by magnetic fields in 2 smectic-A liquid crystals not exhibiting nematic phases, 21989
- resonance phenomena in configurations with helical magnetic axes when calculating toroidality, 21011
- Magnetic separators, alternating current matrix-type separator, 30424
- Magnetic storms, auroral electrojet magnetic activity indices (AE) for 1970, 23182
- Magnetic surveys, see Terrestrial magnetism.
- Magnetic tape :
 - census, 1970, index to summary tapes, 28192
 - description of magnetic tape version of Bulletin of thermodynamics and thermochemistry, 26710
 - LOMO VK- $\frac{1}{2}$ type small video tape recorder, USSR study, 30336
 - 1970 census of population and housing, publication and computer tape program, 30583
 - 1972, census of transportation, publication and computer summary tape program, announcement, 27025
 - recorded magnetic tape for information interchange, 27724, 30468
 - study to correct causes of tape errors, etc., 24040
 - summary statistical data files on magnetic tape publicly available from Department of Commerce, 22146
 - summary tape processing centers for census data, 16791
 - tape playback and serial-time decoder for IFF flight test instrumentation, 22171
 - universal dropout tester for magnetic storage media, 20646

- Magnetism :
 - annealing of thin magnetic films at high temperatures, USSR study, 30340
 - anomalous absorption of electromagnetic waves in magnetized plasma, 22445
 - bathymetric and magnetic data from northeast Pacific 40° to 58°N , 125° to 160°W , 29391
 - dispersing antiferromagnetic precursors to prepare magnetic fluids, 23652
 - logic and memory devices with magnetic crystals, USSR study, 30333
 - measurement of demagnetizing fields in cylindrical magnetic films, USSR study, 30339
 - spectra of magnetic pulsations of nonisothermal plasma, 22461
 - waves, instabilities and anomalous dissipation of parametric plasma in strong electromagnetic field of pumping wave, USSR study, 31534
 - see also Terrestrial magnetism.

- Magnetite :
 - dispersing antiferromagnetic precursors to prepare magnetic fluids, 23652
 - kinetics of CO reduction of hematite to magnetite and effect of silica, 23659
- Magneto-Schottky-diode-integrated circuits, 19158
- Magnetohydrodynamic generators :
 - experimental investigations of open-cycle, vortex MHD generator, 21954
 - thermodynamic cycles of atomic power plants with MHD-generators, USSR study, 27652
 - U-25 apparatus research, USSR study, 31546

- Magnetohydrodynamics :
 - economies of mixed potassium-cesium seeding of an MHD combustion plasma, 23657
 - magnetohydrodynamic method of producing electrical energy, USSR study, 21854

Magnetohydrodynamics—Continued
theory of hydrodynamic stability of plasma in field of alfvén wave of finite amplitude, 22465

Magnetometers:
differential magnetic measurements near cumulus clouds, 22421
dynamic nuclear polarization, application to increase sensitivity and speed of nuclear precession magnetometers, USSR study, 29133
properties of crystalline bismuth selenide and its use as Hall effect magnetometer, 23682
shipboard quantum z-magnetometer, USSR study, 21863
Soviet magnetometry, selected articles, 30351
USSR study, 26597

Magnetosphere:
data compilation for magnetospherically quiet periods, Feb. 19–23 and Nov. 29–Dec. 3, 1970, 30173
investigations of artificial stimulation of ULF waves in ionosphere and magnetosphere, magic mode, 29436

Magnets:
characteristics and performance of superconducting bumpy-torus magnetic facility for plasma research, 31641
preparation of samarium-cobalt magnets, 31595
superconducting magnet systems, field windings and inductors, USSR study, 17642
theory of disordered Helsenberg ferromagnets, 29276

Magno, Paul J., iodine-129 in environment around nuclear fuel reprocessing plant, 25676

Magnoliass, growing, planting, etc., 22332

Magnuson-Moss warranty-Federal Trade Commission improvement act, 28464

Magoon, Orville T., use of satellites in coastal engineering, 23149

Mahan, John N., fertilizer, supply, 15463

Mahnomen County Republican Committee, annual report, 22807

Mahogany, hybrid mahogany recommended for planting in the Virgin Islands, 28057

Mahon, John K., Army lineage series, infantry, Regular Army, 20532

Mahoney, E. A., Jr., Congress Committee, see E. A. Mahoney, Jr., Congress Committee.

Mahoning County, Ohio:
flood plain information, Mahoning River and Crab Creek, Youngstown, Campbell, Struthers, and Lowellville, 28713
floods, 28754

Mahoning River:
flood plain information—
Niles-McDonald - Girard - Weathersfield township, Trumbull County, Ohio, 28714
Youngstown, Campbell, Struthers, Lowellville, Mahoning County, Ohio, 28713

Mahtab, M. A., analysis of geometry of fractures in San Manuel copper mine, Arizona, 25497

Maler, Walter J., biological removal of colloidal matter from wastewater, 31276

Mail matter:
Armed Forces members, free letter mail and air transportation mailing privileges, additional, law, 19403
direct mail advertising, broken promises and shaken premises, 22627
educational and cultural postal amendments, reports, 29881, 30996
enforcement report, Inspection Service, 18262
improvements are gradually being made in U.S. Postal Service operations, etc. (remarks), 29572

Mail matter—Continued
mail and cargo for cruise ships, hearings, 15771
mailing of drug samples to Government officials for analysis, report, 16964
military assistance program address directory, 15971, 17339–340, 23117–118, 25028–29, 26339, 28623, 31196, 32180
see also Franking privilege.

Mail-order business, 8-cent 100th anniversary of mail order business commemorative stamp (poster), 16558

Mail services and how to use them, 30678

Mallers, instruction for mallers, 18492, 24086–87

Mailing lists:
export mailing list and FTI data services, 31202
sale or distribution of mailing lists by Federal agencies, limit, hearings, 26163

Mailing of drug samples for analysis, 16964

Mails, see International postal service—Postal service.

Main Ditch, flood plain information, Portageville, Mo., 28721

Main ideas and organization, reading, 31226

Main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20585

Maine:
bedrock geology of Cupsuptic and Arnold Pond quadrangles, west-central Maine, 27553
census of housing, 1970, housing characteristics for States, cities, and counties, 15547
census of transportation, 1972, truck inventory and use survey, 21049
climate, 17410
counties, population estimates, 28178
county business patterns, 29735
electric rate book, 20257
internal revenue assessment lists for Maine, 1862–66, 25544
landings, fish and shellfish, 18603
mineral industry, minerals yearbook chapter, 25460
1970 census of population, characteristics of population, 28114
northern Maine regional treatment system, 27492
registry of minority contractors and housing professionals, listing in selected cities, 32383
ten-year growth of planted paper birch in old fields, 20308

Maine, Gulf of, sedimentary framework of western Gulf of Maine and southeastern Massachusetts offshore area, 29020

Mainstream Operation, see Operation Mainstream.

Maintaining subsurface drains, 16603

Maintenance:
aircraft maintenance, preventive maintenance, etc., Federal aviation regulations, 18295
commander's maintenance guide, Army pamphlet, 25860
consideration for preparation of operation and maintenance manuals for municipal wastewater treatment plants, 31896
HUD-assisted housing maintenance handbook on safety, 32375
life expectancy of facilities, 28690
little progress by Defense Department in acting on opportunities for significant savings by consolidating real property maintenance organizations, GAO report, 21695
maintainability design criteria handbook for designers of shipboard electronic equipment, change, 16454
maintainability guide for design, engineering design handbook, 20965

INDEX 1973

Maintenance—Continued

- maintainability verification, demonstration, evaluation, military standard, 27405
- maintainability, verification/demonstration/evaluation for aeronautical systems, military standard, 28609
- maintenance inspection notes for McDonnell Douglas DC-8 series aircraft, 17449
- marine equipment maintenance support in Army in field, field manual, 24173
- Mech, naval aviation maintenance safety (periodical), 18615
- organizational DS, GS and depot maintenance manual, 19173
- performance concept in buildings, symposium proceedings, 16359
- potential for greater consolidation of maintenance workload in military services, Department of Defense, GAO report, 30259
- power O. and M. bulletin series, 23928
- power O. and M. report, field review of—
 - maintenance, 31777-785
 - operation and maintenance, 31784-785
 - preventive maintenance programs, 22504
 - roof maintenance, local housing authority, management guide, 23448
 - safety, reliability, maintainability and quality provisions for space shuttle program, 23692
 - some aspects of numerical control maintenance and training, 22505
 - spare parts and maintenance support of RDT&E, military standards, 27413
 - storage maintenance activities operations manual, defense industrial plant equipment, 27379
 - use of simulation models pertaining to best mix of aircraft, support personnel, spare parts, and level of repair, 30730
 - vibration effects on helicopter reliability and maintenance, 30762
 - water operation and maintenance bulletin, 19053
- Maintenance shops:
 - miscellaneous maintenance and repair shop specialized equipment, industrial plant equipment handbook, 15945
 - motor vehicle maintenance and repair shop specialized equipment, industrial plant equipment handbook, 15947
- Maintenance technicians:
 - aerospace ground equipment repairman, Air Force notice, 16616
 - directory of FAA certificated aviation maintenance technician schools, 31315
 - fuel specialist, Air Force notice, 16631
 - hull maintenance 3 & 2, rate training manual, 31759
- Malr, Andrew J., remarks, Feb. 9, 1973, 26942
- Maisel, James E., use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressures, 29280
- Major collective bargaining agreements, administration of seniority, 21903
- Major steps in budget process, 23612
- Makar, H. V., deoxidation of using waste aluminumizing dross, feasibility study, 16337
- Malacca, Strait of, South and North, summary of synoptic meteorological observations, southeast coastal marine areas, 22181
- Malagasy Republic, *see* Madagascar.
- Malawi, economic trends and their implications for United States, 30315
- Malaysia:
 - accessions list, Library of Congress, Djakarta, 17946
 - economic trends and their implications for United States, 20431, 29107
 - foreign trade regulations, 31209
 - mineral industry, minerals yearbook chapter, 16289

Malaysia—Continued

- trade in wool and man-made fiber textile products, agreement, 31854
- Malde, Harold E., stratigraphy of Glenns Ferry formation from Hammett and Hagerman, Idaho, 25251
- Males, *see* Men.
- Mall:
 - economic trends and their implications for United States, 16168
 - military assistance, deposits under Foreign assistance act of 1971, agreement, 16517
- Malina, Robert M., selected body measurements of children 6-11 years, U.S., 27747
- Mallards, population ecology of mallards, review of previous studies and distribution and migration from breeding areas, 16488
- Mallory, Richard Walker, Mallory for Congress, annual report, 24346
- Mallory for Congress, annual report, 24346
- Mallory, Charles W.:
 - application of selected industrial engineering techniques to wastewater treatment plants, 27471
 - beneficial use of storm water, 23192
- Malnutrition, malnutrition, learning, and intelligence, conference paper, 32534
- Malone Creek, Independence, Iowa, flood plain information, 32223
- Malta, background notes, 16492
- Maltz, Michael D., evaluation of crime control programs, 21890
- Malweg, K. W., Shagawa Lake project, 30175
- Mammals:
 - imported into United States, 1970, list, 25717
 - initial assessment of mammal damage in forests of Southwest, 23289
 - Marine mammal protection act—
 - law, 19452
 - report, 19666
 - rodenticides and mammal, bird, and fish toxicants, EPA compendium of pesticides, 20731A, 25668
 - Santa Ana National Wildlife Refuge, 31830
 - see also* Marsupials—Monotremata.
- Man:
 - current issues in mental retardation and human development, conference of family-centered approach to providing services to mentally retarded, 29035
 - cyborgs, symbiosis of man and machine? USSR study, 23559
 - determination of focal projections of internal organs in brain of man through isolation of useful signals, 27646
 - development of man-computer interaction, USSR study, 27643
 - external electric field recorded around animals, man, USSR study, 26583
 - foodborne human salmonellosis, recommendations to Commissioner for control, 30243
 - high altitude physiology of man in Tien Shan and Pamirs, some results of studies, USSR study, 23550
 - hyperbaric oxygen breathing on rate of ethanol metabolism in man, studies on effect, 29197
 - interaction between man and biosphere, USSR study, 29130
 - lead, pesticides, man, and environment, 32531
 - man and his environment, USSR study, 29131, 31531
 - man, biosphere and technology progress, USSR study, 29142
 - mathematic analysis of reactions of human respiratory system to hypoxia and hypercapnia, 23534
 - plants, people, and environmental quality, study of plants and their environmental functions, 25635

Man—Continued

- predicting man's condition during space-flight, USSR study, 20449
- problems of control of body functions of humans and animals, USSR study, 31521
- problems of man's interaction with his natural environment, USSR study, 21881
- protection of man and environment, Federal environmental pesticide control act, supplemental report, 19841
- radiation sickness in man, outlines, 25866
- social and psychological aspects of applied human genetics, bibliography, 25323
- space and man's environment (address), 31663
- space for mankind's benefit, 21982
- use of oxygen for reducing fatigue of man in flight, USSR study, 27626
- water, diseases, and man, USSR study, 17613

Man-hours, *see* Employment—Hours of labor—Labor.

Man-machine systems, *see* Human engineering.

Management:

- acquisition management—
 - guide for program management, 30733
 - statement of work preparation guide, 15493
- advanced air quality management courses, descriptions, 20948
- another look at audit of management performance, progress report (address), 28977
- automated management system for Union republic economy, USSR study, 25348
- better management needed in civil agencies over selection of in-house or contract performance of support activities, GAO report, 30253
- better management needed over decisions to start full-scale development of minor weapons systems, GAO report, 17523
- career ladder and curriculum guide, instructor's manual, housing management, 26524
- civilian career in Coast Guard, 28219
- communications-electronics management of electromagnetic spectrum, 30753
- comprehensive planning assistance management grant, 31431
- construction management, Army technical manual, 24180
- contractor data, 15494
- data acquisition systems in water quality management, 31306
- economics available through improved management of Navy shipboard inventories, GAO report, 28987
- Federal financial management directory, 31376
- field of USSR and U.S. management science surveyed, USSR study, 23527
- financial management for planning and action grants, to combat crime, 27653
- identifying regional opportunities for accelerated timber management, 25232
- improved management information system needed for Exinbank's capital loan program, GAO report, 23320
- improving management for more effective government (lectures), 23316
- improving management in the Sel'khoz-tekhnika system, USSR study, 25357
- improving management of farmer cooperatives, 31312
- labor management case finder, FPM supplement, 18332
- management and development, adapting—Goddard Research and Engineering Management Exercise (GREMEN) to nonspacecraft environments, 29279

Management—Continued

- management challenges in agriculture (address), 22335
- management clerical and assistance series position classification standard, 16823
- management information systems, information processing systems exchange, 22427, 26961
- management of AEC's controlled thermonuclear research program, GAO report, 21696
- management oversight and risk tree, MORT, 24195
- management practice & research, weekly Government abstracts, 19071
- MAP-TOE (motivate all personnel to operate efficiently), instructor's guide, 19165
- materiel management manual, Defense Supply Agency, 23091
- national meat-packing waste management research and development program, 26418
- national resource lands for protection and development, hearings, 27343
- project SOAP, systems approach to biomedical research program management, case study, 27730
- real America (speech), 31553
- reports management system, HUD, 29055
- role of water in urban planning and management, 23332
- socioeconomic factors of scientific research institute management, USSR study, 20464
- space management and courts, summary, 25369
- space management for courtrooms, jury assembly and deliberation, public waiting and security, etc., design handbook, 27658
- summaries of solid waste management contracts, 17429
- traffic management regulation for personal property, Defense Dept., 17341, 27416, 31197
- training, HUD courses, general information, 32381
- underwriting management and supervisory responsibilities, HUD, 29056
- USA, foreign policy mechanism, organization, functions, and management, USSR study, 27621
- ways to improve records management practices in Federal Government, GAO report, 31386
- see also* Administrative management—Industrial management—Materials management—Planning—Wildlife management.
- Management analysts, management analysis series, position classification standard, 16823
- Management and Budget Office:
 - circulars, 25389
 - Director and Deputy Director, Senate confirmation—
 - hearings, 29912
 - reports, 26202, 32104
 - veto, 31054
 - directory of State, metropolitan and regional clearinghouses under Office of Management and Budget, 25389
 - estimates of impact of inflation on costs of proposed programs should be available to committees of Congress, 21691
 - Federal advisory committees, annual report, 28539
 - means for increasing use of defense technology for urgent public problems, GAO report, 21697
 - revisions needed in financial management policies of Federal Government's automatic data processing fund, GAO report, 27550

INDEX 1973

Management consultants, *see* Consultants.

Managers:

Federal sector, where we are, where we may be going, implications for managers, 29805

leadership development and training for Head Start coordinators of nutrition and cook managers, 21072

water facts and figures for planners and managers, 29009

Managua, Nicaragua, geologic and seismologic aspects of Managua, Nicaragua, earthquakes of Dec. 23, 1972, 29028

Manar, Thomas A., fishery publications, calendar year 1971, lists and indexes, 20697

Manasquan, N.J. to Cape Hatteras, N.C., marine weather services chart, 29423

Manassas National Battlefield, general and oversight briefing relating to developments near Manassas National Battlefield, 28414

Manchester, N.H., area wage survey, 21910

Mancos shale, *see* Shale,

Mandate for merit, U.S. Civil Service Commission annual report, 31982, 32024

Mandatory civil service retirement at age 70 with 5 years' service, 27122

Maneuverability, maneuver and buffet characteristics of fighter aircraft, 31625

Mangalore, India, summary of synoptic meteorological observations, southwest Asian marine areas, 23892

Mangan, George F., urban water planning bibliography, 16147

Manganese:

cyclic and isothermal oxidation behavior at 1100° and 1200° C of nickel-20-percent-chromium, nickel-20-percent-chromium-3-percent-manganese, nickel-20-percent-chromium-3 percent-silicon, and nickel-40-percent chromium alloys, 29288

extraction of manganese from Georgia umber ores by sulfuric acid-ferrous sulfate process, cocurrent extraction and centrifuge tests, 21950

mineral industry surveys, monthly, 18604

minerals yearbook chapter, 25454

ore, extension of existing suspension of duty, report, 29855

Manganese oxides, sulfatization-reduction of manganiferous iron ore, 30427

Manganous oxide, *see* Manganese oxides.

Manhattan, Kans.:

flood plain information, Kansas and Big Blue Rivers, 21450

floods, Kansas River and Big Blue River, 21465

Manheim, Frank T., mineral resources off northeastern coast of United States, 21711

Manifolds, analytical necessary and sufficient condition for riemannian manifold to be complete, 16452

MANIP, computer system for algebra and analytic differentiation, 31719

Manipulators:

algebraic manipulation by computer, 31754

robot-manipulator control algorithms, USSR study, 30360

studies to design and develop improved remote manipulator systems, 29255

Manistee National Forest:

canoeist suggestions for stream management, Michigan, 17521

Notapecacon, Pere Marquette River, proposal for scenic river, 28933

Mankind and biosphere, 25351

Manley, Mary L., foreign trade regulations of Republic of Zambia, 30127

Manmade fiber broadwoven goods, *see* Textiles.

Mann, Charles N., method of estimating log weights, 20318

Mann, W. F., jr., growth of planted slash pine under several thinning regimes, 21674

Manned space flight:

Apollo experience report, photographic equipment and operations during manned space-flight programs, 16354

environmental research by means of manned space stations, 21870

Manned spacecraft, *see* Spacecraft.

Manners and customs:

economic and socially desirable development through sound public works investment policy, hearings, 15929

mental health and social change, annotated bibliography, 23755

social change and human behavior, mental health challenges of 70's, 23761

Manometers:

differential pressure mercury manometer, 28068

piston manometer as absolute standard for vacuum-gage calibration in range 2-500 millitorr, 20619

Manos limpas, 30241

Manpower:

Air Force manpower standards—command and command support, 22367

direct support, 24149

medical, research and development, and activities outside the USAF, 22368

aptitude levels in enlisted manpower pool of Air Force, 20940

cable television manpower, job descriptions and educational requirements, 24285

civilian manpower management (periodical), 18529

Community manpower training and employment act, bill text, section-by-section analysis, 17277

comprehensive manpower reform, 1972, hearings, 17278, 19993

correctional manpower programs, 20192A

development and training act, amend—
hearing, 21361

report, 20846

development, Environmental Protection for water pollution control, 21284

effect of new economic policy on employment and power (remarks), 17656

effectiveness of man power training programs, review of research on impact on poor, 16934

employment and manpower act, hearings, 21213

executive manpower in Federal service, 30877

Federal civilian manpower statistics, monthly release, 18647

Federal programs for manpower services for the disadvantaged in District of Columbia, GAO study, 25245

improved manpower management in Federal Government, reports, 27116M, 32057

inventory of Federal programs supporting health manpower training, 26521

manpower (periodical), 18605

manpower planners, handbook, census use study, 21054

manpower requirements for waste water collection systems in cities and towns up of 150,000 in population, 30683

manual for manpower accounting in higher education, 17362

meeting health manpower needs through more effective use of allied health workers, 29154

methods of assessing disadvantaged in manpower programs, review and analysis, 26613

migrant manpower programs, hearings, 19762

national emergency standby regulations and instructions, Federal personnel, 18340

Manpower—Continued

- national patterns of R&D resources, 1953-73, funds and manpower in U.S., 27832
- nuclear technician manpower symposium, proceedings, 21015
- ophthalmology manpower—
 - characteristics of clinical practice, 29332
 - general profile, 25568
 - utilization of supplementary personnel, 30481
- outlook for technology and manpower in printing and publishing, 31556
- podiatry manpower, general profile, 31683
- pre-retirement years, labor market experience of men, longitudinal study, 23581
- report of the President—
 - department edition, 29153
 - document edition, 28299
- reports of the President, 1963-72 index 26610
- research and development findings, 26613, 30402
- research and development projects, 20491
- research monograph, 23581, 25373-374, 26611, 29154, 31573
- review of manpower R & D projects in correctional field, 1963-73, 31573
- rural developments (periodical), 18881
- studies in manpower planning, 27055
- suggestions for control of turnover and absenteeism, 23588
- symposium on popular participation in manpower and employment development, 20493
- training Nation's health manpower, 16125
- technology of health manpower utilization, uniform measurement and evaluation, 23776
- tomorrow's manpower needs, research report on manpower projection needs, 29164
- up to now, chronicle of manpower programs, 17657
- utilization of manpower in military, report, 15722
- Manpower Administration:
 - publications, index, 17654
 - research and development findings, 26613, 30402
- Manpower Development Staff:
 - Office of Air Programs, general information, 20950
 - 13 regional training locations, Manpower Development Staff, Institute for Air Pollution Training, 20952
- Manpower Intelligence Division, DMI analytical studies, 32369
- Mansfield, Mike:
 - journey to new China, Apr.-May, report, 19806
 - two reports on Vietnam and Southeast Asia to President of United States, 26196
 - visit to Mexico, 30029
- Manti-LaSal National Forest, auto tour, Great Basin Experimental Range, 20290
- Mantua, Ohio:
 - flood plain information, 20116
 - floods on Cuyahoga River, 20148
- Manual hoists from Luxembourg, 25780
- Manual of regulations and procedures for radio frequency management, 25789, 32600
- Manual training, simulation as technique in power tool safety research and education, 15626
- Manuals, *see* names of departments, etc., issuing manuals—*also* subjects.
- Manuel Lujan, Jr., for Congress, annual report, 22985
- Manufacturers, *see* Manufactures and manufacturers.

Manufactures and manufacturers:

- annual survey of manufactures, 15528-531, 16684-687, 19188-193, 21030, 24206-208, 25890-896, 28095-97
- book value of fixed assets and rental payments for buildings and equipment, 16687
- employment and labor costs for operating manufacturing establishments, 19191
- fuels and electric energy used by industry groups, 16684
- general statistics for industry groups, industries, 25890
- statistics for divisions and States—
 - East North Central Division, 19189
 - East South Central Division, 15531, 24207
 - Middle Atlantic division, 15529
 - Mountain Division, 19190
 - New England division, 15528
 - South Atlantic division, 15530
 - West North Central division, 16685
 - West South Central division, 16686, 24208
- statistics for States, standard metropolitan statistical areas, large industrial counties, and selected cities—
 - East North Central Division, 25892
 - Middle Atlantic division, 25891
 - Mountain division, 25895
 - New England division, 24206
 - Pacific division, 25896
 - South Atlantic division, 25894
 - West North Central division, 25893
- value of product shipments, 19193
- value-of-shipment concentration ratios by industry, 19188
- anti-friction bearings, manufacturer's shipment and unfilled orders, 23123
- brand names identical to products purchased and tested for use by Federal Government, 23246
- census, 1972, special reports, 30799
- cost accounting for small manufacturers, 16472
- employment and labor costs for operating manufacturing establishments, 21036, 28097
- exports sales and orders of durable goods, current industrial reports, 18194
- Federal supply code for manufacturers—excluding United States and Canada, 17317, 18356
- United States and Canada—
 - code to name, 18357
 - name to code, 18358, 20030-31
- financial report of corporations, quarterly, 18836
- foreign direct investor in U.S., list of foreign firms with some interest/control in American manufacturing and petroleum companies in U.S., 23488
- instructional materials for manufacturing, review and analysis, 27769
- manufacturers' shipments, inventories, and orders, 15596, 21068, 29785
- current industrial reports, 18194
- manufacturers' value of inventories, 28095
- manufacturing plant characteristics, 28644
- manufacturing unit rates, trends, cycles, and interindustry variations, 29161
- multinational corporation, studies on U.S. foreign investment, why industry invests abroad, 27612
- numerical list of manufactured products (new (1972) SIC basis), 1972 census of manufacturers, 31971
- public hearings on noise abatement and control manufacturing and transportation noise (highway and air), 16029
- small manufacturing establishments under Fair labor standards act, 24100

INDEX 1973

Manufactures and manufacturers—Con.
 survey of origin of exports of manufacturing establishments in 1971, current industrial reports, preliminary report, 31963
see also names or classes of manufactured articles.

Manufacturing, *see* Manufactures and manufacturers.

Manures, *see* Fertilizers.

Manus, Peter C.:
 remarks—
 Apr. 12, 1972, 28242
 June 28, 1972, 28241
 Oct. 19, 1972, 21107
 Dec. 18, 1972, 21109

Manuscripts:
 letters, diaries, and similar personal manuscripts, 24971
 MARC format, 25387

Manwiler, Floyd G., wood and bark properties of spruce pine, 21675

Many faces of George S. Patton, jr., 19140

Manzano Mountains, upper paleozoic Madera Group in Manzano Mountains, N. Mex.; 25253

MAP (Military assistance program), *see* Military aid.

MAP—TOE instructor's guide, 19163

Maple:
 cambial dieback and taphole closure in sugar maple after tapping, 25222
 eighth conference on maple products, proceedings, 16585
 eutypella canker, general information 17510
 maple sirup production from bigleaf maple, 21661
 rate of value increase for sugar maple, 25231
 relationship between sap-flow rate and sap volume in dormant sugar maples, 23284
 sapstreak disease of sugarmaple found in Wisconsin for first time, 17513

Maple Knoll Research Natural Area, general information 21627

Maple sirup, maple sirup production from bigleaf maple, 21661

Mapping, *see* Maps and charts.

Maps and charts:
 Air Force, aeronautical charts, latest edition, 18537
 ASCS aerial photography status maps, 22320
 authorized aeronautical chart sale agents, list, 32506
 cartographic records in National Archives, 25531
 catalog of copyright entries, 21389
 Census Bureau, 21069
 United States maps, GE-50 series, 21071, 25940-942, 29759, 28199-200
 conical section method for determining geometric configuration of planet by photographs taken from space, USSR study, 23536
 DIME geographic base file package, census use study for automated address coding, 16748
 DIME workshops program, census use study, interim report, 28147
 Federal Item Identification guide, 28596
 geologic and hydrologic maps for land use planning in Connecticut Valley with examples from folio of Hartford North Quadrangle, Conn., 21714
 geologic maps of moon, list, 20351
 integrated system of geologic mapping and geochemical sampling by light aircraft, 26491
 National Ocean Survey—
 aeronautical charts, dates of latest editions, 18211

Maps and charts—Continued

National Ocean Survey—Continued
 instrument approach procedure charts, 18493
 Alaska, Hawaii, U.S. Pacific Islands, 18494
 military fields, 18624
 nautical chart catalogs—
 Alaska including Aleutian Islands, 32507
 Atlantic and Gulf Coasts including Puerto Rico and Virgin Islands, 22092, 29379
 East Asia, region 9, 23869
 numerical listing of charts, 23871
 Pacific Coast, including Hawaii, Guam, and Samoa Islands, 29380
 special purpose navigational charts and publications, 23870
 reports and maps released only in open files, 29010
 structural and stratigraphic framework and spatial distribution of permeability of Atlantic Coastal Plain, North Carolina to New York, 23367
 synoptic weather maps, daily series, 18202
 transportation in 19th-century America, survey of cartographic records in National Archives of United States, 31670
 types of maps published by Government agencies, 23380
 universal transverse mercator grid, 28051
see also Atlases—*also* names of localities—*also* subjects.

Mar-A-Lago National Historic Site:
 administration, provide—
 law, 21129
 report, 21176

MARAD 1972, new wave in American shipping, 25398

Marathon County, Republican Party, *see* Republican Party of Marathon County.

Marathon County Republican Women, annual report, 22949

Marble Canyon National Monuments, certain lands to be additions to National Wilderness Preservation System, 2300

MARC (machine readable cataloging), *see* Cataloging.

Marceleno, Troy, processing and recovery of Jon Thomas, cool cat, 17428

Marchbanks, Maurice, relief, 19339, 19601, 19836

Marcln, Thomas C., projections of demand for housing by type of unit and region, 19104

Marcuson, William F., III, damping capacity of soil during dynamic loading, review of laboratory methods of determining damping, 28781

Margins (securities) trading, *see* Securities.

Margolis, L., revised annotated list of parasites from sea mammals caught off west coast of North America, 20698

Marianna & Mountstown RR., ICC procedures, inquiry, hearing, 23020

Marietta, Ga.:
 flood plain information, Sope Creek, 28725
 floods, Sope Creek, 28764

Marihuana:
 marihuana and health, report to Congress, 19998
 research on marihuana and hashish, world drug traffic and its impact on U.S. security, hearings, 19991

Marihuana and Drug Abuse Commission:
 appropriations, 1973—
 hearings, 15866
 report, 16987, 19615, 21311
 veto message, 19556

Marihuana and Drug Abuse Commission:
 drug use in America, problem in perspective, report, 25391, 27226
 appendix, 32441

Marijuana, *see* Marihuana.

Marine accidents, marine casualty reports, 30563-565, 32522

Marine animals, *see* Marine fauna.

- Marine biology:
 bibliography, 23815
 biological and nutrient chemistry data from participating ships, 2d survey cruise, eastern tropical Pacific Ocean, EASTROPAC atlas, 29373
- Marine borers, resistance of tropical wood *Delbergia retusa* to marine borer, preliminary investigation, 16449
- Marine casualty reports, 30563-565, 32522
- Marine Corps:
 aircraft accident report, 23855
 engineer operations, Fleet Marine Force manual, 25393
 facilities, definitive designs, 16432
 Fleet Marine Force manual FMFM series, 17673, 20516, 25392-393, 32442
 historical reference pamphlet, 23615
 history of operations in World War II, 21925
 logistics and personnel support, manual, 32442
 Marine division, Fleet Marine Force manual, 17673
 publications, price list, 17799
 special Marine Corps Units of World War II, 23615
 travel regulations, 18526, 30120
 12th Marines, brief history, 23614
- Marine Corps Reserve, reserve marine (periodical), 18866
- Marine engineering:
 digital follow-up systems for ship automation, USSR study, 26577
 marine equipment maintenance support in Army in field, field manual, 24173
 marine thermoelectric cooling systems, USSR study, 20453
 ocean engineering reports, 31985
 index, 31985
 technical diagnosis of ship automation, USSR study, 26566
- Marine environment, *see* Environment.
- Marine fauna:
 implantation of telemetering devices in skin of sea animals, USSR study, 20477
 interaction between marine organisms and oil pollution, 28793
 marine fisheries review (monthly), 18609
 marine game fish program, 25611
 Marine mammal protection act—
 law, 19452
 report, 19666
 operating principle of echolocation system of marine animals, USSR study, 23544
 revised annotated list of parasites from sea mammals caught off west coast of North America, 20698
 taxonomic hierarchy and checklist of genera and higher taxa of marine nematodes, 23964
see also Benthos.
- Marine fisheries review, 18609
- Marine fishes of California current and adjacent waters, 23795
- Marine fishes of Gulf and south Atlantic, 29377
- Marine fishes of North Pacific, 20684
- Marine geodesy, *see* Geodesy.
- Marine geology, *see* Submarine geology.
- Marine Mammal Commission:
 appropriations, 1974, hearings, 28388
 establish—
 law, 19452
 report, 19666
- Marine mammals, *see* Marine fauna.
- Marine Minerals Technology Center, NOAA technical report ERL-MMTC (series), 23802
- Marine pollution, *see* Water pollution.
- Marine products development irradiator program, dosimetry and operations, annual report, 28087
- Marine protection, research and sanctuaries act of 1972 (ocean dumping), 27457
- Marine radioecology, selected bibliography of non-Russian literature, 22489
- Marine resources conservation:
 Federal ocean program, message from President, 16945
 law of the sea crisis, staff report on United Nations Seabed Committee outer Continental Shelf and marine mineral development, 17270-271
 marine protection, research and sanctuaries act (ocean dumping), 27457
 marine sanctuaries, enforce regulations—
 law, 19461
 report, 19696
 marine sanctuaries in California, create, suspend leasing for oil and gas, and other minerals, 21343
 Marine Safety Council, proceedings, 18821
 Marine salvage and hull repair, 19172
 Marine sanctuaries, *see* Marine resources conservation.
 Marine sanitation, 30186
 Marine science, *see* Oceanography.
- Marine services:
 weather chart—
 Alaskan waters, 29415
 Cape Hatteras, N.C., to Savannah, Ga., 29416
 Eastport, Maine to Montauk Point, N.Y., 29417
 Eureka, Calif., to Canadian border, 29418
 Eureka to Point Conception, Calif., 29419
 Great Lakes—
 Huron, Erie, and Ontario, 29420
 Michigan and Superior, 29421
 Hawaiian waters, 29422
 Manasquan, N.J., to Cape Hatteras, N.C., 29423
 Mexican border to Point Conception, Calif., 29424
 Montauk Pt., N.Y., to Manasquan, N.J., 29425
 Morgan City, La., to—
 Apalachicola, Fla., 29426
 Brownsville, Tex., 29427
 Savannah, Ga. to Apalachicola, Fla., 29428
- Marine terminals, *see* Terminals (transportation).
- Marine weather service, 22155
- Marine zoology, *see* Marine fauna.
- Mariner, *see* Spacecraft.
- Mariners, *see* Notice to mariners.
- Mariners weather log (periodical), 18610
- Marion County, Ind.:
 flood plain information—
 Crooked Creek and Williams Creek, 28706
 Lick Creek and Little Buck Creek, 28711
 Little Eagle Creek and tributaries, 28712
 Pogues Run, Pleasant Run, and Bean Creek, 28720
 floods, how to avoid damage—
 Crooked Creek and Williams Creek, 28741
 Little Eagle Creek and tributaries, 28742
 Pogues Run, Pleasant Run, and Bean Creek, 28745
- Marion County, Oreg., soil survey report of area, 17843
- Marion County Republican Executive Committee, annual report, 22942
- Marital status, *see* Marriage.
- Maritime academies, Maritime academy act, amend, hearing, 21203
- Maritime Administration:
 annual report, 25398
 appropriations, authorization hearings, 15771
 appropriations, 1973—
 authorization, law, 16904
 supplemental authorization—
 law, 19453
 report, 19706

INDEX 1973

Maritime Administration—Continued
 appropriations, 1974, authorization—
 hearing, 28526
 report, 32111
 current regulations, index, 25395
 domestic shipping and maritime policy,
 20517
 highlights of MarAd port activities, 27689
 introducing programs and activities,
 25396
 oversight and authorization, hearings,
 21271
 press releases, 18776
 SP series, 21926-928, 23616-620, 25397,
 27690-692
 Maritime Industry, *see* Merchant marine—
 Shipping.
 Maritime law:
 law of the sea—
 crisis, staff report on United Nations
 Seabed Committee outer Continental
 Shelf and marine mineral develop-
 ment, 17270-271
 hearing, 19958
 resolution, hearings, 27202
 prevention of incidents on and over high
 seas, agreement with Union of Socialist
 Republics, 16523
 see also Admiralty.
 Maritime Mobile Telecommunications, draft
 proposals of United States for World
 Administrative Radio Conference, 31843
 Maritime navigation, *see* Navigation.
 Maritime service, *see* Shipping.
 Maritime Subsidy Board, current regulations,
 index, 25395
 Markers, simulation study of diamond run-
 way marks for aircraft approach, guidance,
 24037
 Market absorption of apartments, 18193
 Market analysis for title 10 land develop-
 ment projects, 29071
 Market diseases of stone fruits, cherries,
 peaches, nectarines, apricots, and plums,
 20899
 Market share reports catalog, 17587, 21835
 Marketing, *see* Markets and marketing.
 Marketing research:
 market analysis for title 10 land develop-
 ment projects, HUD, 29071
 marketing economic research publications,
 reference list, 27421
 tree nut production and marketing re-
 search, 1965-71, bibliography, 19120
 Markets and marketing:
 acreage marketing guides, 19100, 22315-
 316
 agreements and orders, statutes, compila-
 tion, 25820
 capital markets and economic develop-
 ment, Kleinman plan, hearing, 21222
 crops, quotas and allotments, statutes,
 compilation, 25820
 effects of alternative marketing margins
 for beef and pork, 30697
 exhibitor's export market guide (series),
 18509
 Federal milk marketing orders, summary
 of major provisions, 27981
 Federal paperwork burden, effect of FCC
 requirements on small market broad-
 caster, hearings, 26292
 Federal-State market news service, 22336
 Foreign Agricultural Service, market
 promotion activity, report, 32028
 foreign market surveys available in fore-
 ign production and commercial re-
 ports, 1969-July 1972, cumulative index,
 16155
 International marketing information serv-
 ice, 18509
 lack of authority limits consumer protec-
 tion, problems in identifying and re-
 moving from market products which
 violate law, GAO report, 16096

Markets and marketing—Continued
 market factors in—
 Belgium, 19295
 Denmark, 22634
 Israel, 28634
 Yugoslavia, 16836
 market machinery, use it or lose it (re-
 marks), 20910
 market outlook for U.S. crops (address),
 25823
 market profiles for—
 Africa, 22632
 Eastern Europe, U.S.S.R., and People's
 Republic of China, 24269
 Far East, 15621
 Latin America and Caribbean, 24287
 Western Europe and Canada, 21104
 marketing and transportation, 18611
 marketing bulletin, 22336, 27994-28000,
 29624, 31914
 marketing of Health Maintenance Organi-
 zation services, technical assistance
 publications, 21755
 marketing research reports, 15474-476,
 16604-606, 19109-112, 20911-914,
 22337-338, 24134, 25824-825, 26937-
 940, 29625-626, 30707-708, 31915-917
 matching fund marketing service program,
 highlights of progress for 1971 and
 summary of ongoing work for 1972,
 22314
 milk sales in foodstores, pricing and other
 merchandising practices, 20913
 population data for milk marketing areas
 under Federal orders, based on 1970
 census, 26925
 safety in marketplace, program for im-
 provement of consumer product safety,
 29327
 sales potential and market shares, 16473
 selling of America, 1972, analysis of in-
 ternational travel to United States by
 USTS Regional Office areas, 16568
 small marketers' aids, 16473
 using market share reports—
 to analyze needs of Federal Republic
 of Germany, 21100
 to estimate needs of electric measuring
 and controlling instruments on world
 market, 21101
 world markets for U.S. exports (series),
 18509
 see also names or classes of commodities,
 etc., marketed.
 Marking, Lief L., methods of estimating half-
 life of biological activity of toxic chemi-
 cals in water, 20780
 Marking:
 aircraft exterior lighting and marking for
 avoiding collisions, 20826
 electrical and electronic parts, military
 standard, 20064
 for domestic shipment, civil agencies,
 23249
 marking for shipment and storage, mili-
 tary standard, 27403
 obstruction marking and lighting, 23211
 radioactive materials, marking and label-
 ing of items, etc., military standard,
 25024
 registration, aircraft and related products,
 Federal aviation regulations, 18292
 shipments and storage, military standard,
 25013
 truck-top markings for visual identifica-
 tion, 31885
 Marking, metal container, assembly, clean
 work station, and miscellaneous industry
 machinery, industrial plant equipment
 handbook, 15943
 Marking machines, industrial plant equip-
 ment handbook, 15943
 Marksmanship, *see* Shooting.
 Markstrom, Donald C., specific gravity varia-
 tion with height in Black Hills ponderosa
 pine, 17517

Marland, S. P., jr.:

addresses—

- Nov. 11, 1971, 28655
- Nov. 3, 1972, 26367
- Nov. 7, 1972, 26362
- Nov. 10, 1972, 30154
- Nov. 24, 1972, 25055
- Nov. 30, 1972, 26359
- Dec. 7, 1972, 25059
- Dec. 14, 1972, 25044
- Jan. 10, 1973, 25061
- Jan. 23, 1973, 25048
- Feb. 9, 1973, 25047
- Feb. 27, 1973, 25049
- Mar. 15, 1973, 28661
- Mar. 29, 1973, 26366, 28659
- Apr. 2, 1973, 26364
- May 31, 1973, 28682
- June 3, 1973, 30155
- June 8, 1973, 30149
- June 13, 1973, 30137
- July 19, 1973, 31234
- Aug. 5, 1973, 31219

nomination—

- hearings, 21376
- report, 21308

Maronde, Robert F., drug utilization review with one-line computer capability at Los Angeles County General Hospital, 27883

Marquette, Jacques, opening of upper Mississippi River by Marquette and Jolliet, commemorate, law, 30917

Marquette University:

- duty-free entry of carillon—
- law, 19344
- report, 15813

Marriage:

- age at 1st marriage and children ever born for U.S. census of population, supplemental report, 25912
- age at 1st marriage, 1970, census of population, 29709
- completeness and quality of response in North Carolina marriage follow-back survey, 30480
- marital status and living arrangements—
- population characteristics, 19245
- population in United States, 1970, supplementary report, 27023
- marital status, 1970, census of population, 21044
- marriage, divorce, and remarriage by year of birth, 16780
- social and economic characteristics by marital status for United States, supplementary report, 27024
- vital statistics of U.S., 25570

Married persons, *see* Husbands and wives.

Marron, Beatrice, study of 6 university-based information systems, 29325

Mars (planet):

- flight test of erectable spacecraft used for decelerator testing at simulated Mars entry condition, 20603
- flow-field measurements around Mars lander model using hot-film anemometers under simulated Mars surface conditions, 17710
- Mariner 9 photographs of Mars (posters), 21971
- meteoroid impacts on Mars and secondary particle environment, 20606
- preliminary results of measuring H-O content in atmosphere of Mars on Mars-3 automatic space station, USSR study, 27649
- site alteration effects from rocket exhaust impingement during simulated Viking Mars landing, nozzle development and physical site alteration, 30448

Mars atmosphere, *see* Atmosphere.

Marshall, Arthur A., jr., for Congress, *see* Arthur A. Marshall jr. for Congress.

Marshall, William F., hazard from engines rebreathing exhaust in confined space, 30434

Marshall County, Miss., soil survey report, 25710

Marshall County Central Committee of Iowa, annual report, 24421

Marshals:

- deputy U.S., reclassification of positions, reports, 28359, 30966
- reclassification and pay of U.S. deputy marshals, hearing, 17075
- revised pay structure of nonsupervisory deputy U.S. Marshal's report, 19688

Marshburn, James P., heat pipe investigations, 32471

Marsupials, monotremes, and marsupials, reference for zoological institutions, 31797

Martin, Franklin W., yam production methods, 20930

Martin, John J., jr., chemical treatment of plating waste for removal of heavy metals, 28798

Martin, Preston:

addresses—

- October 16, 1972, 21545
- November 14, 1972, 21544

Martin County Republican Central Committee, annual report, 22687

Martin County Republican Committee, annual report, 24530

Martinelli, M., jr., simulated sonic boom as avalanche trigger, 23293

Martinez, J. R., user's guide to diffusion/kINETICS, DIFKIN, code, 32253

Martinique:

- economic trends and their implications for United States, 29115
- map, 16804
- mineral industry, minerals yearbook chapter, 20339

Marut, John K., statistical analysis of meteorological parameters during fog at 45 U.S. airports, final report, 24029

Maryama, Lenore S., manuscripts, MARC format, 25387

Marvin, Eugene L., Laplace transform inversion by Fourier series expansion, 25072

Marvin, Keith E., address, Sept. 30, 1971, 28082

Marvin, Richard F., radiometric ages of igneous rocks, from Pima, Santa Cruz, and Cochise Counties, southeastern Arizona, 27557

Marvin Esch Congressional Campaign Committee, annual report, 28285

Marvin Esch Support Committee, annual report, 24348

Maryland:

- census of business, 1967, retail trade, 16697
- census of housing, 1970, housing characteristics for States, cities, and counties, 15548
- census of population, 1970, detailed characteristics, 16734
- census of transportation, 1972, truck inventory and use survey, 30814
- climatological data, 18080
- county business patterns, 30823
- electric rate book, 21553
- landings, fish and shellfish, 18612, 23787, 27794
- Maryland-Virginia seaward boundary agreements, consent of Congress—
- law, 19492
- reports, 16983, 19936
- mineral industry, minerals yearbook chapter, 25401
- 1970 census of population, characteristics of population, 29702
- precipitation data, hourly, 18440
- Republican 4th Congressional District Committee, annual report, 22787
- see also* District of Columbia metropolitan area.

Mascoma River, flood plain information, 20115

INDEX 1973

- Masking, masking as indicator, of neural fatigue, preliminary study, 20529
- Masks, vision through various scuba face-masks, 30409
- Maslen, Stephen H., asymmetric hypersonic flow, 20590
- Mason, Charles, journal of Charles Mason during survey of Mason and Dixon Line, Nov. 15, 1763-Sept. 11, 1768 microfilm pamphlet describing, 21995
- Mason, Richard R., forest-site relationships within outbreak of lodgepole needle miner in central Oregon, 28962
- Mason, V. Bradford, electromagnetic radiation from simple sources in presence of homogeneous dielectric sphere, 29251
- Mason and Dixon Line, journal of Charles Mason during survey of Mason and Dixon Line, Nov. 15, 1763-Sept. 11, 1768, microfilm, pamphlet describing, 21995
- Masonry, dynamic thermal performance of experimental masonry building, 32481
- Mass (physics):
determination of mass of Jupiter from study of motion of 57 Mnemosyne, 30583
dynamic characteristics of two-stage variable-mass flexible missile with internal flow, 17695
new method for generating waterdrops of specified mass, 27737
orbit of Polyhymnia and mass of Jupiter, 17788
- Mass balance, determination of mass balance and entrainment in stratified Duwamish River estuary, King County, Wash., 20359
- Mass diffusion in self-confined rotating flow, 23672
- Mass spectrometry, *see* Spectrometry.
- Mass spectroscopy, *see* Spectroscopy.
- Mass thickness manual for walls, floors, and roofs, 28585
- Mass transit, *see* Local transit.
- Massachusetts:
census of business, 1967, selected services, 16705
census of housing, 1970, housing characteristics for States, cities, and counties, 15549
census of population, 1970, detailed characteristics, 19204
census of transportation, 1972, truck inventory and use survey, 21050
counties, population estimates, 29779
county business patterns, 29736
electric rate book, 23228
income limits for rent supplement housing, rev. pages, 23445
landings, fish and shellfish, 18613, 26761
mineral industry, minerals yearbook chapter, 25462
- 1970 census of population, characteristics of population, 30801
- registry of minority contractors and housing professionals, listing in selected cities, 32383
- regular income limits for sec. 235-236 housing, rev. pages, 23444
- sedimentary framework of western Gulf of Maine and southeastern Massachusetts offshore area, 29020
- Massey, Iris H., aptitude levels in enlisted manpower pool of Air Force, 20940
- Mast, Phillip W., tensor manipulations in complex coordinates with applications to mechanics of materials, 30592
- Master chief petty officer, Lighthouse Service, 16961, 17188
- Master cross reference list, 20042
- Mastitis, what you can do about bovine mastitis, 15468
- Mata, S. A., Jr., accuracy of determining mountain beetle attacks in ponderosa pine utilizing pitch tubes, frass, and entrance holes, 23291
- Matches, matches and lighters in flammable fabric incidents, magnitude of problem, 22016
- Matching fund marketing service program, highlights of progress for 1971 and summary of ongoing work for 1972, 22314
- Materials:
application of modern technologies to international development, list of reports, 18000
behavior of materials in subsurface ocean environment, 17793
First International Meeting of Directors and Chiefs of Naval Material, symposium proceedings, 26783
geology and properties of materials exposed in USACRREL permafrost tunnel, 17371
Government specifications and standards for plastics covering defense engineering materials and applications, 31198
industrial materials, management, technological problems & issues for Congress, 24873
life cycle costing guide for complete defense system acquisitions, 28607
materials and procedures for repair of spalls in concrete, 27439
materials needs and environment today and tomorrow, final reports, 31685
materials sciences, weekly Government abstracts, 19072
materials technology programs in support of mercury rankine space power system, 32475
National Bureau of Standards, standard reference materials—
announcements, 18690
catalog, 29316
National materials policy act of 1970, text, 24867
national policy, world perspective, 2d interim report, 23730
performance concept in buildings, symposium proceedings, 16359
resolving some selected issues of a national materials policy, conference papers, 28574
science—
East European abstracts, 18244
USSR abstracts, 19039
superconducting, quarterly literature survey, 18946
technical base of automated material and technical supply control system, USSR study, 17626
technology of producing new materials, USSR study, 31530
see also Composite materials—Construction materials—*also* names of materials.
- Materials discussing proposed legislative program to meet midwest and northern rail crisis, 32142
- Materials handling:
Army technical manual, 16652
equipment, preparation for shipment, storage, cyclic maintenance, routine testing and processing, military standard, 25014
ground fit and compatibility tests of airborne stores, procedure for, military standard, 20066
materials handling research—
bucket-wheel excavator, 26651
penetration of selected/granular materials by wedge-shaped tools, 29232
shear properties of several granular materials, 27698
miscellaneous materials handling equipment, Federal item identification guide, 26328
storage and materials handling, Army technical manual, 25864
uranium hexafluoride handling procedures and container criteria, 21014
see also Cargo handling.

- Materials management:**
 defense integrated material management manual for consumable items—commodity oriented items, 28590
 weapon system oriented items, 30089
- Materials Policy, National Commission on.**
see National Commission on Materials Policy.
- Materials to help teach forest conservation.** 32317
- Materiel, *see* Military supplies.**
- Materiel management, *see* Materials management.**
- Maternal and Child Health Service:**
 MCHS statistical series, 25402, 26638, 29195
 programs, 23625
 administering agencies and legislative base, 26637
 report on promoting health of mothers and children, 23624
- Maternal and child health services of State and local health departments, 25402**
- Maternal welfare, *see* Mothers.**
- Maternity, *see* Mothers.**
- Mathematical models:**
 BEA quarterly econometric model, 31214
 bellies, quarterly and shorter-term price forecasting models relating to cash and future quotations, 30719
 computerized unsymmetrical mathematical simulation and experimental verification for helicopter crashworthiness in which multidirectional impact forces are present, 30759
 field program designs for verifying photochemical diffusion models, 32254
 for simulation of photogrammetric camera using stellar control, 22108
 investigation of flow fields within large-scale hypersonic inlet models, 29270
 mathematical model for standing-wave acoustic parametric source (SWAPS), 31758
 mathematical models and educational planning, USSR study, 26576
 mathematical simulation of turbidity structure within an impoundment, hydraulic laboratory investigation, 25097
 model tests of lined tunnels in jointed rock mass (strengthening of rock by chemical adhesive grouting), 28693
 modeling of atomic clock performance and detection of abnormal clock behavior, 26707
 numerical thermal plume model for vertical outfalls, in shallow water, 27469
 on natural redistribution of surface contamination, 24199
 on role of organizational period in NHR? circularly symmetric hurricane model, 30525
 optimization by pattern search method, 29562
 planning model to project potential for desalting in, 20388
 pyritic systems, mathematical model, 20185
 simplified mathematical modeling of water quality, 31305
 storm hydrographs using double-triangle model, 20563
 two-dimensional short-range fog forecast model, 22413
 use of model output statistics (MOS) to estimate daily maximum temperatures, 30536
 user's guide to diffusion/kinetics, DIPKIN, code, 32253
- Mathematical symbols, mathematical signs and symbols for use in physical sciences and technology, military standard, 15957**
- Mathematicians. Army, 18th conference transactions, 28045**
- Mathematics:**
 application of matched asymptotic expansions to lunar and interplanetary trajectories, 31606
 technical discussion, 30449
 application of model of porous body for calculation of field of velocities and temperatures in reactor core, USSR study, 30371
 applied mathematics series, 29307
 approximate tests of independence in contingency tables from complex stratified cluster samples, 27743
 attribute sampling inspection procedure based on hypergeometric distribution, 15526
 complete orthonormal set of 2-dimensional Haar-like functions, 27848
 convergence properties of Haar series, 27847
 East European abstracts, 18245
 equivalence techniques for vibration testing, 17342
 explanatory notes on W. H. Zachariasen's theory of X-ray diffraction in ideal crystals, 30595
 evaluation of 200 mCi ⁵⁵Fe X-ray diffraction source in focusing and Debye-Scherrer analytical applications, 25871
 extension of QZ algorithm for solving generalized matrix eigenvalue problem, 31634
 factorization of meromorphic functions, 26786
 gamma distribution computer program and graph paper, note, 31721
 MANIP, computer system for algebra and analytic differentiation, 31719
 mathematic analysis of reactions of human respiratory system to hypoxia and hypercapnia, 23534
 mathematical computer programs, compilation, 26684
 mathematical considerations about effects of guessing on test variance, 20939
 mathematical sciences, journal of research, National Bureau of Standards, 18531
 navigational instruments, USSR study, 27651
 on application of Haar functions, 27846
 on utility of m-6.8 potential function, 26704
 performance comparison of labeling algorithms for calculating shortest path trees, 29323
 performance on expanded time bearing plot as function of bearing accuracy, 26640
 recent computational experience with method of phase and amplitude diagrams, 22168
 robot-manipulator control algorithms, USSR study, 30360
 Spanish, tutorial materials, 29152
 table of 2-associate-class partially balanced designs, 29307
 tables of type NM-64 cosmic-ray neutron monitor counting rates as function of solar modulation of galactic cosmic rays expressed in terms of the Ehmert potential, 21013
 transactions of 18th conference of Army mathematicians, 28045
 two-dimensional Haar-like transform, 27849
 USSR abstracts, 19040
see also Equations—Iteration (mathematics)—Mathematical models—Variables (mathematics).
- Matheny Creek, flood plain information, Sarasota County, Fla., 32220**
- Matherly, J., evaluation of field-type incinerator for human waste, theater of operations sewage treatment systems, 28692**

INDEX 1973

- Mathews, Virginia H.:
adults as reading models for children, 28673
getting help on reading outside of school, 28676
- Mathis, Evelyn S., characteristics of residents in nursing and personal care homes, U.S., June-Aug. 1969, 25566
- Matrices (mathematics):
Cholesky factorization and matrix inversion, 26772
extension of QZ algorithm for solving generalized matrix eigenvalue problem, 31634
table of 2-associate-class partially balanced designs, 29307
31 group response matrices for multisphere neutron spectrometer over energy range thermal to 400 MeV, 28076
- Mats:
design of landing-mat-surfaced airfields for operation of C-5A aircraft, 30167
evaluation and maintenance of expedient-surfaced airfield facilities, 28779
evaluation of Dow Chemical Company extruded aluminum 4- piece 4- by 4-ft landing mat (MX18-E), 26388
evaluation of Goodyear medium-duty aluminum honeycomb landing mat, 26387
evaluation of landing mats—
Dow Chemical extruded truss-web, 21480
XM20 and X20E1 under heavy-duty load, 21479
Harvey aluminum 1- by 12-ft extruded light-duty landing mat with symmetrical butt-type end connectors, evaluation, 20170
Kaiser MX 19-B and MX 19-C aluminum honeycomb landing mat, evaluation, 26389
- Matsue, Japan, summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23888
- Matsumoto, Masao, impact of food stamp program on 3 local economies input-output analysis, 20089
- Matthews, Thresa H., health services in rural America, 29619
- Mattick, R. E., geophysical studies in Yuma area, Ariz. and Calif., 30275
- Mattingly, Ignatius G., relationships between speech and reading, 31692
- Mattis, Richard L., carrier lifetime measurement by photoconductive decay method, 17741
- Mattresses:
current industrial reports, 18194, 30843
mattresses, bedsprings and other sleep furniture, current industrial reports, 15588
- Maul Island, Hawaii, soil survey report, 17842
- Mauna Loa Observatory, aerosol and precipitation chemistry at Mauna Loa Observatory, 23805
- Mauer, Alan O., selling in Italy, 30129
- Mauer, Alfred H., biographical essays and catalogue of paintings, 25571
- Mauritania, area handbook, 24177
- Mauritius:
background notes, 16493
map, 16805
- Mavrodineanu, R., accuracy in spectrophotometry and luminescence measurements, 29317
- Maximization and minimization of dynamic load factors, 27853
- Maximum likelihood estimates, extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687
- Maxwell, George R., soil survey of Arkansas County, Arkansas, 17840
- Maxwell, Laurie, LEAA newsletter, 18539
- Maxwell, Richard, letters sent by Surveyor General of Territory Northwest of River Ohio, 23700
- Maxwell for Congress Committee, annual report, 22752
- May atom be worker not soldier, 28086
- May, Curtis, shade trees for home, 24124
- Mayaguez, P.R.:
census of housing, metropolitan housing characteristics, 24215
census of population and housing, 1970, census tracts, 15580
- Mayer, Shirley A., use of ancillary health personnel in maternal and child health projects, 31576
- Mayes, Herman F., computer processing of sales data on livestock auction market, 24134
- Mayeske, George W.:
study of achievement of our nation's students, 31231
study of our Nation's schools, 27435
- Mayhue, Luther F., solvent extraction status report, 27459
- Mayhue, Robert J., drag characteristics of disk-gap band parachute with nominal diameter of 1.65 meters and Mach numbers from 2.0 to 3.0, 20601
- Mayonnaise:
and related products, current industrial reports, 16775, 30846
mayonnaise, salad dressing & related products, 15972
- Mayoros, John C., relief, 19347, 19597
- Mayors, District of Columbia, elect mayor and city council, report, 31069
- Mazle, Sara M., population, distribution, and policy, 30601
- MCHS, see Maternal and Child Health Service.
- MDTA (Manpower development and training act), see Manpower.
- Meadow Creek:
flood plain information, 17387, 28715
floods, 28751
how to avoid damage, 20138
- Meads, Sue, surgical operations in short-term hospitals, 25567
- Meals, see Food.
- Mean horizontal wind speed and direction variability at heights of 1.5 and 4.0 meters above ground level at WSMR, New Mexico, 22423
- Measure of success, Federal support for continuing education, 32453
- Measurements:
automatic data acquisition system for underground measurements, 25509
carrier lifetime measurement by photoconductive decay method, 17741
electromotive force measurements on cells involving B-alumina solid electrolyte, 29298
freezing decayed wood to facilitate ring counts and width measurements, 23286
intersectorial prediction in optimum planning system, RaS method when prediction and measurement errors are present, USSR study, 17632
laser Doppler velocity measurements of swirling flows with upstream influence, 31610
measurement of logging residue, alternative applications of line intersect method, 21662
measurements of laser extinction in ice fog for design of SEV pilotage system, 21437
measurements of Loran-C skywave stability, 28236
measurements of performance of multiwire proportional chambers, 29297
monitoring instrumentation for measurement of sulfur dioxide in stationary source emissions, 28804

Measurements—Continued

overlap, measurement agreement through process evaluation, 29315
techniques and standards of electromagnetic quantities from D-C to millimeter-wave frequencies, abstracts of selected articles, 18254
temperature and C₂n profiles measured over land and ocean to 3 km above surface, 25623
users bulletin, 18614
yacht admeasurement and documentation, 15613

see also subjects of measurements.

Measures, *see* Metric system—Weights and measures.

Measuring instruments:

commercial specifications, tolerances, and other technical requirements, 17732
instrument for measuring tree crown width, 28944
liquid and gas flow, liquid level, and mechanical motion measuring instruments, Federal item identification guide, 23097
measuring pavement roughness spectra using modified BPR roughometer with additional refinements, 31324
model State registration of servicemen and service agencies regulation 23704
31-day battery-operated recording weather station 23285
weighing and measurements devices, specifications, etc. replacement pages, 22002
see also Electromagnetic measurements.

Measuring pavement roughness spectra using modified BPR roughometer with additional refinements, 31324

Measuring tools, *see* Measuring instruments.

Meat:

applicability of Federal meat inspection act to retail establishments, 27657
atlas of meat inspection pathology, 16389
chemical compounds authorized for use under USDA inspection program, list, 22399
commercial production, 26888
directory of meat and poultry inspection program establishments, circuits and officials, 18233
Federal meat and poultry inspection, statistical summary, 26956
Federal meat inspection act, amend. reports, 16979, 19640, 19677, 24907
foreign agriculture circulars, 18380
home canning of meat and poultry, 15469
imports, trade agreement with—
Australia, 17879
Costa Rica, 16521
Dominican Republic, 22266
El Salvador, 16526
Haiti, 16519
Honduras, 17878
Mexico, 16520
Nicaragua, 17890

inspection—

procedures manual, 15498A, 28040
regulations of USDA, 31929
large-scale meat buying made easy, educational programs, 22312
livestock and meat situation, 18589
market news service on livestock, meat and wool, 29624
market news, weekly summary and statistics, 18590
meat and poultry—
clean for you, 25821
inspection regulations, 29656
standards for you, 26934
national meat-packing waste management research and development program, 26418
price ceilings, effectiveness, hearings, 28519
prices and public interest, 21199

Meat—Continued

processing plants, chemical compounds authorized for use under USDA inspection programs, list, 28041
rabbit meat inspection—
make mandatory at Federal expense, report, 26212
slaughtered for human food, report, 16954
sanitation handbook of meat and poultry inspection program, 15499
State-Federal meat and poultry inspection program, increase Federal support, report, 24907
State inspection costs, Federal contribution, increase, reports, 16979, 19640, 19677
statistics, 29634
see also Packing industry.

Meat animals, *see* Livestock.

Meat inspectors:

Carcass Data Service (Beef), guide for meat inspectors, 20881
training the nation's meat inspectors, 16612

Meat stores, *see* Stores.

Meats, *see* Meat.

Mech, naval aviation maintenance safety, 18615

Mechals, Byron J., water quality criteria data book, investigation into recreational water quality, 21523

Mechanical brains, *see* Cybernetics.

Mechanical design, *see* Designs (Industrial).

Mechanical drawing:

construction drafting, technical manual, 25861
general drafting, technical manual, 22434
Mechanical effect of underground explosion, 25880

Mechanical effects of contained underground nuclear explosions, 16675

Mechanical engineering:

design manual, 25650
mechanical engineering, design manual, 20724

Mechanical equipment, *see* Machinery.

Mechanical lighters, matches and lighters in flammable fabric incidents, magnitude of problem, 22016

Mechanical mobility:

measuring soil properties in vehicle mobility research resistance of fine-grained soils to high-speed penetration, 31262
mobile system for cleaning oil-contaminated beaches, development, 28822

Mechanical properties:

and cutting characteristics of coal, 29208
autoclave heat treatments on mechanical properties of prealloyed powder cobalt-base alloy HS-31, 23688
mechanical tests for welded joints, military standard, 15960

Mechanics (persons):

aerospace ground equipment repairman, Air Force, notice, 16616
air frame and powerplant mechanics certification guide, 30210
aircraft control and warning radar repairman, notice, 16626
aircraft pneumatic repairman, Air Force notice, 16627
aircraft propeller repairman, Air Force notice, 16628
airframe & powerplant mechanics, airframe handbooks, 16066
automotive mechanics, occupational performance survey, 29357
aviation structural mechanics, E 3 & 2, rate training manual, 17794
model State registration of servicemen and service agencies regulation, 23704
national apprenticeship standards for automotive machinist, 28043
opticalman 1 & C, 26787
weapons control systems mechanic (electronics technician), notice, 16637

INDEX 1973

Mechanics (science) :
 career fields, task difficulty and task aptitude benchmark scales, 25843
 glossary of selected terms useful in studies of mechanics of aquifer systems and land subsidence due to fluid withdrawal 20362
 mechanical effects of underground nuclear explosion in granite—
 beyond close-in zone, 21026
 in close-in zone, 21028
 metals, methods of mechanical and technological testing, 29129
 review of plane-stress fracture mechanics parameter K_{IC} determined using center-cracked tension specimen, 30589
 rock mechanics instrumentation for mine design, 25420
 WAVE, computer program for one-dimensional stress wave analysis in time-dependent inelastic rock using generalized Voigt model, 23640
Mechanism of pyrolysis, oxidation, and burning of organic materials, 23706
Mechanisms, see Machinery.
Mechanisms and principles of goal-directed behavior, USSR study, 32404
Mechanisms of sleep, 27718A
Mechanization, merit, red rock and Potomac, tomato varieties adapted to mechanical harvesting, 16613
see also Automation.
Mechtly, E. A., International System of Units, physical constants and conversion factors, 29268
Mechums River:
 flood plain information, 28716
 floods, how to avoid damage, 28743
Meek, Pierce A., field-replaceable rotor blade pocket study, final report, 28058
Medal of Honor:
 designate as Congressional Medal of Honor—
 hearings, 17028
 report, 16982
Medals:
 cable car 100th anniversary commemoration, report, 26224
 commemorative—
 J. Edgar Hoover, Copernicus 500 anniversary, etc., authorize, hearings, 28396
 Roberto Walker Clemente authorize—
 law, 30909
 report, 28452
 U.S. frigate Constellation—
 law, 16892
 reports, 16958, 17130
 United States Mint, issued for public sale, 23663
Medfield, Republican Women's Club, see Republican Women's Club of Medfield.
Mediators, Federal Mediation and Conciliation Service, employment opportunities, opportunities, 20247
Medicaid:
 existing eligibility notwithstanding social security benefit increase, report, 19647
 finding and treating health problems of eligible children, 30405
 improve programs, report, 15860
 long term care, trends, hearings, 19942, 23039
 medicaid early and periodic screening diagnosis, treatment for individuals under 21, guidelines, 23627
 medical review in skilled nursing homes and mental hospitals, guidelines, 23628
 number of recipients and amounts of payments under medicaid and other medical programs financed from public assistance funds, 23728
 provisions in social security amendments of 1972, 17251
 social security amendments, material related to H.R. 1, 19967
see also Medical assistance.

Medical and health related sciences thesaurus, 16396
Medical apparatus, see Medical instruments and apparatus.
Medical assistance:
 Defense Dept. resources used to provide medical emergency transportation to civilians, hearings, 27192
 financed under title XIX of Social Security Act, 18616
 improve assistance to areas with health manpower shortages—
 hearing, 21254, 21365
 law, 19510
 report, 19697
 medicaid and other medical care financed from public assistance funds, 22037
 number of recipients and amounts of payments under medicaid and other medical programs financed from public assistance funds, 23728
see also Medical care.
Medical care:
 administrative services and facilities for hospitals, planning guide, 26517
 aspects of organizing automated control system in medical industry, USSR study, 23531
 barriers to health care for older Americans, hearings, 31122, 32124
 communications, guidelines for emergency medical services, 30495
 cost of National medical care, chart book, 21751
 diagnosis and treatment of poisoning by pesticides, 31764
 disabled, means of meeting medical care charges, 23971
 effects of continued care, study of chronic illness in home, 26716
 emergency food and medical services, committee print, 23068
 Emergency medical services act—
 hearings, 15753, 27220
 report, 15711
 emergency medical services communications systems, 20369
 emergency medical services, Federal programs, proposals and other background, 21264
 emergency medical services systems act—
 reports, 29874, 32116
 veto, 31061
 Emergency medical services systems development act, hearings, 31153
 family medicine, provide professional and technical training, hearing, 21377
 financed by public assistance funds, 22037
 financial planning in ambulatory health programs, 32487
 financial planning manual for prepaid health care plan, 23404
 health service use, National trends and variations, 22022
 health services in rural America, 29619
 health services research, bibliography 16365
 helicopters in Emergency Medical Service, NIHTSA experience to date, 25581B
 improving health care through research and development, 27876
 long-term institutional care and alternative solutions, 23626
 Maternal and Child Health Service reports on research to improve health services for mothers and children, 31575
 marketing pre-paid health care plans, 22645
 medicaid, early and periodic screening, diagnosis, treatment for individuals under 21, guidelines, 23627
 medical record manual for ambulatory centers, 30896
 medical support in divisions, separate brigades, and armored cavalry regiment, field manual, 16645

- Medical care—Continued
 medical support of U.S. Army in Vietnam, 1965-70, 30764
 national health expenditures, fiscal year 1972, 22240
 price changes under economic stabilization program, 27885
 proceedings on alcoholism emergency care services, 22078
 quality assurance of medical care, monograph, 25685
 regional medical programs, oversight, hearing, 31032
 regionalization guidelines, 20853
 relevance of prepaid group practice to effective delivery of health services (address), 16841
 resolved that Federal Government should enact program of comprehensive medical care for all citizens, collection of excerpts and bibliography relating to 1972-73 intercollegiate debate topic 21162, 26044
 roles and resources of Federal agencies in support of comprehensive emergency medical services, 25269
 size and shape of medical care dollar, chart book, 17835, 30635
 sponsor's guide for nursing homes and intermediate care facilities sec. 232 of National housing act, 17558
 State statutes on emergency medical services, 29043
 tax deduction for medical and dental expenses, 20394
 technology and health care systems in 1980's, conference proceedings, 27749
 utilization review program for home health agencies, 19307
 veterans dependents and survivors, provide and improve medical care, law, 32009
 veterans of World War I, priority, hearings, 15785
 volume of X-ray visits, U.S., 29330
see also Health insurance—Medicare.
- Medical certificates:
 aviation medical examiners, directory 16678
 reviewing and acting on, FPM manual supplement, 18328
- Medical corpsman:
 airman's medical guide, 24171
 medical service specialist (medical assistant), Air Force notice, 16633
- Medical Department, Navy:
 manuals, 20522, 23622, 26639, 34577
- Medical education, *see* Medicine.
- Medical examiners, aviation, directory, 16678
- Medical facilities, *see* Health centers—Hospitals—Veterans hospitals.
- Medical institutions, *see* Hospitals.
- Medical instruments and apparatus:
 medical and dental assemblies, kits, sets, and units, Federal item identification guide, 30104
 medical type components and accessories, Federal item identification guide, 26327
 pneumatic jet medical apparatuses, USSR study, 25359
- Medical insurance, *see* Health insurance—Medicare—Old-age, survivors, disability and health insurance.
- Medical journals, index medicus, journals indexed, list, 23780, 25606
- Medical libraries, *see* Libraries.
- Medical literature:
 bibliography of medical reviews, 18481, 18640
 cumulated, 25606
- Medical Malpractice Commission, medical malpractice, report on litigation, insurance, etc., 27577
- Medical Nutrition Laboratory, *see* Army Medical Research and Nutrition Laboratory.
- Medical occupations, health careers, guidebook, 23578
- Medical officers, *see* Physicians.
- Medical personnel:
 allied health professions traineeships for advanced training, 23405
 Armed Forces, authority for special pay, extend—
 hearing, 28514
 report, 28372
 education programs, Department of Medicine and Surgery, Veterans' Administration, 30680
 Emergency health personnel act amendments of 1972—
 hearing, 21254, 21365
 law, 19510
 report, 19697
 health careers film guide, 16395
 health facilities, manpower, and community mental health centers act, report, 17143
 health professions capitation grants, 32369
 increase graduates from health profession schools and improve quality of their education, GAO report, 17525
 interested in environmental health? Operation MEDIHC, 21761
 inventory of Federal programs supporting health manpower training, 26521
 meeting health manpower needs through more effective use of allied health workers, 29154
 National labor relations act, amend, extension to nonprofit hospital employees, hearings, 31018
 operation MEDIHC for health trained service personnel, 23409
 operation MEDIHC military experience directed into health careers, 21762
 ophthalmology manpower, utilization of supplementary personnel, 30481
 public health, traineeship program, hearing, 21377
 toward health manpower opportunity, 16124
 training of health professionals, increase emphasis on ethical, social, legal, and moral implications of advances in biomedical research and technology, hearings, 28566, 30060
 training of Soviet health workers, USSR study, 25363
 Uniformed services health professionals revitalization act, law, 16917
- Medical Political Action Committee, Virgin Islands, *see* Virgin Islands Medical Political Action Committee.
- Medical practice, *see* Medicine.
- Medical Radiation Exposure Division, BRH/DMRE series, 25678
- Medical radiology, computer applications in radiology, conference proceedings, 25678
- Medical records:
 medical record manual for ambulatory health centers, 30896
 net differences in interview data on chronic conditions and information derived from medical records, 32489
 promote and facilitate studies and research, hearings, 15887
- Medical research:
 and development and activities outside USAF, Air Force manpower standards, 22368
 ethical, social, and legal implications of advances in biomedical research and technology, hearings, 28566, 30060
 Veterans' Administration, 1971, fiscal year, 17099
 data supplement, 17100
- Medical schools:
 foreign medical graduate, bibliography, 29039

INDEX 1973

Medical schools—Continued
 increase graduates from health profession schools and improve quality of their education, GAO report, 17525
 profiles of U.S. medical school faculty, 25601
 State—
 assistance in establishing, appropriations, 1974, report, 32069
 Veterans' Administration to establish assistance, law, 19470
 Medical service, *see* Medical care.
 Medical service specialist (medical assistant), 16633
 Medical specialists, *see* Physicians.
 Medical statistics:
 battle casualties and medical statistics, U.S. Army experience in Korean War, 24191
 Navy—
 101st statistical report of Surgeon General, 23230
 102d statistical report of Surgeon General, 32443
 Medical supervision in pursuit of underwater sports, 17612
 Medical supplies, procurement quality assurance for medical materiel, 21404
 Medical support of U.S. Army in Vietnam, 1965-70, 30764
 Medical technicians:
 dispatcher, emergency medical technician, training course, 20662
 medical technician, assistant, aid, examination announcement, 31983
 Medical technologists, careers in medical technology and related biological sciences in Veterans' Administration hospitals and clinics, 30681
 Medical treatment, *see* Medical care.
 Medicare:
 age-adjusted rates for utilization and reimbursements, by State, 22235
 annual report, 21167
 community hospitals, inflation in premedicare period, 23977
 current medicare survey report, MS series, 22232, 26834, 31808
 distribution of medicare benefit disbursements by type, 23701
 estimated number of persons using medicare services, 22232
 general enrollment period, 29500
 health insurance statistics, HI series, 22233-235
 hospital insurance sample, inpatient hospital utilization, 26834
 hospital insurance under social security health insurance, your medicare handbook, 25706
 improve programs, report, 15860
 improvement needed in administration of program to provide medicare benefits for welfare recipients, GAO report, 31381
 inpatient hospital services, 1967-68, by region, 29499
 medicare, health insurance for the aged, 17833, 22236, 23973, 27881-882, 32556
 amounts reimbursed, State and county, 20770, 27880
 persons enrolled in health insurance programs, 17833, 22236, 23973, 27882, 32556
 utilization and reimbursement by person, summary, 27881
 number of persons in 1968, using reimbursed services, 22233
 number of persons insured, 22234
 OASDHI, hospital, and supplementary medical insurance systems as modified by social security provisions of Public law 603, actuarial cost estimates, 19526, 27247

Medicare:
 providers and suppliers of services under health insurance for the aged, hospitals, extended care facilities, etc., directory, 25702
 provisions in social security amendments of 1972, 17251
 public assistance recipients in supplementary medical insurance programs, 30634
 reimbursement by person for services in 1968, 23972
 short-stay hospitals under medicare, 1969, use and charges, by major discharge diagnosis, 32555
 social security amendments, material related to H.R. 1, 19967
 utilization of short-stay hospitals under medicare by type of control and bed size, 29498
 your medicare handbook, hospital insurance under social security, 26836
 your social security, 20772
see also Old age, survivors, disability and health insurance.
 Medicinal substances, *see* Medicines.
 Medicine:
 Administrator, Veterans' Affairs—
 exchange of medical information, annual report, 15933, 20018
 sharing medical facilities, annual report, 15934
 aerospace medicine and biology, bibliography, 17958
 aerospace medicine, chemical rocket/propellant hazards, 26952
 aidman's medical guide, 24171
 aviation medical report, AM series, 16679-682, 19187, 21033-34, 22510-511, 24205, 28093, 29684-686, 30785-788
 aviation medicine translations, annotated bibliography of recently translated material, 16679
 bibliography of epidemiology, preventive medicine and public health, 25608
 blood level determinations of antiepileptic drugs, clinical value and methods, bibliography, 23770
 effects of helium on mechanics of respiration, with clinical correlations, literature review, 32444
 FDA clinical experience abstracts, 18288
 Fourth all-Union Conference on Space Biology and Medicine, USSR study, 23545.
 guide to literature of epidemiology, preventive medicine, and public health, current bibliography of epidemiology, 18182
 history, 1970, bibliography, 32504
 index medicus, 18481
 abridged, 17939
 abridged, cumulated, 26760
 cumulated, 25606
 index of serial titles currently received by National Library of Medicine, 23779
 medical and health related sciences thesaurus, 16396
 medical, and other problems of space flight, USSR study, 25350
 medical information system, USSR study, 16193
 medical malpractice, report of Secretary's Commission on Medical Malpractice on litigation, insurance, etc., 27577
 medical research in Veterans' Administration, 27245
 medical standards and certification, Federal aviation regulations, 18299
 medical subject headings, 18481
 index medicus cumulated, 25606
 new, 1963-73, cumulated list, 25607
 medical supervision in pursuit of underwater sports, USSR study, 17612
 medicine and public health in People's Republic of China, 27617
 bibliography of Chinese sources, 29123
 Navy, statistics, quarterly, 18930
 physician's role in health delivery system, hearing, 24072

Medicine--Continued

- processing of medical information and assessment of work capacity in space flight, USSR study, 17606
- regional medical programs, fact book, 23413, 26810
- relevance of prepaid group practice to effective delivery of health services (address), 16841
- restrictions on funds for experimental use, hearings, 28566, 30060
- Soviet medical graduate study standards, 17608
- Space medicine and extraterrestrial life, USSR study, 31543
- space medicine incorporated into practice on earth, USSR study, 31519
- topics of study interest in medicine and public health in People's Republic of China, report of planned meeting, 21838
- U.S. Navy medicine (periodical), 19018
- U.S.-U.S.S.R. cooperative agreements, 17095
- use of medicine, review of prescribed and nonprescribed medicine use, 22023
- USSR, Academy of Medical Sciences, vestnik (periodical), 19045
- VA programs for sharing medical facilities and exchange of medical information, annual report, 17098, 17306
- see also Medicines--Nuclear medicine--Veterinary medicine.
- Medicine and Surgery Department, Veterans Administration:
 - career personnel, recruitment and retention, provide, law, 32009
- Medicines:
 - medicines without prescriptions, we want you to know what we know about, 25197
 - prescription drugs, we want you to know what we know about, 25198
 - proprietary medicines, advertising, hearings, 24963
 - some kids will try anything once, we want you to know what we know about protecting children from adult medicine (poster), 23260
 - synthetic organic chemicals, production and sales of medicinal chemicals, 25785
 - we want you to know what we know about adverse reactions to medicines, 17494
 - we want you to know about labels on medicines, 31344
- Medina County, Ohio, West and North Branches, Rocky River, flood plain information, 16012
- Mediterranean Sea:
 - lights and fog signals, list, 22160
 - radio navigational aids, 23121
 - tide tables, 31716
- Meeds, Lloyd, Citizens Committee for Congressman, see Citizens Committee for Congressman Lloyd Meeds.
- Meekins, J. F., NRL OSO-4 Bragg crystal spectrometer instrument, 16450
- Meeks Table Research Natural Area, general information, 21628
- Meet Johnny Horizon, environmental action campaign to clean up America for our 200th birthday, 32389
- Meeting Indiana's environmental protection needs, organizational and staffing requirements, 23197
- Meeting our enemies, career education and humanities, 25055
- Meeting your financial obligations, 31980
- Meetings, see Conferences, congresses, etc..
- Megapolis, see Cities and towns.
- Meld, Pat, U.S. marine operation in Korea, 21925
- Meier, E. Marie, Journal of Navy civilian manpower management, 18529
- Meier, John, screening and assessment of young children at developmental risk, 26794
- Meigs County Republican Executive Committee, Ohio, annual report, 22688
- Meiklejohn Peak, fossils from Ordovician bioherm at Meiklejohn Peak, Nev., 21724
- Meirolvitch, Leonard, dynamic characteristics of two-stage variable-mass flexible missile with internal flow, 17695
- Melsburger, Edward P., geomorphology and sediments of Chesapeake Bay entrance, 23151
- Melsing, Arthur C.:
 - perlite, 20370
 - pumice and volcanic clinder, 25480
- Meister, R. P., summary of nondestructive testing theory and practice, 20589
- Mekong Project, opportunities and problems of regionalism, science, technology, and American diplomacy, 21230
- Melanoma, see Tumors.
- Melching, William H., procedures for constructing and using task inventories, 32495
- Mellor, Malcolm, breakage of floating ice by compressed gas blasting, 25067
- Melons:
 - acreage-marketing guide, spring vegetables and melons, 22315
 - fresh market, acreage, production, and value, 1964-70 revised estimates by seasonal groups and states, 19132
 - fresh market prices, revised estimates, 1964-70, 28021
- Melshelmer, Edwin S., spillway for Oakley Dam, Sangamon River, Ill., hydraulic model investigation, type 2, 23179
- Melson, William G., mineral sciences investigations, 20761
- Melting, salinity on optical extinction of sea ice at 6328 Å, effect, 31235
- Melzer, Klaus-Jürgen, power requirements for wheels operating in fine-grained soils, 26386
- Member banks, see Federal reserve member banks.
- Membrane filters, see Filters and filtration.
- Membranes:
 - evaluation and maintenance of expedient-surfaced airfield facilities, 28779
 - evaluation of redesigned XW18 membrane and accessories, for aircraft landing areas, 27446
- Memorandums, see names of departments, etc., issuing memorandums.
- Memorial services:
 - Benton, William, memorial addresses, 29821
 - Bow, Frank T., 28253
 - Byrnes, James F., 17121
 - Collins, George W., memorial services together with tributes presented in eulogy, 28254
 - Gillette, Guy M., 28252
 - Hickenlooper, Bourke B., 23031
 - print additional copies, report, 17152
 - Ryan, William F., 25979
 - Truman, Harry S., eulogies and encomiums of, print as House document, reports, 28354, 31065
- Memorials see National monuments and memorials--also names of persons to whom memorials are erected.
- Memory:
 - A.I.D. memory documents, quarterly, 17938
 - traces of emotional stimuli in EEG spectrum and SGR in humans with normal and impaired memory, USSR study, 26590
- Memory devices:
 - logic and memory devices with magnetic crystals, USSR study, 30333
 - signal processing element--
 - functional description, microprogrammed control unit, buffer store, and storage control unit, 22175
 - users' reference manual, 22174

INDEX 1973

Memphis, Tenn., area wage survey, 26622

Men :

- comparative study of female and male air traffic controller trainees, 21033
- dress and casual footwear, Bates Shoe Division, Wolverine World Wide, Inc., Webster, Mass., Tariff Commission report, 26897
- footwear for men and women, Freeport, Maine, plant of Kayser-Doth Shoes Division of Kayser-Roth Corp., New York, N.Y., Tariff Commission report, 29552
- men who matched mountains, Forest Service in Southwest, 26467
- pre-retirement years, labor market experience of men, longitudinal study, 23581
- study of some indices of higher nervous activity of men subjected to underwater environment for many hours, USSR study, 25335

Menar, A. B., calcium phosphate precipitation in wastewater treatment, 21408

Mendel, Joseph J., rate of value increase for sugar maple, 25231

Mendiratta, Madan G., tensile properties to 650° C and deformation structures in precipitation-strengthened titanium-aluminum alloy, 30460

Mendocino County, Calif., timber resources, 20323

Mendolla, Arthur I., nomination, hearing, 28517

Menhaden :

- electric detector system for recovering internally tagged menhaden, genus Brevoortia, 22107
- tagging and tag-recovery experiments with Atlantic menhaden, Brevoortia tyrannus, 27803

Menominee County Republican Committee, annual report, 22776

Menopause, and aging, research conference, summary report, 26740

Men's and boys' leather footwear, Hammond Shoe Corp., Worcester, Mass., Tariff Commission report, 25781

Men's clothing, *see* Clothing.

Mental disorders :

- bibliography, 1969-70, epidemiology of mental disorders, 26743
- competency to stand trial and mental illness, 31695
- directory of institutions for mentally disordered offenders, 16390
- nationwide survey of mental health and correctional institutions for adult mentally disordered offenders, 23758
- veterans with mental disorders, 20672
- see also* Depression (psychology).

Mental health :

- administration in mental health, 22066
- behavior modification in child and school mental health, annotated bibliography on applications with parents and teachers, 23750
- children our greatest resource for tomorrow, knowledge about mental health for classroom (poster), 23751
- current ethical issues in mental health, 27780
- electrophysiological correlates of mental activity, USSR study, 23543
- experience placements, mental health career development program, 23752
- facts about—
 - college mental health, 22071
 - mental health of children, 22073
- institutions offering trainee stipends in psychiatric mental health nursing for school year 1972-73 in graduate education, list, 17764
- mental health and learning, when community mental health centers and schools collaborate, 22075
- mental health and social change, annotated bibliography, 23755
- mental health at school, 26747

Mental health—Continued

- mental health digest (periodical), 18619
- mental health planning conference for Spanish speaking, 20671
- mental health resources in greater Washington area, 32498
- multi-ethnic literature in high school, mental health tool, 30508
- principles and training techniques in nursing home care, 23756
- private funds for mental health research, list, 31697
- promoting mental health in classroom, handbook for teachers, 31698
- psychoanalytic study of child, abstracts, 23757
- research grants, National Institute of Mental Health, 1972 funds, 30506
- social change and human behavior, mental health challenges of 70's, 23761
- statistics—
 - analytical and special studies reports, 30507, 31696
 - mental health facilities reports, 20672, 22076
 - methodology reports, 16391, 17766
- utilization of mental health resources by persons diagnosed with schizophrenia, 31696
- VA cooperative studies in mental health and behavioral sciences, annual conference highlights, 17925
- Mental health centers, *see* Mental institutions.
- Mental hospitals, *see* Mental institutions.
- Mental illness, *see* Depression (psychology)—Mental disorders.
- Mental institutions :
 - accounting guidelines for mental health centers and related facilities, 16391
 - center and catchment area variations in age, color and sex distributions of additions to 69 selected community mental health centers, 1971, United States, 29366
- Community mental health centers act—
 - extend—
 - hearing, 23019
 - law, 32003
 - reports, 17017, 28353
 - history of program and current problems and issues, 24946
 - community mental health centers, program review, 27225
 - cost-finding and rate-setting for community mental health centers, 17766
 - differential utilization of psychiatric facilities by men and women, United States, 29365
 - directory of institutions for mentally disordered offenders, 16390
 - health facilities, manpower, and community mental health centers act, report, 17143
 - medical review in skilled nursing homes and mental hospitals, guidelines, 23628
 - mental health facilities reports, statistics, 20672, 22076
 - mental retardation facilities and community mental health centers construction act, text, 24867
 - nationwide survey of mental health and correctional institutions for adult mentally disordered offenders, 23758
 - State and county mental hospitals—
 - age, sex, and diagnostic composition of resident patients, 23766
 - length of stay of admissions, 1971, United States, 25592
 - provisional patient movement and administrative data, inpatient services, 25594
 - utilization of mental health resources by persons diagnosed with schizophrenia, 31696

Mental institutions—Continued
utilization of psychiatric facilities—
by persons diagnosed with alcohol disorders, United States, 30507
persons under 18 years of age, United States, 32499
whom are community mental health centers serving? 16393

Mental retardation:
abstracts (periodical), 18620
children served in mental retardation clinics, 1970-72 fiscal years, 29195
citizen advocacy for handicapped, impaired, and disadvantaged, overview, 16457
current issues in mental retardation and human development, conference of family-centered approach to providing services to mentally retarded, 29035
infancy and childhood, collaborative study, bibliography, 26750
Mental retardation facilities and community mental health centers construction act, text, 24867
PCMR message, 18749
phenylketonuria, inherited metabolic disorder associated with mental retardation, 17677
source book of facilities and assistance, 21753

Mental suggestion, experimental studies of mental suggestion, USSR study, 27645

Mental tests:
descriptive-associative logical test and its place in predicting adaptation to conditions of situation of uncertainty, USSR study, 23526
psycho-physiological testing and training of pilots, USSR study, 23551

Mentally handicapped, fresh views on employment, special report (periodical), 18921
see also Mentally retarded.

Mentally ill:
admissions to outpatient psychiatric services by age, sex, color and marital status, 27783
comparison of actual and reported previous psychiatric care, 27785
differential utilization of general hospital psychiatric inpatient units by whites and nonwhites, 1970-71, United States, 23763
differentials in dollar payments and primary payment sources, discharges from non-Federal general hospital psychiatric inpatient units, United States 1970-71, 25595
directory of halfway houses for mentally ill and alcoholics, 25588
length of stay of admissions to state and county mental hospitals, 1971, United States, 25592
length of stay of discharges from general hospital psychiatric inpatient units, 1970-71, United States, 23764
referral of persons to and from general hospital psychiatric inpatient units, 1970-71, United States, 23765
see also Mentally restored.

Mentally restored, selective placement in Federal civil service employment of physically handicapped, mentally restored, etc., handbook, 19281

Mentally retarded:
action for retarded, recommendations to President on Federal programs, 22193
care, treatment, habilitation, and protection, report, hearing, 30054
8½ year record, mentally retarded workers in Federal service, 22597
islands of excellence, report, 29449
Mental retardation facilities and community mental health centers act, amend, reports, 26236, 28360

Mentally retarded—Continued
report to President, Federal programs for retarded, review and evaluation, agency reports, 22197

screening and assessment of young children at developmental risk, 26794
selective placement in Federal civil service of physically handicapped, mentally retarded, etc., handbook, 19281
transportation and mentally retarded, 16459

Mentser, Morris, study of carbon dioxide-carbon reaction by oxygen exchange, 29203
Mercapto compounds, role of mixed disulfide bonds in radioprotective effect of B-mercaptopoethylamine (MEA), USSR study, 16192

Mercer, Charles E., effects of in-flight thrust reverser on stability and control characteristics of single-engine fighter airplane model, 17716

Mercer, J. W., Erwin-1 production well, city of Gallup, McKinley County, N.Mex., 20348

Mercer, Leroy A., Committee to Elect, *see* Committee to Elect Leroy A. Mercer.

Mercer County Committee for Nixon-Nunn-Jackson, annual report, 24748

Mercer County Democratic Committee, New Jersey, annual report, 22748

Mercer County Republican Central Committee, annual report, 22972

Mercer County Republican Committee, annual report, 24513

Merchandise, *see* Commercial products.

Merchandising, advertising allowances and other merchandising payments and services, guides, 16065

Merchant marine:
act, amend—

law, 15646, 19437, 29829
reports, 19857, 29969, 32044

America's merchant marine (remarks), 23618

financing U.S. merchant fleet in 70's (remarks), 21927

improve productivity and attendant cost savings in maritime industry (remarks), 21928

improved productivity and technological advancements revitalize American shipbuilding industry (remarks), 23616

intermodal container services offered by U.S. flag operators, 29193

laws relating to, compilation, 21145

Maritime Administration program (remarks), 23224

maritime manpower report, seafaring, longshore and shipyard employment, 16243

maritime matters, agreement with Union of Soviet Socialist Republics, 29540

maritime programs of Commerce Department, appropriations, authorize—

hearings, 26175
reports, 28358, 32034

marine transportation industry (remarks), 21549

miscellaneous bills, hearings, 15771, 21270

our merchant marine, fourth arm of defense, 32286

personnel, licensing and certificating, rules and regulations, 19288

rebuilding America's merchant marine (remarks), 23225

revitalization of merchant marine and shipping and trade opportunities (remarks), 20520

ship American bonus, how DISC corporations benefit by using U.S. flag ships, 17675

summary of strikes and work stoppages in maritime industry, 17676

see also Shipping.

Merchant Marine Academy, Kings Point, N.Y.:

appropriations, authorize, hearings, 26175
include graduate programs, hearing, 21270

INDEX 1973

- Merchant Marine and Fisheries Committee, House:
activities, 92d Congress, 1st session, report, 17074
calendar, 10553
committee prints, 17072-74, 27236
hearings, 15769-772, 19789-790, 21267-273, 24869, 26175-176, 27234-235, 28411, 28424-426, 29932, 31033, 32087
investigations and studies, authorization and expenses, report, 26076
reports, 15680, 15684, 16959-961, 17018, 17020, 19658, 19664-665, 19667, 19669, 19788, 26076, 26142, 27145-147, 28358, 28362-363, 29591, 30979, 32044
Merchant seamen, *see* Sailors.
Merchant ships, *see* Ships.
Merchant vessels, *see* Ships.
Mercury:
chemical composition of naturally occurring fluids in relation to mercury deposits in part of north-central California, 27559
concentrations in fish of Great Smoky Mountains National Park, 22482
content in fish, sediment and water in Lake Oahe, S.Dak., preliminary investigation, 17934
control of mercury contamination in freshwater sediments, 20201
control of mercury pollution in sediments, 20192
control techniques for mercury emissions from extraction and chlor-alkali plants, 27480
differential pressure mercury manometer, 28068
industrial waste study, mercury-using industries, 20220
Investigation of mercury in St. Clair River-Lake Erie systems, 16374
materials technology programs in support of mercury rankine space power system, 32475
mercurial pesticides, man and environment, 26422
mercury and air pollution, bibliography with abstracts, 16638
mercury and heavy metals, water quality standards, 20863
criteria digest, 20226
mineral industry survey, quarterly, 18621
minerals yearbook chapter, 20560
pollution and enforcement of Refuse act of 1899, hearings, 24859
polymer film overlay system for mercury contaminated sludge, 20219
recovery of mercury from cinnabar ores by electrooxidation, 30428
solid-state amplifier for bridge circuit of mercury detector, 17684
Mergers, *see* Business consolidations.
Meridian, Miss., special flood hazard information report, Gallagher Creek, 21474
Merit, red rock and Potomac, tomato varieties adapted to mechanical harvesting, 16613
Merit systems:
collective bargaining in public employment and merit system, 32416
interim merit staffing policy, 29053
see also Civil Service.
Mermantau River, journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy to survey timber resources between Mermantau and Mobile Rivers, Nov. 1817-May 1819, with appendix, etc. microfilm, pamphlet describing, 21994
Meromorphic functions, *see* Mathematics.
Merriam, Charles W., Silurian rugose corals of Klamath Mountains region, Calif., 17535
Merrifield, Va., Tommie C. Kinard, Larry L. Ramsey and Metropolitan Fuels Co., Inc., motor vehicle accident, 29245
Merrill, Annabel L., energy value of foods, basis and derivation, 27987
Merrill, W. Jay, prescriptive package, case screening and selected case processing in prosecutor's offices, 26607
Merrimack River:
flood plain information—
Concord, N.H., 20119
Lawrence, Methuen, Andover, and North Andover Mass., 25078
Merriman, Russell F., nomination, hearing, 26290
Mertaugh, L. J., investigation of suction system and boundary-layer characteristics on high-lift BLC L-19 test aircraft, 30760
Merwin, Roland W.:
mineral industry of Tunisia, 16308, 29228
minerals yearbook chapter, 25488
Mesa Verde National Park, wilderness recommendation, 23838
Mescalero, N. Mex., nature and extent of peat deposits and possible effects of peat mining on manmade features and springs, 23353
Mesophyll cells, leaf mesophylls of 20 crops, their light spectra, and optical and geometrical parameters, 24146
Mesosphere, meteorological and ecological monitoring of stratosphere and mesosphere, 17698
Mess stewards, *see* Stewards.
Messages, Defense Supply Agency manual, 28592
Messengers:
congressional and Supreme Court pages, change age limit to 18-21, report, 29982
examination announcement, amendment, 22594
Messes, ashore, Navy manual, 29433
Messhall master at arms handbook, 22178
Messier, Arthur A., Bohr effect in chronic hypercapnia, 30408
Metabolism:
diffusional and metabolic components of nitrogen elimination through lungs, effects of pressure, 31530
geochemical anomalies of claypit area, Callaway County, Mo., and related metabolic imbalance in beef cattle, 29026
hyperbaric oxygen breathing on rate of ethanol metabolism in man, studies on effect, 29197
model for water metabolism in organism, USSR study, 26579
2d International Conference on Strontium Metabolism, papers, 26939
Metal casting, *see* Castings.
Metal-ceramic interactions, *see* Metals.
Metal coatings:
welding, heat cutting and metallizing equipment, industrial plant equipment handbook, 17323
zinc-rich coatings applied to carbon steel, performance characteristics, 31638
see also Coating materials.
Metal containers, *see* Containers.
Metal cutting:
flame cutters, career, general information, 23604
industrial plants equipment handbook—secondary metal forming and cutting machines, 26309
welding, heat cutting and metallizing equipment, 17323
Metal finishing:
in-process pollution abatement, metal-finishing facilities, 30661
industrial plant equipment handbook, rolling mills, drawing machines and metal finishing equipment, 17320
upgrading metal-finishing facilities to reduce pollution (series), 30661-662
waste treatment, metal-finishing facilities, 30662
Metal foils:
design, fabrication, and performance of foil journal bearings for Brayton rotating unit, 31604

Metal foils—Continued

- thermal effects on clearance and stiffness of foil journal bearings for Brayton cycle turboalternators, 20587
- Metal forming, industrial plants equipment handbook, secondary metal forming and cutting machines, 26309
- Metal oxides, magnetic ordering in lithium-transition metal oxides with ordered rock-salt structures, 20971
- Metal plating, *see* Plating.
- Metal shapes, *see* Shapes (metal).
- Metal sheeting, *see* Sheet metal.
- Metal working, *see* Metalworking.
- Metallic films:
 - annealing of thin magnetic films at high temperatures, USSR study, 30340
 - investigation of some principles of electro-deposition of cylindrical magnetic films, USSR study, 30341
 - measurement of demagnetizing fields in cylindrical magnetic films, USSR study, 30339
- Metallizing, *see* Metal coating.
- Metallurgy, technology of producing new materials, USSR study, 31530
- Metallurgical slime, *see* Mill slime.
- Metallurgy:
 - austenitic steels, strengthening properties of laves phases, USSR study, 26587
 - diffraction of X-rays in aging alloys having different degree of volumetric discrepancy between precipitation phase and matrix, USSR study, 26565
 - East European scientific abstracts, 18244
 - economic effectiveness of powder metallurgy of titanium, USSR study, 23524
 - influence of method of liquefying vapor phase on flow characteristics of accelerator output of liquid-metal MHD converter, USSR study, 21848
 - metallurgical processing, compilation, 29267
 - Mines Bureau, research 1972, summary of significant results in mining metallurgy, and energy, 25411
 - technology of producing new materials, USSR study, 31530
 - translations on metallurgy, USSR studies, 20472, 21878, 23514, 23518, 23549, 25337, 25346, 27640, 30338, 30343
 - USSR scientific abstracts, 19039

Metals:

- abstracts of reports presented at 1st All-Union conference on metal-dielectric phase transitions, 17635
- adhesion and transfer of polytetrafluoroethylene to metals studied by Auger emission spectroscopy, 20613
- air quality, data from metals from national air surveillance networks, 30725
- annotated bibliography on biological effects of metals in aquatic environments, 26399
- auger analysis of oxygen and sulfur interactions with various metals and effect of sliding on these interactions, 30461
- automatic pyrometer for measuring true temperature of metals on basis of radiation, USSR study, 30348
- Bureau of Mines research programs on recycling and disposal of mineral, metal, and energy-based wastes, 25426
- chemical treatment of plating waste for removal of heavy metals, 28798
- corrosion resistance of metals in hot brines, literature review, 32448
- defectoscopy of metals, USSR study, 29138
- dissimilar metals, military standard, 15962
- duty on metal scrap, extension of suspension, report, 30986
- dynamic tear testing, method for $\frac{1}{2}$ inch metallic materials, military standard, 30122

Metals—Continued

- economics of byproduct metals—copper system, 27696
- lead, zinc, uranium, rare-earth, iron, aluminum, titanium and lithium systems, 26649
- fabrication and test of space power boiler feed electromagnetic pumps, endurance and final performance tests, 23669
- finishing of surfaces, military standard, 23105
- friction and wear of selected metals and of carbons in liquid natural gas, 25523
- historical injury experience, metallic mineral industries—
 - 1966-67 report, 29209
 - 1968-69 report, 29210
- industries, technologic trends, minerals yearbook chapter, 16313
- kinetics and thermodynamics of processes of interaction of gases with liquid metals, summaries of symposium, reports, 23530
- liquid metal boiling inception, 17699
- Lorenz ratios of technically important metals and alloys, 26706
- mercury and heavy metals, water quality standards, 20863
- criteria digest, 20226
- metal-ceramic structural materials, USSR study, 17615
- metal materials, ores, minerals, and alloys, Federal item identification guide, 28601
- metallic materials and elements for aerospace vehicle structures, military standardization handbook, 23116
- metals, methods of mechanical and technological testing, 29129
- minor, minerals yearbook chapter, 20567
- municipal mine demonstration plant, establish, hearing, 17267
- nucleonic sensor for detecting metal in recirculating lubricating oil systems, 20989
- occurrence and distribution of selected metals in streams near Huntsville, Ala., 30271
- phase composition of Ni-Sn alloys hardened from liquid state, USSR study, 25353
- photographic studies on effects of high-level, short term radiation on metals, 22492
- platinum-group metals, minerals yearbook chapter, 25478
- radiation crosslinking of polymers with segregated metallic particles, 25872
- smelting metal with argon, USSR study, 17625
- technologic trends in mineral industries, metals and nonmetals except fuels, minerals yearbook chapter, 25490
- use of cryogens to reclaim nonferrous scrap metals, 26663
- see also* Fracture of metals—*also* names of metals—*also* names of articles made from metal.
- Metalworking, competitive edge, economic impact of foreign metalworking (address), 21413
- Metalworking machinery:
 - current industrial reports, 16768, 18194A, 25926, 29767
 - industrial plant equipment handbooks—lathes, 21401
 - metalworking saws and filing machines, 20035
 - portable machine tools, metalworking machinery accessories, and precision layout tools, 27378
- Meteorites, mineralogy, mineral-chemistry, and composition of Murchison (C2) meteorite, 31799
- Meteoroid bumpers, *see* Bumpers.
- Meteoroids, *see* Meteors.

INDEX 1973

- Meteorological apparatus and instruments, inexpensive meteorological radiation shield for thermistors and thermocouples, 26472
see also Radiosondes.
- Meteorological data:
 microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418
 techniques used in display of sequential images received from geostationary satellites, survey, 22417
- Meteorological observers:
 fire-weather observers' handbook, 25208
 substation observations, 26782
- Meteorological rockets, *see* Rockets.
- Meteorological satellites, *see* Satellites.
- Meteorological Services and Supporting Research, Federal Coordinator, *see* Federal Coordinator for Meteorological Services and Supporting Research.
- Meteorologists:
 chemist-meteorologist—
 1972 workshop, 29682
 1973 workshop, 29683
 meteorology series, position-classification standard, 16824
- Meteorology:
 accuracy requirements for measurement of meteorological parameters which effect artillery fire, 22410
 analysis of meteorological conditions for aviation, USSR study, 32408
 Atlantic Oceanographic and Meteorological Laboratories, collected reprints, 20234, 23206
 Federal meteorological handbooks, 19290, 25965, 28232
 Federal plan for meteorological services and supporting research, 29385
 high altitude meteorological data, report (periodical), 18210
 index numbers for North and Central America to identify coded meteorological reports, 22153
 lasers and meteorology, USSR study, 23546
 meteorological and ecological monitoring of stratosphere and mesosphere, 17698
 meteorological atlas of International Indian Ocean Expedition—
 surface climate, 22135
 upper air, 22136
 meteorological criteria for extreme floods for four basins in Tennessee and Cumberland River watersheds, 30519
 meteorological satellite data application in analysis and forecasting, supplement, 29382
 National Weather Service River Forecast System, forecast procedures, 25621
 physical oceanographic and meteorological data from principal participating ships, 2d survey cruise, Aug.-Sept. 1967
 EASTROPAC atlas, 23782
 question-answering system for CAI, computer assisted instruction, model driven, 28028
 records documentation, 20181, 32245
 soaring meteorology for forecasters, 20718
 Soviet aerometeorological service described, 30330
 statistical analysis of meteorological parameters during fog at 45 U.S. airports, final report, 24029
 statistical method of combining synoptic and empirical tropical cyclone prediction systems, 30533
 summary of synoptic meteorological observations—
 Japanese and Korean coastal marine areas, 23887-889
 southeast Asian coastal marine areas, 22181, 23890-891
 southwest Asian marine areas, 22182-183, 23892-893
 surface observations, observing and reporting techniques, 23865
- Meteorology—Continued
 Swan Islands—
 cooperative meteorological program, agreement with Honduras, 25732
 electric power for certain facilities, agreement between United States and Honduras, supplementing meteorological program agreement, 24000
 transport, deposition, and meteorological studies of nuclear debris in atmosphere, 30521
 updating synoptic data for use in objective analyses, 30532
 weather stations, cooperative meteorological program, agreement with Bahamas, 27910
see also Hydrometeorology—Weather.
- Meteorology and hydrology (USSR periodical):
 translations, 18622
- Meteors:
 discrete levels of beginning height of meteors in streams, 23958
 meteor research program, 17700
 meteoroid impacts on Mars and secondary particle environment, 20606
 yet another stream search among 2401 photographic meteors, 23958
- Meters, wind recorder, current meter and thermistor chain measurements in northeast Pacific, 22094
see also names and types of meters.
- Methadone:
 regulation of methadone and other narcotic drugs in treatment programs, hearings, 32086
 use and abuse, hearings, 30050
- Methanes:
 chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-argon flames, 25500
 control, 1972, in U.S. coal mines, 27697
 diffusion parameters for sized coal particles, 21952
 direct method of determining methane content of coalbeds for ventilation design, 29238
 emission rate study in deep Pocahontas no. 3 coalbed mine in conjunction with drilling degasification holes in coalbed, 23653
 geologic factors causing roof instability and methane emission problems, 30440
 hydrocarbon gases produced in simulated swamp environment, 16336
 radical species profiles for methane-oxygen-argon flame, 30439
 spectral growth of expanding flames, infrared radiance of methane-air ignitions and coal dust-air explosions, 31592
- Methaqualone, traffic, abuse, and regulation, hearings, 31149
- Methemoglobin, methemoglobin formation in humans during exposure to hyperbaric oxygen in standard Navy decompression treatment table, 25403
- Methionine, synthetic methionine from Japan, Tariff Commission report, 27950
- Methodology:
 air pollution impact methodology for airports, phase I, 29646
 first microbiology seminar on standards and standardization of methods, proceedings, 30176
 perspectives and methodology, syncrisis, dynamics of health, analytic series on interactions of health and socioeconomic development, 20366
see also subjects.
- Methods handbooks, 29569
- Methuen, Mass., Merrimack-Shawsheen-Spicket Rivers, flood plain information, 25078

- Methyl bromides, truck-automobile collision involving spilled methyl bromide on U.S. 90 near Gretna, Fla., highway accident report, 30560
- Methyl 1-(butylcarbamoyl)-2-benzimidazole-carbamate, *see* Benomyl.
- Metolus Research Natural Area, general information, 21629
- Metric conversion card, 20637
- Metric system:
brief history of measurement systems with charts of modernized metric system, 26698
- Metric conversion act—
report, 15843
text and description, 17245
- metric conversion card, 20637, 22007
- modernized metric system (poster), 31674
- Metro System, accommodations for handicapped on Metro System, hearing, 21287
- Metropolitan areas, *see* Cities and towns.
- Metropolitan Fuels Co., Inc., motor carrier accident, Merrifield, Va., 29245
- Mette, Herbert L.:
error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
- magneto-Schottky-diode-integrated circuits, 19158
- Metz, A. Stafford:
number of pupils with handicaps in local public schools, spring 1970, 28669
- pupil mobility in public elementary and secondary schools during 1969-70 school year, 28680
- Metzger, D. G., geohydrology of Needles area, Arizona, California, and Nevada, 26498
- Mexican-Americans:
education in Texas, function of wealth report of Civil Rights Commission, 15600
- education study, reports, 15600, 24256
- methodological appendix of research methods employed in Mexican-American education study, 22585
- teachers and students, differences in teacher interaction with Mexican American and Anglo students, 24256
- we, the Americans, 30858
- Mexican border to Point Conception, Calif., marine weather services chart, 29424
- Mexico:
American-Mexican boundary treaty act—
law, 19478
reports, 15702, 19921
- background notes, 29523
- Colorado River salinity, agreements, 20795, 27924
- cultural cooperation, agreement, 16511
- economic trends and their implications for United States, 17576, 27609
- foreign trade regulations, 19302
- international bridge, construction, consent of Congress—
law, 16922
reports, 15701, 17147
- map, 19266
- meat imported into U.S., trade agreement, 16520
- Mike Mansfield's visit, 30029
- military training scholarships, agreement, 22269
- mineral industry, minerals yearbook chapter, 16290
- remote sensing for earth surveys, amending and extending agreement, 17874
- scientific and technical cooperation, agreement, 16513
- screwworm eradication program, agreement, 20803
- social security, agreement, 31869
- west coast, sailing directions, 28627
- Mexico, Mo., flood plain information, South Fork Salt River and Davis Creek, 21456, 23172
- Mexico, Gulf of:
coast pilot, Atlantic Coast, Gulf of Mexico, Puerto Rico, and Virgin Islands, supplement, 27798
- cooperative Gulf of Mexico estuarine inventory and study, Florida, phase 1, area description, 25629
- environmental-acoustics atlas of Caribbean Sea and Gulf of Mexico, marine environment, 22161
- flood plain information, 21449
- geochemistry and diagenesis of tidal-marsh sediment, northeastern Gulf of Mexico, 20345
- marine fishes (poster), 29377
- marine weather services chart—
Morgan City, La. to Apalachicola, Fla., 29426
- Morgan City, La. to Brownsville, Tex., 29427
- MV Theresa F., capsizing on Jan. 9, 1969, marine casualty report, 32522
- offshore petroleum studies, composition of offshore U.S. petroleum industry and estimated costs of producing petroleum in Gulf of Mexico, 21937
- quality of surface waters of United States, 31402
- starfishes from Caribbean and Gulf of Mexico, 26824
- Mexico-United States Interparliamentary Group:
House delegation, report of meeting, 17046, 17048
- Senate delegation, report of meeting, 17256
- Meyer, G. E., application of hot-isostatic pressing, hydrostatic extrusion, and deformable-die tube tapering processes to production of titanium-6Al-4V tapered tubes, 26980
- Meyer, Nessa G.:
admissions to outpatient psychiatric services by age, sex, color, and marital status, 27783
- length of stay of admissions to State and county mental hospitals, 1971, United States, 25592
- Meyers Bayou:
Vidor, Tex.—
flood plain information, 20131
- floods, how to avoid damage, 20139
- MHD, *see* Magnetohydrodynamics.
- MHD-generators, *see* Magnetohydrodynamic generators.
- Miami, Fla.:
aircraft accident report, 30559
- area wage survey, 26621
- census of housing, 1970, components of inventory change, 28105
- Miami County Republican Central and Executive Committees, annual report, 22809
- Miami County Republican Central Committee, annual report, 24640
- Miami Indians, judgment funds, disposition, law, 16862
- Mica:
mica beneficiation, 23635
- minerals yearbook chapter, 25455
- Micosuknee Indians, approach to planning for Micosuknee Tribe of Indians of Florida, 31486
- Mice, Arasan in endrin treatments to protect Douglas-fir seed from deer mice, 20316
- Michaels, Hal, Committee, *see* Hal Michaels Committee.
- Michalski, Bernadette:
mineral industry of—
Bulgaria, 16317
- Czechoslovakia, 25430
- Poland, 16304
- Michigan:
census of housing, 1970, housing characteristics for States, cities, and counties, 19196

INDEX 1973

Michigan—Continued

- census of population, 1970, detailed characteristics, 22522
- climatological data, 18090
- counties, population estimates, 27039
- county business patterns, 30824
- Drive Michigan Conference of Teamsters Political Fund, 24335
- hydrology and recreation on cold-water rivers of Michigan's southern peninsula, 23382
- Machinists Nonpartisan Political League of Michigan, annual report, 26024
- mineral industry, minerals yearbook chapter, 29221
- Nineteenth Political Action Committee, annual report, 22743
- precipitation data, hourly, 18441
- prisons, prison reform, and prisoners' rights, Michigan, hearings, 15764
- resource adjustment in fertilizer industry, 19110
- Savings Association Public Affairs Committee-Michigan, annual report, 26006
- 17th Congressional District Republican Committee, annual report, 24500
- truck inventory and use survey, 27026
- Michigan Campaign Committee, Socialist Labor Party, annual report, 24545
- Michigan Doctors Political Action Committee, annual report, 26007
- Michigan Education and Civic Affairs Committee, annual report, 22742
- Michigan, Lake:
 - bibliography, 16144
 - evaluation of DDT and dieldrin in Lake Michigan, 17414
 - use of electricity in conjunction with 12-5-meter (headrope) Gulf-of-Mexico shrimp trawl in Lake Michigan, 22106
- Microanalysis, *see* Electron probe microanalysis.
- Microbes, *see* Micro-organisms.
- Microbiology:
 - 1st microbiology seminar on standards and standardization of methods, proceedings, 30176
 - methods for collection and analysis of aquatic biological and microbiological samples, 29031
 - natural factors in activation of plague epizootics in Siberia, USSR study, 20457
 - oil waste disposal by soil cultivation process, 23186
 - organization of microbiological laboratory services in England, Bulgaria, Finland, and Czechoslovakia, USSR study, 27632
 - root diseases and soil microbiology, 21683
- Microclimatology, principles of standardizing microclimate of individual gas-defense devices, USSR study, 25331
- Microcopy, *see* Microfilm.
- Microelectronic circuits, *see* Circuits.
- Microelectronics, *see* Electronics.
- Microfiche, census retrospective 1968-70 on microfiche, catalog, 30554
- Microfilaria, laboratory technique for producing microfilariae of *Dirofilaria immitis* in mosquitoes, 15515
- Microfilming, *see* Microphotography.
- Microfilms, National Archives microfilm publications, pamphlets describing, 20626-630, 21994-999, 23698-701, 25333-544, 26694-695, 27718C-718F, 31668
- Micrographics, global market survey, 29119
- Micrographs, *see* Electron micrographs.
- Microinch machining, 25885
- Micrometers:
 - micrometer measures of—
 - 618 double stars, 32523
 - 1,056 double stars, 17789
- Micronesia:
 - briefing on territorial matters, hearing, 28541
 - Micronesian claims act, amend—
 - hearing, 26159
 - report, 27137

Micro-organisms:

- drugs & microbes, slide presentation, announcement, 25548
- spray tower for application of microbial aerial sprays, 25230
- Microphones:
 - reciprocity calibration of microphones under high ambient pressures, 20324
 - response variations of 3 types of microphones pressurized to 19 Åta, 20525
- Microphotography, micrographics, global market survey, 29119
- Microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418
- Microprogramming, *see* Computer programs/programming.
- Microscopes, *see* Electron microscopes.
- Microstraining and disinfection of combined sewer overflows, phase 2, 25112
- Microteaching, 20096
- Microwave communication systems, modeling effects of clouds and rain upon satellite-to-ground system performance, 25967
- Microwave equipment, error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
- Microwave ovens, *see* Ovens.
- Microwaves:
 - absorption of microwaves by plasma which is essentially nonuniform along magnetic field, 22453
 - aircraft microwave measurement of ice in Beaufort Sea, 1971, some preliminary results, 30528
 - changes in permeability of histo-hematic barriers under effect of microwaves, USSR study, 23521
 - determination of plasma density in stellarators by means of open microwave resonator, 22449
 - frequency stability specification and measurement, high frequency and microwave signals, 26705
 - hygienic problems of effect of microwave electromagnetic field on body, 16194
 - invariance of cross ratio applied to microwave network analysis, 20643
 - line-of-sight microwave and tropospheric scatter communication systems, naval shore electronics criteria, 20722
 - measurement techniques and standards of electromagnetic quantities from D-C to millimeter-wave frequencies, abstracts of selected articles, 18254
 - measurements of distribution and volume of sea-surface oil spills using multifrequency microwave radiometry, 30590
 - microwave plasma heating experiments in Tuman-2 device, 22447
 - millimeter attenuation and reflection coefficient measuring system, 17739
 - nonlinear effect in microwave absorption by plasma, 22446
 - plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030
 - results of clinical survey for microwave ocular effects, lecture, 26804
 - some characteristic features of formation of microwave discharge plasma in presence of magnetic fields greater than cyclotron, 22454
 - theory of UHF and microwave measurements using power equation concept, 27727
 - wind wave studies, 27850
- Microwire, *see* Electric wire and wiring.
- Mid-America Committee for Sound Government, annual report, 24774
- Midair collisions in U.S., civil aviation, 20717
- MIDAS, modular interactive data acquisition system, description and specification, 31679

- Mid-Continent memo, 18623
Middendorf, J. William, II, nomination, hearing, 31133
Middle America, crayfish (astacidae) of North and Middle America, 17441
Middle Atlantic Region, Environmental Protection Agency, 25121
Middle Atlantic States, *see* Atlantic States.
Middle course 2 cratering series, 32244
Middle East, *see* East (Middle East).
Midland, Tex., area wage survey, 27673
Midland County, Tex., soil survey report, 31822
Midland County Republican Committee, annual report, 22811
Midland County Republican Executive Committee, annual report 24426
Midshipmen, *see* Naval Reserve.
Midwest (U.S.):
 calendar of air-drying lumber in upper Midwest, 23283
 hydrologic studies in Mid-Continent region, 29016-17
 rail crisis, materials discussing proposed legislative program to meet, 32142
 see also Central States.
Migrant labor:
 environmental healthfulness for migrant workers, hearings, 29924
 health services for domestic agricultural migrant workers, 1972 hearing, 21368
 impact of Federal programs to improve living conditions of migrant and other seasonal farmworkers, GAO report, 23319
 migrant manpower programs, hearing, 19762
Migrants:
 health services for migrant children, 21423
 migrant children's nutrition, hearing, 21373
 migrant education, 21425
 bibliography, 28663
Migration:
 between State economic areas, census of population subject reports, 15577
 interstate migration by State, supplementary report, 28127
 ionic migration and weathering in frozen Antarctic soils, 32459
 lifetime and recent migration—
 by educational attainment for United States, 29715
 1970 census of population, 25909
 population-migration reports, rural urban migrants, 24142
 poverty dimensions of rural-to-urban migration, statistical report, 24142
 stilling basin hydraulics and downstream fish migration, 31238
Migratory-bird-hunting stamps, duck stamp data, information for stamp collectors and conservationists, 17847
Migratory Bird Populations Station, population ecology of migratory birds, symposium, 26850
Migratory birds, *see* Birds—Water Birds.
Migratory workers, *see* Migrant labor.
Mikaellan, Harutune H.:
 adaptation to displaced hearing, non-priorceptive change 30407
 lack of bilateral generalization of adaption to auditory rearrangements, 31578
Mike Walsh for Congress, political committee, annual report, 28273
Mikesh, Robert C., Japan's World War II balloon bomb attacks on North America, 26692
Mikucki, Walter J., plastic pipe for interior and exterior cold water systems, 31242
Mikulenska, Eugene J., relief, 19592, 27116A
Mikva, Ab, Washington Area Friends of, *see* Washington Area Friends of Ab Mikva
Mikva, Abner J., Society Against Mikva (SAM), annual report, 24791
Milam County, Tex., watershed work plan for watershed protection and flood prevention, Pond Creek watershed, 20012
Milestones in U.S. food and drug law history, 23257
Milford Section, Delaware Water Gap National Recreation Area, N.J., 27819
Millitants, investigation of attempts to subvert United States armed services, hearings, 15750
Militarism:
 end of militarism (lecture), 24147
 military force and international relations, USSR study, 26595
Military Academy, West Point:
 additional pay for permanent professors, provide, hearing, 17224
 servicemen's group life insurance, extend coverage for cadets and midshipmen law, 15636
Military aid:
 agreement with Saudi Arabia, 20815
 AID activities in Laos, hearing, 15891
 Conference on European Security, U.S. participation, hearings, 19768
 Foreign assistance act, amend, reports, 15815, 15859, 26228
 foreign military assistance—
 and commitments in Philippines, GAO report, 26478
 appropriations—
 1972, authorizations, staff memorandum, 17051
 1973—
 hearings, 15717, 15869, 17025
 law, 19497
 reports, 16989, 16991, 19729, 19887
 1974, hearings, 32132
 deposits under Foreign assistance act, agreement with—
 Afghanistan, 16532
 Argentina, 17891
 Bolivia, 16508
 Brazil, 16533
 Chile, 16512
 China, Republic of, 16503
 Colombia, 32578
 Dominican Republic, 16515
 El Salvador, 17893
 Ghana, 17887
 Greece, 27915
 Honduras, 16536
 Iran, 16534
 Mali, 16517
 Nigeria, 17870
 Paraguay, 17906
 Portugal, 16507
 Venezuela, 17888
 Zaire, 17897
 Foreign military sales and assistance act—
 analysis of bill, 27328
 hearings, 28535
 report, 28488
 military assistance program address directory, 15971, 17339-340, 23117-118, 25028-29, 26339, 28623, 31196, 32180
MILSTRIP, military standard requisitioning and issue procedures, 31194
mutual defense assistance—
 agreement with—
 Belgium, 16525
 Japan, 22263
 Luxembourg, 17889
 Norway, 22268
 cash contribution by Japan, arrangement with Japan, 16528
Mutual development and cooperation act—
 hearings, 31022
 report, 32064
U.S. agreements with and assistance to free world forces in Southeast Asia show need for improved reporting to Congress on their status, GAO report, 30266
U.S. assistance programs in Vietnam 17022
world military expenditures, 19156

INDEX 1973

- Military aircraft, *see* Aircraft.
- Military Airlift Command:
airlift service industrial funds, proposed closure, hearing, 21204
MAC flyer (periodical), 18601
- Military art and science:
1861-65, military operations, official records of Union and Confederate Armies, guide index, main eastern theater of operations, check-list, 23697
helicopterborne operations, Marine Corps manual, 20516
military activities in and over Cambodia and Laos, inquiry resolution adverse, report, 28335
military applications of nuclear technology, 29833
recommended books for military library, annotated bibliography, 26967, 26972
register planned emergency producers—alphabetical listing, 26340
ASPPO listing, 26342
geographical listing, 26341
safety precautions for shore activities, Navy Department, 26789
special military operations, 19153, 22385, 30736
strategy and tactics, 1000 A.D.-1970, special bibliography, 26969
USSR military affairs, translations, 18987
- Military assistance, *see* Military aid.
- Military bases, compensation for disability or death outside United States, 21372
- Military camps, *see* Military training camps
- Military chaplains' review, 18625
- Military claims, *see* Claims.
- Military communications:
common long haul and tactical communication system technical standards, military standard, 26335
communications-electronics, 1962-70, Vietnam studies, 16657
communications in armored infantry and infantry (mechanized) divisions, field manual, 24172
defense communications system, installation standards, manual, 17316
Defense Department worldwide communications, review, 19745
headquarters and headquarters company, etc., field manual, 19161
MODEM non-diversity digital data, 1200 bits per second, military standard, 20050
naval communications facility on Diego Garcia, agreement with United Kingdom of Great Britain and Ireland, 22274
- Military construction, *see* Installations (military).
- Military courts, *see* Courts martial and courts of inquiry.
- Military depots:
commissary operating manual, 25851
organizational, DS, GS, and depot maintenance, manual, 19173
- Military education:
additional pay for permanent professors at military academies, hearing, 17224
Army formal schools catalog, 26964
greater use of flight simulators in military pilot training can lower costs and increase pilot proficiency, GAO report, 30256
military training scholarships, agreement with Mexico, 22269
permitting appointment by President of sons of Vietnam prisoners to service academies, law, 15642
retraining brigade for behavior modification after court martial, hearings, 32074
some grad schools are more challenging than others, 28036
- Military engineering, military engineering applications of commercial explosives, introduction, 30168
- Military equipment, *see* Military supplies.
- Military facilities:
fibrous concrete, technical information pamphlet on use for military facilities, 28691
life expectancy of facilities, 28690
Marine Corps facilities definitive designs, 16432
- Military fields, United States, instrument approach procedure charts, dates of latest editions, 18624
- Military fixed bridges, 20986
- Military headquarters, *see* Headquarters.
- Military history:
command & commanders in modern military history, 2d Military History Symposium, proceedings, 16630
Harmon memorial lectures (series), 19140, 24147
Marine Corps historical reference pamphlet, 23615
- Military housing, *see* Housing.
- Military index:
Defense Department, specifications and standards index—alphabetical listing, 15954
numerical listing, 20043, 23103
supplements, 18219
- Military information:
information security program regulation, 20044
military affairs, Eastern Europe, translations, 18974
- Military installations, *see* Installations (military).
- Military intelligence, relocation of U.S. Army Intelligence School from Fort Holabird to Fort Huachuca, 17031
- Military justice, *see* Military law.
- Military law:
fundamentals of military law, ROTC manual, 24179
legal guide for the soldier, 28047
manual for courts martial annotation, 15506, 19166
military judges' guide, Army pamphlet, 20983
military justice—
handbook, guide for summary court-martial trial procedure, 24174
handbook, trial guide for special court-martial, 26962
special bibliography, 26970
review, Army Dept. pamphlet, 10626
Task Force on Administration of Military Justice in Armed Forces, report, 23110
- Military occupational specialties, data bank questionnaire administration, enlisted MOS, personnel selection and classification, 25859
- Military operations, *see* Military art and science.
- Military personnel, *see* Armed Forces—Army—Foreign countries.
- Military posts, *see* Post exchanges.
- Military posture, 21200
- Military property, *see* Surplus property.
- Military psychology, *see* Psychology.
- Military publications:
index of AMC—
publications and blank forms, 16642, 20964, 24166, 29658
sponsored DA administrative publications and DOD publications, 30750
- Military research:
Army research and development, news-magazine, 18011
Defense Department research, development, test and evaluation—
1973, authorization—
hearings, 17225
law, 16923
reports, 19623, 19625
1974, authorization—
hearings, 28515, 29894, 30007, 31132
reports, 29882, 32063
research in progress, lists, 19170, 30755

Military review (periodical), 18627
 Military schools, *see* Military education—
 also names of schools.
 Military Sealift Command:
 build and charter program for 9 tanker
 ships, GAO report, 31379
 sealift, 18891
 Military service:
 Negro in military service of United States,
 1639-1886, pamphlet describing micro-
 film, 27718E
 potential for greater consolidation of main-
 tenance workload in military services,
 Department of Defense, GAO report,
 30259
 summary of benefits for veterans with
 military service before Feb. 1, 1955, and
 their dependents, 24092
see also Armed Forces—Manpower.
 Military standards, *see* Standards and
 standardization.
 Military supplies:
 airdrop of supplies and equipment, rigging
 ammunition for low and high velocity
 airdrop, technical manual, 24182
 Armed services procurement regulations,
 18007, 24979
 Air Force ASPR supplement, 17971
 automated engineering procurement docu-
 ment preparation system, military
 standards, 17332
 finishes, 15955
 fuseholders, 20049
 fuses, 17333
 resistors, 20047
 terminal boards, 20048
 washers, 15956
 cataloging system, standardization, etc.,
 semiannual, report, 17302
 commander's maintenance guide, Army
 pamphlet, 25860
 Defense Department—
 specifications and standards index—
 alphabetical listing, 15954
 numerical listing, 20043, 23103
 supplements, 18219
 standardization documents, classifica-
 tion listing, 17330, 18355
 defense disposal manuals, 17319, 20033,
 32162
 defense procurement circular, 18217
 defense retail interservice support (DRIS)
 manual, 30090
 electromagnetic interference characteris-
 tics requirement for equipment, military
 standard, 26336
 Federal item name director for supply
 cataloging—
 abbreviations and symbols, 27376
 alphabetic index of names, 18316
 numeric index of names, 15939, 18317,
 24980
 Federal manual for supply cataloging—
 input and output codes, 28589
 item identification, 24981, 26302, 32161
 material management, special operating
 procedures, 17318
 Federal supply code of manufacturers,
 United States and Canada, name to
 code, 20030
 foreign military credit sales, appropri-
 ations, 1973, hearings, 15717, 15869,
 17025
 40th report to Congress on Defense cata-
 logging and standardization act of 1952,
 by Defense Dept., 15720
 41st report to Congress on Defense cata-
 logging and standardization act of 1952
 by Defense Dept., 24842
 ground fit and compatibility tests of air-
 borne stores, procedure for, military
 standard, 20066
 integrated logistics support, implementa-
 tion guide for DoD systems and equip-
 ments, 16651
 inventory management specialist, Air
 Force notice, 16632

Military supplies—Continued
 materiel management manual, Defense
 Supply Agency, 23091
 life cycle costing guide for system acqui-
 sitions, 28607
 MILSTEP, military supplies and transpor-
 tation, evaluation procedures, 20081
 MILSTRIP—
 military standard requisitioning and
 issue procedures, 15971, 17339-340,
 23117-118, 25029, 26339, 28623,
 31194, 31196, 32180
 project codes, 30123
 requisition fund codes, 27415
 rotary identifier codes, 31195
 miscellaneous items, Federal item identi-
 fication guide, 17327
 noise limits for Army materiel, military
 standard, 25025
 operating forms, cataloging manual, 15941,
 28588
 parts and equipment, procedures for pack-
 aging and packing military standards,
 28610
 problems with U.S. military equipment
 prepositioned in Europe, GAO report,
 26482
 procurement, appropriations—
 1973, authorization—
 hearings, 17225
 law, 16923
 reports, 19623, 19625
 1974, authorization—
 hearings, 28515, 29894, 30007, 31132
 reports, 29882, 32063
 procurement data packages, military
 standard, 23110
 register planned emergency producers—
 alphabetical listing, 26340
 ASPPO listing, 26342
 geographical listing, 26341
 report of task force on reducing costs of
 defense systems acquisition, design-to-
 cost, commercial practice vs. Depart-
 ment of Defense practice, 28625
 slinging and tiedown provisions for lifting
 and tying down military equipment,
 military standard, 15958
 status of procurement of F-14 weapon sys-
 tem as of June 1, 1972, GAO report,
 25244
 supply operations manual, distribution
 system procedures, 15949
 transfer of military scrap, agreement with
 Vietnam Republic, 26865
 U.S. military supply systems, traffic in
 surplus war materiel, hearings, 15900
 use of formal advertising for Government
 procurement can. and should, be im-
 proved. GAO report, 31385
 world military expenditures, 19156
 Military terms, military and associated
 terms, dictionary, 26557
 Military training, *see* Military education.
 Military training camps, ROTC in review,
 summer camp IGMR, Annville, Pa., 16647
 Military transportation, *see* Transportation.
 Milk:
 costs of dry whole milk packaged for
 household use, 31916
 dairy price supports, 1973, hearings, 28512
 economic analysis of automating small
 fluid milk plant, 24117
 evaporated, condensed, and dry, 18270
 Federal import milk act, text, 26171
 Federal milk marketing orders, summary
 of major provisions, 27981
 Federal orders, market statistics—
 annual summary, 28023
 monthly summary, 18321
 fluid milk and cream report, 18373
 milk house for dairy cows, 24135
 milk, revised estimates, 1965-69, milk
 cows, cows on farms, number of farms,
 milk, production, disposition, income,
 22356

INDEX 1973

- Milk—Continued
 milk sales in foodstores, pricing and other merchandising practices, 20913
 nonfat dry milk, Tariff Commission reports, 24065, 32593
 packaged fluid milk sales in Federal milk order markets by size and type of containers, and distribution method, 26924
 population data for milk marketing areas under Federal orders, based on 1970 census, 26925
 pricing policy and procedures, 28001
 production, distribution, and income, 29544
 production, monthly report, 18629
 sales of fluid milk products, 1954-72, 27996
 sanitary standards for milk evaporating and drying plants, military standard, 20056
 steam injection pasteurization of grade A milk and milk products, 28918
 Milk plants, *see* Milk.
 Milk Pricing Advisory Committee, reports, 28001
 Milkhouses, *see* Milk.
 Milking, comparison of milking operations in herringbone milking layouts for large herds in California, 19129
 Mill Creek:
 flood plain information—
 Nashville, Tenn., 23717
 Ripley, W. Va., and vicinity, 16010
 Walla Walla, Wash., 28729
 floods—
 Nashville, Tenn., 28755
 Walla Walla, Wash., 28763
 watershed, acquire, authorize—
 hearing, 21350
 report, 17167
 Mill Creek Research Natural Area, general information, 21630
 Mill slime, removal of dissolved contaminants from mine drainage, 21504
 Miller, Charles G., III, expansion-tube flow quantities for real-gas mixtures and comparison with experimental results, program for calculating, 17713
 Miller, E., development and preliminary design of sorbent-oil recovery system, 27467
 Miller, Edward B.:
 addresses, etc.—
 July 6, 1973, 31708
 Aug. 7, 1973, 31707
 Sept. 12, 1972, 22086
 Miller, Forrest R., processing EASTROPAC STD data and construction of vertical temperature and salinity sections by computer, 22100
 Miller, George P.:
 public technology, 24874
 reelection of Congressman George P. Miller Committee, annual report, 22953
 Miller, Hugh C., Chicago School of Architecture, plan for preserving significant remnant of America's architectural heritage, 23823
 Miller, J. Jefferson, II, 18th century English porcelain, brief guide to collection in National Museum of History and Technology, 23796
 Miller, J. S., methods and evaluation of explosive fracturing in oil shale, 25506
 Miller, Jan D., removal of dissolved contaminants from mine drainage, 21504
 Miller, Lillian B., Lazzaroni, science and scientists in mid-nineteenth century America, 23843
 Miller, Lois A.:
 report of State and local radiological health programs, 25679
 State radiation control legislation, 20741
 Miller, Melvin D., research on preparation of leadership personnel for vocational and technical education, review and synthesis, 17352
 Miller, Robert E., development and standardization of Air Force officer qualifying test form L, 26948
 Miller, Roy W., analysis of unsteady thermal boundary layers, 20618
 Miller, Vance E., jr., evaluation of potential effects of U.S. freight transportation advances on highway requirements, research phases, 25143
 Millimeter waves, *see* Microwaves.
 Milling machines:
 industrial plant equipment handbook, 15948
 lathes, milling machines and shapers, Federal item identification guide, 27391
 Millivoltmeters, Rocky Mountain millivolt integrator for use with solar radiation sensors, 23294
 Mills, William O., St. Mary's County Citizens for Mills, annual report, 24543
 Mills, Billy G., Committee to Elect, *see* Elect Billy G. Mills Committee.
 Mills, Wilbur, Seminar Committee, *see* Wilbur Mills Seminar Committee.
 Mills, *see* Copper mills—Cotton mills—Flour mills—Paper mills—Pulp mills—Rice mills—Rolling mills—Sawmills—Steel mills—Uranium mills.
 MILSCAP (military standard contract administration procedures), *see* Government contracts.
 MILSTEP, military supply and transportation evaluation procedures, 20081.
 MILSTRAP (military standard transaction reporting and accounting procedures), *see* Accounts and accounting—Reporters and reporting.
 MILSTRIP (Military standard requisitioning and issue procedures), *see* Military supplies.
 Milwaukee, Wis.:
 area wage survey, 16231
 Drive, Greater Milwaukee, annual report, 22917
 housing—
 market analysis, 23219
 Milwaukee's poor, obstacles and possibilities, 22583
 Helson teacher-returnee counselor project, Milwaukee, Wis., 16002
 Milwee, William L., faceplate, 18278
 Minam River Canyon:
 designate certain lands as wilderness area, report, 19684
 designate for addition and part of Eagle Cap Wilderness, Oreg., law, 19451
 Mine accidents:
 coal-mine injuries and worktime, monthly report, 18122
 injury experience in coal mining, 30416
 Mine drainage:
 acid mine drainage treatment by ion exchange, 20195
 dewatering of mine drainage sludge, phase 2, 25118
 fish and food organisms in acid mine waters of Pennsylvania, 26402
 Lake Hope mine drainage demonstration project, feasibility study, 27468
 mine drainage from coal mine mineral wastes, control, pollution abatement and monitoring, 28821
 pyritic systems, mathematical model of acid mine drainage system, 20185
 removal of dissolved contaminants from mine drainage, 21504
 revegetation augmentation by reuse of treated active surface mine drainage, 21501
 treatment of ferrous acid mine drainage with activated carbon, 25114
 water infiltration control to achieve mine water pollution control, feasibility study, 26413

Mine explosions:
 minimum extinguishant and maximum oxygen concentrations for extinguishing coal dust-air explosions, 31594
 spectral growth of expanding flames, infrared radlance of methane-air ignitions and coal dust-air explosions, 31592
see also Methanes.

Mine fires:
 coal fires in abandoned mines and inactive deposits, 16254
 final report of major mine fire disaster, Sunshine Mine, Sunshine Mining Company, Kellogg, Shoshone County, Idaho, 27695

Mine gases, *see* Gases.

Mine pillars, strengthening of fractured rock pillars by use of small radial reinforcement pressures, 30432

Mine rescue work, miner's guide to mine rescue system, 17681

Mine roof bolts, *see* Nuts and bolts.

Mine roofs:
 geologic factors causing roof instability and methane emission problems, 30440
 mine roof vibrations from underground blasts, Pilot Knob, Mo., 30437
 predicting probable roof fall areas in advance of mining by geological analysis, 29243

Mine safety, *see* Safety of life.

Mine ventilation:
 methane emission rate study in deep Poca-hontas no. 3 coalbed mine in conjunction with drilling degasification holes in coalbed, 23653
 method for calculating mine ventilation pressure losses using computers and desk-top calculators, 29212

Mine water, *see* Mine drainage.

Mineola Dam and Lake, rename as Carl L. Estes Dam and Lake, law, 19525

Miner, J. Ronald, bibliography of livestock waste management, 21499

Mineral industries, *see* Minerals.

Mineral lands:
 authorizing Secretary of Interior to sell reserved mineral interests of United States in certain land in Missouri to Grace F. Sisler, report, 29845
 leasing act, amend—
 hearings, 26275
 report, 31000
 mineral rights in Utah, convey to record owner of land report, 19913
 placer examination, principles and practices, 30397

Mineral resources of Cloud Peak Primitive Area, Wyo., 20347

Mineral resources of deep seabed, 30046

Mineral resources of Salmon-Trinity Alps Primitive Area, Calif., 20346

Mineral water, origin of mineralized water in Precambrian rocks of upper Paralba basin, Paralba, Brazil, 16112

Mineralogy, *see* Minerals.

Minerals:
 and water resources of North Dakota, 30045
 arsenic as indicator element for mineralized volcanic pipes in Red Mountain area, western San Juan Mountains, Colo., 23330
 bibliography of geology and mineralogy of rare earths and scandium to 1971, 26492
 Bureau of Mines research programs on recycling and disposal of mineral, metal-, and energy-based wastes, 25426
 CRIB, mineral resources data bank of Geological Survey, 27561
 development of hard mineral resources of deep seabed, authorize, hearings, 15904
 effects of direct reduction upon mineral supply requirements for iron and steel production, 29207

Minerals—Continued
 establish municipal mine demonstration plant, hearing, 17267
 experimental study of heavy-mineral segregation under alluvial-flow conditions, 27564
 geochemical characteristics of mineralized breccia pipes in Red Mountain District, San Juan Mountains, Colo., 27558
 geology and mineral—
 deposits of Chulitna-Yentna mineral belt, Alaska, 29021
 deposits of upper Chulitna and Yentna Districts, south-central Alaska (series), 29021
 resources of northern part of North Cascades National Park, Wash., 23328
 hearing conservation for mineral industry, 26648
 heavy mineral segregation under alluvial-flow conditions, experimental study, 20349
 historical injury experience—
 1966-67—
 metallic mineral industries, 29209
 nonmetallic mineral industries (except stone and coal), 29211
 1968-69—
 metallic mineral industries, 29210
 nonmetallic mineral industries (except stone and coal), 25424
 how you get help from Bureau of Mines (remarks), 32447
 Igneous rocks and related mineral deposits of Barker quadrangle, Little Belt Mountains, Mont., 30279
 Industries—
 annual preliminary reports, 18631
 minerals yearbook chapters—
 Afghanistan, Brunei, Cambodia, Ceylon, Hong Kong, Laos, Mongolia, Nepal, Singapore, North Vietnam, and South Vietnam, 25428
 Africa, 25432
 Alabama, 16261, 29214
 Alaska, 16262
 Albania, Denmark (including Greenland), Iceland, and Switzerland, 20538
 Angola, Mozambique, and Portuguese Guinea, 16263
 Arab Republic of Egypt, 20561
 Arizona, 16265
 Argentina, 16264
 Arkansas, 16266, 30422
 Australia, 16267
 Austria, 16268, 25456
 Bahamas, Barbados, Bermuda, Cuba, Dominican Republic, Haiti, Jamaica, Martinique, Netherlands Antilles, Trinidad, and Tobago, 20539
 Bahrain, Jordan, Lebanon, Oman, Peoples Democratic Republic of Yemen, Qatar, Syrian Arab Republic, Trucial States, and Yemen, 16269
 Belgium and Luxembourg, 16270
 British Honduras, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama, 25429
 British Solomon Islands, Christmas Islands, Fiji Islands, Nauru and Ocean Island, New Caledonia, New Hebrides, Papua, and New Guinea, 20540
 Bulgaria, 16317
 Burma, 16318
 California, 16271
 Canada, 20541, 29215
 China, People's Republic, 29226
 Colombia, 20562
 Colorado, 16272
 Congo (Kinshasa), 20542
 Connecticut, 25457
 Czechoslovakia, 25430
 East Germany, 25431
 Finland, 16274, 16319

INDEX 1973

Minerals—Continued
 Industries—continued
 minerals yearbook chapters—con.
 Florida, 16275, 25458
 France, 20543
 Gabon, 16276
 Georgia, 16277
 Germany, Federal Republic, 16279
 Ghana, 16320
 Greece, 16278
 Hawaii, 25459
 Hungary, 20544, 29216
 Idaho, 29217
 India, 16279, 29218
 Indiana, 16280
 Indonesia, 16281
 injury experience and worktime in
 solid mineral mining industries,
 25447-448
 Iowa, 16282, 32450
 Iran, 17683, 29219
 Ireland, 16283
 Italy, 20545
 Japan, 20563
 Kansas, 16284
 Kentucky, 16285, 30423
 Kenya, Tanzania, and Uganda, 16286
 Korea, North, 16297, 29224
 Korea, Republic, 16305, 25468
 Kuwait and Saudi Arabia, 20564
 Liberia, 16287, 29220
 Libya, 20565
 Louisiana, 16288
 Maine, 25460
 Malaysia, 16289
 Maryland, 25461
 Massachusetts, 25462
 Mexico, 16290
 Michigan, 29221
 minerals in world economy, 25436
 Mississippi, 16291
 Missouri, 16292, 29222
 Montana, 16293
 Morocco, 16321
 Nebraska, 16294
 Nevada, 16295, 29223
 New Hampshire, 25463
 New Jersey, 25464
 New Mexico, 20546
 New Zealand, 16296
 North Dakota, 25465
 Norway, 25466
 Ohio, 16298, 29225
 Oregon, 25467
 Pakistan, including Bangladesh,
 16321A
 Pennsylvania, 16301
 Peru, 16302
 Philippines, 16303
 Poland, 16304
 Portugal, 20547, 29227
 Puerto Rico, Panama Canal Zone,
 Virgin Islands, Pacific Island Pos-
 sessions, and Trust Territory of
 Pacific Islands, 20566
 review, 25481
 Rhode Island, 25469
 South American areas, 16299
 South Carolina, 25470
 South Dakota, 16306
 South-West Africa, 16307, 25471
 Spain, 20548
 Sweden, 25433
 Taiwan, 16322
 technologic trends in mineral indus-
 tries, metals, and nonmetals, except
 fuels, 25490
 Texas, 20549
 Tunisia, 16308, 29228
 Turkey, 16309
 United Kingdom, 25435
 USSR, 25434
 Venezuela, 25472
 Vermont, 25473
 Virginia, 16310
 West Virginia, 16311
 Wyoming, 20550, 29229

Minerals—Continued
 Industries—continued
 minerals yearbook chapters—con.
 Zambia, 16312
 injury experience and worktime in solid
 mineral mining industries, 16255, 25447-
 448
 ion exchange color and mineral removal
 from kraft bleach wastes, 31283
 law of the sea crisis, staff report on United
 Nations Seabed Committee outer Con-
 tinental Shelf and marine mineral devel-
 opment, 17270-271
 leasing act, amend, hearings, 31026, 32083
 metal materials, ores, minerals, and al-
 loys, Federal item identification guide,
 28601
 mine drainage from coal mine mineral
 wastes, control, pollution abatement and
 monitoring, 28821
 mineral resource evaluation of U.S. Forest
 Service Sierra Demonstration Project
 area, Sierra National Forest, Calif.,
 20354
 mineral resources of deep seabed, devel-
 opment, authorize, hearings, 30046
 mineral rights in Gwinnett County, Ga.,
 convey to reord owner of land—
 law, 19332
 reports, 19581, 19922
 mineral sciences investigations, 20761
 mineral trade notes, monthly inventory,
 18632
 mineralogy, mineral-chemistry, and com-
 position of Murchison (C2) meteorite,
 31799
 mineralogy of suspended sediment in some
 Alaskan glacial streams and lakes, 23152
 Mining and minerals policy act—
 amend, report, 19668
 mining and minerals policy, 1973, 2d
 annual report of Secretary of Inter-
 rior under act, 31497, 32390
 numerical list of mineral products, 1972
 census of mineral industries, 19260
 providing for conveyance of certain min-
 eral rights in and under lands in Onslow
 County, N.C., report, 29884
 relations among radionuclide content and
 physical chemical and mineral charac-
 teristics of Columbia River sediments,
 275621
 resources, 29027
 Cloud Peak Primitive Area, Wyo., 20347
 code of Federal regulations, 31331
 off northeastern coast of U.S., 21711
 Salmon-Trinity Alps Primitive Area,
 Calif., 20346
 statistical summary, minerals yearbook
 chapter, 25486
 summary petroleum and selected mineral
 statistics for 120 countries, including
 offshore areas, 26510
 technologic and related trends in mineral
 industries, 29213
 technologic trends in minerals industry,
 23644
 underground nuclear explosions, study of
 mineralogical transformations, results
 from Sahara explosion site, 16672
 X-ray mineralogy of Parachute Creek
 member, Green River formation, in
 northern Piceance Creek basin, Colo.,
 30282
 yearbook, 1970—
 area reports, domestic—
 departmental edition, 19542
 document edition, 20537
 area reports, international—
 departmental edition, 26653
 document edition, 26041
 preprints, 16257-313, 17683, 20538-550,
 25428-436
 yearbook, 1971, preprints, 16314-329,
 20551-571, 25437-494, 29214-229,
 30422-423, 32450

Mineralogy, *see* Meteorites.
 Miners, *see* Coal mines and mining—Mines and mining.
 Mines and mining:
 analysis of geometry of fractures in San Manuel copper mine, Arizona, 25497
 establish municipal mine demonstration plant, hearing, 17267
 evaluation of pollution abatement procedures, Moraine State Park, 27463
 Federal mine inspector, examination announcement, amendment, 21086
 gold-lode deposits, Fairbanks mining district, Central Alaska, 30417
 Idaho, temporarily withdraw certain lands from operation of U.S. mining lands, law, 16902
 igneous rocks in Bingham mining district, Utah, 26499
 injury experience and worktime in solid mineral mining industries, 16255
 minerals yearbook chapters, 23447-448
 investigation of use of gel material for mine sealing, 23191
 issues related to surface mining, summary review, 17261
 Isua, Greenland, calculations of glacier flow for open-pit mine, 32198
 method for prediction of stresses in isotropics inclusion or orebody of irregular shapes, 23648
 miner's guide to mine rescue work, 17681
 miners, social security rulings, 18962
 Mines Bureau, research 1972, summary of significant results in mining metallurgy and energy, 25411
 Mining and minerals policy act—
 amend, report, 19668
 mining and minerals policy, 1973, 2d annual report of Secretary of Interior under act, 31497, 32390
 nature and content of peat deposits and possible effects of peat mining on man-made features near Mescalero, N. Mex., 23353
 predicting probable roof fall areas in advance of mining by geological analysis, 29243
 revegetation augmentation by reuse of treated active surface mine drainage, 21501
 rights-of-way across Federal lands to develop mining potentials, etc., 27347
 rock mechanics instrumentation for mine design, 25420
 social security rulings on miner's benefits, 29506
 subsidence due to underground mining—
 ground movements and mining damage, 25415
 theory and practices in predicting surface deformation, 25414
 Surface mining reclamation act, report, 19864
 three-minute gas chromatographic analysis of main constituents of mine atmospheres, 21951
 see also Blasting—Coal mines and mining.
 Mines Bureau:
 bulletins, 16253, 23635, 26647, 29202-203
 energy program, 31586
 how you get help from Bureau of Mines (remarks), 32447
 information circulars, 17679-680, 20536, 21937-938, 23639-644, 25413-426, 26648-651, 27696-697, 29206-213, 30413-419, 31586, 32448
 mineral industry surveys, annual preliminary reports, 18631
 press releases, 18796
 publications and articles, list, 31587
 publications, monthly list, 18695
 report of investigations, 16330-336, 17684-685, 20572-577, 21940-957, 23648-660, 25495-511, 26658-668, 27698-700, 29230-239, 30424-444, 31589-595

Mines Bureau—Continued
 research 1972, summary of significant results in mining metallurgy and energy, 25411
 research programs on recycling and disposal of mineral-, metal-, and energy-based wastes, 25426
 technical progress reports, 16337-339, 21959-963, 25512-516, 29241-244, 30445
 Minett, Cyril W., aerospace safety, 17959
 Miniature trees, *see* Bonsai.
 Minidoka project:
 American Falls Dam, replace under Government or nongovernmental control, report, 31073
 electrical equipment, field review of maintenance, 31781
 MINIMAX, FORTRAN computer program to assemble machine code for interdata model 70 minicomputer on control-data 3800, 31724
 Minimum design standards for community sewerage systems, 23437
 Minimum design standards for mobile home parks, 31430
 Minimum extinguishing and maximum oxygen concentrations for extinguishing coal dust-air explosions, 31594
 Minimum wages, *see* Wages.
 Mining, *see* Coal mines and mining—Mines and mining.
 Mining Enforcement and Safety Administration, head, appointment of, require Senate confirmation, report, 32120
 Mining engineering, automatic data acquisition system for underground measurements, 25509
 Mining machinery, and equipment, current industrial reports, 28163
 Minish, Joe, Dinner Committee, *see* Joe Minish Dinner Committee.
 Minks, milk production, 24017
 Minneapolis, Minn.:
 area wage survey, 27680
 transportation controls to reduce motor vehicle emissions, Minneapolis and St. Paul, Minn., 27487
 Minnesota:
 census of business, 1967, major retail centers, 16692
 census of housing, 1970, housing characteristics for States, cities, and counties, 19197
 census of population 1970—
 characteristics of population, 27011
 detailed characteristics, 16735
 census of transportation, 1972, truck inventory and use survey, 22542
 climate, 20178
 climatological data, 18091
 counties, population estimates, 28185
 county business patterns, 29737
 criminal justice agencies, 20483
 electric rate book, 21554
 First District Republican Committee, annual report, 24475
 Fourth Congressional District Democratic-Farmer-Labor Party, annual report, 22889
 north-central, preliminary classification of wetland plant communities in, 31832
 nursing homes, existing conditions, hearings, 15862, 19942
 precipitation data, hourly, 18442
 Republican Party, annual report, 22778
 Second District COPE, annual report, 24724
 Second District Republican Committee, annual report, 22922
 Minnesota Chippewa Tribe, *see* Chippewa Indians.
 Minnesota Committee of Automotive Retailers, annual report, 24637
 Minnesota Joint Board Political Education Committee, annual report, 24659
 Minnesota multiphasic personality inventory, *see* Personality tests.

INDEX 1973

- Minnesota River, basin, comprehensive program for water pollution control, 17812
- Minnow Pond Drain, flood plain information, 23175
- Minor, J. C., helicopter-load tension-member study, 22436
- Minor nonmetals, 25474
- Minore, Don, germination and early growth of coastal tree species on organic seed beds, 20315
- Minorities:
- access of minority groups to nursing homes, hearings, 23039
 - census, 1970, housing of selected racial groups, 30798
 - directory for reaching minority groups, 29657
 - directory of minority media, 29817
 - employment profiles of minorities and women in SMSA's of—
 - 16 large cities, 23207
 - 17 large cities, 30206
 - FAA personnel employment practices, hearing, 15773
 - goals and alternatives for education of minority group students in elementary and secondary schools, 17250
 - job patterns for minorities and women in private industry, Nation, State, industries, 20236
 - minorities and women, availability data, 32366
 - minority business enterprise—
 - bibliography, 30894
 - program, progress report, 19303
 - minority business people must actively carve their futures in national life and economy (address), 22623
 - minority businessmen, VA invites you to get share of multimillion dollar business, 29584
 - Minority enterprise small business—
 - investment act—
 - law, 21134
 - reports, 15834, 21172
 - problems—
 - investigation, report 19731
 - minority group employment in Federal Government, 22610
 - national roster of minority professional consulting firms, 24282
 - OMBE outlook, news from Office of Minority Business Enterprise, 18728
 - registry of minority contractors and housing professionals, listing in selected cities, 32383
 - toward health manpower opportunity, 16124
 - voice for voiceless, Office of Economic Opportunity's programs for Spanish speaking, 15981
- Minority Business Enterprise Office:
- business development organizations handbook, 19294
 - Business Resource Center handbook, 24283
 - funded organizations, 24284
 - OMBE outlook (periodical), 18728
 - press releases, 18776
- Minority Contractors, National Association, see National Association of Minority Contractors.
- Minot, N. Dak., probable maximum precipitation and snowmelt criteria for Red River of the North above Pembina, and Souris River above Minot, N.D., 32509
- Mint (plant):
- mint for oil, acreage, production, and value, 1964-70 revised estimates by seasonal groups and States, 19132
- Mint Bureau:
- annual reports, 16340, 32451
 - medals of United States Mint, issued for public sale, 23663
- Minter, W. John, manual for manpower accounting in higher education, 17362
- Mints, bicentennial commemorative coinage and construction of new mint buildings, hearing, 30009
- Minute Man National Historical Park, North Bridge, development concept, 23824
- Miocene period, lithologic characteristics of upper oligocene and miocene rocks drilled at Elk Hills, Kern County, Calif., 29005
- Miscellaneous papers, see names of departments, etc., issuing papers.
- Miscellaneous publications, see names of departments, etc., issuing publications.
- Miscellaneous type home mortgage insurance, 29063
- Missile and Electronic District Lodge No. 508, annual report, 24488
- Missiles:
- anti-ballistic missile systems, limitation, text of treaty, SALT agreement, 19548
 - antimissile and space defense weapons, USSR study, 17597
 - ballistic design methods for solid-fuel missiles, USSR study, 30328
 - dynamic characteristics of two-stage variable-mass flexible missile with internal flow, 17695
 - eminent Americans, namesakes of Polaris submarine fleet, 21159
 - guide for design of shock isolation systems for ballistic missile defense facilities, 32202
 - guided missiles fundamentals, 15486
 - limitation of anti-ballistic missile systems, agreement with Union of Soviet Socialist Republics, 25748
 - military procurement, appropriations, 1973, hearings, 21200
 - missile ground equipment, USSR study, 16198
 - production and acquisition of Hawk and Nike Hercules missile systems, agreement with Japan, 27922
 - solid fuel ballistic missile design, USSR study, 27634
 - spare parts and maintenance support of space and missile systems undergoing RDT&E, military standard, 27413
 - standard general requirements for safe design and operation of pressurized missile and space systems, military standard, 20076
- Missing persons:
- American prisoners of war and missing in action in Southeast Asia—
 - hearings, 29903
 - to be treated according to provisions of Geneva Convention, report, 19876
 - promotion of members of uniformed services in missing status, reports, 27119, 27277
 - tax treatment of members of Armed Forces and civilian employees who are prisoners of war or missing in action, report, 32065
- Mission Range, aeromagnetic, Bouguer gravity, and generalized geologic studies of Great Falls-Mission Range area, northwestern Montana, 21729
- Mission Ridge, case history of soil disturbance and revegetation of winter sports area development, 32326
- Missions, Government, see Government missions.
- Mississippi:
- census of housing, 1970, housing characteristics for States, cities, and counties, 15550
 - census of population, 1970—
 - characteristics of population, 28115
 - detailed characteristics, 16736
 - census of transportation, 1972, truck inventory and use survey, 19232
 - climatological data, 18092
 - county business patterns, 30825
 - criminal justice agencies, list, 23566
 - draft environmental statement, proposed 1973 Outer Continental Shelf, oil and gas general lease sale, offshore Mississippi, Alabama, and Florida, 31568
 - electric rate book, 17459

- Mississippi—Continued
hydrologic significance of lithofacies of
Cane River formation or equivalents,
27565
landings, fish and shellfish, 18633
1971 annual summary, 23789
mineral industry, minerals yearbook chap-
ter, 16291
precipitation data, hourly, 18443
rehabilitation facilities, national direc-
tory, 25686
water resources development, 32243
- Mississippi Republican Party, annual report,
24411
- Mississippi River and Valley :
and tributaries—
and other watersheds in New Orleans
district, stages and discharges, 23177
in Vicksburg district, stages and dis-
charges—
1970 report, 21476
1971 report, 25093
bridges over navigable waters of United
States, 24272
briefing on flood conditions in order to
avoid recurring floods, 28430
channel conditions, Devil's Island Reach,
Mississippi River, Mo. and Ill., hydraulic
model investigation, 23180
distributary-Bayou Lafourche, La., trans-
port, 16115
light list and other marine aids, 27056
Mississippi River and tributaries project—
modification of Cache River basin fea-
ture, Arkansas, engineers report—
departmental edition, 20158
document edition, 19566
modification of west Tennessee tribu-
taries feature, Obion and Forked
Deer Rivers, engineers report—
departmental edition, 20159
document edition, 19567
- Missouri-Mississippi River summary and
forecasts, 18634
opening of upper Mississippi River by Mar-
quette and Joliet, commemorate, law,
30917
pollution of interstate waters in St. Louis
metropolitan area, 16465
potential radiological implications of nu-
clear facilities in upper Mississippi River
basin in year 2000, 28090
shoaling conditions, St. Louis Harbor, Mis-
sissippi River, hydraulic model investi-
gation, 20177
SS Union Faith and M/V Warren J. Doucet
and tow in Mississippi River collision,
marine casualty report, 30563
terminals, docks, mooring locations and
warehouses, lists, 31255-257
upper basin, surface water quality, 31404
water pollution investigation, St. Louis
metropolitan area, 17802
- Mississippi River National Recreation Area,
see Upper Mississippi River National Re-
creation Area.
- Mississippian period :
Mississippian stratigraphy of northwestern
Pennsylvania, 20342
stratigraphic distribution of significant
Eocene palynomorphs of Mississippi em-
bayment, 26507
- Missouri :
burn injury prevention pilot-demonstration
project in 6 county problem area, 21117
census of business, 1967, wholesale trade,
16715
census of housing, 1970, housing charac-
teristics for States, cities, and counties,
16724
census of population, 1970—
characteristics of population, 30802
detailed characteristics, 16737
census of transportation, 1972, truck in-
ventory and use survey, 28140
- Missouri—Continued
channel conditions, Devil's Island Reach,
Mississippi River, Mo. and Ill., hydraulic
model investigation, 23180
climatological data, 18093
counties, population estimates, 30853
county business patterns, 30826
criminal justice agencies, 1971, list, 23567
mineral industry, minerals yearbook chap-
ters, 16292, 29222
precipitation data, hourly, 18444
primary forest products output and indus-
tries, 25234
registry of minority contractors and hous-
ing professionals, listing in selected
cities, 32384
some soil phases in Missouri Ozarks have
similar site for oaks, 28960
water quality standards summary, 16035
water resources investigation in Missouri,
21740
- Missouri Basin Inter-Agency Committee :
final annual progress and annual program-
ming report, 21964
minutes—
1st-169th meetings, index, 26669
168th meeting, 21965
169th meeting, 20578
- Missouri, Democratic State Committee of,
see Democratic State Committee of Mis-
souri.
- Missouri River and Valley :
basin—
plankton study, 17803
surface water supply, 21744, 30288
central Missouri River drainage basin, co-
operative State-Federal report on water
pollution, 17806
Missouri-Mississippi River summary and
forecasts, 18634
Missouri River basin investigations project
reports, 31484
Missouri-Souris, development area water
pollution investigation, cooperative
States-Federal report on water pollu-
tion, 17809
pollution of interstate waters, conference
proceedings, 16464
upper Missouri River drainage basin, co-
operative State-Federal report on water
pollution, 17807
water quality and water source investiga-
tions, Missouri River and Kansas River,
Kansas City, Kans., report, 28839
- Missouri River Basin project :
comprehensive framework study, 17686-
686A, 16341-345
North Loup division, construct, operate
and maintain, authorize, reports, 15712,
17156
O'Neill unit, construct, operate and main-
tain, authorize, report, 15712, 17155
see also Pick-Sloan Missouri Basin pro-
gram.
- Mr. Farmer don't get caught up in your work,
22352
- Mistletoe :
control of dwarf mistletoe in a heavily
used ponderosa pine recreation forest,
Grand Canyon, Ariz., 31374
hemlock dwarf, general information, 17509
herbicides ineffective in controlling south-
western dwarf mistletoe, 32333
procedure for using yield simulation pro-
grams for dwarf mistletoe-infested lodge-
pole and ponderosa pine, 32328
simulating yields of southwestern ponder-
osa pine stands, including effects of
dwarf mistletoe, 16086
- Mitchell, George W. :
addresses, etc.—
Aug. 16, 1971, 16054
Sept. 12, 1972, 21565
Oct. 30, 1972, 21568
Feb. 26, 1973, 26446

INDEX 1973

- Mitchell, H. L., how PEG helps hobbyist who works with wood, 20295
- Mitchell, Henry C., relief, 15632
- Mitchell, James L., nomination, hearing, 26256
- Mitchell, John N., remarks, Mar. 12, 1971, 17650
- Mitchell, R. C., feasibility of plastic foam plugs for sealing leaking chemical containers, 31282
- Mitchell County Central Committee of Iowa, annual report, 24446
- Mitko, Francis C.:
mineral industry of—
California, 16271
Idaho, 29217
platinum-group metals, 25478
- Mittens:
current industrial report, 29763
Federal item identification guide, 30099
- Mixers (machinery):
mixers and blenders, consumer information, 32299
- Mixing:
expansion-tube flow quantities for real-gas mixtures and comparison with experimental results, program for calculating, 17713
initial mixing in coagulation processes of waste-water treatment, 20194
mixing zones, water quality standards, 20864
criteria digest, 20227
two-dimensional slot nozzle ejectors with variable area mixing sections, analysis and testing, 29259
- Mixing machinery, some experiments on stirring of viscous liquids, 27735
- MMTC, *see* Marine Minerals Technology Center.
- Mnemosyne (planet):
determination of mass of Jupiter from study of motion of 57 Mnemosyne, 30583
- Moade, Herbert H., costs of dry whole milk packaged for household use, 31916
- Mobasher, Fereldoun, optimum conjunctive use of dual-purpose desalting plant and multi-purpose surface water reservoirs, 20386
- Mobile catering, 15977
- Mobile communication systems, effect of variability in received power on probabilities of communication and delay in land mobile communication systems, 25976
- Mobile electric generators, *see* Electric generators.
- Mobile home courts, *see* Trailer parks.
- Mobile homes, *see* Trailers.
- Mobile psychoacoustic laboratory, 25405
- Mobile River, journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy to survey timber resources between Mermen-tau and Mobile Rivers, Nov. 1817–May 1819, with appendix, etc., microfilm pamphlet describing, 21994
- Mobile teachers' retirement assistance act, 19763
- Mobility:
achievement, mobility and draft, their impact on earnings of men, 26835
interstate migration by State, supplementary report, 28127
mobility, commuting, and veteran status for U.S., 1970 census, 21045
mobility for metropolitan areas, census of population, subject reports, 27018
mobility, support, endurance, story of Naval operational logistics in Vietnam war, 20726
power requirements for wheels operating in fine-grained soils, 26386
pupil mobility in public elementary and secondary schools during 1969–70 school year, 28680
- Mobility—Continued
research on structural dynamic testing by impedance methods—
free body response, 24189
structural system identification from—
multipoint excitation, 24187
single point excitation, 24188
see also Geographic mobility—Mechanical mobility.
- Mobilization, *see* National defense.
- Mobley, Hubert L., soil survey of Jefferson County, Okla., 31820
- Model cities, *see* Cities and towns.
- Model early childhood learning program, Baltimore, Md., 27775
- Model 4100 graphic recorder, 31727
- Model makers, job grading standard for model maker, 30886
- Model 9040-5C C.T.D.—SV environmental profiling system, 27806
- Model programs, compensatory education, 17363–365, 27772–778, 29359
- Model programs, title 3, Elementary and secondary education act, 29360
- Model Reporting Area for Blindness Statistics, statistics on blindness in model reporting area, 26730
- Model Secondary School for the Deaf: appropriations, 1973, veto message, 19556
appropriations, 1974, hearings, 31009
- Model 6230 portable laboratory salinometer, 23817
- Model State method of sale of commodities regulation, 23703
- Model state weights and measures law, 1971 as adopted by National Conference on Weights and Measures, 29310
- Model weights and measures ordinance, 30469
- Modelling:
coupled two-dimensional diffusion and chemistry model for turbulent and inhomogeneously mixed reaction systems, 32257
hydroballistics modeling, 25664
question-answering system for CAI, computer assisted instruction, model driven, 28028
semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475
spontaneous modeling in natural processes, USSR study, 31541
- Modelling effects of clouds and rain upon satellite-to-ground system performance, 25967
- Models (layout):
stochastic network to model air cargo terminals, 25071
- Models (mathematical), *see* Mathematical models.
- MODEM non-diversity digital data, 1200 bits per second, 20050
- Modern management of hypertension, 26912
- Modernized metric system, 31674
- Modification of Cache River basin feature, Mississippi River and tributaries project, Arkansas, 19566, 20158
- Modification of west Tennessee tributaries feature, Mississippi River and tributaries project, Obion and Forked Deer Rivers, 19567, 20159
- Modoc Indians, general information, 31464
- Modular coordination, design and development of housing systems for Operation Breakthrough, phase 1, feedback, 30294
- Modular forms, facility to evaluate three-dimensional performance of house modules, 26470
- Modular individualized learning for electronics training, MIL (series), 22179
- Modulation, table of type NM-64 cosmic-ray neutron monitor counting rates as function of solar modulation of galactic cosmic rays expressed in terms of the Ehmert potential, 21013

- Modules, *see* Nuclear instrument modules—
Spacecraft modules.
- Moekel, W. E., comparison of advanced propulsion concepts for deep space exploration, 17725
- Moenkopi formation:
geochemical anomalies and alteration in Moenkopi formation, Skull Creek, Moffat County, Colo., 21734
stratigraphy and origin of Triassic Moenkopi Formation and related strata in Colorado Plateau region, 17532
- Moffat, Ronald E., World Data Center A, Oceanography, Oceanographic data exchange, 20182, 27447
- Moffat County, Colo., geochemical anomalies and alteration in Moenkopi formation, Skull Creek, Moffat County, Colo., 21734
- Moffatt, Elbert M., high-pressure vibrating pressure transducer, 24185
- Moffatt, Hamilton H., soil survey of Caddo County, Okla., 30638
- Mohair, production, price and value, 24021, 27941
- Mohan, Kshitij, stability and temperature characteristics of some silicon and selenium photodetectors optical radiation measurements, 29321
- Mohawk Airlines, Inc., aircraft accident report, 31743
- Mohr, Don, oil spills surveillance system study, 28815
- Moisture:
content and specific gravity of bark and wood of northern pulpwood species, 17514
content of wood in use, 32319
moisture stresses in Arizona mixed conifer seedlings, 16085
postharvest wax-fungicide treatments of nectarines, peaches and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
pressure bomb measures changes in moisture stress of birchleaf mountainmahogany after partial crown removal, 23290
soil-moisture and energy relationships associated with riparian vegetation near San Carlos, Ariz., 16105
- Molasses, market news, weekly, 18635
- Molds (botany):
hot water and fungicides for control of mold on cantaloups, 27995
- Molecular beams, chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-argon flames, 25500
- Molecular biology, *see* Biology.
- Molecular-sieves, *see* Adsorbents.
- Molecules:
dissociation energies of some high temperature molecules containing aluminum, 23689
dissociation rate of bromine diatomics in argon heat bath, 23685
on molecular mechanism of action of organic agents on cholinergic receptors, 27C39
preparation of molecular sieve materials from anthracite, 29813
- Moline, Ill.:
area wage survey, 29169
census of population and housing, 1970, census tracts, errata, 19214
- Mollusca:
freshwater sphaeriacean clams (Mollusca: Pelecynoda) of North America, 17435
freshwater unionacean clams (Mollusca: Pelecypoda) of North America, 31310
two new species and new subgenus of Lucinidae (Mollusca: Bivalvia), with notes on certain aspects of Lucinid phylogeny, 20763
- Molluscicides, EPA compendium of registered pesticides, molluscicides, etc., 23904-906, 26793, 29445, 31765, 32529
- Molluscicides, *see* Molluscicides.
- Mollusks:
description of Tertiary mollusks, geology and paleontology of Canal Zone and adjoining parts of Panama, 29018
neogene marine mollusks of Pacific Coast of North America, 1797-1969, bibliography, 23329
Oligocene molluscan biostratigraphy and paleontology of lower part of type Temblor formation, Calif., 27572
see also Gastropods—Mussels—Snails.
- Molokai Island, soil survey report, 17842
- Mo'oney, J. B., special virus cancer program, 17743
- Molten fluoride reactors, *see* Reactors (atomic).
- Molten salts, *see* Salts.
- Moltz, Kathleen, libraries and the right to read, 28662
- Molybdenum:
liquid state spectral emissivities in electron-beam furnace, 29233
minerals yearbook chapter, 20568
report, monthly, 18636
- Moments:
adjoint gamma-ray moments computer code, ADJMOM-I, 25556
dynamic frictional moment of ball bearing of a pendulum suspension, USSR study, 16197
gamma ray moments computer code, GAMMOM-I, 26712
- Monaco, background notes, 16494
- Monagan, John S., D.C. Committee for, *see* D.C. Committee for John S. Monagan.
- Monagan, John S., Friends of, *see* Friends of John S. Monagan.
- Le Monde (periodical), index, 18485
- Monetarist criticism and conduct of flexible policy in United States, 21571
- Monetary and Financial Policies, International, National Advisory Council, *see* National Advisory Council on International Monetary and Financial Policies.
- Monetary management, *see* Money.
- Monetary measures, *see* Money.
- Monetary policy, *see* Money.
- Monetary problems, *see* Money.
- Money:
banking and monetary statistics, 21567
code of Federal regulations, 32288
components of money stock measures and related items, 18637
concurrent receipt of public assistance money payments and old-age, survivors, and disability insurance cash benefits by persons aged 65 or over, 1951-72 and Feb. 1972, 22034
contracts with foreign firms should be priced in local currency, GAO report, 30254
currency and coin, outstanding and in circulation, monthly statement, 18926
fiscal relief for States, social security amendments material related to H.R. 1, 19966
foreign exchange rates—
monthly, 18382
weekly, 18383
gold and central bank swap network for foreign currencies, hearings, 19534
gold, SDR's and central bank swaps, 28268
household money income in 1972 and selected social and economic characteristics of households, 29782
illegal currency manipulations affecting South Vietnam, 30034
income of families and persons in United States, 21063-64, 28189
know your money, 16470
monetarist criticism and conduct of flexible monetary policy in United States (lectures), 21571
monetary policy in controlling monetary aggregates, financing economic growth, and inflationary trends, 28905

INDEX 1973

Money—Continued

- monetary policy, savings flows, and availability of housing finance (remarks), 30227
- multi-national banks and management of monetary policy in United States (paper), 25188
- objectives and responsibilities (address), 32293
- open market operations, 30228
- open market rates and bond prices, monthly, 18732
- par value modification—
 - act, amend—
 - hearing, 24913
 - report, 28337
 - background, material, 17033
- quest for international monetary reform (remarks), 32294
- recent developments in money transfers (address), 26446
- revision of money stock measures and member bank reserves and deposits, 26448
- search for new world monetary arrangements, current foreign policy, 20789
- stock measures, in billions of dollars, 18637
- structure of reserve requirements (address), 28904
- world monetary conditions in relation to agricultural trade, 27426
- see also* Foreign exchange—Funds—Inflation (finance).
- Money orders:
 - agreement and final protocol, 25739
 - theft or conversion of blank money orders and unauthorized receipt, possession, or disposition of blank money order forms, U.S. Code definition of criminal actions, amend—
 - law, 16920
 - report, 15846
- Mongolia:
 - mineral industry, minerals yearbook chapter, 25428
- Mongolian People's Republic—
 - background notes, 22253
 - reference aid, abbreviations in Mongolian press, USSR study, 16189
 - translations, 18977
- Monismith, C. L., basic properties of pavement components, 30215
- Monitoring:
 - automated water monitoring instruments for phosphorus contents, 32259
 - development of in-situ prototype diode laser system to monitor SO₂ across stack, 30184
 - electroacoustic apparatus of automatic monitor and measurement systems, USSR study, 20471
 - environmental monitoring series, 30176, 32252-259
 - feasibility study of in-situ source monitoring of particulate composition by Raman and fluorescence scatter, 30185
 - Federal environmental monitoring directory, 30080
 - interferometric techniques in dynamic error monitoring, 22507
 - meteorological and ecological monitoring of stratosphere and mesosphere, 17698
 - monitoring, control, and disposal of tritium, selected bibliography, 29680
 - monitoring instrumentation for measurement of sulfur dioxide in stationary source emissions, 28804
 - monitoring Northern Hemisphere transmissions in Antarctica and some oblique sounding systems, USSR study, 23522
 - multiple-use wildlife transmitter, design, etc., 26847
 - quantitative methods for preliminary design of water quality surveillance systems, 23199

Monitoring—Continued

- rapid detection system for organophosphates and carbamate insecticides in water, 23183
- set of debugging and monitoring facilities to improve diagnostic capabilities of compiler, 25558
- see also* Radiation monitoring.
- Monitors:
 - develop acceleration and brake monitor system, 24053
 - model minosdom, dissolved oxygen monitors, 22110
 - tables of type NM-64 cosmic-ray neutron monitor counting rates as function of solar modulation of galactic cosmic rays expressed in terms of the Ehmert potential, 21013
- Monitors (aeronautics):
 - category 3 ILS ground guidance equipment—
 - STAN-37 localizer tests at NAFEC on R/W-4, interim report, test and evaluation, 24033
 - STAN-38 NAFEC on runway 4, test and evaluation, 24051
- Monkeys:
 - behavior changes from chronic exposure to pesticides used in aerial application, effects of phosdrin on performance of monkeys and pigeons on variable interval reinforcement schedules, 21034
 - effects of altitude on Cebus apella monkey, 16658
- Monlux, William S., atlas of meat inspection pathology, 16589
- Monmouth County, N.J., Sandy Hook Bay and Raritan Bay Shore areas, flood plain information, 32219
- Mono County, Calif., lands declared held in trust by United States for Bridgeport Indian Colony, report, 17169
- Monocular, improvement of absolute distance estimation under water, use of monocular motion parallax, 31582
- Monographs, *see* names of departments, etc., issuing monographs—*also* subjects.
- Monolayer, *see* Monomolecular films.
- Monomolecular films, solar reflectance of monolayer covered and clean water surfaces, 23938
- Monopolies:
 - corporate secrecy, overviews, role of giant corporations in American and world economies, hearings, 17305
 - merger of 2 or more professional basketball leagues, authorize, report, 17176
 - see also* Competition.
- Monoterpenes, *see* Terpenes.
- Monotremes, monotremes, and marsupials, reference for zoological institutions, 31797
- Monroe, Robert G., wastewater treatment studies in aggregate and concrete production, 26407
- Monroe County, Miss., Tombigbee River, Aberdeen to Amory, Lower Town Creek, special flood hazard information report, 17407
- Monroe County, N.Y., flood plain information, Red Creek and Genesee River, 17390
- Monroe County, Ohio:
 - Ohio River—
 - flood plain information, 23168
 - floods, 21466
- Monroe County, Democrats, *see* Democrats of Monroe County.
- Monroe County Republican Committee, annual reports, 24577, 24725
- Montana:
 - census of business, 1967, selected services, 16706
 - census of housing, 1970, housing characteristics for States, cities, and counties, 15551
 - census of population, 1970, characteristics of population, 25903

Montana—Continued
 climatological data, 18094
 county business patterns, 29738
 counties, population estimates, 24243
 electric rate book, 16047
 feasibility of desalting municipal water supplies in Montana, 20387
 First Bank System/Montana Good Government Program, annual report, 24744
 geology and phosphate deposits of Permian rocks in central western Montana, 26497
 mineral industry, minerals yearbook chapter, 16293
 palynology of upper Campanian (Cretaceous) Judith River Formation, 29022
 precipitation data, hourly, 18445
 property tax administration and assessment practices, 21341
 records of Montana Superintendency of Indian Affairs, 1867-73, microfilm, pamphlet describing, 21999
 register of minority contractors and housing professionals, listing in selected cities, 32385
 snow survey measurements 1919-72, summary, 32560
 stratigraphy and geologic history of Montana Group and equivalent rocks, 30281
 structural geology of Sun River Canyon and adjacent areas, northwestern Montana, 26501
 temporary moratorium on Federal coal leasing in Montana, provide, report, 19920
 truck inventory and use survey, 28141
 water supply outlook and snow surveys, 19059, 20778
 Montauk Pt., N.Y. to Manasquan, N.J., marine weather services chart, 29425
 Monteith, Stanley K., Monteith for Congress Committee, annual report, 24541
 Monteith for Congress Committee, annual report, 24541
 Montejano, Rudolph, nomination, hearings, 19955
 Monterey Bay Republican Women's Club, Federated annual report, 22971
 Monterey County Republican Central Committee, annual report, 26028
 Montgomery, Harry E., qualitative study of complete act of solutions of differential equation of motion of test particle in equatorial plane of Kerr gravitational field, 27717
 Montgomery, M. H., high power and heat flux irradiation of uranium-plutonium carbides, fast reactor mixed carbide fuel element development program, 30772
 Montgomery, Ala.:
 Catoosa Creek—
 flood plain information, 20114
 floods, 20147
 Montgomery County, Tex., soil survey report, 20775
 Montgomery County Central Committee, annual report, 22679
 Montgomery County Republican Central Committee, annual report, 24542
 Montgomery County Republican Committee, annual reports, 24405, 24420
 Montgomery County Republican Executive Committee, annual report, 28274
 Montgomery County Republican Primary Campaign Committee, annual report, 22754
 Monthly:
 Note.—For all publications which begin with the word "Monthly", see subject, or name of department, etc., issuing publication.
 Months, see names of special months.
 Montmorillonite, strength development and reaction products in lime-montmorillonite-water systems, 31325

Montpelier, Vt., flood plain information, Winoski and North Branch-Winoski Rivers, 28732
 Montrey, H. M., design parameters for torsion of sandwich strips having trapezoidal, rectangular, and triangular cross sections, 26475
 Monuments, see National monuments and memorials.
 Moon:
 Apollo 17 at Taurus-Littrow, 27707
 geologic maps, list, 20351
 lunar geology, USSR study, 31536
 on the moon with Apollo 17, guidebook to Taurus-Littrow, 21978
 Moore, Charlotte E., selected tables of atomic spectra, atomic energy levels and multiple tables, III, D, T, data derived from analyses of optical spectra, 17735
 Moore, Clifford R., demonstration of waste disposal system for livestock wastes, 28824
 Moore, Jerry A., jr., nomination, hearing, 15885
 Moore, Johnnie A.:
 equal opportunity in Federal employment, newsletter, 18268
 Federal news clip sheet, 18323
 Moore, Merrill, register of his papers in Library of Congress, 20513
 Moore, Paul L., updating of numerical precipitation guidance, 30534
 Moore, Robert V., neutron activation analysis of bottom sediments, 26408
 Moore, William J., igneous rocks in Bingham mining district, Utah, 26499
 Moore, William M., nutrition, growth and development of North American Indian children, 17762
 Moores Creek, Albemarle County and Charlottesville, Va., flood plain information, 16011
 Moorhead, Minn.:
 Red River of the North—
 flood plain information, 28724
 floods, 28752
 Moose River:
 St. Johnsbury, Vt.—
 flood plain information, 23170
 floods, 25088
 Moosehead Lake, geology of Moxie pluton in Moosehead Lake, Jo-Mary Mountain area, Piscataquis County, Maine, 20344
 Mops, Federal identification guide, 23093
 Moraine State Park, Pa., evaluation of pollution abatement procedures, 27463
 Moral education, human self-development, our moral heritage, Army pamphlet, 26963
 Morale, welfare, recreation and morale, unit level recreational sports, 28048
 Moratorium, killing of polar bears, authorize, report, 15703
 Morbidity, morbidity and mortality weekly report, 18653
 see also Diseases of animals.
 Morehart, Jack B., snow effects on image glide path systems, winter, 1971-72, 24045
 Morey, Rexford M., feasibility study of electromagnetic subsurface profiling of geological formations, 20204
 Morgan, Edward L., nomination, hearing, 23059
 Morgan, W. E., investigation of phosphorus removal mechanisms in activated sludge systems, 26404
 Morgan, William J., naval documents of American Revolution, American theater, European theater, 32524
 Morgan City, La. to Apalachicola, Fla., marine weather services chart, 29426
 Morgan City, La. to Brownsville, Tex., marine weather service chart, 29427
 Morgan County Republican Central Committee, annual report, 24580
 Morgan County Republican Executive Committee, annual report, 22680

INDEX 1973

- Morin, Alfred J., handbook for educational program audit, 28658
- Moriyama, Iwao M., cohort mortality and survivorship, 25565
- Mork, Lucille F., guide to budgeting for retired couple, 15470
- Morning, John L., technologic trends in mineral industries (metals and nonmetals except fuels), 16313, 25490
- Morocco:
economic trends and their implications for United States, 27601
economy, basic data, 16830
foreign trade regulations, 25970
map, 29797
mineral industry, minerals yearbook chapter, 16321
- Morphology:
behavior, and histogenesis of pelagospira larva of *Phascolosoma agassizii*, Sipuncula, 25697
morphological and anatomical considerations of grass subfamily Bambusoideae based on new genus *Macdurolyra*, 26822
morphology of *Cypretta kawatali* Sohn and Kornicker, 1972 (Crustacea, Ostracoda) with discussion of genus, 26826
stratigraphy, morphology, and paleoecology of fossil peccary herd from western Kentucky, 23366
- Morphometry, morphometry of 3 small watersheds, Black Hills, South Dakota, and some hydrologic implications, 21673
- Morrell, Gene P.:
remarks—
Oct. 6, 1972, 22184
Oct. 17, 1972, 23897
- Morrell, Lester G.:
mineral industry of—
Canada, 20541
Missouri, 16292
- Morrill, B. J., APEEL array, site study, 22096
- Morrill, R. A., optimization of Wellton-Mohawk drainage operations, 29458
- Morris, E. Frances, supplement for 1972 to Statistics on cotton and related data, 22353
- Morris, Robert G., outdoor recreation potential in West Virginia's eastern panhandle, Potomac Headwaters RC & D Project, 20774
- Morris, Robert H., nomination, hearings, 28529
- Morrison County, Minn. appraisal of ground water for irrigation in Little Falls, area, Morrison County, Minn., 25262
- Morrison County Republican Committee, annual report, 22941
- Morrow County Republican Executive Committee, annual report, 22906
- Morrow Point Dam, Powerplant, and Reservoir, see Colorado River Storage Project.
- Morse, Ellsworth H., jr., address Oct. 13, 1971, 28978
- Morse Virginia A. pitch discrimination in background noises up to 95 dB SPL 30410
- Morss, Elliott R., economic aspects of population change, 29446
- MORT (management oversight and risk tree), see Safety of life.
- Mortality, see Death.
- Mortar, laboratory load tests on buried flexible pipe, reinforced plastic mortar (RPM) pipe, 423543
- Mortgage insurance:
application through firm commitment for project, mortgage insurance, 23432
architectural analysis and inspections for project mortgage insurance, 21793, 25281
title 10, land development projects proposed, HUD, 29073
architectural handbook for building single-family dwellings for home mortgage insurance, 29061
- Mortgage insurance—Continued
architectural processing and inspection for home mortgage insurance, 21780
armed services housing for—
civilian employees, information and processing instructions for home mortgage insurance, 21785
home mortgage insurance, 21786
construction period to final closing for project mortgage insurance, HUD handbook, 21791
cost estimate/cost data for home mortgage insurance, 21779
cost estimation for project mortgage insurance, handbook, 23433
dealers and individuals subject to provisions of title 1, National housing act, 28864
definitions, policy statements and general rulings in administering insured mortgage and low-rent housing programs of HUD-FHA, 23425, 30297
endorsement for insurance for home mortgage programs, 21782
- FHA homes—
area trends, 23222, 26432
mortgage insurance, general information, 16132
regulations, amendments, 27505
State trends, 21548, 26433
fiscal and ADP handbook, mortgage insurance, 23427, 29059, 31425
fiscal instructions for use by Agriculture Department for home mortgages to be insured by HUD-FHA under sec. 235 (1) and sec. 237 of National housing act, 25279
general program summary for sec. 203 (b) for home mortgage insurance, 23426
housing for elderly for project mortgage insurance, 23435
HUD, extend authority with respect to interest rates of FHA mortgage insurance programs and VA guaranteed loans reports, 28340, 31079
HUD-FHA underwriting analysis, 21777
hydrofoil mortgage insurance, hearings, 15771
index of active registered investment companies under investment company act, and related investment advisers, etc., 29468
investments in housing and community development (address), 21806
land planning analysis for title 10 land development projects, proposed for mortgage insurance, HUD, 29072
land planning analysis, principles, and procedures for project mortgage insurance, 21792
market analysis for title 10 land development projects proposed for mortgage insurance, HUD, 29071
market interest rate for project mortgage insurance, 23434
miscellaneous type home mortgage insurance, HUD, 29063
mortgage insurance for—
hospitals, guide, 21770-771
hospitals, supplement, 29070
land development, 29078
servicemen for homes, 21783
mortgagee's guide—
application through commitment, 17557
home mortgage insurance fiscal instructions, 25277, 32374
mortgages involving experimental housing for—
home mortgage insurance, 21788
project insurance, HUD, 29068
multifamily reports and forms catalog, 21799, 23443
National housing act, amend—
hearings, 27193
law, 19433
reports, 16992, 19906

Mortgage Insurance—Continued
 open-end mortgages for home mortgage insurance, 21787
 opportunities to improve effectiveness and reduce costs of homeownership assistance programs, GAO report, 21698
 opportunity for reducing interest costs under sec. 235-236 housing programs, GAO report, 20336
 processing instructions for home mortgage insurance under sec. 240—purchase of fee simple title from lessors, 21784
 processing procedures for insured multifamily projects utilizing industrialized housing systems, HUD, 29064
 project mortgage insurance—
 amendments, FHA regulations, 28865
 basic sec. 207 instructions, 21789
 reconsideration for home mortgage insurance—
 after endorsement, 23429, 29062
 before endorsement, 21781
 rehabilitation and neighborhood conservation housing insurance program, 23431
 sec. 203(h), home mortgage insurance for disaster victims, sec. 203(i), home mortgage insurance for outlying area properties, etc., 23430
 ships, eligibility for participation in programs under Merchant marine act, change criteria, law, 15646
 sponsor's guide for nursing homes and intermediate care facilities sec. 232 of National housing act, 17558
 supplemental loans for project mortgage insurance, HUD, 29069
 underwriting management and supervisory responsibilities, HUD, 29056
 underwriting-technical direction for home mortgage insurance, 23428

Mortgages:
 amortization of pollution control facilities, tax information, 20389
 competition in real estate and mortgage lending, hearings, 15912
 cost certification guide for mortgagors, contractors, and independent public accountants, 20372
 defaults on FHA insured mortgages, hearings, 19771
 farm lending, experience of life insurance companies, Federal land banks, and Farmers Home Administration, 20090, 23132, 26358
 farm mortgage characteristics, Jan.-June 1971 and, 1961-69 historical data, 32190
 farm mortgage debt, 26357, 32193
 FIAA monthly report of operations, project mortgage programs, home mortgage programs, etc., 18363
 holder of first mortgages on homeowner properties made in 1967-71 and 1957-60 for United States, 1960 and 1971, supplementary report, 28110
 home, FHA trends, 18364
 income of homeowners of mortgaged properties acquired in 1967-1971, United States, 29696
 mortgage credit analysis for project mortgage insurance, sec. 207, HUD handbook, 21794
 mortgage settlement costs, reduce closing costs and settlement charges, 17230
 mortgagors' guide—
 application through commitment, 17557
 home mortgage insurance fiscal instructions, 25277, 32374
 mortgages involving experimental housing for—
 home mortgage insurance, 21788
 project mortgage insurance, HUD, 29068
 opportunities to reduce costs in acquiring properties resulting from defaults on home loans, GAO report, 20335
 purchase price of mortgaged homeowner properties acquired in 1967-71 for United States, 28111

Mortgages—Continued
 sec. 235(i) fiscal instructions, HUD handbook, 25278
 ship mortgage insurance, Merchant marine act, amend—
 law, 19437
 report, 19857
 tax treatment of capital recovery (investment credit, accelerated depreciation, and amortization), panel discussions, 26188, 27251
 work in progress, Federal Home Loan Mortgage Corporation's role in establishing national secondary mortgage market (address), 21547
 see also Loans.

Morth, Arthur H., pyritic systems, mathematical model, 20185

Morton, Herbert C., monthly labor review, 18646

Morton, Robert C. B.:
 Indian matters, report, 25298
 remarks—
 July 26, 1972, 23473
 Aug. 3, 1972, 23472
 Aug. 8, 1972, 16139
 Dec. 11, 1972, 23471
 May 10, 1973, 29088

Mosaic (periodical), 18654

Moscow, Pa., tank-truck combination overturn onto Volkswagen microbus followed by fire, U.S. Route 611, Moscow, Pa., highway accident report, 30562

Moscow Institute of Electronic Engineering, teaching electronics, 25339

Mosher, Loren R., schizophrenia bulletin, 23760

Mosher, Sol, nomination, hearing, 26256

Moskow, Michael H., nomination, hearing, 26256

Moskowitz, Loanel I., SKYLAB, sensors and remote sensing in support of EREP oceanographic program, 27856

Mosquitoes:
 laboratory technique for producing microfilariae of *Dirofilaria*, 15515
 northwestern United States, 20935
 use of remote sensing in mosquito control, 27718B

Moss, Frank E.:
 initiatives in corporate responsibility, 17237
 staff report to Federal Trade Commission on ad substantiation program, 17242

Moss, Michael S., on role of organizational period in NHRL circularly symmetric hurricane model, 30525

Most asked questions about space and aeronautics, 27704

Motels, see Motor courts.

Mothers:
 ancillary health personnel in maternal and child health projects, use, 31576
 infant mortality rates, relationships with mother's reproductive history, U.S., 26721
 maternal and child health—
 care programs, improve, report, 15860
 provisions in social security amendments of 1972, 17251
 services of State and local health departments, 25402
 Maternal and Child Health Service—
 programs, 23625
 reports on promoting health of mothers and children, 23624
 reports on research to improve health services for mothers and children, 31575
 professional training programs in maternal and child nursing, 16244

Moths:
 detecting stored-product moths in peanut warehouse by using light traps and larval traps, 15474

INDEX 1973

Moths—Continued

- illustrated catalog of Neotropical Arctiinae types in United States National Museum (Lepidoptera: Arctiidae), 26825
- large aspen tortrix, 26465
- taxonomy of *Acrobasis* larvae and pupae in eastern North America, 22359
- see also* Bee moths—Gypsy moths—Indian meal-moths—Tussock moths.

Motion:

- improvement of absolute distance estimation under water, use of monocular motion parallax, 31582
- liquid and gas flow, pressure, temperature, humidity and mechanical motion measuring and controlling instruments, 24986
- mechanical motion measuring instruments, Federal Item Identification guide, 23097
- motion studies of gyro instruments and geopotential measurement error, 21857
- qualitative study of complete set of solutions of differential equation of motion of test particle in equatorial plane of Kerr gravitational field, 27717
- random walk study of electron motion in helium in crossed electromagnetic fields, 31623
- voluntary activation of motor units and spinal reflexes, USSR study, 27631
- see also* Equations of motion—Movement (psychology).

Motion pictures:

- Agriculture Department, bimonthly list, 18030
- AoA catalog of films on aging, 25811
- cartridge projection motion picture film super 8mm, 27411
- catalog of copyright entries, 24965, 32156
- development of film techniques for runway lighting outage studies, 24026
- earthquake! public service documentary film cleared for non-sponsored TV, 23082
- environmental film list, 32251
- FAA film catalog, 1972, list, etc., 21531, 28852
- film fare, catalog of film and filmstrips produced by Housing and Urban Development Department, 25272
- films available for educational purposes, list, 25211
- films suitable for Head Start child development programs, 21745
- health careers film guide, 21760
- Library of Congress catalog, 18577
- motion picture film services, Geological Survey, 20352
- NASA film list, 26681
- summary of film evaluations, National Highway Traffic Safety Administration, 20663

Motion sickness, simulated artificial gravity on human performance, effects, 21973

Motivation (psychology):

- important factors in motivating AFROTC officer personnel in zero-draft environment, 25840
- mechanisms and principles of goal-directed behavior, USSR study, 32404
- motivation factor, LaSierra High School boys' physical education program, 31770
- studies in enlisted submariner motivation, etiological factors related to devolunteering of submarine school candidates, 16251

Motor boats, *see* Motorboats.

Motor buses, *see* Motorbuses.

Motor Carrier Safety Bureau:

- bulletin, on guard (periodical), 18729
- Motor Carrier Safety Bureau, general information, 21966
- class 1—
 - of passengers preparation and submission of quarterly and annual reports to ICC, 17589

Motor Carrier Safety Bureau—Continued

class 1—continued

- revenues, expenses, other income and statistics, motor carriers of property, 17590
- class 1 and 2—
 - cost of transporting freight—
 - Eastern-central territory, 25320
 - Middle Atlantic region, 20441
 - South-Central territory, 16170
 - of property preparation and submission of quarterly and annual reports to ICC, 17589
 - formula for determination of costs of motor carriers of property, 29122
 - freight commodity statistics, 23506, 26554
 - safety regulations, 23665
 - safety road checks, motor carriers of property, 31596
 - statistics of class 1 motor carriers of passengers, 16172
 - transport statistics, 23507, 23509
 - uniform motor carrier standards act, report, 17177
- see also* Motor vehicle accidents.

Motor courts:

- hotels and motels under Fair labor standards act, 24097
- sound insulation in modular motel, 26474
- Motor cycles, *see* Motorcycles.

Motor fuel:

- association of automotive fuel composition with exhaust reactivity, 30433
- shortage (remarks), 28208
- see also* Fuel—Gasoline.

Motor psychology, *see* Movement (psychology).

Motor reaction, visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29256

Motor skills, *see* Ability—Learning.

Motor trucks, *see* Motortrucks.

Motor vehicle accidents:

- accident investigations, summary, 31597
- accidents involving fire, analysis of 1970 reports, 17687
- Atchison, Topeka and Santa Fe passenger train no. 212 collision with Stillwater Milling Company motortruck at 116th Street north grade crossing near Collinsville, Okla., railroad/highway accident report, 30571
- automobile-truck collision followed by fire and explosion of dynamite on cargo on U.S. Highway 78, near Waco, Ga., highway accident report, 30561
- emergency medical services, Federal programs, proposals and other background, 21264
- establish nationwide system of uniform motor vehicle accident reparation acts, report, 31119
- fatal and injury accident rates on Federal-aid and other highway systems, 26430
- highway accident reports, 30560-562
- investigation, multidisciplinary summaries, 18656
- large motor carriers of property, summary, 16346
- motor carrier accident investigation reports, 23664, 26670-672, 27702, 29245
- motor carrier accidents, vehicle defects or mechanical failure, 1971 analysis, 29247
- physical condition report of commercial drivers involved in accidents, 21967
- railroad/highway accident report NTSB-RHR series, 30571
- tank-truck combination overturn onto Volkswagen microbus followed by fire, U.S. Route 611, Moscow, Pa., highway accident report, 30562
- truck-automobile collision involving spilled methyl bromide on U.S. 90 near Gretna, Fla., highway accident report, 30560
- see also* Motor vehicles.

Motor vehicle operators:

- District of Columbia, implied consent of motorist for chemical testing, provide, hearing, 15888
- driver, traffic safety magazine for military driver, 18236
- effect of low visibility on performance of vehicle operators, 17375
- first aid for drunken driver begins in your office, 25581A
- implied consent in D.C. to test for intoxication—
 - law, 19449
 - report, 17207
- laws requiring drivers to stop for school buses, 20667
- requiring physicians to report, traffic laws commentary, 20665
- State laws on reexamining drivers, 22057
- Motor vehicles:
 - analysis of accident reports involving fire, 29246
 - announcement of highway safety literature, abstract journal, 17996
 - combat vehicles, military vehicles, military procurement, appropriations, 1973, hearings, 21200
 - commercial motor vehicle braking, special study, 30573
 - commercial vehicle front-tire failures, 32452
 - defect remedy act, report, 28463
 - developing an injury and motor vehicle damage reduction, program in municipal police department, guidelines, 29149
 - engine, gasoline, air-cooled, 3 BHP, 4-cycle, military design, model 2A016, installation procedures, military standard, 20063
 - exhaust emissions from uncontrolled vehicles and related equipment using internal combustion engines, outboard motors, 29647
 - Federal safety standards and regulations with amendments and interpretations, 16377, 17757, 18322
 - for safer motor vehicles, more effective efforts needed to insure compliance with Federal Safety Standards, National Highway Traffic Safety Administration, Department of Transportation, GAO report, 28992
 - measuring soil properties in vehicle mobility research resistance of fine-grained soils to high-speed penetration, 31262
 - motor vehicle information and costs savings act—
 - law, 19443
 - report, 19655
 - Motor vehicle safety act, extension for fiscal year 1973, hearing, 23018
 - National traffic and motor vehicle safety act—
 - amend, hearings, 28525
 - amend, law, 19477
 - 1972 authorization, hearing, 26259
 - report on activities—
 - departmental editions, 16379, 16381
 - document edition, 15670
 - nonoperating motor vehicle safety study, special study, 30572
 - report on 3d International technical conference on experimental safety vehicles, 22052
 - require no-fault motor vehicle insurance as condition precedent to operation, report, 31119
 - road user and property taxes on selected motor vehicles, 31327
 - safety defect recall campaign reported to National Highway Traffic Safety Administration, 18655
 - transportation control strategy—
 - Dayton metropolitan area, 27482
 - Denver metropolitan area, 27483
 - Houston, greater, area, 27486

Motor vehicles—Continued

- transportation control strategy—con.
 - Philadelphia, State implementation plan, 27485
 - Phoenix-Tucson air quality area, 27484
- transportation controls to reduce motor vehicle emissions—
 - Minneapolis and St. Paul, Minn., 27487
 - Salt Lake City, Utah, 29644
 - Spokane, Wash., 27489
- Vehicle-free zones in city centers, European experience, 21802
- see also Automobiles—Motor vehicle accidents—Motorbuses.
- Motorboats, seal of safety, Coast Guard Auxiliary courtesy 1973 examination decal for motorboats, 25957
- Motorbuses:
 - bus systems acquisition by Washington Metropolitan Area Transit Authority in National Capital area—
 - hearings, 15884
 - law, 19447
 - legislative history of bill, 23056
 - report, 19911
 - buses, Federal item identification guide, 30092
 - effect of suspension of bus service on local peak hour traffic congestion, case study, 30212
 - tank-truck combination overturn onto Volkswagen microbus followed by fire, U.S. Route 611, Moscow, Pa., highway accident report, 30562
 - Urban mass transportation assistance act, stabilization of fares, 28402
- Motorcycles:
 - comparisons of braking performance for 1973 passenger cars and motorcycles, 25581
 - laws requiring helmets and eye protection for motorcycleists, 22055
 - performance data, 1972 consumer information series, 23738
- Motorists, motorist radio services, 31323
- Motors, and generators, current industrial reports, 16769-770, 29768
- see also Electric motors—Outboard motors.
- Motortruck drivers, physical condition report of commercial drivers involved in accidents, 21967
- Motortrucks:
 - Army procurement of M561, Gama Goat, 17026
 - Atchison, Topeka and Santa Fe passenger train no. 212 collision with Stillwater Milling Company motortruck at 116th Street north grade crossing near Collinsville, Okla., railroad/highway accident report, 30571
 - automobile-truck collision followed by fire and explosion of dynamite on cargo on U.S. Highway 78, near Waco, Ga., highway accident report, 30561
 - automobile, truck, trailer, and farm implement dealers under Fair labor standards act, 26915
 - commercial vehicle front-tire failures, 32452
 - Federal item identification guide, 30092
 - heavy duty vehicle driving pattern and use survey, final report, New York City, 30727
 - household ownership of cars and light trucks, 22563
 - interior/exterior noise levels of over-the-road trucks, report of tests, 16363
 - inventory and use survey, 19230-236, 21048-52, 22538-545, 27026-29, 29720-721, 30813-815
 - preliminary reports, 24222-230
 - lift trucks, fork, platform, and pallet, Federal item identification guide, 25004

INDEX 1973

- Motortrucks—Continued**
truck-automobile collision involving spilled methyl bromide on U.S. 90 near Gretna, Fla., highway accident report, 30560
truck-top markings for visual identification, 31885
see also Motor vehicle accidents.
- Motortrucks in freight service:**
cooperative approach to cargo security in trucking industry, 32601
cost of operating trucks for livestock transportation, 22337
equal employment opportunity in trucking industry at crossroads, 21528
evaluation of potential effects of U.S. freight transportation advances on highway requirements, research phases, 25143
flows of mill residues to pulp and board manufacturers, Washington, Oregon, and California, 20322
- Mould, Christopher M., nomination, hearing, 20000**
- Moultrie, H. Carl, nomination, hearing, 19962**
- Mound Bayou, Miss., social and health indicators system, census use study, 29723**
- Mount, Henry S., optometrists employed in health services, 1968, United States, 27752**
- Mount Burney Council of Republican Women, annual report, 24696**
- Mount Hood, Ore., isotopic profiling snow gauge report, 23978**
- Mount Hood Lodge no. 1005, Oregon, Machinists Nonpartisan Political League, annual report, 24514**
- Mount McKinley National Park, general information, 29398**
- Mount Marion, N.Y., railroad accident investigation report, 23950**
- Mount Rushmore National Memorial, S. Dak.:**
general information, 23827
water resources and geology, 29032
- Mount St. Helens, Washington, Pine Creek volcanic assemblage, 29008**
- Mountain pine beetles, *see* Beetles.**
- Mountain States, *see* Rocky Mountain States.**
- Mountainmahogany:**
cliffrose and mountainmahogany seeds retain viability 6 years in cold storage, 28951
litter production by oak-mountain mahogany chaparral in central Arizona, 17518
mulching improves survival and growth of cercocarpus transplants, 21663
pressure bomb measures changes in moisture stress of birchleaf mountainmahogany after partial crown removal, 23290
- Mountains, men who matched mountains. Forest Service in Southwest, 26467**
- Mourant, Walter A., proposal for study of water resources of Santa Fe County, N. Mex., 23368**
- Mourning doves:**
migratory birds 1972-73 in United States, etc., Federal regulations, 20781
Status report, 17848
- Mouth:**
cancer of mouth, 31681
periodontal disease and oral hygiene among children, statistics, 22027
research explores canker sores and fever blisters, 16388
- Movement (psychology):**
psychokinesis, fact or fantasy, USSR study, 23541
- Movement and dispersion of soluble pollutants in Northeast Cape Fear Estuary, N.C., 16114**
- Movement and impact of pesticides used for vector control on aquatic environment in the Northeast, 17933**
- Moving, *see* Transportation.**
- Moving forward, community development, 19123**
- Moving forward in coal mine health and safety, report of Secretary of Interior on administration of Federal Coal Mine Health and Safety Act during calendar year 1971, 17563**
- Mower County Republican Committee, annual report, 22911**
- Mowers, *see* Mowing machines.**
- Mowing machines, look at it this way, it's a cutting machine, we want you to know what we know about mower safety (poster), 21594**
- Moyer, Forrest T.:**
apparent consumption of industrial explosives and blasting agents in United States, 23634
injury experience and worktime in solid mineral mining industries, 16255, 25447 by States, 25448
injury experience in quarrying, 17680
- Moynihan, Martin J.:**
oceanographic conditions in Nares Strait, 22621
oceanographic observations in Kane Basin, 22620
- Mozambique, *see* Portuguese East Africa.**
- MP series, 31176**
- MSI series, 17998**
- MS-222, Walleyed pike, residues of MS-22 in northern pike, muskellunge, and wall-eye, 20780**
- MTS series, 18611**
- Muckel, Dean C., replenishing underground water supplies on farm, 16601**
- Mud Creek, Broken Bow, Neb., special flood hazard information report, 28776**
- Mudge, Melville R., geology of Sun River Canyon area, northwestern Montana (series), 26501**
- Mueller, Gerhard O. W., criminal, society, and the victim, 32414**
- Mueller, Lincoln A., roll laminating fiber overlays on low-grade ponderosa pine lumber, 23307**
- Mueller, Marjorie S., independent health insurance plans in 1971, 27884**
- Muench, Robin D., oceanographic conditions in northern Baffin Bay, region, 28223**
- Mulberry, Ark.:**
flood plain information, Mulberry and Little Mulberry Creeks, 21451
floods, how to avoid drainage, 21462
- Mulberry Creek:**
flood plain information, 20120, 21451
flood problems at Salina, Kans., 17404
- Mulch farming, *see* Mulching.**
- Mulching, mulching improves survival and growth of cercocarpus transplants, 21663**
- Mullane, Paul, naval aviation news, 18678**
- Mullins, Marjorie C., bibliography of geology of Green River Formation, Colo., Utah, and Wyo., 27560**
- Mullet River:**
flood plain information, 21455
flood areas, 20111
- Mulligan, Kathryn L., question of opportunity women and continuing education, 31601**
- Mullins, Bobby R., relief, 19329, 19837**
- Mullins, Cecil J., evaluation of item-by-item test administration, 30731**
- Mullins, William S., surgery in World War II, orthopedic surgery in Zone of Interior, 16659**
- Multi-ethnic literature in high school, mental health tool, 30503**
- Multifamily reports and forms catalog, 21799, 23443**
- Multinational banks and management of monetary policy in United States, 25183**
- Multinational corporation, studies on U.S. foreign investment, 27612**
- Multinational corporations, 26265, 27317**
- Multinational corporations and United States foreign policy, 31141**

- Multiple Sclerosis, National Commission, *see* National Commission on Multiple Sclerosis.
- Multiple-use wildlife transmitter, 26847
- Multiplexing:
noise immunity of optical communication lines (OLC) with frequency multiplexing of discrete information channels, USSR study, 16191
on application of Haar functions, 27846
- Multiplication, feasibility of applying fringe multiplication techniques to stress analysis in 3 dimensions, 20107
- Multitube generating bank, 20996
- Mundt, Karl E., tributes upon occasion of his retirement from the Senate, 21305
- Municipal and cooperative distributors of TVA, 1972 operations, report, 24080
- Municipal bonds:
alternative to tax-exempt bonds for tax reform purposes, panel discussions 27251
municipal capital market expansion with taxable bond sales, report, 15816
- Municipal capital market expansion act, 15816
- Municipal home rule:
District of Columbia, elect mayor and city council—
hearing, 28531
report, 31069
- Municipal Technology Branch, Environmental Protection Agency, Projects through June 1972, 20202
- Municipal wastes:
Chicago, Ill., regional wastewater management systems, Chief of Engineers Office report, 24958
consideration for preparation of operation and maintenance manuals for municipal wastewater treatment plants, 31896
construction is only half the answer, 16022
electrical power consumption for municipal wastewater treatment, 31291
end, not the means, 16023
environmental compatibility, by law, 16024
establish municipal mine demonstration plant, hearing, 17267
estimating staffing for municipal wastewater treatment facilities, 29589
financial and institutional arrangements for wastewater management, Denver, SMSA, 32264
flow smoothing stations in municipal sewage systems, 28802
injecting highly treated sewage-plant effluent into deep sand aquifer at Bay Park, N.Y., preliminary results, 17540
metropolitan housewives' attitudes toward solid waste disposal, 20215
- Municipal Technology Branch projects through June 1972, 20202
- northern Maine regional treatment system, 27492
- physical-chemical treatment of—
combined and municipal sewage, 27465
municipal wastewater using powdered carbon, 31287
- polices and trends in municipal waste treatment, 16022-26
- ultimate goal, equitable cost-sharing, 16025
- why planning and what is cost effectiveness? 16026
- Municipalities, *see* Cities and towns.
- Munks, Richard, measurements of laser extinction in ice fog for design of SEV pilot-age system, 21437
- Munitions:
characterizing vegetation from existing source material for predicting munition height of burst in inaccessible areas, 31258
ground fit and compatibility tests of air borne stores, procedure for, military standard, 20066
- Munsee Indians:
Federally owned land declared in trust by United States for Stockbridge-Munsee Community—
law, 19412
report, 16985
- Munson, Ronald A., properties of natural zeolites, 29234
- Munson Creek, special flood hazard information report, 20165
- Mural painting and decoration, importation of pre-Columbian sculpture and murals, prohibit, reports, 21179, 21310, 21312
- Murfreesboro, Tenn., pre-school development project, Murfreesboro, Tenn., 27776
- Murphy, Alberta:
Bessemer for Murphy Committee, annual report, 22804
Murphy for Congress, annual report, 24452
- Murphy, Kathryn M., records of Commissioners of Claims (Southern Claims Commission), 1871-80, 25535
- Murphy, Morgan F., world narcotics problem, Latin American perspective, 27212
- Murphy, Paul A., forest resources of Tennessee, 21680
- Murphy, Robert T., remarks, Sept. 20, 1973, 31978
- Murphy, Rupert L., nomination, hearings, 19955
- Murphy for Congress, annual report, 24452
- Murray, C. Richard, estimated use of water in U.S., 23335
- Murray, Donald M., search, new technology for pavement snow and ice control, 23187
- Murray, Raymond L., proceedings of workshop on nuclear energy, environment and engineering education, 28072
- Murray County Republican Committee, annual report, 22936
- Murry, Thomas:
intelligibility of processed helium speech at diving depths greater than 1,000 feet, 20527
response variations of 3 types of microphones pressurized to 19 Ata, 20525
speech discrimination in noise and hearing loss at 3000 hertz, 23632
speech intelligibility during exercise at normal and increased atmospheric pressures, 16248
- Muscle relaxants:
controlled myorelaxants and ganglioblockers with disulfide bond, USSR study, 21865
new curariform and ganglion-blocking agents, USSR study, 26596
- Muscles:
eardrum displacement following stapedius muscle contraction, 29198
electromyographic changes in articulation muscles during emotional shifts, USSR study, 26560
successful conditioning of stapedius muscle, 29200
voluntary activation of motor units and spinal reflexes, USSR study, 27631
- Museums:
aerospace museum in western United States, feasibility study, 27241
HEW to assist in improvement and operation, report, 21218
museum program guidelines for United States, 1974 fiscal year, 23731
surplus property donations to public museums, report, 17193
you asked about Indian museums, 11st, 31490
- Mushkin, Selma J., national assessment and social indicators, 31225
- Music:
Indian music, 31465
Library of Congress catalog, 23609
musical composition, general information, 17314
recording rights in musical compositions, 31169

INDEX 1973

Musich, Lillian F., covering leg 18 of cruises of drilling vessel Glomar Challenger, Honolulu, Hawaii to Kodiak, Alaska, 30553
Musick, J. K., catalytic decomposition of chloroform, 23877
Muskegon, Mich., area wage survey, 16233
Muskegon Heights, Mich., area wage survey, 16233
Muskellunge, *see* Pike.
Muskingum County Republican Club, annual report, 22859
Muskmelons, hot water and fungicides for control of mold on cantaloups, 27995
Muskogee, Okla., flood plain information, Coody Creek, Muskogee, Okla., 31249
Mussels, protecting consumer from potentially harmful shellfish (clams, mussels, and oysters), GAO report, 26483
Must Honduras pine be weeded frequently in Puerto Rico? 28958
Mustin, Henry C., papers in Library of Congress, register, 29182
Muto Alphonso A., relief, 19827, 28443
Muto, Frank P., relief, 19827, 28443
Mutual aid, *see* Foreign aid—Lend-lease operations.
Mutual assistance, *see* Military aid.
Mutual defense, *see* Military aid.
Mutual defense assistance control act of 1951, *see* Exports.
Mutual funds, *see* Investment companies.
Mutual mortgage insurance fund, State chartered mutual savings and loan institutions ineligibile for insurance under National housing act, title 4, hearings, 27193
Muyssers, K., diffusional and metabolic components of nitrogen elimination through lungs, effects of pressure, 31580
Myer, Fort, general information leaflets, 28046
Myers, Beverlee A., health maintenance organizations, objectives and issues, 21764
Myers, Clifford A.:
bark thickness and past diameters of Engelmann spruce in Colorado and Wyoming, 17519
simulating yields of southwestern ponderosa pine stands, including effects of dwarf mistletoe, 16086
volume tables and point-sampling factors for Engelmann spruce in Colorado and Wyoming, 23305
Myers, D. A., test-observation well near Davenport, Wash., 23378
Myers, David L., environmental endurance testing of elastometric pitch change bearings, 26981
Myers, Donald A., upper paleozoic Madera Group in Manzano Mountains, N. Mex., 25253
Myers, Paul J., Candidate for Office of United States Congressman, District No. 10, *see* Paul J. Myers, Candidate for Office of United States Congressman, District No. 10.
Myers Vance A., BOMEX atlas of satellite cloud photographs, 20232
Myocardium, *see* Heart.
Myrtle Island Research Natural Area, general information, 26131
Mytelka, Alan I., combined sewer overflow study for Hudson River, conference, 25115
Mythology, Indians, legends and myths, 31463
Myths, *see* Mythology.

N

N.A.A.C.P., *see* National Association for Advancement of Colored People.
N.A.S.A., *see* National Aeronautics and Space Administration.
N.B.S., *see* National Bureau of Standards.
NAACP, *see* National Association for Advancement of Colored People.

Nacelles:
acoustic and aerodynamic performance of 6-foot-diameter fan for turbofan engines, QF-1 fan in nacelle without acoustic suppression, 32466
aircraft with and without acoustically treated nacelles—
annoyance judgments, 32455
arousal from sleep by noises, 32457
predicting pressure distribution about nacelle at transonic speeds, analytical method, 31603
Naches, Wash.:
flood plain information, 17388
floods on Naches River, 21470
Naches River and Valley:
flood plain information, 17388
floods, Naches, Wash., 21470
Nacogdoches County Republican Party Executive Committee, annual report, 22735
NAFEC, *see* National Aviation Facilities Experimental Center, Atlantic City, N.J.
Nagasaki, Japan, summary of synoptic meteorological observations Japanese and Korean coastal marine areas, 23887
Nagel, William:
foreign trade regulations of—
Sweden, 32120
Switzerland, 19301
Nahcolite:
estimating nahcolite and dawsonite content of Colorado oil shale from oil-yield assay data, 21947
evaluation of methods for determining nahcolite and dawsonite in oil shales, 31593
Nails and spikes:
effect of deformed shanks, prebored lead holes, and grain orientation on elastic bearing constant for laterally loaded nail joints, 27533
nails, staples, and tacks, Federal item, identification guide, 25005
Nakahara, R. H., investigation of floods in Hawaii, 23350
Nakayama, Toshiko, price advances accelerate in 3d quarter of 1972, 25384
Names (business), *see* Business names.
Naming of hurricanes, 20719, 23862
Naphtha, refining improvement of shale oil naphtha, 26665
Napollitano, Albert, some experiments on stirring of viscous liquids, 27735
Naphthalenecetic acid, action of quaternary ammonium derivatives of naphthalenepent-tetracarboxylic and pyromellitic acids on neuromuscular transmission, USSR study, 17621
Narcosis, visual evoked responses for divers breathing various gases at depths to 1200 ft., 16252
Narcotic addicts:
characteristics of NARA patients in after-care during June 1971, 25586
estimating number of narcotic addicts, 20581
treatment and rehabilitation, hearings, 19784
Narcotic habit:
Narcotic addlet rehabilitation act—
amend. law, 15654
text, 26171
Narcotics:
and dangerous drugs, translations, 18978
cooperation in combating illicit international traffic in narcotics, etc., agreement with—
Argentina, 20809
Paraguay, 31864
International narcotics control source book of conventions, protocol and multilateral agreements, 17689
laws, compilation, 21148
narcotic enforcement efforts in Hong Kong, Thailand, Burma, etc., 27229
not the law's business? monograph, 26745

Narcotics—Continued
 protect public health and safety in District of Columbia by amending laws, report, 19674
 protocol amending single convention on narcotic drugs—
 hearing, 15894
 report, 15805
 regulation of methadone and other narcotic drugs in treatment programs, hearings, 32086
 world narcotics problem, Latin American perspective, report, 26138, 27212
see also Barbiturates.
 Narcotics and Dangerous Drugs Bureau:
 annual report, Office of Deputy Director-Operations, 29248
 BNDD compliance investigator, 21968
 BNDD personnel management series, 21969, 26673
 calendar year 1972, report, 31598
 Controlled substances act of 1970, BNDD manual for pharmacist, 26674
 efforts to prevent heroin from illicitly reaching U.S., GAO report, 20327
 library book catalog—
 author catalog, 23571
 periodical catalog, 23572
 subject catalog, 27655
 title catalog, 25367
 SCID-TR-(series), 17689, 20581, 30446
 Nares Strait, oceanographic conditions, 22621
 NASA, *see* National Aeronautics and Space Administration.
 Nash, A. E. Keir, governance and population, governmental implications of population change, 23907
 Nash, Edmund:
 labor developments abroad, 18536
 labor in U.S.S.R., 20497
 Nashua, N.H., housing market analysis, 20245
 Nashville, Tenn.:
 flood plain information, Mill Creek-Seven-mile Creek, 28717
 floods, Mill Creek, 28755
 Nassau County, Fla., surface water, 23376
 Natality, *see* Birth.
 Nantula, *see* Shrimps.
 Natchez Trace Parkway, general information, 23828
 Nathan, Cynthia, manual on volunteer services in public welfare, social services, 22224
 Nathan, Gad, approximate tests of independence in contingency tables from complex stratified cluster samples, 27743
 National Advisory Commission on Criminal Justice, Standards and Goals, progress report, 30378
 National Advisory Committee on Oceans and Atmosphere:
 annual report, 21970, 31600
 increase appropriations, law, 19494
 oversight, hearings, 24869
 National Advisory Council, Action, establish, hearings, 19753, 21359
 National Advisory Council on Adult Education, annual report, 26677
 National Advisory Council on Aging, establish, report, 15683
 National Advisory Council on Economic Opportunity, annual reports, 15668, 20086
 National Advisory Council on Extension and Continuing Education, annual report, measure of success, Federal support for continuing education, 32453
 National Advisory Council on International Monetary and Financial Policies, annual report, 27703
 National Aeronautics and Space Administration:
 acquisitions of capital plant, NASA, 17088
 AEC-NASA tech brief, 18663
 appropriations, 1973—
 law, 19359
 report, 16957

National Aeronautics and Space Administration—Continued
 appropriations, 1974—
 authorization—
 hearings, 26180, 27185, 27243, 27297, 28432, 28508, 31124-125
 index, 32093
 law, 32008
 reports, 27157, 30993
 hearings, 30005
 reports, 28377, 28485, 29867, 29963, 32069
 contractor report CR (series), 16347, 17692-701, 20582-593, 21972-976, 23669-673, 25519, 26680, 27705, 29250-260, 30448-453 31603-616, 32454-462
 EP series, 21977-979, 27706-707, 29262-263, 30454
 film list, 26681
 grant handbook, 16355
 headquarters telephone directory, 18661
 Inventions and Contributions Board, petitions for patent waiver, findings of fact, etc., 18757
 manual control, 7th annual conference, proceedings, 17703
 NASA activities (periodical), 18659
 NASA aeronautics, research, etc., 31602
 NASA contributions to fluidic systems, survey, 17707
 NASA earth resources survey program, weekly abstracts, 19067
 NASA facts, 17702, 23674
 NASA, general information, 20594
 NASA grant handbook instruction, 18660
 NASA report to educators, discovery, knowledge, benefits (periodical), 25520
 NASA SP series, 17958
 NASA technical notes, 27712-716
 national heart, blood vessel, lung and blood program, program analysis, 30492
 photography equipment and techniques, survey of NASA developments, 25522
 posters, 21971, 23674
 press releases, 18797
 procurement regulation, 18662, 18664
 real estate disposals, policy and procedures, hearings, 15779
 reliability and quality assurance publication NHB series, 23692
 scientific and technical reports and publications for 1969, selected listing, 23677
 significant NASA inventions available for licensing in foreign countries, 26686
 SP series, 16348-349, 17703-708, 20595-597, 21980-984, 23675-677, 25521-522, 26682-686, 27708-711, 29264-269, 31617-620, 32463-465
 space flight investigations, opportunities for participation, handbook, 17728-729, 18735
 space shuttle and alternate programs, cost estimates, GAO analysis 28984
 hearings, 31125
 surface-refractivity measurement at NASA spacecraft tracking sites, 17711
 tech brief, 18663
 index, 31619
 technical memorandum, 21985, 23678
 technical notes, 16350-354, 17709-727, 20598-621, 21986-989, 23679-691, 25523-528, 26687-690, 29270-299, 30455-462, 31621-654 32466-479
 technical reports, 20622, 21990, 27717, 29300
 technical translations, 26691, 27718-718A, 29301-303, 30463-464, 31655-661
 National Aeronautics and Space Council:
 abolish, hearing, 26271
 appropriations, 1973—
 law, 19359
 report, 16957
 reorganization plan, hearing, 24861
 National Agricultural Bargaining Board, establish, hearing, 19738

INDEX 1973

- National Agricultural Library :
guide to service, 23693
press releases 18798
- National Airlines, Inc., accident report, 16424
- National Alliance of Businessmen :
job opportunities for American labor force (remarks), 32424
jobs entry program, 23580
- National animal feedlot wastes research program, 25116
- National apprenticeship and training standards for painting and decorating and dry-wall taping, 15500
- National apprenticeship and training standards for sheet metal industry, 22401
- National Arboretum, contribution, 20890
- National Archives :
documents from America's past, reproductions of historical documents in National Archives, 20625
genealogical records, 23695
genealogical sources outside National Archives, 17731
inventory series, 32480
microfilm publications, pamphlets describing, 20626-630, 21994-999, 23698-701, 25533-544, 26694-695, 27718C-718E, 31668
preliminary inventories series, 30467
prologue, Journal of National Archives, 18826
reference information papers, 31670
regional branches, 23696, 31666
slides, list, 20624
suggestions for citing records in National Archives, 16357
transportation in nineteenth-century America, survey of cartographic records, 31670
welcome to National Archives, 26693
see also Records.
- National Archives and Record Service :
aerial photographs in National Archives, list, 29306
appropriations, 1974, hearings, 28393
general information leaflets, 16357, 17731, 20624-625, 23694-696, 25531, 26693, 31666
list of record groups of National Archives and Records Service, 31667
regulations for public use of records in National Archives and Records Service, 23694
special lists, 20631, 29306, 31672
ways to improve records management practices in Federal Government, GAO reports, 31386
- National Arthritis Month, designate, report, 27283
- National aspects of creating and using MARC/RECON records, 31570
- National Association for Advancement of Colored People, register of its records in Library of Congress, 23610
- National Association of Minority Contractors, important role in advancing economy and prosperity (address), 28229
- National atlas of United States of America, 21716
- National Atlas story, 16104
- National Autistic Children's Week, proclaim, law, 30918
- National Aviation Facilities Experimental Center, Atlantic City, N.J., category 3 ILS ground guidance equipment STAN-37 localizer tests at NAFEC on R/W-4, interim report, test and evaluation, 24033
- National Basketball Association, proposed merger with American Basketball Association, hearings, 26172
- National banks :
foreign activities of National banks, regulations, 30231
- National banks—Continued
own stock in and invest in loans to State housing corporations, allow—
law, 32017
report, 31003
regulation Q, NOW accounts, investment in State housing corporations, hearings, 27194
- National Beta Club Week :
designate—
law, 19439
report, 17191
- National Board of Indian Education, establish, hearings, 21216
- National budget, *see* Budget of United States.
- National Bureau of Standards :
applied mathematics series, 29307
director, nomination of Richard W. Roberts, hearings, 26262
disclosures on recent scientific developments, 20648
experimental technology incentives program, program area description—
assistance to inventors and small R&D firms, 27720
Federal procurement policy, 27721-722
frequency and time broadcast services, radio stations WWV, WWVH, WWVB, WWVL, 27725, 30471
handbooks, 17732, 22002
impact of radiometry and photometry and role of NBS, optical radiation measurements, 25555
journal of research, 18530-532, 20634
monographs, 20635, 22003, 29311-312, 32482
national standard reference data series, 16358, 17735-736, 29313, 30470
NBS and inventive process (speech), 29314
NBS lead paint poisoning project, housing and other aspects, 25557
NBS overview, 20638
NBS reactor, summary of activities, 27729
NBS special foreign currency program in Yugoslavia, 23713
Organic act, amend, appropriations, law, 16868
poster, 31674
press releases, 18776
publication announcements, 18688
publications newsletter, 18689
research and testing facilities of Engineering Mechanics Section, 25552
special publications, 16359-361, 17737, 20636-640, 22005-7, 23706-707, 25551-553, 26697-700, 27725, 29316-318, 30471-472, 31674-675
standard reference materials—
announcements, 18690
catalog, 29316
characterization of linear polyethylene SRM 1475, 17737
development of 1579 powdered lead-based paint, 26697
1973 SRM price list, supplement, 25551
preparation and homogeneity characterization of austenitic iron-chromium-nickel alloy, 20636
preparation and use of superconductive fixed point devices, 22005
survey of some health-related research and development (remarks), 21110
technical news—
bulletin, 18954
press release, 18955
technical notes, 16362-363, 17738-742, 20641-650, 22008-017, 23708-714, 25554-558, 26701-712, 27726-737, 29320-326, 30473-476, 31676-680, 32483-484
- National Cancer Institute :
animal histology procedures of Pathological Technology Section, 22020
chemotherapy program, NCI 1972, summary report, 16364, 22021

- National Cancer Institute—Continued
clinical, research, and staff associate, in-
formation bulletin, 26714
journal, 18528
multilevel analysis of NCI research grants
by scientific category, 32485
NSI monographs, 25561, 30478
opportunities for research, 27738
National Capital, *see* Capital of the United
States.
National Capital Housing Authority, an-
nual report, 20656
National Capital Planning Commission:
appropriations, 1973, law, 19355
appropriations, 1974—
hearings, 28385, 31126
report, 29861
preliminary inventory of records, 30467
National Capital region, *see* District of Co-
lumbia metropolitan area.
National cemeteries:
act—
hearings, 21385
report, 15678, 17206
national cemetery system in Veterans'
Administration, establish—
hearings, 26182
reports, 23036, 26140
Rock Island National Cemetery, general
information, 29661
National Center for Educational Statistics:
projects, products, and services, 28679
publications, 21428
National Center for Health Services Research
and Development:
conference series, 27740
focus (periodical), 18374
reprint series, 16366, 22023
summary of grants and contracts, active
on June 30, 1971, 22024
National Center for Health Statistics:
career in health statistics, 23720
catalog of publications, 17745, 29328
organization and functions, 20660
policy statement on release of data for
individual elementary units and related
matters, 23721
standardized micro-data tape transcripts
available for public use, 23722
National Center for Toxicological Research,
appropriations, 1974, hearings, 28384
National Center on Child Abuse and
neglect:
establish—
hearings, 28557
report, 29984
National Clean Water Week:
designate—
law, 30904
report, 27284
National Clearinghouse for Drug Abuse In-
formation, report series, 18862
National Clearinghouse for Mental Health
Information:
abstracts, 23757
crime and delinquency abstracts (periodi-
cal), 18178
National Clearinghouse for Poison Control
Centers, bulletin, 18665
National Coaches Day, designate, report,
19364
National Commission for Review of Fed-
eral and State Laws Relating to Wiretap-
ping and Electronic Surveillance, appro-
priations, 1974, hearings, 28388
National Commission on Consumer Credit,
see National Commission on Consumer Credit
Finance.
National Commission on Consumer Finance:
consumer credit in United States, report,
25572
extend for 6 months, report, 15685
report, hearings, 32140
National Commission on Financing of Post-
secondary Education:
compensation of members, law, 19460
National Commission on Financing of Post-
secondary Education—Continued
extend authorization and date for filing
report—
law, 30911
report, 26093
final report, extend date for filing report,
28326
National Commission on Fire Prevention
and Control:
America burning, report, 29335
appropriations, 1973, law, 19473
preliminary recommendations, hearing,
21324
National Commission on Libraries and Infor-
mation Science:
annual report, 25573
appropriations, 1973—
reports, 16987, 19615, 21311
veto message, 19556
appropriations, 1974—
hearings, 28387
report, 30983
National Commission on Marihuana and
Drug Abuse, *see* Marihuana and Drug
Abuse Commission.
National Commission on Materials Policy:
appropriations, 1974, hearings, 28384
energy conservation and development rec-
ommendations contained in final report,
summary, 30043
National Commission on Multiple Sclerosis:
establish—
law, 19460
report, 19875
National Commission on Productivity:
annual report, 31771
appropriations, authorization, hearings,
26255
extend, reports, 28455, 29873
productivity in food industry, prelimi-
nary study of problems & opportuni-
ties, report, 27863
temporary extension of authorization, law,
30910
National Commission on Productivity and
Work Quality, extend and define functions,
hearing, 29895
National Commission on State Workmen's
Compensation Laws:
report, 20660A
summary, 16482
National Commission on Water Quality,
appropriations, 1974, amendment, 31055
National Committee on Vital and Health
Statistics, *see* United States National
Committee on Vital and Health Statistics.
National Conference on Criminal Justice,
proceedings, 23573
National Conference on Radiation Control,
4th annual conference, Save A Rad, 16468
National Conference on Weights and
Measures:
annual report, 29318
model State—
method of sale of commodities regula-
tion, 23703
packaging and labeling regulation,
17733
registration of servicemen and service
agencies, regulation, 23704
unit pricing regulation, 23705
weights and measures law, 29310
model weights and measures ordinance,
17734, 30469
reports, 1905-71, index, 25553
National Council of State committees for
children and youth, strengthening State
committees and National Council, report
of 1st national workshop, 24109
National Council on Indian Opportunity:
appropriations, 1973, law, 19355
appropriations, 1974—
hearings, 28385, 31126
report, 29861

INDEX 1973

- National Council on the Arts, annual report, 22041
- National Credit Union Administration :
 administrator, placement in level 3 of executive schedule, report, 19720
 annual report, 16374
 financial statements for 1971 and 1972 GAO report, 32352
 NCUA bulletin, 18691
 research report, 29338
 rules and regulations, 16372-373, 18666, 22040, 25576, 26725-727, 29337
- National Criminal Justice Information and Statistical Service :
 series SD-EF, 27656
 Statistics Center reports, 26605
- National Criminal Justice Reference Service :
 national criminal justice, document retrieval index, 20484
 selected topic digest STD series, 32414
- National Day of Prayer and Thanksgiving, designate, law, 27078
- National debt, *see* Public debt.
- National defense :
 ASCS defense activities, 22321
 capability of Naval petroleum and oil shale reserves to meet emergency oil needs, GAO report, 17524
 code of Federal regulations, 30223-224, 31332-335, 32289
 defense areas in West Indies, facilities on North and South Calcos Islands, agreement with Great Britain, 20792
 defense indicators, 18214
 defense industry bulletin (periodical), 18215
 defense production act, amend, hearing, 31134
 economic impact of reductions in defense spending, summary of research prepared for U.S. Arms Control and Disarmament Agency, 26958
 emergency planning—
 communications and electronics equipment industries, industrial civil defense handbook, 20082
 industrial mobilization, 30132
 final report to Congress by Secretary of Defense Melvin R. Laird, Jan. 1969-Jan. 1973, 24843, 25012
 iron and steel industry role (address), 27058
 means of increasing use of defense technology, for urgent public problems, GAO, report, 21697
 our merchant marine, fourth arm of defense, 32286
 preservation of human resources during national crisis, HEW emergency preparedness programs, 32368
 perspectives in defense management (periodical), 18755
 privileges and immunities for personnel under F-5 program, agreement with Saudi Arabia, 17900
 production and acquisition of Hawk and Nike Hercules missile systems, agreement with Japan, 27922
 special military operations, 19153, 22385, 30736
 see also National security—War and emergency powers.
- National defense education act, *see* Education.
- National Defense Executive Reserve, planning conference, regional directors designate regional emergency transportation coordinators, secretarial representatives, 20841
- National Drug Abuse Prevention Week :
 designate—
 law, 19438
 report, 17181
- National east coast winter storms operations plans, 20687
- National economic accounting training programs for economists and statisticians from other countries, 20084
- National economy, *see* Economic conditions.
- National electric rate book, 16047-51, 17457-466, 18667, 20252-259, 21553-557, 23227-229, 25155
- National Electronic Injury Surveillance System, NEISS news, product safety, 23258
- National Emergency Medical Services Advisory Council, establish, hearings, 31153
- National emergency standby regulations and instructions, personnel and manpower, FTM supplement, 18340
- National emissions data system control device workbook, 29650
- National Employ the Older Worker Week, designate, law, 27085
- National employees, retirement act, amend, report, 30964
- National Endowment for the Arts :
 annual report, 22041
 museum program guidelines for United States, 23731
 visual arts program guidelines, 1973 fiscal year, 20661
- National Endowment for the Humanities :
 annual report, 27754
 program announcement 1973-74, information for applicants, 31687
- National engineering handbook, 25707, 26338
- National Environmental Data System, establish, report, 19652
- National Environmental Information Symposium, agenda, 16020
- National environmental policy act of 1969, analysis of proposed legislative modifications, 30047
- National Environmental Research Center :
 Cincinnati, Ohio, active research projects report, 16015
 Las Vegas, staff study, 32267
- National Environmental Satellite Service :
 ESSA technical report NESC (series), 29382
- NOAA technical memorandum, NESS series, 17773, 22098-99, 23806, 25627, 30527-529
- publications and final reports on contracts and grants, 1971-NESS, 30529
- National environmental study area, guide, 16414
- National Export Expansion Council :
 chemicals, report of Industry Advisory Committee, 19292
 Industry Advisory Committee on Office Machines and Computers, report, 19293
- National Facilities Center, facilities act, amend, hearings, 28572
- National Family Week :
 designate—
 law, 19387
 report, 17184
- National Fertilizer Development Center :
 bulletins, 30669-671
 research and development program, abstracts relating to objectives, 18361
- National Firefighting Museum and Center for Fire Prevention, Inc. :
 conveyance of land in District of Columbia—
 hearing, 15887
 law, 19422
 report, 19892
- National-First Associates, *see* First Associates-National.
- National flood insurance :
 act, amend, hearing, 21318
 areas eligible for flood insurance, 29045
 flood insurance and disaster assistance, increase coverage, hearings, 32137
- National Flood Insurance Program, financial statements, GAO examination, 15671, 30255
- National Forest Reservation Commission, annual report, 28437

National forests:

- accelerated reforestation of national forests, law, 15655
- code of Federal regulations, 31337
- establish system of wild areas within lands of national forest system, hearings, 19736
- explore! visitor's guide to discovery in national forests, 29632
- Forest Service comments on resolutions relating to National Forest-System as adopted in 1971-72 by American National Cattlemen's Association, National Wool Growers Association, and State livestock associations, 25210
- Idaho, temporarily withdraw certain lands from operation of U.S. mining lands, law, 16902
- in quality environment, action plan, 28932
- Indian treaty reservation lands, authority of the President to return possession of lands placed in national forests and excluded from reservations as result of erroneous surveys opinion of Attorney General, 16212
- national forest landscape management, 24125
- national forest vacations, 30712
- regulations governing occupancy and use of National forest recreation sites and areas, 30710
- system, areas, 20296
- Vermejo, N. Mex. and Colo., acquisition for addition to forest system—
 - hearings, 19741
 - report, 19672
- volume and value of sawtimber stumpage sold from national forests (periodical), 19051
- wild areas in national forests, establish—
 - hearings, 15863
 - report, 26211
- wood supply and national forest lands investment act of 1973, report, 28494
- see also Timber.
- National Foundation on the Arts and the Humanities:
 - act, amend—
 - hearings, 19767, 24949, 32076
 - report, 27274
 - appropriations, 1973—
 - law, 19355
 - report, 16955
 - appropriations, 1974—
 - hearings, 28385, 31126
 - report, 29861
- National Gallery of Art:
 - appropriations, 1973, report, 16955
 - appropriations, 1974—
 - hearings, 28385, 31126
 - report, 29861
- National Guard, technicians' retirement, correct inequities in crediting service, report, 31099
- National Geophysical and Solar-Terrestrial Data Center, marine geophysical data catalog, 17411
- National growth policy, 15724
- National Guard:
 - air reservist (periodical), 17975
 - Army—
 - officer personnel reporting system, 17754, 23733
 - officers, career planning, 27758
 - register, 30485
 - woman's place in the Guard, 30487
 - Army lineage series, armor-cavalry, 32445
 - construction, standard operating procedures for major military construction, Army National Guard program, 17753
 - establish in Virgin Islands, authorize—
 - law, 19423
 - report, 19881
 - gentlemen, you have decisions to make, 26960

National Guard—Continued

- give yourself a chance the same way Art Frazier did, through National Guard, 16375
- join local radio station, Army Guard communications, electronics, 32492
- members—
 - contributory negligence claims, apply local law—
 - law, 19380
 - report, 17179
 - erroneous payments of pay or allowances, waiver of claims—
 - law, 19388
 - report, 19866
- National Guard technicians—
 - reduction in force, 26732
 - standards of conduct for National Guard technicians, 23734
 - technician performance rating plan, 30486
- retirement credit, hearing, 30068
- servicemen's group life insurance coverage for—
 - Ready Reserve and Retired Reserve, report, 15675
 - Reserve and National Guard, hearings, 17105, 26184
- spend weekend with boys, women in Army National Guard, 25579
- technician personnel pamphlets, 23734, 26732, 30486
- this is your Air National Guard, 17756
- training and equipping Army National Guard for maintaining order during civil disturbances, GAO report, 16102
- National Guard Bureau:
 - annual report, 30484
 - pamphlets, 17753-755, 23733, 26731, 27758
- National Health Service Corps:
 - enlarge personnel and services—
 - hearing, 21254
 - law, 19510
 - report, 19697
 - scholarship training program, hearing, 21365
- National health survey, vital and health statistics, 16387-370, 17746-749, 22026-32, 23724-725, 25566-567, 26718-720, 27745-751, 29330-331, 31682, 32489-490
- National Heart and Lung Advisory Council:
 - establish, law, 19368
 - national heart, blood vessel, lung and blood program, report, 30488
- National Heart and Lung Institute:
 - enlarge authority, law, 19368
 - lung program, respiratory diseases, task force report on problems, research approaches and needs, 27761
 - national heart, blood vessel, lung and blood program—
 - blood diseases panel, report, 30489
 - blood resources panel, report, 30490
 - heart and blood vessel diseases panel, report, 29343
 - lung diseases panel, report, 29344
 - National Heart and Lung Advisory Council, report, 30488
 - panel chairman, report, 29342
 - program analysis, 29345
 - summary, 29341
- NHLI's blood resource studies—
 - regulation of Nation's blood resource, 29346
 - supply and use of Nation's blood resource, 30493
- non-accountability, HEW response to Kennedy's letter on Wolfe report, 25580
- National Heritage Day:
 - designate—
 - law, 19385
 - report, 19884

INDEX 1973

- National Highway Traffic Safety Administration:
for safer motor vehicles, more effective efforts needed to insure compliance with Federal safety standards, National Highway Traffic Safety Administration, Department of Transportation, GAO report, 28992
helicopters in Emergency Medical Service, NHTSA experience to date, 25581B
report on 1971 activities—
departmental editions, 16379-381
document edition, 15670
- National Historic Preservation Week:
designate—
law, 30906
report, 27280
- National Historical Publications Commission:
additional members, provide—
hearing, 15743
law, 19475
- National housing act, *see* Housing—Loans—Mortgage Insurance.
- National Hunting and Fishing Day, designate, report, 27282
- National hurricane operations plan, 29384
- National Hurricane Research Laboratory:
NOAA technical memorandum, ERL-NHRL series, 30525
on role of organizational period in circularly symmetric hurricane model, 30525
- National Inconvenienced Sportsmen's Association, incorporate in District of Columbia, report, 17019, 27125
- National Industrial Pollution Control Council:
appropriations, 1974, hearings, 28384
National Industrial Pollution Control Council's and industrial responsibility in bearing costs of pollution control (address), 22639
- National Information and Resource Clearing House for the Aging, establish, report, 19923
- National Institute for Occupational Safety and Health, OH series, 16383-385, 17759
- National Institute of Advertising, Marketing and Society, establish, hearings, 17235
- National Institute of Aging:
establish—
hearing, 28420
report, 15683, 31082
see also National Institute on Aging.
- National Institute of Arthritis, Metabolism, and Digestive Diseases, 6th annual contractors' conference of artificial kidney-chronic uremia program, National Institute of Arthritis, Metabolism, and Digestive Diseases, 26739
- National Institute of Child Health and Human Development, extramural program of research on aging, 17761, 31691
- National Institute of Dental Research:
graduate training programs supported by training grants, 22059
grants and awards, 1972 funds, 32494
national caries program, 1972 status report, 22060
- National Institute of Education:
brief outline of its history, status, and tentative plans, 30503
establish, hearings—
appendix of background papers, 19754
print additional copies, report, 31089
oversight, hearing, 26154
PREP reports, 17763, 22062-63, 23746, 29361
- National Institute of Health Care Delivery, establish, report, 32100
- National Institute of Law Enforcement and Criminal Justice:
establishment, law, 32010
law enforcement standards program—
LESP-RPT series, 23570, 30379
NILECJ-STD series, 26604
- National Institute of Law Enforcement and Criminal Justice—Continued
NILECJ standard on ballistic resistance of police body armor, 23570
PR series, 16213-215, 20486, 21894, 26606, 27658
- National Institute of Marketing and Health, establish, hearings, 27313
- National Institute of Mental Health:
poster, 23751
Survey and Reports Section, statistical notes, 16393, 23762-767, 25592-595, 27783-785, 29365-366, 32499
- National Institute of Mental Health Task Force on Homosexuality, final report and background papers, 22077
- National Institute of Neurological Diseases and Stroke:
bibliography series, 22081, 23770
mission and publications for public, 26751
publications available, 23771
research, summary, 26752
women and their pregnancies, collaborative perinatal study, 23772
- National Institute on Aging:
establish—
hearing, 27357
report, 17164
see also National Institute of Aging.
- National Institute on Alcohol Abuse and Alcoholism:
alcoholism, conference proceedings, 29363-364
best, public service campaign of year, 27779
- National Institutes of Health:
annual report, 23774, 26755
international activities, 31515
appropriations, 1974, hearings, 28387
grants for training projects, policy statement, 22084
guide to grant and award programs, 17767
increase graduates from health profession schools and improve quality of their education, GAO report, 17525
international awards and biomedical research and research training, 29124
national heart, blood vessel, lung and blood program, program analysis, 30491
pharmacology research associate training program, 22065
public advisory groups, authority, structure, functions, members, 23775
Public Health Service grants and awards, 1972 funds—
State and organization tables, 31702
training, construction, medical libraries, 25599
publications, list, 31701
radiation safety guide, 32500
research grants index, 27788
resources analysis memo, 25601
scientific directory and annual bibliography, 31703
statistical reference book of international activities, fy 1972 funds, 29125
training programs of its institutes, 1974 fy, policy analysis, 22085
unauthorized use of funds for construction and alteration of public buildings, GAO report, 21701
see also Clinical Center, National Institutes of Health.
- National Inventors Day:
designate—
law, 19392
report, 17185
- National inventory of library statistics practices, data collection on national, State, and local levels, 28663
- National labor relations act, *see* Industrial relations.
- National Labor Relations Board—
annual reports, 23777-778
appropriations 1973—
hearings, 15866
reports, 16987, 19615, 21311
veto message, 19556

JANUARY-DECEMBER

National Labor Relations Board—Continued
 appropriations, 1974—
 hearings, 28387
 report, 30983
 board decisions and related court decisions, classified index, 30511
 case developments, quarterly report, 18840
 classification outline for decisions of National Labor Relations Board and related court decisions, 32501
 decisions and orders, bound volumes, 26758, 27789-791, 31704-705, 35502-503
 election reports, 18657
 field manual, 18669, 25605
 is NLRB still alive (remarks), 31706
 jurisdiction guide in administration of National labor relations act, 30512
 labor-management relations examiner, career opportunities, 29370
 litigation manual outline and litigation manual, 27792
 press releases, 18799
 routes to reform for decision-making (remarks), 31707
 rules and regulations relative to Labor management relations act, 18879
 separation of powers and National Labor Relations Board, selected readings, print as Senate document, report, 19909
 statistical summary, quarterly, 18658
 weekly summary of cases, 19079
 National land use policy, 17272, 27344
 National Legal Secretaries' Court Observance Week:
 designate—
 law, 19398
 report, 17192
 National Legal Services Corporation:
 establish—
 hearings, 28404
 report, 30968
 National Library of Medicine:
 bibliography of medical reviews, 18640
 cumulated, 25606
 catalog, annual cumulation, 29371, 30513
 current catalog—
 cumulative listing, 18670
 monthly listing, 18671
 general information, 31709
 history, programs, services, etc., 23781
 index medicus, cumulated, 25606
 literature search series, 25609
 serial titles currently received, index, 23779
 National Marine Fisheries Service:
 circular, 23782, 29373, 29393-394, 31726, 32510
 fishery marketing development series, 20683, 31712
 fishery publications—
 1969, lists and indexes, 29394
 1970, lists and indexes, 25630
 1971, lists and indexes, 20697
 NOAA technical reports—
 NMFS CIRC series, 20694-697, 22100-101, 25629-630, 23807, 29393-394, 31726, 32510
 NMFS SSRF series, 20699-701, 22102-107, 23808-809, 25631-632, 26771, 27803, 30542
 ocean fishery management, discussions and research, proceedings of workshop sponsored by Division of Economic Research, National Marine Fisheries Service, 29393
 posters, 20684, 23795, 29377
 research vessels, 20695
 special scientific reports, fisheries series, 23808-809, 25631-632, 27803
 statistical digests, 16403
 National Mediation Board:
 appropriations, 1973—
 reports, 16987, 19615, 21311
 veto message, 19556

National Mediation Board—Continued
 appropriations, 1974—
 hearings, 28387
 report, 30983
 member, nomination of Kay McMurray, hearing, 21375
 NOAA technical memorandum, NWS NMC series, 25622, 30532
 numerical weather prediction activities, 22156, 30581
 National Microfilm Week:
 designate—
 law, 19370
 report, 19867
 National Military Command System Support Center:
 NIPS formatted file systems 360 FFS—
 NIPS processing handbook, 28586
 user's manual, 30084
 error codes, 30086
 file maintenance (FM), 31177
 job preparation, 30085
 retrieval and sort processor (RASP), 28587
 National monuments and memorials:
 code of Federal regulations, 31337
 erection of memorial on public ground in D.C. or vicinity in honor and commemoration of Seabees, proposal, law, 16915
 overseas memorials, American Battle Monuments Commission to assume control authorize, report, 30975
 publications, price list, 27866
 see also names of monuments or memorials.
 National Museum:
 illustrated catalog of Neotropical Arctiinae types in United States National Museum (Lepidoptera; Arctiidae), 26825
 publications, price list, 26799
 National Museum of History and Technology, 18th century English porcelain, brief guide to collection, 23796
 National Next Door Neighbor Day, designate, report, 28480
 National Nutrition Education Conference, proceedings, 28004
 National Ocean Survey:
 NOAA technical memorandum, NOS LSC series, 31720
 NOAA technical report, NOS series, 17778-780, 22108, 23810-814, 25633, 26772, 30516, 30543
 press releases, 18776
 National Oceanic and Atmospheric Administration:
 adequacy of national weather service's hurricane and flood warning system, hearing, 19770
 Agnes floods, post-audit of effectiveness of storm and flood warning system, 26676
 earthquake research in NOAA, 26770
 geomagnetic research in NOAA, 1971-72, review, 26769
 information from NOAA, souvenir folder, 20688
 new agency, NOAA photoessay, 23800
 NOAA (periodical), 18708
 NOAA professional papers, 26766
 NOAA technical memorandum, ERL-NSSL (series), 23801
 NOAA technical report—
 ERL-APCL (series), 23805
 ERL-ESL (series), 23804
 ERL-MMTC (series), 23802
 ERL-WPL series, 23803
 NESS series, 23806
 NMFS CIRC series, 23807
 NMFS SSRF series, 23808-809
 NOS series, 23810-814
 oversight, hearings, 24869
 photoessay series, 23800
 poster, 23797
 press releases, 18776
 priorities and criteria for managing assistance programs for U.S. fishing vessel operators, need to establish, GAO report, 25242

INDEX 1973

- National Oceanic and Atmospheric Administration—Continued
 provide authority for certification of environmental soundness of facilities in coastal waters, offshore marine environmental protection act, hearings, 30015
 publications announcement, 20703
 technical memorandums, 17771-774, 20690, 23801, 25619-622, 29386-390, 30520-539, 31719-720
 technical reports, 20691-701, 22094-108, 23802-814, 25623-633, 26767-772, 27800-803, 29391-394, 30540-543, 31721-726, 32510
 travel regulations, 18526, 30120
 VHF radio weather, 23863
 National Oceanographic Data Center:
 NJAA technical memorandum, EDS-NODC series, 29388
 NODC, National Oceanographic Data Center, general information, 27805
 user's guide to NODC's data services, 26395
 National Oceanographic Instrumentation Center:
 instrument fact sheet IFS series, 17782-783, 22109-113, 23817, 27806, 31727, 32511
 technical bulletins, 22114-115, 31728
 tests in progress sheet (periodical), 18672
 National Olympic Day, Olympic games commemorative stamps, 22294
 National outdoor recreation programs and policies, 32082
 National Park Service:
 anthropological paper, 20704
 appropriations, 1974, hearings, 27180
 areas administered by National Park Service and related properties, 16409
 Chesapeake, lightship for environmental awareness, 32513
 development concept, 23824
 Director, appointment, require Senate confirmation, report, 32120
 history series, 29399
 Interpretive prospectus, 22117-122, 23826, 27818-819
 posters, 22124, 26775, 26778
 seasonal employment, 22123
 wilderness recommendations, 22125-130, 23831-842, 27824-829
 National parks:
 areas administered by National Park Service and related properties, 16409
 camping, fees, facilities, etc., 26773
 code of Federal regulations, 31337
 development in areas within National park system, hearings, 21243
 excess Defense lands available for national park purposes, report, 19685
 Golden Eagle passport and Golden Age passport, general information, 26776
 land acquisition for national park system, appropriations, authorize, report, 15836
 national park system plan, history, and natural history, 16415
 national parks and American landscape, 29334
 national parks centennial 1872-1972, parks, man and his environment, 23822
 overnight stays, 1972, public use of national parks, 27820
 place where hell bubbled up, history of 1st national park, 23829
 proposed reservation system in selected national parks, hearing, 27345
 public use, monthly, 18833
 publications, price list, 27866
see also names of parks.
 National Planning Conference on Domestic Shipping, report, 23623
 National Policy Toward Gambling, Commission to Review:
 appropriations, 1974—
 hearings, 28393, 32135
 report, 31117
 National Portrait Gallery, checklist of permanent collection, 30552
 National priorities, next five years, 25993
 National Railroad Adjustment Board:
 appropriations, 1973—
 hearings, 15866
 report, 16987
 appropriations, 1974, report, 30983
 National Railroad Passenger Corporation:
 accident report, 30569
 Amtrack improvement act of 1973, report, 28505
 financial assistance for purchasing railroad equipment, provide—
 law, 16867
 report, 15681
 financial assistance provide—
 hearings, 29925
 report, 31001
 National Range Workshop, Oct. 18-22, 1971
 Tucson, Ariz., 23979
 National Reactor Testing Station, Idaho, probability of exceeding capacity of flood-control system of National Reactor Testing Station, Idaho, 22478
 National Reading Center:
 parents and beginning readers (series), 28670-677
 problem solving exercises, right to read program, 21426
 right to read series, 15999
 teacher orientation handbook, 16001
 National register of historic places, 28777
 National Resource lands management act, 19865
 National Resources Planning Board, reports, 25536
 National Science Board, series, 31739
 National Science Foundation:
 achievements, cost, and administration of Ocean sediment coring program, GAO report, 20324
 act, amend—
 law, 19416
 report, 19638, 19853
 appropriations, 1973—
 authorization, law, 15645
 law, 19359
 report, 16957
 appropriations, 1974—
 authorization—
 hearings, 28433
 law, 32014
 report, 28373
 hearings, 27185, 28563, 30005
 reports, 28377, 29847, 29963, 29966, 32069
 databooks, 23845, 25637
 general information, 25639
 grants and awards, 25640
 guide to programs, 1970 fiscal year, 23846
 mosaic (periodical), 18654
 national heart, blood vessel, lung, and blood program, program analysis, 30492
 NSF forecasts rise in company-funded research and development and R&D employment, 23848
 press releases, 18800
 publications, 29405
 report, 1972—
 departmental edition, 25641
 document edition, 24818
 National science policy and priorities act, 19795
 National search and rescue manual, 22618
 National security:
 act, amend, report, 15822
 air traffic control, Federal aviation regulations, 18296
 appropriations, 1973, further continuing—
 law, 19497
 report, 19729
 assault on freedom, compendium of theoretical and policy statements by communist movement, 30048

National security—Continued
 cargo security handbook for shippers and receivers, 20840
 conference on security and cooperation in Europe, current foreign policy, 16498
 Congress to be kept better informed on foreign policy and national security by Central Intelligence Agency, report, 15822
 executive classification of information, security classification problems, involving exemption of Freedom of information act, report, 28347
 Government information policies and practices—
 public access to information from Executive branch advisory groups, hearings, 21241
 security classification problems involving subsection of Freedom of information act, hearings, 17058
 HUD personnel security program, 25274
 information security program regulation, 20044
 Internal security act and other internal security laws, report of subcommittee to investigate administration, 28454
 national security policy and changing world power alignment, hearing, 21227
 safeguarding classified defense information and material, 23423
 world drug traffic and its impact on U.S. security, hearings, 15920, 19991, 31152
see also National defense.
 National Security Seminar:
 background readings, 16175
 general information, 29126
 National severe local storms operations plan, 25616
 National Severe Storms Laboratory:
 NOAA technical memorandum, ERL-NSSL (series), 23801, 25619-620, 29390
 Norman, Okla., project highlights, 1972 fy, 23798
 National Shipping Authority, current regulations, index, 25395
 National Shut-In Day, designate, law, 19354
 National social service systems, comparative study and analysis of selected countries, 29495
 National Society of Daughters of American Revolution, annual report, 19804
 National Sokol Day:
 designate—
 law, 19418
 report, 17187
 National standard reference data series, 16358, 17735-736, 29313, 30470
 National standard reference data system:
 Standard reference data act, appropriations to carry out, law, 16868
 status report, 20650
 National strategy to reduce crime, 31599
 National Student Volunteer Program, synergist (periodical), 18949
 National Study Commission, water pollution control study plan, 27363
 National survey of oyster industry's problems, 29378
 National survey of professional, administrative, technical, and clerical pay, 21909
 National Technical Information Service:
 fast announcement service (periodical), 18285
 Government reports topical announcements, 18407
 1973 special interest publications, 23850
 NTIS information services, 29406
 weekly abstracts, NASA earth resources survey, 19067
 weekly Government abstracts—
 building technology, 19068
 computers, control & information theory, 19069
 environmental pollution & control, 19070
 management practice & research, 19071

National Technical Information Service—
 Continued
 weekly Government abstracts—continued
 materials sciences 19072
 transportation, 19073
 National Technical Institute for the Deaf:
 appropriations, 1973, veto message, 19556
 appropriations, 1974, hearings, 31009
 National topical meeting on new developments in reactor physics and shielding, 19178
 National Tourism Resources Review Commission, appropriations, 1973, law, 19473
 National Transportation Safety Board:
 annual report to Congress, 31746
 appropriations, 1973, law, 19362
 appropriation 1974, authorization, report, 29995
 NTSB-AAR series, 20716, 23851-861, 25643, 27834-835, 30559, 31742-745, 32521
 NTSB-AAS series, 20717, 25646-648, 29411, 30566
 NTSB-BA series, 17979
 NTSB-PSS series, 31747
 press releases, 18801
 safety recommendations, 18884
 special study report, NTSB (series), 16426-427, 30572-574
 National Union Catalog:
 Library of Congress, 18675, 29187
 reference and related services, general information, 31571
 National Visitor Center:
 facilities act, amend—
 hearing, 31040
 law, 30933
 reports, 23343, 31075
 National Vital Statistics System, vital and health statistics, 26721, 27753
 National Voter Registration Administration, establish, report, 26239
 National Voter Registration Month:
 designate September 1972—
 law, 15639
 report, 15817
 National Water Commission:
 public works appropriations, 1973, law, 19363
 public works appropriations, 1974—
 law, 32015
 report, 29993
 summary digest, Federal water laws and programs, 29413
 water policies for future, final report to President and to Congress, 30577
 National Weather Service:
 and cooperative upper air stations, 30579
 chart, 29414
 and water management, 30580
 communications handbook, 22153
 forecasters handbook, 20718
 NOAA technical memorandum—
 NWS CR series, 30530
 NWS ER series, 30531
 NWS HYDRO series, 25621
 NWS NMC series, 25622, 30532
 NWS SR series, 30533-535
 NWS TDL series, 17774, 30536
 NWS WR series, 30537-539
 operations, annual report, 20720
 poster, 30578
 river forecast system, forecast procedures, 25621
 weather service observing handbooks, 17787, 20721, 26782
 National Wild and Scenic Rivers System, designate St. Croix River as part of system, hearing, 19976
 National Wilderness Preservation System:
 annual report, 23000
 16 additions to system, message from the President proposing additions, 23000

INDEX 1973

- National Wool Growers Association, Forest Service comments on resolutions relating to National Forest System as adopted in 1971-72 by American National Cattle-men's Association, National Wool Growers Association, and State livestock associations, 25210
- National ZIP code directory, 26910
- National Zoological Park, annual report, 22222
- Nationality:
- administrative decisions under immigration and nationality laws of U.S., supplemental index, 25292
 - code of Federal regulations, 23234
 - Immigration and nationality act, amend—law, 19509
 - reports, 21171, 27130
 - laws, administrative decisions, 27588
 - national origin and language, 1970, census of population, 31948
 - U.S. nationals employed outside United States by Federal Government, extend coverage of life insurance, report, 28346
- Nation's range resources, forest-range environmental study, 25209
- Nationwide air pollutant emission trends, 28832
- Nationwide personal transportation study, report, 32282-283
- Nationwide survey of mental health and correctional institutions for adult mentally disordered offenders, 23758
- Native races, nativity and parentage composition of families of foreign stock, for United States, 1970, supplementary report, 28129
- Nativity, *see* Birth.
- NATO, *see* North Atlantic Treaty Organization.
- Natrona County, Wyo., stratigraphy and preliminary biostratigraphy of Flagstaff Rim area, Natrona County, Wyo., 30632
- Natrona County Democratic Central Committee, annual report, 22675
- Natural areas, *see* Wilderness areas.
- Natural disaster survey reports, 23799, 25618
- Natural factors in activation of plague epizootics, 20457
- Natural gas, *see* Gas.
- Natural history:
- national park system plan, 16415
 - natural history of—
 - Gardner Pinnacles, northwestern Hawaiian Islands, 26820
 - Kure Atoll, northwestern Hawaiian Islands, 26820
- Natural landmarks program, 29400
- Natural radiation exposure in United States, 23912
- Natural reforestation after logging on Afognak Island, 20299
- Natural resources:
- and environment, report on state, message from the President, 24813
 - career profiles in forestry, conservation, ecology, environmental management, 26462
 - collection of laws of USSR government on natural resources, USSR study, 29134
 - Congress and Nation's environment, environmental and natural resources affairs of 92d Congress, 24935
 - conservation activities for girl scouts, 24138
 - conservation and development of our nation's fish and wildlife resources, environmental quality, and oceanography, compilation of Federal laws, 17072
 - conservation bulletins, 17561
 - conservation in New Mexico, 1972, progress report, 32559
 - conservation of natural resources and wildlife, USSR study, 23561
 - conservation plan for developing areas, 22350
- Natural resources—Continued
- conservation practices, signs of good hunting and fishing, 15481
 - conservation yearbook, 17562
 - earth resources survey systems, proceedings of international workshop, 23675
 - economic realities of reclaiming natural resources in solid waste, report, 17431
 - energy, natural resources and research in agriculture, effects on economic growth and productivity for U.S., 32187
 - Federal protection of Indian resources, hearings, 15915, 21353, 26276
 - general tax reform, panel discussions, 27250
 - geomorphology and vegetation of Iles Glorieuses, 25695
 - Hawaii, conservation needs inventory, 27889
 - how to increase biological resources of Caspian, 23523
 - human behavior aspects of fish and wildlife conservation, annotated bibliography, 28927
 - Land and water conservation fund act, amend, hearings, 28547
 - legal and administrative measures for protecting environment, USSR study, 29139
 - management of national resource lands for protection and development, hearing, 27343
 - management, protection, development and sale, provide, hearings, 26275
 - NASA earth resources survey program, weekly abstracts, 19067
 - our environment and our natural resources, indivisibly one, conservation yearbook, 17562
 - plan for development of land and water resources of southeast river basins, 17924
 - population, resources, and environment, 22192
 - potentials for outdoor recreational development appraisal Caribbean area, Spanish edition, 27893
 - President's 1973 state of Union message on natural resources and environment, 30081
 - ranger arithmetic for 6th grade teachers, 20297
 - remote sensing for earth resources, 32094
 - agreement with Brazil, 31855
 - bibliography, 26370
 - resource bulletins, 20322-323, 21679-682, 23309-312, 25234, 27542, 28973-974, 31375
 - resource conservation in—
 - Alabama, 27894
 - California, 32561
 - resource publication (series), 16488, 23985, 25715-716, 30641, 31831
 - resource recovery—
 - act, implementation, hearing, 21383
 - state of technology, 24974
 - Skylab—
 - earth resources investigations, 29305
 - experiments, remote sensing of earth resources, information for teachers, 29263
 - summary analysis, summary and analysis of public response to proposed principles and standards for planning water and related land resources and draft environmental statement, 17937
 - tax reform for greater utilization of resources panel discussion, 27251
 - toward national materials policy, world perspective, 23730
 - USSR resources, translations, 18989
 - work of sanitary service on natural conservation, USSR study, 25333
 - see also* Land.
 - Natural role of fire, 26468

Naturalization:

Federal textbook on citizenship—
becoming a citizen series—
English and State government, 31440
home study course, 30303
our United States, 30302
simplified edition, 31442
our Constitution and Government,
31441, 32387

laws, compilation, 19541
publications, price list, 17800
subcommittee report, 92d Congress, 26234

Nature:

and extent of peat deposits and possible
effects of peat mining on manmade fea-
tures near Mesclero, N. Mex., 23352
and extent of retail and consumer losses
in apples, oranges, lettuce, peaches,
strawberries, and potatoes marketed in
Greater New York, 31915
and properties of some forest soils in
White Mountains of New Hampshire,
32344

environmental yardstick, 20353

Nannmann, Madeline, FAR horizons, 18282
Nauru Island, mineral industry, minerals
yearbook chapter, 20540

Naus, D., fracture mechanics applicability to
portland cement concretes, 26380

Nautical almanacs, *see* Almanacs.

Nautical charts, *see* Maps and charts.

Navajo-Hopi Administration Joint Commit-
tee, abolish report, 26204

Navajo Indians:

and Hopi Indians, joint land partition,
reports, 15687, 16953

general information, 31466

partition of surface rights of Navajo-Hopi
Indian land, hearing, 28548

Navajo Reservation, partition of surface
rights of Navajo-Hopi Indian land, au-
thorize, hearings, 19975

Naval Academy, Annapolis:

additional pay for permanent professors,
provide, hearing, 17224
catalog, 27836

servicemen's group life insurance coverage
for cadets and midshipmen law, 15636

Naval Academy Preparatory School, Baln-
bridge, 1973-74 catalog, 25649

Naval art and science:

Marine Corps, logistics and personnel sup-
port, manual, 32442

mobility, support, endurance, story of
Naval operational logistics in Vietnam
war, 20726

naval research logistics quarterly, 18679
Naval aviation, *see* Aeronautics.

Naval Aviation Facilities Experimental Cen-
ter, category 3 ILS ground guidance equip-
ment STAN-33 glide slope tests at NAFEC
on runway 4, test and evaluation, 24051

Naval aviation news, 18678

Naval bases, Guantanamo Naval Base Desa-
lination Facility, analysis and summary
report of operation, 20385

see also Navy.

Naval education:

naval shore electronics criteria, naval
training facilities, 16430

naval training bulletin, 18683

rate training manuals, 17794, 20729,
22180, 23886, 25661-663, 26787-788,
27858, 29438, 30598, 31759-760

training facilities, design manual, 20725

Naval Facilities Engineering Command:

design manual DM series, 20724-725
25650-651, 27837-838, 30582

cumulative index, 30582

Naval Historical Foundation Collection:

register of papers—

Bloch, Claude C., Julius A. Furer
John F. Shafroth, William H. Stand-
ley, 32438

Colby M. Chester, William F. Fullan,
Samuel McGowan, Henry C. Mustin,
29182

Naval history:

Alfred, 1775-78, first continental flagship,
31804

bibliography, 23872

naval documents of American Revolution,
American and European theaters, 32524

Naval installations, *see* Installations (mili-
tary).

Naval Observatory, publications (series),
17789, 23868, 29431, 32523

Naval Oceanographic Office:

catalog of nautical charts—

numerical listing of charts, 23871

region 9, East Asia, 23869

special purpose navigational charts and

publications, 23870

monthly summary, the Gulf Stream (peri-
odical), 18649

press releases, 18802

publications, 16436-439, 17790, 22160,
23869-871

special publication SP series, 22161

technical report, 29432, 30584

Naval officers, *see* Navy.

Naval oil shale reserves, capability of Naval
petroleum and oil shale reserves to meet
emergency oil needs, GAO report, 17524

Naval Operations Office, excerpts from 35
mm slide presentation by Office of Chief
of Naval Operations, 25654, 30585

Naval Ordnance Laboratory, NOL, White
Oak, general information, 20727

Naval Personnel Bureau:

career publication, 17989

manuals, 16441, 18036, 22162, 25656,
30586

Naval Postgraduate School, chemical oceano-
graphic research, present status and fu-
ture direction, deliberations of workshop
held at Naval Postgraduate School, Mon-
terey, Calif., 31750

Naval Research Laboratory:

adaptation of NRL acoustic research tank
facility for experiments in parametric
sonar, with preliminary results, 32525

1972 review, 31751

NRL OSO-4 Bragg crystal spectrometer
instrument, study of solar flare plasmas,
16450

progress, report, monthly, 18860

report series, 16443-452, 17791-793,
22163-175, 23874-885, 25658, 27843-
856, 29436, 30589-596, 31572-758,
32525-526

Naval research logistics quarterly, 18679

Naval Research Office:

ACR series, 16442, 31750

ONR report ACR (series), 29437

Naval research reviews (periodical), 18680

Naval Reserve:

chaplains handbook, 31749

officers—

on active duty, register—

departmental edition, 29434

document edition, 28298

retired, register, 29435

rear admiral grade in Judge Advocate
General's Corps, authorize—

law, 19486

reports, 19701, 19885

students at State maritime academies and
colleges, appoint as midshipmen in
Naval Reserve, hearing, 21203

Naval reservist (periodical), 18681

Naval Safety Center:

fathom (periodical), 18286

Navy lifeline, naval safety journal (peri-
odical), 25655

Naval service, *see* Navy.

Naval Ships Systems Command, NAVSHIPS
display illumination design guide, intro-
duction to light and color, 30597

Naval shore electronics criteria, 16430-431,
20722-723, 22158, 23867

Naval stores:

annual report, 29545

report, monthly, 18682

INDEX 1973

- Naval Submarine Medical Center, report, 16246-252, 20524-531, 21930-931, 23632, 25403-410, 26640-646, 29197-200, 30407-412, 31578-582, 32444
- Naval training, *see* Naval education.
- Naval Training Device Center, training device developments (periodical), 18969
see also Naval Training Equipment Center.
- Naval Training Equipment Center, training device guide, 22176
- Naval vessels, *see* Ships.
- Navarro, Richard:
L-7 velocity seismograph shaking-table results, 25625
Old Reliable Mine project seismic measurements, 30524
refraction, surveys in—
Colorado, Grand Valley, Silt, and Equity Oil Company Plant, 30522
Rifle, Colo., 30523
- Navel oranges, *see* Oranges.
- Navigable waters, *see* Navigation.
- Navigation:
aids, Coast Guard list, Mississippi River system, 27056
analysis of errors of gimballess inertial navigation system, USSR study, 30355
artificial islands and fixed structures, rules and regulations, 15610
bridges over navigable waters of United States, Gulf and Mississippi, 24272
channel improvement; Gastineau Channel, Alaska, hydraulic model, investigation, 21481
compendium, naval test, 25660
drift meter log operation, USSR study, 27636
navigation and communications, USSR study, 30344
navigation conditions and filling and emptying system, New Bankhead Lock, Black Warrior River, Ala., hydraulic model investigation, 20176
navigation conditions at confluence of Arkansas, Verdigris, and Grand Rivers, hydraulic model investigation, 25100
navigation instruments, USSR study, 27651
notices to mariners—
coastal and ocean regions of world, 18712
Great Lakes and tributary waters west of Montreal, 18713
Omega navigational station, agreement with Japan, 25729
radio aids, Atlantic and Mediterranean area, 23121
rules of the road—
Great Lakes, 21094
International, inland, 21095
special purpose navigational charts and publications, catalog, 23870
square wave, VOR tests, 30655
see also Air navigation—Loran.
- Navigator (periodical), 18684
- NAVSHIPS, *see* Naval Ships Systems Command.
- Navy:
Admiral, retired list, appointment of Hyman G. Rickover, hearings, 28394
Assistant Secretary, nomination of Jack L. Bowers, hearings, 28517
battle streamers of U.S. Navy, 16440
birthday, family tradition, then and now, 31761
civil engineer (periodical), 18685
disciplinary problems, subcommittee report, 23008
economies available through improved management of Navy shipboard inventories, GAO report, 28987
effect of personal treatment of Navy subjects on hearing discrimination task, 20528
enlisted personnel classification manual, 25657
- Navy—Continued
erection of memorial on public grounds in D.C. or vicinity in honor and commemoration of Seabees, proposal, law, 16915
facelate, official magazine for divers of U.S. Navy, 18278
First International Meeting of Directors and Chiefs of Naval Material, symposium, proceedings, 26783
it's your move! 22177
journal, civilian manpower management (periodical), 18529
manual of enlisted classifications, 30587
medical statistics, 23630, 32443
medicine, statistics, quarterly, 18930
messes ashore, manual, 29433
naval shore electronics criteria, 16430-431, 20723, 22158, 23867
naval shore facilities, definitive designs, 16433-434
Navy diving manual, 27857
Navy outdoor recreation areas, guide, 26785
nuclear-qualified naval surface and submarine officers and enlisted members who agree to reenlist, authorize special pay—
hearings, 17030
law, 19506
reports, 19675, 19939
officers—
classification manual, 23873
register—
departmental edition, 29434
document edition, 28298
retired, 29435
procurement directives, 18686
publications, price list, 17799
rate training manuals, 17794, 20729, 22180, 23886, 25661-663, 26787-788, 27858, 29438, 30598, 31759-760
safety precautions for shore activities, 26789
6th fleet, decision to homeport in Greece review, 21223
status of U.S. Navy personnel, agreement with Greece, 27913
travel regulations, 18526, 30120
U.S. Naval aerospace physiologist's manual, 23631
U.S. Navy medicine (periodical), 19018
use by Bahamian organizations of certain lands at U.S. Navy Base, Great Exuma Islands, Bahamas, agreement with United Kingdom of Great Britain and Northern Island, 25755
your Navy from viewpoint of Nation's finest artists, 29440
see also Armed forces—Uniforms.
- Navy Department:
appropriations, 1973, military construction—
law, 19476
reports, 19711, 19898
build and charter program for 9 tanker ships, GAO report, 31379
capability of Naval petroleum and oil shale reserves to meet emergency oil needs, GAO report, 17524
direction, Navy Public Affairs monthly 18232
journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy to survey timber resources between Mermentau and Mobile Rivers, Nov. 1817-May 1819, with appendix, etc., microfilm, pamphlet describing, 21994
messhall msater at arms handbook, 22178
nominations, hearings, 26250
outlook for production on Navy's LHA and DD-963 shipbuilding programs, GAO review, 31383
recruitment program, reprogramming, hearings, 24840

Navy Department—Continued
 safety review (periodical), 18885
 status of procurement of F-14 weapon system as of June 1, 1972, GAO report 25244
 Under Secretary, nomination of J. William Middendorf II, hearing, 31133
 U.S. Navy regulations, 27859
 Navy Supply Corps, newsletter, 18687
 NBS, *see* National Bureau of Standards.
 NCI, *see* National Cancer Institute.
 NCJRS, *see* National Criminal Justice Reference Service.
 NCUA, *see* National Credit Union Administration.
 Near East, *see* East (near East).
 Nearly spherical constant power detonation waves driven by focused radiation, 29254
 Nebolsine, Ross, ultra high rate filtration of activated sludge plant effluent, 27476
 Nebraska:
 Big Blue River compact with Nebraska, negotiation, consent of Congress, law, 16861
 census of business, 1967, selected services, 16707
 census of housing, 1970, housing characteristics for States, cities, and counties 21040
 census of population, 1970, characteristics of population, 27012
 census of transportation, 1972, truck inventory and use survey, 21051
 climatological data, 18095
 counties, population estimates, 28175
 county business patterns, 29739
 electric rate book, 23229
 mineral industry, minerals yearbook chapter, 16294
 precipitation data, hourly, 18446
 registry of minority contractors and housing professionals, listing in selected cities, 32384
 water quality standards summary, 16036
 Necessity for strength in era of negotiation, 29531
 Neckwear, Federal item identification guide, 32165
 Nectarines, postharvest wax-fungicide treatments of nectarines, peaches and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
 Nedelman, Jeffery, Youth Advisory Board newsletter, 19093
 Nedzi, Lucien N.:
 Citizens for Nedzi Committee, annual report, 24656
 Nedzi for Congress Committee, annual report, 26013
 Nedzi for Congress Committee, annual report, 26013
 Need for Federal agencies to improve solid waste management practices, 20333
 Need to control discharges from sewers carrying both sewage and storm runoff, 26480
 Need to improve administration of water pollution research, development and demonstration program, GAO report, 20334
 Need to improve language training programs and assignments of Government personnel overseas, 23323
 Needham, James J., remarks, Mar. 2, 1973, 29483
 Needle cast, *see* Leaf cast.
 Needle miner, *see* Lodgepole needle miner.
 Needles, Calif., geohydrology of Needles area, Arizona, California, and Nevada 26498
 Neel, Joe E., weed harvest and lake nutrient dynamics, 31267
 Negotiated contracts, *see* Health, Education, and Welfare Department.

Negotiation:
 agricultural trade and proposed round of multilateral negotiations, 32126
 comprehensive test ban treaty, promote negotiations, hearing, 28537
 International, arms limitations in light of SALT decisions based on United States and Soviet positions, hearings, 27333
 negotiating equality for postal employees and uniformity in labor relations, hearings, 29933
 negotiation and statecraft, hearings, 26269, 30037
 progress report on Trust Territory status negotiations, hearing, 27216
 Negro, *see* Negroes.
 Negroes:
 apprenticeship program and its potential for black Americans (speech), 31554
 black Americans—
 and Peace Corps, one part of Action, 22307
 decade of occupational change, 21907
 heritage, 17348
 black colleges and Federal agencies, 30218
 black male professionals in industry, study, 25374
 black news digest, 18033
 black presence in era of American Revolution, 31737
 characteristics of Negro immigrants in selected metropolitan areas, 1970, supplementary report, 29716
 college graduates beyond the melting pot (address), 31219
 employment and income in black community, trends and outlook (lecture), 25182
 employment in South, State and local governments, 25373
 Negro art from Harmon Foundation, selected audiovisual records, 31671
 Negro in military service of United States, 1639-1886, pamphlet describing microfilm, 27718E
 Negro population—
 as percent of total population, by counties of United States, 1970, map, 25941
 1970 census of population, 28122
 number of Negro persons, by counties of United States, 1970, maps, 19259, 25940
 road ahead, outlook for blacks in business (address), 21589
 social and economic status of black population in United States, 29776
 suitability of using common selection test standards for Negro and white airmen, 25844
 tabular analysis of records of U.S. colored troops and their predecessor units in National Archives, 31672
 we the black Americans, 16796
 Nehmer, Stanley:
 remarks—
 Nov. 27, 1972, 22637
 Dec. 30, 1972, 21114
 Neighborhood Youth Corps:
 difficulties of in-school program and its management problems, GAO report, 23318
 general information, 17655
 Neighborhoods, rehabilitation and neighborhood conservation housing insurance program, 23431
 Neighbors for Charles and Jerry Wilson, political committee, annual report, 22899
 Nelson, Jacqueline, older children need love too, 25945
 NEISS, *see* National Electronic Injury Surveillance System.
 Nellis, Muriel, resource book for drug abuse education, 22039
 Nelms, Johnny, Elect to Congress, Committee, *see* Elect Johnny Nelms to Congress Committee.

INDEX 1973

- Nelsen, Ancher, D.C. Friends of, *see* D.C. Friends of Ancher Nelsen.
- Nelson, C. Hans, sedimentary process and distribution of particulate gold in Northern Bering Sea, 17531
- Nelson, D., economic feasibility study of Fayetteville, N.C. treating Fort Bragg's wastewater, 25074
- Nelson, Harold D.:
area handbook for—
Chad, 15508
Democratic Republic of Sudan, 25856
Malagasy Republic, 31931
- Nelson, Jack E., equal employment opportunity in trucking, industry at crossroads, 21528
- Nelson, Rex A., review and analysis of instructional materials for manufacturing, 27769
- Nelson, Richard R., municipal collective bargaining agreements in large cities, 21906
- Nematodes, *see* Nematoid worms.
- Nematoid worms:
annotated bibliography of nematodes of soybeans, 26928
arthropod and nematode parasites, parasitoids and predators of Acrididae in America north of Mexico, 28024
genera of freshwater nematodes (Nematoda) of eastern North America, 32273
taxonomic hierarchy and checklist of genera and higher taxa of marine nematodes, 24964
- Neogene marine mollusks of Pacific Coast of North America, 1797-1969, bibliography, 23329
- Neonatal, *see* Infants.
- Neostriatum, certain aspects of participation of neostriatum in behavioral control, 17594
- Neotropical region, illustrated catalog of Neotropical Arctiinae types in United States National Museum (Lepidoptera; Arctiidae), 26825
- Nepal:
accessions list, Library of Congress, American Libraries Book Procurement Center, New Delhi, 17949, 29177
economic trends and their implications for United States, 32396
mineral industry, minerals yearbook chapter, 25428
United States interests and activities in Nepal, 25246
- Nepheline syenite, minerals yearbook chapter, 20556
- Neptunium, neptunium 237, production and recovery, 22491
- NERC, *see* National Environmental Research Center, Las Vegas.
- NERHL, *see* Northeast Radiological Health Laboratory.
- Nerves:
effect of anticholinesterase substances on action of acetylcholine and its analogues on neurons of gastropods, USSR study, 17637
influence of trigeminal stimulation on children's judgments of odor, 15627
neuroanatomy of speech, 23768
- Nervous system:
epilepsy bibliography, 29367
masking as indicator of neural fatigue, preliminary study, 20529
neurological and sensory disabilities, estimated numbers and cost, 27787
neurological disorders of infancy and childhood, collaborative study, bibliography, 26750
physiology of higher nervous activity, USSR study, 17638
self-regulation of neural mechanisms, 21879
- Nervous system—Continued
study of some indices of higher nervous activity of men subjected to underwater environment for many hours, USSR study, 25335
women and their pregnancies, collaborative perinatal study of National Institute of Neurological Diseases and Stroke, 23772
see also Reflexes.
- NESC, *see* National Environmental Satellite Service.
- Neskowin Crest Research Natural Area, general information, 21632
- NESS, *see* National Environmental Satellite Service.
- Nessul, Patricia C., population data for milk marketing areas under Federal orders, based on 1970 census, 26925
- Net differences in interview data on chronic conditions and information derived from medical records, 32489
- Net radiation method for enclosure systems involving partially transparent walls, 31651
- Netherlands:
economic trends and their implications for United States, 26548, 29114
narcotic enforcements efforts by local government and American missions, report, 27229
poultry meat industry, 17499
selling in Netherlands, 16835
- Netherlands Antilles:
economic trends and their implications for United States, 32395
mineral industry, minerals yearbook chapter, 20539
- Networks:
activity networks to model transportation systems subject to facility constraints, 26379
cascade impactor network, 19149
filters and networks, selection and use of, military standard, 15967, 20072, 28615
performance comparison of labeling algorithms for calculating shortest path trees, 29323
- Neuman, Charles J., statistical method of combining synoptic and empirical tropical cyclone prediction systems, 30533
- Neumann, Thomas L., police isolation and community needs, report of Wisconsin State Committee to United States Commission on Civil Rights, 19276
- Neumeier, Leander A., creep and other properties of zinc-copper-titanium alloys annealed after rolling, 16333
- Neunzig, H. H., taxonomy of *Acrobasis* larvae and pupae in eastern North America, 22359
- Neuroanatomy of speech, 23768
- Neurological diseases, *see* Nervous system.
- Neurologists, notes of neurologist, USSR study, 17617
- Neurology, *see* Nervous system.
- Neuromuscular system, action of quaternary ammonium derivatives of naphthalene-peritetracarboxylic and pyromellitic acids on neuromuscular transmission, USSR study, 17621
- Neurons, *see* Nerves.
- Neuropharmacology, *see* Pharmacology
- Neurophysiology, stable changes in frequency and synchronism of cortical neuron population discharges in experiments with feedback, USSR study, 20475
- Neuroses, autogenic training applied to neurotic habits, USSR study, 17601
- Neurotropic viral diseases surveillance, 31973
- Nense River and Valley:
flood plain information, 20121, 21452
floods in Kinston, N.C., 21463
- Neutron activation analysis, *see* Radioactivation analysis.

- Neutron generators, *see* Neutron sources.
 Neutron sources, new pumping system for a 150-kilovolt neutron generator to reduce present tritium hazard, 23914
 Neutron spectrum, *see* Spectrum.
 Neutrons:
 approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of $A \geq 12$, 31653
 effect of neutron irradiation on fatigue crack propagation in types 304 and 316 stainless steels at high temperature, 23876
 formation of scandium-46 during irradiation of calcium in high-energy neutron beams, USSR study, 16188
 neutron dose and fluence distributions in infinite air medium, 23711
 table of type NM-64 cosmic-ray neutron monitor, counting rates as function of solar modulation of galactic cosmic rays, expressed in terms of the Ehmert potential 21013
 31 group response matrices for multisphere neutron spectrometer over energy range thermal to 400 MeV, 28076
- Nevada:
 census of business, 1967—
 retail trade, 16698
 selected services, 16708
 census of housing, 1970, housing characteristics for States, cities, and counties, 15552
 census of population, 1970, characteristics of population, 27013
 census of transportation, 1972, truck inventory and use survey, 27027
 climatological data, 18096
 counties, population estimates, 27037
 county business patterns, 29740
 distribution of Middle Ordovician Copenhagen Formation and its trilobites in Nevada, 17539
 electric rate book, 21555
 Federal-State-private cooperative snow surveys, 1965-72, daily automatic snow sensor data for Nevada, summary, supplement, 20773
 geohydrology of—
 eastern part of Pahute Mesa, Nevada test site, Nye County, Nev., 20350, 30274
 Needles area, Arizona, California, and Nevada, 26498
 mineral industry, minerals yearbook chapters, 16295, 29223
 placer gold deposits of Nevada, 25252
 precipitation data, hourly, 18447
 report on pollution affecting Las Vegas Wash, Lake Mead, and Lower Colorado River, Nevada, Arizona, and California, 20211
 seismicity of—
 Pahute Mesa area, Nevada test site, 23372
 southern Nevada region, 26768
 Water supply—
 fall summary, 29507
 Nuclear Rocket Development Station at AEC's Nevada test site, 17547
 outlook and snow surveys, 19060
- Nevada County, Ark., water resources of Hempstead, Lafayette, Little River, Miller, and Nevada Counties, Ark., 30285
 New approaches to diversion and treatment of juvenile offenders, 32411
 New Bankhead Lock, navigation conditions and filling and emptying system, New Bankhead Lock, Black Warrior River, Ala., hydraulic model investigation, 20176
 New Brachiopoda from Indian Ocean, 23960
 New Brunswick Laboratory, annual progress report, 22481
 New Caledonia, mineral industry, minerals yearbook chapter, 20540
 New dimension in taxation, 17568
 New dimensions for arts, 25578
 New directions in U.S. water policy summary, conclusions and recommendations, 30375
 New England:
 annual survey of manufactures, statistics for—
 divisions and States, 15528
 States, standard metropolitan statistical areas, large industrial counties, and selected cities, New England division, 24206
 climatological data, 18097
 precipitation data, hourly, 18448
 residence in 1965 for selected areas, 1970, supplementary report, 28130
 New England Regional Commission:
 Cochairman, nomination of Russel F. Merriam, hearing, 26290
 economic development plans, 28241A
 New environments for incarcerated, 17648
 New era, new Army, 19th National Conference of Civilian Aides to Secretary of Army, 25855
 New facts about older Americans, 31904
 New Federalism, *see* Intergovernmental relations.
 New Federalism and education, 26372
 New for consumers, highlights of new federal consumer publications, 18693
 New Guinea:
 mineral industry, minerals yearbook chapter, 20540
 sailing directions, 26344
 New Hampshire:
 census of housing, 1970, housing characteristics for States, cities, and counties, 15533
 census of population, 1970—
 characteristics of population, 25904
 detailed characteristics, 15575
 commercial campground industry in New Hampshire, report on 1971 campground census, 27536
 counties, population estimates, 24242
 county business patterns, 30827
 electric rate book, 20258
 floods in vicinity of White River Junction, Vermont and New Hampshire, 20144
 income limits for sec. 221(d)(3) below-market interest rate housing and exemption limits for sec. 235-236 housing, 29076
 mineral industry, minerals yearbook chapter, 25463
 registry of minority contractors and housing professionals, listing in selected cities, 32383
 truck inventory and use survey, 22543
 New Haven, Conn.:
 aircraft accident report, 16423, 23852
 area wage survey, 27678
 New Haven Socialist Workers Campaign Committee, annual report, 24415
 New Hebrides, mineral industry, minerals yearbook chapter, 20540
 New Hope Dam and Lake, rename as B. Everett Jordan Dam and Lake, report, 31115
 New Jersey:
 air pollution damage to vegetation in New Jersey, 1972 survey and assessment, 32271
 census of housing, 1970, housing characteristics for States, cities, and counties, 15554
 census of population, 1970—
 characteristics of population, 31947
 detailed characteristics, 21041
 census of transportation, 1972, truck inventory and use survey, 27028
 climatological data, 18098
 counties, population estimates, 24244
 county business patterns, 30828
 electric rate book, 20259
 Gateway National Seashore, N.Y. and N.J., establish, reports, 16981, 17008

INDEX 1973

New Jersey—Continued

- landings, fish and shellfish, 18694
- mineral industry, minerals yearbook chapter, 25464
- precipitation data, hourly, 18449
- regular income limits for sec. 235-236 housing, 20376-377
- timber industries of New Jersey and Delaware, 27542
- New method of controlling radioactivity in laboratory waste water, 21019
- New Mexico:
 - census of business, 1967, selected services, 16709
 - census of housing, 1970, housing characteristics for States, cities, and counties, 15555
 - census of population, 1970, characteristics of population, 28116
 - climatological data, 18099
 - conservation, 1972, progress report, 32559
 - county business patterns, 29741
 - electric rate book, 17460
 - Indian lands, longer term leases for lands located outside Indian reservations—
 - law, 19371
 - report, 19851
 - mineral industry, minerals yearbook chapter, 20546
 - New Mexico work-effort analysis computer program, 17530
 - placer gold deposits in New Mexico, 21707
 - precipitation data, hourly, 18450
 - remove cloud on title to certain lands, law, 19343
 - Santa Fe, Gila, Cibola, and Carson National Forests, boundaries, modify, law, 19399
 - snow survey, measurements, summary, 25714
 - socio-economic profile of American Indians, 22589
 - stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, 17528
 - stratigraphic terminology of Dakota Sandstone and Mancos shale, western central New Mexico, 31394
 - truck inventory and use survey, 22544
 - water resources—
 - data, 32365
 - development, 1973, by Corps of Engineers, 28778
 - water supply outlook and snow surveys, 19057
- New municipal roles in human resource development, 21417
- New Orleans, La.:
 - area wage survey, 27679
- Mississippi River and tributaries and other watersheds in district, stages and discharge, 23177
- opportunities to improve model cities program in Kansas City, Mo., and St. Louis, Mo., and New Orleans, La., GAO report, 32354
- New Panama Canal treaty, 17861
- New program for economic education of workers, USSR, 17630
- New program of veterans' group life insurance (VGLI), 16950
- New serial titles, 27686
- New ship construction, 17674
- New shipping containers for cut roses, costs, and performance, 20887
- New timber cruising grades for coast Douglas-fir, 31371
- New versions and reprints, 24968
- New vistas for competitive employment of deaf persons, 31787
- New way, General Services Administration, annual report, 26485
- New wonders of world in America, 23922

New York City:

- Angelo Rizzuto's New York, In little old New York, by Anthony Angel, 20511
- area wage survey, 17661
- census of housing, 1970, components of inventory change, 27006
- census of transportation, 1972, truck inventory and use survey, 24227
- Civil Rights Commission hearing to investigate denial of equal opportunity for Puerto Ricans, 24255
- college bound program, model programs, compensatory education, 17363
- concentrated employment program in New York City has not met its employment objectives, GAO report, 16095
- Cotton Exchange, futures trading and open contracts in cotton and frozen concentrated orange juice, wool, 18393
- Education Board of New York City, transfer to, USNS Twin Falls, for educational purposes—
 - law, 19481
 - report, 19658
- fresh fruit and vegetable prices, 26946
- heavy duty vehicle driving pattern and use survey, final report, New York City, 30727
- heroin being smuggled into New York City successfully, GAO report, 20332
- large commercial banks, weekly condition report, 19076
- Long Island Railroad Co., accident investigation summary report, 20750
- Mercantile Exchange, futures trading and open contracts in potatoes and imported frozen fresh boneless beef, 18394
- nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
- oceanographic observation of New York Bight from ERTS-1, 27802
- port, rail, and marine interface, 25400
- railroad employee accident report, 32547
- school ship, replacement, hearing, 21270
- sewage sludge dumping in New York Bight, brief outline of study, 31302
- transportation noise (rail and other), and urban noise problems and social behavior, public hearings on noise abatement and control, 21513
- New York Socialist Workers Campaign Committee, annual report, 24383
- New York State:
 - census of business, 1967, wholesale trade, 16716
 - census of housing, 1970, housing characteristics for States, cities, and counties, 16725
 - census of population, 1970, detailed characteristics, 22523
 - climate, 20179
 - climatological data, 18100
 - county business patterns, 30829
 - Gateway National Seashores, N.Y. and N.J., establish, reports, 16981, 17008
 - hometown plans for construction industry in New York State, civil rights aspects, 22582
 - income limits for—
 - rent supplement housing, 29077
 - sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
 - inventory of soil and water conservation needs, 1967, basic statistics, 27888
 - landings, fish and shellfish, 16398, 18701, 30514
 - precipitation data, hourly, 18451
 - western New York river basins, 31921
- New Zealand:
 - agriculture, report by Carl T. Curtis, 32129
 - background notes, 29524

New Zealand—Continued
economic trends and their implications
for United States, 23498, 30318
mineral industry, minerals yearbook
chapter, 16296

Newark, N.J.:
area wage survey, 27681
model cities program, hearing, 19748

Newburg, Mo., Little Piney Creek and New-
burg branch, special flood hazard informa-
tion report, 16014

Newburg Branch, Little Piney Creek, New-
burg, Mo., special flood hazard informa-
tion report, 16014

Newburgh, Ind., operation of lock and dam,
hearing, 19793

Newburgh, N.Y., area wage survey, 16228

Newcomb, R. C.:
geology and ground-water characteristics
of Hanford Reservation of Atomic En-
ergy Commission, Washington, 26505
quality of ground water in basalt of Co-
lumbia River Group, Washington, Ore-
gon, and Idaho, 20360

Newell, Reginald E., meteorological and eco-
logical monitoring of stratosphere and
mesosphere, 17698

Newfoundland, oceanography of Grand Banks
region of Newfoundland and Labrador Sea,
30891

Newland, Claude T., soil survey of Craig
County, Okla., 29508

Newly discovered properties of plants ex-
plained, 31540

Newman, Morris, mathematical sciences,
journal of research, 18531

Newman, Oscar, architectural design for
crime prevention, 26603

Newport News, Va., area wage survey, 29167

Newport News Republican City Committee,
annual report, 22004

News agencies:
news media under Fair labor standards
act, 26916
newsmen's privilege—
protect to assure free flow of informa-
tion to the public, hearings, 28422
to protect confidential sources of news
media, hearings, 19786
violence and media, 23717

News broadcasts, *see* Radio journalism—
Television broadcasting of news.

News digest, Securities and Exchange Com-
mission, 18702

News for farmer cooperatives, 18703

News letters:
American Revolution Bicentennial Com-
mission, bicentennial era, 18029
Army Medical Department, 18706
consumer news (periodical), 18160
equal opportunity in Federal employment,
18268
Federal Library Committee, 18370
Head Start Project, 18415
hoi, newsletter from Cabinet Committee
on Opportunities for Spanish Speaking
People, 28094
LEAA (Law Enforcement Assistance Ad-
ministration), 18539
marine science newsletters, 1973, anno-
tated bibliography, 29388
Navy Supply Corps, 18687
NBS publications newsletters, 18689
oil pollution research newsletters, 18727
President's Council on Physical Fitness
and Sports, 18704
research in psychology, Veterans Admin-
istration Center, 18705
RIF (Reading is fundamental) newsletter,
18872
sea grant newsletter index, 17772
State Department, 18222
USDA employee, 19033
Youth Advisory Board newsletter, 19093

News media, *see* News agencies.

News releases, *see* names of departments,
etc., issuing releases.

News reporters, *see* Reporters and reporting.

News summary, Federal Trade Commission,
18359

Newsletters, *see* News letters.

Newsmen's privilege, 28422, 28553

Newsom, David D., southern Africa, constant
themes in U.S. policy, 25718

Newspapers, foreign newspaper report, 23608
see also Press.

Newton, John H., soil survey of Madison
County, Ky., 29510

Next Door Neighbor Day, *see* National Next
Door Neighbor Day.

Nez Percé Indians:
general information, 31467
inheritance of interests in restricted or
trust land—
law, 19378
report, 17161

Nez Percé National Historical Park, Spald-
ing area, historic resource study, 27816

NFS series, 18668

NGB, *see* National Guard Bureau.

NHL, *see* National Heart and Lung Insti-
tute.

NHRL, *see* National Hurricane Research
Laboratory.

NHTSA, *see* National Highway Traffic Safety
Administration.

Ni, *see* Nickel.

NIAAA, *see* National Institute on Alcohol
Abuse and Alcoholism.

Niagara County, N.Y., soil survey report,
25711

Niagara Mohawk Power Corporation, fiche
index for nuclear docket's Nine Mile Nu-
clear Station, unit 2, 29674

Nicaragua:
background notes, 23991
earthquake, report, hearing, 26156
mineral industry, minerals yearbook chap-
ter, 25429
prevention of foot-and-mouth disease and
rinderpest, agreement, 16535
trade—
cotton textiles, agreement, 17901
meat imports, agreement, 17890

Nice agreement concerning international
classification of goods and services to
which trademarks are applied, 20797-798

Nichols, Frederick H., review of benthic
faunal surveys in San Francisco Bay,
29011

Nichols, J. C., Public Affairs Group of Em-
ployees, *see* J. C. Nichols Public Affairs
Group of Employees.

Nicklack Reservoir, fish inventory data,
24075

Nickel:
cyclic and isothermal oxidation behavior at
1100° and 1200° C of nickel-20-percent-
chromium, nickel-20-percent chromium-3-
percent-manganese, nickel-20-percent
chromium-3 percent-silicon, and nickel-
40-percent chromium alloys, 29288
diffusional creep and creep degradation in
dispersion-strengthened alloy TD-NiCr,
23686
disposal from national stockpile, law,
16878
ductility of titanium alloys and atomic
ordering in nickel chromium alloy, USSR
study, 17631
heat resistance and sintering of nickel,
USSR study, 26570
improved diffusion welding techniques for
TD-NiCr sheet, 23691
improving nickel extraction from oxide
nickel ores, 21959
mineral industry survey, monthly, 18707
minerals yearbook chapter, 16323
national inventory of sources and emis-
sions, 29640
phase composition of Ni-Sn alloys hardened
from liquid state, USSR study, 25353

INDEX 1973

- Nickel—Continued
 preparation and homogeneity characteri-
 zation of austenitic iron-chromium-
 nickel alloy, standard reference mate-
 rials, 20636
 structural-kinetic study of oxidizability of
 nickel-chromium based alloys, USSR
 study, 26569
- Nicol, Dan P., United States Air Force JAG
 law review, 18524
- Nicolaus Copernicus Week, designate, law,
 30902
- Nicollet County Democratic Farmer Labor
 Party, annual report, 24503
- Nicollet County Republican Committee, an-
 nual report, 22924
- Nicotine, tar and nicotine content of ciga-
 rettes, Federal Trade Commission, Hist,
 17752, 23729, 26723
- NIDR, *see* National Institute of Dental Re-
 search.
- NIE, *see* National Institute of Education.
- Nielson, R.:
 structural analysis of longitudinally
 framed ships, 22215
 tanker longitudinal strength analysis,
 user's manual and computer program,
 22216
 tanker transverse strength analysis—
 programmer's manual, 22218
 user's manual, 22217
- Nienstaedt, Hans, genetics of white spruce,
 28972
- Niessen, Frank R., low-cost inertial smooth-
 ing system for landing approach guidance,
 29289
- Nigata, Japan, summary of synoptic meteoro-
 logical observations, Japanese and Korean
 coastal marine areas, 23889
- Nigeria:
 background notes, 32569
 economic trends and their implications for
 United States, 25310, 31501
 map, 29798
 military assistance, deposits under Foreign
 assistance act, agreement, 17870
- Night vision, *see* Sight.
- Nightwear:
 industry wage survey, men's and boys'
 shirts (except work shirts) and night-
 wear, 30393
 knit, current industrial reports, 18194A
- Nigro, J. C., kinetics of CO reduction of
 hematite to magnetite and effect of silica,
 23659
- NIH, *see* National Institutes of Health.
- Nike-Hercules missile, *see* Missiles.
- Nikonov, V. B., methods of investigating
 variable stars, 31661
- NILECJ, *see* National Institute of Law En-
 forcement and Criminal Justice.
- NILECJ-STD series, 26604
- Niles, Ohio, flood plain information, Trum-
 bull County, Ohio, 28714
- Nilsen, T. H., Lower and middle Tertiary
 stratigraphic units of San Emigdio and
 western Tehachapi Mountains, Calif.,
 29004
- Nimbus spacecraft, *see* Satellites.
- NINDS, *see* National Institute of Neurologi-
 cal Diseases and Stroke.
- Nine Mile Point Nuclear Station, unit 2,
 Niagara Mohawk Power Corporation, fiche
 index for nuclear dockets, 29674
- 19th for McDonald Committee, annual re-
 port, 22744
- Nineteenth Political Action Committee, an-
 nual report, 22743
- 9th District Republican Organization, annual
 report, 22798
- 9th District Young Republican Federation,
 annual report, 22913
- Niobium:
 columbium and tantalum, minerals year-
 book chapter, 20555
 high temperature superconductor Nb₃Ga,
 31616
- Niobium—Continued
 oxidation at through-hole defects in fused
 slurry silicide coated columbium alloys
 FS-85 and CB-752, 31635
- Niobrara River, annual operating plan, for
 federally owned reservoirs in Niobrara
 River basin, 29457
- NIPCC, *see* National Industrial Pollution
 Control Council.
- Nipp, Robert E., Alma-Bacon County story,
 model for rural America, 17215
- NIPS (National Information processing sys-
 tem) *see* Information storage and retrieval
 system.
- Nissen, Anton, revision of money stock meas-
 ures and member bank reserves and de-
 posits, 26448
- Niswander, Kenneth R., women and their
 pregnancies, collaborative perinatal study
 of National Institute of Neurological Dis-
 eases and Stroke, 23772
- Nitrates:
 food additives, nitrites and nitrates, regu-
 lation, report, 16974
 investigation of nitrate problem in Run-
 nels County, Tex., ground water, etc.,
 31289
 nitrates, water quality standards, 20865
 criteria digest, 25129
 removal of nitrate by algal system, bio-
 engineering aspects of agricultural
 drainage, San Joaquin Valley, Calif.,
 25126
 solvent extraction of nitrate from titanium
 leacher effluent, 25508
- Nitric oxide, *see* Nitrogen dioxide.
- Nitriding, *see* Casehardening.
- Nitrification and denitrification:
 application of plastic media trickling fil-
 ters for biological nitrification systems,
 30181
 biological removal of carbon and nitrogen
 compounds from coke plant wastes,
 26415
 denitrification by anaerobic filters and
 ponds, bioengineering aspects of agri-
 cultural drainage, San Joaquin Valley,
 Calif., 21521
 field study of nitrification with submerged
 filter, 23193
- Nitrioltriacetic acid:
 development of method for NTA analysis
 in raw water, 20196
 polarographic determination of NTA,
 30191
- Nitrites, food additives, nitrites and nitrates,
 regulation, report, 16974
- Nitrogen:
 biological removal of carbon and nitrogen
 compounds from coke plant wastes,
 26415
 chemical kinetics in C-O-S and H-N-O-S
 systems, bibliography, 16360
 compressibility data for helium, nitrogen,
 and helium-nitrogen mixtures at 0°, 25°,
 and 50° C at pressures to 1,000 atmos-
 pheres, 16331
 diffusional and metabolic components of
 nitrogen elimination through lungs, ef-
 fects of pressure, 31580
 distribution of odd nitrogen in lower
 stratosphere and possible perturbations
 caused by stratospheric air transport,
 32462
 effect of various combinations of nitrogen,
 phosphorus, and potassium on paper
 birch seedling growth, 28941
 equation of state of mixture of helium and
 nitrogen, USSR study, 21850
 fertilizer supply, 15463
 formation of inversion in CO₂-H₂O-N₂ gas
 mixture, jet expanding through slit,
 21845
 liquid densities, 25554
 nitrogen fertilization increases cottonwood
 growth on old-field soil, 21665

Nitrogen—Continued

- nitrogen, phosphate, potash, fertilizer supply, 30694
 nitrogen-pressurized spray system for C-47 airplanes, 27527
 performance of DC-9 aircraft liquid nitrogen, fuel tank inerting system, 24034
 possibility of reducing nitrogen in drainage water by on farm practices, bioengineering aspects of agricultural drainage, San Joaquin Valley, Calif., 27498
 reactions of nitrogenous and phosphatic compounds with soils and geologic strata, 17936
 response of paper birch seedlings to nitrogen, phosphorus, and potassium, 28540
 supplementary bibliography of kinetic data on gas phase reactions of nitrogen, oxygen, and nitrogen oxides, 26699
 total soil nitrogen analysis using micro-Kjeldahl digestion and portable distillation equipment, 31369
 Nitrogen dioxide, nitric oxide formation in combustion processes with strong recirculation, 31293
 Nitrogen isotopes, environmental gamma radiation from ^{10}N decay in turbines of large boiling water reactor, 25877
 Nitrogen oxides:
 low NO_x emission combustor for automobile gas turbine engines, 31922
 nitrogen oxide abatement technology in Japan, 30196
 supplementary bibliography of kinetic data on gas phase reactions of nitrogen, oxygen, and nitrogen oxides, 26699
 Nix, Edmund A., Nix for Congress Club, annual report, 24628
 Nix, Robert N. C., Campaign Committee, *see* Robert N. C. Nix Campaign Committee.
 Nix for Congress Club, political committee, annual report, 24628
 Nixon administration and economic justice, (address), 22630
 Nixon-Nunn Campaign Fund of Barren County, annual report, 24728
 Nixon, Richard M.:
 Mercer County Committee for Nixon-Nunn-Jackson, annual report, 24748
 Nixon doctrine, foreign policy course, USSR study, 23538
 Nixon-Nunn Campaign Fund of Barren County, annual report, 24728
 Nixon, Richard M., *see also* President of United States.
 NLM, *see* National Library of Medicine.
 NLRB, *see* National Labor Relations Board.
 NMB, *see* National Mediation Board.
 NMC, *see* National Meteorological Center.
 NMCS, *see* National Military Command System Support Center.
 NMSSC, *see* National Military Command System Support Center.
 NMFS, *see* National Marine Fisheries Service.
 No-fault vehicle insurance, *see* Automobile Insurance.
 No te dejes pescar!, 27579
 NOAA, *see* National Oceanic and Atmospheric Administration.
 Noble, Daniel L.:
 age of Engelmann spruce seedlings affects ability to withstand low temperature, greenhouse study, 28947
 effects of soil type and watering on germination, survival and growth of Engelmann spruce, greenhouse study, 16081
 Engelmann spruce seedling roots reach depth of 3 to 4 inches their first season, 32332
 Nobles County Republican Committee, annual report, 24401
 NODC, *see* National Oceanographic Data Center.
 Noddin, Ernest M., studies in enlisted submariner motivation, some etiological factors related to devolunteering of submarine school candidates, 16251
 Noe, Frank E.:
 mineral industry of Peru, 16302
 titanium, 16328
 Noise:
 acoustic and aerodynamic performance of 6-foot-diameter fan for turbofan engines, QF-1 fan in nacelle without acoustic suppression, 32466
 acoustic impedance of curved multilayered duct liners, 30458
 airborne noise control for vertically stacked bathrooms with mechanical exhaust systems, 26469
 aircraft and airport noise, EPA report, 31160
 aircraft noise impact, planning guidelines for local agencies, 30293
 aircraft with and without acoustically treated nacelles—
 annoyance judgments, 32455
 arousals from sleep by noises, 32457
 airplane noise levels, 31313
 auditory effects of noise on air-crew personnel, 24203
 facts digest, 21510
 far field noise generation by coaxial flow jet exhausts, 24028
 Federal aircraft noise abatement program, fy 1972-73, 29565
 from heavy construction, 21511
 harmful intruder, noise in home, 16018
 investigation of coaxial jet noise and inlet choking using F-111 A airplane, 31649
 hearing conservation for mineral industry, 26648
 hearing loss at 3 kilohertz and chaba, proposed clinical test of speech discrimination in noise, 25409
 influence of crossflow on jet noise, 23671
 interior/exterior noise levels of over-the-road trucks, report of tests, 16363
 investigation of helicopter transmission noise, reduction by vibration absorbers and damping, 20988
 laws and regulatory schemes for noise abatement, 28831
 leading-edge serrations which reduce noise of low-speed rotors, 31645
 measurement and reduction of noise from detonating cord used in quarry blasting, 17685
 noise and noise sickness, 31655
 Noise control act, 31160
 highlights, 27458
 law, 19500
 legislative history, 17067
 oversight, hearing, 32141
 report, 15858
 text, 24867
 noise generated by impingement of jet upon large flat board, 23684
 noise immunity of optical communication lines (OLC) with frequency multiplexing of discrete information channels, USSR study, 16191
 noise in air route traffic control center, flight service station, air traffic control tower and remote facilities, 24032, 25774
 noise limits for Army materiel, military standard, 25025
 noise pollution, 17426
 noise source regulation in State and local noise ordinances, 27478
 noise tests of mixer nozzle-externally blown flap system, 29278
 occupational exposure to noise, criteria for recommended standard, 25584
 OH-6A phase 2 quiet helicopter program, 24183
 pitch discrimination in background noises up to 95 dB SPL, 30410

INDEX 1973

Noise—Continued

- public hearings on noise abatement and control—
 - manufacturing and transportation noise (highway and air), 16029
 - physiological and psychological effects, 16031
 - standards and measurement methods, legislation and enforcement problems, 16030
 - technology and economics of noise control, national programs and their relations with State and local programs, 21514
 - transportation noise (rail and other), urban noise problems and social behavior, 21513
- reciprocity calibration of microphones under high ambient pressures, 20524
- 727 noise retrofit feasibility, lower goal design, fabrication, ground and flight testing, 24030
- source mechanisms for rotor noise radiation, 32454
- speech discrimination in noise and hearing loss at 3000 hertz, 23632
- standards, aircraft type certification, Federal aviation regulations, 18293
- transportation noise and its control, 17915
- uncertainty of pulse position due to noise, 16448
- use of circumural earphones for attenuating ambient noise in bone conduction audiometry, 26645
- see also* Radar—Sonic boom.
- NOL. *see* Naval Ordnance Laboratory.
- Nolan for Congress Volunteer Committee, annual report, 24336
- Nolan, Richard M., Nolan for Congress Volunteer Committee, annual report, 24336
- Nome, Alaska, high-resolution seismic survey of offshore area for gold concentrations, 23363
- Nominations:
 - Air Force and Navy, hearing, 26250
 - Soviet prizes in science and technology, USSR study, 17610
 - see also* names of persons.
- Nonagricultural employment, *see* Employment.
- Nonappropriated funds:
 - nonappropriated fund and other resale activities within Defense Department, review, 19747
 - Special Subcommittee on Nonappropriated Fund Activities within Department of Defense investigations, hearings, 19744
 - uniform accounting system, Air Force annual, 15491
- Noncitizens, *see* Aliens.
- Noncredit activities in institutions of higher education, 26373
- Nondestructive testing, 31620
- Nondiscrimination, *see* Race problems.
- Nondurable goods, *see* Commercial products.
- Nonelectrical lighting fixtures, Federal item identification guide, 26329
- Nonfat dry milk, *see* Milk.
- Nonferrous metals, *see* Metals.
- Non-game wildlife research in megalopolis, Forest Service program, 32314
- Nongovernment organization codes for military standard contract administration procedures (MILSCAP), United States and Canada, 18709-710
- Non-GPO imprints received in Library of Congress in 1971, selective checklist, 16241
- Nonlinear equations, *see* Equations.
- Nonlinear theories:
 - anomalous nonlinear dissipation of high-frequency radio waves in plasma, USSR study, 31532
 - nonlinear effect in microwave absorption by plasma, 22446
- Nonmetallic materials, *see* Nonmetals.
- Nonmetalliferous minerals, *see* Minerals.

Nonmetals:

- air quality data for nonmetallic inorganic ions, 1969-70, from national air surveillance networks, 30724
- industries, technologic trends, minerals yearbook chapter, 16313
- minor nonmetals—
 - minerals yearbook chapter, 25474
 - 1972, mineral industry survey, 31588
- nonmetallic coatings for concrete reinforcing bars coating materials, 27733
- structural shapes, nonmetallic, Federal item identification guide, 30113
- technologic trends in mineral industries, metals and nonmetals except fuels, minerals yearbook chapter, 25490
- Non-Partisan Commission on Federal Election Reform:
 - establish—
 - draft of proposed legislation, 27115
 - report, 29985
- Non-point source pollution from agricultural, rural, and developing areas, 21289
- Nonprofit organizations:
 - facts about relocation, 31415
 - Federal support to universities, colleges, and selected nonprofit institutions, 1971 report to the President and Congress, 25642
 - non-profit hospitals, coverage under National labor relations act, provide, report, 16956
 - tax-sheltered annuity plans for employees of public schools and certain tax-exempt organizations, 25308
- Nonpublic education, *see* Private schools.
- Nontariff barriers affecting trade in agricultural products, 17497, 28920
- Nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455
- Nonwhite population, differential utilization of general hospital psychiatric inpatient units by whites and nonwhites 1970-71, United States, 23763
- NORAD, *see* North American Air Defense Command.
- Norby, Amos E., estate, relief, 19330
- Norco, J. E., air pollution impact methodology for airports, phase 1, 29646
- Nordquist, Walter S., jr., helicopter downwash applied to fog clearing, status summary, 22422
- Nordvall, Stephen L., Citizens for Nordvall, annual report, 24598
- Norfolk, Va., area wage survey, 29167
- Norloff, Paul A., selling in United Kingdom, 19236
- Norm Selby Volunteer Committee, annual report, 24566
- Normal, Ill., census of housing, 1970, metropolitan housing characteristics, 16731
- Norman, Philip S., remarks, Jan. 26, 1971, 29354
- Norman County Republican Committee, annual report, 22892
- Norris, E. B., adequacy of high-strength, low-alloy steel weldments for cargo ship hulls, study of factors which affect, 22221
- Norstrud, Helge, high-speed flow past wings, 29258
- North, A. F., infant care, 28206
- North America:
 - aerial surveys of waterfowl production, 20782
 - Arctic and subarctic, ice thickness, 1967-68, 1968-69, observations, 16006
 - arthropod and nematode parasites, parasitoids and predators of *Acriddine* in America north of Mexico, 28024
 - Atlantic coast—
 - surface water temperature and density, 30516
 - tidal current tables, 32508
 - crayfish (astacidae) of North and Middle America, 17441

North America—Continued

- east coast—
 - including Greenland, tide tables, high and low water predictions, 29381
 - lights and fog signals, changes, 17790
- eastern taxonomy of *Acrobasis* larvae and pupae in eastern North America, 22359
- freshwater—
 - amphipod crustaceans (*Gammaridae*) of North America, 17437
 - genera of nematodes (*Nematoda*) of eastern North America, 32273
 - isopods (*Asellidae*) of North America, 17439
 - leeches (*Annelida*: *Hirudinea*) of North America, 17440
 - planarians, *Turbellaria*, of North America, 17433
 - polychaetes (*Annelida*) of North America, 17436
 - sphaeriacean clams (*Mollusca*: *Pelecypoda* of North America, 17435
 - triclads (*Turbellaria*) genus—*Dendrocoelopsis*, 25699
 - Polycelis*, 23963
 - unionacean clams (*Mollusca*: *Pelecypoda*) of North America, 31310
- index numbers for North and Central America, to identify coded meteorological reports, 22153
- Japan's World War II balloon bomb attacks on North America, 26692
- larvae of subfamily *Hadeninae* (*Lepidoptera*, *Noctuidae*) of America north of Mexico, review and reclassification, 16615
- nutrition, growth, and development of North American Indian children, 17762
- Pacific Coast, tidal current tables, 17769
- parasites from sea mammals caught off west coast of America, revised annotated list, 20698
- revisions of genus *Sennius* of North and Central America (*Coleoptera*, *Bruchidae*), 28025
- type-material of North American clearwing moths (*Lepidoptera*: *Sesiidae*), 29492
- west coast, tide tables, high and low water predictions, 25614
- North American Air Defense Command, agreement with Canada, 31867
- North American Conference on Labor Statistics, selected papers, 21017, 31567
- North American Forestry Commission, quarantine requirements and procedures to prevent introduction and spread of exotic pests of mutual concern to member countries of North American Forestry Commission, 27531
- North American Rockwell, Inc., aircraft accident report, 29407
- North Andover, Mass., Merrimack-Shawheen-Spicket Rivers, flood plain information, 25078
- North Atlantic Assembly, *see* North Atlantic Treaty Organization.
- North Atlantic slob basins, *see* Atlantic States.
- North Atlantic States, *see* Atlantic States.
- North Atlantic treaty, implementation, executive session hearings, 30033
- North Atlantic Treaty Organization:
 - American commitment to NATO, 19743
 - doing business with NATO, how U.S. companies can participate, 21414
- Europe and nuclear weapons, USSR study, 25334
- North Atlantic Assembly—
 - 16th meeting, report of U.S. Delegation, 15896
 - 18th meeting, report of U.S. Delegation, 30025
- status of forces agreement, criminal jurisdictional operations report, 26238

- North Branch Winooski River, *see* Winooski River.
- North Bridge development concept plan, 23824
- North Carolina:
 - census of business, 1967, selected services, 16710
 - census of housing, 1970, housing characteristics for States, cities, and counties, 16726
 - census of population, 1970, detailed characteristics, 19205
 - census of transportation, 1972, truck inventory and use survey, 19233
 - climatological data, 18101
 - completeness and quality of response in North Carolina marriage follow-back survey, 30480
 - counties, population estimates, 29781
 - county business patterns, 30830
 - criminal justice agencies, list, 21889
 - electric rate book, 21556
 - income limits for—
 - rent supplement housing, 29077
 - section 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
 - landings, fish and shellfish, 16399, 18711
 - North Carolina-Virginia seaward boundary agreement, consent of Congress—
 - law, 19513
 - reports, 16984, 19931
 - precipitation data, hourly, 18452
 - regular income limits for sec. 235-236 housing, 29075
 - rehabilitation facilities, national directory, 25686
- North Carolina Republican Party, annual report, 24425
- North Cascades National Park:
 - geology and mineral resources of northern part of North Cascades National Park, Wash., 23328
- North Cascades (poster), 26778
- North Central Airlines, Inc., aircraft accident report, 31744
- North Central Forest Experiment Station:
 - publications—
 - by subject, list, 17511
 - 1972, annotated list, 32316
- North Central States, *see* Central States.
- North Creek, flood plain information, Sarasota County, Fla., 32220
- North Dakota:
 - census of housing, 1970, housing characteristics for States, cities, and counties, 15556
 - census of population, 1970, characteristics of population, 27014
 - census of transportation, 1972, truck inventory and use survey, 21052
 - climatological data, 18102
 - county business patterns, 29742
 - electric rate book, 17461
 - flood stages and discharges for small streams, 23341
 - ground water hydrology of prairie pot-holes, 23359
 - hydrologic investigations of prairie pot-holes in North Dakota, 21723
 - hydrology of prairie potholes in North Dakota (series), 21723, 23359
 - income limits for sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
 - mineral and water resources, 30045
 - mineral industry, minerals yearbook chapter, 25465
 - notes on weevils from trees and shrubs in North Dakota, 28945
 - precipitation data, hourly, 18453
 - register of minority contractors and housing professionals, listing in selected cities, 32385

INDEX 1973

- North Dakota—Continued
stratigraphy and geologic history of Montana Group and equivalent rocks, 30281
- North Dakota Committee on Medical Political Action, annual report, 24357
- North Dakota Republican State Committee, annual report, 22713
- North Fork Big Nemaha River, Tecumseh, Nebr., special flood hazard information, 25091
- North Fork Catawba River, and Valley : flood plain information, 20122
floods, McDowell County, N.C., 20149
- North Fork Nooksack Research Natural Area, general information, 21633
- North Fork Rivanna River, *see* Rivanna River.
- North Fork St. Lucie River, St. Lucie County, Fla., 25079
- North Korea, *see* Korea.
- North Loup division, *see* Missouri River Basin project.
- North Little Rock, Ark., area wage survey, 20504
- North Pacific Ocean, *see* Pacific Ocean.
- North Platte River and Valley : communication and control systems projects, region 7, field review of maintenance, 31778
electrical equipment, projects region 7, field review of operation and maintenance, 31784
report on water quality investigations, North Platte River basin, Torrington, Wyo.-to-Bayard, Nebr., 20214
- North Sea, lights and fog signals, list, 16439
- North Shore Republican Club, annual report, 24447
- North Vietnam, *see* Vietnam.
- North Whidbey Republican Women's Club, annual report, 24613
- Northampton County Republican Committee, annual report, 22697
- Northeast (U.S.) :
food consumption of households, 1965-66 seasons and year, 15471
mineral resources off northeastern coast of U.S., 21711
movement and impact of pesticides used for vector control on aquatic environment in Northeast, 17933
public sector labor relations in Northeast region, regional series, 21898
rail crisis, materials, discussing proposed legislative program to meet, 32142
rail problems, background information, 29928
rail services in northeastern U.S., assure continuance, report, 32122
- Northeast Cape Fear Estuary, movement and dispersion of soluble pollutants, 16114
- Northeastern Forest Soils Conference, forest fertilization, symposium proceedings, 28925
- Northeastern Radiological Health Laboratory, BRH/NERHL series, 17815
- Northeastern railroad transportation crisis, 28524
- Northern bleached hardwood kraft pulp from Canada, 24066
- Northern California Joint Board, Amalgamated Clothing Workers of America, Political Action Committee, annual report, 24757
- Northern Hemisphere, *see* Hemisphere, Northern.
- Northern Marketing and Nutrition Research Division, publications and patents, lists, 24118-120
- Northern Virginia Jefferson-Jackson Day Dinner Committee, annual report, 22984
- Northwest (U.S.) :
cattle feedlots in Pacific Northwest, 32248
cattle ranches, 1960-71, organization, costs and returns, 15983
- Northwest (U.S.)—Continued
ecology and impacts of forest insects of Pacific Northwest, 21606
forest diseases of Pacific Northwest, 23273
forest industries, production, prices, employment, and trade, 18822
key to field identification of anadromous juvenile salmonids in Pacific Northwest, 20696
mechanical equipment, Columbia Basin project, Boise project, Yakima project, Pacific Northwest region, field review of maintenance, 31782
mosquitoes, 20935
- Pacific Northwest—
current discharge at selected stations, 18190
precipitation and temperature, monthly, 18743
river temperatures, 18876-877
water quality data for selected sites, Oct. 1971-Sept. 1972, annual summary, 23327
water, reports by Geological Survey, list, 18698
water resources—
summary, 18745, 23355
weekly runoff report, 18746
physiology, behavior and genetics of forest insects, 23280
pocket gophers and reforestation in Pacific Northwest problem analysis, 27899
recent reports of interest to plant ecologists, 23281
root diseases and soil microbiology, 21683
soil stability and streamflow, 21684
- Northwest Airlines, Inc. :
accident reports, 23856, 30559
aircraft incident report, 22149
- Northwest Atlantic Fisheries, International Commission for, *see* International Commission for Northwest Atlantic Fisheries.
- Northwest Territory :
letters sent by Surveyor General of Territory Northwest of River Ohio, 1797-1854, pamphlet describing microfilm, 23700
State Department territorial papers, Territory Northwest of River Ohio, 1781-1801, pamphlet describing microfilm, 21998
- Norton, Arthur :
household and family characteristics, 22556
marital status and living arrangements, population characteristics, 19245
- Norton Creek, special flood hazard report, 20163
- Norway :
double taxation, taxes on income and property, convention, 25737
economic trends and their implications for United States, 25316, 32399
lights and fog signals, 30124
mineral industry, minerals yearbook chapter, 25466
mutual defense assistance, agreement, 22268
nontariff barriers affecting trade in agricultural products, 17497
selling in Norway, 15616
- Norwich, Vt., flood plain information, Connecticut, White, Mascoma Rivers, 20115
- NOS, *see* National Ocean Survey.
- Nose, hearing and related medical findings among children, race, area, and socioeconomic differentials, 22030
- Nosotros hablamos español, 22609
- Nosotros, los americanos, 30858
- Not the law's business? examination of homosexuality, abortion, prostitution, narcotics and gambling in United States, 26745
- Notapacagon, Pere Marquette River, proposal for scenic river, Manistee National Forest, 28933
- Notes, *see* Treasury notes.

Notice (law):
 notices, Internal Revenue Service, 26539
 Notice to mariners:
 coastal and ocean regions of world, 18712
 Great Lakes and tributary waters west of
 Montreal, 18713
 Notices to airmen, 17985
 international notams, 18510
 Noticias de la semana, news summary, for
 Hispanos, 18714
 Notifiable diseases, *see* Contagion and con-
 tagious diseases.
 Novo-Voronezh, utilizing reactor installa-
 tion at atomic electric power plant, USSR
 study, 29141
 Now you are in charge (of your dental
 health), 30406
 Nowak, E. J., ionization gauge characteris-
 tics of SA1463 triode electron tube and ef-
 fects of internal gas pressure on pulse
 emission and arcing, 22484
 Nowak, Geraldine D., prostaglandins in abor-
 tion and reproductive physiology, cita-
 tions from literature search, 25609
 Nozzles:
 effects of fuel nozzle design on perfor-
 mance of experimental annular combus-
 tor using natural gas fuel, 20620
 noise tests of mixer nozzle-externally
 blown flap system, 29278
 site alteration effects from rocket exhaust
 impingement during simulated Viking
 Mars landing, nozzle development and
 physical site alteration, 30448
 two-dimensional slot nozzle ejectors with
 variable area mixing sections, analysis
 and testing, 29259
 NRL, *see* Naval Research Laboratory.
 NSF, *see* National Science Foundation.
 NSRDS, *see* National standard reference
 data series.
 NSSL, *see* National Severe Storms Labora-
 tory.
 NTA, *see* Nitrilotriacetic acid.
 NTIS, *see* National Technical Information
 Service.
 NTSS, *see* National Transportation Safety
 Board.
 Nuclear effects engineers, reactor shielding
 for nuclear engineers, 28084
 Nuclear energy, *see* Atomic energy.
 Nuclear energy resources, a geologic per-
 spective, 32362
 Nuclear engineering:
 construction of nuclear geostorage facili-
 ties for petroleum products, 26393
 nuclear engines in space, USSR study,
 25329
 space nuclear systems, AEC authorizing
 legislation, hearings, 29832
 Nuclear excavations, *see* Atomic blasting.
 Nuclear explosions:
 annotated bibliography of explosive exca-
 vation related research, 25099
 atmospheric transmission from 4N light
 source to 2 π receiver, survey of studies,
 22408
 checklist guide for nuclear emergency
 operations planning, 30082
 comprehensive test ban treaty—
 hearing, 28537
 report, 28502
 distribution and evolution of radioele-
 ments after nuclear explosion, 16671
 oil recovery by nuclear explosion, USSR
 study, 27624
 Plowshare program, civil, industrial, and
 scientific uses, bibliographies, 19185
 reviews to insure safety of nuclear opera-
 tions, 15519
 scientific and industrial applications of
 nuclear explosions-safety problems,
 16667
 seismicity of Pahute Mesa area, Nevada
 test site, 23372

Nuclear explosions—Continued
 sensitivity analysis of relation of wellhead
 price to nuclear gas stimulation costs,
 22483
 transport, deposition, and meteorological
 studies of nuclear debris in atmosphere,
 30521
 underground nuclear explosions—
 calculation of shock wave in close-in
 zone (Cades method), 16676
 codes calculation of effects of contained,
 method of calculation, 16674
 effects on surrounding rock, 21027
 experimental conditions, 1961-66
 French in Sahara, 16670
 gases formed, chemical equilibria and
 potential applications, 21025
 geologic effects in Sahara granite mas-
 sif, research, 1666, 21023, 21024
 mechanical effects, 25880
 beyond close-in zone in granite, 21026
 in close-in zone in granite, 21028
 of contained explosion, 16675
 mineralogical transformations, results
 from Sahara explosion site, 16672
 physics of phenomena in close-in zone
 around, 16673
 radioactivity and its fractionation dur-
 ing in granite medium, 15524
 zones of fracturing, 16669
 Nuclear fuel, *see* Reactor fuels.
 Nuclear fusion, fusion power, assessment of
 ultimate potential, 25883
 Nuclear instrument modules, CAMAC in-
 strumentation system, supplementary in-
 formation, 21021
 Nuclear medicine:
 bibliography, 15521
 clinical uses of radionuclides, critical
 comparison with other techniques, pro-
 ceedings of symposium held at Oak
 Ridge Associated Universities, Nov. 15-
 19, 1971, 28071
 dose calibrator pilot study, 31680
 Nuclear physics, physics of phenomena in
 close-in zone around underground nuclear
 explosions, 16673
 Nuclear power, *see* Atomic energy.
 Nuclear power plants, *see* Nuclear reactor
 power plants.
 Nuclear-powered ships:
 eminent Americans, namesakes of Polaris
 submarine fleet, 21159
 nuclear-qualified naval surface and sub-
 marine officers and enlisted members
 who agree to reenlist, authorize spe-
 cial pay—
 law, 19506
 reports, 19675, 19930
 research and development program (re-
 marks), 25399
 Nuclear propulsion, *see* Propulsion.
 Nuclear radiation, *see* Radiation.
 Nuclear reactions:
 controlled thermonuclear research, hear-
 ings, 21136
 isosinglet approximation for nonelastic
 reactions, 20605
 management of AEC's controlled thermo-
 nuclear research program, GAO report,
 21696
 nuclear and ion beam techniques for sur-
 face and near-surface analysis, 31752
 scattering of 42-MeV alpha particles from
 copper-65, 31642
 structure of zirconium-93 and zirconium-
 91, 17719
see also Photonuclear reactions—Spalla-
 tion.
 Nuclear reactor power plants:
 atomic electric power stations, USSR
 study, 26563
 Calvert Cliffs and other court decisions,
 effect on nuclear power in U.S., 17265
 characteristics of electrical part of atomic-
 electric plants, USSR study, 32402

INDEX 1973

Nuclear reactor power plants—Continued
determining power conversion ratios and thermal efficiencies for atomic electric power plant thermal layouts, USSR study, 25362
environmental radioactivity surveillance guide, 23913
first report of study to forecast nuclear power plant effects on coastal zones, 30771
interim nuclear licensing, report, 19613
iodine-129 in environment around nuclear fuel reprocessing plant, 25676
potential radiological implications of nuclear facilities in upper Mississippi River basin in year 2000, 28090
operating history U.S. nuclear power reactors, 26996
radiological surveillance studies at pressurized water nuclear power reactor, 32270
Southern Conference on Environmental Radiation Protection from Nuclear Power Plants, proceedings, 20740
symposium on nuclear power plant control and instrumentation, USSR study, 26588
thermodynamic cycles of atomic power plants with MHD-generators, USSR study, 27652
topical meeting on water-reactor safety papers, 29669
utilizing reactor installations at Novovoronezh atomic electric power plant, USSR study, 29141
Nuclear reactors, *see* Reactors (atomic).
Nuclear rockets, *see* Rockets.
Nuclear safety, technical progress review, 18715
Nuclear science:
abstracts, 18716
bibliography on nuclear medicine, 15521
index, 18717
cumulative report number, with public availability citations, 25887
serial titles cited, list, 28083
title listing of civilian power reactor docket literature, 28080
application of model of porous body for calculation of field of velocities and temperatures in reactor core, USSR study, 30371
fiche index for nuclear dockets, 22473, 25873, 29673-674
Nuclear spectroscopy, *see* Spectroscopy.
Nuclear tests, *see* Nuclear explosions.
Nuclear warfare, *see* Atomic warfare.
Nuclear weapons, *see* Weapons.
Nucleate boiling, boiling crisis and critical heat flux, 21022
Nuclei:
approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of $A \geq 12$, 31653
semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475
Nucleons, comparison of exact and approximate evaluations of single-scattering integral in nucleon-deuteron elastic scattering, 20600
Nucleonics:
nucleonic sensor for detecting metal, in recirculating lubricating oil systems, 20989
semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475
Nucleus, *see* Nuclei.
Nuclides, *see* Radionuclides.
Nueces River and Valley:
Edwards Underground Reservoir, engineers report—
departmental edition, 26383, 27441
document edition, 26043, 27106
Number of American Indians by counties of United States, 1970, map, 25942

Number of persons of Spanish origin by counties of United States, 29789
Numerical calculations:
atmospheric water resources program, Project Skywater, numerical modeling of atmospheric processes, 23930
calculation of shock wave in close-in of underground nuclear explosion (Cades method), 16676
calculation of 2-dimensional flows with detonation, USSR study, 25361
codes calculation of effects of contained underground explosions, method of calculations, 16674
computation of spectral data for Josephson junction circuit, 22010
how to use 2 computational strategies to solve simple system, identification problems, 25212
Isua, Greenland, calculations of glacier flow for open-pit mine, 32198
LUIN, code for calculation of cosmic ray propagation in atmosphere, 29675
numerical simulation of plasmas, proceedings of conference, 25659
numerical weather activities, 30581
performance comparison of labeling algorithms, for calculating shortest path trees, 29323
some problems of calculation of 3-dimensional boundary-layer flows on general configurations, 31611
use of isotopes composition data, to improve reactor calculational techniques, 21012
user's manual for three-dimensional heated surface discharge computations, 23190
Numerical control, *see* Machine tools.
Numerical list of manufactured products (new (1972) SIC basis), 1972 census of manufactures, 31971
Numerical study of electromagnetic scattering from ocean-like surfaces, 17697
Numerical weather predictions, National Meteorological Center, 22156
Nunn, Louie B.:
Mercer County Committee for Nixon-Nunn Jackson, annual report, 24748
Nixon-Nunn Campaign Fund of Barren County, annual report, 24728
Nurseries, *see* Day care of children.
Nurseries (horticulture), crops, nursery and greenhouse products, forest products, census of agriculture, general report, 31939
Nursery diseases of southern hardwoods 16075
Nursery schools, *see* Day care of children.
Nurses and nursing:
better use of outpatient services and nursing care bed facilities could improve health care delivery to veterans, GAO report, 27546
extending scope of nursing practice, report of Secretary's Committee to Study Roles for Nurses, 29037
financial distress grants for schools of nursing, 21758
from student to RN, report of nurse career-pattern study, 21759
handbook for nursing staff, Clinical Center, 23773
institutions offering trainee stipends in psychiatric-mental health nursing for school year 1972-73 in graduate education, list, 17764
Join Life Corps, general information about careers and educational opportunities, 27578
licensed practical nurse, examination announcement, 27047
NTA, digest, Nurse training act, 20368
nurse careers in VA hospitals, nationwide locations, 31893
nurse training, special project grants for improvement, 26522

Nurses and nursing—Continued
 nurses in action, Peace Corps, VISTA
 career opportunities, 29591
 nursing care of manic depressive patient,
 25597
 nursing careers in Indian Health Service,
 17560
 nursing scholarships and student loans,
 information for schools, 23408
 practical nurses in VA, career opportuni-
 ties in Veterans Administration Hospi-
 tals nationwide, 27965
 professional training programs in maternal
 and child nursing, 16244
 repayment, deferment and cancellation of
 nursing student loans, guide, 25266
 research on nurse staffing in hospitals
 31409
 schools, construction grants awarded, list,
 21757
 special projects for improvement in nurse
 training, 23411
 survey of factors relating to job satisfac-
 tion among VA nurses, 29578
 utilization review program for home health
 agencies, 19307
 Walter Reed Army Institute of Nursing
 educational opportunity in nursing field,
 30765
 YOU-IN program—
 group leadership guidelines, 16126
 guide, 16127
 what's it all about? 16128
 youth opportunities unlimited in nurs-
 ing (series), 16126-128
 Nursing, *see* Nurses and nursing.
 Nursing assistant, *see* Hospital attendants.
 Nursing Division, Health Manpower Educa-
 tion Bureau, selected publications, 25265
 Nursing homes:
 administrators of nursing and per-
 sonal care homes—
 education and training, June-Aug. 1969,
 U.S., 27748
 work experience, 26720
 characteristics of residents in nursing and
 personal care homes, June-Aug. 1969,
 U.S., 25566
 charges for care and sources of payment
 for residents in nursing homes, June-
 Aug. 1969, U.S., 31682
 county and metropolitan area data book
 32488
 employees in nursing homes, U.S., 22031
 inpatient health facilities as reported from
 1969 MFI survey, 25569
 long term care under Medicaid, trends,
 hearings, 15862, 19942, 23039
 medical review in skilled nursing homes
 and mental hospitals, guidelines, 23628
 mental health, principles and training
 techniques in nursing home care, 23756
 nursing home administration, statistical
 analysis of examination (form 2) and
 summary of responses, to background
 survey, 21119
 nursing home care, 30291
 residential care enterprises under Fair
 labor standards act, 25804
 services and activities offered to nursing
 home residents, U.S., 23725
 sponsor's guide for nursing homes and
 intermediate care facilities sec. 232 of
 National housing act, 17558
 statistical information program for utili-
 zation review in extended care facilities
 19306
 their admission policies, admissions, and
 discharges, 26719
 Nutrients:
 development and demonstration of nutri-
 ent removal from animal wastes, 23188
 in situ evaluation of nutrient effects in
 lakes on phytoplankton, 27451

Nutrients—Continued
 lake restoration by nutrient removal from
 wastewater effluent, Shagawa Lake proj-
 ect, 30175
see also Nutrition.
 Nutrition:
 biological and nutrient chemistry data
 from participating ships, 2d survey
 cruise, eastern tropical Pacific Ocean
 EASTROPAC atlas, 29373
 Child nutrition act—
 law, 16921
 report, 17154
 child nutrition programs, 24137
 continue financing—
 law, 27088
 reports, 24829, 26121
 handbook for volunteers, 17495
 maintain for fiscal year 1973, hearing,
 31019
 child nutrition statutes, compilation,
 25820
 compilation of National school lunch act,
 Child nutrition act, and related pro-
 visions of law, 17035
 development and social behavior, Western
 Hemisphere conference proceedings,
 27766
 families in expanded food and nutrition
 education program, comparison of food
 stamp and food distribution program
 participants and nonparticipants, 31911
 family fare, guide to good nutrition, 16597
 food and nutrition (periodical), 18375
 Food and Nutrition Information and
 Educational Materials Center, catalog,
 30466
 food selection for good nutrition in group
 feeding, 16599
 growth and survival of northern plants at
 low soil temperature, growth response,
 organic nutrients, and ammonium utili-
 zation, 30157
 happy balance, good nutrition, healthy per-
 son, 24192
 health and nutrition examination sur-
 vey, 20659
 United States 1971-73, plan and op-
 eration, 26717
 low-income families in feeding infants and
 small children, practices, 17678
 migrant children's nutrition, hearing,
 21373
 National Nutrition Education Conference,
 proceedings, 28004
 nutrient survey of surface waters in south-
 ern Florida during wet and dry season,
 23354
 nutrition and aging, selected annotated
 bibliography, 29601
 nutrition and diseases—
 hearings, 28568, 30063
 obesity and fad diets, hearings, 27358
 nutrition and human needs—
 investigation of problems, authorization
 report, 26217
 national survey, hearings, 20006-7,
 21381, 23069, 26285
 nutrition education, 1972—
 hearings, 23070
 overview, Federal programs, hearings,
 24956
 nutrition education, 1973—
 hearings, 27359
 phosphate research and dental decay,
 hearings, 28569
 TV advertising of food to children,
 hearings, 26286
 nutrition for elderly, program highlights
 of research and development nutrition
 projects funded under title 4 of Older
 Americans act, 25812
 nutrition, growth and development of
 North American Indian children, 17762
 nutrition program news (periodical),
 18718

INDEX 1973

Nutrition—Continued

- nutrition research in USSR, 17591
- nutrition sense and nonsense, 21595
- plant analysis for nutrient assay of natural waters, 25796
- realities in lower income countries (address), 28651
- ten-State survey, 1968-70, historical development demographic data, clinical biochemical, dietary, 22569
- we want you to know what we know about nutrition labels on food, 31345
- weed harvest and lake nutrient dynamics, 31267

see also Food.

- Nutrition and Human Needs, Select Committee on. Senate:
 - committee print, 17292-293, 23068, 24955, 26284, 27360, 32151
 - hearings, 20006-7, 21380-381, 23069-70, 24956, 26285-286, 27358-359, 28567-569, 30063, 31157
 - investigations and studies, authorization and expenses, report, 26217
 - publications list with research reference, 27360

Nutrition Laboratory, see Army Medical Research and Nutrition Laboratory.

Nutrition of plants, see Plants.

Nutritionists, leadership development and training for Head Start, coordinators of nutrition and cook managers, 21072

Nuts:

- Federal item identification guide, 31189
- foreign agriculture circulars, 18380
- tree nuts—
 - by States, production use value, 31879
 - production and marketing research, 1965-71, bibliography, 19120
 - production, use, value, revised estimates, 20932

see also names of nuts.

Nuts and bolts, effects of specimen radius on stress state near roof bolt anchor, finite element determination, 30426

NWS, see National Weather Service.

Nye County, Nev., geohydrology of eastern part of Pahute Mesa, Nevada test site, Nye County, Nev., 20350, 30274

Nyrop, Richard F.:
area handbook for—
Algeria, 25857
Libya, 30754

O

Oahe, Lake, mercury content in fish, sediment and water in Lake Oahe, S. Dak., preliminary investigation, 17934

Oahu Island, soil survey report, 17842

Oak:

- American wood, 31355
- litter production by oak-mountain mahogany chaparral in central Arizona, 17518
- long length cuttings from no. 2 common hardwood lumber, 25229
- predicting fire spread in Arizona's oak chaparral, 28968
- size of oak advance reproduction, key to growth following harvest cutting, 21670
- some soil phases in Missouri Ozarks have similar site indexes for oaks, 28960
- wilt, general information, 16073
- Oak wilt, pressure injection of solubilized benomyl for prevention and cure of oak wilt, 32325

Oakland, Calif.:

- census of housing, 1970, components of inventory change, 28106
- harbor, bridge, change name to George P. Miller-Leland W. Sweeney Bridge, law, 19498

Oakland County, Mich., flood plain information, Upper River Rouge, Minnow Pond Drain, Bell Branch, and Tarabusi Creek, 23175

Oakland County Democratic Committee, annual report, 22771

Oakland County Register and Vote Committee, annual report, 22772

Oaklawn, Ill., population, special censuses, 31967

Oakley, Donald T., natural radiation exposure in United States, 23912

Oakley Dam, Sangamon River, Ill., spillway, type 2, 23179

Oakley Reservoir, Sangamon River at Decatur, Ill., designate William L. Springer Lake, law, 19523

OAS, see Organization of American States.
OASDHI, see Old-age, survivors, disability, and health insurance.

Oaths, Public Printer to designate employees to administer, authorize, report, 32112

Oats, futures, commitments of traders, 18140

OBERS projections economic activity in United States, 24103

Obesity:

- and fad diets, nutrition and diseases, hearings, 27358
- anti-obesity drugs, advertising of proprietary medicines effects, hearings, 24963
- food and your weight, 30701

Obion County, Tenn., soil survey report, 25712

Obion River:

- modification of west Tennessee tributaries feature, Mississippi River and tributaries project, Obion and Forked Deer Rivers, engineers report—
departmental edition, 20159
document edition, 19567

Objective speech quality measurement of communication channel, 31990

Objectives and requirements of Federal Information Processing Standards Program, 25550

OBRS series, 15614-621, 16828-836, 18742, 19295-302, 21100-105, 22631-635, 24286-289, 25968-974, 27066-68, 28633-641, 30127-131, 31203-204, 32183-185

O'Brien, Harold W., transmission of 2.0-3.4 micron infrared radiation in ice fog, 31237

O'Brien, Keran:

LUIN, code for calculation of cosmic ray propagation in atmosphere, 29675

semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475

table of type NM-64 cosmic-ray neutron monitor counting rates as function of solar modulation of galactic cosmic rays expressed in terms of the Ehmert potential, 21013

O'Brien County, Iowa, Republican Central Committee, annual report, 22915

Observation:

celestial catalog of ultraviolet stellar observations, 5068 objects measured by Smithsonian experiment aboard Orbiting Astronomical Observatory (OAO-2), 27878

dynamic observation in T-37 undergraduate pilot training (UPT) link trainers (T-4), 26950

Federal plan for meteorological rocket observations, fiscal years 1973-77, 29383

fire-weather observers' handbook, 25208

microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418

observations of—

currents in Puget Sound, 27801

severe storms on April 26 and 28, 1971, 29390

surface effect vehicle performance, 30159

substation observations, 26782

Zvenigorod experimental station, optical observations of artificial earth satellites, USSR study, 30329

Obsidians, chemistry of peralkaline oversaturated obsidians, 23358
 Obstetrics, *see* Abortion.
 Obstruction marking and lighting, 23211
 Obtaining information from patents, 29444
 Occupational alcoholism, some problems and some solutions, 23759
 Occupational analysts, *see* Job analysts.
 Occupational diseases, target health hazards, 20731
 Occupational health, *see* Health.
 Occupational instructors, *see* Teachers.
 Occupational Safety and Health Administration:
 implementation of Occupational safety and health act, hearings, 21369
 occupational safety and health—
 maritime standards and interpretations, 30599
 other regulations and procedures, 27860, 31762
 100 questions and answers about OSHA, 23894
 what every employer needs to know about OSHA recordkeeping, 17672, 26616
 Occupational Safety and Health Review Commission:
 appropriations, 1973—
 hearings, 15866
 report, 16987, 19615, 21311
 veto message, 19556
 appropriations, 1974—
 hearings, 28387
 report, 30983
 Occupational training, *see* Training.
 Occupations:
 Air Force—
 officer personnel officer, career information, 16625
 road signs . . . about your CAC (Career Assistance and Counseling Office in Consolidated Base Personnel Office), 16636
 area wage surveys, metropolitan areas, U.S. and regional summaries, 1969-70, 27667
 Army, recruiting & career counseling journal, 18850
 black Americans, decade of occupational change, 21907
 business data processing occupational performance survey, 31693
 career education, 21420
 address, 26359
 and equality of opportunity (address), 28653
 leisure occupations, curriculum guidelines for recreation, hospitality and tourism, 28654
 career opportunities—
 Foreign Agricultural Service International secretary, 23265
 in labor-management relations as field examiner, 29369
 Internal Revenue Service, attorney, estate tax, 16148
 medical, technician, assistant, aid, 31983
 nursing careers in Indian Health Service, 17560
 veterans in Federal service, 16819
 welders and flame cutters, 23604
 women in Forest Service, 16607
 careers for women in 70's, 27970
 careers in medical technology and related biological sciences in Veterans Administration hospital and clinics, 30681
 check career with U.S. Office of Civil Defense, 16812
 civilian career in Coast Guard, outstanding opportunities in management, public administration, accounting, data processing and other related areas, 28219
 detailed occupations of employed persons by race or sex for U.S., 1970, supplementary report, 24221

Occupations—Continued
 determining occupational emphases for high school program design, 27771
 dual careers, longitudinal study of labor market experience, 26611
 earnings by occupation and education, census of population, subject reports, 22534
 engineering and scientific occupational groups, selected characteristics, 31741
 Federal—
 occupational groups and series of classes, handbook, 18414
 white-collar workers, 15607
 hazardous occupation classification for customs and immigration inspectors for civil retirement purposes, report, 29860
 health careers—
 film guide, 16395
 guidebook, 23578
 index, 1970, census, classified, 29705
 job grading system for trades and labor occupations, 18329, 22600-601, 24264, 30880
 job opportunities for skilled craftsmen, civil service announcement, 31981
 job seekers guide, inventory of jobs, military job fair, 20045
 jobs—
 as agricultural and biological technicians, biological laboratory technicians, agricultural research technicians, examination announcement, 30882
 which one is for you? list of reprints from occupational outlook handbook, 17670
 jobs for which—
 apprenticeships are available, 29173
 college education is usually required, 26633
 high school education is generally required, 26631
 high school education is preferred, but not essential, 26632
 key level definitions for production facilitating jobs, 22804
 legal careers, Chief Counsel's Office, IRS, 21819
 manual for USES basis occupational literacy test, development, 25375
 occupation and residence in 1965—
 for United States, supplementary report, 29717
 statistics compared with census of population, 1970 subject reports, 29710
 occupation by industry, census of population, 19210
 occupational exposure to noise, criteria for recommended standard, 25584
 occupational outlook for college graduates, 20501
 Occupational safety and health, act, text, 24867
 occupational survey of 7 accounting and finance civil service series, 22366
 opportunities in Federal service for veterans, 30887
 outlook—
 handbook, list of reprints, 17670
 quarterly, 18719
 physiological principles of aptitude for mass occupations, USSR study, 17628
 predictability of expressed career intent, Air Force, 20941
 retail trade, selected department store occupations, 16005
 secretarial science occupational performance survey, 29358
 selected career education for the handicapped, 26376, 27434
 small business and Occupational safety and health act—
 hearings, 15783
 report, 16976
 toward health manpower opportunity, 16124

INDEX 1973

Occupations—Continued

- trades and labor, job qualification system for occupations, 29809
- typists and stenographers, go Government, 22607
- we the Americans, work we do, 30860
- what about a career in labor law?, 27665
- what every employer needs to know about Occupational safety and health act recordkeeping, 17672, 26616
- women in work force, development and field testing of curriculum materials, planning ahead for world of work, 26741
- your rights as an employee on Federal or federally financed construction job, 29588
- see also Employment—Work—also names of occupations, industries, etc.
- Occupied rural housing units and rural population by farm-nonfarm residence for counties in United States, 15570
- Occurrence and distribution of selected metals in streams near Huntsville, Ala., 30271
- Ocean :
 - achievements, cost and administration of ocean sediment coring program, GAO report, 20324
 - applications of remote sensing techniques to buoy-based environmental data gathering, 30526
 - behavior of materials in subsurface ocean environment, 17793
 - development of hard mineral resources of deep seabed, authorize, hearing, 15904
 - Federal ocean program, message from the President, 16945
 - fluvial sediment discharge to ocean from conterminous United States, 23333
 - geologic prediction, development tools and techniques for geophysical identification and classification of sea floor sediments, 23802
 - geology of Isla Desecheo, P.R., with note on great southern Puerto Rico fault zone and quaternary stillstands of sea, 17536
 - international convention for prevention of pollution of sea, implement, report, 26142
 - International Council for Exploration of the Sea, convention with other governments, 31873
 - law of sea resolution, hearings, 27202
 - marine magnetovariation station for studies by magnetotelluric soundings method, USSR study, 20451
 - marine protection, research and sanctuaries act of 1972 (ocean dumping), 27457
 - measurements of distribution and volume of sea-surface oil spills using multifrequency microwave radiometry, 30590
 - mineral resources of deep seabed, development, authorize hearings, 30046
 - numerical study of electromagnetic scattering from ocean-like surfaces, 17697
 - ocean disposal practices and effects, report, 32268
 - ocean dumping of waste materials, radiological, chemical, etc., prohibit—law, 19461
 - report, 19696
 - ocean engineering reports, 31985
 - index, 31985
 - ocean transportation in noncontiguous States and territories, report, 29964
 - oceans are great source of American economic development in today's international competition (address), 30893
 - oceans series, 17827
 - our living oceans, secrets of the sea, 27797
 - radar image of surface of sea, USSR study, 17605
 - radar sea returns, JOSS II, 30591

Ocean—Continued

- review of family Synopiidae-(Tironidae), mainly distributed in deep sea (Crustacea: Amphipoda), 17828
- salinity on optical extinction of sea ice at 6328 Å, effect, 31285
- systematics and areal distribution of pelagic cephalopods from seas of southern California, 16475
- temperatures and C_{2n} profiles measured over land and ocean to 3 km above surface, 25623
- treaty, endorsing objectives for just and effective agreement, report, 27121
- U.S. ocean policy, report, 29974
- United States' forecasts for study and exploration of world ocean, USSR study, 25358
- see also Oceanography—Sea ice.
- Ocean currents :
 - currents observed in Juan de Fuca submarine canyon and vicinity, 25624
 - Galveston Bay hurricane surge study, effects of proposed barriers on tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, hydraulic model investigation, 27445
 - Puget Sound, observations of—
 - currents, 27801
 - currents and water properties, 26767
 - recording current meter, model MO.21, 17782
 - wind recorder, current meter and thermistor chain measurements in northeast Pacific, 22094
- Ocean Island, mineral industry, minerals yearbook chapter, 20540
- Ocean Science and Technology Division, report availability notice, 29437
- Ocean stations, see Weather stations.
- Ocean temperature :
 - bottom-water temperatures on Continental Shelf, Nova Scotia to New Jersey, 32510
 - Gulf Stream, anomalies, etc., for western North Atlantic, monthly summary, 18649
 - processing EASTROPAC STD data and construction of vertical temperature and salinity sections by computer, 22100
 - surface water temperature and density, North and South America, 30516
- Ocean transportation, see Shipping.
- Oceania Republican County Committee, annual report, 22784
- Oceania :
 - agricultural data book, 15984
 - agricultural situation, 1972 review and 1973 outlook, 26356
- Oceanographer (OSS) :
 - cross-coupling computer for Oceanographer's Askania gravity meter, 25633
- Oceanography :
 - Atlantic Oceanographic and Meteorological Laboratories, collected reprints, 20234, 23206
 - bibliography on—
 - marine biology, 23815
 - marine geology and geophysics, 23816
 - chemical oceanographic research, present status and future direction, deliberations of workshop held at Naval Postgraduate School, Monterey, Calif., 31750
 - conservation and development of our Nation's fish and wildlife resources, environmental quality, and oceanography, compilation of Federal laws, 17072
 - economic problems of world ocean, USSR study, 30366
 - Federal ocean program, message from President, 16945
 - field test report on interoceanic acoustic release devices, 31728
 - International Decade of Ocean Exploration, Jan. 1970–July 1972, progress report, 30171

Oceanography—Continued

- key to oceanographic records documentation, 26395
- marine geodesy, USSR study, 26582
- marine geophysical data catalog, 17411
- marine science newsletters, 1973 annotated, bibliography, 29388
- marine studies on north coast of Jamaica, 25695
- National Oceanographic Instrumentation Center—
 - instrument fact sheets index, 32511
 - tests in progress sheet (periodical), 18672
- National Sea Grant program, program description and suggestions for preparing proposals, 17770
- Ocean Science and Technology Division report, availability notice, 29437
- oceanographic conditions in—
 - Nares Strait, 22621
 - northern Baffin Bay region, 28223
- oceanographic data exchange, World Data Center A, Oceanography reports, 20182, 27447
- oceanographic observations—
 - along East Coast of U.S., 22619
 - in Kane Basin, 22620
 - North Atlantic Ocean Station DELTA, 28224
 - of New York Bight from ERTS-1, 27802
- oceanographic reports, 22619-621, 24275, 28223-224, 30891
- oceanography in 92d Congress, 27236
- oceanography of Grand Banks region of Newfoundland and Labrador Sea, 30891
- physical oceanographic and meteorological data from principal participating ships
- 2d survey cruise, Aug.-Sept. 1967
- EASTROPAC atlas, 23782
- sea grant—
 - newsletter index, 17772
 - publications index, 17771, 20690, 29386-387
- SKYLAB, sensors and remote sensing in support of EREP oceanographic program, 27856
- study of some indices of higher nervous activity of men subjected to underwater environment for many hours, USSR study, 25335
- underwater search systems, instruments, and devices, USSR study, 26591
- underwater television survey of Atlantic outer continental margin near Wilmington Canyon, 31800
- see also Ocean.
- Oceanology, see Oceanography.
- Oceans, ocean fishery management, discussions and research, proceedings, 29393
- Oceans and Atmosphere, National Advisory Committee, see National Advisory Committee on Oceans and Atmosphere.
- Oceans of commerce, 25654
- Ochiltree County, Tex., soil survey report, 25713
- Ochlockonee River and Valley, Ochlockonee basin, plan for development of land and water resources of southeast river basins, 17924
- Ochoco Divide Research Natural Area, general information, 21634
- Ochoco Mountains, loop tour in Ochoco National Forest, 21653
- Ochs, C. R., temperature and C_{2n} profiles measured over land and ocean to 3 km above surface, 25623
- Oconee Nuclear Station, units, 1, 2, and 3, Duke Power Company, fiche index for nuclear dockets, 22473
- O'Connell, Dorothy, research relating to children, 24253, 28207
- Ocular damage, see Eyes.
- Oden, Laurance L., recovering rutile from titanium-enriched high-iron smelter slag, studies, 26667
- Odessa, Tex.:
 - area wage survey, 27673
 - census of population and housing, 1970, census tracts, 16744
- Odessa, Wash., test-observation well near Odessa, Wash., description and preliminary results, 23379
- O'Donnell, Gerald, census 1970, geography, concepts, products, and programs, data access descriptions, 31969
- Odors:
 - influence of trigeminal stimulation on children's judgments of odor, 15627
 - odors and air pollution, bibliography with abstracts, 19151
 - steam stripping odorous substances from kraft effluent streams, 28810
- OEDP (overall economic development program), see Redevelopment (city planning, etc.).
- OEO, see Economic Opportunity Office.
- Offenses, see Crime and criminals.
- Office employees, career opportunities, office assistant and related positions, examination announcement, 25949
- Office equipment, see Office furniture and equipment.
- Office furniture and equipment:
 - business machines, Federal item identification guide, 24992
 - furniture, office, Federal item identification guide, 28599
- Industry Advisory Committee on Office Machines and Computers, report, 19293
- office excellence, planning & designing today's Federal office, 21703
- office machines, current industrial reports, 16773, 30845
- typewriters and office composing machines
- Federal item identification guide, 27399
- see also Furniture.
- Office machines, see Office furniture and equipment.
- Office of Chief Attorney, operating procedures, 16570
- Office of Radiation Programs, see Radiation Programs Office.
- Office practice, secretarial science occupational performance survey, 29358
- Office space, see Space.
- Office workers, see Office employees.
- Officers, see Command (military)—also names of services to which officers belong.
- Offices:
 - cost effectiveness of 3 different interior open-type offices, 25073
 - first aid for drunken driver begins in your office, 25581A
 - see also Government offices.
- Official Army National Guard Register, 30485
- Official gazette of Patent Office, 18721-722
- Offset presses, see Printing presses.
- Offshore marine environment protection act, 30015
- Offshore petroleum studies, 21937
- Ogallala Formation, driller's logs in lithologic studies of Ogallala Formation of Southern High Plains of Texas, evaluation of use, 23339
- Ogeechee River and Valley, Ogeechee basin, plan for development of land and water resources of southeast river basins, 17924
- Ogemaw County Republican Committee, annual report, 20905
- Ogilvy, Virginia, buying a new sewing machine, 28014
- OGO (orbiting geophysical observatory), see Satellites.
- OH, see Hydroxyl.
- OH series, 16383-385, 17759
- OH-6A phase 2 quiet helicopter pro-24183
- O'Hara, George J., maximization and minimization of dynamic load factors, 27853
- O'Hara, M. E., specialized gaging equipment, 22496

INDEX 1973

OHES, *see* Health and Environmental Science Office.

Ohio :

- census of housing, 1970, housing characteristics for States, cities, and counties, 19198
- census of population, 1970, detailed characteristics, 24217
- census of transportation, 1972, truck inventory and use survey, 28142
- climatological data, 18103
- counties, population estimates, 28187
- county business patterns, 30831
- district No. 27—USA—Committee on Political Education Voluntary Fund, annual report, 24792
- mineral industry, minerals yearbook chapter, 16298, 29225
- precipitation data, hourly, 18454
- soil and water conservation, 1972, report, 27892
- Ohio County Republican Central Committee, Indiana, annual report, 22718
- Ohio River and Valley :
 - basin, surface water supply—below Wabash River, 31405
 - from Kanawha River to Louisville, Ky., 20364
- flood plain information, 17389, 20123-125, 23168-169
- Boone County, Ky., 28719
- Cabell County, Wayne County, W. Va., 32215
- Ohio and Beaver Rivers, Beaver County, Pa., 31253
- floods—
 - Boone County, Ky., 28750
 - past and future, Cabell County, Wayne County, West Va., 32240
- letters sent by Surveyor General of Territory Northwest of River Ohio, 1797-1854 pamphlet describing microfilm, 23700
- Ohio River summary and forecasts, 18726
- State Department territorial papers, Territory Northwest of River Ohio, 1781-1801, pamphlet describing microfilm, 21998
- surface water, quality, United States, 31403
- Ohio State Council of Carpenters Political Action Committee, annual report, 24391
- Ohio State University, *see* Center for Vocational and Technical Education, Ohio State University.
- Oil, *see* Oils and fats—Petroleum—Petroleum as fuel.
- Oil and Gas Office :
 - press releases, 18803
 - technical reports, 23898
- Oil fields, *see* Petroleum.
- Oil films, appearance and visibility of thin oil films on water, 26405
- see also* Lubrication.
- Oil pipe lines, *see* Pipe lines.
- Oil pollution of rivers, harbors, etc., *see* Oil spills.
- Oil pollution research newsletter, 18727
- Oil shale :
 - aragonite and genesis of carbonates in mahogany zone oil shales of Colorado's Green River formation, 25504
 - estimating nahcolite and dawsonite content of Colorado oil shale from oil-yield assay data, 21947
 - evaluation of methods for determining nahcolite and dawsonite in oil shales, 31593
 - final environmental statement for prototype oil-shale leasing program, 32388
 - Public hearings during review, 31495
 - geochemical aspects of saturated hydrocarbon constituents of Green River oil shale-Colorado no. 1 core, 29231
 - leasing-agreement for mining on naval oil shale reserves, report, 19746

Oil shale—Continued

- methods and evaluation of explosive fracturing in oil shale, 25508
 - oil yields and characteristics of Green River Formation oil shales at WOSCO-Ex-1, Uintah County, Utah, 20577
 - potential source of energy, 21717
 - Oil shale reserves, *see* Naval oil shale reserves.
 - Oil spills :
 - aerial surveillance spill prevention system, 25105
 - air modulated vacuum oil recovery collection of spilled oil (foams), 17416
 - compensation for oil pollution damage, section-by-section analysis of proposed act, 17050, 27207
 - concept evaluation, recovery of floating oil using polyurethane foam sorbent, 17418
 - control manual for fire departments, 25111
 - fate and effect of Shell oil spill, Platform B, Block 26, South Timberler Bay, studies and investigations, final report, 17930
 - feasibility demonstration of aerial surveillance spill prevention system, 25127
 - fire streams used with self-propelled oil spill skimmer, 28807
 - free floating endless belt oil skimmer, 20188
 - interaction between marine organisms and oil pollution, 28793
 - Measurements of distribution and volume of sea-surface oil spills using multifrequency microwave radiometry, 30590
 - mobile system for cleaning oil-contaminated beaches, development, 28822
 - Oil pollution act—
 - amend, 26142
 - amendments of 1972, report, 19664
 - oil pollution source identification, 25110
 - oil slick identification by trace element patterns measured with neutron activation analysis, instruction manual, 15518
 - oil/sorbent harvesting system for use on vessels of opportunity, 27470
 - oil spillage, bibliography, 29089
 - rapidly deployable oil containment boom for emergency harbor use, 27461
 - removal of oil from under piers, 27462
 - restoration of beaches contaminated by oil, 23184
 - shore termination for oil spill booms, 28800
 - small vacuum oil skimming system, 28801
 - sorbent-oil recovery system, development and preliminary design, 27467
 - surveillance system study, 28815
 - underwater oil harvesting technique, development, and demonstration, 28813
 - use of fire streams to control floating oil, 28799
- Oil tankers, *see* Tankers.
- Oil wells, *see* Petroleum.
- Oilfields, *see* Petroleum.
- Oils and fats :
 - current industrial reports, 18194
- fats and oils—
 - production, consumption, and factory and warehouse stocks, current industrial reports, 28156
 - production, consumption, and stocks seasonal adjustment supplement 1959-1971, current industrial reports, 19240
 - reporting period adjustment supplement Jan.—June 1972, current industrial reports, 15586
 - situation, 18287
- field repairs of EHV bushing oil leaks, 25874
- foreign agriculture circulars, 18380
- vegetable oil crushers, summary 1972, current industrial reports, 25922
- waxes, oils and fats, Federal item identification guide, 32171
- see also* names of oils.

Oilseeds:

- potential for oilseed sunflowers in United States, 24122
- production and trade prospects for Argentine oilseeds and their products, 31350
- stocks of grain, oilseeds, and hay, revised estimates by States, 1964-70, farm and off-farm stocks, 20934, 25834
- Olly waste disposal by soil cultivation process, 23186
- Okaloosa County Democratic Executive Committee, annual report, 24526
- Okeechobee Lake, surface water records, 31397
- Okinawa, Japan, analytical bibliography with supplementary research aids and selected data on Okinawa, Republic of China (Taiwan), Republic of Korea, 20984
- Oklahoma:
 - Arkansas River basin compact—agreement with Arkansas, consent of Congress, reports, 17197, 32058
 - grant consent to Arkansas and Oklahoma, report, 31074
 - census of business, 1967—major retail center, 16693
 - retail trade, 16699
 - census of housing, 1970, housing characteristics for States, cities and counties, 15557
 - census of population, 1970—characteristics of population, 29703
 - detailed characteristics, 16738
 - census of transportation, 1972, truck inventory and use survey, 30815
 - climatological data, 18104
 - cloud-to-ground lightning versus radar reflectivity in Oklahoma thunderstorms, 23801
 - county business patterns, 29743
 - electric rate book, 16048
 - estimates of population of Oklahoma counties, current population reports, 27036
 - income limits for rent supplement housing, 20381
 - Miami Indians of Indiana, judgment funds, disposition, law, 16862
 - Osage Tribe of Indians of Oklahoma, judgment funds, disposition, report, 15825
 - precipitation data, hourly, 18455
 - regular income limits for sec. 235-236 housing, 20378
- Oklahoma City, Okla., area wage survey, 20508
- Oklahoma County Republican Committee, annual report, 24396
- Okner, Benjamin A., concepts in welfare program design, 3 studies, 30940
- Oktibbeha County, Miss., soil survey report, 31823
- Olallie Ridge Research Natural Area, general information, 21635
- Old age assistance, *see* Old age, survivors, disability, and health insurance.
- Old age insurance, *see* Old age, survivors, disability, and health insurance.
- Old-age, survivors, disability, and health insurance:
 - benefit amounts under 1972 amendments, 22241
 - benefit statistics, monthly, 16480, 18638, 29502
 - comparison of actual experience under OASDHI system with short-range cost estimates, 22226
 - concurrent receipt of public assistance money payments and old-age, survivors, and disability insurance cash benefits by persons aged 65 or over, 1951-72 and Feb. 1972, 22034
 - disregard in determining need for public assistance, report, 19647
- Old age—Continued
 - health insurance statistics, HI series, 29498-500, 32555
 - history of provisions, 25703, 29501
 - income of OASDHI beneficiaries and other disabled, 26833
 - increase benefits and improve eligibility and computation methods, report, 15860
 - invalidity, old-age, and survivors benefits, ILO recommendations, 28303
 - mortality of charter beneficiaries, 22227
 - OASDHI, hospital, and supplementary medical insurance systems as modified by social security provisions of Public law 603, actuarial cost estimates, 19526, 27247
 - old age assistance program, findings of 1970 OAA study, demographic and program characteristics, 22036
 - self-employed doctors of medicine under OASDHI, 22238
 - social security benefits, increase—law 19526
 - report, 21183
 - social security rulings, 18912, 29506
 - see also* Medicare.
- Old house borer, 19108
- Old paint can poison your children, 28248-249
- Old Reliable Mine, project, seismic measurements, 30524
- Oldale, R. N., sedimentary framework of western Gulf of Maine and southeastern Massachusetts offshore area, 29020
- Older Americans Community Service, employment program, authorization and appropriation, report, 19855
- Older Americans comprehensive services amendments, 28511
- Older children need love too, 25945
- Older persons, *see* Aged—Gerontology.
- Older Worker Week, *see* National Employment the Older Worker Week.
- Older workers, *see* Labor.
- O'Leary, Eugene E., O'Leary for Congress Committee, annual report, 24442
- O'Leary for Congress Committee, annual report, 24442
- Olfactory sense, *see* Smell.
- Oligocene period:
 - lithologic characteristics of upper oligocene and miocene rocks drilled at Elk Hills, Kern County, Calif., 29005
 - oligocene molluscan biostratigraphy and paleontology of lower part of type Temblor formation, Calif., 27572
- Oliver, Judge P., and wife, relief, 19818
- Olives, autumn olive, for wildlife and other conservation uses, 15473
- Olmstead, Joseph A., organizational structure and climate, implications for agencies, national study of social welfare and rehabilitation workers, work, and organizational contexts, 31806
- Olney District Women's Republican Club, annual report, 22993
- Olsen, Arnold, Olsen for Congress Club, annual report, 24458
- Olsen, William A., noise generated by impingement of jet upon large flat board, 23684
- Olsen for Congress Club, annual report, 24458
- Olson, Alan E., in-process pollution abatement, upgrading metal-finishing facilities to reduce pollution, 30661
- Olson, Gary M.:
 - differences in speed of mentally processing displays containing information about "right" and "left", 26642
 - performance on expanded time bearing plot as function of bearing accuracy, 26640
- Olson, James J., rock damage from small charge blasting in granite, 30429

INDEX 1973

- Olson, Storrs L., evolution of ralls of South Atlantic Islands (Aves: Rallidae), 31802
- Olympic games:
1976 Denver Winter Olympics, planning design and construction of outdoor recreational facilities, authorize—
hearings, 15909, 21250
report, 15837
see also National Olympic Day.
- Omaha, Nebr.:
area wage survey, 23596
census of population and housing, 1970, census tracts, 19220
- Oman:
background notes, 31839
mineral industry, minerals yearbook chapter, 16269
Peace Corps, agreement, 31865
summary of synoptic meteorological observations, southwest Asian marine areas, 22183
- Oman, Gulf of, summary of synoptic meteorological observations, southwest Asian marine areas, 23893
- OMB, *see* Management and Budget Office.
- OMBB, *see* Minority Business Enterprise Office.
- Omega navigational system, *see* Navigation.
- Omnibus judgeship bill, 28555
- Omnibus water resources authorizations, 1972, 15930, 21382
- Omniranges:
square wave VOR tests, 30655
VOR TACAN low altitude flight check summary, 24041
- OMNITAB, *see* Computer programs/programming.
- On guard, Motor Carrier Safety Bureau bulletin, 18729
- On incentive awards program, 30878
- On natural redistribution of surface contamination, 24199
- On prediction of Lorand-D, 19305
- On-the-job-training, *see* Employee training.
- On utility of m-6-8 potential function, 26704
- O'Nan Transfer Company, motor carrier accident investigation, Jonesboro, Tenn., 26670
- Oncology:
special virus cancer program, 17743
virus-cancer program, 32486
- Ondera, A. W., field repairs of EHV bushing oil leaks, 25874
- One cell spoke to another, 27642
- 100 largest retirement plans 1960-71, 32418
- 100 questions and answers about OSHA, 23894
- 100th anniversary of mail order business, 16558
- One-year increase in authorization under Wagner-O'Day act, report, 29853
- 102 monitor, environmental impact statements, 18731
- 1000-MWe central station power plants investment cost study, 24200-201
- 1000 volunteers, university year for Action, 19098
- O'Neal, A. D., jr., nomination, hearings, 28529
- Oneida County, Idaho, feasibility of cloud seeding to enhance water resources in Cassia and Oneida Counties, Idaho, and Box Elder County, Utah, 22208
- O'Neill, Catherine V., Citizens for Brathwaite-O'Neill, annual report, 24528
- O'Neill, Eugene, \$1.00 Eugene O'Neill coin stamp (poster), 22293
- O'Neill Unit, *see* Missouri River Basin project.
- Onions:
effects of futures trading on price performance in cash onion market, 22360
structure of intraseasonal pricing mechanism for late summer onions, 30707
structure of seasonal supply and demand in onion market, 22338
- Onslow County, N.C., providing for conveyance of certain mineral rights in and under lands in Onslow County, N.C., report, 29884
- ONR, *see* Naval Research Office.
- Ontario, Calif.:
aircraft accident report, 16422
area wage survey, 30389
cross-age teaching, 29359
- Ontario, Lake:
annotated bibliography of Lake Ontario limnological and related studies—
biology, 27454
chemistry, 27453
physical science, 27455
- Oostanaula River, Rome, Floyd County, Ga., special flood hazard information report, 28772
- Open-end mortgages for home mortgage insurance, HUD handbook, 21787
- Open-ended Federal matching of State social service expenditures authorized under public assistance, 19535
- Open market operations, 30228
- Open pit mining, *see* Mines and mining.
- Opening doors for handicapped, publicity guide and activities calendar for State and local committees on employment of handicapped, 32535
- Operating banking offices, 28861, 30211
- Operating engineers, training young people (speech), 32422
- Operating history, U.S. nuclear power reactors, 26996
- Operating principle of echolocation system of marine animals, USSR study, 23544
- Operation Breakthrough:
design and development of housing systems, phase 1, feedback, 30294
general information, 26531
- Operation Golden Eagle:
Golden Eagle passport and Golden Age passport, general information, 26776
Golden Eagle program extend, law, 15638
- Operation Home Town, annual report, 24438
- Operation housecleaning, annual report, 29836
- Operation Mainstream, older workers, Operation Mainstream can help, 23582
- Operation MEDIHC for health trained service personnel, 23409
- Operation MEDIHC, military experience directed into health careers, 21762
- Operation Tripod, toward rehabilitation involvement by parents of the deaf, workshop, 31788
- Operational use of UH-1H helicopters in Southeast Asia, 31935
- Operations research, *see* Administrative management.
- Operations (surgical), *see* Surgery.
- Ophthalmic fisher-dispensers, national apprenticeship standards, 15501
- Ophthalmology:
diabetic retinopathy, 27756
macular degeneration, 27757
ophthalmology manpower—
characteristics of clinical practice, 29332
general profile, 25568
utilization of supplementary personnel, 30481
- Opiates, *see* Narcotics.
- Opinion (public), *see* Public opinion.
- Opinion leaders in organizational structure of 2 State divisions of vocational and technical education, 27770
- Opinions, *see* names of courts, etc. rendering opinions—Public opinion.
- Opium:
disposal from national and/or supplemental stockpiles, report, 31101
laws, compilation, 21148
- Opportunities abroad for teachers, 1974-75, teaching, seminars, 32197
- Opportunities abroad, teaching seminars, 15993
- Opportunities as technical aids in science and engineering, 28215

- Opportunities for older Americans in ACTION, 27972
- Opportunities for participation in space flight investigations, 17728-729
- Opportunities for research and study in history, art, science, 16478
- Opportunities for research at National Cancer Institute, 27738
- Opportunities for Spanish-Speaking People, Cabinet Committee on, *see* Cabinet Committee on Opportunities for Spanish-Speaking People.
- Opportunities for stenographers and typists, 16817
- Opportunities in Federal service for veterans, 16819, 30887
- Opportunities to reduce cost in acquiring properties resulting from defaults on home loans, 20335
- Opportunity, 18736
- Opportunity for reducing interest costs under sec. 235-236 housing programs, 20336
- Optical communications:
noise immune of optical communication lines (OLC) with frequency multiplexing of discrete information channels, USSR study, 16191
- optical communication systems for short-haul applications, 27062
- Optical data processing:
optical communication systems for short-haul applications, 27062
- phase-contrast enhancement without spatial filters for seismic holography, 25499
- Optical equipment, *see* Optical instruments and apparatus.
- Optical filters, *see* Filters and filtration.
- Optical glass, *see* Glass.
- Optical illusion, *see* Distortion.
- Optical instruments and apparatus:
laser induced damage in optical materials, 20639, 23707
- optical materials investigation for ultraviolet down-converters, 20972
- scales, balances and optical instruments, industrial plant equipment handbook, 23088
- volt-ampere characteristics of optically controlled avalanche transistor, 23542
- Optical materials, *see* Optical instruments and apparatus.
- Optical mechanics, *see* Mechanics (persons).
- Optical measurements:
optical and visual tests on Navy prototype hard hat diving system, 26646
- optical measurement of capillary wave structure, 30540
- Optical observations:
optical phenomena in atmosphere as observed from manned spaceships, USSR study, 17595
- techniques for generation of control and guidance signals derived from optical fields of spacecraft for detection and identification of landmarks, 17692
- Optical radiation, *see* Radiation.
- Optical spectra, *see* Spectra.
- Optical supplies, *see* Optical instruments and apparatus.
- Optics:
design and evaluation of an optical fine-pointing control system for telescopes, utilizing digital star sensor, 31628
- spatial-temporal structure of light impulses in water, USSR study, 16207
- temperature and C_n profiles measured over land and ocean to 3 km above surface, 25623
- see also* Light.
- Optimal control, optimal piecewise-constant control of dynamic systems with applications to Kalman filtering, 22166
- Optimal processes, analytical and experimental performance of optimal controller designs for supersonic inlet, 26689
- Optimization:
analysis of Stormfury data using variational optimization approach, 29392
- coal gasification processes, 24270
- ecological forecasting and optimizing of biosphere, USSR study, 30362
- engineering optimization method with application to STOL-aircraft approach and landing trajectories, 17726
- heuristic cost optimization of Federal Telpak Network, 29326
- optimization by pattern search method, 29562
- optimizing decomposition of carbonyl sulfide in electrical discharge, 21953
- PERFORM, performance optimizing computer program for dynamic system subject to transient loadings, 30450
- Wellton-Mohawk drainage operations, 29458
- Optimum conjunctive use of dual-purpose resulting plant and multi-purpose surface water reservoirs, 20386
- Optometrists, employed in health services, 1968, United States, 27752
- Oral hygiene, *see* Mouth.
- Orange County, Calif.:
flood plain information—
Aliso Creek, Orange County, 31248
- San Diego Creek and Peters Canyon Wash, 20127
- floods, Aliso Creek, Orange Co., Calif., 32229
- Orange County, Fla., flooding in Cypress Creek basin, 17394
- Orange County, Lincoln Club of, *see* Lincoln Club of Orange County.
- Orange County Republican Central Committee, annual report, 22797
- Orange County Republican Committee, annual report, 24681
- Orange County Republican Executive Committee, annual reports, 24432, 24445
- Orange juice:
frozen concentrated—
futures, commitments of traders, 18139
- futures trading and open contracts, 18393
- Orange Republican Town Committee, annual report, 24778
- Oranges, nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
- Orbital stations and study of Earth from space, 30345
- Orbiting Astronomical Observatory (OAO), *see* Satellites.
- Orbiting Geophysical Observatories, role of gas-surface interactions in reduction of OGO 6 neutral particle mass spectrometer data, 27714
- Orbits:
classical 8th- and lower-order Runge-Kutta-Nystrom formula with new step-size control procedure for special 2d-order differential equations, 29300
- juridical problems in use of orbits for artificial earth satellites, USSR study, 31522
- orbit of Polyhymnia and mass of Jupiter, 17788
- qualitative study of complete set of solutions of differential equation of motion of test particle in equatorial plane of Kerr gravitational field, 27717
- technical and economic trade-offs for geostationary orbit communications resources, 28235
- Orchards, apple, young, establishing and managing, 16592
- Orcutt, John C., fluidized bed clarification as applied to waste-water treatment, 21497
- Orders, *see* names of departments, etc., issuing orders—*also* subjects.

INDEX 1973

Orders (sales):

- manufacturers' shipments, inventories, and orders, 15596
- Order Division automated system, Library of Congress, 25388
- Ordinance of 1787, text, 29949
- Ordinance, Civil War explosive ordinance, guide to safe inerting, 29439
- see also* Airborne ordinance.

Ordovician period:

- distribution of Middle Ordovician Copenhagen Formation and its trilobites in Nevada, 17539
- fossils from Ordovician bioherm at Melklejohn Peak, Nev., 21724
- stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, 17528
- stratigraphy and structure of Middle and Upper Ordovician rocks in Sedgwick basin and adjacent areas, south-central Kansas, 21726
- Strodes Creek member (upper Ordovician), new map unit in Lexington limestone of north-central Kentucky, 23331

Oregon:

- bottle bill, first 6 months, 31309
- census of housing, 1970, housing characteristics for States, cities, and counties, 15558
- census of population 1970—
 - characteristics of population, 25905
 - detailed characteristics, 16739
- census of transportation, 1972, truck inventory and use survey, 28143
- chemical composition of sedimentary rocks in Alaska, Idaho, Oregon, and Washington, 23364
- climatological data, 18105
- coast pilot, 26765
- county business patterns, 30832
- crest-stage gaging stations in Oregon, compilation of peak data collected Oct. 1952–Sept. 1972, 23337
- electric rate book, 17462
- Federal research natural areas in Oregon and Washington, guidebook for scientists and educators, 20291
- separates, 21607–650, 23270
- flood profiles in Umpqua River, Oregon, 29014
- flows of mill residues to pulp and board manufacturers, 20322
- forest insect outbreak, 21652
- forest-site relationships within outbreak of lodgepole needle miner in central Oregon, 28962
- land conveyance for highway purposes, release condition in deed—
 - law, 19394
 - report, 19870
- log production, historical perspective, 23311
- major outbreaks of Douglas-fir tussock moth in Oregon and California, 27529
- Middle Jurassic (Bajocian) ammonites from eastern Oregon, 30280
- mineral industry, minerals yearbook chapter, 25467
- Oregonians restore Willamette, joint citizen, State and Federal efforts clean river waters, 23198
- Pacific Slope basins, surface water supply, 16117
- petrology of welded tuff of Devine Canyon, southeastern Oregon, 27573
- precipitation data, hourly, 18456
- quality of ground water in basalt of Columbia River Group, Washington, Oregon, and Idaho, 20360
- rehabilitation facilities, national directory, 23947
- relationship of log production in Oregon and Washington to economic conditions, 28963

Oregon—Continued

- sampling populations of western spruce budworm and predicting defoliation on Douglas-fir in eastern Oregon, 27540
- timber harvest, 23312
- water supply outlook and snow survey, 19061, 20779

Ores:

- alternating current matrix-type separator, 30424
- metal materials, ores, minerals, and alloys, Federal item identification guide, 23601
- method for prediction of stresses in isotropics inclusion or orebody of irregular shapes, 23648
- simulation in situ leaching of copper from porphyry ore, 29242
- see also* name of metals or minerals.

Organic compounds:

- air quality data for organics, 1969–70, from national air surveillance networks, 30723
- detection of organic compounds in respiratory coal dust by high-resolution mass spectrometry, 21962
- method for concentrating and determining trace organic compounds in atmosphere, 20104
- on molecular mechanism of action of organic agents on collinoreceptors, 27639
- organic iodide formation under accident conditions in water-cooled reactors, review, 24203
- synthetic organic chemicals, production and sales—
 - crude products from petroleum and natural gas, for chemicals conversion, 22283
 - cyclic intermediates, 25784
 - dyes, 20833
 - flavor and perfume materials, 17913
 - medicinal chemicals, 25785
 - miscellaneous chemicals, 1971, preliminary, 30660
 - plastics and resin materials, 1971 preliminary report, 29554
 - preliminary report, 18772
 - surface-active agents, 27951
 - tar and tar crudes, 24070

Organic matter:

- mechanisms of pyrolysis, oxidation, and burning of organic materials, 23706
- organic substances in water (series), 27575
- preparative free-flow electrophoresis as method of fractionation of natural organic materials, 27575
- trace organic impurities in gaseous helium, 31622

Organic pollutant identification utilizing mass spectrometry, 32262

Organisms:

- control in health and diseased organism, USSR study, 27623
- effect of ionizing radiation on organism, problem of effect of radioactive water pollution on reproduction of commercial fishes, 26984
- fish and food organisms in acid mine waters of Pennsylvania, 26402
- model for water metabolism in organism, USSR study, 26579
- pilot plant demonstration of lime-biological treatment phosphorus removal method, 32261

Organization:

- Federal energy organization, staff analysis, 27337
- field operations and enforcement manual for air pollution, organization and basic procedures, 22375
- microbiological laboratory services in England, Bulgaria, Finland, and Czechoslovakia, USSR study, 27632
- organization of control of scientific research, 31533

Organization—Continued

- organizational structure and climate, implications for agencies, national study of social welfare and rehabilitation workers, work, and organizational contexts, 31806
- reading, main ideas and organization, national assessment of educational progress, 31226
- USA, foreign policy mechanism, organization, functions, and management, USSR study, 27621
- see also* Planning.
- Organization charts :
 - Air Staff, Air Force Department, 17976
 - Army Department, 18416
 - see* Air Force Department.
- Organization of African Unity, extending certain privileges and immunities in Organization of African Unity, 29865
- Organization of American States, American foreign policy in economic and political relationships with Organization of American States and Latin America, 30648
- Organization of Government for Conduct of Foreign Policy Commission :
 - appropriations, 1974—
 - hearings, 31127
 - supplemental, 31057
- Organization of Government of District of Columbia Commission, *see* District of Columbia Commission on Organization of Government.
- Organization, Office of General Counsel, HUD, 23421
- Organizations :
 - citizen action can get results, 17413
 - contributions to which are deductible for income tax purposes, list, 18181
 - groups that can help, directory of environmental organizations, 16017
 - how to apply for recognition of exemption, 27597
 - Office of Minority Business Enterprise funded organizations, 24284
 - Public Health Service grants and awards, 1972 funds, 31702
 - registration of certain organizations wishing to control by force or overthrow Government, rules, etc., prescribed by Attorney General, 17649
 - why tenant organizations? role for residents of rental housing, 29083
 - see also* International organizations.—Non-profit organization.
- Organized crime, *see* Crime and criminals.
- Organizing interface of hardware of local data control systems with M-600 ASVT-M computer complex, 30337
- Organophosphorus compounds :
 - behavior changes from chronic exposure to pesticides used in aerial application, effects of phosdrin on performance of monkeys and pigeons in variable interval reinforcement schedules, 21034
 - chemistry and application of organophosphorus compounds, proceedings of Third Conference, USSR study, 20479
 - effects of LSD, chlorpromazine and organophosphorous cholinesterase inhibitors on brain, USSR study, 21860
 - rapid detection system for organophosphates and carbamate insecticides in water, 23183
 - subtle changes in brain functions produced by single doses of mevinphos (phosdrin), 30786
 - synthesis and spectral properties of organophosphorus compounds containing keto group, USSR study, 23512
 - toxic organophosphorus compounds, USSR study, 30331
 - transient blindness due to combined effects of mevinphos and atropine, 30787

- Organs, determination of focal projections of internal organs in brain of man through isolation of useful signals, 27646
- Orientalism in United States, *see* Asian Americans.
- Orientation :
 - effects of copper on locomotor orientation of fish, 28794
 - Interior Department officials with Members of the House, hearings, 26165
 - Members of Congress by resources officials of Interior Dept. on programs etc., hearing, 27217
 - orientation courses conducted by Institute for Air Pollution Training, 20951
 - orientation problems, kinematic and trihedron, USSR study, 27644
 - processing of measurements in problems of stellar orientation of spacecraft, USSR study, 23554
 - teacher orientation handbook for right to read program, 16001
- Origin and findings of Atomic Bomb Casualty Commission, 25681
- Origin of mineralized water in Precambrian rocks of upper Paraíba basin, Paraíba, Brazil, 16112
- Orloff, Kenneth, laser Doppler velocity measurements of swirling flows with upstream influence, 31610
- Orlov, Alexander, legacy, 31148
- Ormsby, W. C., strength development and reaction products in lime-montmorillonite-water systems, 31325
- Ornamentation, *see* Decoration and ornament.
- Orofino, Idaho, flood plain information, Orofino Creek, Whiskey Creek, 32216
- Orofino Creek, flood plain information, Orofino, Idaho, 32216
- Orography, orographic lifting rain factor shown in atmospheric variability experiment (AVE), 32461
- ORP, *see* Radiation Programs Office.
- Orphans, and child welfare, relief and rehabilitation of war victims in Indochina, hearings, 30053
- Orr, Howard K. :
 - Black Hills, S. Dak., flood of June 1972, impacts and implications, 28928
 - water yield characteristics of 3 small watersheds in Black Hills of South Dakota, 28967
- Orr, Paul H. :
 - bin fronts for potato storages, 16604
 - potato packinghouses, guidelines for plant layout, 26937
- Orsborn, John F., correlated studies of Vancouver Lake, hydraulic model study, 17421
- ORSS, *see* Research and Support Services Office.
- Ortel, Walter H., Azotea Tunnel instrumentation program, San Juan-Chama Project, N. Mex., 32541
- Orthogonal function, *see* Mathematics.
- Orthopedics, orthopedic surgery in Zone of Interior, surgery in World War II, 16659
- Ortuzar-Varas, Jorge, and wife, relief, 19334, 19580, 19839
- Osage Indians :
 - general information, 31469
 - judgment funds, disposition, report, 15825
 - Tribe of Oklahoma, judgment funds, disposition, law, 19511
- Osage-orange, American woods, description, etc., 25203
- Osage River, Osage (Marais des Cygnes)-Gasconade drainage basins, cooperative State-Federal report on water pollution, 17808
- Osborn, Elburt F., remarks, Sept. 11, 1973, 32447
- Osceola County Republican Committee, Mich., annual report, 22753

INDEX 1973

- Oscillations:
 investigation of parasitic oscillations in
 KIU-12 klystron, originating when dura-
 tion of modulating pulse is increased,
 USSR study, 17618
 laboratory investigations of driven low
 frequency plasma oscillations, 29389
 on theory of transformation of surface
 waves into longitudinal oscillations in
 surface layer of plasma wave-guide,
 21002
 on transformation of electromagnetic
 waves into longitudinal oscillations in
 nonhomogeneous plasma in presence of
 perfectly conducting surface, 22443
 wave field pressure, effect on longitudinal
 oscillations in plasma, 21004
 Oscillators, maximization and minimization
 of dynamic load factors, 27853
see also Lasers.
 OSHA, *see* Occupational Safety and Health
 Administration.
 OSO (Orbiting Solar Observatory), *see*
 Satellites.
 Osso, Nicholas A.:
 adult basic education program statistics,
 students and staff data, 32194
 directory of secondary schools with oc-
 cupational curriculums, public-nonpub-
 lic, 30136
 Osteopathic physicians, income of physicians,
 osteopaths, and dentists, 1965-69, from
 professional practice, 22237
 Osteopathy, osteopathic commemorative
 stamp (poster), 16560
 Oster, Eugene A., flood profiles in Umpqua
 River, Oregon, 29014
 Osterwald, Frank W.:
 field instrumentation studies of earth
 tremors and their geologic environ-
 ments in central Utah coal mining areas,
 26504
 Instrumentation studies of earth tremors
 related to geology and to mining at Som-
 erset Coal Mine, Colo., 21735
 Ostracoda:
 Bradleya problem, with descriptions of two
 new ptychospheric Ostracode genera,
 agrenocythere and poseldonamicus
 (Ostracoda: Crustacea), 20762
 Lower Cretaceous, Jurassic (?), and Tri-
 assic ostracoda from Atlantic Coastal
 Region, 21736
see also Shrimps.
 Ostroff, Aaron J., design and evaluation of
 an optical fine-pointing control system for
 telescopes utilizing digital star sen-
 sor, 31628
 Ostrom, Arnold J., timber volume in Wis-
 consin counties, 25220
 OSW, *see* Saline Water Office.
 Oswald, Daniel D., timber resources of Men-
 docino and Sonoma Counties, Calif., 20323
 Oswald, William J., anaerobic-aerobic ponds
 for best sugar waste treatment, 26409
 Oswalt, John L., color removal from kraft
 pulp mill effluents by massive lime treat-
 ment, 25109
 Oswalt, Noel R.:
 navigation conditions and filling and
 emptying system, New Bankhead Lock,
 Black Warrior River, Ala., hydraulic
 model investigation, 20176
 outlet works stilling basin for Tallahala
 Dam, Tallahala Creek, Miss., hydraulic
 model investigation, 28784
 Oswego River, basin, USDA report, 31921
 OT, *see* Telecommunications Office.
 OT reports, 30895
 Ottawa County, Mich, soil survey report,
 26842
 Ottawa County Republican Party, annual
 report, 22874
 Otter Tail County Republican Committee,
 annual report, 22862
 Otterson, Dumas A., determination of hydro-
 gen in milligram quantities of titanium
 and its alloys, 29299
 Ottersten, Hans, radar monitoring of turbu-
 lence at tropopause level, 23603
 Ottina, John R.:
 addresses, etc.—
 Feb. 1, 1973, 25046
 Mar. 30, 1973, 26372
 Otto, N. E., aquatic pests on irrigation sys-
 tems, identification guide, 23915
 Otto Goedecke, Inc., Hallettsville, Tex., cer-
 tain cotton yarns and fabrics, Tariff Com-
 mission report, 17911
 Ouachita County, Ark., soil survey report,
 30639
 Oudine, John A., all hands, Naval Personnel
 Bureau career publication, 17989
 Our Asian neighbors, 28408
 Our Best for Congress Committee, annual
 report, 22736
 Our cities and suburbs, 29790
 Our education, 30859
 Our environment and our natural resources,
 indivisibly one, 17562
 Our flag, 30944
 Our homes, 19263
 Our incomes, 28202
 Our living oceans secrets of the sea, 27797
 Our United States, becoming a citizen series,
 30302
 Our vocational training can guarantee you
 job of lifetime, 30239
 Outage monitor, development of film tech-
 niques for runway lighting outage studies,
 24026
 Outboard motors, exhaust emissions from un-
 controlled vehicles and related equipment
 using internal combustion engines, out-
 board motors, 29647
 Outdoor education, *see* Education.
 Outdoor recreation, *see* Recreation.
 Outdoor Recreation Bureau:
 appropriations, 1974, hearings, 27180
 Director, appointment, require Senate
 confirmation, report, 32120
 grants-in-aid manual, 29441
 greater benefits to more people possible by
 better uses of Federal outdoor recreation
 grants, GAO report, 20331
 press releases, 18804
 Outer Continental Shelf lands act, *see* Conti-
 nental Shelf.
 Outer Mongolia, *see* Mongolia.
 Outer space:
 aeronautics and space report of President,
 1972, activities, 25530
 aerospace bibliography, 27706
 aerospace companies, backlog of orders,
 current industrial reports, 18194A
 aerospace museum in western United
 States, feasibility study, 27241
 aerospace safety (periodical), 17959
 antimissile and space defense weapons,
 USSR study, 17597
 code of Federal regulations, 25176, 26438-
 439
 comparison of advanced propulsion con-
 cepts for deep space exploration, 17725
 conical section method for determining
 geometric configuration of planet by
 photographs taken from space, USSR
 study, 23536
 convention on international liability for
 damage caused by space objects, consent
 of Congress, 17127
 for benefit of all mankind, practical re-
 turns from space investments, 17012
 geophysics and space data bulletin, 18401
 interplanetary Pioneers—
 summary, 21981
 system design and development, 25521
 most asked questions about space and aero-
 nautics, 27704
 physics of space environment, colloquim
 held at University of Alabama, Hunts-
 ville, Ala., 17704
 remote sensing for earth surveys, agree-
 ment with Mexico, 17874
 research performed in USSR, 30373

- Outer space—Continued
 scientific and technical aerospace reports, 18890
 indexes, annual, 25529
 semiannual indexes, 18889, 21991, 31662
 Soviet-American working group on remote sensing of natural environment from space, meeting, 30364
 Soviet bloc research (periodical), 18917
 Soviet space programs, 1971, report, 17212
 space and man's environment (address), 31663
 space cooperation, agreement with Union of Soviet Socialist Republics, 16506
 space for mankind's benefit, space congress, proceedings, 21982
 space-periodic magnetic configurations, experimental determination of basic characteristics, 21001
 studies of earth from space, USSR, 31525
 U.S.-U.S.S.R. cooperative agreements, 17095
see also Space missions—*also* headings beginning Space.
 Outlet works, *see* Reservoirs.
 Outlook for 1972, economy and phase 2, 28237
 Outlook for production of Navy's LHA and DD-963 shipbuilding programs, 31383
 Outlying possessions:
 census of housing, 1970, housing characteristics for States, cities, and counties, 24213
 index to official published documents relating to Cuba and insular possessions of U.S., 1876-1906, pamphlet describing microfilm, 25533
 tax guide for U.S. citizens employed in U.S. possessions, 20411
 U.S. trade, monthly report, 19008
 Outpatient services, *see* Hospitals.
 Output, *see* Production.
 Ovens:
 industrial furnaces, ovens and heat treating equipment, industrial plant equipment handbook, 24984
 we want you to know about microwave oven radiation, 32303
 Overall view of issues involved in current proposals for Federal aid to State and local governments, 15788
 Overby, W. K., predicting probable roof fall areas in advance of mining by geological analysis, 29243
 Overcoats, provisions for evaluating quality of overcoats, men's, military standard, 27408
 Overhelm, Richard K., food distribution facilities for Wilkes-Barre and Scranton, Pa., 26939
 Overlake Associated Republican Women, annual report, 24614
 Overlap, measurement agreement through process evaluation, 29315
 Overnight stays, 27820
 Overseas business reports, OBR (series), 15614-621, 16828-836, 18742, 19295-302, 21100-105, 22631-635, 24286-289, 25968-974, 27066-68, 28633-641, 30127-131, 31203-204, 32183-185
 Overseas Private Investment Corporation:
 appropriations, 1973—
 further continuing—
 law, 19497
 report, 19729
 hearings, 15717, 15869, 17025
 reports, 16989, 16991, 19887
 appropriations, 1974, hearings, 32132
 audit report, 28985
 GAO audit, document edition, 30957
 biographic register, 30643
 telephone directory, 31850
 Overseas service:
 automated overseas employment referral program, area information manual, 30088
 Overseas service—Continued
 Federal jobs overseas, 24265
 information for dependents traveling to overseas areas, 20985
 need to improve language training programs and assignments of Government personnel overseas, GAO report, 23323
 tax information for U.S. Government civilian employees stationed abroad, 20416
 Overseas trade promotion activities, calendar of events, 30320
 Overseas trade promotions calendar, 31211
 Oversight hearing on noise control act, 32141
 Oversight hearings on HUD new communities program, 31014
 Overview from underside or reopening of paths, 19809
 Overview of United States trade prospects with Communist countries, 21106
 Owens, Hugh F.:
 addresses—
 Apr. 10, 1972, 29476
 May 16, 1972, 29472
 Oct. 12, 1972, 29470
 Oct. 16, 1972, 29467
 Owens, James M., address, Oct. 17, 1972, 21413
 Oxidation:
 cannery waste treatment by anaerobic lagoons and oxidation ditch, 25107
 cyclic and isothermal oxidation behavior at 1100° and 1200° C of nickel-20-percent-chromium, nickel-20-percent-chromium-3 percent-manganese, nickel-20-percent-chromium-3 percent-silicon, and nickel 40-percent-chromium alloys, 29288
 cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminide coatings on IN-100 and via allows in high-velocity gases, 17714
 dyestuff color removal by ionizing radiation and chemical oxidation, 26410
 fretting of secondary-sealing candidate materials in air temperature to 816° C, 23683
 gamma induced low temperature oxidation of textile effluents, study, 30193
 mechanisms of pyrolysis, oxidation, and burning of organic materials, 23706
 of carbon at high temperatures, reaction-rate control or transport control, 23679
 oxidation at through-hole defects in fused slurry silicide coated columbium alloys FS-85 and Ch-752, 31635
 oxidation ditch sewage waste treatment process, 21540
 oxygen diffusion in wet air oxidation processes, 23875
 photochemical methods for purifying water, 20206
 pyrites in chlorinated solvents, 20200
 recovery of mercury from cinnabar ores by electrooxidation, 30428
 resistance of selected mechanical carbons at 650° C in dry flowing air, 32478
 structural-kinetic study of oxidizability of nickel-chromium based alloys, USSR study, 26569
 thermal degradation, thermal oxidation and thermal analysis of high polymers, 4 literature survey, 27417
 Oxides, *see* Manganese oxides.—Names of oxides, e.g. Uranium oxides.
 Oxidizers, *see* Oxidizing agents.
 Oxidizing agents, reference method for measurement of photochemical oxidants, guidelines for development of quality assurance program, 31271
 Oxon, Maryland, Oxon Hill children's farm, 30547
 Oxygen:
 ASRDI oxygen technology survey—
 cleaning requirements, procedures, and verification techniques, 23676
 thermophysical properties, 17706

Oxygen—Continued

- anger analysis of oxygen and sulfur interactions with various metals and effect of sliding on these interactions, 30461
- chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-argon flames, 25500
- coolant-side heat-transfer rates for hydrogen-oxygen rocket and new technique for data collection, 25527
- development of dissolved oxygen criteria for freshwater fish, 28791
- dissolved oxygen, water quality standards criteria, 20224, 20861-862
- hyperbaric oxygen breathing on rate of ethanol metabolism in man, studies on effect, 29197
- influence of atmosphere of molecular hydrogen upon evolution of oxygen by leaves of *Tradescantia fluminensis* Vell, 23539
- laboratory evaluation of dissolved oxygen analyzers, 22115
- liquid densities, 25554
- measurement of salt-wedge excursion distance in Duwamish River estuary, Seattle, Wash., by means of dissolved-oxygen gradient, 20358
- methemoglobin formation in humans during exposure to hyperbaric oxygen in standard Navy decompression treatment table, 25403
- minimum extinguishant and maximum oxygen concentrations for extinguishing coal dust-air explosions, 31594
- model 1131, dissolved oxygen analyzer, 22111
- model minus dom, dissolved oxygen monitor, 22110
- model 735, dissolved oxygen analyzer, 22109
- oxygen and sulfur interactions with clean iron surface and effect of rubbing contact on these interactions, 29290
- oxygen diffusion in wet air oxidation processes, 23875
- problems of space biology, tissue oxygen under extreme flight factors, 31659
- radical species profiles for methane-oxygen-argon flames, 30439
- study of carbon dioxide-carbon reaction by oxygen exchange, 29203
- supplementary bibliography of kinetic data on gas phase reactions of nitrogen, oxygen, and nitrogen oxides, 26699
- use of oxygen for reducing fatigue of man in flight, USSR study, 27626
- Oxygenates, oxygenates in automotive exhaust gas, estimation of levels of carbonyls and noncarbonyls in exhaust from gasoline fuels, 28649
- Oysters:
 - national survey of oyster industry's problems, 29378
 - protecting consumer from potentially harmful shellfish (clams, mussels, and oysters) GAO report, 26483
- Ozarks region, some oil phases in Missouri Ozarks have similar site indexes for oaks, 28960
- Ozarks Regional Commission:
 - economic development plans, 28241A
 - press releases, 18805
- Ozaukee County, Republican Party, *see* Republican Party of Ozaukee County.
- Ozaukee Unit of Republican Women, annual report, 22881
- Ozone:
 - distribution of total content of atmosphere according to satellite observations, USSR study, 21856
 - pilot plant for tertiary treatment of wastewater with ozone, 26414
 - variations in stratospheric circulation and ozone during selected period, 22419
 - vertical transport by thunderstorms, observations, 27800

P

- P series, Federal Power Commission, 28870
- P&SA, *see* Packers and Stockyard Administration.
- P.U.L.S.E., *see* Political Unity of Leaders in State Education.
- PA series, 15480-481, 16608-611, 19121-127, 20922-926, 22344-351, 24137-139, 25828-832, 26943, 28009-14, 29629-633, 30710-714, 31920
- Paarlberg, Don, addresses, Jan. 22, 1973, 26932
- PAC of N. Dak. RECS, Political Action Committee, *see* Political Action Committee (PAC) of N. Dak. RECS.
- Pacesetter for safety, 21811
- Pacesetting year for personnel management, U.S. Civil Service Commission, annual report, 16818, 16939
- Pacific area:
 - climatological data, 18106
 - East Asian and Pacific series, 16496, 17855, 20787, 22258, 25726, 29529
 - Pacific chart supplement, U.S. Government flight information publication, 19028
- Pacific Coast:
 - coast pilots—
 - Alaska, Cape Spencer to Beaufort Sea, 26764
 - Alaska, Dixon Entrance to Cape Spencer, 25615
 - California, Oregon, Washington, and Hawaii, 26765
 - germination and early growth of coastal tree species on organic seed beds, 20315
 - light list, 24274
 - marine weather services chart—
 - Eureka, Calif. to Canadian border, 29418
 - Eureka to Point Conception, Calif., 29419
 - Mexican border to Point Conception, Calif., 29424
 - nautical chart catalog, 29380
 - neogene marine mollusks of Pacific Coast of North America, 1797-1969, bibliography, 23329
 - North America and Asia, tidal current tables, 17769
 - revised list of parasites from sea mammals caught off west coast of North America, 20698
 - west coast corridor feasibility study act, report, 31081
- Pacific Gas and Electric Company, wage chronology, 17666
- Pacific herring, *see* Herring.
- Pacific Islands:
 - Cenozoic fossil mollusks from western Pacific Islands; gastropods (*Turritellidae* through *Strombidae*), 21720
 - light list, 24274
 - sailing directions, 27418A
- Pacific Islands Trust Territory, *see* Trust Territory of Pacific Islands.
- Pacific Northwest, *see* Northwest (U.S.).
- Pacific Northwest Environmental Laboratory, PNERL working papers, 31302
- Pacific Northwest Forest and Range Experiment Station:
 - publications, lists, 18582, 20289, 28931
 - recent reports of interests to plant ecologists, 23281
- Pacific Northwest Regional Commission, Federal Cochairman, nomination of Jack O. Padrick, hearing, 20011
- Pacific Northwest Water Laboratory, quarterly progress report, 18744
- Pacific Ocean:
 - bathymetric and magnetic data from northeast Pacific 40° to 58°N, 125° to 160°W, 29391
 - Central and Western, development of tuna and other fisheries, report, 15835
 - Central, Western and South, development of tuna and other fisheries, law, 19379

Pacific Ocean—Continued
distribution of forage of skipjack tuna (*Euthynnus pelamis*) in eastern tropical Pacific, 22103
eastern tropical, EASTROPAC atlas, 23782, 29373
fish larvae collected from northeastern Pacific Ocean and Puget Sound during April and May 1967, 23808
Foraminifera of North Pacific Ocean, 27570
marine fishes of North Pacific (poster), 20684
marine weather services chart, Hawaiian waters, 29422
North Pacific, aircraft accident report, 23856
North Pacific fisheries act, amend—
hearings, 15881
law, 19405
report, 19872
north, sailing directions, 28626, 31201
northeastern—
fisheries off United States Coast, agreement with Union of Soviet Socialist Republics, 26882
fishing operations, agreement with Union of Soviet Socialist Republics, 26881
processing EASTROPAC STD data and construction of vertical temperature and salinity sections by computer, 22100
review of literature on development of skipjack tuna fisheries in central and western Pacific Ocean, 26771
western, lights and fog signals, list, 27418B
wind recorder, current meter and thermistor chain measurements in northeast Pacific, 22094
see also Pacific SEAMAP (scientific exploration and mapping program).
Pacific Oceanographic Laboratories, NOAA technical report, ERL-POL series, 17775, 22094, 25624, 26767, 27801, 29391
Pacific salmon, see Salmon.
Pacific SEAMAP (scientific exploration and mapping program):
1961-70 data, bathymetry, magnetics and gravity, 17778-780, 23810-813
Pacific slope basins, see Pacific States.
Pacific Southwest Forest and Range Experiment Station, publications, lists, 18583, 28934
Pacific States:
annual survey of manufactures, statistics for States, standard metropolitan statistical areas, large industrial counties, and selected cities, Pacific division, 25896
communication and control systems, mid-Pacific region, field review of maintenance, 31777
electrical equipment, Central Valley project, mid-Pacific region, field review of maintenance, 31779
Pacific slope basins—
California, 21743
North, surface water quality, 16116
Oregon and lower Columbia River basin, surface water supply, 16117
surface water data, 23385
Pacific Tropical Botanical Garden:
trustees, increase number—
law, 19382
report, 17183
Packaged fishery products, see Fish and fisheries.
Packages, package sorption device system study, 28812
Packaging:
converted flexible packaging products, current industrial reports, 18194A
costs of dry whole milk packaged for household use, 31916
dangerous materials for military aircraft transportation, Air Force manual, 29652

Packaging—Continued
Fair packaging and labeling act, text, 26171
guiding principles for responsible packaging and labeling, 23715
industry report, 18162
model state packaging and labeling regulation, 17733
radioactive materials, marking and labeling of items, etc., military standard, 25024
requirements code, military standard, 18628, 26337
role of packaging in solid waste management, 1966-76, 23200
savings attainable by revising packaging in Defense Dept, 27551
tapes, methods of inspection, sampling, and testing, Federal standard, 16064
waste not, want not [poster], 23204
wrapping and packaging machinery, Federal item identification guide, 27402
see also Packing.
Packers, packers and stockyards resumé, 18747
see also Packing industry.
Packers and Stockyard Administration:
appropriations, 1974, hearings, 28384
P&SA research reports, 29442
Packing:
national meat-packing waste management research and development program, 26418
packaging for mailing, 29570
parts and equipment, procedures for packaging and packing, military standard, 25017
wrapping and packaging machinery, Federal item identification guide, 27402
see also Packaging—also names of articles packed.
Packing industry, Packers and stockyards act, fair play in marketplace, 19124
Packing materials, Federal item identification guide, 27392
Packinghouses, potato packinghouses, guidelines for plant layout, 26937
Padre Island National Seashore:
additions to National Wilderness Preservation System, 23000
wilderness recommendation, 27829
Padrick Jack O., nomination, hearing, 20011
Page, Louise, food and your weight, 30701
Page, Robert A., ground motion values for use in seismic design of trans-Alaska pipeline system, 21713
Pages, see Messengers.
Pagoda Point, Burma, summary of synoptic meteorological observations, Southeast Asian coastal marine areas, 23891
Pahute Mesa:
geohydrology of eastern part of Pahute Mesa, Nevada test site, Nye County, Nev., 20350, 30274
seismicity of Pahute Mesa area, Nevada test site, 23372
Palls, steel shipping, current industrial reports, 18194, 21056, 25928
Paint:
current industrial reports, 18194
development of NBS standard reference material 1579 powdered lead-based paint, 26697
estimates of nature and extent of lead paint poisoning in United States, 20649
Federal test method standard, 23251
has your child had lead test yet? 28246
hazard elimination procedures for leaded paints in housing, 27734
Lead-based paint poisoning prevention act—
amend. reports, 28451, 32062
text, 24867
lead paint poisoning in children, problem in your community? 31993
lead paint poisoning, watch out for, Spanish edition, 25401

INDEX 1973

- Paint—Continued
old paint can poison your children (poster), 28248-249
painting standard for broad gauge freight cars, USSR study, 30358
- Painting:
apprenticeship and training standards, 15500
outside wood surfaces, wood finishing, 21654
- Painting books:
good foods coloring book, 31920
there lived a wicked dragon, environmental coloring book, 30199
- Paintings, Winslow Homer, selection from Cooper-Hewitt collection, Smithsonian Institution, 23967
- Paints, *see* Paint.
- Palute Indians:
Burns Colony, Oreg., lands, hold in trust—law, 19420
reports, 16977, 19903
general information, 31470
land allotments from Navajo and Hopi Indians—
hearing, 28548
reports, 15687, 16953
- Pajalleh, Walter, sand and gravel, 25484
- Pajamas, boys' shirts, robes, and pajamas, I. Jablow and Company, Inc., Philadelphia, Pa., Tariff Commission, report, 29548
- Pakistan:
accessions list, Library of Congress American Libraries Book Procurement Center—
Karachi, 17950, 29178
Karachi-Dacca, quinquennial index 1967-71, 21919
agricultural commodities, agreement, 17872, 20813, 22264, 24012, 25742, 27911, 27925
background notes, 25719
debt rescheduling under certain agricultural commodity and credit and loan agreements, agreements, 17905
economic trends and their implications for United States, 16166, 29093
educational foundation and financing of exchange programs, agreement, 25740
foreign trade regulations, 28640
India, Pakistan and Bangladesh, current information, supplement, 17855
issues in United States foreign policy, 29536
mineral industry, minerals yearbook chapter, 16321A
trade in cotton textiles, agreement, 16518
- Paleobiogeography, Jurassic paleobiogeography of Alaska, 29025
- Paleobiology, Smithsonian contributions to paleobiology, 20762, 23959-961, 30632
- Paleocene period:
Harebell formation (upper Cretaceous) and Pincon conglomerate (uppermost Cretaceous and Paleocene), northwestern Wyoming, 27568
sedimentary petrology and paleocurrents of Harebell Formation, Pincon Conglomerate, and associated coarse elastic deposits, northwestern Wyoming, 21731
- Paleoecology:
Pennsylvania carbonates, paleoecology, and rugose colonial corals, north flank eastern Brooks Range, Arctic Alaska, 21733
stratigraphy, morphology, and paleoecology of fossil necary herd from western Kentucky, 23366
- Paleomagnetism, *see* Terrestrial magnetism.
- Paleontology:
contributions to paleontology (series), 26507
Oligocene molluscan biostratigraphy and paleontology of lower part of type Temblor formation, Calif., 27572
- Paleozoic era:
Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution, 25257
upper paleozoic Madera Group in Manzanito Mountains, N. Mex., 25253
- Pallets (materials handling):
Appalachian hardwoods for pallets, correlation between service and laboratory testing, 20304
evaluation of hydrohandling system for sorting and sizing apples for storage in pallet boxes, 19109
pallet bins, farm buildings plans, 20921
palletized unit loads for 40' x 48' pallets, military standard, 23104
- Palmby, Clarence D., remarks, May 18, 1972, 20910
- Palmer, Frank M., evaluation of redesigned XW18 membrane and accessories, 27446
- Palo Pinto County Republican Executive Committee, annual report, 22856
- Palsy, cerebral, infancy and childhood, collaborative study, bibliography, 26750
- Palynology:
palynology of upper Campanian (Cretaceous) Judith River Formation, north-central Montana, 29022
stratigraphic distribution of significant Eocene palynomorphs of Mississippi embayment, 26507
- Pamir-Alai Mountains, high altitude physiology of man in Tien Shan and Pamirs, some results of studies, USSR study, 23550
- Pa Mong project:
phase 2, 23926
phase 2—
drainage, 31776
economic, agricultural, social, and financial analysis, 31776
geology, 23925
hydrology and climatology, 23924
land resources, 23923
plans and estimates, 31776
- Pamphlets:
catalog of copyright entries, 23078, 27373, 30072
see also names of departments, etc. issuing pamphlets.
- Pan Alaska Airways, Ltd., aircraft accident, 25643
- Pan American World Airways, Inc., accident report, 16421
- Panama:
background notes, 25720
Canal Company, annual report, 25888
economic trends and their implications for United States, 20433
economy, basic data, 15620
foreign economic trends and their implications for United States, 29112
geology and paleontology of Canal Zone and adjoining parts of Panama, description of Tertiary mollusks, 29018
mineral industry, minerals yearbook chapter, 25429
prevention of foot-and-mouth disease and rinderpest, agreement, 22275
records of Department of State relating to political relations between Panama and other states, 1910-1929, pamphlet describing microfilm, 27718c
synerisis, dynamics of health, analytic series, on interactions of health and socioeconomic development, 17552
United Nations Security Council meeting, hearing, 28411
United States relations, hearing, 26161
withholding of contributions for educational insurance, agreement, 24007
- Panama Canal:
appropriation 1974—
authorization, report, 29995
hearings, 27181
law, 32016
report, 30977

- Panama Canal—Continued
 briefings on treaty negotiations, hearing, 28425
 code of Federal regulations, 31336
 new Panama Canal treaty (Address), 17861
 review (periodical), 21035, 31938
 treaties affecting operations, hearings, 19789, 21268
 Panama Canal Company, *see* Panama Canal
 Panama Canal Zone, *see* Canal Zone—Panama Canal
 Pananos, William J., introduction to technological forecasting, 26381
 Panel boards (electricity), *see* Control boards
 Panels and panelling:
 changing market for hardwood plywood stock panels, 21669
 insert arrangements for MIL-C-83733 rack to panel connectors—
 shell size A, military standard, 20079
 shell size B, military standard, 20080, 28618
 some views on large structural particle-board panels, 23282
 Pandim, Port, India, summary of synoptic meteorological observations, southwest Asian marine areas, 23892
 Pants, *see* Trousers
 PAO series, 31298-301
 Paper:
 current industrial reports, 18194
 effective dry methods of separating thermoplastic films from wastepapers, 32342
 fiber bonding and tensile stress-strain properties of earlywood and latewood hand-sheets, 32339
 Government specification standards, 18404, 21300, 26194, 29946
 industry report, 18834
 Kraft effluent color characterization before and after stoichiometric lime treatment, 25113
 kraft pulping effluent treatment and re-use, state of art, 25117
 Kraft wrapping paper from Canada, determination of no injury, etc., Tariff Commission report, 24064
 one-inch perforated paper tape for information interchange, 29308
 paper and paperboard, Federal item identification guide, 25006
 pulp and paper industries and size reduction machinery, industrial plant equipment handbook, 26308
 pulp and paper industry, air pollution aspects of emission sources, bibliography with abstracts, 29638
 steam stripping odorous substances from kraft effluent streams, 28810
 see also Photographic paper
 Paper birch, *see* Birch
 Paper cutters, *see* Paper cutting machines
 Paper cutting machines, sheet-fed offset printing presses and industrial paper cutters, former workers of Dayton, Ohio, plant of Harris-Seibold Division, Harris-Intertype Corp., Tariff Commission report, 27947
 Paper mills:
 kraft pulping effluent treatment and re-use, state of art, 25117
 methods for pulp and paper mill sludge utilization and disposal, 31279
 state-of-the-art review of pulp and paper waste treatment, 24620
 Paper pulp, *see* Pulp—Wood pulp
 Paper work, *see* Paperwork (office practice)
 Paperboard:
 current industrial reports, 18194
 industry report, 18834
 paper and paperboard, Federal item identification guide, 25006
 see also Pulpboard
 Paperboard containers, *see* Containers
 Papers, *see* Records
 Paperwork (office practice):
 Federal paperwork burden for small business, hearings, 17304, 26292
 Federal paperwork burden, investigation, report, 26243
 recordkeeping requirements and guide to tax publications, 23482
 reporting and other paperwork requirements applicable to industrial issuers in securities industry, 23952
 Paprocki, Thomas H., flight test and evaluation of heliport lighting for IFR, 24055
 Papua, mineral industry, minerals yearbook chapter, 20540
 Par value modification act, *see* Dollars
 Parachute Creek, X-ray mineralogy of Parachute Creek member, Green River formation, in northern Piceance Creek basin, Colo., 30282
 Parachute jumping, *see* Parachuting
 Parachutes:
 aerial pick-up, delivery, and recovery, Federal item identification guide, 23098, 26330
 drag characteristics of disk-gap-band parachute with nominal diameter of 1.65 meters and Mach numbers from 2.0 to 3.0, 20601
 flight test of erectable space craft used for decelerator testing at simulated Mars entry conditions, 20603
 parachute lifts, Federal aviation regulations, 18295
 Parachuting, parachute jumping, Federal aviation regulations, 18296
 Paradiso, John L., mammals imported into United States in 1970, 25717
 Paraguay:
 cooperation in combating illicit international traffic in narcotics, agreement, 31864
 economic trends and their implications for United States, 29108
 military assistance, deposits under Foreign assistance act, agreement, 17906
 other South American areas mineral industry, minerals yearbook chapter, 16299
 Parahydrogen, *see* Hydrogen
 Paraiba, Brazil, origin of mineralized water in Precambrian rocks of upper Paraiba basin, Paraiba, Brazil, 16112
 Parallaxes:
 improvement of absolute distance estimation under water, use of monocular motion parallax, 31582
 trigonometric parallaxes of faint stars, 2d catalog, 29431
 Parallel plate transmission line Pockels cell, 23579
 Paralyzed Veterans of America:
 legislative recommendations, 1973, hearings, 27367
 recommendations 1973, hearings, 26183
 Paramagnetic resonance, *see* Magnetic resonance
 Parameters:
 accuracy requirements for measurement of meteorological parameters which affect artillery fire, 22410
 adaptation of NRL acoustic research tank facility for experiments in parametric sonar, with preliminary results, 32525
 applications of dual parameter analyzers in solid-state laser tests, 20979
 characteristics of turbulent diffusion parameters as related to stability, 20980
 design parameters for torsion of sandwich strips having trapezoidal, rectangular, and triangular cross sections, 26475
 effect of sheet thickness on fracture resistance K_{1c} parameter for titanium alloys, 27845

Parameters—Continued

- E1893L, influence of several technological parameters on strength properties, USSR study, 21886
- experimental and analytical determination of stability parameters for balloon tethered in wind, 32472
- extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687
- leaf mesophylls of 20 crops, their light spectra, and optical and geometrical parameters, 24146
- longitudinal aerodynamic parameters of Kestrel aircraft (XV-6A) extracted from flight data, 29295
- mathematical model for standing-wave acoustic parametric source (SWAPS), 31758
- methane diffusion parameters for sized coal particles, 21952
- review of plane-stress fracture mechanics parameter K_{IC} determined using center-cracked tension specimen, 30589
- spectroscopic examination of parameters of turbulent plasma, 22457
- statistical analysis of meteorological parameters during fog at 45 U.S. airports, final report, 24029
- systemizing information to identify and relate behavioral and physical design parameters, 25069

Parasites:

- arthropod and nematode parasites, parasitoids and predators of Acrididae in America north of Mexico, 28024
- releases of *Bracon kirkpatricki* (Wilkinson) and *Chelonus Blackburni* Cameron for pink bollworm control in Arizona, 28017
- revised annotated list of parasites from sea mammals caught off west coast of North America, 20698

- Parcel post, agreement and related documents, 25739

Parents:

- behavior modification in child and school mental health, annotated bibliography on applications with parents and teachers, 23750
- education for parenthood, 26361
- home-based child development program resources, bibliography, 30868
- nativity and parentage composition of families of foreign stock for United States, 28129
- Operation Tripod toward rehabilitation involvement by parents of the deaf, workshop, Memphis, Tenn., 31788
- parental involvement in title 1 ESEA, 23140
- parents and beginning readers (series), 28670-677
- parents, are your walls poisoning your children, 28250
- reading readiness, what parents should know about it, 28672
- relationships among parent ratings of behavioral characteristics of children, U.S., 22029
- stop, look, listen, children ahead, play of Headstart programs, 16119
- tax information for students and parents, 20415

- Paris, France, agreement on ending war and restoring peace in Vietnam, international conference hearings, 26157

- Park rangers, ranger 'rithmetic, 20297

- Parke, Robert, Jr., aspects of population growth policy, 32532

- Parker, C. D., cannery waste treatment by anaerobic lagoons and oxidation ditch, 25107

- Parker, D. S., sludge processing for combined physical-chemical-biological sludges, 31281

- Parker, H. Dennison, solar radiation affects radiant temperatures of deer surface, 16080

- Parker, Homer W., oxidation ditch sewage waste treatment process, 21540

- Parker, Marjorie H., nomination, hearing, 15885

- Parker, R. O., Jr., oxidation detector system for recovering internally tagged menhaden, genus *Brevortia*, 22107

- Parker-Davis project, electrical equipment, region 3, field review of operation and maintenance, 31785

- Parking areas, report on CBD parking, 16041

- Parking of vehicles:
 - creating Select Committee to regulate parking on House side of Capitol, report, 26070
 - parking systems analysis, guide, 25144
 - report on CBD parking, 16041

- Parkinsonism, Parkinson's disease & related disorders, citations from literature, 18748

- Parkinson's disease, *see* Parkinsonism.

- Parks, 2d annual national symposium on park, recreation, and environmental design, proceedings, 22186

- see also* National parks—*also* names of parks.

- Parlett, Lysle P., investigation of effects of variations in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configurations, 32470

- Parmelia, *see* Lichens.

- Parnell, C. B., Jr., particulate emissions of cotton gin in Texas stripper area, 26945

- Parnes, Herbert S., pre-retirement years, labor market experience of men, longitudinal study, 23581

Parole:

- experimental study of differential effects of parole supervision for group of adolescent boys and girls, summary report, 25365

- Federal and State parole systems, hearings, 15763

- print additional copies, reports, 28324, 28458

- legislation, amend, hearings, 26277

- prisons, prison reform and prisoners' rights, Michigan, hearing, 15764

- Parris, Stanford E., Parris Campaign Committee, annual report, 24322

- Parris Campaign Committee, annual report, 24322

- Parsons, Kans., Labette and Little Labette Creeks, special flood hazard information, 28775

- Partial cutting practices in old-growth lodgepole pine, 16092-93

- Particle board, *see* Pulpboard.

- Particles:
 - BEAMR, an interactive graphic computer program for design of charged-particle beam transport systems, 31640
 - development of X-ray fluorescence spectroscopy in elemental analysis of particulate matter, evaluation of commercial multiple crystal spectrometer instruments, 31273
 - effect of fuel additives on chemical and physical characteristics of particulate emissions in automotive exhaust, 31275
 - feasibility study of in-situ source monitoring of particulate composition by Raman and fluorescence scatter, 30185
 - heat transfer coefficients of dilute flowing gas-solids suspensions, 29261
 - meteoroid impacts on Mars and secondary particle environment, 20608
 - on natural redistribution of surface contamination, 24199
 - plasma Bremsstrahlung from relativistic physics, 20992

Particles—Continued

- qualitative study of complete set of solutions of differential equation of motion of test particle in equatorial plane of Kerr gravitational field, 27717
- radiation crosslinking of polymers with segregated metallic particles, 25872
- reference methods for determination of suspended particulates in atmosphere, guidelines for development of quality assurance programs, 31271
- role of gas-surface interactions in reduction of OGO 6 neutral particle mass spectrometer data, 27714
- soluble particulates in ice from site 2, 31236
- structure of space charge field of an ellipsoidal cluster of charged particles, 22462
- see also* Alpha particles.
- Particulate emissions of cotton gin in Texas stripper area, 26945
- Partners in exchange, 16500
- Partnership between accounting profession and SEC (address), 30623
- Partnership for older Americans, 27978
- Partnerships:
 - creative partnerships, Government and professional services, conference proceedings, 31675
 - income and losses, tax information, 21829
- Parts:
 - brass wind musical instruments, Tariff Commission report, 24056
 - contractor parts control and standardization program, military standard, 17336
 - electrical connector parts, Federal item identification guide, 24999
 - parts and equipment, procedures for packaging and packing, military standard, 25017, 28610
 - see also* Repair parts.
- Pase, Charles P., litter production by oak-mountainmahogany chaparral in central Arizona, 17518
- Pasko, Thomas J., jr., effect of welding on fatigue life of high-strength reinforcing steel used in continuously reinforced concrete pavements, 31326
- Passaic, N.J., area wage survey, 17659
- Passaic River, basin above Little Falls, N.J., characteristics of water quality, and streamflow, 31400
- Passenger cars:
 - comparison of braking performance for 1973 passenger cars and motorcycles, 25581
 - importing a car, custom information, 23081
 - tires, comparison of tire reserve load for 1973 passenger cars, 23737
- see also* Automobiles.
- Passenger rates, reduced rates for elderly, handicapped, etc., hearings, 23049
- Passenger service, *see* Railroads.
- Passenger traffic:
 - Immigration and Naturalization Service, reports of passenger travel between United States and foreign countries, 21810
 - nationwide personal transportation study, reports, 32282-283
 - 1972 general overview of air carriers (remarks), 30872
 - Rail passenger service act, amend, hearings, 29925
 - U.S. and foreign countries, reports, 18475, 29085
 - see also* Air carriers.
- Passenger trains, *see* Railroads.
- Passengers:
 - air passenger fees, State and local charges, report, 15699, 15707, 17139
 - GPSS/360 computer models to simulate aircraft passenger emergency evacuations, 28093

Passengers—Continued

- Immigration and Naturalization Service, reports of passenger travel between United States and foreign countries, 21810
- in-flight safety of passengers and flight attendants aboard air carrier aircraft, special study, 29411
- travel between U.S. and foreign countries, reports, 18475, 29085
- Passer, Harold C.:
 - addresses, etc.—
 - Jan. 21, 1972, 28237
 - May 17, 1972, 28239
 - June 21, 1972, 28231
 - Sept. 14, 1972, 28238
 - Oct. 6, 1972, 22630
 - Oct. 18, 1972, 21108
 - Nov. 30, 1972, 22626
- Passport Office, State Dept., Chief, testimony, hearing, 15919
- Passports:
 - control acts, compilation, 22997
 - summary of statistics, 18943
 - visa requirements of foreign governments, costs, etc., 25768
 - you and your passport, 26856, 30644
- Pastumpic River:
 - flood plain information, 23170
 - floods, St. Johnsbury, Vt., 25088
- Past to remember/future to mold, American bicentennial 1776-1976, 15498
- Pasteurella pestis, *see* Bacillus pestis.
- Pasteurization:
 - cost benefit analysis of selected radiation pasteurized foods, 21020
 - steam injection pasteurization of grade A milk and milk products, 28918
- Pataha Bunchgrass Research Natural Area, general information, 21636
- Patel, Raman Lal, preparation of molecular sieve materials from anthracite, 29813
- Patent examiners, manual of procedure, 18607, 22189, 25667, 27861
- Patent Office:
 - administration, investigation, report, 17129
 - annual report, 25666
 - attorneys and agents registered to practice before U.S. Patent Office, 29443
 - classification definition series, 16456, 23902
 - official gazette—
 - patents, 18721
 - trademarks, 18722
 - press releases, 18776
 - rules of practice, 18880
 - trademarks, rules of practice with forms and statutes, 22191
- Patents:
 - cases, rules of practice, 18880
 - classification manuals, 17795, 18606, 31763, 32528
 - code of Federal regulations, 30225
 - collection of annotations of foreign patents relating to electroslag refining, USSR study, 16202
 - confidence in patent system's principles, operation and its effectiveness must be continued (remarks), 22190
 - cooperation treaty and annexed regulations, message from the President, 15801
 - examination and review of administration and statutes, subcommittee report, 26237
 - examining procedure, manual, 18607, 22189, 25667, 27861
 - general information, 30600
 - index 1971—
 - index to subjects of invention, 26792
 - list of patentees, 22187
 - International Bureau of Intellectual Property, U.S. participation, authorize—
 - law, 19441
 - reports, 17149, 19686

INDEX 1973

Patents—Continued

- obtaining information from patents, 29444
- official gazette of Patent Office, 18721
- patent abstracts—
 - international solid waste management, 23203
 - U.S. solid waste management, 23202
- patent documentation use in—
 - analyzing technological development trends, USSR study, 31523
 - medium-term technological forecasting, USSR study, 31524
- patent information and technological forecasting, USSR study, 31547
- Patent Office today, alive and well and looking ahead (address), 27862
- patent system, keystone to technological progress (remarks), 22636
- patents, trademarks, and licensing in Japan, 24288
- priority for inventors' certificates, international agreement, implement, law, 19353
- waiver petitions, findings of fact, etc., of NASA Inventions and Contributions Board, 18757
- Pathak, P. H., radiation from apertures in curved surfaces, 32456
- Pathology, chronic CO₂ toxicity, species difference in physiological and histopathological effects, 21930
- Patients:
 - hospital insurance sample, inpatient hospital utilization, 26834
 - inpatient health facilities as reported from 1969 MPI survey, 25569
 - inpatient utilization of short-stay hospitals in each geographic division, U.S., 22032
 - primary diagnosis of discharges from general hospital psychiatric inpatient units, 1970-71, United States, 23762
 - provisional patient movement and administrative data, State and county mental hospital inpatient services, 25594
 - services and activities offered to nursing home residents, U.S., 23725
 - State and county mental hospitals, age, sex, and diagnostic composition of resident patients, 23766
 - statutes relating to, investigation, report, 17129
 - uniform hospital abstract, minimum basic data set for patients, etc., 23723
- Paterson, N.J., area wage survey, 17659
- Pathogenesis, pathogenesis of skin bends, review, 16246
- Pathology:
 - atlas of meat inspection pathology, 16589
 - significance of cholinergic reactions in brain neuron pathology brought on by anticholinesterase intoxication, USSR study, 20458
- Patients:
 - average length of stay in short-stay hospitals, demographic factors, 1968, United States, 27751
 - differential utilization of psychiatric facilities by men and women, United States, 29365
 - inpatient utilization of short-stay hospitals by diagnosis, 1968, United States, 27750
 - medicare, inpatient hospital services, 1967-68, by region, 29499
 - utilization of psychiatric facilities by persons under 18 years of age, United States, 32499
- Paton, William J., performance characteristics of zinc-rich coatings applied to carbon steel, 31638
- Patric, James H., deforestation effects on soil moisture, streamflow and water balance in central Appalachians, 32343
- Patriek, D. M., radiographic, petrographic, and SEM evaluation of ballistically loaded clay, 31261
- Patrols, field evaluation of effects on hearing and general habitability of own-ship echoranging during submarine patrol, 20523
- Patt, Y. N., injections of neighborhood size 3 and 4 on set of configurations from infinite one-dimensional tessellation automata of two-state cells, 22405
- Pattern recognition:
 - digital processing of radiographic images, 29252
 - techniques for generation of control and guidance signals derived from optical fields of spacecraft for detection and identification of landmarks, 17692
- heavy duty vehicle driving pattern and use survey, final report, New York City, 30727
- optimization by pattern search method, 29562
- patterns for progress in aging, work study in social gerontology, 30689
- patterns of course offerings and enrollments in public secondary schools, 15994
- standard X-ray, diffraction powder patterns, 20635
- Patterson, David R., construction of an 8-mm time-lapse camera for biological research, 16087
- Patterson, Howard L., for Congress Committee, see Howard L. Patterson jr. for Congress Committee.
- Patterson, Kay O., foreign agriculture, 18379
- Patterson, W. B., Missouri Basin Inter-Agency Committee, minutes of 169th meeting, 20578
- Patton, George S., jr., many faces of George S. Patton, jr., 19140
- Patton, William W., jr.:
 - preliminary geologic investigations of western St. Lawrence Island, Alaska, 26503
 - reconnaissance geology of northern Yukon-Koyukuk province, Alaska, 27571
- Paul, Lee E., evaluation of potential reflection problems when using NAS model 3d display in vertical position in air route traffic control centers, 24039
- Paul J. Myers, Candidate for Office of United States Congressman, District No. 10, annual report, 22994
- Paulding County Republican Central Committee, annual report, 22840
- Pavells, George A., energy, natural resources and research in agriculture, effects on economic growth and productivity for U.S., 32187
- Pavements:
 - aircraft-pavement interaction studies, finite-element model of jointed concrete pavement on non-linear viscous subgrade, 31240
 - basic properties of pavement components, 30215
 - behavior of bituminous-stabilized pavement layers, study, 25095
 - determining presence, thickness, and electrical properties of stratified media using swept-frequency radar, 23181
 - effect of welding on fatigue life of high-strength reinforcing steel used in continuously reinforced concrete pavements, 31326
 - evaluation of structural layers in flexible pavement for aircraft traffic, 28782
 - fibrous concrete construction material for 70's, pavement and airfield applications, 25068
 - keyed joint performance under heavy load aircraft, 32200
 - measuring pavement roughness spectra using modified BPR roughometer with additional refinements, 31324
 - pavement distress identification and repair, 28694
 - rational pavement design, systems approach to airfield pavements, Allerton Park conference proceedings, 30163

- Pavements—Continued
responses of prototype flexible pavements subjected to repetitive and static loads, 31321
snow and ice control, search for new technology, 23187
stabilization for pavements, 31244
updated inventory of existing practices and solutions to slippery pavements, 17456
user requirements for airfield pavement system, 23157
- Paving, *see* Pavements.
- Paving breakers, Federal item identification guide, 30106
- Payloff, George C., proceedings on alcoholism emergency care services, 22078
- Pawnee Indians, general information, 31471
- Pawson, Walter W., selected U.S. crop budgets, yields, inputs, and variable costs, Southwest region, 27423
- Pawtucket, R.I., census of population and housing, 1970, census tracts, 19221
- Pay, *see* Pay, allowances, etc.—Salaries—Wages.
- Pay, allowances, etc.:
additional office allowance for certain officials of House of Representatives, report, 27141
allowances for making nonprofit projects operation and use of housing consultants, HUD, 29065
Armed Forces members, erroneous payments, waiver of claims—
law, 19388
report, 19866
armed services, special pay structure relating to members with special qualifications and skills, report, 19676
Federal employees, pay increase, message from the President, 19557
flight pay, prohibit to officers not assigned to operational flying report, 32052
Government Printing Office employees erroneous payments, waiver of U.S. claims, 29994
licensed vendor listing, postal service, uniform allowance program, 17921
nuclear-qualified naval surface and submarine officers and enlisted members who agree to reenlist, authorize special pay—
law, 19506
reports, 19675, 19939
opportunities to improve effectiveness and reduce costs of rental assistance housing program, 25243
pay and allowances of uniformed services pursuant to title 37, United States Code, 27191
privileges, pensions, and allowances for military personnel, USSR study, 25345
provide special pay to certain nuclear-trained and qualified enlisted members of naval service who agree to reenlist, and to revise pay structure of members of uniformed services, hearings, 17030
supplementary compensation in PATC industries, 27683
uniformed services, incentive pay to continue for period required for hospitalization and rehabilitation after termination of missing status—
law, 19414
report, 19891
veterans, educational assistance allowances, increase rates, law, 19469
Veterans' Administration hospital grade deescalation summary, 21294
- Pay Board, recodification, regulations, rulings and delegations of authority, 25545
- Pay rolls:
payroll operations of District of Columbia government need improvement, GAO report, 20337
State and local government, 18924
- Payloads, Skylab payload shroud jettison tests, 17720
- Payments:
agency heads to draw checks in favor of financial organizations to other classes of recurring payments, extension of authority, law, 16885
bank card and payments mechanism (remarks), 21565
concurrent receipt of public assistance money payments and old-age, survivors, and disability insurance cash benefits by persons aged 65 or over, 1951-72 and Feb. 1972, 22034
deficiency payment to certain wheat farmers in southern wheat belt, report, 19662
differentials in dollar payments and primary payment sources, discharges from non-Federal general hospital psychiatric inpatient units, United States 1970-71, 25595
evolution of payments mechanism, 23239
farm payment limitations, 17217
functions and responsibilities of Federal Reserve System and payments (remarks), 21588
Indian tribes, Alaskan native villages, payment listing by county, entitlement period 3—
3rd payment, 27956
4th payment, 30674
numbers of recipients and amounts of payments under medicaid and other medical programs financed from public assistance funds, 23728
operation of law permitting waiver of erroneous payments of pay, GAO report, 16099
2d payment, entitlement period 2, 24083
separation of services from assistance payments, guide for State agencies, 21121
social security beneficiaries under representative payment, 25704
supplemental payment entitlement periods, 1, 2, & 3, list, Revenue Sharing Office, 29567
under National school lunch act, 15732
- Payne, Brian R., accelerated roadbuilding on North Umpqua, economic analysis, 20317
- Payne, J. A., objective speech quality measurement of communication channel, 31990
- Payne, J. N., hydrologic significance of lithofacies of Cane River Formation or equivalents of Ark., La., Miss., and Tex., 27565
- Payne, Joseph E. Jr., foreign trade regulations of Thailand, 32183
- Payrolls, *see* Pay rolls.
- Payson Ban of Yavapai-Apache Indians, *see* Yavapai Indians.
- Paz Soldan Elsa B., relief, 28446
- PBS, *see* Public Broadcasting Corporation.
- PCA, *see* Production credit associations.
- PCB, *see* Biphenyl.
- PCMR, *see* President's Committee on Mental Retardation.
- Pea River:
flood plain information, Geneva, Ala., 32208
floods in Geneva, Ala., Choctawhatchee River, Pea River, Double Bridges Creek, 32236
- Peace:
blessed are the real peacemakers (address), 20902
challenges (address), 24280
ending war and restoring peace in Vietnam, agreement with Republic of Vietnam, Democratic Republic of Vietnam, and Provisional Revolutionary Government, 26869
food for peace program, extend hearings, 32071
shaping a durable peace, foreign policy for 1970's—
departmental edition, 26795
document edition, 26063

INDEX 1973

- Peace, American Commission to Negotiate, *see* American Commission to Negotiate Peace.
- Peace Corps:
act, amend—
hearing, 15738
reports, 15682, 26132, 27118, 28473
ACTION for businessman, Peace Corps, VISTA, 25810
agreement, continuing in force, agreement with Fiji, 20793
agreement with Oman, 31865
appropriations, 1973—
authorization hearing, 15738
hearings, 15717, 15869, 17025
law, 16877
appropriations, 1974—
additional, authorize, law, 30922
authorization—
hearing, 27323
reports, 26132, 27118, 28473, 32040
appropriations, 1974 and 1975, authorization, hearing, 24855
architects, city planners in Peace Corps and VISTA, 22308
biographic register, 30643
Black Americans and Peace Corps, one part of Action, 22307
nurses in action, career opportunities, 29591
Peace Corps in 1970's report of staff survey team, 24856
Peace Corps, one part of Action, 19093
place in agriculture through Peace Corps, 19097
U.S. interests and activities in Nepal, 25246
volunteer records, bi-annual statistical summaries, 20879, 22309, 30685
you'll be more than a teacher in Peace Corps or VISTA, parts of Action, 22306
- Peaches:
canned, standards for grades—
clingstone, 29606
freestone, 29607
caustic dry peeling of cling peaches to reduce water pollution, its economic feasibility, 22323
control of postharvest brown rot of sweet cherries and peaches with chemical and heat treatments, 19112
economic analysis of cling peach production with emphasis on harvest mechanization, 27986
nature and extent of retail and consumer losses in apples, oranges, lettuce peaches, strawberries, and potatoes marketed in Greater New York, 31915
postharvest wax-fungicide treatments of nectarines, peaches, and plums for reducing decay, reducing moisture loss enhancing external appearance, 26935
- Peak, George W., water supply outlook and Federal-State-private cooperative snow surveys for Wyoming, 19065
- Peanuts:
allotment, transfer to other farms because of floods, permit, report, 27153
costs of storage and selected services for farmers' stock peanuts in commercial facilities, 1971/72, 32188
detecting stored-product moths in peanut warehouse by using light traps and larval traps, 15474
market news, weekly report, 18750
need intensifies to amend legislation to reduce Government losses on peanut price-support program, GAO report, 26479
peanut loan and purchase program, 1973, proposed changes—
hearings, 28383
report, 28331
peanut market news, price summary/1944-72, 25815
stocks and processing, 16538, 18751
- Pearce, William R., remarks, May 21, 1973, 27898
- Pearl Harbor, pollution of navigable waters of Pearl Harbor and its tributaries, Hawaii, conference proceedings, 16028
- Pearl River and Valley:
basin, Mississippi and Louisiana, engineers report—
departmental edition, 20160
document edition, 19544
- Pears:
blight, 20909
canned Bartlett pears from Australia, Tariff Commission report, 25777
canned, standards for grades, 29612
marketing orders—
hearing, 17218
law, 19400
report, 19869
- Pearson, Carl A., cross-coupling computer for Oceanographer's Askania gravity meter, 25633
- Peat:
minerals yearbook chapter, 20569
nature and extent of peat deposits and possible effects of peat mining on manmade features near Mesalero, N. Mex., 23353
producers in United States, 30420
- Peavy, Bradley A., dynamic thermal performance of experimental masonry building, 32481
- Peavy, S. T., OMNITAB II segmentation structure for SCOPE operating system, 17740
- Pecan, American wood, 32308
- Pecarles, *see* Swine.
- Pecora, William T.:
nature, environmental yardstick, 20353
remarks, Mar. 17, 1972, 23474
- Pecos County, Tex., geology of Sierra Madera cryptoexplosion structure, 29019
- Pecos National Monument, general information, 31733
- Peculiarities of common deep point composite tapes, USSR study, 30370
- Pedone, Ronald J., financial statistics of CPS-qualified public radio stations, 1970 fiscal year, 15990
- Peele, Warren D., Federal Aviation Administration electromagnetic pulse [EMP] protection study, 26891
- Peeling, caustic dry peeling of cling peaches to reduce water pollution, its economic feasibility, 22323
- Pelner, H. Steffen, NBS special foreign currency program in Yugoslavia, 23713
- Pelagic amphipods, *see* Amphipods.
- Pelecypods:
freshwater sphaeriacean clams (Mollusca: Pelecypoda) of North America, 17435
freshwater unionacean clams (Mollusca: Pelecypoda) of North America, 31310
- Pell, Eva J., 1972 survey and assessment of air pollution damage to vegetation in New Jersey, 32271
- Pellets, world iron-ore pellet and direct-iron policy, 22649
- Pellini, W. S., criteria for fracture control plans, 22163
- Pembina, N. Dak., probable maximum precipitation and snowmelt criteria for Red River of the North above Pembina, and Souris River above Minot, N. Dak., 32509
- Pemcor, Inc.:
loudspeakers workers of Chicago, Ill., plant of Jensen Manufacturing Division, Pemcor, Inc., Tariff Commission report, 20831
television yokes, workers of Warrensville Heights, Cleveland, Ohio, plant of Pemcor, Inc., Tariff Commission report, 32597
- Peffa, Ricardo, turbulence characteristics at heights of 1.5, 4.0 and 16.0 meters at White Sands Missile Range, N. Mex., 20976
- Penaeld shrimps, *see* Shrimps.
- Penal institutions, *see* Prisons and prisoners.

Pendulum:

dynamic frictional moment of ball bearing of a pendulum suspension, USSR study, 16197

gyros, axis disturbance probability characteristics, bearing friction with forced base rotation, astatic gyro gimbal errors with drift, and horizontal pendulum energy dissipation, USSR study, 17620

use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressures, 29280

Penetrant inspection Inspector, qualification of inspection personnel, magnetic particle and penetrant, military standard, 20046

Penetration of waves into plasma at frequencies close to lower hybrid frequency, 22460

Peninsula Republican Women, Federated, annual report, 24618

Peninsular southeast Asia, bibliographic survey of literature, Burma, Cambodia, Laos, Thailand, 29680

Penitentiaries, see Prisons and prisoners. Penn, F. W., emission characteristics of aircraft auxiliary power unit, 25518

Penn Central Transportation Company: accident investigation report, 23950 and other railroads, financial failures perspective, analysis and prescriptions, 23055

crew consist labor-management dispute, hearing, 24866

financial collapse, staff report of Securities and Exchange Commission, 15761

labor dispute, hearing, 26282

railroad accident investigation, summary report, 20749

railroad accident report, 30570

railroad employee accident report, 32546-547

Pennsylvania:

census of business, 1967—

major retail centers, 16694

retail trade, 16700

selected services, 16711

census of housing, 1970, housing characteristics for States, cities, and counties, 16727

census of population, 1970, detailed characteristics, 22524

climatological data, 18107

Clothing Workers Political Committee for eastern Pennsylvania, annual report, 24350

coal, Pennsylvania anthracite in 1971, mineral industry surveys, annual, 23637

counties, population estimates, 28186

county business patterns, 30833

fish and food organisms in acid mine waters of Pennsylvania, 26402

Glard estate coal lands in Pennsylvania, 23965

income limits for rent supplement housing, 29077

mineral industry, minerals yearbook chapter, 16301

Mississippian stratigraphy of northwestern Pennsylvania, 20342

precipitation data, hourly, 18457

primary wood-product industries, 23309

regular income limits for sec. 235-236 housing, 29075

truck inventory and use survey, 19234

Pennsylvania anthracite, see Coal.

Pennsylvania Avenue Bicentennial Development Corporation, establish, hearings, 15747

Pennsylvania Avenue Development Corporation:

appropriations, 1973 supplemental, hearings, 26149

appropriations, 1974—

hearings, 28385, 31126

report, 29861

Pennsylvania Avenue Development Corporation—Continued

establish—

law, 19503

report, 19642

Pennsylvania Avenue National Historic Site:

development plan—

hearing, 19980

law, 19503

report, 19642

Pennsylvania Medical Political Action Committee, annual report, 24378

Pennsylvania Republican Congressional Dinner Committee, annual report, 27103

Pennsylvanian period, Pennsylvania carbonates, paleoecology, and rugose colonial corals, north flank, eastern Brooks Range, Arctic Alaska, 21733

Penry J. Kiffin, blood level determinations of antiepileptic drugs, clinical value and methods, 23770

Pensacola, Fla.:

flood plain information, Gulf of Mexico, Big Lagoon, Santa Rosa Sound, Pensacola Bay, East Bay, Escambia and Santa Rosa Counties, Fla., 21449

housing market analysis, 23220

Pensacola Bay, flood plain information, 21449

Pensions:

benefits and beneficiaries under public employee retirement systems, 16481

digest of selected pension plan, 26630

employee pension and welfare benefit plan,

strengthen and improve protection and

interests of participants, report, 27291

estimates of cost of vesting in pension

plans, 29900

grant and pension regulations for USSR

servicemen, handbook, 30361

Individual retirement benefits act, summary

of administration's pension proposal, 17110

laws, compilation, 21149

liberalization of disability and death pension, reports, 19916, 31113

mandatory vesting provisions proposed for

private pensions plans, study of cost, 24954

new rates of disability and death pension

and dependency and indemnity compensation, 17308

100 largest retirement plans, 1960-71, 32418

pension plan terminations, 1972, study, 31886

pension provisions affecting employment of

older workers, 29174

pension trust procedures and guides for

integration of qualified plans, 20403

pensions, profit sharing, and deferred compensation, panel discussions, 26188, 27251

private pension plan reform—

hearings, 31140, 32145

report, 31120

summaries of testimony on proposals, 30017, 30022

private pension plans (speech), 32421

private pension plans, statistical analysis

of major characteristics, 17290

private welfare and pension plan study,

report of hearings on pension plan terminations, 17285

private welfare and pension plans, investigation, report, 19760

privileges, pension, and allowances for military personnel, USSR study, 25345

public safety officers or their surviving dependents, Federal minimum death and

dismemberment benefits, reports, 21177, 21184

rating specialists, legal, compensation and

pension service, training guide, 24091

INDEX 1973

- Pensions—Continued
 recomputation and other retirement legis-
 lation relating to Armed Forces—
 hearings, 21208
 subcommittee report, 21209
 Retirement benefits tax act, related ma-
 terial, 29940
 bill text, 24953, 30062
 hearings, 24952
 selected plans under collective bargaining,
 digest, 18230
 service-connected disabled veterans, in-
 crease compensation payments, hear-
 ings, 15784
 social security pensions, agreement with
 Poland, 27912
 State old age pensions (speech), 32423
 survivor benefit plan for retired members
 of uniformed services, 31493
 tax information on pensions and annuities,
 23485
 tax proposals affecting private pension
 plans, summary of testimony, 21293
 teachers retirement benefits, District of
 Columbia, increase—
 law, 19448
 report, 19928
 Veterans' Administration proposed re-
 vision of schedule for rating disabili-
 ties, 27372
 veterans, disability and death pension, in-
 crease rates, report, 32066
 veterans, economic validation of rating
 schedule, 21293
 veterans of World War I, provide pay-
 ment, hearings, 15785
 veterans, rates relating to, from 1917 to
 present, 26181
 veterans, service-connected compensation,
 increase, law, 16870
 welfare and pension plan legislation, hear-
 ings, 31020
 welfare and pension plan programs, au-
 thorization and expenses, report, 26111
 Welfare and pension plans disclosure act—
 administration, 1972, report of Secre-
 tary of Labor, 27659
 revise, hearings, 31020
 World War I pension act—
 hearing, 21388
 report, 19919
see also Civil service pensions.
- Penzien, John P., plot command language
 translator program, 17454
- People for Antilla Committee, annual re-
 port, 24676
- People for Kennedy Committee, annual re-
 port, 24634
- People for Roe Committee, annual report,
 24453
- People, land and water, 23927
- People's Democratic Republic of Yemen, *see*
 Yemen.
- Peoples' Friendship University, Moscow
 USSR, development of People's Friend-
 ship University in Moscow, 26360
- People's Republic of China, *see* China.
- Pepin County Democrats, annual report,
 22989
- Pepitone, Byron V., nomination, hearing,
 26252
- Pepper, L., analyses of check-test results of
 pozzolan samples, 25098
- Pepper, Stephen V.:
 adhesion and transfer of polytetrafluoro-
 ethylene to metals studied by Auger
 emission spectroscopy, 20613
 new technique for auger analysis of sur-
 face species subject to electron-induced
 desorption, 27716
- Pepitization, preparing magnetic fluids by
 pepitizing method, 21960
- Perception:
 lack of bilateral generalization of adaption
 to auditory rearrangements, 31578
- Perception—Continued
 speech discrimination in noise and hearing
 loss at 3000 hertz, 23632
 visual field dependency in erect and supine
 positions, experimental investigation,
 17715
see also Sight—Thresholds (perception).
- Perceptual-motor performance, *see* Ability.
- Perchloroethylene, *see* Tetrachloroethylene.
- Percussive drilling, *see* Drilling.
- Percy, Charles H., economic and political
 developments in Far East, 27322
- Perdido River and Valley, Choctawatchee-
 Perdido basins, plan for development of
 land and water resources of southeast river
 basins, 17924
- Pere Marquette River, Notapecacon, proposal
 for scenic river, 28933
- Pérez Farfante, Isabel, western Atlantic
 shrimps of genus *Solenocera* with descrip-
 tion of new species (Crustacea, Decapoda,
 Penaeidae), 32552
- Performance (law):
 evaluation of Office of Economic Oppor-
 tunity's performance contracting experi-
 ment, in field of education, 27548
- Performance (periodical), 18753
- Performance (psychology):
 automotive mechanics, occupational per-
 formance survey, 29357
 handbook on performance objectives writ-
 ing, title 1, Elementary and secondary
 education act of 1965, 26365
 instructional strategies for performance
 oriented technician course, 28034
- Performance characteristics of zinc-rich
 coatings applied to carbon steel, 31638
- Performance comparison of labeling algo-
 rithms for calculating shortest path trees,
 29323
- Performance concept in buildings, opening
 addresses, rapporteur reviews, and dis-
 cussions, 16359
- Performance contracts, *see* Performance
 (law).
- Performance data, new 1973 passenger cars
 and motorcycles, 23738
- Performance ratings, *see* Efficiency ratings.
- Performance tests (engineering, mechanical,
 etc.):
 analyses of check-test results of pozzolan
 samples, 25098
 safety and performance tests for qualifica-
 tion of explosives, 20728
 test results report and technology develop-
 ment report HLH/ATC compliant
 roller bearing development program,
 24186
- Performance tests (human):
 automotive mechanics, occupational per-
 formance survey, 29357
 effect of low visibility on performance of
 vehicle operators, 17375
 effect of personal treatment of Navy sub-
 jects on hearing discrimination task,
 20528
 methodology in measurement of complex
 human performance two-dimensional
 compensatory tracking, 19187
 performance on expanded time bearing
 plot as function of bearing accuracy,
 26640
 residual performance effects of simulated
 sonic booms during sleep, 16680
 simulated artificial gravity on human per-
 formance, effects, 29737
 visual-motor response of crewmen during
 simulated 90-day space mission as mea-
 sured by critical task battery, 29256
- Performances of various types of gyroscopes
 discussed, USSR study, 29145
- Performing arts, performing arts in 19th-
 century America, 20514
- Performing Arts, John F. Kennedy Center
 for, *see* John F. Kennedy Center for Per-
 forming Arts.

- Perfumes, perfume materials, synthetic organic chemicals, production and sales, 17913
- Perimeters, delineation of clustered points in 2 dimensions by measuring perimeters of convex hulls, 21940
- Perinatal research, *see* Pregnancy.
- Perio, 23410
- Periodic excitation of finite standard linear viscoelastic solid, 27440
- Periodic reports of agricultural economics and statistics, 25833
- Periodic solutions, *see* Mathematics.
- Periodicals:
- catalog of copyright entries, 23078, 27373-374, 30072
 - copyrights for contributions to periodicals, 24970
 - currently received in Army library, check-list, 27974
 - Government periodicals and subscription services, price lists, 25672, 26796, 30607
 - magazine reprint MR series, 18602
 - magazine subsidy and revenue foregone by obliging Postal Service to provide rates to encourage and support widest possible dissemination of news, etc., hearings, 27361
 - military, Air University Library index, 17977
- Periodontal disease:
- and oral hygiene among children, statistics, 22027
 - perio, general information, 23410
- Perishables, *see* Agricultural products.
- Perkins, Carl D., Boyd County Labor Committee for Relection of, *see* Boyd County Labor Committee for Relection of Carl D. Perkins.
- Perkins, L. Z., filling and emptying system Ice Harbor Lock, Snake River, Wash., hydraulic model investigations, 28685
- Perkins Creek, Des Moines River, Windom, Minn., flood plain information, 32225
- Perlite, minerals yearbook chapter, 20570
- Permafrost:
- construction of unattended seismological observatory (USO) in permafrost, 28687
 - fundamental concepts for rapid disengagement of frozen soil, phase 1, 30158
 - geology and properties of materials exposed in USACRREL permafrost tunnel, 17371
 - ionic migration and weathering in frozen Antarctic soils, 32459
 - rotary drilling and coring in permafrost, deep core drilling, core analysis and bore hole thermometry at Cape Thompson, Alaska, 21440, 28689
- Permeability:
- changes in permeability of histo-hematic barriers under effect of microwaves, USSR study, 23521
 - structural and stratigraphic framework, and spatial distribution of permeability of Atlantic Coastal Plain, North Carolina to New York, 23367
- Permian period:
- geology and phosphate deposits of Permian rocks in central western Montana, 26497
 - Permian brachiopods of west Texas, 23959
- Permits, *see* classes of persons to whom, or subjects for which permits are issued.
- Perry, Bill, discovering Prince William Forest, 32514
- Perry, Harry, energy, ultimate resource, 17090
- Perry County, Mo.:
- drainage and levee districts, nos. 1, 2, and 3 engineers report—departmental edition, 21473
 - document reports, 21160A
- Perry's Victory and International Peace Memorial:
- redesignation—law, 21132
 - report, 21174
- Persecution, abuse of psychiatry for political repression in Soviet Union, hearing, 19984
- Persia M. Robinson Research Natural Area, general information, 21637
- Persian Gulf:
- lights and fog signals, list, 27418B
 - S.E., N.E., N.W., summary of synoptic meteorological observations, southwest Asian marine areas, 23893
 - United States and Persian Gulf suppliers of petroleum, report, 21237
- Personal affairs, your personal affairs handbook, Army pamphlet, 15510
- Personal property:
- credit sales by dealers in personal property, tax information, 20393
 - donations of surplus personal property to State fish and wildlife and outdoor recreation agencies, permit, report, 19868
 - Federal real and personal property, inventory report, 17054, 31024
 - traffic management regulation for personal property, Defense Dept., 17341, 27416, 31197
- Personal toiletry articles, 27393, 30107
- Personality, investigations of formation of first impression of person in foreign psychology, USSR study, 16186
- Personality tests:
- factors related to drug abuse in submarine service, personality trait patterns as delineated by Minnesota multiphasic personality inventory, 30411
 - state-trait anxiety inventory and assessment of stress under simulated conditions, study, 16682
- Personick, Martin E.:
- industry wage survey contract cleaning services, 31561
 - union wages and hours, grocery stores, 27668
- Personnel administration, *see* Administrative management.
- Personnel advisory series, 25953
- Personnel management, *see* Administrative management—Employment management.
- Personnel manual, *see* Civil service.
- Personnel records:
- District of Columbia police, exclude from public inspection—law, 19472
 - report, 17201
 - National Guard Bureau—enlisted personnel reporting system, pamphlets, 17754
 - officer personnel reporting system, 23733
 - what every employer needs to know about OSHA, recordkeeping, 26616
- Personnel service in education, *see* Counselors.
- Personnel shelters and protective construction, 29429
- Personnel system, *see* Army.
- Personnel workers:
- State, county and municipal personnel publications, 27052
 - 3 & 2, Navy rate training manual, 30598
 - Persons enrolled in health insurance program, 23973, 27882, 32556
 - Persons in engineering, scientific and technical occupations, current population reports, 30852
 - Persons of Spanish origin, 29706
 - Persons of Spanish origin in United States, 28173
 - Persons of Spanish surname, 30805
 - Perspective on draft, 17825
 - Perspectives and methodology, synclisis, dynamics of health, analytic series on interactions of health and socioeconomic development, 20366

INDEX 1973

- Perspectives in defense management (periodical), 18755
- Perturbation theory, applicability of perturbation theory in describing process of multiphoton ionization of atom, 22459
- Perturbations, distribution of odd nitrogen in lower stratosphere and possible perturbations caused by stratospheric air transport, 32462
- Peru:
- area handbook, 24176
 - background notes, 22254
 - economic trends and their implications for United States, 30313
 - foreign trade regulations, 28638
 - loan of vessel, extension, agreement, 16,01
 - mineral industry, minerals yearbook chapter, 16302
- Pessl, Fred, Jr., geologic and hydrologic maps for land use planning in Connecticut Valley with examples from folio of Hartford North Quadrangle, Conn., 21714
- Pesticides:
- analysis of population dynamics of selected avian species with special reference to changes during modern pesticide era, 22250
 - behavioral changes from chronic exposure to pesticides used in aerial application, effects of phosdrin on performance of monkeys and pigeons on variable interval reinforcement schedules, 21034
 - catalog of research in aquatic pest control and pesticide residues in aquatic environments, 17931
 - development of case study of total effect of pesticides in environment, non-irrigated croplands of the Mid-west, 20367
 - diagnosis and treatment of poisoning by pesticides, 31764
 - effects of agricultural pesticides in aquatic environment, irrigated croplands, San Joaquin Valley, 17932
 - effects of pesticides in water, report to the States, 28795
 - EPA compendium of pesticides, rodenticides and mammal, bird and fish toxicants, 20731A
 - EPA compendium of registered pesticides, insecticides, acaricides, molluscicides, and antifouling compounds, 23904-906, 25665, 26793, 29445, 31765, 32529
 - Environmental Protection Agency efforts to remove hazardous pesticides from channels of trade, GAO review, 28989
 - Federal environmental pesticide control act--
 - environmental law, highlights, 27456
 - hearings, 19959
 - law, 19446
 - reports, 19692, 19844
 - future role of chemicals in forestry, 31360
 - guide for analyzing pesticide legislation, digest of state pesticide use and application laws, 32530
 - handbook of procedures for pesticide residue analysis, 26848
 - health aspects, abstract bulletin, 18417
 - insuring crop and livestock losses caused by restricted pesticide use, appraisal, 27422
 - integrated pest management, 21390
 - laws and institutional mechanisms controlling release of pesticides into environment, 22301
 - lead, pesticides, man and environment, 32531
 - liquid chromatography of carbamate pesticides, 17422
 - manual, analytical, 25194
 - mercurial pesticides, man, and environment, 26422
 - methods for individual pesticide results, pesticide analytical manual, 26456
 - methods which detect multiple residues, pesticides analytical manual, 25194, 26455
- Pesticides--Continued
- monitoring journal (periodical), 18756
 - movement and impact of pesticides used for vector control on aquatic environment in the Northeast, 17933
 - patterns of pesticide use and reduction in use as related to social and economic factors, 20869
 - pesticide study series, 17931-933, 22301, 20867-869
 - pesticide usage and its impact on aquatic environment in the Southeast, 20868
 - pesticides in aquatic environment, 16575
 - pesticides, insecticides, they kill almost anything that crawls, we want you to know what we know about poison control (poster), 21596
 - predator control and related problems on Federal, State and county level, 19948
 - pressure injection of solubilized benomyl for prevention and cure of oak wilt, 32325
 - protection of man and environment, Federal environmental pesticide control act, supplemental report, 19841
 - review, 30695
 - subtle changes in brain functions produced by single doses of mevinphos (phosdrin), 30786
 - transient blindness due to combined effects of mevinphos and atropine, 30787
 - using diseases to kill plant insect pests, research progress, report, 20884
 - see also Sprays and spraying.
- Pests:
- aquatic, on irrigation systems, identification guide, 23915
 - catalog research in aquatic pest control and pesticide residues in aquatic environments, 17931
 - forest pest leaflets, 16072-75, 17507-510, 26464-465, 27528, 32312
 - going abroad? Important message for U.S. citizens, 30713
 - integrated pest management, 21390
 - intercepted plant pests, 1971, list, 28039
 - pest control agents and disinfectants, Federal item identification guide, 32172
 - plant pests, list of intercepted, 1970, 22394
 - quarantine requirements and procedures to prevent introduction and spread of, exotic pests of mutual concern to member countries of North American Forestry Commission, 27531
 - USDA and military cooperate to stop foreign invaders, 28015
 - see also Insects.
 - Pet shops, urban business profiles, 15978
 - Petalium, see Beetles.
 - Peterkin, Betty B., food selection for good nutrition in group feeding, 16599
 - Peters, A. J., central western Indian Ocean bibliography, 26821
 - Peters, James A., frog genus *Atelopus* in Ecuador (Anura, Bufonidae) 31801
 - Peters, Penn A., average yarding distance on irregular-shaped timber harvest settings, 21658
 - Peters Canyon Wash, flood plain information, 20127
 - Petersen, Eugene W., deaf leadership training for community interaction, manual for grassroots leadership, 22209A
 - Peterson, Joe, what about reading failure? 15999
 - Peterson, Peter G.:
 - addresses--
 - Feb. 15, 1972, 28226
 - June 19, 1972, 21097
 - Sept. 6, 1972, 28227
 - Sept. 27, 1972, 21098
 - Oct. 3, 1972, 22643
 - Oct. 9, 1972, 22627
 - Oct. 25, 1972, 21115
 - Nov. 13, 1972, 22629
 - Nov. 14, 1972, 22628

Peterson, Peter G.—Continued

- addresses—continued
- Nov. 15, 1972, 22624
- Jan. 18, 1973, 21099
- comments and recommendations on annual report, National Advisory Committee on Oceans and Atmosphere, 21970
- U.S.-Soviet commercial relationships in new era, 16838
- Peterson, William S., foreign curriculum consultants in action, 25053
- Petition timeliness guide, how to determine "open" period during term of agreement for filing representation petition under Executive order 11491, as amended, 26612
- Petitions for patent waiver, findings of fact and recommendations of NASA Inventions and Contributions Board, 18757
- Petkof, Benjamin:
 - mica, 25455
 - mineral industry of Pakistan including, Bangladesh, 16321A
- Petrick, Alfred, Jr.:
 - economics of byproduct metals—copper system, 27696
 - lead, zinc, uranium, rare-earth, iron, aluminum, titanium and lithium systems, 26649
- Petrochemicals, identification and control of petrochemical pollutants inhibitory to anaerobic processes, 30180
- Petrography, *see* Rocks.
- Petroleum:
 - anticompetitive impact of oil company ownership of petroleum products pipelines, investigation—
 - hearings, 17096
 - report, 21186
 - bulk, stations and terminals, census of business, 1967, wholesale trade, 27004
 - calibration standards used in Department of Defense equipment oil analysis program, studies, 23712
 - char oil energy development, interim report, 21092
 - compound type separation and characterization studies for 370° to 535° C boiling distillate of Gach Saran, Iran, crude oil, 30441
 - construction of nuclear geostorage facilities for petroleum products, 26393
 - crude oil, market demand forecast, monthly, 18758
 - crude petroleum, petroleum products, and natural gas liquids—
 - District 5 petroleum statement, monthly, 18234
 - monthly statement, 18759
 - crude products, production and sales, 22283
 - demonstration of safety plugging of oil wells penetrating Appalachian coal mines, 16338
 - determining discounted cash flow rate of return and payout time for onshore development wells, graphical method, 25425
 - draft environmental statement, proposed 1973 Outer Continental Shelf, oil and gas general lease sale, offshore Mississippi, Alabama, and Florida, 31568
 - economic evaluation of COED (char oil energy development) process, 22615
 - Emergency petroleum allocation act, report, 28471
 - energy crisis and its effect on agriculture, hearing, 32072
 - engineering cost study of development wells and profitability analysis of crude oil production, 23639
 - European views on dependency of free world on Middle East oil, summary, 32358
 - evaluation of waste waters from petroleum and coal processing, 21494

Petroleum—Continued

- Federal energy research and development policies and future technological options, 15903
- field study of viscous oil production by solvent stimulation, Wilmington, Calif., 21963
- final environmental statement, FES 73-19, proposed 1973 Outer Continental Shelf, east Texas general oil and gas lease sale, 29176
- final environmental statement, proposed 1972 Outer Continental Shelf oil and gas general lease sale, offshore eastern Louisiana, 23605
- financial requirements of nation's energy industries, hearing, 28545
- foreign direct investors in U.S., list of foreign firms with some interest/control in American manufacturing and petroleum companies in U.S., 23488
- geology and oil resources of western Puente Hills, southern California, 21718
- how to find abandoned oil and gas wells, 25418
- inadequacy of petroleum supplies and its repercussions on small business, investigation report, 19732
- independent oil producer and proposed oil and gas investment act of 1972 (address), 29467
- initiatives in energy conservation, 31139
- international flow of petroleum and tanker utilization, estimates, 23895
- international petroleum annual, 26652
- interstate compact to conserve oil and gas, consent of Congress to extend law, 16869
- investigation of industry, 30036
- locating uncharted oil and gas wells, state-of-the-art, 25514
- need for continuous research and development of American energy resources to supply expanding demand (remarks), 23471
- offshore petroleum studies—
 - composition of offshore U.S. petroleum industry and estimated costs of producing petroleum in Gulf of Mexico, 21937
 - historical and estimated future hydrocarbon production from U.S. offshore areas and impact on onshore segment of petroleum industry, 25417
- oil and gas imports, hearings, 24934, 27336
- oil and hazardous substances program series, 17930
- oil criteria, water quality standards, 20866
- oil-fired fossil plant, 1000-MWe central station power plants investment cost study, 22493
- oil import program, problems (remarks), 22184
- oil import totals for April 1973, 32527
- oil pollution research newsletter, 18727
- oil recovery by nuclear explosion, USSR study, 27624
- oil, water quality standards criteria digest, 21524
- oil yields and characteristics of Green River Formation oil shales at WOSCO-EX-1, Uintah County, Utah, 20577
- oil yields and stratigraphy of Green River formation's Tipton Member at Bureau of Mines sites near Green River, Wyo., 20574
- oilfields and crude oil characteristics, Cook Inlet Basin, Alaska, 21946
- petroleum product shortages impact on national economy, hearings, 30011
- phase 4, oil regulations, 31172
- problems and future of American petroleum industry (remarks), 32391
- products, survey (series), 16256, 17682, 26654-655, 30421, 32449
- radiation halos and hydrocarbon reservoirs, review, 25419

INDEX 1973

Petroleum—Continued

- removal of oil from under piers, 27462
- SEC disclosure system, real estate and oil and gas (address), 30628
- solvents and explosives to recover heavy oil, 21961
- sulfur compounds in crude oil, 16253
- summary petroleum and selected mineral statistics for 120 countries, including offshore areas, 26510
- supply and demand in non-Communist world, 23896
- toward rational policy for oil and gas imports, 24933
- trends in oil and gas exploration, hearings, 26273
- United States and Persian Gulf, suppliers, report, 21237
- use of fire streams to control floating oil, 28799
- worldwide crude oil prices, 2d report, summer 1972, 23898
- see also* Naval oil shale reserves—Oil shale—Pipe lines.
- Petroleum and Gas Administration, Emergency, *see* Emergency Petroleum and Gas Administration.
- Petroleum as fuel:
 - adequacy of home heating oil supplies, hearings, 17228
 - analysis of regulatory aspects of fuel oil supply, 29645
 - bunker fuels, oil and coal laden in U.S. on vessels engaged in foreign trade, foreign trade report, 24246
 - bunker oil, foreign trade reports, 19009
 - burner fuel oils, 1973, petroleum products survey, 32449
 - certain background information for consideration when evaluating national energy dilemma, 25991
 - CSF [control synthetic fuel] coal liquefaction process, development, 28217
 - diesel fuel oils, 1972, petroleum products survey, 17682
 - drilling Atlantic Continental Shelf for oil and gas, (remarks), 31499
 - effect of fuel additives on chemical and physical characteristics of particulate emissions in automotive exhaust, 31275
 - fuel oils by sulfur content, monthly, mineral industry surveys, 18392
 - fuel shortages, factors contributing to current shortages of natural gas, crude oil residual oil, etc., 28544
 - inadequacy of petroleum supplies and its repercussions on small business, investigation—
 - hearings, 17097
 - report, 19732
 - international flow of petroleum and tanker utilization, estimates, 23895
 - national gas survey and synthetic fuel development, concentration by competing raw fuel industries in energy market and its impact on small business, report, 19626
 - potential for cooperative distribution of petroleum products in South, 28849
 - recent developments in desulfurization of fuel oil and waste gas in Japan, 30187
 - regulatory aspects of fuel oil supply, analysis, 28835
 - United States energy fact sheets by States and regions, 26535
 - see also* Fuel.
- Petroleum engineering, engineering cost study of development wells and profitability analysis of crude oil production, 23639
- Petroleum gases, *see* Gas—Liquefied petroleum gases.
- Petroleum products, *see* Petroleum.
- Petroleum refineries:
 - air pollution aspects of emission sources, petroleum refineries, bibliography with abstracts, 19150

Petroleum refineries—Continued

- background information for proposed new source performance standards, 29643, 30722
- Petrology, *see* Rocks.
- Petrov, Julia A., foreign language, area studies and other aspects of international education, completed research and instructional materials, bibliography, 26363
- Pets, pets, wildlife, customs, 28582
- Pettinger, Leon F., important forest insect outbreaks in Oregon and Washington, 21652
- Pettit, Mrs. Dominga, relief, 19594, 27116G
- Petty officers, *see* Coast Guard.
- Peyton Creek, Tex.:
 - engineers report—
 - departmental edition, 16013
 - document edition, 15667
- PF series, 18762
- Pfeiffer Co. Inc., *see* Frank H. Pfeiffer Co., Inc.
- Pfeister, Joseph L., user requirements for airfield pavement system, 23157
- pH, *see* Hydrogen-ion concentration.
- Pharmaceuticals, *see* Drugs.
- Pharmacists:
 - Controlled substances act of 1970, BNDD manual for pharmacist, 26674
 - pharmacy 8-cent commemorative postage stamp, 16561
 - Public Health Service, hospital residences, 17801
 - R legend, FDA manual for pharmacists, 17493
- Pharmacology:
 - case studies series, 20658
 - does cessation of negative stimulus cause activation of brain's emotionally positive zone? USSR study, 20462
 - pharmacology research associate training program of National Institutes of Health, 22065
 - seminar on use of stable isotopes in clinical pharmacology, proceedings, 16861
 - significance of cholinergic reactions in brain neuron pathology brought on by anticholinesterase intoxication, USSR study, 20458
 - see also* Drugs.
- Pharmacotherapy, pharmacotherapy in chronic schizophrenia, 26913
- Pharmacy:
 - drug abuse education in pharmacy schools, 32186
 - 8-cent commemorative postage stamp, 16561
 - institutional pharmacy practice in the 1970's, 16366
 - residences in hospitals of Public Health Service, 17801
- Phascolosoma, *see* Worms.
- Phase control:
 - application of phase change technique to thin sections with heating on both surfaces, 32469
 - using holographic matched filters in correcting phase discontinuities in antenna apertures, USSR study, 27650
- Phase diagrams:
 - correlations of phase-boundary pressure of condensate fluid systems with compositions modified by added butane, 30436
 - recent computational experience with method of phase and amplitude diagrams, 22168
- Phase 4 announcement, economic stabilization program, 30075
- Phase stability, HCN lasers, frequency and phase stabilization by locking to synthesized reference, 30473
- Phase 3, background information, 26295
- Phase 3, economic stabilization program, 26296
- Phase 3, regulations, questions, & answers, 30076

Phase 4, food regulations, 31171
 Phase 4, oil regulations, 31172
 Phase 4, regulations, questions and answers, 31173
 Phase shifters, standard digital data clock-rate generator with programmable digital phase shift, 31755
 Phase transformations, *see* Transformation temperatures.
 Phenoxo herbicides, economic impact of cancelling use of 2,4,5-T in rice production, production, 26353
 Phenylketonuria, inherited metabolic disorder associated with mental retardation, 17677
 Philadelphia, Pa.:
 accuracy of automated temperature forecasts for Philadelphia as related to sky condition and wind direction, 30531
 area wage survey, 27677
 census of housing, 1970, components of inventory change, 29691
 transportation control strategies State implementation plan, City of Philadelphia, 27485
 Philadelphia County, Pa.:
 declaration of nonnavigability for Penna's Landing project development—law, 19528
 report, 19934
 Philadelphia Republican City Committee, annual report, 22708
 Philately and philatelists, *see* Postage stamps.
 Philipp, Warren H., survey of application of radiation to preparative, chemistry, 29291
 Philippines:
 agricultural commodities, agreement, 25730, 25751, 31874
 background notes, 22255
 ceramic glazed wall tile from Philippines, determination of no injury to U.S. industry, Tariff Commission report, 32585
 economic trends and their implications for United States, 23489, 27606
 floods in central Luzon area, report of Daniel K. Inouye, 19805
 Korea and Philippines Nov. 1972, committee print, 24927
 labor law and practice, 26614
 military assistance and commitments in Philippines, GAO report, 26478
 mineral industry, minerals yearbook chapter, 16303
 sailing directions, 16438
 syncrisis, dynamic of health, analytic series on interactions of health and socioeconomic development, 17553
 Phillips, Norman S., crashworthy landing gear study, 30758
 Philosophy, toward philosophy of planning attitudes of Federal water planners, 27493
 Phipps, John, trading with People's Republic of China, 27068
 Phoenix, Ariz.:
 area wage survey, 20500
 Illinois-California Express, Inc., motor carrier accidents, 27702
 transportation control strategy, Phoenix-Tucson air quality area, 27484
 Phonograms, protection of producers of phonograms, convention, 28438
 Phonographs:
 and record players attachments, current industrial reports, 29764
 radio-phonograph and radio-phonograph tape player combinations, workers of Lowell, Mass., plant of Symphonie Electronic Corp., subsidiary of Lynch Corp. Tariff Commission report, 26898
 radios, radio-phonographs, and loudspeaker systems, workers of Milroy, Pa., plant of Fisher Electronics Inc., subsidiary of Emerson Electric Co., Tariff Commission report, 26899

Phonographs—Continued
 record changers, phonographs, radio-phonograph combinations, and tape recorders players, and decks, V-M Corp., Benton Harbor, Mich., Tariff Commission report 16543
 solid-state radio receivers, radio-phonograph combinations, loudspeakers, and amplifiers, workers of H. H. Scott Inc., Tariff Commission report, 27948
 television receivers, radio receivers, phonographs, and radio-phonograph combinations, workers of Zenith Radio Corp. Tariff Commission report, 29555
 television receivers, radio-television-phonograph combinations, and radio-phonograph combinations, workers of Wheeling, Ill., plant of TMA Co., Tariff Commission report, 29556
 Phonorecords, Library of Congress catalogs, 23609
 Phosphatases, investigation of alkaline phosphatase activity in persons dealing with electromagnetic emission generators of high, ultra-high and superhigh frequency USSR study, 30357
 Phosphate rock, *see* Rock phosphate.
 Phosphate slimes, phosphorus removal by trickling filter slimes, 31290
 Phosphates:
 Federal and Indian lands, royalty, income and related statistics, 29013
 fertilizer supply, 15463
 geology and phosphate deposits of Permian rocks in central western Montana, 26497
 nitrogen, phosphate, potash, fertilizer supply, 30694
 phosphate research and dental decay, nutrition education, 1973, hearings, 28549
 phosphates criteria, water quality standards, 20870
 phosphates, water quality standards criteria digest, 21525
 superphosphates, current industrial reports, 18194
 see also Calcium phosphates—Rock phosphates.
 Phosphine, relative toxicity of chloropicrin phosphine, EDC-CCl₃, and CCl₃-CS₂ to various life stages, 30693
 Phosphorus:
 automated water monitoring instruments for phosphorus contents, 32259
 calcium and inorganic phosphorus levels in plasma and erythrocytes during acute and chronic hypercapnia, studies, 16250
 effects of various combinations on nitrogen, phosphorus, and potassium on paper birch seedling growth, 28941
 investigation of phosphorus removal mechanisms in activated sludge systems, 26404
 phosphorus removal—
 bibliography, 29090, 30310
 by trickling filter slimes, 31290
 from Birmingham, Ala., calcareous iron ores, 25505
 pilot plant demonstration of lime-biological treatment phosphorus removal method, 32261
 process design manual for phosphorus removal, 16547
 reactions of nitrogenous and phosphatic compounds with soils and geologic strata, 17936
 release from lake sediments, 31268
 response of paper birch seedling to nitrogen, phosphorus, and potassium, 28940
 see also Organophosphorus compounds.
 Photo plot bias, 28961
 Photochemical processes, field program designs for verifying photochemical diffusion models, 32254
 Photochemistry:
 photochemical methods for purifying water, 20206

INDEX 1973

Photochemistry—Continued

- reference method for measurement of photochemical oxidants guidelines for development of quality assurance program, 31271
- user's guide to diffusion/kinetics, DIFKIN, code, 32253
- Photoconductivity, carrier lifetime measurement by photoconductive decay method, 17741
- Photodegradation, photodegradation of commercial dyes, study, 26411
- Photodetectors, stability and temperature characteristics of some silicon and selenium photodetectors, optical radiation measurements, 29321
- Photoelasticity, feasibility of applying fringe multiplication techniques to stress analysis in 3 dimensions, 20107
- Photoelectric cells:
 - germanium cell performance with erbium oxide and silicon carbide radiators, experimental study, 16644
 - photoelectric color sorting of citrus fruits, 22358
- Photoelectric measurements, *see* Photoelectric cells.
- Photoelectricity, photoelectronic and thermoelectronic instruments and their applications, USSR study, 31542
- Photoelectronic and thermoelectronic instruments and their applications, 31542
- Photofabrication processes for printed circuits, 22468
- Photogrammetry, mathematical model for simulation of photogrammetric camera using stellar control, 22108
- Photographers:
 - examination announcement, photographers and photographers (laboratory), 24260
 - urban business profile, photographic studio, 15979
- Photographic apparatus and supplies:
 - Apollo experience report, photographic equipment and operations during manned space-flight programs, 16354
 - photographic equipment and accessories, Federal item identification guide, change, 20039
 - photography equipment and techniques, survey of NASA developments, 25522
 - sensitized materials, photographic and copying, Federal item identification guide, 27395
 - see also* Cameras.
- Photographic emulsions, *see* Emulsions.
- Photographic lenses, *see* Lenses.
- Photographic paper:
 - investigation of optical print media, initial survey, 20966
 - sensitized materials, photographic and copying, Federal item identification guide, 27395
- Photographic plates, *see* Plates (photographic).
- Photographic processes, *see* Photography.
- Photographic studies, urban business profile, 15979
- Photographs:
 - Anselo Rizzuto's New York. In Little old New York, by Anthony Angel, 20511
 - BESM-4 and SDS-1604A computer video-display and its application in processing spark and bubble-chamber photographs, USSR study, 25364
 - catalog of copyright entries, 28576, 31168
 - conical section method for determining geometric configuration of planet by photographs taken from space, USSR study, 23536
 - geostationary satellite position and attitude determination using picture landmarks, 30527
 - NOAA photoessays series, 23800
- Photography:
 - Apollo experience report, photographic equipment and operations during manned space-flight programs, 16354

Photography—Continued

- BOMEX atlas of satellite cloud photographs, 20232
- chemical compounds, photographic and copy processing, Federal item identification guide, 26313
- methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall at Chanute AFB, 32201
- photo stratification improves Northwest timber volume estimates, 27541
- photographic studies on effects of high-level, short term radiation on metals, 22492
- photography equipment and techniques, survey of NASA developments, 25522
- urban business profile, photographic studios, 15979
- see also* Aerial photography.
- Photometric measurements, photometric instrumentation and research, 1970-71, optical radiation measurements, 20641
- Photometry:
 - impact of radiometry and photometry and role of NBS, optical radiation measurements, 25555
 - photometric calibration procedures, optical radiation measurements, 20642
- Photons:
 - applicability of perturbation theory in describing process of multiphoton ionization of atom, 22459
 - resonance phenomena during multiphoton ionization of xenon atom in an electric field $E \sim 5 \times 10^7$ V/cm, 22452
- Photonuclear reactions:
 - photonuclear activation analysis with GE (Li) detectors, compilations, 30594, 30596
 - photonuclear reaction data, indexes, etc., 26700
- Photonuclear Reactions and Applications, International Conference, *see* International Conference on Photonuclear Reactions and Applications.
- Photosynthesis, influence of atmosphere of molecular hydrogen upon evolution of oxygen by leaves of *Tradescantia fluminensis* Vell, 23539
- Photovoltaic cells, *see* Photoelectric cells.
- Phrases, *see* Terms and phrases.
- Phreatophytes:
 - evapotranspiration and watershed research as related to riparian and phreatophyte management, abstract bibliography, 25826
 - Gila River phreatophyte project (series), 16105
- PHS, *see* Public Health Service.
- Physical aspects of copper cementation on iron, 27700
- Physical characteristics of magnesiothermal titanium sponge with hardness less than 100 Hb, USSR study, 23547
- Physical-chemical treatment of combined and municipal sewage, 27465
- Physical-chemical treatment of municipal wastewater using powdered carbon, 31287
- Physical condition report of commercial drivers involved in accidents, 21967
- Physical conditioning specialist, athletic trainer, 16634
- Physical constants, International System of Units, adjusted, and conversion factors, 29268
- Physical education and training:
 - interval training, 31768
 - motivation factor, LaSierra High School boys' physical education program, 31770
 - physical conditioning specialist (athletic trainer), Air Force notice, 16634
 - physical conditioning through water exercises, 31772
- Physical education instructor, *see* Physical education and training.

Physical fitness:

- aerobic dancing, rhythmic sport, 31766
- Cureton's basic principles of physical fitness work (rules for conducting exercise), 31767
- interval training, 31768
- introduction, includes self-testing activities, graded exercises and jogging program, 23908
- jogging guidelines, 31769
- motivation factor, LaSierra High School boys' physical education program, 31770
- nutrition, growth and development of North American Indian children, 17762
- physical conditioning through water exercises, 31772
- Pullman Elementary School program, description, evaluation, cost, etc., 27777
- trends of research on prevention of physiological aging and value of exercise for fitness and health, 31773
- weight training for strength and power, 32537
- Physical geography, physiographic and hydraulic studies of rivers (series), 27567
- Physical measurements, precision measuring equipment specialist, Air Force notice, 16635
- Physical phenomena related to crystal growth in space environment, 32458
- Physical properties:
 - ASRDI oxygen technology survey, thermophysical properties, 17706
 - physical oceanographic and meteorological data from principal participating ships 2d survey cruise, Aug.-Sept. 1967 EASTROPAC atlas, 23782
 - physical properties of snow cover in Ft. Greeley, area, Alaska, 17372
 - physical properties testing unit, industrial plant equipment handbook, change, 21398
 - relations among radionuclide content and physical chemical and mineral characteristics of Columbia River sediments, 27562
 - sludge processing for combined physical-chemical-biological sludges, 31281
- Physical research:
 - AEC programs, authorizing legislation, 1974 hearings, 28265
 - how you get help from Bureau of Mines (remarks), 32447
- Physical Research Division, Atomic Energy Commission, physical research program, 21029
- Physical science aids, examination announcement, 22598
- Physical sciences, *see* Science.
- Physically handicapped, *see* Handicapped.
- Physicians:
 - Air Force physicians, 19146
 - answers for doctors, social security disability program, 22228
 - determinants of expenditures for physicians' services in United States, 27741
 - doctors draft, how special calls work, 26819
 - economic controls on physicians and dentists, 26540
 - HSMHA, place for tomorrow's physicians, 25267
 - immigrant scientists and engineers decline in FY 1972, and physicians increase sharply, 32519
 - income of physicians, osteopaths, and dentists, 1965-69, from professional practice, 22237
 - join Life Corps, general information about careers and educational opportunities, 27578
 - medical malpractice, report on litigation, insurance, etc., 27577
 - physician visits, volume and interval since last visit, United States, 16368
 - practitioners, informational outline of Controlled substances act, 26875

Physicians—Continued

- questions physicians are asking about HMOs and answers, 21756
- requiring physicians to report, traffic laws commentary, 20665
- role in health delivery system, hearing, 24872
- scientists, engineers and physicians from abroad, 20712
- self-employed doctors of medicine under OASDHI, 22238
- services to children under crippled children's program, 1971 fiscal year, 26638
- Physicians Committee for 17th Congressional District, annual report, 24385
- Physicians for Good Government political Committee, annual report, 22755
- Physicians for McColl for Congress, annual report, 24457
- Physics:
 - collected data reports on Aug. 1972 solar-terrestrial events, 30174
 - East European abstracts, 18245
 - journal of research, National Bureau of Standards, 18530, 20634
 - physics of space environment, colloquium held at University of Alabama, Huntsville, Ala., 1970-71, 17704
 - quiet sun, 29265
 - Solar-Terrestrial Physics, report UAG series, 30172-174, 31265
 - USSR abstracts, 19040
 - World Data Center A for Solar-Terrestrial Physics—
 - preliminary compilation of data for retrospective world interval, 21484
 - report UAG series, 23182
 - see also* Nuclear physics.
- Physiography, *see* Physical geography.
- Physiological reactions:
 - aircraft exterior lighting and marking for avoiding collisions, 20826
 - chronic CO₂ toxicity, species difference in physiological and histopathological effects, 21930
 - determination of focal projections of internal organs in brain of man through isolation of useful signals, 27646
 - on molecular mechanism of action of organic agents on cholinoreceptors, 27639
 - physiological principles of aptitude for mass occupations, USSR study, 17628
 - psycho-physiological testing and training of pilots, USSR study, 23551
 - public hearings on noise abatement and control, physiological and psychological effects, 16031
 - visual evoked responses for divers breathing various gases at depths to 1200 ft., 16252
 - we want you to know what we know about adverse reactions to medicines, 17494
- Physiology:
 - autogenic training, USSR study, 20473
 - electrophysiological correlates of mental activity, USSR study, 23543
 - forest insects, 23280
 - high altitude physiology of man in Tien Shan and Pamirs, some results of studies, USSR study, 23550
 - physiological characteristics of positive and negative emotional states, USSR study, 27638
 - physiology of higher nervous activity, USSR study, 17638
 - problems of control of body functions of humans and animals, USSR study, 31521
 - prostaglandins in abortion and reproductive physiology, citations from literature search, 25609
 - U.S. Naval aerospace physiologist's manual, 23631
 - Phytophthora root rot of Port-Orford-cedar, 17508
 - Phytoplankton, in situ nutrient enrichment experiments on natural lake phytoplankton, 27451

INDEX 1973

- Planos, planos, except grand planos, Tariff Commission, 24067
- Piceance Creek:
- biota and chemistry, effects of chemical variations in aquatic environments, 28790
 - X-ray mineralogy of Parachute Creek member, Green River formation, in northern Piceance Creek basin, Colo., 30282
- Pick-Sloan Missouri Basin program:
- appropriations, authorization, law, 15644
 - Canyon Ferry, unit of Pick-Sloan Missouri Basin Program, 25683
 - O'Neill Unit, North Loup division, construct, operate and maintain—law, 19444
 - reports, 15712, 19643
- Polecat Bench area of Shoshone Extensions Unit, construct, operate, and maintain—
- hearings, 17062, 21347
 - report, 12555
- see also* Missouri River Basin project.
- Pickaway County Republican Executive Committee, annual report, 22747
- Pickrel (U.S.S.):
- loan of vessels to Italy, agreement, 20800
- Pickett, Dale L., spring flood, 1973, helping others, 29815
- Pickwick Reservoir, fish inventory data, 16550
- Picture story series, 16612, 20927-929, 22352, 24140, 26944, 28015-16, 30715
- Pictures:
- select audiovisual records—contemporary African art from Harmon Foundation, still pictures, 22000
 - pictures of Civil War, 22001
 - pictures of Revolutionary War, 25546
 - you asked about pictures of Indians, 31491
 - see also* Photographs.
- Plech, Richard, magnetic tape study, 24040
- Piedra Lumbre Grant:
- exchange lands within for national forest lands in Carson and Santa Fe National Forest, authorize—law, 16925
 - report, 17203
- Pieper, William J.:
- automated apprenticeship training (AAT), systematized audio-visual approach to self-paced job training, 30729
 - development of video system for rapid generation of learning, 24148
 - instructional strategies for performance oriented technician course, 28034
- Pierce County, Wash., equal employment opportunities in government operations, 22579
- Pierce County Democratic Party, annual report, 24692
- Piers, removal of oil from under piers, 27462
- Pifer, Glenda, simple home repairs inside, 28010
- Pigeon Butte Research Natural Area, general information, 21638
- Pigeons:
- behavior changes from chronic exposure to pesticides used in aerial application, effects of phosdrin on performance of monkeys and pigeons on variable interval reinforcement schedules, 21034
 - migratory birds, 1972-73 in United States, etc., Federal regulations, 20781
 - see also* Mourning doves.
- Pigments:
- iron oxide, minerals yearbook chapter, 16316
 - vacuum and ultraviolet-radiation effects on binders and pigments for spacecraft thermal-control coatings, 23680
- Pigs, *see* Swine.
- Pike, residues of MS-22 in northern pike, muskellunge, and walleye, 20780
- Pike County Republican Executive Committee, annual report, 24558
- Pilchuk River, vicinity of Machias, Wash., special flood hazard information, 32242
- Pile driving, *see* Piles and pile driving.
- Piles and pile driving, inspection of pile driving operations, 20105
- Pilkey, W.D., PERFORM, performance optimizing computer program for dynamic systems subject to transient loadings, 30450
- Pillars (mines), *see* Mine pillars.
- Pillowcases:
- current industrial reports, 19243
 - sheets, pillowcases, and towels, current industrial reports, 28166
- Pilot guides, *see* Coast pilots.
- Pilot Knob, Mo., mine roof vibrations from underground blasts, Pilot Knob, Mo., 30437
- Pilot plant demonstration of lime-biological treatment phosphorus removal method, 32261
- Pilot plants, pilot plant for tertiary treatment of wastewater with ozone, 26414
- Pilots and pilotage:
- certifications, Federal aviation regulation, 18299
 - refresher courses for private and commercial pilots, 23255
 - rules of the road, Great Lakes, 21094
 - see also* Aviators.
- Pima County, Ariz., radiometric ages of igneous rocks, 27557
- Pima County Republican Women, annual report, 24531
- Pinchot Institute, system for environmental forestry studies, 32313
- Pine:
- atropella canker of pines, 32312
 - brown-spot resistance in natural stands of longleaf pine seedlings, 20302
 - compression wood formation and other characteristics of plantation-grown *Pinus caribaea*, 28955
 - control of dwarf mistletoe in heavily used ponderosa pine recreation forest, Grand Canyon, Ariz., 31374
 - controlling lophodermium needlecast on Scotch pine Christmas trees, 32320
 - deer habitat in ponderosa pine forest of Black Hills, S. Dak., classification, 16091
 - economically oriented production functions for slash and loblolly pine plantations, 23297
 - economics of thinning stagnated ponderosa pine in sapling stands in pine-grass areas of central Washington, 25233
 - geographic survey of monoterpenes in loblolly and shortleaf pines, 21676
 - grading sugar pine saw logs in trees, 20312
 - growth and hydrologic influence of European larch and red pine after 10 years of planting, 25219
 - growth and soil moisture in thinned lodgepole pine, 20310
 - growth of planted slash pine under several thinning regimes, 21674
 - guying to prevent wind sway influences loblolly pine growth and wood properties, 21677
 - improved growth intercept method for estimating site index of red pine, 21671
 - in southeastern U.S., relation of environmental and biotic factors to stump colonization and losses in residual stand, 20936
 - large-crowned planted ponderosa pine respond well to thinning, 21659
 - loblolly, regenerating by direct seeding, natural seeding, and planting, 28971
 - must Honduras pine be weeded frequently in Puerto Rico? 28958
 - partial cutting practices in old-growth lodgepole pine, 16092
 - field guide, 16093

Pine—Continued

ponderosa—
 accuracy of determining mountain pine beetle attacks, utilizing pitch tubes, frass, and entrance holes, 23291
 cost analysis of clearing ponderosa pine watershed, 28946
 effects of wildfire on elk and deer use of pine forest, 23295
 judging ripeness of seeds in Black Hills ponderosa pine cones, 28950
 pine needle miner in Colorado front range, 28943
 product suitability of wood determined by density gradients across growth rings, 25225
 roll laminating fiber overlays on low-grade pine lumber, 23307
 procedure for using yield simulation programs for dwarf mistletoe-infested lodgepole and ponderosa pine, 32328
 replacement planting with potted southern pines on research plots, 23299
 simulating yields of southwestern ponderosa pine stands, including effects of dwarf mistletoe, 16086
 site preparation for Jack pineon grayling sands, 16078
 southern, utilization of southern pines, raw material, proceedings, 15464
 specific gravity variation with height in Black Hills ponderosa pine, 17517
 ten-year growth of planted slash pine after early thinnings, 21678
 treatment height for mountain pine beetles in front range ponderosa pine, 17520
 tree growth and water use response to thinning in 47-year-old lodgepole pine stand, 31366
 weights and centers of gravity for red pine, white spruce, balsam fir, 16083
 wood and bark properties of spruce pine, 21675
 yellow-poplar, loblolly pine, and Virginia pine compared in Cumberland Plateau plantations, 21664
 Pine County Republican Party, annual report, 22813
 Pine Creek, volcanic assemblage at Mount St. Helens, Wash., 29008
 Pine Creek Research Natural Area, general information, 21639
 Pineapple juice, canned pineapple and pineapple juice, workers of Hawaiian Fruit Packers, Ltd., Kapaa, Kauai, Hawaii, Tariff Commission report, 29549
 Pineapples canned pineapple and pineapple juice, workers of Hawaiian Fruit Packers, Ltd., Kapaa Hawaii, Tariff Commission report, 29549
 Pinellas County, Fla.:
 soil survey report, 17844
 survey of diathermy equipment used in Pinellas County, Fla., 17815
 Pines, Wayne L., FDA consumer, 18289
 Pink bollworms, *see* Bollworms.
 Pink salmon, *see* Salmon.
 Pinnacles National Monument, Calif., general information, 27821
 Pinnipedia, some hydrodynamic indices of body shape of pinnipeds, USSR study, 20466
 Pins, Federal item identification guide, 21406, 30108
 Pinton, Giuseppe P., relief, 28442
 Pinus caribaea, *see* Pine.
 Pinyon Conglomerate:
 Harebell formation (upper Cretaceous) and Pinyon Conglomerate (uppermost Cretaceous and Paleocene), northwestern Wyoming, 22568
 sedimentary petrology and paleocurrents of Harebell Formation, Pinyon Conglomerate, and associated coarse clastic deposits, northwestern Wyoming, 21731
 Pioneer, *see* Spacecraft.
 Pioneer imprints from 50 States, 29188

Pions, semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475
 Pipe and pipe fittings:
 arsenic as indicator element for mineralized volcanic pipes in Red Mountain area, western San Juan Mountains, Colo., 23330
 cast iron soil pipe fittings from Poland, determination of injury or likelihood thereof in investigation AA1921-100 under Antidumping Act, 1921, as amended, 16540
 flanges, Federal item identification guide, 27385
 fracture safety considerations for Hanford-N reactor coolant piping material, 22169
 heat pipe investigations, 32471
 hose, pipe, and tube fittings, quick disconnect, and self-sealing, Federal item identification guide, 26322
 laboratory load tests on buried flexible pipe, reinforced plastic mortar (RPM) pipe, 32543
 pipe, metallic, Federal item identification guide, change, 23099
 plastic pipe for interior and exterior cold water systems, 31242
 shipments of thermoplastics pipe, tube, and fittings, current industrial reports, 18194, 22553
 soil pipe fittings, Federal item identification guide, 27396
 solid-liquid flow in noncircular pipes, 25502
 Pipe lines:
 accident report, NTSB-PAR series, 30567-568
 Alaska pipeline, hearings, 19790
 anticompetitive impact of oil company ownership of petroleum products pipelines, investigation—
 hearings, 17096
 report, 21186
 control of surging in low-pressure pipelines, 23940
 detonation of flammable cloud following propane pipeline break, Dec. 9, 1970, explosion in Port Hudson Mo., 26668
 evaluation of coal gasification technology, pipeline-quality gas, 24271
 gas pipeline safety, Federal-State relations, 31884
 gas supplies of Interstate natural gas pipeline companies, 21552
 heated pipeline, some effects on groundwater flow in Alaska, 23374
 measurement of lateral erosion at proposed river crossing sites on Alaska pipeline, 23352
 natural gas—
 regulation and trans-Alaska pipeline, hearings, 16930
 safety regulations, amend—law, 16903
 report, 19617
 statistics for Interstate companies, 20251
 procedures for evaluating reasonableness of petroleum pipelines rates need improving, GAO report, 16101
 sales by producers of natural gas to interstate pipeline companies, 25151
 systematic approach to pipeline safety, special study, 31747
 trans-Alaska oil and gas pipeline, authorize—
 hearings, 28551, 31026, 31146, 32083
 report, 31000
 trans-Alaska pipeline—
 construction and operation is vital to all Americans and Alaskans (remarks), 23472
 economically sound and nationally essential (remarks), 21114
 flood survey along proposed route, 23342
 ground motion values for use in seismic design, 21713

Pipe lines—Continued
 transport statistics, 21837
 water resources investigations along proposed trans-Atlantic pipeline route, 21739
 Pipelines, *see* Pipe lines.
 Pipes and pipe fittings:
 hose, air duct and air breathing, Federal item identification guide, 30102
 pipe, metallic, Federal item identification guide, 30109
 Pipestone National Monument, general information, 26779
 Piping Industry Political Action Committee, annual report, 24339
 Pipirigos, G. N., upper Triassic and pre-Morrison Jurassic rocks, 26490
 Piracy, *see* Air piracy.
 Piro, Paula, estimated number of persons using medicare services, 22232
 Piropilosis, equine, reports, 20954
 Piscataquis County, Maine geology of Moxie pluton in Moosehead Lake, Jo-Mary Mountain area, 20344
 Piscataway Park:
 land acquisition, additional funds—law, 19462
 report, 19631
 Piskur, Frank T., commercial fisheries abstracts, 18137
 Pistons:
 piston manometer as absolute standard for vacuum-gage calibration in range 2–500 millitorr, 20619
 piston pin, Federal item identification guide, 30108
 Pit traps, bark beetle emergence cages modified for use as pit traps, 23235
 Pitch:
 environmental endurance testing of elastometric pitch change bearings, 26981
 pitch discrimination in background noises up to 95 dB SPL, 30410
 Pitkin, Marvin, remarks, June 20, 1973 29194
 Pits, *see* Quarries and quarrying.
 Pittsburgh, Pa., Equitable Gas Company, natural gas distribution system, Pittsburgh Pa., pipeline accident report, 30567
 Pittsburgh Securities Industry Campaign Committee, annual report, 28287
 PKU, *see* Phenylketonuria.
 PL 480 newsletter, 18579
 Place in agriculture through Peace Corps, 19097
 Place-names, *see* Geographical names.
 Place where hell bubbled up, history of 1st national park, 23829
 Placement:
 assessment/placement profile (APP) system, HUD, 31418
 experience placements, mental health career development program, 23752
 tests and other applicant appraisal procedures, Federal personnel manual, supplement, 24262
 Placer claims, *see* Gold.
 Placer deposits:
 Alaska, 30270
 gold deposits of Utah, 30269
 placer examination, principles and practices, 30397
 placer gold deposits of—
 Arizona, 21708
 New Mexico, 21707
 Placer mining, *see* Gold.
 Plague, natural factors in activation of plague epizootics in Siberia, USSR study, 20457
 Plainfield, N.H., flood plain information, Connecticut, White, Mascoma Rivers, 20115
 Plains, *see* Great Plains—Pano Estacado.
 Planarians, *see* Triclad.
 Plane stress, *see* Strains and stresses.

Planers (tools):
 planers and shapers, industrial plant equipment handbook, 17322
 Planes (aircraft), *see* Airplanes.
 Planetary atmosphere, *see* Atmosphere.
 Planets:
 conical section method for determining geometric configuration of planet by photographs taken from space, USSR study, 23536
 interplanetary Pioneers—
 operations, 26682
 summary, 21981
 system design and development, 25521
 water on planets, USSR study, 20459
see also names of planets.
 Planforms, complex, vortex-lattice FORT-RAN program for estimating subsonic aerodynamic characteristics, 31621
 Planing mills, wood residues produced at planing mills, 31833
 Plankton, Missouri River Basin plankton study, 17803
see also Phytoplankton.
 Planned-unit development with homes association, 31328
 Planned variations, 1st year survey, 21766
 Planners, *see* City planners—Supervisors.
 Planning:
 changing demand for local capacity, analysis of functional programming and policy planning, 25271
 communications in 9th 5-year plan, USSR study, 27648
 comprehensive planning assistance managing grant, 31431
 comprehensive planning assistance program administration, HUD handbook, 16133
 coordinating Federal assistance in community, 21767
 educational planning, mathematical models, USSR study, 26576
 emergency planning in communications and electronics equipment industries, 20082
 energy, environment, and planning, Long Island Sound region, proceedings of Conference held at Brookhaven National Laboratory, Oct. 5–7, 1971, 28070
 environmental assessments for effective water quality management planning, 32250
 health and nutrition examination survey, United States 1971–73, plan and operation, 26717
 kitchen planning, HUD training handbook, 32378
 interaction simulation, coordinated local-State vocational education planning, evaluation report, 17354
 land planning analysis, principles and procedures for project mortgage insurance, HUD handbook, 21792
 national park system plan, natural history, 16415
 plan for management of AEC-generated radioactive wastes, 30777
 pressing problems of economics and planning of health services, USSR study, 26581
 soil surveys for land use planning in Alaska, 32563
 soils interpretations for community planning and development, 27897
 studies in manpower planning, 27055
 toward philosophy by planning, attitudes of Federal water planners, 27493
 transit lines to Dulles and Friendship Airports from D.C. metropolitan center, Federal payment for planning, authorize, report, 32103
 urban and regional planning research in USA, review of trends, 23451
 urban mass transportation travel surveys, 16043

Planning—Continued
 why planning and what is cost effective-
 ness, municipal waste treatment, 16026
 Planning (economics), see Economic policy—
 Housing.
 Planning (programming), see Programming
 (planning).
 Planning Support Group, Billings, Mont., re-
 ports, 31485-486
 Plant diseases, see Diseases of plants.
 Plant pests, see Pests.
 Plantations:
 economically oriented production functions
 for slash and loblolly pine plantations,
 22297
 tree species for plantations in granitic up-
 lands of Puerto Rico, 28956
 Planting:
 cotton varieties planted, 1969-73, 31907
 replacement planting with potted southern
 pines on research plots, 23299
 see also Crops.—Forest planting.
 Plants:
 cadmium in plants, 20341
 chemical control of plant growth, 20931
 endangered species conservation, hearings,
 19960
 endangered species of wild fauna and flora,
 convention on international trade, 28439
 growing plants without soil for experi-
 mental use, 20916
 growth and survival of northern plants at
 low soil temperatures, growth response,
 organic nutrients, and ammonium utiliza-
 tion, 30157
 international plant protection, convention
 with other governments, 25734
 loop-frequency as related to plant cover,
 herbage production and plant density,
 23304
 newly discovered properties of plants ex-
 plained, USSR study, 31540
 plant analysis for nutrient assay of
 natural waters, 28796
 plant growth by method of holographic
 interferometry, USSR study, 23557
 plants, people, and environmental quality,
 study of plants and their environmental
 functions, 25635
 preliminary classification of wetland plant
 communities in north-central Minnesota,
 31832
 publications, price list, 16461
 quarantine import requirements—
 American Samoa, 20955
 Canada, 20956-957
 France, 31930
 foreign countries, 24162
 foreign countries for logs and lumber,
 30738
 Greece, 20958-959, 28042, 30739
 Italy, 20960
 Iraq, 30740
 South Africa, 20962
 Sweden, 20961
 recent reports of interest to plant ecolo-
 gists, 23281
 soil temperature and plants in north,
 USSR study, 31538
 timber-harvest clearcutting and nutrients
 in Northeastern United States, 31365
 see also Aquatic plants.
 Plants (industrial):
 defense industrial plant equipment, storage
 maintenance activities operations
 manual, 27379
 expenditures for new plant and new
 equipment, survey of manufactures,
 28096
 further improvements needed in controls
 over Government-owned plant equip-
 ment in custody of contractors, GAO
 report, 20330
 improved layout for fowl processing plant,
 25824
 industrial location determinants, 1971-75,
 survey, 27419

Plants (industrial)—Continued
 industrial plant equipment handbooks—
 aircraft maintenance and repair shop
 specialized equipment, 20034
 boring machines, broaching machines,
 gear cutting and finishing machines,
 23090
 centrifugals, separators and filters,
 26307
 chemical analysis and laboratory instru-
 ments, 21399, 23089
 chemical and pharmaceutical products
 manufacturing machinery, 15944
 combination and miscellaneous instru-
 ments, 24987
 crystal and glass industries machinery,
 26305
 driers, dehydrators, and anhydrators,
 26306
 drilling and tapping, 24989
 electrical and electronic properties,
 measuring and testing instruments,
 24982
 environmental chambers, 23087
 grinding machines, 17324
 industrial furnaces, ovens and heat
 treating equipment, 24984
 liquid and gas flow, pressure, tempera-
 ture, humidity and mechanical mo-
 tion measuring and controlling in-
 struments, 24986
 machining centers, way type machines,
 electrical and ultrasonic erosion ma-
 chines, 24988
 marking, metal container, assembly,
 clean work station, and miscellane-
 ous industry machinery, 15943
 metalworking lathes, 21401
 metalworking saws and filing machines,
 20035
 milling machines, 15948
 miscellaneous machine, 15946
 miscellaneous maintenance and repair
 shop specialized equipment, 15945
 motor vehicle maintenance and repair
 shop specialized equipment, 15947
 physical properties testing equipment,
 21398
 planers and shapers, 17322
 portable machine tools, metalworking
 machinery accessories, and precision
 layout tools, 27378
 pulp and paper industries and size re-
 duction machinery, 26308
 rolling mills, drawing machines and
 metal finishing equipment, 17320
 rubber and plastics working machinery,
 17321
 scales, balances and optical instruments,
 23088
 secondary metal forming and cutting
 machines, 26309
 specialized machinery and ordnance ma-
 chinery, 21400
 specialized semiconductor, microelec-
 tronic circuit board manufacturing
 machinery, 26310
 stimulated coherent radiation devices,
 lasers, 20036
 textile industries machinery and indus-
 trial sewing machines, 24985
 welding heat cutting and metalizing
 equipment, 17323
 woodworking machines, 24983
 manufacturing establishments, book value
 of fixed assets and rental payments for
 buildings and equipment, annual survey
 of manufactures, 16687
 manufacturing plant characteristics, 28644
 potato packinghouses, guidelines for plant
 layout, 26937
 small manufacturing establishments under
 Fair labor standards act, 24100
 survey of industrial location determi-
 nants, 26352

Plants (industrial)—Continued
 under USDA continuous inspection, processed fruits and vegetables, etc., list, 20882
 waste treatment plant construction, July 1, 1971-June 30, 1974, Federal funding available, 32272
 weight loss of pond-raised channel catfish (*Ictalurus punctatus*) during holding in processing plant vats, 20699
see also types of industrial plants.
 Plaquemine Brule Bayou, Church Point, La., flood plain information, 23076
 Plasma:
 absorption of microwaves by plasma which is essentially nonuniform along magnetic field, 22453
 absorption of SHF waves by plasma at upper hybrid frequencies, study, 22440
 amplitude of electromagnetic wave reflected from boundary of anisotropic plasma, 22450
 anomalous absorption of electromagnetic waves in magnetized plasma, 22445
 anomalous nonlinear dissipation of high-frequency radio waves in plasma, USSR study, 31532
 bremsstrahlung of relativistic plasma, 21007
 circuits for studying interaction of high-frequency fields with plasma in linear devices, 20994
 conditions for wave transformation in plasma with nonmonotonic longitudinal distribution, 21005
 conditions of plasma heating at electron cyclotron resonance, 22439
 density fluctuations of L-I stellarator by correlation method, 22458
 determination of plasma density in stellarators by means of open microwave resonator, 22449
 development of concept of plasma turbulence, 22463
 double electrostatic probe for measuring density, temperature and velocity of flowing plasma, 25528
 economics of mixed potassium-cesium seeding of MHD combustion plasma, 23657
 excitation of electromagnetic waves in plasma by relativistic electron beam longitudinal waves, 21000
 general principle of current heating processes of plasma in pulsed Z-discharges, 20997
 generation of fast electrons through interaction of SHF wave with collisionless plasma, 20998
 high frequency potential, effect on propagation of fast waves along magnetoactive plasma layer, 21003
 injection of relativistic electron beam into plasma, 21008
 interaction of plasma streams with stationary, axially symmetric magnetic fields, 21009
 ion heating mechanism in modified Penning discharge, 20614
 laboratory investigations of driven low frequency plasma oscillations, 29389
 laser-induced sources for magnetic fields, 17791
 localization of wave transformation region in superhigh-frequency discharge plasma, study, 21006
 measurement of plasma parameters in strong HF discharges, 22442
 measurement of transverse diffusion coefficient in SHF plasma, 20995
 microwave plasma heating experiments in Tuman-2 device, 22447
 multibeam generating bank, 20996
 nonlinear effect in microwave absorption by plasma, 22446
 nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455

Plasma—Continued
 numerical simulation of plasmas, proceedings of conference, 25659
 on theory of transformation of surface waves into longitudinal oscillations in surface layer of plasma wave-guide, 21002
 penetration of waves into plasma at frequencies close to lower hybrid frequency, 22460
 plasma bremsstrahlung from relativistic physics, 20992
 plasmasphere sounder satellite, 20693
 possible mechanisms of turbulent heating of plasma by ultrashort laser pulses, USSR study, 27622
 probe method for recording ions produced by laser radiations in afterglow discharge plasma, 20993
 quasilinear theory of collisionless plasma in weak SHF electric field and constant magnetic field, 22441
 R-OM experimental setup for studying interaction of high-frequency fields with plasma, 22467
 random walk study of electron motion in helium in crossed electromagnetic fields, 31623
 ratio of longitudinal and transverse diffusion coefficients in argon SHF discharge plasma, 20999
 self-stress of electromagnetic waves in dense collisionless plasma, 22456
 some characteristic features of formation of microwave discharge plasma in presence of magnetic fields greater than cyclotron, 22454
 spectra of magnetic pulsations of non-isothermal plasma, 22461
 spectroscopic examination of parameters of turbulent plasma, 22457
 theory of hydrodynamic stability of plasma in field of Alfvén wave of finite amplitude, 22465
 theory of streamer breakdown, USSR study, 29143
 theory of wave interactions in beam-plasma systems in magnetic fields, 21010
 theta pinch in electron-hole plasma with surface generation, 22464
 transformation of electromagnetic waves into longitudinal oscillations in non-homogeneous plasma in presence of perfectly conducting surface, 22443
 use of dual electric probes for measuring fluctuations and fluctuating currents in turbulent plasma, 22444
 visit to USSR by U.S. Energetic Beam Team, Apr. 1-15, 1972, report, 15523
 wavefield pressure, effect on longitudinal oscillations in plasma, 21004
 waves, instabilities and anomalous dissipation of parametric plasma in strong electromagnetic field of pumping wave, USSR study, 31534
 Plasma (blood), *see* Blood.
 Plasma arcs, *see* Plasma jets.
 Plasma confinement, characteristics and performance of superconducting bumpy-torus magnetic facility for plasma research, 31641
 Plasma jets, selection of coals for AVCO hydrogen plasma arc process for making acetylene, 28218
 PLASTEC notes, 27417, 31198
 PLASTEC reports, 21412, 25030, 28624
 Plaster, some aspects of setting and hardening of gypsum plaster, 23714
 Plastic pipe for interior and exterior cold water distribution systems, 31242
 Plasticity, theory of soil plasticity with indefinite angle of non-coaxiality, 30156
 Plastics:
 environmentally degradable plastics, review, 28624
 feasibility of plastic foam plugs for sealing leaking chemical containers, 31282

Plastics—Continued

- Government specifications and standards for plastics, covering defense engineering materials and applications, 31198
- PLASTECH notes, 27417, 31198
- PLASTECH reports, 21412, 25030, 28624
- plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030
- recovering plastics from urban refuse by electrodynamic techniques, 25512
- rubber and plastics working machinery, industrial plant equipment handbook, 17321
- shipments of selected products, 1971, current industrial reports, 16777
- shipments of thermoplastic pipe, tube, and fittings, current industrial reports, 18194, 22553
- solid-phase forming (cold forming) of plastics, 21412
- synthetic organic chemicals, U.S. production and sales of plastics and resin materials, 1971 preliminary report, 29554
- termite resistance of polymeric materials phase 2-nontoxic polymers, 17792
- thermoplastics, effective dry methods of separating thermoplastic films from wastepapers, 32342
- see also* names of articles made from plastics.
- Plastics Technical Evaluation Center:
 - PLASTECH notes, 27417, 31198
 - PLASTECH reports, 21412, 25030, 28624
- Plates:
 - flaw growth behavior in thick welded plates of 2219-T87 aluminum at room and cryogenic temperatures, 32477
 - metal bars, rods, wires, sheets, plates, and shapes, Federal Item Identification guide, 30105
 - stainless steel plates from Sweden, Tariff Commission report, 29553
- Plates (photographic):
 - reduction of photographic plate measurements for satellite triangulation, 30543
- Platform trucks, *see* Motortrucks.
- Platforms (loading), *see* Artificial islands.
- Plating:
 - chemical treatment of plating waste for removal of heavy metals, 28798
 - plating methods, survey, 26683
 - prevention of tin-lead overhang in plated copper-clad printed wiring boards, final report, 26985
 - see* Chromium.
- Platinum:
 - demand for platinum to reduce pollution from automobile exhausts, 23641
 - liquid state spectral emissivities in electron-beam furnace, 29233
 - platinum-group metals—
 - mineral industrial survey—
 - annual, preliminary, 23647
 - quarterly, 18761
 - minerals yearbook chapter, 25478
 - platinum resistance thermometry, 29311
- Platoons, tank units, Army field manual, 20981
- Platte County Democratic Central Committee, annual report, 22782
- Platte River and Valley:
 - North, flood plain information, Casper, Wyo., 32207
 - trapping techniques for sandhill crane studies in Platte River Valley, 25715
 - water supply outlook and snow surveys, 19057
- Playing safe in toyland, 21597
- Plays, *see* Drama.
- Pleasant Run:
 - flood plain information, 28720
 - floods, Marion County, Ind., how to avoid damage, 28745

Pleasant Valley, Nev.:

- flood plain information, Steamboat Creek, 20130
- floods, Steamboat Creek, 20153
- Pleasanton Plant Materials Center, plant materials highlights, 23981
- Pliocene period lithologic characteristics of Pliocene rocks cored at Elk Hills, Kern County, Calif., 27552
- Plot command language translator program, 17454
- Plotting boards and plotting:
 - Inter-Governmental Maritime Consultative Organization, merchant ship position reporting systems, 22616
 - performance on expanded time bearing plot as function of bearing accuracy, 26640
- Plowshare program (civil, industrial, and scientific uses for nuclear explosives):
 - Project Schooner, ecological and environmental effects from local fall-out, beta and gamma radiation effects from close-in fallout, 16663
 - report, 19185
 - reports available in Plowshare open file, 16662, 25878
- Plugs, feasibility of plastic foam plugs for sealing leaking chemical containers, 31282
- Plumbers supplies, plumbing fixtures, current industrial reports, 18194A, 29770
- Plumbing:
 - Army technical manual, 16649
 - plumbing facilities by persons per room and by income in 1969 of families and primary individuals, for United States, 29695, 27009
 - repairs for home and farmstead, 20904
 - water supply and plumbing cross-connections, hazards in household and community systems, recommended control practices, 16576
- Plumbing fixtures, *see* Plumbers supplies.
- Plums:
 - canned, United States standards for grades, 22317
 - postharvest wax-fungicide treatments of nectarines, peaches and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
- Plutonium:
 - geochemistry and potassium-argon ages of plutonic rocks in Battle Mountain mining district, Lander County, Nev., 29024
 - plutonium and americium measurement in humans by X- and gamma-ray spectral analysis, 25884
- Plutonium carbides, high power and heat flux irradiation of uranium-plutonium carbides, fast reactor mixed carbide fuel element development program, 30772
- Plutonium isotopes, Pu-238 production in commercial water reactors experimental and analytical program, 21017, 22486
- Plywood:
 - aerobic secondary treatment of plywood glue wastes, 28809
 - changing market for hardwood plywood stock panels, 21669
 - dry veneer volume losses in production of red and white fir plywood, 26473
 - price of lumber and plywood, Banking and Currency Committee investigation and study, authorize, report, 15692
 - softwood, current industrial reports, 29772
- Plywood mills, predictors of job tenure in lumber-plywood mill, 31362
- PMG series, 16583, 20883, 24116
- PNERL, *see* Pacific Northwest Environmental Research Laboratory.
- Pneumatic conveyors, *see* Conveyors.
- Pneumatic jet medical apparatuses, 25359
- Pneumatic lines, inner tubes, pneumatic tire, 16063
- Pneumoautomation, *see* Automation.

INDEX 1973

Pneumoconiosis:

- achievements, administrative problems, and costs in paying black lung benefits to coal miners and their widows, GAO report, 16094
- black lung—
 - benefits act, summary and explanation, 19765
 - benefits, 1972 changes made with explanation, 19992
 - legislation, text, section-by-section analysis and changes in existing law, 17281
 - program manual, 30381
 - reminder, if you get black lung benefits, 29503
- Pneumonia, hypersensitivity pneumonitis, farmer's lung disease and the like, 29355
- Pneumonitis, *see* Pneumonia.
- Poage, Bob, for Congress, Temple Committee, *see* Bob Poage for Congress, Temple Committee.
- Pocahontas coal, *see* Coal.
- Pocket gophers, and reforestation in Pacific Northwest, problem analysis, 27899
- Pocket guide to choosing vocational school, 30240
- Pockets, field-replaceable rotor blade pocket study, final report, 28058
- Podany, Joseph G., harvesting, storing, and packing apples for fresh market, regional practices and costs, 31917
- Podell, Bertram, Dinner Committee in Honor of Congressman, *see* Dinner Committee in Honor of Congressman Bertam Podell.
- Podiatry, *see* Chiropody.
- Poe, John R. relief, 28317
- Poetry, *see* American poetry.
- Poques Run:
 - flood plain information, 28720
 - floods, Marion County, Ind., how to avoid damage, 28745
- Poinsettia Republican Women's Club, Federated, annual report, 24698
- Point and path performance of light aircraft, 30452
- Point Place:
 - Toledo, Ohio, engineers report—departmental edition, 21473A
 - document edition, 21161
- Point Reyes National Seashore, wilderness recommendations, 23839
- Point sampling, *see* Volume and yield tables.
- Point-scatterer formulation of terrain clutter statistics, 23878
- Pointers for veteran homeowner, 27966
- Poisoning, diagnosis and treatment of poisoning by pesticides, 31764
 - see also* Lead poisoning.
- Poisonous gases, *see* Gases.
- Poisonous plants, typical poisonous plants, 31407
- Poisons:
 - annotated bibliography on biological effects of metals in aquatic environments, 26399
 - chronic CO₂ toxicity, species difference in physiological and histopathological effects, 21930
 - effects of chemical variations in aquatic environments, lead toxicity to rainbow trout and testing application factor concept, 27449
 - electronic simulator and training console for indication and degasification of poisons, USSR study, 17619
 - Federal caustic poison act, test, 26171
 - gonadotoxic and embryotoxic effect of food dye amaranth, USSR study, 17627
 - methods of estimating half-life of biological activity of toxic chemicals in water, 20780
 - National Clearinghouse for Poison Control Centers, bulletin, 18665
 - poisoning and intoxication by trace elements in children, abstract review of worldwide medical literature, 25977

Poisons—Continued

- prohibit poisoning of animals and birds on public lands, restrict use of toxic chemicals as method of predator control, hearings, 24917
- relative toxicity of chloropicrin, phosphine, EDC-CCl₄ and CCl₄-CS₂ to various life stages, 30893
- rodenticides and mammal, bird and fish toxicants, EPA compendium of pesticides, 20731A, 25668
- standard dispersant effectiveness and toxicity test, 28811
- toxic effects of aqueous aluminum to rainbow trout, effects of chemical variations in aquatic environments,
- toxic organophosphorus compounds, USSR study, 30331
- toxic substances, 1972, annual list, 17760
- toxicity, bibliography, 18967
- toxicity of power plant chemicals to aquatic life, 28091
- toxicity of some insecticides to 4 species of malacostracan crustaceans, 26849
- water hardness affects on toxicity of several organic and inorganic herbicides to fish, 26849
- you can poison yourself, your family, your livestock, if you don't use poison carefully, 26947
 - see also* Lead poisoning.
- POL, *see* Pacific Oceanographic Laboratories.
- Poland, J. F., glossary of selected terms usefully in studies of mechanics of aquifer systems and land subsidence due to fluid withdrawal, 20362
- Poland:
 - air transport services, agreement, 25764
 - area handbook, 28050
 - cast iron soil pipe fittings, determination of no injury or likelihood thereof, investigation AA1921-100 under Anti-dumping act, 1921, as amended, 16540
 - consular convention, message from President of United States, 15802
 - report, 24894
 - fisheries in western region of middle Atlantic Ocean, agreement, 17876
 - five-year plan summary, 31207
 - mineral industry, minerals yearbook chapter, 16304
 - observations on East-West economic relations, U.S.S.R. and Poland, trip report, 22661
 - Polish People's Republic scientific and technical cooperation, agreement, 27926
 - President Nixon's visit to Poland, 16497
 - social security pensions, agreement, 27912
 - Soviet and Polish agriculture, observations, 24910
- Polar bears, *see* Bears.
- Polar regions, *see* Antarctic regions.
- Polaris (star), *see* Pole stars.
- Polaris missile, *see* Missiles.
- Polarization (electricity):
 - calculating spreading resistance of linearly polarized electrodes, USSR study, 16184
- Polarization (nuclear):
 - dynamic nuclear polarization, application to increase sensitivity and speed of nuclear precession magnetometers, USSR study, 29133
- Polarography, polarographic determination of NTA, 30191
- Pole stars, ephemeris, 20510
- Polecat Bench area, *see* Pick-Sloan Missouri Basin program.
- Polecat Creek, Sapulpa, Okla., special flood hazard information, 25092
- Poles, evaluation of adhesive-bond quality in telephone crossarms after 16 to 23 years of exterior exposure, 21667
- Police:
 - allocations of resources in Chicago Police Department, 16214

Police—Continued

- Capitol police, reorganization of supervisory positions under House of Representatives, report, 28364
- current regulation of private police, regulatory agency experience and views, 20486
- developing injury and damage reduction program in municipal police departments, guidelines, 29149
- District of Columbia—
 - exclusion of personnel records from public inspection—
 - hearing, 15887
 - law, 19472
 - report, 17201
 - metropolitan policeman, policewoman, amendment, 22596
- Federal minimum death and dismemberment benefit to public safety officers or their surviving dependents, reports, 21177, 21184
- guidelines for police performance appraisal, promotion and placement procedures, 27654
- innovation in law enforcement, 31550
- International Criminal Police Organization, U.S. membership, increase limit on dues, law, 16890
- law and private police, 16213
- law enforcement officers killed, summary, 26428
- National Airport, Washington, D.C. and Dulles International Airport, revise pay structure, report, 19689
- NILECJ standard on ballistic resistance of police body armor, 23570
- police isolation and community needs, report of Wisconsin State Committee to United States Commission on Civil Rights, 19276
- police traffic services—
 - basic training program—
 - course guide, 22049
 - instructor's lesson plans, 22050
 - student study guide, 22051
 - supervisory level training program—
 - course guide, 27762
 - instructor's lesson plans, 29347
 - student study guide, 30496
- public safety officers' group life insurance, authorize report, 24904
- public safety officers' survivors' benefits, provide report, 24903
- research on street crime control, 31552
- salary increases for District of Columbia police and firemen—
 - law, 16910
 - report, 16975
- street crime in America, police response, hearings, 29897
- Policemen, *see* Police.
- Policewomen, *see* Police.
- Policies and trends in municipal waste treatment, 16022-26
- Policy and supporting positions, 26200
- Polish People's Republic, *see* Poland.
- Political Action Committee Ohio State Council of Carpenters, *see* Ohio State Council of Carpenters Political Action Committee.
- Political Action Committee on Cable Television, annual report, 22676.
- Political Action Committee (PAC) of N. Dak. RECS, annual report, 28277
- Political activity, *see* Politics.
- Political Awareness Fund, annual report, 24332
- Political campaigns, *see* Elections.
- Political corruption, abuse of psychiatry for political repression in Soviet Union, hearing, 18984
- Political Education, Wapplingers Federation of Teachers Committee, *see* Wapplingers Federation of Teachers Committee on Political Education.
- Political Fund Committee of American Postal Workers Union, AFL-CIO
 - annual report, 24720

- Political kidnappings, 1968-73, 29920
- Political persecution, *see* Persecution.
- Political Unity of Leaders in State Education, annual report, 24699
- Politically Active Carpenters, Political Committee, annual report, 22877
- Politics :
 - American student left, 32410
 - Eastern Europe, transmissions, 18974
 - Far East, political developments, 27322
 - Federal employees political participation, 29807
 - Investigation of possible politicization of Federal statistical programs, report, 19690
 - military surveillance of civilian politics, subcommittee report, 30051
 - political cartoons in 1848 election campaign, 20766
 - registration of certain organizations wishing to control by force or overthrow Government, rules etc. prescribed by Attorney General, 17649
 - USA, economics, politics, ideology (periodical), 19031
 - USSR political and sociological affairs, translations, 18988
 - see also* International relations.
- Polk, Bonnie W., food and nutrition, 18375
- Polk County, Democratic Party of, *see* Democratic Party of Polk County.
- Polk County Republican Committee, annual report, 24524
- Pollination, *see* Fertilization of plants.
- Pollock, Budd S., conversion of victoreen model 6 CDV 700 GM instruments for use with scintillation of BF₃ probes, 24194
- Pollock, Gerald A., Pollock for Congress Committee, annual report, 24673
- Pollock for Congress Committee, annual report, 24673
- Pollution :
 - activated carbon adsorption, new process for treating wastewater, 16545
 - additional actions needed to minimize adverse environmental impacts of timber harvesting and road construction on forest land, GAO report, 25236
 - AEC Pollution Control Conference, Oak Ridge, Tenn., proceedings, 26990
 - amortization of pollution control facilities, tax information, 20389
 - analysis of State fire control laws, general administration, environmental protection and pollution control, 21603, 25204
 - atmospheric turbulence and dispersal of atmospheric pollutants, 32255
 - bibliography of R & M research reports, 27491
 - catalytic combustion, pollution-free means of energy conversion? 31274
 - coastal pollution research highlights, 27448
 - control costs and research priorities in animal slaughtering and processing industries, 27763
 - effects of pollution abatement on international trade, 25964
 - environment, problems, solutions and emergency preparedness, 20029
 - environmental film list, 32251
 - environmental pollution and control, weekly Government abstracts, 19070
 - environmental protection in synthetic rubber industry, sub-council report, 29348
 - environmental quality, fourth annual report of Council on Environmental Quality, 32159
 - environmental statements, AEC authorizing legislation, 1974, hearings, 27090
 - evaluation of pollution abatement procedures, Moraine State Park, 27463
 - Federal programs to control environmental pollution from Federal Government activities, basic documents, 32247

Pollution—Continued

give a hoot, don't pollute, forestry, '76, 23275
 groups that can help, directory of environmental organizations, 16017
 health effects of environmental pollution, 32265
 how to increase biological resources of the Caspian, USSR study, 23523
 indoor-outdoor carbon monoxide pollution study, 32258
 Industrial Pollution Control Branch, Environmental Protection Agency, projects, 25106
 industrial solid waste, staff report, 16382
 life pass it on—
 how educators can help, 31298
 how farmer and rancher can help, 31300
 how homemaker can help, 31299
 how outdoorsman can help, 31301
 Middle Atlantic Region, Environmental Protection Agency, 25121
 National Industrial Pollution Control Council's and industrial responsibility in bearing costs of pollution control (address), 22639
 noise pollution, 17426
 non-point source pollution from agricultural, rural, and developing areas, hearings, 21289
 organic pollutant identification utilizing mass spectrometry, 32262
 pollution control costs and research priorities in animal slaughtering and processing industries, 30499
 President's 1973 environmental program, 30081
 questions and answers from EPA's 2d national citizens' briefing, 32269
 railroads and environment in rail freight operations, sub-council report, 23741
 Southern Conference on Environmental Radiation Protection from Nuclear Power Plants, Apr. 21-22, 1971, proceedings, 20740
 steam stripping odorous substances from kraft effluent streams, 28810
 steel industry and environmental quality, progress report, 23742
 textile industry and pollution control, progress report, 25582
 U.S.-U.S.S.R. cooperative agreements, 17095
 upgrading metal-finishing facilities to reduce pollution (series), 30661-662
 upgrading poultry-processing facilities to reduce pollution (series), 30663-665
 vehicle-free zones in city centers, European experience, 21802
 when wildlife tries to tell us something we'd better pay attention (posters), 29516B
 Woodys Owl, give a hoot, don't pollute (poster), 20293
 your world, my world, look for young environmentalists, 21527
 see also Air pollution—Water pollution.
 Pollution Control Analysis Section, projects, listing of active and completed projects, published reports, etc., 21505
 Pollution Control Council, National Industrial Pollution Control Council.
 Pollution of streams, see Water pollution.
 Polly, Ubel D., relief, 28449
 Polta, Harold J., iron and steel scrap, 25450
 Polycelis, freshwater triclads (Turbellaria) of North America, genus Polycelis, 23963
 Polychaeta, freshwater polychaetes (Annelida) of North America, 17436
 Polychlorinated biphenyl, see Biphenyl.
 Polyelectrolytes, preparative free-flow electrophoresis as method of fractionation of natural organic materials, 27575
 Polyester fabric, wool and polyester/wool worsted fabrics from Japan, 20837

Polyethylene:

fabrication of open cell polyethylene foam, 20063
 making polyethylene more disposable, 26423
 retrieval and baling machine for polyethylene field cover, 22393
 standard reference materials, characterization of linear polyethylene SRM 1475, 17737
 Polyethylene glycol:
 how PEG helps hobbyist who works with wood, 20295
 stabilization of hard maple flooring with polyethylene glycol 1000, 31370
 Polygons, delineation of clustered points in 2 dimensions by measuring perimeters of convex hulls, 21940
 Polyhymnia (asteroid):
 orbit of Polyhymnia and mass of Jupiter, 17788
 Polymers and polymerization:
 adsorption of chlorinated hydrocarbons from seawater by crosslinked polymer, 28806
 flow augmenting effects of polymer additives into open channel water flows, 30189
 new technique for auger analysis of surface species subject to electron-induced desorption, 27716
 polymer concrete-reinforced concrete composite beams, 30162
 polymer film overlay system for mercury contaminated sludge, 20219
 polymerized lightweight structural elements, 30160
 pyrrone and BBB publications, annotated bibliography, 21955
 radiation crosslinking of polymers with segregated metallic particles, 25872
 studies of radiation effects, final report, 29677
 termite resistance of polymeric materials phase 2-nontoxic polymers, 17792
 thermal degradation, thermal oxidation and thermal analysis of high polymers, literature survey, 27417
 Polytetrafluoroethylene, adhesion and transfer of polytetrafluoroethylene to metals studied by Auger emission spectroscopy, 20613
 Polyurethane, see Urethanes.
 Pomacanthidae, see Angelfish.
 Ponce, P.R.:
 aircraft accident report, 23861
 census of housing, metropolitan housing characteristics, 24216
 census of population and housing, 1970, census tracts, 15581
 ground water along Rio Bucana at Ponce, P.R., and effects of proposed floodway on ground-water quality, 23384
 Pond Creek, watershed work plan for watershed protection and flood prevention, Pond Creek watershed, Bell, Falls, and Milam Counties, Tex., 20012
 Ponderosa pine, see Pine.
 Ponds:
 anaerobic-aerobic ponds for beet sugar waste treatment, 26409
 denitrification by anaerobic filters and ponds, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21521
 management of recycled waste-process water ponds, 28817
 Pontiac, Mich., railroad accident report, 22212
 Pontotoc County, Okla., soil survey report, 29511
 Pools, pool drownings and their prevention, 29042
 Poon, Calvin P. C., anaerobic-aerobic treatment of textile wastes with activated carbon, 28825

Poor:

- census employment survey user's guide, 31566
- dignity instead of desperation, programs for elderly poor, 17345
- effectiveness of manpower training programs, review of research on impact on poor, 16934
- funds, summer lunch-pre-school feeding, extend, hearings, 20006
- housing Milwaukee's poor, obstacles and possibilities, 22583
- hunger 1973, poverty in America, census statistics for county level poor and story behind them with review of food program administration, 26284
- limited resource farmers, proceedings of workshop, 30669
- income transfer programs, how they tax the poor, 21140
- mobile homes and low-income rural families, 25037
- needy school children will receive free or reduced price lunch under National school lunch act, hearings, 15732
- nutrition and human needs, national survey, hearings, 20007
- productive employment of disadvantaged, guidelines for action, 30402
- research for people in need, 23968
- school lunches free or reduced price including summer months, hearings, 15727
- Seattle, Wash., unemployment, new poor and hunger, 17293
- Poor Fork, flood plain information, 21453
- Pop Warner Little League Scholars, Inc., incorporate in D.C., report, 19582
- Pope, Joseph H., ionospheric scintillation predictions for GOES, 25626
- Pope, Robert B., photo plot bias, 28961
- Pope County, Minn., soil survey report, 17845
- Popenoe, Charles H., MIDAS, modular interactive data acquisition system, description and specification, 31679
- Poplar Creek, flood plain information, 17392
- Popov Society Congress, table of contents from 5 volumes of abstracts of papers presented at Congress, 31537
- Population:
 - accuracy of data on population characteristics for subgroups of total population, 22564
 - alternative futures and environmental quality, working papers, 31311
 - analysis of population dynamics of selected avian species with special reference to changes during modern pesticide era, 22250
 - aspects of population growth policy, 32532
 - census, 1960—
 - accuracy of data on population characteristics for subgroups of total population, 22564
 - evaluation and research program, 19251, 22564
 - census, 1970—
 - census tract memo series, 21053
 - census tracts, 15580-581, 16744-745, 19212-227, 28131
 - characteristics of occupied housing units by year structure built and tenure, for United States, supplementary report, 15571
 - characteristics of population, 25900-906, 27010-17, 28112-119, 29697 704, 30800-804, 31946-947
 - publications order form, 25907
 - detailed characteristics, 15573-575, 16732-742, 19200-208, 21041-42, 22517-525, 24217, 28120-121
 - microfiche order form, 22141
 - publications order form, 22526
 - United States summary, 28120
 - effects of different reinterview techniques on estimates of simple response variance, 19251

Population—Continued

- census, 1970—continued
 - employment profiles of selected low-income areas, rural areas, publications order form, 22527
 - evaluation and research program, 22536, 25913, 28132
 - final reports, 19210
 - general social and economic characteristics, 15576, 16743, 19209
 - United States summary, 15576
 - geographic identification code scheme, 16746, 19228-229
 - microfiche order form, 22145
 - publications order form, 22537
- industries and occupations, classified index, 29705
- Negro population, 28122
- procedural history, 25914, 28133-134
- publication and computer tape program, list, 29719
- rural population by farm-nonfarm residence for counties in United States—
 - microfiche order form, 22143
 - supplementary reports, 15570, 15579
 - subject reports, 15577, 21044, 22533-534, 24218-219, 25908-910, 27018-19, 28122-124, 29706-710, 30805-810, 31948-950
 - data access descriptions, 28191
 - microfiche order form, 22144
 - publications order form, 27020
 - summary tapes, 6th count, 15594
 - supplementary reports, 15578-579, 19211, 21045-47, 22535, 24220-221, 25911-912, 27021-24, 28125-130, 29711-718, 30811
- microfiche order form, 22142-142A
- publications order forms, 22528-532
- characteristics of population by ethnic origin, 28172
- characteristics of U.S. rural areas with noncommuting population, 17216
- comparison of total population figures from censuses taken around 1970 with population estimates for selected countries, 28194
- completeness and quality of response in North Carolina marriage follow-back survey, 30480
- current population reports, 18197
- consumer buying indicators, 15593, 21065, 22563, 25937, 29783
- consumer income, series, 21062-64, 22562, 28189-190, 29782
- estimates of population of Florida counties, 30854
- Federal-State cooperative program for population estimates, 16784-785, 19248-249, 22558-561, 24241-244, 25934-936, 27036-39, 28175-188, 29779-781, 30853-854
- population characteristics, series, 15591-592, 16780, 19245-246, 21058, 22556, 24236-237, 27032, 28172-174, 31964
- population estimates and projections, series, 16781-783, 19247, 21059-61, 22557, 24240, 25932-933, 27033-35, 29777-778, 31965
- special censuses series, 24245, 31966-968
- special studies, 24238-239, 29776, 30852
- distribution, and policy, 30601
- economic aspects of population change, 29446
- educational attainment, 1970 census of population, 25910
- effects on populations of exposure to low levels of ionizing radiation, 25517
- employment and population changes, special economic reports series ES 20, 16787, 29784
- estimates and projections of populations of U.S.S.R. by age and sex, 1950-2000.
- international population report, 25035

Population—Continued

estimates of coverage of population by sex, race and age in 1970 census (paper), 27040
 estimates of population, counties—
 Kansas, 29780
 Massachusetts, 29779
 North Carolina, 29781
 estimates of population of United States, current population reports, 31965
 farm population estimates, 1910-70, 29635
 farm population of United States, 28171
 farm, series Census ERS, 28171
 Federal-State cooperative program for local population estimates, Apr. 1, 1970, test results, 25934
 fertility changes in continuing program of population projections, problems in interpretation and projections, 22566
 five-year plan for family planning services and population research programs, progress report, 17286
 geographic divisions and States, changes, 29784
 governance and population, governmental implications of population change, 23907
 growth and its implications for future on resources, environment and food supply, hearings, 29932
 income of farm-related population, 1970, census of population, 28124
 international population reports, 25035, 26351
 lifetime and recent migration, 1970 census of population, 25909
 low-income population, 1970, census of population, 31949
 low-income population, 1971, characteristics, 21062, 22562, 28196
 marital status and living arrangements of population in United States, 1970, supplementary report, 27023
 mid-decade census, proposals, hearings, 27237
 mobility, commuting, and veteran status for U.S., 1970 census, 21045
 national growth and distribution of population, roles of National and State Governments on policy levels, hearings, 15724
 Negro population as percent of total population by counties of United States, 1970, map, 25941
 1970 population of Congressional districts for 93d Congress, 19211
 number of Negro persons, by counties of United States, 1970, maps, 19259, 25940
 persons of Spanish ancestry, census of population supplementary report, 22535
 places of 2,500 or more, 1970 and 1960, 15578
 population and economic activity in United States, 1950-2020 for water quality management, 23205
 population and housing characteristics for United States, 1970, by State, 21047
 population data for milk marketing areas under Federal orders, based on 1970 census, 26925
 population-migration reports, rural urban migrants, 24142
 population program assistance, aid to developing countries by United States, other nations, and international and private agencies, 30322
 population, resources, and environment, 22192
 population sciences, Federal population research, inventory, 29356
 prediction approach to finite population sampling theory, application to hospital discharge survey, 29329
 projections of population of communist countries of Eastern Europe, by age and sex, 1972-2000, 26351
 prototype of environmental civilization (address), 21512

Population—Continued

public investments and population changes in 3 rural Washington State towns, 20894
 report on national growth, 17343
 research, population research centers and program projects supported by Center for Population Research, annual summary, 27767
 rise (remarks), 28241
 standard metropolitan statistical areas and central cities, changes, 16787
 summary of special censuses, 24245
 survey of air and population lead levels in selected American communities, 31270
 U.S. aid to population/family planning in Asia, 27209
 United States, estimates, 16781-783, 21059-61, 25932-933, 29777-778
 United States estimates, and components of change, 27033
 United States, projections of population 1972-2020, by age and sex, 19247
 see also Rural population—also names of States, etc.
 Population Growth and the American Future, Commission on, research reports, 22192, 23907, 25669, 29446, 30601, 32532
 Populus tremuloides, see Aspen.
 Porcelain, 18th century English porcelain, brief guide to collection in Natural Museum of History and Technology, 23796
 Pork:
 bellies, quarterly and shorter-term price forecasting models relating to cash and future quotations, 30719
 effects of alternative beef import policies on beef and pork sectors, 17346
 effects of alternative marketing margins for beef and pork, 30697
 frozen pork bellies, commitments of traders, 18140
 Porous materials, application of model of porous body for calculation of field of velocities and temperatures in reactor core, USSR study, 30371
 Porphyries, simulated in situ leaching of copper from porphyry ore, 29242
 Port Angeles, Wash.:
 Ediz Hook, beach erosion control project, engineers report—
 departmental edition, 30953
 document edition, 31245
 Port Authority Trans-Hudson Corporation, emergency board, report, investigate dispute between Port Authority Trans-Hudson Corporation and certain of its employees represented by Brotherhood Railway Carmen of United States and Canada, 25062
 Port Hudson, Mo., detonation of flammable cloud following pipeline break, Dec. 9, 1970, explosion in Port Hudson, Mo., 26668
 Port-Orford cedar, see Cedar.
 Port Orford Cedar Research Natural Area, general information, 21640
 Port Royal Sound, tracer simulation study of potential solute movement in Port Royal Sound, S.C., 20356
 Portage, Wis.:
 flood plain information, Wisconsin River, 25082
 floods, how to avoid damage, 25085
 Portage County, Ohio, flood plain information, Cuyahoga River, 17382, 20116
 Portage Open Bay, flood plain information, Portageville, Mo., 28721
 Portageville, Mo., floods, how to avoid damage, 28746
 Porte, H. A.:
 activity networks to model transportation systems subject to facility constraints, 26379
 stochastic network to model air cargo terminals, 25071

- Porter, John J., study of photodegradation of commercial dyes, 26411
- Portland, Maine, area wage survey, 23600
- Portland, Oreg.:
 area wage survey, 17660
 log export restriction, hearing, 28520
 motor carrier accident, 26671
- Portland cement, *see* Cement.
- Porto Rico, *see* Puerto Rico.
- Portraits, portraits of committee chairmen, presentation to Permanent Select Committee on Small Business, 23026
- Ports:
 construction in theater of operations, 30169
 construction of offshore facilities approval of adjacent coastal States necessary, hearing, 24960
 Customs Bureau examination and screening procedures at ports of entry, report, 19639
 deep water port development, policy issues for handling supertankers, etc., hearings, 15902
 distances between United States ports, 32505
 highlights of MarAd port activities, 27689
 new kinds of port facilities and equipment, domestic and international competition, regulation and legislation, etc. with ensuing problems (remarks), 28868
 port construction in theater of operations, 28786
 port information sources, 23622
 port series, 17405
 ports and ocean transportation (remarks), 21550
 Ports and waterways safety act, amend, hearings, 30015
 Ports and waterways safety act, law, 16872
 selected, arrivals and departures, 16567
 U.S. foreign trade, schedule D, classification of customs districts and ports, 22546, 29724, 30857
see also names of ports, or places where located.
- Ports of entry and delivery, *see* Customs Service.
- Portsmouth, Va.:
 area wage survey, 29167
 flood plain information, coastal flooding, 28703
 floods, how to avoid damage, 28747
- Portugal:
 agricultural commodities, agreement, 20794
 background notes, 25722
 map, 19267
 metropolitan economic trends and their implications for United States, 29118
 military assistance, deposits under Foreign assistance act of 1971, agreement, 16507
 mineral industry, minerals yearbook chapter, 20547, 29227
 trade in cotton textiles with Macao, agreement, 25765
- Portuguese East Africa:
 mineral industry, minerals yearbook chapter, 16263
 Mozambique—South Africa boundary study, 29532
 Mozambique—Swaziland boundary study, 29534
- Portuguese Guinea, *see* Portuguese West Africa.
- Portuguese West Africa:
 Angola, economic trends and their implications for United States, 16161, 31506
 mineral industry, minerals yearbook chapter, 16263
 Portuguese Guinea, background notes, 32570
- Posey, Carl A., earthquake information bulletin, 18237
- Posey County Republican Central Committee, annual report, 22907
- Position and problems of small business in Government procurement, 19728
- Position classification, *see* Classification.
- Position indicators, estimating Dunning's site index from plant indicators, 31368
- Position plotting, *see* Plotting boards and plotting.
- Positions, *see* Employment.
- Possessions of United States, *see* Outlying possessions.
- Possibilities of using induced potentials in evaluating functional state of auditory analyzer, 27629
- Possibility of building pulsed electron accelerators with energies of 20-50 MeV, 23516
- Post, Howard A., pulp, paper, and board, quarterly industry report, 18834
- Post assessment insurance guaranty association, 19670
- Post exchanges:
 Defense Department nonappropriated fund and other resale activities, review, 19747
 restriction on purchases by members of selected reserve be removed, hearings, 27192
 Special Subcommittee on Nonappropriated Fund Activities within Department of Defense Investigations, hearings, 19744
- Post Office and Civil Service Committee, House:
 calendar, 18554
 committee prints, 17076-79, 21280-282, 24871, 29934
 hearings, 15773-76, 17075, 21274-279, 24870, 24872, 26177, 27237-239, 29933, 32089-90, 31034-39, 32091
 investigations and studies, authorization and expenses, reports, 26085, 26113
 reports, 16964-965, 19688-690, 19708, 19720, 21178, 26091-92, 26131, 26137, 26239, 27116M, 27122-123, 27135, 28346, 28359, 28367, 29860, 30996, 32029, 32057, 32060
- Post Office and Civil Service Committee, Senate:
 calendar, 18572
 committee prints, 17294-295, 20010, 23071, 24957, 27362
 hearings, 20008-9, 26287, 27361, 28570, 30064-68, 31158, 32152
 reports, 19840, 19933, 27269, 28465, 29973, 31098-99, 31100
- Post Office Department, posters, commemorative stamp poster series, 31888-890
- Post offices:
 director, with ZIP code numbers, 31891
 postal contracting manual, 16565
 postal service manual, 18767
- Post rider commemorative stamp, rise of spirit of independence series, 27959
- Postage:
 financing cost of reduced rates of postage, hearings, 27238
 international postage rates and fees, general information, 16564
 mail management, postage accountability, 31423
- Postage rates, *see* Postage.
- Postage stamps:
 aerogramme recognizes balloonists (poster), 22292
 Amadeo P. Giannini, 21-cent stamp (poster), 27960
 Angus cattle, 8-cent stamp, rural America series, 32605
 Benjamin Franklin 7-cent regular (poster), 16559
 Boston Tea Party, Bicentennial series (poster), 27958
 Christmas (poster), 20848
 colonial drummer, rise of spirit of independence series (poster), 31888
 commemorative, posters, 18133, 24085

INDEX 1973

Postage stamps--Continued

- Eugene O'Neill \$1.00 coil stamp (poster), 22293
- George Gershwin 8-cent commemorative stamp (American arts series), (poster), 22290
- Harry S. Truman (poster), 26907
- Henry Ossawa Tanner commemorative stamp, American arts series (poster), 31889
- love, special 8-cent stamp for someone special (poster), 22291
- Lyndon B. Johnson 8-cent stamp (poster), 30676
- mail order business, 100th anniversary, 8-cent commemorative stamp, 18558
- Nicolaus Copernicus 8-cent (poster), 25795
- olympic games, 6, 8, 11, and 15 cent stamps (poster), 22294
- osteopathic medicine commemorative 8-cent stamp (poster), 16560
- people serving you, Postal Week, Apr. 29-May 5, 1973 (poster), 26908
- pharmacy (poster), 16561
- philatelic dedicatory lecture series, 22090
- post rider 8-cent commemorative stamp, rise of spirit of independence series (poster), 27959
- Postal people stamps, dedication (remarks), 29573
- posting a broadside, rise of spirit of independence series (poster), 26909
- progress in electronics stamps (poster), 29568
- rise of spirit of independence, pamphleteer, 8-cent commemorative stamp (poster), 24085
- Robinson Jeffers (poster), 30677
- stamp collecting 8-cent stamp (poster), 20849
- stamp collecting for fun of it, 27961
- Tom Sawyer 8-cent stamp, 16562
- United States, May 1970-Dec. 1971, description, 25797
- wildlife conservation stamp (poster), 16563
- Willa Cather commemorative stamp, American arts series (poster), 31890
- Postal bulletin, *see* Postal service.
- Postal cards:
 - John Hanson 6-cent postal card (poster), 16557
 - 100th anniversary of postal card (poster), 32606
- Postal contracting manual, 17923
- Postal contracts, *see* Postal service.
- Postal employees, *see* Postal service.
- Postal Inspection Service, enforcement report, monthly, 18262
- Postal life, magazine for postal employees, 18766
- Postal money orders, *see* Money orders.
- Postal oversight, 28570, 32152
- Postal rates, *see* Postage.
- Postal service:
 - air service instructions, 29569
 - appropriations, 1973, hearings, 15719
 - dedication of Postal people stamps (remarks), 29573
 - early retirement of postal employees, authorize, hearing, 15775
 - employees, Elmhurst, Ill., post office, relief, 15810, 19335, 19588
 - improvements are gradually being made in U.S. Postal Service operations, etc. (remarks), 29572
 - laws, 16566
 - licensed vendor listing, uniform allowance program, 17921
 - magazine subsidies by providing rates to encourage and support widest possible dissemination of news, etc., hearings, 27361
 - mail services and how to use them, 30678
 - packaging for mailing, 29570

Postal service--Continued

- people serving you, Postal Week, Apr. 29-May 5, 1973, commemorative stamps (poster), 26908
- post rider 8-cent commemorative stamp, rise of spirit of independence series, 27959
- postal bulletin, 18764
- postal contracting manual, 16565, 17922-923, 18765, 20850, 22295, 24088, 25796, 31892, 32607
- postal life, magazine for postal employees, 18766
- postal oversight, hearings, 28570, 32152
- postal service manual, 18767
 - excerpts, instructions for mailers, 18492
 - publications, price list, 30606
- result and analysis of experimental mail extension test, census of population and housing, 28132
- see also* Franking privilege--International postal service--United States Postal Service.
- Postal Union of the Americas and Spain:
 - constitution, convention, and related documents, 25739
 - money order agreement and final protocol, 25739
 - parcled post agreement and related documents, 25739
- Postal Week:
 - dedication of Postal people stamps (remarks), 29573
 - people serving you, Postal Week, Apr. 29-May 5, 1973, commemorative stamps, (poster), 26908
- Posters:
 - American Revolution Bicentennial Commission, 15498
 - Community Environmental Management Bureau, 28246, 28248-249
 - Environmental Protection Agency, 23204
 - Equal Employment Opportunity Commission, 25133
 - Fish and Wildlife Service, 29516B
 - Food and Drug Administration, 21594, 21596, 21598, 23260
 - Forest Service, 20293
 - Geological Survey, 21706
 - Health Services and Mental Health Administration, 27579
 - National Aeronautics and Space Administration, 17702, 21971, 23674
 - National Bureau of Standards, 31674
 - National Institute of Mental Health, 23751
 - National Marine Fisheries Service, 20684, 23795, 29377
 - National Oceanic and Atmospheric Administration, 23797
 - National Park Service, 22124, 26775, 26778
 - National Weather Service, 30578
 - Post Office Department, commemorative stamp poster series, 31888-890
 - Reclamation Bureau, 31775
 - sold by Superintendent of Documents, price list, 25674
 - Solid Waste Management Office, 29515
 - United States Postal Service, commemorative stamp poster series, 16557-563, 18133, 20848-849, 22290-294, 24085, 25795, 26907-909, 27958-960, 29568, 30676-677, 32605-606
- Postharvest wax-fungicide treatments of nectarines, peaches, and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
- Posting a broadside, rise of spirit of independence series (poster), 26909
- Postma, A. K., organic iodine formation under accident conditions in water-cooled reactors, review, 24203
- Postmaster General, *see* United States Postal Service.
- Postsecondary Education, Commission on Financing, *see* National Commission on Financing of Postsecondary Education.

- Potash:
continuous heavy liquid concentration of high-clay potash ores, 25501
Federal and Indian lands, royalty, income and related statistics, 29013
minerals yearbook chapter, 25479
1972, mineral industry survey, 26657
nitrogen, phosphate, potash, fertilizer supply, 30694
- Potassium:
economics of mixed potassium-cesium seedling of MHD combustion plasma, 23657
effects of various combinations of nitrogen, phosphorus, and potassium on paper birch seedling growth, 28941
fertilizer supply, 15463
geochemistry and potassium-argon ages of plutonic rocks in Battle Mountain mining district, Lander County, Nev., 29024
response of paper birch seedlings to nitrogen, phosphorus, and potassium, 28940
use of atomic absorption spectroscopy in determination of $\mu\text{g/liter}$ concentrations of Na^+ , K^+ , Ca^{2+} , and Mg^{2+} , 17370
- Potassium chloride, thermodynamics of molten mixtures of lithium chloride-potassium chloride at 640°C , 22407
- Potatoes:
acreage marketing guide, 19100
bin fronts for potato storage, 16604
futures—
commitments of traders, 18139
trading and open contracts, 18394
instant potato granules from Canada, Tariff Commission report, 16542
nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
potato packinghouses, guidelines for plant layout, 26937
spring and early summer, 1973 acreage marketing guides, 22316
total stocks, monthly report, 18966
- Potat, Kenneth O., comparison of satellite-derived low and cirrus level winds with conventional wind observations, 30535
- Potential:
on utility of m-8-8 potential function, 26704
possibilities of using induced potentials in evaluating functional state of auditory analyzer, USSR study, 27629
- Potential fertilizers for underdeveloped areas, 30671
- Potential for energy conservation, staff study, 16004
- Potential for energy conservation, substitution for scarce fuels, staff study, 23145
- Potential for oilseed sunflowers in United States, 24122
- Potential radiological implications of nuclear facilities in upper Mississippi River basin in year 2000, 28090
- Potholes:
ground water hydrology of prairie potholes in North Dakota, 23359
hydrologic investigations of prairie potholes in North Dakota, 21723
hydrology of prairie potholes in North Dakota (series), 21723, 23359
- Potomac Headwaters Resource Conservation and Development (RC & D) Project:
outdoor recreation potential in West Virginia is eastern panhandle, 20774
- Potomac River Basin Interstate Commission, see Interstate Commission on Potomac River Basin
- Potter, Dale R.:
human behavior aspects of fish and wildlife conservation, annotated bibliography, 28927
questionnaires for research, annotated bibliography on design, construction, and use, 20320
- Potzick, James E., new method for generating waterdrops of specified mass, 27737
- Poughkeepsie, N.Y., area wage survey, 16228
- Poultry:
antibiotics in animal and poultry feeds, critical of research, 20886
bibliography and abstracts on research in Western Marketing and Nutrition Research Division, 20889
chemical compounds authorized for use under USDA inspection program, list, 22399, 28041
clean for you, 25821
directory of meat and poultry inspection program establishments, circuits and officials, 18233
Federal meat and poultry inspection, statistical summary, 26956
foreign agriculture circulars, 18380
health requirements and regulations governing interstate and international movement, State-Federal, 29655
home canning of meat and poultry, 15469
improved layout for fowl processing plant, 25824
in-process pollution abatement, poultry-processing facilities, 30663
inspection regulations of USDA, 31929
livestock, poultry, livestock and poultry products, 1969 census of agriculture, 29689
market statistics, 1972 annual summary, 24143
meat and poultry inspection regulations, 29656
meat and poultry standards for you, 26934
Netherlands poultry meat industry, 17499
Packers and stockyards act, fair play in marketplace, 19124
poultry and egg situation (periodical), 18768
poultry house, caged layers—
deep pit, 26941
farm building plans, 20920, 25827
Poultry products inspection act, amend, report, 24907
pretreatment of poultry processing wastes, 30664
products inspection act, reports, 16979, 19640, 19677
protection against tuberculosis, do's and don'ts for swine, cattle, etc., 22349
publications sold by Superintendent of Documents, price list, 25673
sanitation handbook of meat and poultry inspection program, 15499
slaughtered under Federal inspection, monthly report, 18769
State-Federal meat and poultry inspection program, increase Federal support, report, 24907
State inspection costs, Federal contribution, increase reports, 16979, 19640, 19677
upgrading poultry-processing facilities to reduce pollution (series), 30663-665
used in further processing, monthly report, 18769
waste treatment, poultry-processing facilities, 30665
Poultry processing plants, see Poultry.
- Poverty:
farmworkers in rural poverty, hearings, 19995
hunger 1973, poverty in America, census statistics for county level poor and story behind with review of food program administration, 26284
inadequate housing and poverty status of households, areas served by Farmers Home Administration programs, 1970, by States, 28022
national anti-poverty plan, fiscal year 1968-72, OEC, hearings, 28540
poverty dimensions of rural-to-urban migration, statistical report, 24142
Powder metallurgy, see Cobalt—Metallurgy.
Powdered carbon, see Carbon.

INDEX 1973

Powders:
 electrical conductivity of stream of hot powdered fuel, USSR study, 30368
 standard X-ray, diffraction powder patterns, 20635

Powell, A. H., fabrication and test of space power boiler feed electromagnetic pumps, endurance and final performance tests, 23669

Powell, H. E., recovery of zinc, copper, silver, and iron from zinc smelter residue, 30431

Powell, John H., jr., southwest Indian report, 27044

Powell County Republican Club, annual report, 24783

Power:
 appropriations, 1974, water and power development, law, 32015
 conservation, code of Federal regulations, 27511, 28873
 development, public works appropriations, 1974, hearings, 27186, 31130, 32134
 power O. and M. bulletin series, 23928
 power O. and M. report, field review of—maintenance, 31777-783
 operation and maintenance, 31784-785

Power:
 power requirements for wheels operating in fine-grained soils, 26386
 public works appropriations, 1973, law, 19363
 public works appropriations, 1974—hearings, 27186
 reports, 29993, 30989
 theory of UHF and microwave measurements using power equation concept, 27727
 weight training for strength and power, 32537
see also Atomic energy—Electricity—Force and energy—Water power.

Power, Balance of, *see* Balance of power.

Power boilers, *see* Boilers.

Power brakes, *see* Brakes.

Power generators, power system stabilization with high initial response excitation on large hydroelectric generators, 23936

Power lines, *see* Electric lines.

Power of attorney, extend expiration data executed by members of Armed Forces missing in action or prisoners report, 19888

Power plants:
 airframe and powerplant mechanics certification guide, 30210
 background report on powerplant siting, 17234
 Canyon Ferry, unit of Pick-Sloan Missouri Basin Program, 25683
 Capitol power plant improvements, hearings 21285
 1000-MWe central station power plants investment cost study—oil-fired fossil plant, 22493
 pressurized water reactor plant, 25882
 siting to assure protection of environmental values, hearings, 21328
 Soviet nuclear reactors, fast neutron reactors and prospects for future, USSR study, 16185
 toxicity of power plant chemicals to aquatic life, 28091
see also Electric power plants.

Power reactors, *see* Reactors (atomic).

Power resources:
 briefings before Task Force on Energy, 17089, 19794
 Canyon Ferry, unit of Pick-Sloan Missouri Basin Program, 25683
 certain background information for consideration when evaluating national energy dilemma, 25991
 char oil energy development, interim report, 21092

Power resources—Continued
 comprehensive program of energy resources, development will meet national needs (remarks), 23474
 conservation and efficient use of energy, hearings, 29913
 conservation of energy, national fuels and energy policy study, 17263
 Cornell workshop on energy and environment, 21342
 Council on Energy Policy, hearing, 24920
 Emergency petroleum allocation act, report, 28471
 energy, America, and you, 23467
 energy conservation and development recommendations contained in final report of National Commission on Materials Policy, summary, 30043
 energy conservation, hearings, 28546
 energy crisis and its effect on agriculture, 32072
 energy crisis and its effect on agriculture, hearing, 32072
 energy crisis can be averted through conservation and use of advanced technology (remarks), 29088
 energy crisis, need for research and reconciliation of competing claims and values (address), 22624
 energy demand studies, analysis and appraisal, 17063
 energy dilemmas, President Nixon's cabinet level Domestic Council review of energy strategies (address), 22628
 energy, natural resources and research in agriculture, effects on economic growth and productivity for U.S., 32187
 energy, natural resources in agriculture, effects on economic growth and productivity for U.S., 32187
 energy policy act of 1973, 27285
 energy policy activities of 92d Congress, review, 27335
 energy problems, special reviews, hearings, 28386
 energy research and development—hearings, 15781
 task force report, 27242
 energy research, key to our long range energy future (address), 21097
 energy research needs, 29403
 energy research policy alternatives, hearing, 15903
 energy resources advisory board to investigate and report on energy activities of private and public sector, establish hearings, 26263
 energy resources of public lands, review based on studies by Public Land Law Review Commission, 15901
 energy, ultimate resource, 17090
 factors affecting use of coal in present and future energy markets, 27339
 Federal energy organization, staff analysis, 27337
 Federal laws relating to fuel and energy resources, compilation, 24863
 Federal leasing and disposal policies governing management and development of energy resources on public lands, hearing, 28543
 financial requirements of nation's energy industries, hearing, 28545
 foreign policy implications of energy crisis, hearings, 23016
 fuel and energy resources, hearings, 15746, 17060
 summary, 21247
 how Federal Government participates in activities affecting energy resources of United States, 27549
 initiatives in energy conservation, 31139
 interfuel substitutability in electric utility sector of U.S. economy, economic report, 17489

Power resources—Continued

- international implication of energy situation (statement), 16499
- Inventory of energy research, 17091
- Mines Bureau energy program, 31586
- Mines Bureau, research 1972, summary of significant results in mining metallurgy and energy, 25411
- national energy policy, shipbuilding and world trade expansion (remarks), 21926
- necessity of developing domestic energy resources (remarks), 21814
- need for continuous research and development of American energy resources to supply expanding demand (remarks), 23471
- need to solve our energy problems (remarks), 23897
- nuclear power and related energy problems, 1968-70, 21137
- potential for energy conservation—
staff study, 16004
- substitution for scarce fuels, staff study, 23145
- President's energy message, hearings, 30041
- relationship of energy and fuel shortages to Nation's internal development—
hearings, 17085
- interim report, 17087
- review of energy policy activities of 92d Congress, 17262
- substantial increase in ship inventory needed to deal with national energy deficits (remarks), 21928
- supplemental bibliography of publications on energy, 17266
- survey of energy consumption projections, 17264
- Tennessee Valley area, concentration by competing raw fuel industries in energy market and its impact on small business, investigation, report, 16970
- transportation of Alaska's north slope oil, rights-of-way across Federal lands, hearings, 28551, 31146
- trends in oil and gas exploration, hearings, 26273
- understanding national energy dilemma, 30937
- United States energy fact sheets by States and regions, 26535
- vessel building and financing in increasing energy imports (remarks), 25397
- Power supplies, direct-current, rack-mounted, for ground-based training equipment, 25022
- Power systems for spacecraft, 25347
- general suppression system design requirements for portable electric hand tools, military standard, 20068
- simulation as technique in power tool safety research and education, 15626
- Power transmission, direct-and alternating-current power transmission, USSR study, 17599
- Power units, *see* Electric generators.
- Powerplane mechanics, *see* Mechanics (persons).
- Powerplants, *see* Power plants.
- Pozzolan cement, *see* Cement.
- PR series, 16213-215, 20486, 21894, 26606, 27658.
- Practical nurses, *see* Nurses and nursing.
- Practices of low-income families in feeding infants and small children, 17678
- Practitioners, informational outline of Controlled substances act, 26675
- Prager, Manfred J., automated water monitoring instruments for phosphorus contents, 32259
- Prairies:
effect of silt and silt removal in prairie lake, 31269
- ground water hydrology of prairie pot-holes in North Dakota, 23359

Prairies—Continued

- hydrologic investigations of prairie pot-holes in North Dakota, 21723
- hydrology of prairie potholes in North Dakota (series), 21723, 23359
- Pratzner, Frank C., programmatic research and development in education, positions, problems, propositions, 21427
- Pre-Cambrian period:
origin of mineralized water in Precambrian rocks of upper Paraíba basin, Paraíba, Brazil, 16112
- Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution, 25257
- precambrian geology of northern Bradshaw Mountains, Yavapai County, Ariz., 20343
- Precipitation:
forecasting at Bakersfield, Calif., using pressure gradient vectors, 30539
- high plains precipitation enhancement project, preliminary planning document, 30201
- research, 30202
- updating of numerical precipitation guidance, 30534
- Precipitation (chemistry):
tensile properties to 650° C and deformation structures in precipitation-strengthened titanium-aluminum alloy, 30460
- Pre-Columbian civilization, *see* Indians—
Mural painting and decoration.
- Preble County Republican Central and Executive Committees, annual report, 22808
- Precious metals, recovery of precious metals from electronic scrap, 20576
- Precious stones—
gem stones—
mineral industry survey, 29205
- advance summary, 21935
- minerals yearbook chapter, 20558
- Precipitation:
hourly data, by States, etc., 18425-468
- Pacific Northwest, monthly, 18743
- probable maximum precipitation and snow-melt criteria for Red River of the North above Pembina, and Souris River above Minot, N.D., 32509
- synoptic climatological studies of precipitation in Plateau States from 850-, 700-, and 500-millibar lows during spring, 17774
- Tennessee River basin, monthly, 18770
- weather modification, precipitation inducement, bibliography, 27593
- weather radar investigations on artillery test conducted in Panama Canal Zone, 20973
- see also* Weather control.
- Precipitation (chemistry):
aerosol and precipitation chemistry at Mauna Loa Observatory, 23805
- calcium phosphate precipitation in wastewater treatment, 21498
- Precipitation gages:
isotopic profiling snow gage report, Mount Hood, Oreg., 23978
- telemetered profiling isotopic snow gauge, final report and specifications, 28062
- Precision frequency multivibrators, 28069
- Precision instruments, overview of precision machining and gaging, 22494
- Precision measurements, *see* Physical measurements.
- Precision measuring equipment specialist, 16635
- Predators:
arthropod and nematode parasites, parasitoids and predators of Acrididae in America north of Mexico, 28024
- control and conservation of predatory animals, hearings, 24017
- control and related problems on Federal, State and county level, 19948
- predatory mammals, conservation and control, restricting use of toxic chemicals, hearings, 27235

INDEX 1973

Predictability of expressed career intent, 20941
 Predicting civilian position grades from occupational and background data, 25841
 Predicting probable roof fall areas in advance of mining by geological analysis, 29243
 Prediction:
 airblast overpressures from underground explosions, 17376
 flight evaluation of methods for predicting vortex wake effects on trailing aircraft, 23681
 intersectorial prediction in optimum planning system, RaS method when prediction and measurement errors are present, USSR study, 17632
 predicting man's condition during space-flight, USSR study, 20449
 predicting pressure distribution about nacelle at transonic speeds, analytical method, 31603
 statistical prediction of impact displacement due to wind effect on unguided artillery rocket during powered flight, 20978
 Prediction approach to finite population sampling theory, application to hospital discharge survey, 29329
 Prediction modeling for salinity control in irrigation return flows, 26416
 Predictors of job tenure in lumber-plywood mill, 31362
 Predisaster assistance for eucalyptus trees in California, 30012
 Preemployment inquiries, 29052
 Prefabricated houses, *see* Houses.
 Pregitzer, Karl E., soil survey of Ottawa County, Mich., 26842
 Pregnancy, women and their pregnancies, collaborative perinatal study of National Institute of Neurological Diseases and Stroke, 23772
 Preimpoundment study, Carters Lake, 31901
 Preimpoundment study of West Point Lake, Ga., 31900
 Prejudices, bibliography on racism, 20669
 Preliminary analysis of aircraft accident data, U.S. civil aviation, 29412
 Preliminary determination of epicenters, 18771
 Preliminary findings from survey of new beneficiaries, reports, 32557
 Preliminary inventories series, 31669
 Preliminary investigation of Thompson scatter radar as aid to high-frequency direction finding, 16444
 Preliminary reports, Construction Engineering Research Laboratory, 28690-691
 Preliminary results of measuring H₂O content in atmosphere of Mars on Mars-3 automatic space station, 27649
 Preliminary statistics of State school systems, 28678
 Prenatal care, prenatal-postnatal health needs and medical care of children, U.S., 26718
 PREP reports, 15995-996, 17763, 20096, 21425, 22062-63, 23746, 29361
 Preparation and submission of data for approval of non-standard general purpose electronic test equipment, military standard, 15966
 Preparation and submission of quarterly and annual report to Interstate Commerce Commission 17589
 Preparation of aluminum alloys for electroplating, military standard, 27412
 Preparation of molecular sieve materials from anthracite, 29813
 Preparation of samarium-cobalt magnets, 31595
 Preparedness, *see* Civilian defense—National defense.
 Preprimary enrollment, 30148
 Preschool children, *see* Children.
 Preschool development project, Murfreesboro, Tenn., 27776

Prescriptions:
 development and marketing of prescription drugs competitive problems in drug industry, hearings, 27366
 prescription data summary, 17834
 use of medicine, review of prescribed and nonprescribed medicine use, 22023
 we want you to know what we know about prescription drugs, 25198
 Prescriptive package, case screening and selected case processing in prosecutor's offices, 26607
 Preservation and protection of polar bears, 19905
 Preservation of additional historic properties, 28549
 Preservation of food, *see* Food.
 Preservation of human resources during national crisis, HEW emergency preparedness programs, 32368
 Preservation of materials, preservation treatments and service life of fence posts in Puerto Rico, 1972 progress report, 28954
 Preservation of wilderness areas, 15910
 Preservation of wood, *see* Wood.
 President of United States:
 Ad Hoc Advisory Group on Presidential Vote for Puerto Rico, 6 special studies requested for group, 22198
 address, Sept. 26, 1972, 20789
 advisory committees, annual report, 28539
 budget message and economic report to Congress, extend time of transmission, law, 27076
 code of Federal regulations, 23231, 25156
 economic report—
 departmental edition, 22195A
 document edition, 21166
 extend time to file, law, 27082
 hearings, 27095
 reports, 24837, 26133
 executive orders, regulations, guidelines and reports, in regard to solid waste, legal compilation, statutes and legislative history, 32266
 impoundment of appropriated funds by the President, 24929
 inaugural address, Jan. 20, 1973, 21994
 inaugural addresses from President George Washington to President Richard M. Nixon, print as House document, report, 31087
 messages, *see* in main alphabet, subject of message.
 papers, Nixon, Richard M., 20263
 Presidential documents, weekly compilation, 19075
 President Nixon's visit to Poland, 16497
 proclamations enacted, 92d Cong. 1st sess., 23236
 provisions of Constitution and United States Code relating to Presidential elections, 17482
 Richard M. Nixon, inaugural address, 26195
 single 6-year term for President, provide, hearing, 15918
 state of the Union message on our Federal system of criminal justice, 30946
 Truman, Harry S., eulogies and encomiums of, print as House document, report, 31065
 veto messages—
 Federal water pollution control act, 21302
 Management and Budget Office, abolish and establish Office of Director, etc., 31054
 Rehabilitation act of 1972, 24891
 rural water and sewer grant program, 26058
 2d supplemental appropriation act, 30960
 war powers, define—
 hearings, 27211
 reports, 15700, 15814
 war powers of Congress and the President, reports, 30978, 31070, 32047

Presidential Campaign Activities, Select Committee on, Senate, hearings, 31159
 Presidential employees, *see* Government officials and employees.
 Presidential Study Commission on International Radio Broadcasting, right to know, report, 27864
 President's Air Quality Advisory Board, urban air pollution problems, briefing document, 25125
 President's Commission on School Finance, progress report, 16458
 President's Committee on Employment of the Handicapped:
 annual meeting, minutes, 23909
 changing nature of mass media (address), 22194
 opening doors for handicapped, publicity guide and activities calendar for State and local committees on employment of handicapped, 32535
 performance, (periodical), 18753
 press releases, 18806
 special report, fresh views on employment of mentally handicapped (periodical), 18921
 President's Committee on Mental Retardation:
 action for retarded, recommendations to President on Federal programs, 22193
 PCMR message, 18749
 report, 29449
 report to President, Federal programs for retarded, review and evaluation, agency reports, 22197
 President's Council on Physical Fitness and Sports, newsletter, 18704
 President's Inter Agency Economics Adjustment Committee, opportunities for a community in economic distress, 22196
 President's National Advisory Council on Supplementary Centers and Services, reports, 32533, 23536
 President's National Commission on Productivity, *see* National Commission on Productivity.
 President's Science Advisory Committee, improving health care through research and development, 27876
 President's Water Pollution Control Advisory Board:
 ocean disposal practices and effects, report, 32268
 report, 28838
 Presidio Flood Control Project, authorization and appropriations, report, 19921
 Press:
 reference aids—
 abbreviations in Cambodian and Lao press, 23525
 abbreviations in Mongolian press, USSR study, 16189
 glossary of abbreviations, acronyms, and terms used in West European press, West Europe study, 26599
 Press releases, *see* names of departments, etc.
 Presses:
 application of hot-isostatic pressing, hydrostatic extrusion, and deformable-die tube tapering processes to production of titanium-6Al-4V tapered tubes, 26980
 see PUNCH presses.
 Pressure:
 development of indwelling intracranial pressure sensor, 29671
 differential pressure mercury manometer, 28068
 diffusional and metabolic components of nitrogen elimination through lungs, effects of pressure, 31580
 forecasting precipitation at Bakersfield, Calif., using pressure gradient vectors, 30539
 liquid and gas flow, pressure, temperature, humidity and mechanical motion measuring and controlling instruments, 24986

Pressure—Continued
 predicting pressure distribution about nacelle at transonic speeds, analytical method, 31603
 prediction of ground-shock-induced airblast overpressures for subsurface explosions from peak vertical space velocity, 17378
 pressure recovery performance of conical diffusers at high subsonic Mach numbers, 32460
 pressure sewer system demonstration, 23185
 steady state and dynamic pressure phenomena in propulsion system of F-111A airplane, 31636
 table of differential pressure in relation to calibrated airspeed, military standard, 17337
 thermophysical properties of helium-4 from—
 2-1500 K pressures to 1000 atmospheres, 23709
 4-3000 R with pressure to 15000 PSIA, 23708
 two-stage high pressure-ratio centrifugal compressor, 26982
 variable property turbulent boundary layers by means of modified compressibility transformation analysis, 21976
 wave field pressure, effect on longitudinal oscillations in plasma, 21004
 Pressure chambers, pressure bomb measures changes in moisture stress of birchleaf mountainmahogany after partial crown removal, 23290
 Pressure gages, *see* Gages.
 Pressure injection of solubilized benomyl for prevention and cure of oak wilt, 32325
 Pressure transducers, *see* Transducers.
 Pressure vessels, high pressure reaction vessel system 1, installation, modification and initial experiments, 21931
 Pressurization:
 Centaur space vehicle pressurized propellant feed system tests, 20599
 response variations of 3 types of microphones pressurized to 19 Atm, 20525
 standard general requirements for safe design and operation of pressurized missile and space systems, military standard, 20076
 Pressurized water reactors, *see* Reactors (atomic).
 Preston tubes, *see* Speed indicators.
 Pretreatment of poultry processing wastes, 30664
 Preuss, Luther E., evaluations of 200 mCi ⁵⁵Fe X-ray diffraction source in focusing and Debye-Scherrer analytical applications, 25871
 Prevention of foot-and-mouth disease and rinderpest, agreement between United States and Nicaragua, 16535
 Prevention of incidents on and over high seas, agreement between U.S. and Union of Soviet Socialist Republics, 16523
 Prevention of tin-lead overhang in plated copper-clad printed wiring boards, 26985
 Prevention of violence in correctional institutions, 30377
 Preventive maintenance programs, 22504
 Preventive medicine, *see* Medicine.
 Preyer, Richardson, Preyer for Congress, annual report, 24714
 Preyer for Congress, annual report, 24714
 Price, Daniel N., income-loss protection against illness, 23974
 Price, George C., materials handling research, bucket-wheel excavator, 26651
 Price, Lester K., Island lantern (periodical), 18521
 Price Commission:
 information for business executives, firms, etc., 20732
 press releases, 18807

INDEX 1973

- Price control, *see* Prices.
 Price discrimination, *see* Prices.
 Price lists, *see* Government publications—
 also subjects.
 Price supports, *see* Prices.
 Prices:
 agricultural prices (periodical), 17964
 capitalization of farm program benefits
 into land value, 17347
 chartbook on prices, wages, and pro-
 ductivity, 18064
 consumer price index—
 city average and selected items, 18161
 short description, 17668
 contracts with foreign firms should be
 priced in local currency, GAO report,
 30254
 dairy price supports, hearings, 24839,
 28512
 demand and price situation, 18218
 effect of futures trading on price perform-
 ance in cash onion market, 22360
 fruit and vegetable grower and PACA
 (Perishable Agricultural Commodities
 Act), 20925
 Spanish edition, 22348
 indexes, department store inventory, 32433
 information for business executives, firms,
 etc., 20732
 inquiry into spread between retail food
 prices and prices received by farmers,
 hearings, 29892
 milk sales in foodstores, pricing and other
 merchandising practices, 20913
 model State unit pricing regulations, 23705
 need intensifies to amend legislation to re-
 duce Government losses on peanut price-
 support program, GAO report, 26479
 Northwest forest industries, 18822
 phase 4 announcement, economic stabili-
 zation program, 30075
 price advances accelerate in 3d quarter of
 1972, 25384
 price and wage control—
 evaluation of current policies, hearings,
 22662
 evaluation of year's experience, 19536
 price disclosure label on new cars through-
 out United States, law, 16880
 price discrimination legislation to elim-
 inate monopolies, hearing, 17274
 price index for deflation of academie R & D
 expenditures, 16417
 price support, statutes, compilation, 25820
 prices and price spreads for eggs, frying
 chickens and turkeys in 12 major cities,
 1966-71, 30718
 productivity, wages, and prices, 18823
 spot market price indexes and prices,
 18990
 structure of intraseasonal pricing mech-
 anism for late summer onions, 1930-68,
 30707
 tung nut price support, continue—
 hearings, 27177
 report, 28357
 what's happened to food prices? 31991
 wholesale—
 index numbers, 18482
 price index, summary, 19086
 prices and price indexes, monthly, 19085
 see also Inflation (finance)—also names
 of commodities.
 Pricing policy, *see* Prices.
 Prien, Robert F., pharmacotherapy in
 chronic schizophrenia, 26913
 Priest, Marian K., health services reports,
 18418
 Primary grades, *see* Elementary education.
 Primitive areas, *see* Wilderness areas.
 Prince William Forest, discovering Prince
 William Forest, 32514.
 Principles of war (supplement), special
 bibliography, 26973
 Pringle Falls Research Natural Area, gen-
 eral information, 21641
 Printed circuits, *see* Circuits.
 Printed wiring for electronic equipment,
 15959
 Printed wiring from ground-based training
 equipment, 20071
 Printers:
 Federal careers for journeymen in print-
 ing crafts, examination announcement,
 15602
 journeymen in printing crafts, examina-
 tion announcement, amendment, 21085
 Printing:
 for use of Veterans Affairs Committee,
 House, provide, report, 16996
 industry report, 18818
 investigation of optical print media, ini-
 tial survey, 20966
 outlook for technology and manpower in
 printing and publishing, 31556
 pioneer imprints from 50 States, 29188
 see Public printing and binding.
 Printing Joint Committee, authority in field
 of printing and binding, restore under title
 44 of U.S. Code, report, 32113
 Printing machinery, *see* Printing presses.
 Printing presses, sheet-fed offset printing
 presses and industrial paper cutters,
 former workers of Dayton, Ohio, plant of
 Harris-Seybold Division, Harris-Intertype
 Corp., Tariff Commission report, 27947
 Prints:
 and pictorial illustrations, catalog of copy-
 right entries, 28576, 31168
 your Navy from viewpoint of Nation's
 finest artists, 29440
 Priorities:
 full opportunity and national goals and
 priorities act report, 32115
 national priorities, next five years, hear-
 ings, 25993
 quality of life, social priority as national
 goal, 26742
 Prisms, computing cameras with prism com-
 pensation, USSR study, 16181
 Prisoners, *see* Prisons and prisoners.
 Prisoners of war:
 American prisoners of war and missing in
 action in Southeast Asia, hearings,
 29903
 and missing in action be treated accord-
 ing to provisions of Geneva Convention,
 report, 19876
 permitting appointment by President of
 sons of Vietnam prisoners to service
 academies, law, 15642
 Project Egress Recap, treatment of Ameri-
 can servicemen on return from missing
 or capture status, hearings, 21206
 tax treatment of members of Armed
 Forces and civilian employees who are
 prisoners of war or missing in action,
 32065
 Prisons and prisoners:
 American prisons in turmoil, hearings,
 19749
 Andersonville, story of Civil War prison
 camp, 23818
 Island lantern (periodical), 18521
 local jails, report presenting data for in-
 dividual county and city jails from 1970
 national jail census, 26605
 National correctional standards act, hear-
 ing, 27352
 nationwide survey of mental health and
 correctional institutions for adult men-
 tally disordered offenders, 23758
 new environments for incarcerated, 17648
 prevention of violence in correctional in-
 stitutions, criminal justice monograph,
 30377
 prison, prison reform and prisoners'
 rights, hearings, print additional copies,
 report, 19629
 prisons, prison reform and prison rights,
 Michigan, hearings, 15764
 racial conditions in Indiana penal institu-
 tions, 22587

- Prisons and prisoners—Continued
reform of our correctional systems, re-
port, 29862
review of manpower R & D projects in
correctional field, 1963-73, 31573
revolutionary activities directed toward
administration of penal or correctional
systems, hearings, 29921
- Prisons Bureau:
library book catalog, periodical catalog,
23572
nature and effectiveness of rehabilitation
programs, oversight, hearing, 23063
statistical report, 1971-72 fiscal years,
29452
- Pritchard, Joel M., Pritchard for Congress
Committee, annual report, 24397
Pritchard for Congress Committee, annual
report, 24397
- Privacy:
census confidentiality/mid-decade sample
survey bill, report, 32029
Financial records privacy act, hearing,
15874
Private and commercial pilot, gyroplane,
flight test guide, 16067
Private enterprise, *see* Business.
Private funds for mental health research,
31697
Private laws, *see* Law.
Private ownership of gold, 27307
Private pension plan reform, 31140
Private pilot, written test guide, 16068
Private schools:
aid to nonpublic education, hearings,
21360
directory of schools with occupational pro-
grams, public and private—
postsecondary, 30135
secondary, 30136
Federal aid to public and private ele-
mentary and secondary education, sum-
mary of testimony, 21299
public and private education assistance
by payments to State educational
agencies, hearings, 21221
tax credits for nonpublic education, pri-
mary and secondary, hearings, 15789,
17114, 19800
Privileges, pensions, and allowances for
military personnel, 25345
Prizes, *see* Rewards (prizes, etc.).
- Probabilities (mathematical):
effect of variability in received power on
probabilities of communication and de-
lay in land mobile communication sys-
tems, 25976
error estimate for thermal resistance
measurements on uncoated Si micro-
wave transistors as result of tempera-
ture gradients, 20970
gamma distribution computer program and
graph paper, note, 31721
mathematical considerations about effects
of guessing on test variance, 20939
multidimensional stationary stochastic
processes, some approaches to testing
hypotheses, 23880
numerical study of electromagnetic scat-
tering from ocean-like surfaces, 17697
probability approach to sawtimber tree-
value projections, 27535
stochastic network of model air cargo
terminals, 25071
subsamples of set of symmetric, independ-
ent, identically distributed random vari-
ables which determine set of typical
values, 23882
- Probation, Federal probation (periodical),
19343
- Probes:
development of probe for measuring 3-di-
mensional boundary layers, 16653
double electrostatic probe for measuring
density, temperature and velocity of
flowing plasma, 25528
- Probes—Continued
fluorescent probes in detection of insecti-
cides in water, 28816
probe method for recording ions produced
by laser radiation in afterglow discharge
plasma, 20993
- Problem solving:
administration of contract studies could
be improved, GAO report, 21685
exercises, National Reading Center, right
to read program, 21426
- Problems and prospects in American economy
(remarks), 21573
- Problems in obtaining and enforcing compli-
ance with good manufacturing practices
for drugs, 26481
- Problems of development of instrument mak-
ing, 26562
- Problems of Far East (USSR periodical),
18820
- Problems of the aging, 15744, 17056
- Problems of war victims in Indochina, North
Vietnam, 19989
- Procedural history, 28133-134
- Procedure for using yield simulation pro-
grams for dwarf mistletoe infected lodge-
pole and ponderosa pine, 32328
- Procedures, *see* Administrative management.
- Proceedings of workshop on methods of work-
ing with limited resource farmers, 30669
- Process design manual for carbon adsorp-
tion, 16546
- Process design manual for phosphorus re-
moval, 16547
- Process design manual for upgrading existing
removal, 16548
- Process design manual for suspended solids
wastewater treatment plants, 16549
- Processed fishery products, annual summary,
1971, 23784
- Processing and recovery of Jon Thomas, cool
cat, 17428
- Processing EASTROPAC STD data and con-
struction of vertical temperature and
salinity sections by computer, 22100
- Processing instructions for home mortgage
insurance under sec. 204—purchase of fee
simple title from lessors, 21784
- Processing of food, *see* Food processing—
also names of food processed.
- Processing of fruit, *see* Fruit.
- Processing personnel actions, 18325
- Processing procedures for insured multi-
family projects, utilizing industrialized
housing systems, 29064
- Processing procedures for title 6 complaints
and compliance reviews, 29074
- Proclamations, *see* President of United
States.
- Proctor, L. D., electroencephalographic
changes during saturation excursion dives
to simulated seawater depth of 1,000 feet,
25404
- Procurement, *see* Government contracts—
Government supplies—Military supplies—
also names of departments engaged in pro-
curement.
- Produce, *see* Agricultural products.
- Produce markets, *see* Markets and marketing.
- Production:
changes in farm production and efficiency,
summary report, 28018
chartbook on prices, wages, and pro-
ductivity, 18064
competitive edge, economic impact of for-
eign metalworking (address), 21413
Defense production act, amend, hearing,
31134
energy, natural resources and research in
agricultural, effects on economic growth
and productivity for U.S., 32187
estimated world fertilizer production ca-
pacity as related to future demand,
30670
estimating productivity on sites with low
stocking capacity, 31372

Production—Continued

- factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length aspen, 32321
- foreign production and commercial reports, index, 17569, 18486
- key level definitions for production facilitating jobs, 22604
- National Commission on Productivity, authorize expenditures, hearings, 26255
- Northwest forest industries, 18822
- outlook for production on Navy's LHA and DD-963 shipbuilding programs, GAO review, 31383
- output, indexes per man-hour selected industries, 16237
- production management, military standard, 20077
- productivity and the economy, 30391
- productivity, selected annotated bibliography, 31560
- productivity, wages, and prices, 18823
- register planned emergency producers—
 - alphabetical listing, 26340
 - ASFPO listing, 26342
 - geographical listing, 26341
- research reports, 16613, 19128-139, 20930, 26945, 28017, 30716
- U.S. commodities exports and imports as related to output, 28195
- worker productivity, Government and business (address), 21901
- see also names or classes of commodities.
- Production credit associations:
 - operations, 1971, summary, 21529
- PCA borrowers 1971, their characteristics, their loans, 32275
- profile of largest borrowers in 442 PCAs, 1971 sample survey, 32276
- profiles of new PCA borrowers, 1971 sample survey, 32277
- summary, 1972, operations, 30208
- Production equipment, industrial plant equipment handbook, portable machine tools, metalworking machinery accessories, and precision layout tools, 27378
- Productive employment of disadvantaged, guidelines for action, 30402
- Productivity, see Production.
- Productivity and Work Quality, National Commission on, see National Commission on Productivity and Work Quality.
- Productivity in food industry, 27863
- Productivity, National Commission on, see National Commission on Productivity.
- Productivity, President's National Commission on, see National Commission on Productivity.
- Products, see Commercial products—also names of products.
- Professional careers for librarians, 27053
- Professional careers in biological and agricultural sciences, 22611
- Professional education:
 - achievement, academic, mobility and draft, their impact on earnings of men, 26435
 - professional and technical refresher courses, noncredit activities in institutions of higher education, 26373
- Professional papers:
 - Geological Survey, 16105-108, 17531-542, 20354, 21718-739, 23358-367, 25256-259, 26497-510, 27562-573, 29018-29, 30272-283
 - National Oceanic and Atmospheric Administration, 26766
- Professional training programs in maternal and child nursing, 16244
- Professional workers:
 - black male professionals in industry, study, 25374
 - examination announcement, 22605
 - experience placements, mental health career development program, 23752
 - national survey of professional, administrative, technical, and clerical pay, 21909

Professional workers—Continued

- professional careers in biological and agricultural sciences, 30874
- public health traineeship program, hearing, 21377
- State agricultural experiment stations and other cooperating State institutions, lists, 20898, 22326
- supplementary compensation in PATC industries, 27683
- Professions:
 - creative partnerships, Government and professional services, conference proceedings, 31675
 - education professions, 1971-72 annual report—
 - differentiated staffings, state of art report, 27428
 - need for teachers in our schools and colleges, 28656
 - health professions and occupations, join Life Corps, 27578
 - profession of change (address), 30149
 - professional associations, conventions, 1973, list, 29172
- Professors, see Teachers.
- Profile of largest borrowers in 442 PCAs, 32276
- Profile of new PCA borrowers, 1971, P.C.A. sample survey, 32277
- Profilers, see Profiling machines.
- Profiles of U.S. medical school faculty, 25601
- Profiling machines:
 - model 9040-5C C.T.D.-SV environmental profiling system, 27806
 - telemetered profiling isotopic snow gauge, final report and specifications, 28062
- Profit sharing:
 - pension trust procedures and guides for integration of qualified plans, 20403
 - pensions, profit sharing, and deferred compensation, panel discussions, 26188, 27251
- Profitable new aerospace technology with potential industrial application, 20597, 20758
- Prognostication, and past performance (address), 28239
- Program aid series, 15480-481, 16608-611, 19121-127, 20922-926, 22344-351, 24137-139, 25828-832, 26943, 28009-14, 29629-633, 30710-714, 31920
- Program guides, Veterans Administration, 16571, 29579
- Programa de HUD-FHA para la compra de casas movibles, 31438
- Programmed instruction:
 - basic concepts of aging, programmed manual, 20880
 - domestic programs fact book, 18235
 - Federal use and development of advanced information technology Federal information systems and plans, 31023
 - programmed orientation to civil defense, 21392-396
- Programmers, set of debugging and monitoring facilities to improve diagnostic capabilities of compiler, 25558
- Programming (computer), see Computer programs/programming.
- Programming languages:
 - microprogrammed control unit (MCU) programming reference manual, 22173
 - plot command language translator program, 17454
- see also Computer programs/programming.
- Programming (planning):
 - acquisition management, guide for program management, 30733
 - organization of control of scientific research, 31533
 - programmatic research and development in education, positions, problems, propositions, 21427
 - statement of work preparation guide, acquisition management, 15493

- Programming (planning)—Continued
surgical suite, functional programming worksheets, 26518
Programs, *see* Federal assistance programs.
Programs for the handicapped, 18824
Programs of Maternal & Child Health Service, 23625
Progress and plans for implementation of Rural development act of 1972, 27300
Progress in highway safety (address), 22150
Prohibiting military weather modification, 19971
Project Apollo (man-in-space program):
Apollo experience report—
command and service module instrumentation subsystem, 31647
command and service module reaction control systems, 30455
command module uprighting system, 25525
crew station integration lighting considerations, 30459
development of design-loads criteria, etc., for prelaunch, lift-off, and mid-boost conditions, 31646
evolution of attitude time line, 25526
evolution of rendezvous-maneuver plan for lunar-landing missions, 31654
guidance and control systems, engineering simulation program, 29292
lunar module electrical power subsystem, 20611
photographic equipment and operations during manned space-flight programs, 16354
potable water system, 29293
protection against radiation, 25524
spacecraft heating environment and thermal protection for launch through atmosphere of earth, 26687
service propulsion subsystem, 31648
Apollo 7-16 manned spacecraft decals (colored pasters), 17691
Apollo 16, preliminary science report, 27708
Apollo 17 at Taurus-Littrow, 27707
Apollo-Soyuz test project (folder), 26679
on the moon with Apollo 17, guidebook to Taurus Littrow, 21978
relativistic time corrections for Apollo 12 and 13, 17709
Project Egress Recap, treatment of American servicemen on return from missing or capture status, hearing, 21206
Project fiscal procedures, HUD handbook, 21790, 25280
Project Head Start, *see* Children.
Project Helping Wheels, 31905
Project management, unmanned space project management, Surveyor and Lunar Orbiter, 20596
Project Rio Blanco, hydraulic testing and sampling of holes RB-E-01 and RB-D-01.
Project Rio Blanco, Rio Blanco County, Colo., 23347
Project Schooner, ecological and environmental effects from local fallout, beta and gamma radiation effects from close-in fallout, 16663
Project Skywater (atmospheric water resources program):
conference proceedings, numerical modeling of atmospheric processes, 23930
review of draft plans for precipitation management program for Northern Plains Region, conference proceedings, 23931
Project SOAP, system approach to biomedical research program management, 27730
Project Stormfury:
analysis of Stormfury data using variational optimization approach, 29392
general information, 20702
Project Surveyor (unmanned lunar exploration):
unmanned space project management, Surveyor and Lunar Orbiter, 20596
Project Trinidad, explosive excavation tests in sandstone and shale, 27443
Project Tugboat, explosive excavation of harbor in coral, 26391
Projectiles:
card-gap and projectile impact sensitivity measurements, compilation, 30418
Federal item identification guide, 26331
fragment and projectile penetration resistance of soils high-velocity fragment penetration into laboratory-prepared soil targets, 31259
see also Ballistics.
Projections of educational statistics to 1981-82, 30150
Projectors, *see* Motion pictures.
Projects of Pollution control Analysis Section, 21505
Projects, products, and services of National Center for Educational Statistics, 28679
Prologue, journal of National Archives, 18826
Promise vs. performance, status of equal employment opportunity in nation's gas and electric utilities, 17442
Promotions:
evaluation of employees for promotion and internal placement, 18327
Foreign Agricultural Service, market promotion activity, report, 32028
guidelines for police performance appraisal, promotion and placement procedures, 27654
interim merit staffing policy, 29053
members of uniformed services in missing status, reports, 27119, 27277
promotional activities of Foreign Agricultural Service, hearings, 27213
Propagation:
antennas and transionospheric propagation as related to ELF/VLF downlink satellite communications, conference proceedings, 27844
bibliography on propagation effects from 10 GHz-1000 THz of electromagnetic waves, 16837
data results on nanosecond pulse propagation measurements over line-of-sight paths, 22640
high frequency potential, effect on propagation of fast waves along magnetoactive plasma layer, 21003
LUIN, code for calculation of cosmic ray propagation in atmosphere, 29675
propagation factors in telecommunications applications of 10- to 100 GHz radio spectrum, review, 19304
Propanes:
detonation of flammable cloud following propane pipeline break, Dec. 9, 1970, explosion in Port Hudson, Mo., 26668
primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effects, 29294
Propellants:
Apollo experience report, service propulsion subsystem, 31648
ballistic design methods for solid-fuel missiles, USSR study, 30328
Centaur space vehicle pressurized propellant feed system tests, 20599
chemical rocket/propellant hazards, liquid and solid, aerospace medicine, 26952
liquid propellant rocket combustion instability, 21980
see also Fuels.
Propeller blades, *see* Blades.
Propeller mechanics, *see* Mechanics (persons).
Propellers:
aircraft propellers, current industrial report, 24233
aircraft, type certificate data sheets and specifications, 17980
airworthiness standards, Federal aviation regulations, 18294

- Propellers—Continued
propellers and test clubs, Federal item identification guide, 31190
- Properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260
- Properties of crystalline bismuth selenide and its use as Hall effect magnetometer, 23882
- Properties of natural zeolites, 29234
- Property:
common carrier, tax assessments, report, 15550
dealer and contractor guide to property improvement loans, 27583
donated, valuation, tax information, 26546
double taxation, convention with Norway, 25737
Federal property and administrative services act, amend—
law, 19507
report, 19879
formula for determination of costs of motor carriers of property, 29122
income in 1969 of families and primary individuals in owner and renter occupied housing units for U.S., 19199
income of homeowners of mortgaged properties acquired in 1967–71, United States, 29696
loss or damage sustained in transportation, attorneys' fees for recovery, hearing, 21255
sales and exchanges of assets, tax information, 20408
sales and other dispositions of depreciable property, tax information, 25304
tax administration in States, status, compilation of responses to survey, 24931
tax, impact and administration in States, hearings, 26270
taxable and other property values, SMSA's counties and selected major cities survey for 1972 census of governments, 27005
see also Capital assets—Condemnation of property—Personal property—Public property—Real estate—Surplus property.
- Property rights, above property rights, 24254
- Proportional counters, measurements of performance of multiwire proportional chambers, 29297
- Proposed Big Cypress Reserve, Fla., 32084
- Proposed calibration target for visible channel of satellite radiometer, 22099
- Proposed Federal participation in international exposition at Spokane, Washington, in 1974, 15622
- Proposed system for Arizona telemetry of mountain snow pack and related data, 17839
- Pronloceptive system, adaptation to displaced hearing, non-proprioceptive change, 30407
- Propulsion:
aircraft propulsion, gas turbine engines, designation, military standard, 20060
Apollo experience report, service propulsion subsystem, 31648
comparison of advanced propulsion concepts for deep space exploration, 17725
development and manufacture of linear induction motor propulsion system for tracked air cushion research vehicle, 21559
dynamic compatibility of rotary-wing aircraft propulsion components, 28059
effective specific impulse of external nuclear pulse propulsion systems, 17727
ion rocket engines, USSR study, 27635
nuclear propulsion for naval warships, hearings, 19532
steady state and dynamic pressure phenomena in propulsion system of F-111A airplane, 31636
vendor substantiation for aerospace propulsion system items, 20078
- Prosecutors, see Public prosecutors.
- Prospecting:
deep rotary core drilling in ice, 28688
geochemical prospecting using water from small streams in central South Carolina, 25254
geochemical sampling in McCormick County, S.C., some results, 29006
Prospects for more rational world, reflections on international relations, 22257
Prospectus for development of liquid-crystal waveguides, 23885
Prostaglandins in abortion and reproductive physiology, citations, 25609
Protheses, prosthetics research bulletins, 22297, 25800, 27064
see also Artificial limbs.
Prosthetics, see Protheses.
- Prostitution, not the law's business? monograph, 26745
- Protect food, stay alert, 16069
- Protected educational facilities in found space, guide to converting noneducational spaces into safe, healthful environments for education, 30083
- Protecting aspen resource in Lake States, 21672
- Protecting health of coal miners, interagency approach, 30500
- Protecting log cabins, rustic work, and unseasoned wood from injurious insects in Eastern United States, 24127
- Protection of foreign officials, 19663
- Protection of man and environment, 19841
- Protective coating, see Coating materials.
- Protective equipment, see Safety equipment and appliances.
- Protective shelters:
aboveground home shelter, 26298
case for protective design, nuclear and otherwise, 23083
cost benefits in shelters, 20028
nuclear weapons, effects and shelter, 21393
personnel shelters and protective construction, 29429
- Protectors, hearing protectors for use on firing ranges, 26604
- Proteins:
engineering economic model for fish protein concentration processes, 22101
reanimation and protein synthesis, USSR study, 17602
⁷⁵Se-binding by rat plasma proteins after injection of ⁷⁵SeO₃²⁻, 31937
- Proto, Daniel, annotated bibliography of Lake Ontario limnological and related studies, chemistry, 27453
- Protons:
approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of A≥12, 31653
high speed streams in solar wind, 31265
semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475
- Prototype annular slot antenna measurements, 21113
- Prototype of continuous dryer developed by ITMO, Academy of Sciences, Belorussian SSR, 21869
- Prototype of environmental civilization, 21512
- Protozoa, chemotherapy of protozoan diseases, 15516
- Providence, R.I., census of population and housing, 1970, census tracts, errata, 19221
- Province Dorothy S. preliminary inventory of records of National Capital Planning Commission, 30467
- Proving grounds Bahamas long range proving ground, expanded use of Ascension Island, agreement with United Kingdom of Great Britain and Northern Ireland, 31856
- Provisional U.S. charts delimiting Alaskan territorial boundaries, 15882

- Provisions for evaluating quality of coated fabric raincoats, 28614
- Provisions for evaluating quality of coats, men's dress, military standard, 25026
- Provisions for evaluating quality of coats, women's dress, 28619
- Provisions for evaluating quality of overcoats, 27403
- Provisions for evaluating quality of trousers, military standard, 28616
- Provisions for evaluating quality of women's skirts, 28620
- Provisions in CPA laws and regulations, 19169
- Provo, Utah:
- flood plain information, Provo River and Slate Canyon Creek, 23171
 - floods, Provo River and State Canyon Creek, 21471
- Provo River:
- flood plain information, 23171
 - floods, Provo, Utah, 21471
- Provo River project, mechanical equipment, Colbran project, Colorado River Storage project, Provo River project, UC region, field review of maintenance, 23928
- Proxy, remarks on new proxy rules (address), 30624
- Pruitt, Eleanor M., State and local borrowing anticipations and realizations, 28903
- Psychiatric clinics, *see* Clinics.
- Psychiatric institutions, *see* Mental institutions.
- Psychiatric nurses, *see* Nurses and nursing.
- Psychiatric patients, *see* Mentally ill.
- Psychiatry:
- abuse of psychiatry for political repression in Soviet Union, hearing, 19984
 - admissions to outpatient psychiatric service by age, sex, color and marital status, 27783
 - comparison of actual and reported previous psychiatric care, 27785
 - primary diagnosis of discharges from general hospital psychiatric inpatient units, 1970-71, United States, 23762
 - psychiatric halfway houses, general characteristics, 27784
 - psychiatric services in general hospitals, 22076
 - psychiatry in Soviet Union, USSR study, 27619
 - see also* Mental disorders.
- Psychoacoustics:
- mobile psychoacoustic laboratory, 25405
 - peripheral auditory adaptation in psychoacoustical experiment, USSR study, 21847
- Psychoanalysis, psychoanalytic study of child, abstracts, 23757
- Psychoanalytic study of child, abstracts, 23756
- Psychokinesis, fact or fantasy, USSR study, 23541
- Psycholinguistics, basic directions of applied psycholinguistics in USSR, 16190
- Psychological tests, *see* Mental tests—Personality tests.
- Psychology:
- contemporary stage of development of psychology in RSFSR, USSR study, 23540
 - discovering yourself in brain age, journey to universe of inner space, 26754
 - ideation and automata, USSR study, 32406
 - investigations of formation of first impression of person in foreign psychology, USSR study, 16186
 - modern combat and problems of psychology, USSR study, 20465
 - new psychology institute, USSR study, 21866
 - newsletter for research, Veterans Administration center, 18705
 - psychological characteristics of activity of cosmonauts, 27718
- Psychology—Continued
- psychological compatibility in interplanetary flight, USSR study, 21841
 - public hearings on noise abatement and control, physiological and psychological effects, 16031
 - social and psychological aspects of applied human genetics, bibliography, 25323
 - use of psychological methods for investigation of psychotropic action proper of some psychopharmaceutical substances, USSR study, 21872
 - see also* Motivation (psychology).
- Psychometrics, factors related to drug abuse in submarine service, psychometric data, 26643
- Psychopathy, *see* Mental disorders.
- Psychopharmaca, use of psychological methods for investigation of psychotropic action proper of some psychopharmaceutical substances, USSR study, 21872
- Psychopharmacology:
- abstracts (periodical), 18827
 - bulletin (periodical), 18828
 - international directory of investigators in psychopharmacology, 17765
- Psycho-physiological testing and training of pilots, 23551
- Psychosurgery, psychosurgery, perspective on current problem, 27781
- Psychotherapy, facts about group therapy, 23753
- Psychotropic agents, *see* Psychotropic drugs.
- Psychotropic drugs:
- documentation of clinical psychotropic drug trials, 25589-590
 - psychotropic drugs and related compounds, 16392
 - use of psychological methods for investigation of psychotropic action proper of some psychopharmaceutical substances, USSR study, 21872
- PTFE, *see* Polytetrafluoroethylene.
- Pu-(nos.), *see* Plutonium isotopes.
- Public accountants, *see* Accountants.
- Public administration:
- civilian career in Coast Guard, 28219
 - social indicators for small areas, 31951
- Public affairs, *see* Public information.
- Public assistance, *see* Public welfare.
- Public Broadcasting Corporations:
- appropriations, 1973—
 - authorization—
 - law, 16911
 - reports, 16966, 16971, 16987
 - reports, 19615, 21311
 - veto message, 19556
 - appropriations, 1974—
 - authorization, hearing, 31030
 - hearings, 28387
 - authorizations, extend—
 - hearings, 27314
 - reports, 27290, 29863, 32048
- Board of Directors—
- nomination of Thomas B. Curtis, hearing, 19954
 - recess appointment, reports, 27290, 29863
- employment statistics of public television licensees, 30138
- financial statistics of CPB-qualified public radio stations, 1970 fiscal year, 15990
- summary statistics of CPB qualified public radio stations, 31233
- Public buildings:
- act, amend—
 - hearing, 30018
 - laws, 16866, 19450, 29830
 - reports, 19858, 27171, 31076
 - allotment of space in Federal courthouses or in Federal buildings which include Federal courts, hearings, 21283
 - Foreign Service buildings act, amend, reports, 26126, 27117, 28474
 - proposed construction of Federal office buildings in Alaska, hearings, 23073

INDEX 1973

Public buildings—Continued
 public buildings and lands, publications, price list, 27871
 unauthorized use of funds for construction and alteration of public buildings, GAO report, 21701
 Public comfort stations:
 comfort station for campgrounds, building plan, 22340
 rest area sewage disposal and water supply, 32285
 water supply and sanitary waste treatment facilities for safety rest areas, guidelines for review of plans, 32281
 Public contracts, *see* Government contracts.
 Public debt:
 developing countries' external debt and U.S. foreign assistance, case study, GAO report, 28986
 Increase in ceiling—
 committee print, 29834
 hearings, 15786, 19965, 28532
 laws, 16871, 19522, 32005
 reports, 17211, 19650, 19687, 19725, 19730, 21165, 28369, 29868, 29872, 29958, 30970
 Treasury Department circular, 17917, 20842-843, 24082, 25792-793, 27954-955
 Public Documents Department:
 classified list of Government publications, 17797, 23910
 price lists, 16460-463, 17798-800, 22201, 23911, 25672-674, 26796-799, 27866-872, 29453, 30605-608
 Public documents highlights, 30609
 Public employment, *see* Employment.
 Public Employment Program Office, annual report, 27663
 Public funds, audit of payments from special bank accounts to Lockheed Aircraft Corporation for C-5 aircraft program during quarter ended Sept. 30, 1972, GAO report, 21689
 Public Health, *see* Health.
 Public Health Service:
 act, amend—
 hearings, 15754, 15757-760, 15922, 21254, 21365, 27222, 27224, 27357, 31031, 31153
 laws, 19366, 19368, 19384, 19510, 32003
 reports, 15683, 19697, 26236, 27292, 28350, 28353, 28360, 29997, 30963, 31082, 32100
 text, 24867
 annual report, 29454
 bibliography series, 16467
 CCPM pamphlet, 17801, 25675
 Commissioned Corps of U.S. Public Health Service, 25675
 cooperative study, renal disease and hypertension, conference proceedings, 16039
 engineers, careers, 26803
 grants and awards, 1971 funds, Health Services and Mental Health Administration, and Environmental Service, 25598
 grants and awards, 1972 funds—
 National Institutes of Health—
 State and organization tables, 31702
 training construction, medical libraries, 25599
 research contracts, 25600
 research grants, 20674
 health consequences of smoking, Surgeon General's report, 29041
 hospital closings, hearings, 21267
 hospitals—
 administration's proposal to dismantle major portion of system, hearings, 31033
 legislative oversight, hearings, 19781
 oversight, hearing, 31028
 Indian health program, 17555

Public Health Service—Continued
 National biomedical research fellowship, traineeship, and training act, report, 30965
 pharmacy residencies in their hospitals, 17801
 research grants index, 27788
 scholarship training program, hearing, 21365
 survivor benefit plan for retired members of uniformed services, 23461
 travel regulations 30120
 uniformed service, 18526
 Public hearings on noise abatement and control, physiological and psychological effects, 16031
 Public housing, *see* Housing.
 Public information:
 availability of all information to Congress, except where executive privilege is invoked, require, hearings, 29911
 constitutional immunity of Members of Congress, legislative role in gathering and disclosing information, hearings, 27093
 direction, Navy Public Affairs monthly, 18232
 executive classification of information, security classification problems involving exemption of Freedom of information act, report, 28347
 freedom of information act, amend, hearings, 29914
 Government information policies and practices—
 problems of Congress in obtaining information from executive branch, hearings, 17058
 public access to information from executive branch advisory groups, hearings, 21241
 security classification problems involving subsection of Freedom of information act, hearings, 17058
 Information and educational exchange act, amend, laws, 16898, 30930
 Information security program regulation, 20044
 National Center for Health Statistics statement on release of data for individual elementary units and related matters, 23721
 public information guide for all government agencies, 26829
 solid waste management, available information materials, 31307
 Public investments and population changes in 3 rural Washington State towns, 20894
 Public lands:
 Alexandria waterfront lands convey to city of Alexandria, Va., report, 16952
 appeals, Interior Department decisions, 18499
 code of Federal regulations, 17469-470
 energy resources of public lands, review based on studies by Public Land Law Review Commission, 15901
 Federal and Indian lands, coal, phosphate, potash, etc., royalty income and related statistics, 29013
 Federal lands right-of-way act, report, 28497
 Federal leasing and disposal policies governing management and development of energy resources on public lands, hearing, 28543
 how to buy, information bulletin, 32435
 Interior Department decisions, 18498
 list of North Carolina land grants in Tennessee, microfilm, pamphlets describing, 20626
 national land policy, planning, and management act, report, 24820
 our public lands (periodical), 18739
 public buildings and lands, publications price list, 27871

Public lands—Continued
 public land policy, activities in 92d Congress, 19981
 rights-of-way across Federal lands—
 hearings, 26275, 27347
 transportation of Alaska's north slope oil, hearings, 28551, 31146
 uniform appraisal standards for Federal land acquisitions, 30304
 Public law 480, *see* Agricultural trade development and assistance act.
 Public laws, *see* Law.
 Public management, *see* Administrative management.
 Public opinion:
 homemakers' opinions about dairy products and imitations, nationwide survey, 29625
 inventory of surveys of the public on crime, justice and related topics, 26606
 Public papers of the President, 20263
 Public Printer:
 adopt official Government Printing Office seal and designate employees to administer oaths, authorize report, 32112
 nomination of Thomas F. McCormick, hearing, 23074
 to designate library of highest appellate court in each State as depository library, authorize, law, 15643
 Public printing and binding, regulations, 24886
 Public property:
 code of Federal regulations, 17471
 Federal property and administrative services act, amend, report, 19868, 32110
 Federal real and personal property, inventory reports, 17054, 31024
 further improvements needed in controls over Government-owned plant equipment in custody of contractors, GAO report, 20330
 management, code of Federal regulations, 31338
 Public prosecutors:
 prescriptive package, case screening and selected case processing in prosecutor's offices, 26607
 street crime in America prosecution and court innovations, hearings, 29897
 Public relations, *see* Public information.
 Public roads, *see* Roads and highways.
 Public safety officers' group insurance act, 17157
 Public school systems in 1971-72, preliminary report, 21039
 Public schools, *see* Elementary schools—High schools—Schools.
 Public sector labor relations in Northeast region, regional series, 21898
 Public sector labor relations information, exchange publications, 21898-900, 27664
 Public service:
 executive leadership, bibliography, 29576
 labor management relations in public service, bibliography, 16820
 programs for unemployed persons interim assessment, 17279
 programs for unemployed persons, report, 29981
 public sector labor relations information exchange publications, 21898-900, 27664
 Public speaking engagements, *see* Addresses, lectures, etc.
 Public technology, Science and Astronautics Committee, House, committee print, 24874
 Public use samples of basic records from 1970 census, description and technical documentation, 28193
 Public utilities:
 accounts, uniform system, 19024
 automated control systems in housing and public utilities, USSR study, 17623

Public utilities—Continued
 District of Columbia, reimbursement of costs of relocation or abandonment losses—
 hearing, 15888
 law, 19426
 report, 19902
 holding companies, security transactions and holdings, 18725
 utilization of minority and women workers, Equal Employment Opportunity Commission, hearings, 25134
see also Gas utilities.
 Public view of rail safety, 22151
 Public welfare:
 AFDC recipients, assessments completed and referrals to manpower agencies under, work incentive program, 18015
 aid to blind program, findings of 1970 AB study demographic and program characteristics, 22035
 aid to permanently and totally disabled, program findings of 1970 APTD study, demographic and program characteristics, 23727
 BENDEX, beneficiary data exchange for State use in public assistance cases, 24193
 characteristics of State public assistance plans under Social security act, general provisions, eligibility, assistance, administration, 17829
 child care arrangements of AFDC recipients under work incentive program, 18067
 code of Federal regulations, 17472-473, 20260
 concurrent receipt of public assistance money payments and old-age, survivors, and disability insurance cash benefits by persons aged 65 or over, 1951-72 and Feb. 1972, 22034
 disposition of public assistance cases involving questions of fraud, 1971 fiscal year, 16371
 disregard OASDI and railroad retirement income in determining need for public assistance, report, 19647
 fair hearings in public assistance, statistical information, 31684
 Federal domestic assistance—
 1972 catalog, 18053, 23613
 1973 catalog, 30401
 Federal employee assistance in reduction in force, hearings, 32091
 funds by source, expended for public assistance payments and for administration, services and training, calendar year ended Dec. 31, 1972, 32554
 improve programs, report, 15860
 improvement needed in administration of program to provide medicare benefits for welfare recipients, GAO report, 31381
 medical and other medical care financed from public assistance funds, 22037
 medical assistance financed under title XIX of Social security act, 18616
 medicare, public assistance recipients in supplementary medical insurance program, 1969, 30634
 national social service systems, comparative study and analysis of selected countries, 29495
 numbers of recipients and amounts of payments under medical and other medical programs financed from public assistance funds, 23728
 old age assistance program, findings of 1970 OAA study demographic and program characteristics, 22036
 problems in administration of public welfare programs, hearings, 15662, 16932
 profile of rehabilitated clients who were recipients of public assistance, 32544
 promote for full opportunity and national goals and priorities, report, 32115

INDEX 1973

Public welfare—Continued

- public assistance—
 - applications—
 - cases approved, and cases discontinued, 18003
 - reasons for disposition other than by approval, 18845
 - cases, reasons for discontinuing payments, 18844
 - reports, 17829
 - statistics, monthly, 18829
 - regulations, published in code of Federal regulations, public welfare, Social and Rehabilitation Service, assistance programs, compilation, 26827
 - separation of services from assistance payments, guide for State agencies, 21121
 - services to AFDC families, annual report to Congress, 22646
 - State social service expenditures subsidized by Federal Government, justification, hearings, 19535
 - studies in public welfare—
 - concepts in welfare program design, 3 studies, 30940
 - effectiveness of manpower training programs, review of research on impact on poor, 16934
 - how public welfare benefits are distributed in low-income areas, 27096, 30939
 - income-tested social benefits in New York, adequacy incentives, and equity, 29835
 - income transfer programs, how they tax the poor, 21140
 - issues in coordination of public welfare programs, 32023
 - issues in welfare administration—
 - implication of income maintenance experiments, 24309
 - intergovernmental relationships, 24309
 - welfare, administrative nightmare, 21140
 - public income transfer programs, handbook, 16933
 - supplemental security income program for blind, aged and disabled, protection for those who might suffer loss of income and medicare benefits under Jan. 1974 regulations, 28534
 - trend report, graphic presentation of public assistance and related data, 17750
 - volunteer services in public welfare, social services, manual, 22224
 - welfare cheating, 17253
 - welfare in review (periodical), 19082
 - see also Social work and problems.
- Public works:
 - appropriations, 1973, water and power development, law, 19363
 - appropriations, 1974—
 - report, 29890
 - water and power development—
 - hearings, 27186, 28392, 31130, 32134
 - law, 32015
 - report, 29993, 30989
 - authorizations, 1972, rivers and harbors, flood control, etc., reports, 19654, 19715, 19871
 - development act of 1972, hearings, 15929
 - Engineers Corps, Army, report, civil works activities—
 - departmental edition, 17369, 25064, 25090, 30165
 - document edition, 16938, 24799-800, 29838
 - history of public works in United States, authorize preparation—
 - law, 19491
 - report, 16999
 - Public works and economic development act, amend—
 - hearings, 26290, 27240
 - law, 30919
 - reports, 15708, 17209, 24834, 26106, 28450, 32035

Public works—Continued

- water, pollution control, and power development, appropriations, 1973, hearings, 15870
- Public Works Committee, House:
 - calendar, 18555
 - committee prints, 15777, 17081-82, 17084, 17086-87, 19791, 21290-291, 26178
 - hearings, 15778, 17080, 17083, 17085, 19792-793, 21283, 21285-289, 26179, 27240, 28428, 28430, 29935, 32092, 31040
 - investigations and studies, authorization and expenses, report, 19710
 - legislative history, 91st Congress, 15777
 - legislative history, 92d Congress, 21188, 21291
 - reports, 15689, 16993, 17010, 19654, 19721, 21188, 24834, 26067, 26136, 27171-172, 28343-345, 28429
 - studies and investigations, authorization and expenses, report, 24332
- Public Works Committee, Senate:
 - activities and accomplishments, summary, 92d Congress, 23072
 - calendar, 18573
 - committee print, 17296, 20012, 23072, 24958, 26288, 27363, 31160
 - hearings, 15929-930, 17297, 19792, 20011, 21382-383, 23073, 24959-60, 26289-291, 27364-365, 28571-572, 31161-164, 32153-154
 - legislative activities and accomplishments, summary, 92d Congress, 23072
 - reports, 15852, 15858, 17146, 17209, 19858, 19871, 24899, 26201, 26203, 28450, 28470, 29955, 29972, 31075, 31078, 31118, 32108, 32110
- Publications, CIP, cataloging in publication, progress reports, 30399-400
- see also Government publications—Military publications—also names of departments, etc., issuing publications—also subjects.
- Published ordinances, firearms, important information to gun dealers, 26955
- Publishing:
 - industry report, 18818
 - outlook for technology and manpower in printing and publishing, 31556
- Puckett, Richard H., changes in bank lending practices, 32290
- Pueblo, Colo., stratigraphy and ammonite fauna of Graneros shale and Greenhorn limestone near Pueblo, Colo., 23360
- Pueblo County Republican Central Committee, annual report, 24750
- Pueblo Indians, general information, 31472
- Pueblos, see Acoma Pueblo.
- Puente Hills, geology and oil resources of western Puente Hills, southern California, 21718
- Puerto Ricans:
 - Civil Rights Commission hearing to investigate denial of equal opportunity, 24255
 - issues of concern to Puerto Ricans in Boston and Springfield, 22584
 - we, the Americans, 30858
- Puerto Rico:
 - Ad Hoc Advisory Group on Presidential Vote for Puerto Rico, 6 special studies requested for group, 22198
 - briefing on territorial matters, with text of constitution, hearing, 28541
 - census of agriculture, 1969, area reports, 22512
 - census of housing, 1970—
 - detailed housing characteristics, 19195
 - housing characteristics for States, cities and counties, 25897
 - census of population, 1970—
 - detailed characteristics, 28121
 - general social and economic characteristics, 19209

Puerto Rico :

- climatological data, 18108
- coast pilot, Atlantic Coast, Gulf of Mexico, Puerto Rico, and Virgin Islands, supplement, 27798
- county business patterns, 30835
- ground water in Tortuguero area, P.R., as related to proposed harbor construction, 23383
- mineral industry, minerals yearbook chapter, 20566
- municipios, barrios, towns, cities, villages, etc., census 1970, map, 21069
- must Honduras pine be weeded frequently in Puerto Rico? 28958
- nautical chart catalog, 22092, 29379
- precipitation data, hourly, 18458
- preservative treatments and service life of fence posts in Puerto Rico, 1972 progress report, 28954
- tree species for plantations in granitic uplands of Puerto Rico, 28956
- U.S. trade, monthly report, 19008
- water-resources bulletins, 23383-384
- Puerto Rico International Airlines (Prinair), Inc., accident report, 23861
- Puerto Rico Water Resources Authority, fiche index for nuclear dockets, Aguirre Nuclear Plant, unit 1, 25873
- Puget Sound :
 - estuary, protection, report, 16988
 - fish larvae collected from northeastern Pacific Ocean and Puget Sound during April and May 1967, 23808
 - observations of currents, 27801
 - observations of currents and water properties in Puget Sound, 26767
 - pollution of interstate waters—Puget Sound, Strait of Juan de Fuca, and their tributaries and estuaries, transcript of conference, 26801-801A, 29455
 - region, Washington, low-flow characteristics of streams, 32361
- Pugh, Franklin, highway and urban mass transportation, 18421
- Pugliese, Joseph M., designing blast patterns using empirical formulas, comparison of calculated patterns with plans used in quarrying limestone and dolomite, with geologic considerations, 17679
- Pulaski County, Ark. :
 - flood plain information, Arkansas River and tributaries, 28697
 - floods, Arkansas River, 28684
- Pulaski County Boehning for Congress Committee, annual report, 22871
- Pulaski County Democratic Committee, annual report, 22773
- Pullam William E., status of world history instruction in American secondary schools, 21430
- Pullman, Wash., Pullman Elementary School, physical fitness program, description, evaluation, cost, etc., 27777
- Pulmonary Disease Research Conference, transactions of 31st VA-Armed Forces conference, 20855
- Pulmonary diseases :
 - chest X-ray as screening procedure for cardiopulmonary disease, policy statement, 26805
 - current research programs, analysis, 23735
- Pulmonary functions, *see* Respiratory system.
- Pulmonary Specialized Centers of Research (SCOR) Workshops, workshop on lung cell identification, isolation and culture, 30494
- Pulp :
 - color removal from kraft pulp mill effluents by massive lime treatment, 25109
 - current industrial reports, 18194
 - industry report, 18834
 - kraft pulping effluent treatment and refuse, state of art, 25117

Pulp—Continued

- methods for pulp and paper mill sludge utilization and disposal, 31279
- pulp and paper industries and size reduction machinery, industrial plant equipment handbook, 26308
- pulp and paper industry, air pollution aspects of emission sources, bibliography with abstracts, 29638
- state-of-the-art review of pulp and paper waste treatment, 26420
- Pulp mills, flows of mill residues to pulp and board manufacturers, Washington, Oregon, and California, 20322
- Pulp, Sulphite, & Paper Mill Workers, International Brotherhood of, Political Education Program, *see* International Brotherhood of Pulp, Sulphite & Paper Mill Workers Political Education Program.
- Pulp wood, *see* Wood pulp.
- Pulpboard :
 - current industrial reports, 18194, 28164
 - fiber bonding and tensile stress-strain properties of earlywood and latewood handsheets, 32339
 - method for measuring and controlling web tension of corrugating medium during singlefacing process, 21655
 - some views on large structural particle-board panels, 23282
- Pulpwood, *see* Wood pulp.
- Pulpwood production in Lake States, 1972, by county, 32322
- Pulse acceleration, *see* Acceleration.
- Pulse counters, method for finding D-regions electron density distributions from L.F. broadband pulse measurements, 22641
- Pulse generators, multibyte generating bank, 20996
- Pulse-height analyzers, applications of dual parameter analyzers in solid-state laser tests, 20979
- Pulse modulators, investigation of parasitic oscillations in KIU-12 klystron, originating when duration of modulating pulse is increased, USSR study, 17618
- Pulse waves :
 - data results on nanosecond pulse propagation measurements over line-of-sight paths, 22640
 - general principle of current heating processes of plasma in pulsed Z-discharges, 20997
- Pulses :
 - discharging of inductive power accumulator for generating short-front pulse, USSR study, 26589
 - experimental short-pulse X-ray detection system, 24031
 - Fortran computer program to calculate range of pulse radar, 22170
 - ionization gauge characteristics of SA1463 triode electron tube and effects of internal gas pressure on pulse emission and arcing, 22484
 - possibility of building pulsed electron accelerators with energies of 20-50 MeV, USSR study, 23516
 - possible mechanisms of turbulent heating of plasma by ultrashort laser pulses, USSR study, 27622
 - quasistationary CO₂ laser with pulsed excitation, USSR study, 27625
 - spectra of magnetic pulsations of nonisothermal plasma, 22461
 - uncertainty of pulse position due to noise, 16448
 - using video pulse sequencing for sounding sea ice, USSR study, 21840
- Pulses (seeds) :
 - dried, foreign agriculture circulars, 18380
- Pumice, pumice and volcanic cinder, minerals yearbook chapter, 25480
- Pumping :
 - combined gas-laser pumping, USSR study, 21848

INDEX 1973

Pumping—Continued
 new pumping system for a 150-kilovolt neutron generator to reduce present tritium hazard, 24914
 nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455

Pumps:
 and compressors, current industrial reports, 29771
 Centaur space vehicle pressurized propellant feed system tests, 20599
 fabrication and test of space power boiler feed electromagnetic pumps, endurance and final performance tests, 23669
 liquid, Federal item identification guide, 25007
 vacuum, Federal item identification guide, 27400
 waves, instabilities and anomalous dissipation of parametric plasma in strong electromagnetic field of pumping wave, USSR study, 31534

Punch card systems, automated engineering document preparation system, finishes, military standards, 15955

Punch presses, presses, shearing, punching, boring, drilling, and tapping machine, Federal item identification guide, 28602

Punched tape, one-inch perforated paper tape for information interchange, 29308

Pupae, *see* names of insects.

Pupils (students), *see* Students.

Purchase of Products and Services of the Blind and Other Severely Handicapped, Committee for:
 appropriations, 1974—
 authorization, increase, reports, 28493, 29853
 hearings, 28393, 32135
 reports, 29885, 31117
 increase 1974 budget, hearing, 28413

Purchase price of mortgaged homeowner properties acquired in 1967-71, for United States, 28111

Purchasers, *see* Vendors and purchasers.

Purchase:
 alleged purchase of classified information by Members of Congress, hearings, 27188-89
 "Buy American act", amendments, hearing, 21288
 buying a home? don't forget those closing costs, 23414
 buying and financing mobile home, 32372
 buying new sewing machine, 28014
 consumer buying indicators, series, 15593, 21065, 22563, 29783
 current population reports, consumer buying indicators, series, 25937
 how to buy beef steaks, 27992
 how to buy food, lesson aids for teachers, 26931
 how to use USDA grades in buying food, 20906
 large-scale meat buying made easy, educational programs, 22312
 peanut loan and purchase program, 1973, proposed changes—
 hearings, 28333
 report, 28331
 programa de HUD-FHA para la compra de casa movibles, 31438
 public lands, how to buy, 32435
 recent purchase of cars, houses, and other durables and expectations to buy during months ahead, survey data, 21065
 U.S. Government purchasing and sales directory, 32551

Purification of water, *see* Water purification.

Purification of yttrium by electrorefining, 26661

Putnam, Terrill W., investigation of coaxial jet noise and inlet choking using F-111 A airplane, 31649

Putnam County Republican Central Committee, annual report, 26017

Putting research into educational practice, 15995-996, 17763, 20096, 21425, 22062-63, 23746, 29361

Puttkamer, Jesco von, space for mankind's benefit, 21982

Putzel, Henry, Jr.:
 official reports of Supreme Court, United States preliminary print, 18724
 United States reports, cases adjudged in Supreme Court, 24022, 27942, 31880

Puukohola Helau National Historic Site, establish, law, 16894

Puzak, P. P., significance of Charpy-V parameters as criteria for quenched and tempered steels, 23883

PXs, *see* Post exchanges.

Pyorrhea, *see* Periodontal disease.

Pyrites:
 computerized system for quantitative X-ray diffraction analysis of pyrite in coal, 29244
 minerals yearbook chapter, 25488
 oxidation of pyrites in chlorinated solvents, 20200
 pyritic systems, mathematical model, 20185
 pyrographic gross characterization of water contaminants, 28819
 removing pyrite from coal by dry-separation methods, 29230

Pyrolysis:
 char oil energy development interim report, 21092
 disposal of cattle feedlot wastes by pyrolysis, 23189
 economic evaluation of COED process plus char gasification, 22615
 mechanisms of pyrolysis, oxidation, and burning of organic materials, 23706

Pyromellitic acid, action of quaternary ammonium derivatives of naphthalene-peritetracarboxylic and pyromellitic acids on neuromuscular transmission, USSR study, 17621

Pyrometers, automatic pyrometer for measuring true temperature of metals on basis of radiation, USSR study, 30348

Pyrophyllite, minerals yearbook chapter, 25489

Q

Qatar:
 map, 16803
 mineral industry, minerals yearbook chapter, 16269

Quaalude, *see* Methaqualone.

Quail, review of literature on endangered masked bobwhite, 22247

Qualification of miniature internal threads using air flow, 29665

Quality and its preservation in processed foods, proceedings, 20888

Quality assurance:
 guidelines for development of quality assurance program, 31271
 procurement quality assurance for medical materiel, 21404
 quality assurance of medical care, monograph, 25685
 reliability and quality assurance publication NHB series, 23692
 supplier quality assurance program requirements, military standard, 23115

Quality construction for people, 23933

Quality control:
 analytical, in water and wastewater laboratories, handbook, 25788
 quality control and measurement of non-sampling error in health interview survey, 27744
 safety and performance tests for qualification of explosives, 20728
 testing methods and techniques, quality control and nondestructive testing, 20758
 compilation, 27710

Quality control—Continued
toward developing quality control system
for rawinsonde reports, 25622
U.S. standards for inspection by variables,
27983
vendor substantiation for aerospace propul-
sion system items, 20078
see also subjects.
Quality of life, 26742
Quality of life concept, potential new tool
for decision makers, 28836
Quality of residential geographic coding,
22536
Quality of surface waters of United States,
20363, 31402-403
Quantitative analysis:
computerized system for quantitative
X-ray diffraction analysis of pyrite in
coal, 29244
quantitative methods for preliminary de-
sign of water quality surveillance sys-
tems, 23199
rigorous correction procedure for quanti-
tative electron probe microanalysis,
31677
Quantity-price relationships in health insur-
ance, 23969
Quantity recipes for child care centers,
32305
Quantum electrodynamics, superconducting
quantum interference devices, operational
guide for rf-biased systems, 22011
Quantum electronics, shipboard quantum
z-magnetometer, USSR study, 21863
Quantum generators, *see* Lasers.
Quarantine:
going abroad? Important message for U.S.
citizens, 30713
quarantine requirements and procedures
to prevent introduction and spread of
exotic pests of mutual concern to mem-
ber countries of North American For-
estry Commission, 27531
see also Plants—Subjects.
Quarles, John R., Jr., address, Oct. 26, 1972,
21519
Quarries and quarrying:
computer program for pit slope stability
analysis by finite element stress analysis
and limiting equilibrium method, 21943,
25495
historical injury experience in quarrying,
25421-423
measurement and reduction of noise from
detonating cord used in quarry blast-
ing, 17635
see also Limestone.
Quarry accidents:
historical injury experience in quarrying,
25421-423
injury experience in quarrying, 17680
Quarterly:
NOTE.—For all publications which
begin with the word "Quarterly";
see subject, or name of department,
etc., issuing publication.
Quartz, quartz crystal unit, Federal item
identification guide, 28603
Quasilinear differential equations, *see* Equa-
tions.
Quasistationary CO₂ laser with pulsed excita-
tion, USSR study, 27625
Quaternary ammonium compounds, action of
quaternary ammonium derivatives of
naphthalene-peri-tetracarboxylic and pyro-
mellitic acids on neuromuscular transmis-
sion, USSR study, 17621
Quaternary ammonium salts, *see* Quaternary
ammonium compounds.
Quebec, Canada:
conference 1944, diplomatic papers—
departmental edition, 17856
document edition, 16942
Quentin P. Smith for Congress, annual re-
port, 22992
Quest for international monetary reform (re-
marks), 32294

Question of opportunity, women and con-
tinuing education, 31601
Questionnaires:
questionnaires for research, annotated
bibliography on design, construction, and
use, 20320
recording quizboard, device for evaluating
interpretive services, 20319
reporting health events in household inter-
views, effects of extensive questionnaire
and diary procedure, 17746
Questions and answers from EPA's 2d na-
tional citizens' briefing, 32269
Questions and answers on retirement plans
for self-employed, 20404
Questions and answers on role of Assistant
Secretary of Labor for labor-management
relations under Executive order 11491, as
amended, labor-management relations in
Federal service, 32419
Questions and answers on specially adapted
housing for veterans, 26914
Questions and answers on water quality
standards, 20209, 20871-72
Questions and policy issues for oversight
hearings on administration of Outer Con-
tinental Shelf act, 31498
Questions asked by U.S. taxpayers abroad,
20405
Questions physicians are asking about
HMOs and answers, 21756
Questions to artist who is also author, 16242
Quick look at hours worked under Fair labor
standards act as amended in 1966, 25803
Quile, Albert H., Quile Volunteer Committee,
annual report, 26015
Quile Volunteer Committee, annual report,
26015
Quiet sun, 29265
Quigley, Charles E., tape playback and serial-
time decoder for IFF flight test instru-
mentation, 22171
Quillin, Susan A., *relief*, 19812
Quinary reciprocal salt system Na,K,Mg, Ca/
Cl₂SO₄, review of literature with new data,
17537
Quinault Research Natural Area, general in-
formation, 21642
Quince, blight, 20909
Quinebaug River, flood plain information,
25080
Quinn, R. E., measuring pavement roughness
spectra using modified BPR roughrometer
with additional refinements, 31324
Quinn, Joseph R., medicine and public health
in People's Republic of China, 27617
Quinn, Robert, mental health and learning,
when community mental health centers and
schools collaborate, 22075
Quit rates, *see* Labor turnover.
Quita Sueno Bank, status, treaty with Colom-
bia, 21306

R

R.O.T.C., *see* Reserve Officers Training
Corps, Army.
RAA, *see* Renewal Assistance Administra-
tion.
Rabbit Creek:
Anchorage, Alaska—
flood plain information, 28722
floods, 28757
Rabbit hutches, hutches for rabbits, farm
building plan, 29628
Rabbits:
chemical compounds authorized for use
under USDA inspection program, list,
22399
meat and poultry inspection regulations,
29656
processing plants, chemical compounds
authorized for use under USDA inspec-
tion programs, list, 28041
rabbit meat inspection—
make mandatory at Federal expense,
report, 76954

INDEX 1973

- Rabbits—Continued
 rabbit meat inspection—continued
 slaughtered for human food—
 hearing, 19735
 report, 76954
 selecting and raising, 15466
- Rabies:
 Center for Disease Control zoonosis surveillance—
 annual summary, 29793
 quarterly summary, 18062
- Rabin, David L., use of medicine, review of prescribed and nonprescribed medicine use, 22023
- Rabon, E. W., status of Savannah River plant deer herd, radiological monitoring results for 1971 deer hunts, 16664
- Race problems:
 bibliography on racism, 20669
 emergency school assistance program, background and evaluation, 19963
 equal educational opportunities act, hearings, 15729, 17037, 19759, 21366, 23012
 fear runs deep, report of open meeting, Somerville, Tenn., civil rights aspects, 22580
 Federal Aviation Administration, nondiscrimination in federally assisted programs, FAA regulations, 18292
 race relations, Armed Forces, 1960-72, special bibliography, 26971
 racial conditions in Indiana penal institutions, 22587
 your housing rights, live where you want to live, Spanish edition, 21809
see also Discrimination in education—Discrimination in employment.
- Races of man:
 detailed industry of employed persons by race and sex for U.S., 28126
 establishing Federal racial/ethnic data system, 23463
 annotated bibliography, 23464
 to know or not to know, collection and use of racial and ethnic data in Federal assistance programs, 22591
- Racing:
 organized crime in sports (racing)—
 hearings, 23010
 report, 28379
- Racketeering, civil remedies for victims of racketeering activity, and theft, report, 15844
see also Extortion.
- Racks:
 insert arrangements for MIL-C-83733 rack to panel connectors, military standard—
 shell size A, 20079-80
 shell size B, 28618
- Rad, Parviz F., mechanical properties and cutting coal, 29208
- Radar:
 air traffic control radar beacon code assignment plan 3dl, 24050
 behavior of α - β tracker for maneuvering targets under noise, false target, and fade conditions, 22167
 cloud-to-ground lightning versus radar reflectivity in Oklahoma thunderstorms, 23801
 cross-section measurements of snow and ice, 23155
 description of α - β filter in cartesian coordinates, 32526
 design considerations of programmable predetection digital signal processor for radar applications, 27843
 determining presence, thickness, and electrical properties of stratified media using swept-frequency radar, 23181
 feasibility study of electromagnetic subsurface profiling, 20204
 Fortran computer program to calculate range of pulse radar, 22170
- Radar—Continued
 point-scatterer formulation of terrain clutter statistics, 23378
 publications, price list, 16463
 radar echo distribution in Arizona during July and Aug., study, 30538
 radar image of surface of sea, USSR study, 17605
 radar monitoring of turbulence at tropopause level, 23803
 radar sea returns, JOSS II, 30591
 radars with synthesized antenna, USSR study, 29132
 Thompson scatter radar as aid to high-frequency direction finding, preliminary investigation, 16444
 weather radar investigations on artillery test conducted in Panama Canal Zone, 20973
 weather radar manual, national network observing and reporting procedures, 23866
see also Doppler radar.
- Radar interference:
 electromagnetic interference characteristics requirement for equipment, military standard, 26336
 procedures for conducting shipboard electromagnetic interference (EMI) survey, military standard, 27414
- Radar repairmen, *see* Mechanics (persons).
- Radar tracking:
 behavior of α - β tracker for maneuvering targets under noise, false target, and fade conditions, 22167
 description of α - β filter in cartesian coordinates, 32526
 rawin radar targets, 20977
- Radford City Republican Committee, annual report, 24324
- Radiac detectors, soldering process of attaching dosimeter to film badge holder radiac detecting element, military standard, 20069
- Radiance, testing of coal-cutter materials for incendiarity and radiance of sparks, 21957
- Radiant energy:
 energy budget at earth's surface water relations and stomatal response in corn field, 22404
 germanium cell performance with erbium oxide and silicon carbide radiators, experimental study, 16644
 soil-moisture and energy relationships associated with riparian vegetation near San Carlos, Ariz., 16105
- Radiation:
 AEC Pollution Control Conference, Oak Ridge, Tenn., proceedings, 26990
 Apollo experience report, protection against radiation, 25524
 automatic pyrometer for measuring true temperature of metals on basis of radiation, USSR study, 30348
 consumability of animals exposed to radiation in post attack situation, 29678
 contributions of selected residual elements to radiation-embrittled sensitivity of steel forgings, 27855
 control for health and safety act administration, annual report, 32026
 cost benefit analysis of selected radiation pasteurized foods, 21020
 course manual for machine sources of X-rays radiation exposure, 26806
 dynamic friction and wear of solid film lubricant during radiation exposure in nuclear reactor, 20604
 ecological and environmental effects from local fallout, beta and gamma radiation effects from close-in fallout, 16663
 effects on populations of exposure to low levels of ionizing radiation, 25517
 environmental exposure to nonionizing radiation, 30612

Radiation—Continued

environmental statements, AEC authorizing legislation, 1974, hearings, 27030
epidemiologist takes a look at radiation risks, 25677
Federal State radiation control legislation, 32302
high power and heat flux irradiation of uranium-plutonium carbides, fast reactor mixed carbide fuel element development program, 30772
implicit finite-difference solution to viscous shock layer including effects of radiation and strong blowing, 20622
inexpensive meteorological radiation shield for thermistors and thermocouples, 26472
investigation of optical print media, initial survey, 29066
iodine-129 in environment around nuclear fuel reprocessing plant, 25676
irradiation—
Hawaii food program, 29676
laser irradiation and melanoma, 21852
marine products development program, dosimetry and operations, annual report, 28087
isotopes and radiation technology, quarterly technical progress review, 18522
iterative solution of integral equation for radiative transfer by using variational technique, 31632
liquid state spectral emissivities of titanium, vanadium, zirconium, molybdenum, and platinum in electron-beam furnace, 29233
National Conference Radiation Control, 4th annual conference, 16468
natural radiation exposure in United States, 23912
nearly spherical constant power detonation waves driven by focused radiation, 29254
net radiation method for enclosure systems involving partially transparent walls, 31651
nuclear and ion beam techniques for surface and near-surface analysis, 31752
occupation exposure to ultraviolet radiation, criteria for recommended standard, 26738
optical radiation measurements—
impact of radiometry and photometry and role of NBS, 25555
photometric calibration procedures, 20642
photometric instrumentation and research, 20641
stability and temperature characteristics of some silicon and selenium photo-detectors, 29321
origin and findings of Atomic Bomb Casualty Commission, 25631
photographic studies on effects of high-level, short term radiation on metals, 22492
plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030
potential radiological implications of nuclear facilities in upper Mississippi River basin in year 2000, 28090
probe method for recording ions produced by laser radiation in afterglow discharge plasma, 20993
radiation balance of earth-atmosphere system from Nimbus 3 radiation measurements, 27715
radiation crosslinking of polymers with segregated metallic particles, 25872
radiation data and reports (periodical), 18842
radiation from apertures in curved surfaces, 32456
radiation halos and hydrocarbon reservoirs, review, 25419

Radiation—Continued

radiative coupled viscous flow with massive blowing, 26680
regulations for administration and enforcement of radiation control for Health and safety act, 22207
remote aftereffects of radiation damage, 22466
safety guide, National Institutes of Health, 32500
SHIP (simplified-Helmholtz-Integral program), fast computer program for calculating acoustic radiation and radiation impedance for free-flooded-ring and finite-circular-cylinder sources, 16443
Southern Conference on Environmental Radiation Protection from Nuclear Power Plants, proceedings, 20740
State radiation control, 1971 legislation, 20741
stimulated coherent radiation devices, lasers, industrial plant handbook, 20036
studies of radiation effects, final report, 29677
survey of application of radiation to preparative chemistry, 29291
UHF irradiation and worker in industry, USSR study, 20460
vacuum and ultraviolet-radiation effects on binders and pigments for spacecraft thermal-control coatings, errata, 23680
water quality standards criteria digest, 20228
we want you to know about microwave oven radiation, 32303
workshop on natural radiation environment, 25875
see also Bremsstrahlung radiation—Cosmic rays—Electromagnetic radiation—Gamma rays—Ionizing radiation—Infrared rays—Radioactivity—Radio-protective agents—Solar radiation—Thermal radiation.
Radiation biology, *see* Radiobiology.
Radiation Control, National Conference, *see* National Conference on Radiation Control.
Radioaction detection instruments, calibration of radioaction detectors in ultraviolet region between 972-2500 Å, 20616
see also Radiac detectors.
Radiation doses, *see* Radiation.
Radiation emission, investigation of alkaline phosphatase activity in persons dealing with electromagnetic emission generators of high, ultra-high and superhigh frequency, USSR study, 30357
Radiation exposure, *see* Radiation.
Radiation illness, radiation sickness in man, outlines, 25866
Radiation injuries, workmen's compensation and radiation injuries, studies, 21032
Radiation monitoring:
environmental radioactivity surveillance guide, 23913
investigation of thermoluminescent dosimeters for environmental monitoring, 22477
radiation safety and protection in industrial applications, symposium proceedings, 22206
Radiation Programs Office:
EPA/ORP series, 29456, 30612
function, role, authority, etc., 16021
ORP/CSO series, 17813
ORP/SID [Surveillance and Inspection Division] (series), 20740, 23912-913
Radiation sickness, *see* Radiation illness.
Radiators:
caps, radiator and tank, Federal Item Identification guide, change, 23094
germanium cell performance with erbium oxide and silicon carbide radiators, experimental study, 16644
Radical species profiles for methane-oxygen-argon flame, 30439

INDEX 1973

Radio :
 publications, price list, 16463
 regulations, partial revision and final protocol, agreement, 20801
 Radio amplitude modulation, *see* Amplitude modulation.
 Radio astronomy, radioastronomy, USSR study, 31548
 Radio broadcasting :
 applications, FCC reports, 18302
 appropriations, 1973, authorization, law, 16911
 broadcast actions, reports, 18302
 broadcast services, and miscellaneous documents, FCC reports, 28858
 call signs, new or modified, FCC reports, 18302
 experimental, auxiliary, and special services, FCC rules and regulations, 18306
 FCC decisions and reports, 28857
 noncommercial educational television and radio broadcasting facilities, construction grants, report, 32048
 programs, copyright, general information, 30074
 Public broadcasting act, amend, hearings, 27314
 Public Broadcasting Corporation, appropriations, 1973, authorization, reports, 16966, 16971
 right to know, report of Presidential Study Commission on International Radio Broadcasting, 27864
 services, FCC rules and regulations, 18306
 small broadcaster requirements, impact on small businesses of Federal paperwork burden, hearings, 26292
 tune in, drug abuse news for broadcasters about broadcasting, 19000
see also Radio stations.
 Radio communication :
 amateur service, FCC rules and regulations, 18309
 amateur stations, on behalf of 3d parties, agreement with—
 Guyana, 17871
 Jordan, 24006
 applications, FCC, reports, 18302
 aviation, public safety, industrial, and land transportation services, FCC rules and regulations, 18308
 boundary-layer electron profiles for entry of blunt slender body at high altitude, 31637
 citizens radio service, FCC rules and regulations, 18309
 domestic, public services, FCC rules and regulations, 18310
 draft proposals of United States for World Administrative Radio Conference for Maritime Mobile Telecommunications, 31843
 experimental radio services, FCC rules and regulations, 18305, 25139
 fundamental changes needed to achieve effective enforcement of radio communication regulations, GAO report, 20329
 industrial, scientific, and medical services, FCC rules and regulations, 18305, 25139
 international fixed public services, FCC rules and regulations, 18310
 ionosphere disturbances and their influence on radio communications, 29303
 laws of United States, compilation, 21150
 motorist radio services, 31323
 promotion of safety on Great Lakes by means of radio, agreement with Canada, 31046
 radio transmitting and receiving facilities, telecommunications, agreement with Thailand, 16522
 radio treaty matters, FCC rules and regulations, 25139
 radiotelegraph carriers, uniform system of accounts, FCC rules and regulations, 18312

Radio communication—Continued
 safety and special radio services, FCC applications and actions, reports, 18302
 television system and radio facility, agreement with Saudi Arabia, 25758
 treaty matters, FCC rules and regulations, 18305
see also Television—Tropospheric scatter communications.
 Radio direction finding, Thompson scatter radar as aid to high-frequency direction finding, preliminary investigation, 16444
 Radio equipment, *see* Radio communication.
 Radio Free Europe :
 appropriations—
 authorize, law, 16898
 1973, supplemental, authorize, report, 29961
 1974, authorize, report, 31103
 authorization and expenditures, hearings, 32079
 fund, hearings, 30030
 Radio frequencies :
 allocations, FCC rules and regulations, 18305
 devices, FCC rules and regulations, 18305
 directory of field contacts for coordination of use of radio frequencies, 32279
 frequency allocations, FCC rules and regulations, 25139
 manual of regulations and procedures for radio frequency management, 25789, 32600
 NBS frequency and time broadcast services, radio stations WWV, WWVH, WWVB, and WWVL, 27725, 30471
 propagation factors in telecommunications applications of 10- to 100 GHz radio spectrum, review, 19304
 radio frequency coils, molded ceramic capacitors, and fixed precision metal film resistors certain workers of Du-bols, Pa., plant of Alreo Speer Electronic Components Division, Tariff Commission report, 22282
 radio frequency devices, FCC rules and regulations, 25139
 radio frequency spectrum—
 characteristics, measurement of, 27404
 United States use and management, 26902
 superconducting quantum interference devices, operational guide for rf-biased systems, 22011
 Radio frequency allocations, *see* Radio frequencies.
 Radio frequency modulation, broadcasting stations of the world, frequency modulation, 17502
 Radio in navigation :
 aids, Atlantic and Mediterranean area, 23121
 impedance maps to predict effect of irregular, inhomogeneous ground of Loran C/D radio navigation systems, 27064, 31989
 Radio interference :
 procedures for conducting shipboard electromagnetic interference (EMI) survey, military standards, 27414
 superconducting quantum interference devices, operational guide for rf-biased systems, 22011
 Radio journalism, Federal-State market news service, 22336
 Radio Liberty :
 appropriations 1973—
 authorize, law, 16898
 supplemental, authorize, report, 29961
 appropriations, 1974, authorize, report, 31103
 authorization and expenditures hearings, 32079
 funding, hearings, 30030
 Radio measurements, radio frequency spectrum characteristics, measurement of, 27404

- Radio navigation, *see* Radio in navigation.
- Radio operators:
 amateur, alien, continued application to
 Fiji of United States-United Kingdom,
 agreement, 17894
 commercial, FCC rules and regulations,
 18304
- Radio programs, *see* Radio broadcasting.
- Radio propagation, *see* Radio waves.
- Radio receivers, *see* Receivers (radio).
- Radio repairmen, aircraft radio repairman,
 Air Force notice, 16629
- Radio servicemen, *see* Radio repairmen.
- Radio services, *see* Radio communication.
- Radio signals:
 action of dither in digital matched filters,
 27851
 erection and testing of zonal signal en-
 hancer on Chollon-Ata-Orgochur radio
 relay line, USSR study, 21867
- Radio spectrum, *see* Radio frequencies.
- Radio stations:
 amateur stations—
 alien, continued application to Fiji of
 United States-United Kingdom, agree-
 ment, 17894
 communications on behalf of 3d parties,
 agreement with Jordan, 24006
 broadcasting stations of world—
 amplitude modulation, according to—
 country and city, 17500
 frequency, 17501
 frequency modulation, 17502
 CPB-qualified public radio stations—
 financial statistics, 1970, fy, 15990
 summary statistics, 31233
 maritime services on land, shipboard, etc.,
 FCC rules and regulations, 18307
 U.S. and foreign coastal radio stations
 accepting ships' weather observations,
 31748
 WWV, WWVH, WWVB, and WWVL, NBS
 frequency and time broadcast services,
 27725, 30471
- Radio telemetry, four-channel miniature
 radiotelemetric system for transmitting
 brain biopotentials, USSR study, 21871
- Radio transmissions, NOAA VHF radio
 weather, 23863
- Radio transmitters, *see* Transmitters.
- Radio waves:
 anomalous nonlinear dissipation of high-
 frequency radio waves in plasma, USSR
 study, 31532
 impedance maps to predict effect of ir-
 regular, inhomogeneous ground of Loran
 C/D radio navigation systems, 27064,
 31989
 measurements of Loren-C skywave stabi-
 lity, 28236
 radar image of surface of sea, USSR
 study, 17605
see also Microwaves.
- Radioactivation analysis:
 neutron activation analysis of bottom
 sediments, 26408
 oil slick identification by trace element
 patterns measured with neutron activa-
 tion analysis, instruction manual, 15518
 photonuclear activation analysis with GE
 (LI) detectors, compilations, 30594,
 30596
- Radioactive substances:
 distribution and evolution of radioele-
 ments after nuclear explosion, 16671
 fate of radioactive contaminants in water,
 20735
 opportunity for AEC to improve its proce-
 dures for making sure that containers
 used for transporting radioactive mate-
 rials are safe, GAO report, 30258
 radiation, water quality standards criteria
 digest, 20228
 radioactive materials, marking and label-
 ing of items, etc., military standard,
 25024
see also Waste products.
- Radioactive waste disposal:
 disposal of radioactive wastes, USSR
 study, 26568
 plan for management of AEC-generated
 radioactive wastes, 30777
 radioactive waste management, appro-
 priations, 1974, authorization, hearings,
 29832
- Radioactivity:
 effect of ionizing radiation on organism,
 problem of effect of radioactive water
 pollution on reproduction of commercial
 fishes, 26984
 environmental radioactivity surveillance
 guide, 23913
 fallout, Health and Safety Laboratory pro-
 gram, quarterly summary reports,
 19180, 28078, 30773
 appendix, 19181, 28077, 30774
 index, 19182
 new method of controlling radioactivity in
 laboratory waste water, 21019
 personnel shelters and protective construc-
 tion, 29429
 radioactivity and its fractionation during
 underground nuclear explosions in
 granite medium, 15524
 radioelement and trace-element content
 of Ione Formation, central California,
 29007
 radiological risks relative to distribution
 of contaminated gas, 16668
 radionuclide analysis of environmental
 samples, laboratory manual of method-
 ology, 20736
 research on removing radioactive fallout
 from farmland, 25888
 transport, deposition, and meteorological
 studies of nuclear debris in atmosphere,
 30521
- Radioastronomy, *see* Radio astronomy.
- Radobiology:
 hygienic problems of effect of microwave
 electromagnetic field on body, 16194
 one cell spoke to another, USSR study,
 27642
 USSR periodical, translations, 15517,
 22448, 25867-868, 28061, 29664
- Radioecology:
 marine radioecology, selected bibliography
 of non-Russian literature, 22489
 Russian radioecology, bibliography of
 Soviet publications with citations of
 English translations and abstracts,
 21018
 terrestrial and freshwater radioecology
 selected bibliography, 22488
- Radioelement and trace-element content of
 Ione Formation, central California, 29007
 digital processing of radiographic images,
 29252
 discontinuities in welds by stereoradio-
 graphy, examination, 20106
 radiographic, petrographic, and SEM
 evaluation of ballistically loaded clay,
 31261
- Radioiodide, organic iodide formation under
 accident conditions in water-cooled re-
 actors, review, 24203
- Radioisotopes, *see* Isotopes.
- Radiological health, *see* Health.
- Radiological Health Bureau:
 BRH/DBE series, 17814, 25677, 26804,
 27872
 BRH/DEP series, 22206, 23914
 BRH/DMRE series, 25678
 BRH/NERHL series, 17815
 BRH/OBD series, 16468, 20741-742, 22207,
 25679
 BRH publications index, 20742
- Radiological Research Laboratory, Columbia
 University, annual report on research proj-
 ect, 19179

INDEX 1973

Radiology :

clinical uses of radionuclides, critical comparison with other techniques, proceedings of symposium held at Oak Ridge Associated Universities, Nov. 15-19, 1971, 28071

Radiological Research Laboratory, Columbia University, annual report on research project, 19179

radiological surveillance studies at pressurized water nuclear power reactor, 32270

see also Medical radiology.

Radiometers :

attitude-referenced radiometer study, primary calibration system, 21972

proposed calibration target for visible channel of satellite radiometer, 22099

Radiometry :

impact of radiometry and photometry and role of NBS, optical radiation measurements, 25555

measurements of distribution and volume of sea-surface oil spills using multi-frequency microwave radiometry, 30590

radiation halos and hydrocarbon reservoirs, review, 25419

radiometric ages of igneous rocks, from Pima, Santa Cruz, and Cochise Counties, southeastern Arizona, 27557

radiometric techniques for observing atmosphere from aircraft, 25628

Radionuclides :

clinical uses of radionuclides, critical comparison with other techniques, proceedings of symposium held at Oak Ridge Associated Universities, 28071

distribution of radionuclides in bottom sediments of Columbia River estuary, 30273

ecological techniques utilizing radionuclides and ionizing radiation, selected bibliography, 21016

fate of radioactive contaminants in water, 20735

radiological surveillance studies at pressurized water nuclear power reactor, 32270

radionuclide analysis of environmental samples, laboratory manual of methodology, 20736

radionuclide carcinogenesis, 30768

radionuclides transport in Columbia River from Pasco to Vancouver, Wash., 27563

relations among radionuclide content and physical chemical and mineral characteristics of Columbia River sediments, 27562

transport of radionuclides by streams (series), 27562-563, 30273

Radio-protective agents, role of mixed disulfide bonds in radio-protective effect of B-mercaptopoethylamine (MEA), USSR study, 16192

Radios, see Receivers (radio).

Radiosondes :

accuracy of ballistic density departure tables, 22409

observation computation tables, 19290

observations, Federal meteorological handbook, 25965

Radiotelemetry, see Radio telemetry.

Radon, development of portable radon detector, 26666

Raff, Alfred I., program scores, ship structural response in waves, 22219

Ragone, Stephen E. :
cationic analysis of—

Byrd Station, Antarctica, ice core, 17374

Camp Century, Greenland, ice core, 17373

use of atomic absorption spectroscopy in determination of ug/liter concentrations, 17370

Rail carload costs by territories, 27616

Rail terminals, see Terminals (transportation).

Railroad accidents :

accident bulletin, 22211

all line-haul and switching and terminal companies, summary, 18941

application of commercial aircraft accident investigation techniques to railroad derailment, 30785

Atchison, Topeka and Santa Fe passenger train no. 212 collision with Stillwater Milling Company motortruck at 116th Street north grade crossing near Collinsville, Okla., railroad/highway accident report, 30571

Investigation reports, 20748, 22212, 23950, 31791

Investigation summary reports, 20749-751, 23951, 27875

public view of rail safety (address), 22151

railroad employee accident investigation reports, 25692, 32545-547

railroad/highway accident report NTSB-RHR series, 30571

reports, 30569-570

train accidents attributed to negligence of employees, special study report, 30574

United States, summary and analysis, 1971 calendar year, 22211

Railroad cars :

Rolling stock utilization and financing act—

hearings, 28528

report, 29979

see also Freight cars.

Railroad crossings :

Atchison, Topeka and Santa Fe passenger train no. 212 collision with Stillwater Milling Company motortruck at 116th Street north grade crossing near Collinsville, Okla., railroad/highway accident report, 30571

rail-highway grade crossing safety, improve with Federal aid, report, 17141

Railroad employees :

disputes under Labor Board, laws, compilation, 19538

disregard railroad retirement income in determining need for public assistance, report, 19647

emergency board report, 21434

handling of rail disputes under Railway labor act, 23592

railroad employee accident investigation reports, 25692, 32545-547

railroad retirement—

amendments of 1972, 23976

background information, 29927

legislation, 32558

temporary benefit increase, extend—

hearings, 27223

reports, 28338, 28341, 29954, 31071, 32105

unemployment insurance programs, benefit statistics, monthly, 18639

railroad retirement system—

analysis of actuarial and financial status and of options relating to restructuring of the system, 24868, 25682

analysis of its historical development, statistical trends, structure, and adequacy, 30613

economic analysis of future outlook, 19783, 20743

its coming crisis—

departmental edition, 20744

document edition, 19558

Railway labor act, extend, law, 27080

report to President by Emergency Board to investigate dispute between Port Authority Trans-Hudson Corporation and certain of its employees represented by Brotherhood of Railway Carmen of United States and Canada, 25062

retirement act, amend—

annuity, eligibility and retirement tax rate, hearings, 30061

law, 30929

reports, 28348, 31067

Railroad employees—Continued
 retirement act, amend—continued
 revise eligibility conditions, etc., report, 29859
 to increase annuities—
 hearing, 17288
 law, 19395
 message from President, 16947
 reports, 15695, 15705, 15856
 retirement act and retirement tax rates,
 revise annuity eligibility conditions, re-
 port, 31071
 train accidents attributed to negligence of
 employees, special study report, 30574
 wage statistics, class 1 railroads, 26555
 Railroad/highway accident report NTSB-
 RHR series, 30571
 Railroad retirement acts,
see Railroad employees.
 Railroad Retirement Board :
 annual report—
 departmental edition, 26808
 document edition, 26047
 appropriations, 1973—
 hearings, 15866
 reports, 16987, 19615, 21311
 supplemental, hearings, 26149
 veto message, 19556
 appropriations, 1974—
 hearings, 28387
 report, 30983
 member, nomination of James L. Cowen,
 hearing, 20001
 quarterly review, 18878
 railroad retirement and unemployment in-
 surance programs, benefit statistics,
 monthly, 18639
 Railroad Retirement Commission :
 appropriations, 1973—
 hearings, 15866
 reports, 16987, 19615, 21311
 veto message, 19556
 report—
 departmental edition, 20744
 document edition, 19558
 Railroads :
 American posture, problems and prospects,
 23055
 British railways, advance passenger ser-
 vice technology, hearings, 15879
 cargo thefts, hearings, 20015
 carload costs by territories, 27616
 class 1—
 financial and operating statistics, 23505
 freight commodity statistics, annual re-
 port, 17588
 wage statistics, 16173
 disputes under Labor Board, laws, com-
 pilation, 19538
 emergency rail facilities restoration—
 hearing, 19953
 law, 19516
 reports, 19713, 19860
 Emergency rail services act, amendments,
 report, 32122
 establishing trails on rights-of-way, prin-
 cipally railroad abandonments, reports,
 23901
 Federal railroad safety act, amend, re-
 ports, 28506, 29551
 flows of mill residues to pulp and board
 manufacturers, Washington, Oregon, and
 California, 20322
 ICC to continue essential rail transporta-
 tion services, authorize, report, 29978
 improve and insure safe, efficient, and eco-
 nomic surface transportation system,
 15751
 Interstate commerce act, amend, report,
 15850
 lessors and proprietary companies, trans-
 port statistics, 20443, 25322
 midwest and northeast rail crisis, ma-
 terials discussing proposed legislative
 program to meet, 32142

Railroads—Continued
 passenger service, appropriate investiga-
 tion to determine course of action be-
 fore discontinuing, hearings, 15883
 private car lines, statistics in United
 States, 30325
 rail and marine interface, 25400
 Rail passenger service act, amend—
 hearings, 29925
 law, 16867
 reports, 15681, 28505, 31001
 rail problems, background information,
 29928
 rail rapid transit safety, special study,
 16426
 rail services in northeastern U.S.—
 assure continuance, report, 32122
 crisis, hearings, 28524
 railroad-highway safety, recommendations
 for solving problems, report to Con-
 gress, 32602
 railroad safety and hazardous materials
 control, amend, report, 29851
 railroads and environment in rail freight
 operations, sub-council report on pollu-
 tion problems, 23741
 Railway labor act—
 amend, hearing, 26282
 extend, law, 27080
 railway operating and safety rules, tech-
 nical manual, 30756
 report to President by Emergency Board
 to investigate dispute between Port Au-
 thority Trans-Hudson Corporation and
 certain of its employees represented by
 Brotherhood of Railway Carmen of
 United States and Canada, 25062
 roadway and track statistics in United
 States, 30325
 safety appliance standards and power
 brake requirements, 30617
see also High speed ground transporta-
 tion—Railroad employees.
 Rails (birds) :
 evolution of rails of South Atlantic Is-
 lands (Aves: Rallidae), 31802
 migratory birds, 1972-73 in United States,
 etc., Federal regulations, 20781
 Railway cars, *see* Freight cars.
 Railway crossings, *see* Railroad crossings.
 Railway Express Agency, Inc., transport
 statistics, 20443, 25322
 Railway labor act, *see* Railroad employees—
 Railroads.
 Railways, *see* Electric railroads—Railroads.
 Rain :
 characteristics of rainfall runoff from beef
 cattle feedlot, 17419
 modeling effects of clouds and rain upon
 satellite-to-ground system performance,
 25967
 storm sewer design, evaluation of RRL
 method, 20199
 urban storm water runoff, selected ab-
 stracts, 21502
 weather modification, precipitation induce-
 ment, bibliography, 27593
see also Precipitation.
 Rain making, *see* Weather control.
 Rainbow Creek Research Natural Area, gen-
 eral information, 21643
 Rainbow trout, *see* Trout.
 Raincoats, coated fabric raincoats, provision
 for evaluating quality, 28614
 Rainey, Charles E., Commissioner, Testi-
 monial Dinner, *see* Testimonial Dinner for
 Commissioner Charles E. Rainey.
 Rainfall, *see* Rain.
 Rainville, Bob, sealift, 18891
 Raleigh, Henry D. :
 Arkansas Nuclear One, unit 1, Arkansas
 Power and Light Company, 29673
 Calvert Cliffs Nuclear Power Plant, units
 land 2, 28075
 Nine Mile Point Nuclear Station, unit 2,
 Niagara Mohawk Power Corporation,
 29674

INDEX 1973

- Raleigh, N.C., area wage survey, 20509
 Rall, H. T., sulfur compounds in crude oil, 16253
 Rallidae, *see* Rails (birds).
 Ralls, Jack W., low water volume enzyme deactivation of vegetables before preservation, 31278
 Ramage, C. S.:
 surface climate of 1963-64, 22135
 upper air, 22136
 Raman scattering, *see* Scattering.
 Ramsey County Republican Committee, annual report, 22847
 Ramseyer rule print of Foreign assistance act of 1971 (H.R. 8961), 19769
 Ranchers, *see* Stockmen.
 Ranches, Northwest cattle ranches, 1960-71, organization, costs, and returns, 15983
 Rancho Bernardo Republican Women's Club Federated, annual report, 22952
 Rancidity, effects of some antioxidants and EDTA on development of rancidity in Spanish mackerel (*Scomberomorus maculatus*) during frozen storage, 22104
 Randall, Robert M., operations research approach to Douglas fir thinning, 28964
 Randhawa, J. S., variations in stratospheric circulation and ozone during selected periods, 22419
 Randolph, John N., establishing business in Thailand, 15615
 Randolph, P. D., telemetered profiling isotopic snow gauge, final report and specifications, 28062
 Random processes, *see* Probabilities (mathematics).
 Random walks (mathematics):
 random walk study of electron motion in helium in crossed electromagnetic fields, 31623
 Range finding, artillery sound ranging computer simulations, 22412
 Range lands:
 forest-range environmental production analytical system (FREPAS), 22329
 interpretation of trend in range condition from 3-step data, 31373
 national range workshop, Tucson, Ariz., 23979
 nation's range resources, forest-range environmental study, 25209
 range management practices, 1970 investment costs, 20901
 Rangel, Sandra K., general records of American Commission to Negotiate Peace, 1918-31, 23701
 Rangelands, *see* Range lands.
 Rangers, *see* Park rangers.
 Ranges (stoves), *see* Stoves.
 Ranging systems, *see* Sonar.
 Rangoon, Burma, summary of synoptic meteorological observations, Southeast Asian coastal marine areas, 23891
 Rankine cycles, materials technology programs in support of mercury rankine space power system, 32475
 Ranking agriculture counties, 24212
 Ranofsky, Abraham L., inpatient utilization of short-stay hospitals by diagnosis, 1968, United States, 27750
 Ransom, Grayce A., reducing pressures in learning to read, 28675
 Rantz, S. E., runoff characteristics of California streams, 20361
 Rao, C. N. R., crystal structure transformations in binary halides, 16358
 Rapid City, S. Dak.:
 hearings to investigate adequacy and effectiveness of Federal disaster relief legislation, 28571
 South Dakota flood disaster, hearing, 15778
 Rapid detection systems for organophosphates and carbamate insecticides in water, 23183
 Rapid transit, *see* Local transit.
 Rapier, P. M., analysis and summary report of operation, Guantannamo Naval Base Desalination Facility, 20385
 Rare earths:
 chemical thermodynamic properties, tables for lanthanide, (rare earth) elements selected values, 29320
 economics of byproduct metals, 26649
 minerals and metals, minerals yearbook chapter, 16324
 research conference, proceedings, 30770
 Rarick, John R., Century Club, *see* John R. Rarick Century Club.
 Rarick, John R., Congressional Campaign Fund (District Finance Committee), *see* John R. Rarick Congressional Campaign Fund (District Finance Committee).
 Raritan Bay, Monmouth County, N.J., tidal flood plain information, 32219
 Rarotonga, reef islands, 25695
 Raschke, Ehrhard, radiation balance of earth-atmosphere system from Nimbus 3 radiation measurements, 27715
 Rast, Everette D., guide to hardwood log grading, 28924
 Ratchet drills, *see* Drills.
 Rate of value increase for sugar maple, 25231
 Rate training manuals, 17794, 20729, 22180, 23886, 25661-663, 26787-788, 27858, 29438, 30598, 31759-760
 Rates, ²⁵Se-binding by rat plasma proteins after injection of ⁷⁵SeO₄²⁻, 21937
 see also Electricity—Freight rates—Insurance—Passenger rates.
 Rather, John C., national aspects of creating and using MARC/RECON records, 31570
 Ratings, rating specialists, legal, compensation and pension service, training guide, 24091
 Ratio and proportion:
 effect of fineness ratio on boattail drag of circular-arc afterbodies having closure ratios of 0.50 with jet exhaust at Mach up to 1.30, 29274
 invariance of cross ratio applied to microwave network analysis, 20643
 ratio of longitudinal and transverse diffusion coefficients in argon SHF discharge plasma, 20999
 two-stage high pressure ratio centrifugal compressor, 26982
 Rats, urban rat control, 1969-71 status report, 21118
 Rattlesnake Hills Research Natural Area, general information, 21644
 Raulerson, Richard C., demand for farm-raised channel catfish in supermarkets, analysis of selected market, 26940
 Raulston, J. R., methods for large-scale rearing of tobacco budworm, 19128
 Ravenscroft, Vernon F., Committee for Responsible Government Ravenscroft's Political Fund, annual report, 24467
 Rawin system, rawin radar targets, 20977
 Rawinsonde:
 rawin radar targets, 20977
 toward developing quality control system for rawinsonde reports, 25622
 see also Rockets.
 Ray, Edward J., maneuver and buffet characteristics of fighter aircraft, 31625
 Ray, John G., Jr., manual of tissue typing techniques, 31690
 Ray J. Madden for Congress Committee, annual report, 28272
 Ray Roberts Campaign Committee, annual report, 24323
 Ray Thornton for Congress Committee, annual report, 24338
 Rayburn, Sam, commemorative medals, authorize, hearings, 28396
 Rayon, viscose rayon yarns wholly of continuous fibers, workers of Lewistown, Pa., rayon plant of American Viscose Division, FMC Corp., 24071

Razner, Ronald, dissociation rate of bromine diatomics in argon heat bath, 23685

REA, *see* Railway Express Agency, Inc.—Rural Electrification Administration.

Reaction kinetics, *see* Kinetics.

Reactions (chemical), *see* Chemical reactions.

Reactions (nuclear), *see* Nuclear reactions.

Reactions (physiological), *see* Physiological reactions.

Reactivity:
 association of automotive fuel composition with exhaust reactivity, 30433
 reactivity of hydroxyl radical in aqueous solutions, 30470

Reactor fuels:
 burnup determination for fast reactor fuels review and status of nuclear data and analytical chemistry methodology requirements, 29681
 high power and heat flux irradiation of uranium-plutonium carbides, fast reactor mixed carbide fuel element development program, 30772
 iodine-129 in environment around nuclear fuel reprocessing plant, 25676
 nuclear fuels—
 cycle, transportation requirements within Southern Interstate Nuclear Board region through 1980, SINR/AEC Work Conference on Transportation of Radioactive Materials, 28079
 resources and requirements, 26997
 supply, 30780
 observation of airborne tritium waste discharge from nuclear fuel reprocessing plant, 29456

Reactor power plants, *see* Nuclear reactor power plants.

Reactor safety, *see* Safety of life.

Reactors (atomic):
 absorbing materials and control rods for fast reactors, USSR study, 31528
 application of model of porous body for calculation of field of velocities and temperatures in reactor core, USSR study, 30371
 boiling crisis and critical heat flux, 21022
 boiling water reactor plant, 1000-MWe central station power plants investment cost study, 24200
 civilian reactor development, AEC authorization, 1974, hearings, 28265
 contemporary research reactors, USSR study, 17636
 controlled thermonuclear research, hearings, 21136, 24301
 damage-function analysis of neutron embrittlement in steel at reactor service temperature, 16447
 dynamic friction and wear of solid film lubricant during radiation exposure in nuclear reactor, 20604
 environmental gamma radiation from ^{14}N decay in turbines of large boiling water reactor, 25877
 fracture safety considerations for Hanford-N reactor coolant piping material, 22169
 gas cooled fast reactor evaluation, 30779
 heterogeneous effects in fast breeder reactors, 28074
 high power and heat flux irradiation of uranium-plutonium carbides, fast reactor mixed carbide fuel element development program, 30772
 liquid metal fast breeder reactor (LMFBR) demonstration plant, hearing, 19531
 molten salt breeder reactors, evaluation, 30778
 national topical meeting on new developments in reactor physics and shielding, 19178
 NBS reactor, summary of activities, 27729

Reactors (atomic)—Continued
 nuclear power reactor—
 instrumentation system handbook, 28085
 temporary operating licenses, authorize Atomic Energy Commission to issue, law, 15635
 nuclear reactors built, being built, or planned in U.S., 16665, 26994
 1000-MWe central station power plants investment cost study, pressurized water reactor plant, 25882
 organic iodide formation under accident conditions in water cooled reactors, review, 24203
 radiological surveillance studies at pressurized water nuclear power reactor, 32270
 reactor shielding for nuclear engineers, 28004
 reactor technology, quarterly technical progress review, 18843
 some characteristics of local accident in core of fast reactor, USSR study, 20450
 Soviet nuclear reactors, fast neutron reactors and prospects for future, USSR study, 16185
 specialists' meeting on sodium-water reactions, summary report and papers, 16660
 status of LMFBR reheater in Western Europe, 1972, report of USA LMFBR sodium reheater team, 24197
 title listing of civilian power reactor docket literature in Nuclear science abstracts, 28080
 topical meeting on water-reactor safety papers, 29669
 ^{238}Pu production in commercial water reactors experimental and analytical program, 21017, 22486
 use of isotopes composition data to improve reactor calculational techniques, 21012
 utilizing reactor installations at atomic electric power plant, USSR study, 29141

Read the label (on foods, drugs, cosmetics, household chemicals, devices), 23259

Readdy, Arthur F., jr., plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030

Readiness of Air Force in Europe, GAO report, 30260

Reading:
 adults as reading models for children, 28673
 cooperative individualized reading project, 27774
 getting help on reading outside of school, 28676
 getting ready to read, 28670
 libraries and the right to read, 28662
 national assessment of educational progress—
 critical reading, 31227
 graphic materials, 30144
 main ideas and organization, 31226
 reading and literature, 27431
 reading rate and comprehension, 26369, 28667
 reference materials, 30145
 survey of reading habits, literature, 30142
 understanding words and word relationships, 30143
 written directions, reading, 28666
 parents and beginning readers (series), 28670-677
 preschool reading instruction, information of administrator, 23746
 problem solving exercises, National Reading Center, right to read program 21426
 reading and language development in first grade, 28671
 reading crisis in America, 26374
 reading is fun-damental, 16474

INDEX 1973

Reading—Continued

- reading readiness, what parents should know about it, 28672
- reducing pressures in learning to read, 28675
- relationships between speech and reading, 31692
- RIF (Reading is fundamental) newsletter, 18872
- right to read, 23142
 - series commissioned by National Reading Center, 15999
- Spanish, tutorial materials, 29152
- status report on reading, 21431
- teacher orientation handbook for right to read program, 16001
- teacher's guide to preschool reading instruction, 29361
- vision, hearing, coordination and health in reading, 28674
- what about reading failure? 15999
- what can communities do to improve reading programs? 28677

Recreation, *see* Aeration.

Real estate:

- Arkansas, authorize exchange, report, 28362
- brokerage, urban business profile, 21416
- competition in real estate and mortgage lending, hearings, 15912
- Federal real and personal property, inventory reports, 17054, 31024
- get facts before—
 - buying land, 32373
 - investing in land, 23418
- leased by U.S. throughout the world, inventory, report, 29002
- little progress by Defense Department in acting on opportunities for significant savings by consolidating, real property maintenance organizations, GAO report, 21695
- minimum property standards for semi-private swimming pools and wading pools, 21795
- Montana property tax administration and assessment practices, 21341
- NASA real estate disposals, policy and procedures, hearings, 15779
- one housing unit owner occupied properties, construction report, residential alterations and repairs, expenditures, etc., 25916
- opportunities to reduce costs in acquiring properties resulting from defaults on home loans, GAO report, 20335
- owned by U.S. throughout the world, inventory report, 26484
- permitting suits to adjudicate certain real property quiet title actions—
 - law, 19489
 - report, 19702
- property disposition handbook, reconditioning acquired properties, 21796, 31427
- property improvement loan, title 1, operating handbook, 31429
- property taxes—
 - and urban blight, 30039
 - incentive programs upon property rehabilitation and new construction, effects, 32386
 - relief and reform act, hearings, 30038
- real estate securities and realtors involvement (address), 29477
- real estate tax data for homeowner properties for United States and regions, 28109
- real property acquisition, HUD handbook, 25275
- requirements of national market in real estate securities (address), 30625
- SEC disclosure system, real estate and oil and gas (address), 30628
- sec. 203(1), home mortgage insurance for outlying area properties, etc., 23430
- tax treatment—
 - general tax reform, panel discussions, 26188

Real estate—Continued

- 10-year limitation from time of defective or unsafe improvements on real property on actions arising out of death or injury in D.C.—
 - law, 19504
 - report, 19914
- Uniform relocation assistance and real property acquisition policies act, amend, hearings, 26179
- use of real property for wildlife conservation purpose, law, 15656
- see also* Farms—Mortgages.
- Real Estate Advisory Committee, report to Securities and Exchange Commission, 16471
- Real estate appraisers, *see* Appraisers.
- Real Estate Political Education Committee of Illinois, annual report, 24595
- Real Estate Political Education Committee of Kansas, annual report, 24722
- Real property, *see* Real estate.
- Realignment of Bureau of Indian Affairs central office, 32147
- Ream, Norman J., Ream for Congress Committee, annual report, 22779
- Ream for Congress Committee, annual report, 22779
- Reanimation, *see* Revivification.
- Reasoning, descriptive-associative logical test and its place in predicting adaptation to conditions of situation of uncertainty, USSR study, 23526
- REC-ERC series, 22209, 23934-940, 32541-543
- Recall of retired commissioners of Court of Claims, 17134
- Receipts, *see* Recipes.
- Receipts and expenditures, *see* Finance.
- Receivers:
 - atmospheric transmission from 4 π light source to 2 π receiver, survey of studies, 22408
 - cargo security handbook for shippers and receivers, 20840
 - diver pinger receiver, description, 22113
- Receivers (radio):
 - ferrite rod antenna arrays for Loran-C receivers, 20967
 - home-type radio receivers and automobile radios, current industrial reports, 29764
 - radio-phonograph and radio-phonograph-tape player combinations, workers of Lowell, Mass., plant of Symphonic Electronic Corp., subsidiary of Lynch Corp., Tariff Commission report, 26898
 - radios, radio-phonographs, and loudspeaker systems, workers of Milroy, Pa., plant of Fisher Electronics, Inc., subsidiary of Emerson Electric Co., Tariff Commission report, 26899
 - record changers, phonographs, radio-phonograph combinations, and tape recorders, players, and decks, V-M Corp., Benton Harbor, Mich., Tariff Commission report, 16543
 - solid-state radio receivers, radio-phonograph combinations, loudspeakers, and amplifiers, workers of H. H. Scott, Inc., Tariff Commission report, 27948
 - television receivers, radio receivers, phonographs, and radio-phonograph combinations, workers of Zenith Radio Corp., Tariff Commission report, 29555
 - television receivers, radio-television-phonograph combinations, and radio-phonograph combinations, workers of Wheeling, Ill., plant of TMA Co., Tariff Commission report, 29556
- Receiving stolen goods, criminal redistribution systems and their economic impact on small business, analysis, 17302
- Recent activities of foreign branches of U.S. banks, 20271
- Recent computational experience with method of phase and amplitude diagrams, 22168
- Recent developments of fuel oil and waste gas in Japan, 30187

- Recent educational policy and legislative development abroad, 26375, 30151
- Recent purchases of cars, houses, and other durables and expectations to buy during months ahead, 15593
- Reception for Roe Committee, annual report, 24770
- Receptors, on molecular mechanism of action of organic agents on cholinoreceptors, 27639
- Recipes:
- Armed Forces recipe service, index, 19171, 22435, 24181
 - family fare, guide to good nutrition, 16597
 - fish and shellfish over coals, 20685
 - freezing combination main dishes, 27991
 - quantity recipes for child care centers, 32305
 - test kitchen series, 20685
 - WORLD wheat in foods of many lands, 16586
- Recipients of local service air carriers' unit costs, 21075, 28211
- Reciprocal fishing privileges, agreement between United States and Canada, 31859
- Reciprocity theorem (electric networks), *see* Electric networks.
- Recirculation, *see* Circulation.
- Reclamation, *see* Reclamation of land.
- Reclamation Bureau:
- appropriations 1974—
 - reports, 29890, 29993
 - law, 32015
- Commissioner, appointment, require Senate confirmation, report, 32120
- Congress should reevaluate 160-acre limitation on land eligible to receive water from Federal water resources projects, 23317
- field laboratories, 1971 survey, 23937
- orientation and briefing on programs for House members, hearing, 27217
- poster, 31775
- publications for distribution without charge, 23932
- REC-ERC series, 22209, 23934-940, 32541-543
- safety news (periodical), 18849
- statistical report, statistical and financial appendix, 20747, 25684
- water operation and maintenance bulletin, 19053
- Reclamation era, water review quarterly, 18848
- Reclamation feasibility study, McGee Creek Reservoir, Okla., 32121
- Reclamation of land:
- acquisition and reclamation of abandoned mines, hearings, 27346, 29918, 31025
 - answering your questions about reclamation, 20745
 - coal surface mining and reclamation, Council on Environmental Quality's report, hearing, 28542
 - Congress should reevaluate 160-acre limitation on land eligible to receive water from Federal water resources projects, 23317
 - Construction of irrigation distribution and drainage systems act, amend—
 - hearing, 21345
 - law, 19419
 - report, 19895
 - drainage, why do we do it? 31816
 - Federal projects, 1971, water and land resource accomplishments, 16469, 17817
 - Federal reclamation projects, construct, operate, and maintain—
 - law, 19444
 - report, 19643
 - Kentucky guide for classification, use and vegetative treatment of surface mine spoil, 17938
 - methods and costs of coal refuse disposal and reclamation, 23643, 30413
 - Reclamation of land—Continued
 - Mission Ridge, case history of soil disturbance and revegetation of winter sports area development, 32326
 - projects, feasibility investigations—
 - law, 19502
 - reports, 19683, 32056
 - reclamation feasibility studies, 1972, report, 17202
 - repayment of reclamation projects, 20746
 - revegetating coal mine spoils in New Mexico, laboratory study, 32336
 - revegetating devastated sites in New Mexico with western wheat-grass transplants, 32334
 - revegetation augmentation by reuse of treated active surface mine drainage, 21501
 - surface mining—
 - and reclamation, environmental and economic assessment of alternatives, 27338
 - operations, regulate, hearings, 28550
 - reclamation act of 1972, report, 19864
 - Reclamation projects, *see* Reclamation of land—also names of projects.
 - Recodification, Pay Board, regulations, rulings and delegations of authority, 25545
 - Recognition (psychology):
 - investigations of formation of first impression of person in foreign psychology, USSR study, 16186
 - Recognition is your responsibility, 26673
 - Recognition of natural brine by electrical soundings near Salt Fork of Brazos River, Kent and Stonewall Counties, Tex., 30283
 - Recommendations for change in U.S. financial system, 32604
 - Recommendations for shape of earthquake response spectra, 30782
 - Recommended books for military library, 26967, 26972
 - Recomputation and other retirement legislation, 21208-209
 - RECON, *see* RECON Pilot Project (retrospective conversion).
 - RECON Pilot Project (retrospective conversion):
 - national aspects of creating and using MARC/RECON records, 31570
 - RECON pilot project, final report, 23611
 - Recondition and reuse of organically contaminated waste chloride brines, 30182
 - Reconnaissance (geologic):
 - geochemical reconnaissance of Santa Rita Mountains, southeast of Tucson, Ariz., 27554
 - northern Yukon-Koyukuk province, Alaska, 27571
 - petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
 - Reconsideration (after endorsement) for home mortgage insurance, 29062
 - Reconsideration (before endorsement) for home mortgage insurance, 21781
 - Reconstruction Finance Corporation, preliminary inventory of records, 1932-64, 31669
 - Record changers, phonographs, radio-phonography combinations, and tape recorders, players, and decks, V-M Corp. Benton Harbor, 16543
 - Record players, *see* Phonographs.
 - Recorded magnetic tape for information interchange, 27724
 - Recorders, *see* Recording instruments.
 - Recording instruments:
 - insulation for crash fire protection of new flight recorders, evaluation, 24042
 - model A-2/Q-6 wave recording system, 17783
 - model 4100 graphic recorder, 31727

INDEX 1973

Recording instruments—Continued
 recorder current meter, model MO.21, 17782
 wind recorder, current meter and thermometer chain measurements in northeast Pacific, 22094

Recording quizboard, device for evaluating interpretive services, 20319

Recording soil moisture tensiometer, 21660

Recordings, *see* Sound recordings.

Records:
 automated legislative record keeping system for Senate, feasibility study, 20014
 computers and rights of citizens, report, 30292
 hearings in records of U.S. Senate and Joint Committees of Congress, 20631
 National Archives and Records Service—
 documents from America's past, reproductions of historical documents, 20625
 regulations for public use of records, 23694
 suggestions for citing records, 16357
 tabular analysis of records of U.S. colored troops and their predecessor units, 31672
 national aspects of creating and using MARC/RECON records, 31570
 National Credit Union Administration, financial statements, 1971 and 1972, GAO examination, 32352
 papers in Library of Congress, register—
 Ackerman, Carl W., 29181
 Aldrich, Nelson W., 26635
 Bloch, Claude C., Julius A. Furer, John F. Shafroth, William H. Standley, 32438
 Chester, Colby M., William F. Fullam, Samuel McGowan, Henry C. Mustin, 29182
 Moore, Merrill, 20513
 Wister, Owen, 21920
 production in legal proceedings, Federal aviation regulations, 18292
 public use samples of basic records from 1970 census, description and technical documentation, 28193
 records control handbook, HUD, 29057-58, 31424
 visible record equipment, Federal item identification guide, 31192
 ways to improve records management practices in Federal Government, GAO report, 31386
 what every employer needs to know about Occupational safety and health act recordkeeping, 17672
see also Paperwork (office practice)—
 Personnel records—also names of departments, etc.—also subjects.

Recovery of copper from converter slags by flotation, 16330

Recovery of feldspar and glass sand from South Carolina waste granite fines, 16335

Recovery of mercury from cinnabar ores by electrooxidation, 30428

Recreacion al aire libre, evaluacion de las potencialidades, Distrito de Conservacion de Conservacion de Euelos Caribe, 27893

Recreation:
 Addicks-Barker Reservoirs, an opportunity, 23900
 America voices its recreation concerns, 10 public forums on nationwide outdoor recreation planning, 25665
 Army recreation and travel guide, 29659
 boating guide, official Coast Guard basic principles, 28225
 career education for leisure occupations, curriculum guidelines for recreation, hospitality and tourism, 28654
 cooperative approach to outdoor recreation, 26425

Recreation—Continued
 facilities subject to user fees at—
 Corps of Engineers projects, reports, 28345, 32108
 Federal areas, report, 31084
 grants-in-aid manual, 29441
 how outdoorsman can help prevent pollution, 31301
 hydrology and recreation on cold-water rivers of Michigan's southern peninsula, 23382
 investigation into recreational water quality criteria data book, 21523
 Navy outdoor recreation areas, guide, 26785
 1965 nationwide inventory of publicly owned recreation areas and assessment of private recreation enterprises, 22185
 outdoor—
 appraisal of potentials for outdoor recreation development, Caribbean area, Spanish edition, 27893
 Delaware, outdoor recreation potentials, summary of county appraisals, 17837
 Federal areas, collection of fees at sites containing Federal equipment and improvements, hearings, 28547
 grants-in-aid manual, 18741
 greater benefits to more people possible by better uses of Federal outdoor recreation grants, GAO report, 20331
 land and water conservation fund act, collect special recreation use fees, amend, report, 28462
 national outdoor recreation programs and policies, hearings, 32082
 outdoor recreation action (periodical), 18740
 potential in West Virginia's eastern panhandle, Potomac Headwaters RC & D Project, 20774
 small business opportunities in outdoor recreation and tourism, investigation, report, 19723
 tribute to Laurence Rockefeller for his work in field (remarks), 23473
 recreation potential in Appalachian highlands, market analysis, 30749
 recreational buildings and facilities, 16590
 recreational resources, publications price list, 27871
 regulations governing occupancy and use of national forest recreation sites and areas, 30710
 2d annual National symposium on park, recreation, and environmental design, proceedings, 22186
 statistics, 26384
 symbols, new recreation signs to guide you, 22351
 welfare, recreation, and morale, unit level recreational sports, 28048
see also Hobbies.

Recreation centers, financial assistance for work and training and year-round recreational opportunities for youth, hearings, 31017

Recreational areas and demonstration projects:
 be safe from insects in recreation areas, 16598
 mid-continent memo (periodical), 18623
 Navy outdoor recreation areas, guide, 26785
see also names of recreational areas.

Recruiting and enlistment:
 all-volunteer Armed Forces, progress, problems, and prospects, 28513
 Army recruiting & career counseling journal, 18850
 important factors in motivating AFROTC officer personnel in zero-draft environment, 25840
 Navy reprogramming of recruitment program, hearings, 24840

- Recruiting and enlistment—Continued
nuclear-qualified naval surface and submarine officers and enlisted members who agree to reenlist, authorize special pay—
law, 19506
reports, 19675, 19939
today's Army wants to join you, 19174, 30757
- Recrystallization, features of heat-resistant steel recrystallization, USSR study, 26585
- Rectum, cancer, 25560
- Recycle operations (chemical technology):
Bureau of Mines research programs on recycling and disposal of mineral, metal, and energy-based wastes, 25426
economic realities of reclaiming natural resources in solid waste, report, 17431
economic studies of uses of glass fractions from municipal incinerator residues, 23642
establish municipal mine demonstration plant, hearing, 17267
evaluation of treatment for urban wastewater reuse, 30177
glass wool from waste glass, 26659
marine sanitation system demonstration, 30186
recovering plastics from urban refuse by electrodynamic techniques, 25512
resource recovery, state of technology, 24974
salvage industry, what it is, how it works, 28842
salvage markets for materials in solid wastes, 16033
solid waste, recycling and recovery of resources, hearing, 21383
use of cryogenics to reclaim nonferrous scrap metals, 26663
see also Waste treatment.
- Red Canyon, general information, 23477
- Red Cedar River:
flood plain information—
Ingham County, Mich, 28723
Lansing, Mich., and vicinity, 23164
- Red Creek:
Brighton and Henrietta, N.Y.—
flood plain information, 17390
floods, 20150
- Red Cross, International Committee of, *see* International Committee of the Red Cross.
- Red fir, *see* Fir.
- Red Mountain:
arsenic as indicator element for mineralized volcanic pipes in Red Mountain area, western San Juan Mountains, Colo., 23330
geochemical characteristics of mineralized breccia pipes in Red Mountain district, San Juan Mountains, Colo., 27558
- Red pine, *see* Pine.
- Red River of the North:
flood plain information—
 Fargo, N.D.-Moorhead, Minn., 28724
Grand Forks, N.D.-East Grand Forks, Minn., 17391
floods, Fargo, N. Dak.-Moorhead, Minn., 28752
floods in Grand Forks area, how to avoid damage, 17395
Missouri-Souris development area water pollution investigation, cooperative State-Federal report on water pollution, 17809
probable maximum precipitation and snowmelt criteria for Red River of the North above Pembina, and Souris River above Minot, N.D., 32509
- Red Sea:
lights and fog signals, list, 27418B
sailing directions, 27418
- Redd, L. Tracy, experimental and analytical determination of stability parameters for balloon tethered in wind, 32472
- Redevelopment (city planning, etc.):
area overall economic development programs, guide, 23125
audit guide for urban renewal program for use by independent public accountants, 31436
central city problem and urban renewal policy, study, 24914
District of Columbia redevelopment act of 1945, amend—
law, 19426
report, 19902
facts about relocation of—
business concerns, farm operations, and nonprofit organizations, 31415
families and individuals, 31416
field procedures in connection with reports on relocation activities, 30295
housing and urban development programs, oversight, hearings, 28523
how HUD helps with relocation, 29051
HUD international information series, 25289
HUD international urban renewal supplement, 26530
model cities programs, comparative analysis of city response patterns and their relation to future urban policy, 31437
NPS acquisition policies and relocation assistance, 29401
role of water in urban planning and management, 23332
TOPICS is on the move, 16042
Uniform relocation assistance and real property acquisition policies act, amend, hearings, 26179
urban and regional planning research in USA, review of trends, 23451
urban growth policies in 6 European countries, 23453
urban renewal directory, 29081
urban renewal handbook, 19030, 20373, 21797, 21800, 25285, 31432, 31435
urban renewal operations under title I, Housing act, report, 18861
urban water planning, bibliography, 16147
- Redfish, *see* Rose fish.
- Redick, Richard W., veterans with mental disorders, 20672
- Redmon, Donald E.:
historical injury experience in—
metallic mineral industries, 29209-210
nonmetallic mineral industries (except stone and coal), 25424, 29211
quarrying, 25421-423
- Redpath, Bruce B., Project Trinidad, explosive excavation tests in sandstone and shale, 27443
- Reducing court delays, 32412
- Reducing pressures in learning to read, 28675
- Reduction (chemical):
effects of direct reduction upon mineral supply requirements for iron and steel production, 29207
kinetics of CO reduction of hematite to magnetite and effect of silica, 23659
sulfatization-reduction of manganiferous iron ore, 30427
- Reduction of electrostatic charge in jet fuels during refueler loading, 22165
- Reduction of Federal Expenditures Joint Committee, committee prints, 15791-794, 17118-119, 17952-953, 19801, 27254-255, 29947-948, 31043-44
- Reduction of Government expenditures, *see* Economies in National Government.
- Reduction of photographic plate measurements for satellite triangulation, 30543
- Reduction of traffic congestion, and improved operational efficiency, 32280A
- Reductions in force, *see* Government offices.
- Redwood County Republican Committee, annual report, 22872
- Redwood National Park, general information, 17785

INDEX 1973

- Redwood Valley, Calif., microphysical observations of fog in Redwood Valley near Arcata-Eureka, Calif., 22418
- Reed, Avery H.:
gypsum, 25446
lime, 25452
mineral industry of—
Hawaii, 25459
New Hampshire, 25463
- Reed, Bruce L., massive sulfide deposits near Shellabarger Pass, southern Alaska Range, Alaska, 17527
- Reed, Charles, hypersensitivity pneumonitis, farmer's lung disease and the like, 29355
- Reed, John H.:
addresses—
Aug. 27, 1972, 22150
Sept. 25, 1972, 25645
Oct. 10, 1972, 22152
Oct. 11, 1972, 20715
Oct. 31, 1972, 22151
- Reed, Judith, children today, 18068
- Reed, Susan K., controlled accessibility bibliography, 30476
- Reed canary grass, control of reed canary-grass along irrigation systems, study, 26929
- Reeder, Nell E., soil survey of Ashtabula County, Ohio, 31817
- Reedy, Robert, photographic studies on effects of high-level, short term radiation on metals, 22492
- Reelect Al Ullman Committee, annual report, 26002
- Reelect Collins to Congress Committee, annual report, 22683
- Reelect Congressman Bill Cotter Committee, annual report, 24484
- Reelect Congressman Mario Blaggi Committee, annual report, 24743
- Reelect Congressman Van Deerlin Committee, annual report, 25999
- Reelect Peter W. Rodino, jr. Committee, annual report, 22751
- Reelect Ryan to Congress Committee, annual report, 24320
- Reelection of Congressman George P. Miller Committee, annual report, 22953
- Reelection of Congressman James A. Burke and Election of other Democratic Candidates Committee, annual report, 26004
- Reels, take-up reels for one-inch perforated tape for information interchange, category, hardware standard, subcategory, interchange codes and media, 29309
- Reemployment of veterans, *see* Veterans.
- Reentry into atmosphere, *see* Atmospheric entry.
- Reentry vehicles, *see* Spacecraft.
- Rees, N.E., arthropod and nematode parasites, parasitoids and predators of Acrididae in America north of Mexico, 28024
- Reese, Charles D., pesticides in aquatic environment, 16575
- Reeves, Don, for Congress, *see* Don Reeves for Congress.
- Reference books:
Indians, references for young students, 31473
reference aid—
abbreviations in Cambodian and Lao press, 23525
directory of JPRS serial publications 1957-72, 21884
glossary of abbreviations, acronyms, and terms used in West European press, West Europe study, 26599
JPRS ad hoc publications 1972 directory, 25338
reference materials, theme 4, reading, national assessment of educational progress, 30145
- Referral of persons to and from general hospital psychiatric inpatient units, United States, 1970-71, 23765
- Refineries, lead, background information for proposed new source performance standards, 29643, 30722
see also Petroleum refineries.
- Refining, *see* Smelting.
- Reflection, millimeter attenuation and reflection co-efficient measuring system, 17739
- Reflection (light):
potential reflection problems when using NAS model 3d display in vertical position in air route traffic control centers, evaluation, 24039
- Reflection characteristics of screen wave absorbers, 28783
- Reflectivity, cloud-to-ground lightning versus radar reflectivity in Oklahoma thunderstorms, 23801
- Reflexes:
eardrum displacement following stapedius muscle contraction, 29198
voluntary activation of motor units and spinal reflexes, USSR study, 27631
- Reforestation, *see* Forest planting.
- Reform of Federal budget, 28893
- Reform of Federal criminal laws, 21357, 24944
- Reform of our correctional systems, 29862
- Reformatories:
juvenile confinement institutions and correctional systems hearing, print additional copies, report, 26214
review of manpower R & D projects in correctional field, 1963-73, 31573
- Refraction:
refraction surveys in—
Colorado, Grand Valley, Sit, and Equity Oil Company Plant, 30522
Rile, Colo., 30523
surface-refractivity measurement at NASA spacecraft tracking sites, 17711
- Refractory materials:
extraction of silver from refractory ores, 25511
refractories, current industrial reports, 18194A
stability of and insulation leakage in high temperatures resistance thermometers, investigation, interim report, 27731
- Refrigeration and refrigerating machinery: conference on refrigerated containers, 27688
equipment, current industrial reports, 22549, 30837
- Refrigerator cars, ventilation of mechanical refrigerator cars to prevent carbon dioxide accumulation and brown stain in lettuce loads, 27994
- Refrigerators, clean refrigerator for clean house, 16609
- Refueling of airplanes, *see* Airplanes.
- Refugees:
Cuban, assistance, appropriations, 1973, hearings, 15717, 17025
migration and refugee assistance, appropriations, 1973—
hearings, 15717, 15869, 17025
reports, 16989, 16991, 19887
problems of war victims in Indochina, hearings, 19989
refugee relief in Khmer Republic, agreement between USA and International Committee of the Red Cross, 27920
relief and rehabilitation of war victims in Indochina—
crisis in Cambodia, hearings, 28556
orphans and child welfare, hearing, 30053
war victims in Indochina, GAO report, 19990
- Refugees, Freedmen and Abandoned Lands Bureau:
Alabama, 1865-70, pamphlet describing microfilm—
Assistant Commissioner, 26694
Superintendent of Education, 26695

Refuges, *see* Wildlife refuges—*also* names of refuges.

Refunds of taxes, *see* Tax refunds.

Refuse:

act, enforcement—
hearing, 24859
report, 16972

hydrologic relationship of Jefferson County landfill leachate and Meramec Heights area springs, Jefferson County, Mo., 28829

lime retention in anthracite coal-breaker refuse, 25221

litterbags, evaluation of their use, 20301
national status on control of garbage-feeding, 18673

ocean disposal practices and effects, report, 32268
resource recovery from raw urban refuse, 29235

sanitary landfills, bibliography, 16146
see also Waste products.

Regenerating loblolly pine by direct seeding, natural seeding, and planting, 28971

Regina Footwear, Inc., Brooklyn, N.Y., footwear for women, Tariff commission report, 30658

Region V public report, 18851

Regional agricultural research, quarter century of achievement through cooperative endeavor, 30709

Regional analyses of streamflow characteristics, 27574

Regional branches of National Archives, 31666

Regional Economic Development Federal Advisory Council on, *see* Federal Advisory Council on Regional Economic Development.

Regional medical programs, oversight, 31032

Regional shelf studies, guide to engineering design, 23148

Regionalism:
opportunities and problems of regionalism, science, technology, and American diplomacy, 21230

regional commission development plans, summaries, 28241A

regional governance, promise and performance, 30688

Regionalization of Veterans Administration's health care systems, 27368

Registered nurse, *see* Nurses and nursing.

Registers:

Army—

departmental edition, 15512

document edition, 15663

Army Materiel Command, approved recurring reports, 22403

Army National Guard, 30485

certificates of registry, enrollment, and license issued, 1815-1913, at Edgartown, Mass., pamphlet describing microfilm, 25537

civil aircraft register, United States, 20242, 28854

Coast Guard, reserve officers, 31984

Federal register, 18345

index, 18346

Justice Department and courts of United States, 18852, 20487

National Association for Advancement of Colored People, register of its records in Library of Congress, 23610

national register of historic places, 1972, by States, 26777

Navy officers—

departmental edition, 29434

document edition, 28298

retired, 29435

register planned emergency producers—

alphabetical listing, 26340

ASPPQ listing, 26342

geographical listing, 26341

registry of minority contractors and housing professionals, listing in selected cities, 32383-385

Registers—Continued

retirement benefit plans, 23583

State Department, biographic, 30643

Veterans Administration Central Cancer

Registry, 1958-53 report, 29577

Registrants processing manual, 18853, 23954-955

Registration:

concept of national voter registration, hearings, 21276

voter registration—

hearings, 26287

reports, 26239, 27269

see also subjects.

Regular Army, *see* Army.

Regular income limits for sec. 235-236 housing, 20374-378

Regular Republican Primary Campaign Committee, annual report, 22829

Regulation theory, *see* Control theory.

Regulations, *see* Code of Federal regulations—*also* names of departments, etc., issuing regulations—*also* subjects.

Regulators, swirl concentrator as combined sewer overflow regulator facility, 20189

Regulatory agencies, *see* Government offices.

Rehabilitation:

Engenhelo Avidos Dam, examination and proposed rehabilitation, 23920

financing RAA programs handbook, 27585

property disposition handbook, reconditioning acquired properties, 21796, 31427

rehabilitation and neighborhood conservation, housing insurance program, 23431

see also subjects.

Rehabilitation centers:

centers for maintenance, treatment and rehabilitation of drug addicts, emergency assistance for States, etc., to establish, hearings, 15922

some current concerns of rehabilitation facilities presented at annual conference of International Association of Rehabilitation Facilities, 23948

Rehabilitation of criminals:

community based corrections in Des Moines, exemplary project, 32413

Community supervision and services act, hearings, 19986, 27349

Comprehensive correctional training and employment act, hearing, 21361

correctional manpower programs, 29192A

correctional treatment in community settings, report of current research, 22068

corrections—

approaches for street crime in America, hearings, 32075

hearings, 15763

print additional copies, reports, 19629, 19908, 28324, 28458

prisons, prison reform and prisoners rights, Michigan, hearings, 15764

juvenile confinement institutions and correctional systems, hearing, print additional copies, report, 26214

nature and effectiveness of rehabilitation programs of Prisons Bureau, oversight, hearing, 23063

offender rehabilitation, nullification of certain criminal records, hearings, 28554

reform of our correctional systems, report, print additional copies, report, 29864

review of manpower R & D projects in correctional field, 1963-73, 31573

selective placement in Federal civil service, employment of physically handicapped, rehabilitated offenders, etc., handbook, 19281

volunteers in correctional programs, guidelines and standards for use, 17645

Rehabilitation of the disabled:

authorize Federal grants for vocational rehabilitation services, report, 29987

characteristics of clients rehabilitated in fiscal years 1967-71, Federal-State vocational rehabilitation program, 29460

- Rehabilitation of the disabled—Continued
 Comprehensive alcohol abuse and alcoholism prevention, treatment, and rehabilitation act, extend, report, 17016
 effectiveness of vocational rehabilitation in helping the handicapped, GAO report, 28988
 expanding joint use of evaluation facilities by disability determination units and vocational rehabilitation, 17819
 Operation Tripod toward rehabilitation involvement by parents of the deaf, workshop, Memphis, Tenn., 31788
 profile of clients with monthly family incomes less than \$150 who were rehabilitated during 1971, 31789
 profile of rehabilitated clients who were recipients of public assistance, 32544
 program evaluation, beginning statement 26811
 rehabilitating person with spinal cord injury, source book, 20854
 Rehabilitation act, amend—
 hearings, 15924
 reports, 17165, 19714, 29987
 authorize grants for vocational services, report, 28365
 veto, 24891
 rehabilitation facilities, national directory—
 region 4, 25686
 region 10, 23947
 rehabilitation record (periodical), 18858
 social and rehabilitation services regulations as they affect child care, oversight, hearing, 28406
 State vocational rehabilitation agency, fact sheet booklet, 22210
 use of special aids, U.S., 22026
 Veterans' drug and alcohol treatment and rehabilitation act, report, 15849
 veterans' from drug abuse and alcoholism, reports, 24897-898
 veterans, rates relating to, from 1917 to present, 26181
 veterans, vocational rehabilitation, assistance, allowances increase rates, law, 19469
 vision impairment services teams, report, 17926
 vocational evaluation and work adjustment services in vocational rehabilitation, 26812
 vocational rehabilitation—
 act, amend—
 hearings, 15924, 26155, 27356
 reports, 19714, 23035, 26098, 26103
 act as amended through 1970, compilation of amendments, 17291
 services, oversight, hearing, 32078
 State agencies, caseload statistics, 30615
 vocational rehabilitation and other benefits, information for persons disabled in military service, 29582
 you and vocational rehabilitation services, 16483
 Rehabilitation Services Administration:
 future directions, hearings, 32078
 quarterly indices, 18859
 special reports, 23948
 statistical note, 31798, 32544
 Reid, George W., evaluation of waste waters from petroleum and coal processing, 21494
 Reid, John M., interaction of ultrasound and biological tissues, 27872
 Relling, S. D., economic, benefits from improvement in water quality, 25122
 Reimbursement of costs of relocation or abandonment losses, 19902
 Relmers, George W.:
 dispersing antiferromagnetic precursors to prepare magnetic fluids, 23652
 preparing magnetic fluids by peptizing method, 21960
 Reinforced concrete, *see* Concrete.
- Reinforcements:
 closing, sealing and reinforcing fiberboard shipping boxes, general methods for, 16061
 strengthening of fractured rock pillars by use of small radial reinforcement pressures, 30432
 Reinhart, K. C., timber-harvest clearcutting and nutrients in northeastern United States, 31365
 Reinsel, Edward I., agricultural finance review, 31215
 Reinsel, Robert D., capitalization of farm program benefits into land value, 17347
 Reintegration of offender into community, 31551
 Reister, Frank A., battle casualties and medical statistics, U.S. Army experience in Korean War, 24191
 Relationship between SAE smoke number and jet aircraft visibility, 24025
 Relationship between sap-flow rate and sap volume in dormant sugar maples, 23284
 Relationship of energy and fuel shortages, to Nation's internal development, 17085
 Relationships among parent ratings of behavioral characteristics of children, 22029
 Relationships between design characteristics of avionics systems and training cost, training difficulty and job performance, 28031
 Relative importance of income sources of aged, 29504
 Relativity (physics):
 plasma Bremsstrahlung from relativistic physics, 20992
 relativistic time corrections for Apollo 12 and 13, 17709
 Relaxants (drugs), *see* Muscle relaxants.
 Relaxation time (physics):
 reduction of electrostatic charge in jet fuels during refueler loading, 22165
 Releases, *see* names of officers issuing releases.
 Relevance of prepaid group practice to effective delivery of health services, 16841
 Reliability (mechanical):
 criteria for fracture control plans, 22163
 reliability and quality assurance publication, NHB series, 23692
 safety, reliability, maintainability and quality provisions for space shuttle program, 23692
 scanning electron microscope examination of wire bonds from high-reliability devices, 32483
 vibration effects on helicopter reliability and maintenance, 30762
 Reliability of estimates with alternative cluster sizes in health interview survey, 27742
 Relief, disaster relief, SBA program, administration, hearings, 23043
 Relief work:
 disaster communications, FCC rules and regulations, 18309
 Disaster preparedness and assistance act, draft of proposed legislation, 30952
 Disaster relief—
 act, amend, report, 19721
 legislation to investigate adequacy and effectiveness, hearings, 28571
 message from the President, 19554
 supplemental appropriations, 1973, law, 16897
 foreign relief aid, hearings, 30026
 Foreign relief assistance act, hearings, 27324
 spring flood, 1973, helping others, 29815
 victims of tropical storm Agnes, message from the President, 19550
 Religions, Indians, religions and ceremonials, 23459
 Relocation (city planning, etc.):
 Uniform relocation assistance and land acquisition policies act of 1970, amend, report, 21185

Relocation (housing), *see* Redevelopment (city planning, etc.)
 Remark, D. G., survey of diathermy equipment use in Pinellas County, Fla., 17815
 Remote control, studies to design and develop improved remote manipulator systems, 29255
 Remote sensing:
 aerial remote sensing, bibliography, 27592
 application of remote sensing to—
 air pollution detection and measurement, 26650
 buoy-based environmental data gathering, 30526
 bibliography for earth resources, 23370
 earth resources, 32094
 earth resources—
 survey systems, proceedings of International workshop, 23875
 feasibility study of electromagnetic subsurface profiling, 20204
 for earth resources, agreement with Brazil, 31855
 for earth surveys, agreement with—
 Brazil, 27916
 Mexico, amending and extending agreement, 17874
 measurements of distribution and volume of sea-surface oil spills using multi-frequency microwave radiometry, 30590
 oceanographic observation of New York Bight from ERTS-1 remote sensing, 27802
 oil spills surveillance system study, 28815
 Skylab experiments, remote sensing of earth resources—
 information for teachers, 29263
 investigations, 29305
 Soviet-American working group on remote sensing of natural environment from space, meeting, 30364
 troposphere, 16037
 use of remote sensing in mosquito control, 27718B
 water quality, 23371
 Remote sensors, *see* Sensors.
 Removal of dissolved contaminants from mine drainage, 21504
 Removal of oil from under piers, 27462
 Removing pyrite from coal by dry-separation methods, 29230
 Renal diseases, *see* Kidneys.
 Rendezvous (space):
 Apollo experience report, evolution of rendezvous-maneuver plan for lunar-landing missions, 31654
 Apollo-Soyuz test project (folder), 26679
 Renegotiation, *see* Government contracts.
 Renegotiation Board:
 annual report, 26813
 appropriations, 1973—
 law, 19359
 report, 16957
 appropriations, 1974—
 hearings, 27185, 30005
 reports, 28377, 29963
 regulations, 25687
 Renegotiation act—
 and Renegotiation Board, proposal for extension, 29943
 extend, hearings, 27249
 Renewal Assistance Administration, rehabilitation financing, RAA programs handbook, 27585
 Renn, Charles E., management of recycled waste-process water ponds, 28817
 Renner, David R., river currents, 18873
 Renner, J. J., motorist radio services, 31323
 Rennick, G. E., demonstration of safety plugging of oil wells penetrating Appalachian coal mines, 16338
 Reno, Horace T.:
 mineral industry of United Kingdom, 25435
 nickel, 16323

Rent:
 District of Columbia Council, to regulate and stabilize rents, authorize, report, 32038
 District of Columbia, rent control—
 act, hearing, 32144
 authority, establish, hearings, 29898
 low-rent housing administration of program handbook, 17559
 rent controls, tenant's guide, 22199
 rent supplement fiscal handbook, HUD handbook, 25283
 rent watch for social security beneficiaries, 16152
 rental income and royalty income, tax information, 23483
 value and rent by household composition for United States, 1970, 31945
 Rental allowances, *see* Pay, allowances, etc.
 Rental housing, *see* Housing.
 Rentz, Frederick P., review of available heated wet-suit protection for divers and swimmers, 31581
 Reorganization of Government activities, *see* Government reorganization plans.
 Reorganization plan no. 1 of 1973, 24861
 Repair parts:
 aircraft, certification procedures for products and parts, Federal aviation regulations, 18292
 need to improve accuracy of Air Force requirements system for reparable parts, GAO report, 16098
 spare parts and maintenance support of space and missile systems undergoing RDT&E, military standards, 27413
 Repair shops:
 miscellaneous maintenance and repair shop specialized equipment, industrial plant equipment handbook, 15945
 motor vehicle maintenance and repair shop specialized equipment, industrial plant equipment handbook, 15947
 Repair stations, *see* Aircraft repair stations.
 Repairing:
 auto safety repairs at no cost, hearings, 28525
 field repairs of EHV bushing oil leaks, 25874
 level of repairs, military standards, 25021, 28613
 simple home repairs inside, 28010
 tax information on repairs, replacements and improvements, 27600
 see also subjects.
 Repairmen, *see* Mechanics (persons).
 Repairs, *see* Repairing.
 Repas, David S., digital-computer program for design-analysis of salient, wound pole alternators, 29286
 Replacement planting with potted southern pines on research plots, 23299
 Replenishing underground water supplies on farm, 16601
 Replication of bilingual education project, Albuquerque, N. Mex., 17367
 Reporters and reporting:
 MILSTRAP, military standard transaction reporting and accounting procedures, 17338
 newsmen's privilege—
 protect to assure free flow of information to the public, hearings, 28422
 to protect confidential sources of news media, hearings, 19786
 testimonial privilege for newsmen, create, hearings, 28553
 see also Correspondents.
 Reports:
 format requirements for scientific and technical reports prepared by or for Defense Department, 23108
 Government reports—
 announcements, 18405
 index, 18406
 topical announcements, 18407

INDEX 1973

- Reports—Continued
 report series, 18862
 report UAG series, 23182, 30172-174, 31265
 reports management system, HUD, 29055
 reports to be made to Congress, list, 27109
see also names of departments, etc., issuing reports—*also* subjects.
- Reppert, Jack N., interpretation of trend in range condition from 3-step data, 31373
- Reproduction:
 effects of—
 ionizing radiation on organism, problem, of effect of radioactive water pollution on reproduction of commercial fishes, 26984
 temperature on growth and reproduction of aquatic snails, 27452
 horizontal planting of green ash cuttings looks promising, 28952
 infant mortality rates, relationships with mother's reproductive history, U.S., 26721
 long length cuttings from no. 2 common hardwood lumber, 25229
 predicting softwood cutting yields by computer, 23965
 prostaglandins in abortion and reproductive physiology, citations from literature search, 25609
- Republic of Korea, *see* Korea.
- Republican Candidates Primary Election Campaign Committee, annual report, 22753
- Republican Central Committee of Charles County, annual report, 28288
- Republican Central Committee of Los Angeles County, annual report, 22935
- Republican Committee of Bedford County, annual report, 22768
- Republican Committee of Guadalupe County, annual report, 22730
- Republican Committee of Lower Merion-Narberth, annual report, 24697
- Republican Committee, Sixth District, *see* Sixth District Republican Committee.
- Republican County Committee, Inc., annual report, 24604
- Republican County Committee of Lebanon County, annual report, 22873
- Republican County Committee of Schuylkill County (General Account), annual report, 22759
- Republican Executive Committee of Austin County, annual report, 22827
- Republican Executive Committee of Gregg County, Tex., annual report, 24337
- Republican 4th Congressional District Committee of Maryland, annual report, 22787
- Republican Organization of Tuscarawas County, annual report, 24355
- Republican Party of Dane County, annual report, 24539
- Republican Party of Green County, annual report, 24649
- Republican Party of Jefferson County, annual report, 24441
- Republican Party of Los Alamos County, annual report, 24575
- Republican Party of Marathon County, annual report, 24466
- Republican Party of Minnesota, annual report, 22778
- Republican Party of Ozaukee County, annual report, 22801
- Republican Party of Santa Fe County, annual report, 24498
- Republican Party of Warren County, annual report, 24749
- Republican Party of Whitfield County, annual report, 24407
- Republican Party of Wood County, annual report, 24459
- Republican Political Action League, annual report, 22677
- Republican, Regular, Primary Campaign Committee, *see* Regular Republican Primary Campaign Committee.
- Republican State Central Committee of Frederick County, annual report, 24765
- Republican Victory Committee, annual report, 22763
- Republican Women of Dane County, annual report, 22996
- Republican Women of Walla Walla County, annual report, 24694
- Republican Women's Club of Duxbury, annual report, 24638
- Republican Women's Club of Medfield, annual report, 24718
- Republicans and Democrats who want Robert Carr elected for Congress, annual report, 28289
- Requiring physicians to report, 20665
- Requirements, *see* subjects.
- Requisitions:
 MILSTRIP—
 military standard requisitioning and issue procedures, 31194
 requisition fund codes, 27415
 routing identifier code, 31195
- Rescue Mission Alliance of Syracuse, relief, 19576
- Rescue operations, *see* Relief work.—Rescue work.
- Rescue work:
 diver-rescue worker, guide, USSR study, 26567
 national search and rescue manual, 22618
 rescue skills and techniques, 15938
see also Search and rescue operations.
- Research:
 and development—
 adapting Goddard Research and Engineering Management Exercise (GRE-MEX) to nonspacecraft environments, 29279
 Federal R&D funding by function, analysis, 23844
 assistance to inventors and small R&D firms, program area description of experimental technology incentives program, 27720
 bibliography of R&M research reports, 27491
 company funds push total industrial R&D spending to \$18 billion, 1971, science, 23847
 for people in need, special SRS research report, 23963
 inventory of congressional concern with research and development, 92d Congress—
 1971 bibliography, 17260
 1972, bibliography, 27334
 national meat-packing waste management research and development program, 26418
 naval, reviews (periodical), 18680
 non-accountability in National Heart and Lung Institute, HEW response to Kennedy's letter on Wolfe report, 25580
 NSF forecasts rise in company-funded research and development and R&D employment, 23848
 price index for deflation of academic R&D expenditures, 16417
 questionnaires for research, annotated bibliography on design, construction, and use, 20320
 research and demonstrations briefs, 18863
 Soviet research on exobiology, USSR study, 21858
 special facilities for research in Library of Congress, 29189
 tomorrow's manpower needs, research report on manpower projection needs, 29164
see also Military research—Scientific research—*also* names of departments, etc., doing research—*also* subjects.

Research and development reports:

- Atomic Energy Commission, 15517-526, 16660-676, 19177-185, 20992-21031, 22439-508, 24194-203, 25866-885, 26984-997, 28061-92, 29664-683, 30766-783
- Coal Research Office, 21092, 22615, 24270-271, 25955, 28217-218, 29813
- Research and development series, 17353-354, 26741, 27770-771, 29357-358, 30501-502, 31693, 32495
- Research and development technical reports, Army Electronics Command, Fort Monmouth, N.J., 16643-644, 19158-159, 20966-980, 22404-421
- Research and Monitoring Office:
 - Environmental Protection Agency, interim specifications for OR&M grant, contract and in-house reports, 26421
 - EXPRO '73, listing of extramural projects to be funded, 21506
 - technical personnel access directory, 28843
- Research and statistics notes, Social Security Administration, 16481-482, 22238-243, 23974-976, 27884-885, 29504, 31810-811, 32558
- Research and Statistics Office:
 - health insurance statistics, HI series, 22233-235, 23972, 29498-500, 32555
 - staff papers, 22237, 26835, 27883
- Research and Support Services Office, NOAA technical memorandum, ERL ORSS series, 31719
- Research document series, 22566, 28194
- Research Flight Facility, Miami, Fla., NOAA technical report, ERL-RFF series, 20686
- Research grants index, fiscal year 1972, 27788
- Research laboratories, *see* names of laboratories or places where located.
- Research notes, Forest Service, 16077-81, 17512-520, 20298-302, 21654-665, 23282-299, 25219-225, 26469-474, 27532, 28935-953, 31361-369, 32319-336
- Research on street crime control, 31552
- Research opportunities and needs in taiga of Alaska, 31359
- Research papers:
 - Forest Service, 16082-93, 17521, 20304-321, 21666-678, 23300-308, 25226-233, 26475-476, 27533-541, 28954-972, 31370-374, 32337-347
 - Tennessee Valley Authority, 29562-563
- Research reports:
 - Appalachian Regional Commission, 30747-749
 - Center for Studies of Crime and Delinquency, 30504
 - Cold Regions Research and Engineering Laboratory, 21437-438, 23152, 28686, 30156, 31235, 32198
 - Equal Employment Opportunity Commission, 23207, 28848, 30206
 - Injury Control Research Laboratory, 15625-627, 16840
 - National Credit Union Administration, 29338
 - Packers and Stockyard Administration, 29442
 - Population Growth and the American Future, Commission on, 22192, 23907, 25669, 29446, 30601, 32532
 - Smithsonian Institution, 31798
 - Social Security Administration, 23977, 27886
 - Waterways Experiment Station, 20171-172, 23178, 28783
- Research review (periodical), 28645
- Research scientists:
 - National biomedical research fellowship, traineeship, and training act, reports, 29997, 30965
 - national program of biomedical research fellowships, traineeships, and training, establish. report, 28350
- Research technicians, *see* Agricultural research technicians.

Research Triangle, N.C.:

- Burdens and Two Bottle Creeks—flood plain information, 20113
- floods, 20142
- Reservations, proposed reservation system in selected national parks, hearing, 27345
- see also* Indian reservations.
- Reserve components of Armed Forces:
 - facilities construction—
 - appropriations, 1973—
 - law, 19476
 - reports, 19623, 19711, 19898
 - authorizations, 1973—
 - law, 19474
 - report, 19695
 - personnel strengths for—
 - 1972, authorization—
 - hearings, 28984
 - 1973, authorization—
 - report, 29882
 - hearings, 17225, 21200
 - law, 16923
 - reports, 19623, 19625
 - 1974, authorization—
 - hearings, 32515, 30007, 31132
 - report, 32063
 - restriction on purchases at military exchanges, remove, hearings, 27192
 - servicemen's group life insurance—
 - coverage, report, 15675
 - for Reserve and National Guard, hearings, 26184
 - full coverage to Reserves and National Guard, provide, hearings, 17105
- Reserve officers, *see* Reserve Officers' Training Corps, Army.
- Reserve Officers Association of United States, exemption from taxation of certain property in D.C., authorize, hearing, 15887
- Reserve Officers Training Corps, Air Force, important factors in motivating AFROTC officer personnel in zero-draft environment, 25840
- Reserve Officers Training Corps, Army:
 - facts, Army R.O.T.C., 26959
 - gentlemen, you have decisions to make, 26960
 - manual, 24179
 - ROTC in review, summer camp IGMR, Annville, Pa., 16647
- Reserves (accounting):
 - recent regulatory changes in reserve requirements and check collection, 17485
- Reservoirs:
 - annual operating plan for federally owned reservoirs in Kansas River basin, 29457
 - development of analytical procedures for determining chlorinated hydrocarbon residues in waters and sediments from storage reservoirs, 22209
 - flow into stratified reservoir, 17417
 - optimum conjunctive use of dual-purpose desalting plant and multi-purpose surface water reservoirs, 20386
 - outlet works stilling basin for Tallahala Dam, Tallahala Creek, Miss., hydraulic model investigation, 28784
 - outlet works, Warm Springs Dam, Dry Creek, Russian River Basin, Sonoma County, Calif., 25101
 - procedures for evaluating hazards to coal mining operations from hydrocarbon reservoirs, 29206
 - sanitary survey of drinking water systems on Federal water resource developments, pilot study, 31899
 - simultaneous, multiple-level release from stratified reservoirs, hydraulic laboratory investigation, 23178
 - summary of reservoir deposition surveys made in United States through 1970, 29627
 - see also* names of reservoirs or places where located.
 - Residences, *see* Apartment houses—Houses.

INDEX 1973

- Residential care enterprises under Fair Labor standards act, 25804
- Residential construction, *see* Construction Industry.
- Residual performance effects of simulated sonic booms introduced during sleep, 16680
- Resins:
- resin concrete, literature review, 20169
 - synthetic organic chemicals, U.S. production and sales of plastics and resin materials, 1971 preliminary report, 29554
 - vacuum and ultraviolet-radiation effects on binders and pigments for spacecraft thermal-control coatings, errata, 23600
- Resistance, *see* Electric resistance.
- Resistance thermometers, *see* Thermometers.
- Resistors, *see* Electric resistors.
- Resnik, H. L. P., suicide prevention in 70's, 27786
- Resolutions:
- digest, 18228
 - history, 18145
 - see also* Law.
- Resolving power, method for determining resolving power of photographic lenses, 30472
- Resolving some selected issues of a national materials policy, 28574
- Resonance:
- conditions of plasma heating at electron cyclotron resonance, 22439
 - resonance phenomena—
 - during multiphoton ionization of xenon atom in an electric field $E5 \times 10^7 \text{V/cm}$, 22452
 - in configurations with helical magnetic axes when calculating toroidality, 21011
- Resonators, determination of plasma density in stellarators by means of open microwave resonator, 22449
- Resource adjustment in fertilizer industry with emphasis on Michigan, 19110
- Resource book for drug abuse education, 22039
- Resource bulletins, Forest Service, 20322-323, 21679-682, 23309-312, 25234, 27542, 31375
- Resource list for drug abuse literature, 23666
- Resource publications, Sport Fisheries and Wildlife Bureau, 22247-248, 23985, 25715-716, 31831
- Resource recovery from raw urban refuse, 29235
- Resources, *see* Natural resources.
- Resources analysis memo, 25601
- Respiration:
- effects of helium on mechanics of respiration, with clinical correlations, literature review, 32444
 - hose, air duct and air breathing, Federal item identification guide, 30102
 - hyperbaric oxygen breathing on rate of ethanol metabolism in man, studies on effect, 29197
 - simulated breathholding dives in dry and wet chambers on blood shifts into thorax, effect, 29199
 - visual evoked responses for divers breathing various gases at depths to 1200 ft., 16252
- Respiratory acidosis, *see* Acidosis.
- Respiratory equipment, comparison of respirable dust concentrations measured with MRE and modified personal gravimetric sampling equipment, 30442
- Respiratory system:
- advance national attack against cardiovascular, pulmonary, and blood diseases, law, 19368
 - mathematic analysis of reactions of human respiratory system to hypoxia and hypercapnia, 23534
 - respiratory diseases, task force report on problems, research approaches and needs, National Heart and Lung Institute Lung Program, 27761
- Response, report on actions for a better environment, 18868
- Response to crop-tree release by 7-year-old stems of yellow-poplar and black cherry, 27534
- Responses:
- effects of stress history on resilient response of soils, 31243
 - experimental dynamic response of two-dimensional, Mach 2.7, mixed-compression inlet, 20608
 - response factors and selective attention in learning from instructional materials, annotated bibliography, 22365
 - response of paper birch seedlings to nitrogen, phosphorus, and potassium, 28940
 - response variations of 3 types of microphones pressurized to 19 Ata, 20525
 - responses of several crops to 6 herbicides in irrigation water, 20937
- Responses (physiological), *see* Physiological reactions.
- Responses (psychology):
- differences in speed of mentally processing displays containing information about "right" and "left", 26642
 - frequency of anti-collision observing responses by solo pilots as function of traffic density, ATC traffic warnings, and competing behavior, 30788
- Responsible Government Ravenscroft's Political Fund Committee, annual report, 24467
- Responsibility and responsiveness, HEW potential for the seventies, 23403
- Responsive federalism, report to the President on Federal assistance review, 27687
- Rest, ecology of rest, USSR study, 27633
- Rest areas, *see* Roadside rest areas.
- Restaurants, lunchrooms, etc., restaurants and food service employees under Fair labor standards act, 26921
- Restoration:
- Federal aid in fish and wildlife restoration manual, 31826
 - lake restoration by nutrient removal from wastewater effluent, Shagawa Lake project, 30175
- Restraint apparatus:
- automobile safety belt activities book, grades 4-7, 26733
 - case for seat belts, experimental and statistical evidence, 23736
 - laws requiring seat belts, traffic laws commentary, 22056
 - safety belts—
 - instructional booklet, 22053
 - instructor guide, 16378
 - suggestions for increasing use of vehicle restraint systems, 22054
 - teaching children about safety belts, grades K-3, 20664
 - there are lots of safety belt myths, why not consider the truths? 17758
- Results and analysis of experimental mail extension test, census of population and housing, 28132
- Retail prices, *see* Prices.
- Retail stores, *see* Stores.
- Retail trade:
- and consumer interest (address), 27059
 - census of business, 1967—
 - area statistics, 16697-700
 - major retail centers in standard metropolitan statistical areas, 16690-696
 - current business reports, 15584, 18183, 18186, 18189
 - food retailer and PACA, 29629
 - nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
 - retail drug stores under Fair labor standards act, 26922
 - selected department store occupations, 16005

Retail trade—Continued
see also names of commodities and industries—also Stores

Retaining walls, design criteria for concrete retaining walls, 23919

Retallation (economics), *see* Tariffs.

Retinopathy, diabetic retinopathy, 27756

Retired pay, *see* Annuities.

Retirement:

- benefit plans, register, 23583
- benefits and beneficiaries under public employee retirement systems, 16481
- Central Intelligence Agency retirement act, amend—
 - hearings, 26150–151, 27305
 - law, 30907
 - reports, 26141, 27278
- civil service—
 - annuities, increase, hearing, 20008
 - mandatory at age 70 with 5 years' service, report, 27122
 - retirement system, 28213
- credit for services rendered States and other government instrumentalities when under Federal funding, hearing, 32089
- early retirement of postal employees, authorize, hearing, 15775
- employment and retirement, recommended for action, White House Conference on Aging, 16577
- firefighters under civil service retirement program, law, 15648
- immediate retirement of certain Federal employees, permit, report, 27123
- income security for employees act of 1973, report, 27291
- Individual retirement benefits act—
 - administration's pension proposal, 17110
 - testimony, 21298
- mobile teachers' retirement assistance, Federal-State program, establish, hearing, 19763
- National Guard retirement credit, hearing, 30068
- permit immediate retirement of certain Federal employees—
 - law, 30915
 - report, 28465
- planning for retirement, bibliography, 24175
- Postal Service payments to civil service retirement fund, provide, report, 26137
- pre-retirement years, labor market experience of men, longitudinal study, 23581
- publications, price list, 27868
- questions and answers on retirement plan for self-employed, 20404
- retired couple, guide to budgeting, 15470
- retirement income credit, tax information, 20407
- retirement income security for employees—
 - act, bill text, summary of major provisions, and background material, 17289
 - act, hearings, 15925
 - participating in pension and welfare benefit plans—
 - by mandating protective measures, 17175
 - report, 19882
- retirement plans for self-employed individuals, tax information, 21820
- selected public-employee retirement systems, holdings, quarterly report, 18423
- State and local governments, employee-retirement systems, 1970–71 finances, 19252
- survivor benefit plan for retired members of uniformed services, 23461
- tax advantage story, how U.S. saving bonds help more retirement money, 17823
- transition, guide to retirement, 17868
- union status and benefits of retirees, 31555
- your social security, 20772

Retirement—Continued
see also Civil Service pensions—Pensions—Railroad employees—Survivors' benefits—Teachers.

Retrieval and baling machine for polyethylene field cover, 22303

Retrieval and sort processor (RASP), 23587

Retrieval of dispersive and convective transport phenomena in fluids using stationary and nonstationary time domain analysis, 31630

Rettig, Albert:

- computer program for primary insurance amount, 22225
- some aspects of dynamic projection of benefits under 1972 social security amendments, 26831
- some mathematical aspects of Social Security amendments in Public law 92–603, 26830

Reubush, David M., effect of finess ratio on boattail drag of circular-arc afterbodies having closure ratios of 0.50 with jet exhaust at MACH numbers up to 1.30, 29274

Reukema, Donald L., twenty-one-year development of Douglas-fir stands repeatedly thinned at varying intervals, 23303

Reuss, Henry S., Reuss for Congress Committee, annual report, 26014

Reuss for Congress Committee, annual report, 26014

Revegetating coal mine spoils in New Mexico, laboratory study, 32336

Revegetating devastated site in New Mexico with western wheatgrass transplants, 32334

Revegetation, *see* Reclamation of land.

Revenue:

- elementary and secondary education, expenditures and revenues for public elementary and secondary education, 1970–71, 27429
- power systems, average rate and repayment studies, 23929
- revenues, expenses, other income and statistics of class 1 motor carriers of property, 17590
- sharing—
 - case for revenue sharing (address), 25048
 - Idea whose time has come, information report, 22311
 - payment, entitlement period 3, list, 26906
 - 2d payment, entitlement period 2, 24083
 - State and local fiscal assistance act, summary of testimony, public hearings, 17116
 - see also* Revenue sharing—also names of articles, etc., from which revenue is derived.
- Revenue agents, career opportunities, revenue officer, 16153
- Revenue Financing Division, Treasury Dept., for financial assistance to surface transportation, establish, hearings, 15883
- Revenue officers, *see* Revenue agents.
- Revenue sharing:
 - data elements, entitlement period 1, Treasury Dept., 27953
 - 4th entitlement period allocations with adjustments for entitlement periods 1, 2 & 3, 30673
 - Indian tribes, Alaskan native villages, payment listing by county, entitlement period 3—
 - 3d payment, 27956
 - 4th payment, 30674
 - its use by and impact on State governments, GAO report, 32355
 - overall views, 19970
 - payment, entitlement period 3, list, 29566
 - per capita comparisons of distributions, 19970

INDEX 1973

- Revenue sharing—Continued
 sharing—
 reports, 15673, 15679
 summary of Senate amendments to bill, 21297
 State and local fiscal assistance act—
 general explanation, 24884
 law, 19442
 regulations governing payment of initial entitlements, 20845
 report, 19886
 supplemental report showing distribution of funds, 15790
 States and local educational agencies to receive a share of Federal revenues for education programs, hearings, 21364
 supplemental payment entitlement periods
 1, 2, & 3, list, 29567
 what general revenue sharing is all about, 20846
 guide, 20847
 Revenue stamps, devices other than stamps on distilled spirits containers to evidence tax payments, report, 19681
 Reversers. *see* Thrust reversers.
 Review and comment responsibilities of State and areawide comprehensive health planning agencies, 28251
 Review and reclassification of larvae of subfamily Hadeninae (Lepidoptera, Noctuidae) of America north of Mexico, 16615
 Review of family Symptelidae (-Tironidae), mainly distributed in deep sea (Crustaceans: Amphipods), 17828
 Review of geomagnetic research in NOAA, 1971-72, 26769
 Review of National Policy toward Gambling, Commission on, *see* National Policy toward Gambling, Commission to, Review of.
 Revised estimate of cost of completing national system of Interstate and defense highways, 17082
 Revision of genus *Petalium* LeConte in United States, Greater Antilles, and Bahamas (Coleoptera: Anobiidae), 29636
 Revision of genus *Sennius* of North and Central America (Coleoptera, Bruchidae), 28025
 Revision of Judicial Circuits of United States. Commission on.
 establish—
 law, 16927
 report, 17013
 Revision of money stock measures and member bank reserves and deposits, 26448
 Revision of neotropical genus *Xystosomus* Schaum, 29489
 Revivification:
 reanimation and protein synthesis, USSR study, 17602
 reanimatology, USSR study, 21880
 Revolution, 1775-83:
 American Revolution 1775-83, atlas of 18th century maps and charts, theatres of operations, 27842
 bicentennial—
 bicentennial advanced technology transportation system demonstration act, report, 28491
 commemorative medals, authorize, hearings, 28396
 new coinage design and data emblematic design, report, 32059
 past to remember, future to mold, poster, 15498
 rise of spirit of independence, commemorative stamp poster—
 colonial drummer, 31888
 pamphleteer, 24085
 posting a broadside, 26909
 black presence in era of American Revolution 1770-1800, 31737
 creating independence, 1763-89, background reading for young people, 23606
 naval documents of American Revolution, American and European theaters, 32524
 Revolution, 1775-83—Continued
 select audiovisual records, pictures of Revolutionary War, 25546
 spirit of revolution lives on in Sons of American Revolution (address), 29816
 Revolutionaries. *see* Revolutionists.
 Revolutionary War, *see* Revolution, 1775-83.
 Revolutionists, investigation of attempts to subvert United States armed services, hearings, 15750
 Revolutions, revolutionary activities directed toward administration of penal or correctional systems, hearings, 29921
 Revzin, Alvin M.:
 subtle changes in brain functions produced by single doses of mevinphos (phosdrin), 30786
 transient blindness due to combined effects of mevinphos and atropine, 30787
 Rewards (prizes, etc.):
 achievements 1972, Federal incentive awards program, Civil Service Commission, 29803
 highways and its environment, fourth annual awards competition, 21538
 incentive awards program, Federal employees, 30878
 life—pass it on, President's environmental merit awards program, 27477
 National Institutes of Health, Public Health Service grants and awards, 1972 funds, 25509
 nominations for Soviet prizes in science and technology, USSR study, 17610
 recognition is your responsibility, of superior work for awards, 26673
 USSR State prize winners for 1972, 20468
 Reyes, Ricardo T., *see* Torres-Reyes, Ricardo.
 Reynard, Diana, cancer chemotherapy abstracts, 18046
 Reynolds numbers, investigations of effects of variations in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configurations, 32470
 RFF, *see* Research Flight Facility, Miami, Fla.
 Rhenium:
 availability of rhenium in United States, 25416
 minerals yearbook chapter, 25482
 Rhoad, David L., war on hunger, 19052
 Rhoads, William A., ecological and environmental effects from local fallout, beta and gamma radiation effects from close-in fallout, 16663
 Rhode Island:
 census of housing, 1970, housing characteristics for States, cities, and counties, 15559
 census of population, 1970—
 characteristics of population, 28117
 detailed characteristics, 16740
 census of transportation, 1972, truck inventory and use survey, 29721
 counties, population estimates, 25935
 county business patterns, 29744
 landings, fish and shellfish, 18870, 22089
 mineral industry, minerals yearbook chapter, 25469
 registry of minority contractors and housing professionals, listing in selected cities, 32383
 Rhodesia:
 Southern—
 background notes, 22256
 future direction of U.S. policy, hearings, 29904
 Ribbons for typewriters, record, Federal standard, 16060
 Ribovich, J., active list of permissible explosives and blasting devices approved before Dec. 31, 1972, 30414
 Riccitiello, S. R., application of space program fire-retardant technology to housing, 31644

- Rice, John L. :
keyed joint performance under heavy local aircraft, 32200
stabilization for pavements, 31244
- Rice, Mary E. :
morphology, behavior, and histogenesis of pelagospira larva of Phascosoma agassizii, Sipuncula, 25697
- Rice, Stewart C., Jr., county and metropolitan area data book, 32488
- Rice :
allotment, transfer to other farms because of floods, permit, report, 27153
distribution patterns for U.S. rice, 20088
economic impact of canceling use of 2.4,5-T in rice production, 26353
evaluating milling, cooking and processing characteristics required of rice varieties in United States, 25818
food grain statistics, supplement, 15482
foreign agriculture circulars, 18380
market news, 18871
review of world rice markets and major suppliers, 17498
rice diseases, 16593
rice situation, 15985, 27425
United States, varieties and production, 29620
- Rice County Republican Committee, annual report, 24388
- Rice mills, evaluating milling, cooking and processing characteristics required of rice varieties in United States, 25818
- Rieh, Thomas A., basic concepts of aging, programmed manual, 20880
- Richard A. Brown for Congress, annual report, 24485
- Richards, William J., indexed bibliography of eggs and young of tunas and other scombrids (Pisces, Scombridae), 20700
- Richardson, Elliot L. :
health maintenance organizations, necessity for establishing, 21765
nomination, hearings, 24912, 30052
responsibility and responsiveness, 23403
statement on defense budget and program, 26343
- Richardson, Tex., wastewater treatment plant, description, advantages, etc., 26901
- Richland County Democratic Organization, annual report, 24619
- Richland County Republican Executive Committee, annual report, 22814
- Richlen, Ellsworth M., soil survey of South Umpqua area, Oreg., 29513
- Richmond County, Ill., soil survey report, 17841
- Richmond, Fredericksburg and Potomac Railroad Co., railroad employee accident report, 25692
- Richmond National Battlefield Park, interpretive prospectus, 22122
- Richter, Thomas A., rawin radar targets, 20977
- Rickard, W. H., Rattlesnake Hills Research Natural Area, 21644
- Rickard, Warren, preliminary ecological evaluation of effects of air cushion vehicles on Arctic tundra of northern Alaska, 21439
- Rickover, Hyman G. :
appointment to Admiral on retired list—authorize, hearings, 28394
report, 30976
eminent Americans, namesakes of Polaris submarine fleet, 21159
testimony on Defense Dept. appropriations, 1974, hearings, 32073
- Riddiough, Earl T., forecasting precipitation at Bakersfield, Calif., using pressure gradient vectors, 30539
- Riddle, J. B., relief, 19826
- Riddle, John L., platinum resistance thermometry, 29311
- Rider, L. J., mean horizontal wind speed and direction, variability at heights of 1.5 and 4.0 meters above ground level at WSMR, New Mexico, 22423
- Ridgely, Marie M., relief, 19341, 19596
- Ridker, Ronald G., population, resources, and environment, 22192
- Riedell, John T., probable maximum precipitation and snowmelt criteria for Red River of the North above Pembina, and Souris River above Minot, N.D., 32509
- Riemannian manifold, see Manifold.
- Rienzi, Thomas M., communications-electronics, 1962-70, Vietnam studies, 16657
- Rietz, Raymond C., calendar for air-drying lumber in upper Midwest, 23283
- RIF (Reading is fundamental), see Reading.
- Rife, Colo. :
Colorado River and Rife, Government, and Hubbard Gulch Greeks—
flood plain information, 28705
floods, 28737
refraction surveys, 30523
- Rife Creek :
flood plain information, 28705
floods, Rife, Colo., 28737
- Rigging, air drop operations, technical manual, ammunition for low and high velocity airdrop, 24182
- Riggs, H. C. :
regional analyses of streamflow characteristics, 27574
storage analyses for water supply, hydrologic analysis and interpretation, 26511
- Right of privacy, see Privacy.
- Right to know, 27864
- Right to read, 23142
- Right to read series, commissioned by National Reading Center, 15999
- Rights (civil), see Civil rights.
- Rights-of-way, see Public lands—Railroads—Roads and highways.
- Rights of women, see Women.
- Rigid poly (vinyl chloride) (PVC) plastic siding, 20651
- Rigorous correction procedure for quantitative electron probe microanalysis, 31677
- Rij, Roger E., new shipping containers for cut roses, costs and performance, 20887
- Riley, Glyn A., survey of red wolf (canis rufus), 22249
- Riley, H. L. :
mineral industry of—
Alabama, 29214
Kentucky, 16285, 30423
West Virginia, 16311
- Riley, Susan G., mental health planning conference for Spanish speaking, 20671
- Riley, Wilson A., selling in Japan, 15617
- Rinaldi, Rose, engineering evaluation of non-reserve zinc-air cells, 19159
- Rinderpest :
prevention, agreement with—
British Honduras, 20808
Honduras, 31858
Nicaragua, 16535
Panama, 22275
- Rings :
product suitability of wood determined by density gradients across growth rings, 25225
SHIP (simplified-Helmholtz-Integral program), fast computer program for calculating acoustic radiation and radiation impedance for free-flooded-ring and finite-circular-cylinder sources, 16443
wearing rings, Federal item identification guide, 30119
wiping and sealing, Federal item identification guide, 23100
- Rio Blanco County, Colo., hydraulic testing and sampling of holes RB-E-01 and RB-D-01, Project Rio Blanco, Rio Blanco County, Colo., 23347
- Rio Bucana, ground water along Rio Bucana at Ponce, P.R., and effects of proposed floodway on ground-water quality, 23384

INDEX 1973

Rio de Janeiro, Brazil, landslides, 27566
 Rio Grande and Valley:
 cotton gin operating costs in lower Rio Grande Valley of Texas, 27999
 mechanical equipment, Rio Grande project, region 5, field review of maintenance, 31783
 summary of alluvial-channel data from Rio Grande conveyance channel, New Mexico, 1965-69, 21721
 water supply outlook and snow surveys, 19057
 Rio Grande Project, 1969 Elephant Butte Reservoir sediment survey, 23935
 Riots, training and equipping Army National Guard for maintaining order during civil disturbances, GAO report, 16102
 Riparian rights, evapotranspiration and watershed research as related to riparian and phreatophyte management, abstract bibliography, 25826
 Ripley, W. Va., Mill Creek, and vicinity, flood plain information, 16010
 Riprap, riprap stability on earth embankments tested in large- and small-scale wave tanks, 20103
 Rise of Spirit of Independence, pamphleteer, 24085
 Risk:
 attribute sampling inspection procedure based on hypergeometric distribution, 15526
 epidemiologist takes look at radiation risks, 25677
 management oversight and risk tree, MORT, 24195
 radiological risks relative to distribution of contaminated gas, 16668
 risk concepts in dangerous goods transportation regulations, 16427
 screening and assessment of young children at developmental risk, conference papers, 29447
 Rittenband, Richard M., Elect Rittenband Committee, annual report, 24701
 Ritzman, R. L., evaluation of data regarding efficiency of activated charcoal adsorbers at low gas phase iodine concentrations, 21031
 Rivanna River:
 North Fork—
 flood plain information, 28718
 floods, how to avoid damage, 28744
 South Fork—
 flood plain information, Albermarle County, Va., 28726
 floods, how to avoid damage, 28748
 River currents, 18873
 River Forest, Ill., relief, 15807
 River Ohio, *see* Ohio River and Valley.
 Rivers, Gary L., relief, 15812, 16853
 Rivers:
 analysis of potential errors in real-time streamflow data and methods of data verification by digital computer, 23326
 annual streamflow summaries from 4 sub-alpine watersheds in Colorado, 23276
 basin authorizations and related water resource projects, 32154
 canoeist suggestions for stream management in Manistee National Forest of Michigan, 17521
 channel modifications, report on stream channelization projects, 28578
 characterization of stream reaeration capacity, 21490
 controlling thermal pollution in small streams, 17423
 crest-stage gaging stations in Oregon, compilation of peak data collected Oct. 1952-Sept. 1972, 23337
 daily weather and river bulletin, Albuquerque, N. Mex., 18204
 deforestation effects on soil moisture, streamflow, and water balance in central Appalachians, 32343

Rivers—Continued
 flood control—
 and multi-purpose projects, public works authorizations, reports, 19654, 19715, 19871
 improvements, compilation, departmental edition, 26385
 flood profiles in Umpqua River, Oregon, 29014
 flood stages and discharge for small streams in North Dakota, 23341
 flow and channel characteristics of 2 high mountain streams, 23306
 flow characteristics of Georgia streams, 23343
 general streams use designations, water quality standards digest, 20225
 generalization of stream-temperature data in Washington, 29033
 geochemical prospecting using water from small streams in central South Carolina, 25254
 hydrology and recreation on cold-water rivers of Michigan's southern peninsula, 23382
 hydrology of tidal streams (series), 20356
 improvement of rivers and harbors, 21155
 inexpensive water sampler, 23287
 low-flow characteristics of streams in—
 Albany County, N.Y., 23351
 Puget Sound region, Wash., 32361
 low flows and temperatures of streams in Seattle-Tacoma urban complex and adjacent areas, Wash., 25249
 measurement of lateral erosion at proposed river crossing sites on Alaska pipeline, 23352
 mineralogy of suspended sediment in some Alaskan glacial streams and lakes, 21152
 national study of streamflow data-collection programs, 30287
 National Weather Service River Forecast System, forecast procedures, 25621
 national wild and scenic rivers system—
 Rock Creek in Montana, designation, hearings, 24937
 St. Croix River, designation of segment—
 law, 19487
 report, 19712
 occurrence and distribution of selected metals in streams near Huntsville, Ala., 30271
 physiographic and hydraulic studies of rivers (series), 27567
 plan for development of land and water resources of southeast river basins, 17924
 regional analyses of streamflow characteristics, 27574
 river basins of United States series, 17543-545
 river summary and forecasts, daily bulletin—
 Memphis, Tenn., area, 18874
 New Orleans, La., area, 18875
 runoff characteristics of California streams, 20361
 selected streamflow characteristics as related to channel geometry of perennial streams in Colorado, 23373
 soil stability and streamflow, 21684
 stream channelization, effects, etc., hearings, 29915
 stream quality preservation through planned urban development, 30198
 summary of turbulence data from rivers, conveyance channels, and laboratory flumes, 23375
 temperatures, Pacific Northwest, 18876-877
 transport of radionuclides by streams (series), 27563, 30273
 transverse diffusion of solutes in natural streams, 21722
 traveling screen for removal of debris from rivers, 22102

Rivers—Continued

western, rules of road, 22622
wild and scenic rivers—
act, amend, hearing, 21346
act, amend, report, 17168
study, Upper Iowa River, 21163
winter survival of fecal indicator bacteria
in subarctic Alaskan river, 20190
see also names of rivers or places where
located.

Riverside, Calif., area wage survey, 30389
Rivets, rivets, rivet caps, and collars, Fed-
eral item identification guide, 30111
Riviera Republican Women's Club, annual re-
port, 24798
Rizdon, Donald S., industry wage survey,
fertilizer, 21908

Rizzuto, Angelo, Angelo Rizzuto's New York,
In Little old New York, by Anthony Angel,
20511

Roach, Kenneth E., ²³⁸Pu production in com-
mercial water reactors experimental and
analytical program, 21017, 22486

Road ahead, outlook for blacks in business
(address), 21589

Road oils, runoff of oils from rural roads
treated to suppress dust, 26406

Road signs, about your CAC (Career Assist-
ance and Counseling Office) in Consolidated
Base Personnel Office, 16636

Road to work, technical school training or
directed duty assignment? 25842

Road user and property taxes on selected
motor vehicles, 1973, 31327

Roads and highways:
accelerated roadbuilding on North Umpqua,
economic analysis, 20317

additional actions needed to minimize ad-
verse environmental impacts of timber
harvesting and road construction on for-
est land, GAO report, 25236

announcement of highway safety litera-
ture, abstract journal, 17996
code of Federal regulations, 30221

economic and social effects of highways,
summary and analysis, 21537
erosion and sediment control in highway
construction, guidelines, 17453

evaluation of potential effects of U.S.
freight transportation advances on high-
way requirements, research phases,
25143

fatal and injury accident rates on Fed-
eral-aid and other highway systems,
26430

federal-aid highway—
act, amend—
hearings, 21317, 24950
reports, 15853, 17010, 19678, 19733,
24899, 31102

act, reports, 26136, 27143
Federal-aid highway and mass transporta-
tion act, its role in highway transporta-
tion program (address), 17455

federally coordinated program of research
and development in highway transporta-
tion, 32280A

highway accident reports, 30560-562
highway and its environment, fourth an-
nual awards competition, 21538

highway and urban mass transportation,
18421
highway construction, appropriations
1974-80, authorize—
hearing, 21317
reports, 17010, 19678, 19733

highway emergency relief, additional ap-
propriations, authorize, law, 16882
highway legislation, future needs, hear-
ings, 29935

highway planning technical reports, 16041,
30212-213
highway projects, economic social, and en-
vironmental effects, guidelines, report to
Congress, 17084

Roads and highways—Continued

highway safety—
act, hearings, 26291
design and operating practices, hand-
book, 25145

design and operations, operational defi-
ciencies, hearings, 21286
1973 legislation, appropriations, author-
ize, hearings, 28428

highway statistics, 26431
highway trust fund, financial condition and
operations, annual report, 26052

highways, new developments in design,
etc., newsbriefs, 18692
interstate and other highway funds, in-
terim apportionment—
law, 30932
report, 28470

labor and materials required for highway
constructions, 32434
national system of interstate and defense
highways, revised estimate of cost of
completing, 17082

plot command language translator pro-
gram, 17454
public hearings on noise abatement and
control manufacturing and transporta-
tion noise (highway and air), 16029

public roads, journal of highway research
(periodical), 18832
publications, price list, 30606

R & D highway transportation research
and development studies, 30214
railroad/highway—
accident report NTSB-RHR series,
30571

safety, recommendations for solving
problem, report to Congress, 32602
road and landing criteria for mobile-crane
yarding systems, 26471

road structure, process and apparatus,
classification definitions, 23902
rules of the road, 20666

urban freeway surveillance and control,
state of art, 21539
see also names of roads or highways, or
places where located.

Roadside rest areas:
rest area sewage disposal and water sup-
ply, 32285
water supply and sanitary waste treatment
facilities for safety rest areas, guidelines
for review of plans, 32281

Roanoke County, Va.
flood plain information, Back Creek, 23158
floods on Back Creek, 21469

Roanoke Valley Republican Committee, an-
nual report, 22886
Roaring Fork River, and Castle and Hunter
Creeks, Aspen, Colo., flood plain informa-
tion, 32217

Roasting (minerals):
copper recovery from chalcopyrite by roast-
leach procedure, 25516

Robbery, *see* Theft.
Robbins, Daniel H., relief, 19817
Robbins, David, NBS technical note, miscel-
laneous papers, 20648

Robbins, Frances, rural development, 17220
Robert A. Taft Sanitary Engineering Center,
technical reports, 22204-205, 20735-738

Robert E. Gonzales Dinner Committee, pol-
itical committee, annual report, 28281
Robert F. Kennedy Memorial Stadium:
additional seating, hearing, 31040, 30016

8,000 additional seats, provide at no cost
to Government—
law, 29830
reports, 27171, 31076

Robert N. C. Nix Campaign Committee, an-
nual report, 22681
Robert R. Hardy Campaign Fund, annual re-
port, 24690

Robert S. Kerr Laboratory, national envi-
ronmental research facility, 31304
Roberto Walker Clemente medals, law,
30909

INDEX 1973

- Roberts, Archie C.:
shore termination for oil spill booms, 28800
using fire streams with self-propelled oil spill skimmer, 28807
- Roberts, Charles T., financial accounting, classifications and standard terminology for local and State school systems, 30139
- Roberts, Jean:
eye examination findings among children, United States, 17747
hearing and related medical findings among children, race, area and socioeconomic differentials, 22030
prenatal-postnatal health needs and medical care of children, U.S., 26718
- Roberts, John D., Jr., microprogrammed control unit (MCU) programming reference manual, 22173
- Roberts, Ray, Campaign Committee, *see* Ray Roberts Campaign Committee.
- Roberts, Richard S., U.S. taxation of foreign investments, 26347
- Roberts, Richard W.:
National Bureau of Standards, hearings, 26262
speech, June 12, 1973, 29314
- Robertson, J. L., remarks, Nov. 8, 1972, 20275
- Robes, boys' shirts, robes, and pajamas, I. Jablow and Company, Inc., Philadelphia, Pa., Tariff Commission report, 29548
- Rohle, Richard A., calorimeters for heat of solution and low-temperature heat capacity measurements, 17541
- Robinette, Gary O., plants, people, and environmental quality, study of plants and their environmental functions, 25635
- Robinson, Glenn H., flight evaluation of methods for predicting vortex wake effects on trailing aircraft, 23681
- Robinson, Harold J., Committee for Election, *see* Committee for Election of Harold J. Robinson.
- Robinson, Jim., our public lands (periodical), 18739
- Robinson, Tully M., ground water in central St. Croix, U.S. Virgin Islands, 23344.
- Robison, F. Luman, low-flow study of streams in Albany County, N.Y., 23351
- Robots, robot-manipulator control algorithms, USSR study, 30360
- Rochester, N.Y., area wage survey, 20506
- Rochester Joint Board Political Education Committee, annual report, 24780
- Rochford, S. Dak., preliminary report on geology and gold deposits of Rochford District, Black Hills, S. Dak., 26489
- Rock, *see* Rocks.
- Rock County, Republican Committee, annual report, 22923
- Rock Creek:
designating Rock Creek in Montana as part of wild and scenic rivers system, hearing, 24937
flood plain information, 20126
floods, Independence, Mo., 20151
Sapulpa, Okla., special flood hazard information, 25092
- Rock drills, *see* Drills (tools).
- Rock Falls-Sterling Republican Women's Club, *see* Sterling-Rock Falls Republican Women's Club.
- Rock Island, Ill.:
area wage survey, 29169
census of population and housing, 1970, census tracts, 19214
- Rock phosphates:
minerals yearbook chapter, 25477
phosphate rock in 1972, mineral industry survey, 26656
Rock River, flood plain information, 17392
- Rock salt, *see* Salt.
- Rockbridge/Lexington Republican Committee, annual report, 22701
- Rockdust, dispersal of coal- and rock-dust deposits, 16332
- Rockefeller, Laurence, tribute to Laurence Rockefeller for his work in outdoor recreation field (remarks), 23473
- Rocker, Mont., Butte, Anaconda and Pacific Ry., railroad accident investigation summary report, 27875
- Rocket fuel, *see* Fuel.
- Rocket propellants, *see* Propellants.
- Rockets:
chemical rocket/propellant hazards, 26952
coolant-side heat-transfer rates for hydrogen-oxygen rocket and new technique for data correlation, 25527
dynamics of rocket control systems with on-board digital computers, USSR study, 21844
experimental and analytical study of one- and two-component flows in spherical chambers, 31609
Federal plan for meteorological rocket observations, fiscal year 1973-77, 29383
ion rocket engines, USSR study, 27635
liquid propellant rocket combustion instability, 21980
meteorological rocket data reduction program, general-purpose, 22420
nuclear engines in space, USSR study, 25329
observations, Federal meteorological handbook, 28232
oxidant-fuel-ratio-zoned rocket injector for high performance and ablative engine compatibility, design and evaluation, 17721
statistical prediction of impact displacement due to wind effect on unguided artillery rocket during powered flight, 20978
unmanned, Federal aviation regulations, 18296
water supply for Nuclear Rocket Development Station at AEC's Nevada test site, 17547
- Rocketsondes, *see* Rockets.
- Rockford, Ill., area wage survey, 16232
- Rocks:
adhesion at crystalline interfaces in rock, 26660
Cenozoic rocks of Santa Rita Mountains, southeast of Tucson, Ariz., 21732
Copper Harbor Conglomerate (middle Keweenaw) on Isle Royale, Mich., and its regional implications, 26508
determination of paleotectonic principal stress direction, including analysis of joints by optical diffraction, 26658
determination of three-dimensional deformation anisotropy in rock specimens, new method, 26488
drillers' logs in lithologic studies of Ozallala Formation of Southern High Plains of Texas, evaluation of use, 23339
effects of specimen radius on stress state near roof bolt anchor, finite element determination, 30426
effects of underground nuclear explosion on surrounding rock, 21027
evaluation of yields of wells in consolidated rocks, Virginia to Maine, 17550
geochemistry and potassium-argon ages of plutonic rocks in Battle Mountain mining district, Lander County, Nev., 29024
geology and phosphate deposits of Permian rocks in central western Montana, 26497
geology of Moxie pluton in Moosehead Lake, Jo-Marv Mountain area, Piscataquis County, Maine, 20344
geology of pre-Tertiary rocks in northern part of Yellowstone National Park, Wyo., 26506
lithologic characteristics of—
Pliocene rocks cored at Elk Hills, Kern County, Calif., 27552
upper oligocene and miocene rocks drilled at Elk Hills, Kern County, Calif., 29005

Rocks—Continued

- model tests of lined tunnels in jointed rock mass (strengthening of rock by chemical adhesive grouting), 28693
- origin of mineralized water in Precambrian rocks of upper Paraba basin, Paraba, Brazil, 16112
- paleomagnetism of some Lake Superior Keweenaw rocks, 17542
- Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution, 25257
- petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
- petrography of some granitic bodies in northern White Mountains, Calif.-Nev., 29023
- petrology of welded tuff of Devine Canyon, southeastern Oregon, 27573
- radiographic, petrographic, and SEM evaluation of ballistically loaded clay, 31261
- rock damage from small charge blasting in granite, 30429
- rock mechanics instrumentation in mine design, 25420
- sedimentary petrology and paleocurrents of Harebell Formation, Pinyon Conglomerate, and associated coarse clastic deposits, northwestern Wyoming, 21731
- stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, 17528
- stratigraphy and geologic history of Montana Group and equivalent rocks, Montana, Wyoming, and North and South Dakota, 30281
- stratigraphy and structure of Middle and Upper Ordovician rocks in Sedgwick basin and adjacent areas, south-central Kansas, 21726
- strengthening of fractured rock pillars by use of small radial reinforcement pressures, 30432
- trace-element contents of some plutonic rocks of Sierra Nevada batholith, 17526
- WAVE, computer program for one-dimensional stress wave analysis, 23640
- wave transmission through rock structures, hydraulic model investigation, 25096
- see also* Igneous rocks—Sedimentary rocks.
- Rocky Mountain Forest and Range Experiment Station:
 - publications, list, 18587
 - research highlights, 23274
- Rocky Mountain millivolt Integrator for use with solar radiation sensors, 23294
- Rocky Mountain National Park, general information, 30548
- Rocky Mountain States:
 - manufactures, annual survey—general statistics, Mountain Division, 19190
 - statistics for States, standard metropolitan statistical areas, large industrial counties, and selected cities, Mountain division, 25895
- Rocky Mountains, geochemistry of lower Eocene sandstones in Rocky Mountain region, 25259
- Rocky River, West and North Branch, Medina County, Ohio flood plain information, 16012
- Rodenticides:**
 - Arsenic in endrin treatments to protect Douglas-fir seed from deer mice, 20316
 - Federal insecticide, fungicide, and rodenticide act, amend—
 - hearings, 19959
 - law, 19446
 - reports, 19692, 19841, 19844

Rodenticides—Continued

- rodenticides and mammal, bird and fish toxicants, EPA compendium of pesticides, 20731A, 25668
- Rodents, *see* Rats.
- Roder, Hans M.:
 - ASRDI oxygen technology survey, thermophysical properties, 17706
 - computer programs for thermodynamics and transport properties of hydrogen (Tabcode-II), 26703
 - liquid densities of oxygen, nitrogen, argon, and parahydrogen, 25554
- Rodgers, Colin, two-stage high pressure-ratio centrifugal compressor, 26982
- Rodino, Peter W., jr., Reelect, Committee, *see* Reelect Peter W. Rodino, jr., Committee.
- Rodriguez, Alberto, relief, 19338, 19605
- Rods:
 - absorbing materials and control rods for fast reactors, USSR study, 31528
 - metal bars, rods, wires, sheets, plates, and shapes, Federal item identification guide, 30105
 - see also* Tie rods.
- Roe, Eldon P., People for Roe Committee, annual report, 24453
- Roe, Robert A., Reception for Roe Committee, annual report, 24770
- Roehler, Henry W.:
 - stratigraphic division and geologic history of Laney Member of Green River formation in Washakie Basin in southwestern Wyoming, 26495
 - stratigraphy of Washakie formation in Washakie basin, Wyo., 27555
- Roethlisberger, Hans, seismic exploration in cold regions, 21443
- Roger Stanley Orchestra, relief, 27116E
- Rogers, Hiluard G., jr., newsletter of U.S. Army Medical Department, 18706
- Rogers, John C., relief, 19345
- Rogers, Peter H.:
 - mathematical model for standing-wave acoustic parametric source (SWAPS), 31758
 - SHIP (simplified Helmholtz integral program), fast computer program for calculating acoustic radiation and radiation impedance for free-flooded-ring and finite-circular-cylinder sources, 16443
- Rogers, Vergil A., soil survey of Lancaster County, S.C., 31821
- Rogers, William P.:
 - briefing on major foreign policy questions, hearings, 26267
 - press conference following International Conference on Viet-Nam, 26860
- Rogue River and Valley, Land Management Bureau and Forest Service combined plan for development, operation and management, 23001
- Rohani, B., fragment and projectile penetration resistance of soils high-velocity fragment penetration into laboratory-prepared soil targets, 31259
- Role of campus security in college setting, 26608
- Role of institutional investors in stock market, 30020
- Role of packaging in solid waste management, 1966-76, 23200
- Role of sludge worms in eutrophication, 32249
- Role of water in urban planning and management, 23332
- Roles and resources of Federal agencies in support of comprehensive emergency medical services, 25269
- Roll laminating fiber overlays on low-grade ponderosa pine lumber, 23307
- Roll welding, *see* Welding.
- Roller bearings, *see* Bearings (machinery).
- Roller chain from Japan, 25783

- Rollers, test results report and technology development report HLH/ATC compliant roller bearing development program, 24186
- Rolling mills, industrial plant equipment handbook, rolling mills, drawing machine and metal finishing equipment, 17320
- Rolling stock, *see* Railroads.
- Rolling stock utilization and financing act of 1973, 28528
- R-Om experimental setup for studying interaction of high-frequency fields with plasma, 22467
- Romania, *see* Rumania.
- Romano, Jeanne C., Romano for Congress Committee, annual report, 24469
- Romano for Congress Committee, annual report, 24469
- Rome, Ga., Coosa, Etowah, and Oostanaula Rivers, special flood hazard information report, 28772
- Rome, N.Y., area wage survey, 20505
- Rome Centre, U.S. participation, extend report, 23476
- Romine, G. L., site alteration effects from rocket exhaust impingement during simulated Viking Mars landing, nozzle development and physical site alteration, 30448
- Romney, George, remarks, Oct. 23, 1972, 21806
- Rona, Peter A., exploration methods for Continental Shelf, geology, geophysics, geochemistry, 20691
- Roncador Bank, status, Treaty with Colombia, 21306
- Roncallo, Teno, Committee to Keep Teno in Congress, annual report, 24314
- Ronco, Frank: planting Engelmann spruce, 16088 field guide, 16089
- Roofing: asphalt and tar, current industrial reports, 18194 asphalt and tar roofing and siding products, current industrial reports, 29754 guidelines for selection of and use of foam polyurethane roofing systems, 29324
- Roofs: mass thickness manual for walls, floors, and roofs, 28585 roof maintenance, local housing authority management guide, 23448
- Rooms, clean room and work station requirements, controlled environment, 28911
- Rooney, Fred B., Rooney for Congress Committee, annual report, 24317
- Rooney for Congress Committee, annual report, 24317
- Roosevelt, Franklin D. Home, National Historic Site, *see* Home of Franklin D. Roosevelt.
- Roosevelt, Theodore: birthplace, Sagamore Hill, etc., National Park Service (poster), 22124 Sagamore Hill and Roosevelt family, historic resource study, 27814 *see also* Theodore Roosevelt National Memorial Park.
- Roosters, *see* Poultry.
- Root rot, phytophthora root rot of Port-Orford-cedar, 17508 *see also* Fomes annosus.
- Roots: Engelmann spruce seedling roots reach depth of 3 to 4 inches their first season, 32332 root diseases and soil microbiology, Rope, rope, cable, and chain fittings, Federal item identification guide, 27394 *see also* Wire rope.
- Rosa Vernon for Congress, annual report, 22791
- Rose, Joseph B., what factors influence union representation elections?, 23602
- Rose-Bro Shoe Co., Inc., footwear for women, Boston, Mass., Tariff Commission report, 25779
- Rose fish, redfish, fishery facts, 23791
- Roseau County Republican Association, annual report, 24410
- Rosen, Donald E., tips, Army personnel magazine, 18961
- Rosen, Seymour M., development of Peoples' Friendship University in Moscow, 26360
- Rosenbaum, Joe B., sulfur dioxide emission control by hydrogen sulfide reaction in aqueous solution, citrate system, 30443
- Rosenblum, Marcus, compendium on workmen's compensation, 29336
- Rosendahl, Elaine, Rosendahl for Congress Committee, annual report, 24456
- Rosendahl for Congress Committee, annual report, 24456
- Rosenkranz, William A., Municipal Technology Branch projects through June 1972, 20202
- Rosenthal, Benjamin S., growing bond, European Parliament and Congress, 17043
- Rosenthal, Carl F., American student left, 32410
- Roses, new shipping containers for cut roses, costs and performance, 20887
- Roseville, Calif., flood plain information, Dry Creek and tributaries, 31250
- Ross, David F., Negro employment in South, State and local government, 25373
- Ross, Donald C., petrographic and chemical reconnaissance study of some granitic and gneissic rocks near San Andreas fault from Bodega Head to Cajon Pass, Calif., 17533
- Ross, Eldon W., in southeastern U.S., relation of environmental and biotic factors to stump colonization and losses in residual stand, 20936
- Ross, J. R., solvent extraction of nitrate from titanium leacher effluent, 25508
- Ross, Joseph B., tabular analysis of records of U.S. colored troops and their predecessor units in National Archives, 31672
- Ross, Reuben James, jr.: distribution of Middle Ordovician Copenhagen Formation and its trilobites in Nevada, 17539 fossils from Ordovician bioherm at Meiklejohn Peak, Nev., 21724
- Ross Aviation, Inc., accident report, 23859
- Ross County Republican Executive Committee, annual report, 22854
- Roszbach, R. J., automobile gas turbine, optimum cycle selection study, final report, 29642
- Rossie, John P., report on current standards for air-cooled heat exchangers, 28088
- Rossmasser, Stephen A., critical evaluation of data in physical sciences, status report on National standard reference data system, 20650
- Rosters, national roster of minority professional consulting firms, 24282 *see also* names of departments, etc., issuing rosters—*also* subjects.
- Rostvedt, J. O., summary of floods in United States during 1968, 23393
- Roswell, N. Mex., Roswell test facility test bed, brackish water test center, etc., 23475
- Roswell Employment Training Center, phase out, hearings, 24911
- Roswell Residential Training Center, *see* Roswell Employment Training Center.
- Rot, control of postharvest brown rot of sweet cherries and peaches with chemical and heat treatments, 19112
- Rotary drills, *see* Drills (tools).
- Rotation: cannery wastewater treatment with rotating biological contactor and extended aeration, 28797
- FORTTRAN IV computer program for calculating critical speeds of rotating shafts, 31652
- laser Doppler velocity measurement of swirling flows with upstream influence, 31610
- percussive drilling with independent rotation, 21948

- Rotation—Continued
swirl concentrator as combined sewer overflow regulator facility, 20189
- ROTC, *see* Reserve Officers Training Corps, Air Force—Reserve Officers Training Corps, Army.
- Roth, Edward J., cable television manpower, job descriptions and educational requirements, 24285
- Roth, J. Reece:
characteristics and performance of superconducting bumpy-torus magnetic facility for plasma research, 31641
ion heating mechanism in modified Penning discharge, 20614
- Roth, L. E., phytophthora root rot of Port-Orford-cedar, 17508
- Roth, Peter H., Deep Sea Drilling Project, cruises of drilling vessel, Glomar Challenger Honolulu, Hawaii to Honolulu, Hawaii, 32517
- Rothermel, Terry W., planning model to project potential for desalting in United States, 20388
- Rothgeb, Carrie L.:
crime and delinquency abstracts, 18178
psychoanalytic study of child, abstracts, 23757
psychopharmacology abstracts, 18827
- Rotorcraft:
airworthiness standards—
normal category, Federal aviation regulations, 18294
transport category, Federal aviation regulations, 18294
external-load operations, Federal aviation regulations, 18298, 23209
- Rotors:
analytical evaluation of controllable twist rotor performance and dynamic behavior, 15513
design and experimental results for turbine with jet flap stator and jet flap rotor, 29257
effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, sinusoidal and random vibration, 29250
expandable main rotor blade study, 28055
field-replaceable rotor blade pocket study, final report, 28058
investigation of dissipation of tip vortex of rotor blade by mass injection, 20990
leading-edge serrations which reduce noise of low-speed rotors, 31645
main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20585
measurements of velocity components in wake of full-scale helicopter rotor in hover, 24184
sectionalized main rotor blade advanced design study, 20987
source mechanisms for rotor noise radiation, 32454
test results report and technology development report HLH/ATC compliant roller bearing development program, 24186
- Rotramel, Frank A., Apollo experience report, command and service module instrumentation subsystem, 31647
- Rottman, Ellis, manpower (periodical), 18605
- Roughness, *see* Surfaces.
- Rouse, Jim V., hydrologic relationship of Jefferson County landfill leachate and Meramec Heights area springs, Jefferson County, Mo., 25829
- Routes to reform, 31707
- Routing, MILSTRIP, identifier codes, 31195
- Routly, Paul M., second catalog of trigonometric parallaxes of faint stars, 29431
- Routt County, Colo.:
disseminated silver-lead-zinc sulfide occurrence, at Hahns Peak, 26493
- Routt County, Colo.—Continued
general geology of Hahns Peak and Farwell Mountain quadrangles, Routt County, Colo., 26490
- Routt National Forest, designate part as Flat Tops Wilderness, report, 19915
- Rowan, S. J., nursery diseases of southern hardwoods, 16075
- Rowe, J. J.:
chemical analysis of thermal waters in Yellowstone National Park, Wyo., 1980-65, 32359
quinary reciprocal salt system Na.K.Mg.-Ca/CLSO₄, review of literature with new data, 17537
- Rowell, R. M., effects of trans-a-hydroxyl groups in alkaline degradation of glycosidic bonds, 32337
- Rowland, George E., aircraft exterior lighting and marking, 20826
- Rowlett Creek:
Dallas and Collin Counties, Tex.—
flood plain information, 32218
floods, 32241
- Roy, William R., District of Columbia Committee for Dr. Roy, annual report, 24490
- Royall, Richard M., prediction approach to finite population sampling theory, applications to hospital discharge survey, 29329
- Royalties, royalty income, tax information, 23483
- RRB, *see* Railroad Retirement Board.
- RSFSR, *see* Russian Soviet Federated Socialist Republic.
- Rubber:
and plastics working machinery, industrial plant equipment handbook, 17321
environmental protection in synthetic rubber industry, sub-council report, 29348
reinforced rubber and/or plastic hose suitable for conducting liquids or gases, workers of Passaic, N.J., plant of Uniroyal, Inc., Tariff Commission report, 27944
sampling and testing, test method standard, 17487
supply and distribution for U.S., current industrial reports, 18194, 28165
- Rubber hose, *see* Hose.
- Rubinsky, Stanley, simulation as technique in power tool safety and education, 15626
- Ruckelshaus, William D.:
addresses, etc.—
Sept. 13, 1972, 21507
Oct. 17, 1972, 21512
- Rucks, Frances B., Air University Library index to military periodicals, 17977
- Rudder, C. L., aerial surveillance spill prevention system, 25105
- Rugs:
carpets and rugs, 28907
current industrial reports, 16758, 18194A, 25918
- Ruhnke, Lothar H., three-station lightning detection system, 20692
- Ruhoff, Florence A., bibliography and zoological taxa of Paul Bartsch, with biographical sketch, 30633
- Rule, Albert R., beneficiation of Idaho kyanite-bearing materials, 27699
- Rules, *see* names of Courts, Commission, etc., issuing rules—also subjects.
- Rules and Administration Committee, Senate:
calendar, 18574
committee prints, 17298-300, 20014, 24961-962
hearings, 23074, 30069
investigations and studies, authorization and expenses, 24961
report, 27260
legislative review of 92d Congress, report, 27271

INDEX 1973

Rules and Administration Committee, Senate—Continued
 reports, 15818, 15838-841, 17151-153, 19842, 19853, 19907-910, 24896, 26200, 26213-218, 26229-231, 27260-264, 27266, 27271, 27275, 27293-95, 28457-460, 28468, 28499-500, 29960, 29971, 29982, 29985, 29994, 31065-66, 31083, 31086-91, 31109-110, 32112-113, 32117-119

Rules Committee, House :
 hearings, 28431, 29936
 investigations and studies, authorization and studies, report, 26119
 reports, 15679, 15682, 15688, 15692, 15705, 15707-708, 16953, 16971, 16986, 16991, 16994, 17006-9, 19610, 19612, 19622, 19624-625, 19628, 19643, 19646, 19661, 19677-679, 19687, 19705, 19710, 21168-171, 24822-823, 24826-827, 24830-833, 24835, 26068-70, 26074-77, 26079-89, 26100-103, 26105-106, 26123-124, 27117-118, 27129, 27133, 27143-144, 27151-152, 28328-330, 28332-334, 28341, 28360-361, 29847-849, 29857, 29863, 29879-81, 30963-971, 30991, 30997-998, 32031-34, 32045-47, 32050-51, 32061-64

Rules of evidence, 24812

Rules of the road, international, inland, 21095

Rumania :

area handbook, 15509
 background notes, 23992
 consular convention—
 message from President of United States, 15803
 report, 24894
 cultural relations, agreement, 25759

Ruminations and action on enforcement, SEC (address), 30627

Runaway youth, 28325

Runaway youth act, 17137, 31063

Runge-Kutta method, *see* Equations.

Runnels County, Tex., investigation of nitrate problem in Runnels County, Tex., ground water, etc., 31289

Runoff :

characteristics of—
 California streams, 20361
 rainfall runoff from beef cattle feedlot, 17419
 herbicide contamination of surface runoff waters, 28626
 need to control discharges from sewers carrying both sewage and storm runoff, GAO report, 26480
 runoff of oils from rural roads treated to suppress dust, 26406
 storm sewer design, evaluation of RRL method, 20199
 storm, water pollution aspects of street surface contaminants, 20203
 urban storm water runoff, selected abstracts, 21502

Runways (aeronautics) :

ability of laser profilometer system to evaluate unprepared landing site, analysis, 30166
 Bahamas Long Range Proving Ground, expanded use of Ascension Island, agreement with United Kingdom of Great Britain and Northern Ireland, 31856
 continued analysis of capacity concept for runway and final-approach path airspace, 24023
 development of film techniques for runway lighting outage studies, 24026
 evaluation and maintenance of expedient-surfaced airfield facilities, 28779
 evaluation of—
 Dow Chemical Company extruded—
 aluminum 4-piece 4- by 4-ft landing mat (MX18-E), evaluation, 26388
 truss web, landing mat, 21480
 Goodyear medium-duty aluminum honeycomb landing mat, 26387

Runways (aeronautics)—Continued

Dow Chemical Company—Continued

Harvey aluminum 1- by 12-ft extruded light-duty landing mat with symmetrical butt-type end connectors, 20170

Kaiser MX 19-B and MX 19-C aluminum honeycomb landing mat, 26389
 redesignated XW18 membrane and accessories, for aircraft landing areas, 27446

XM20 and XM20E1 landing mats under heavy-duty load, 21479

extension of capacity concept to dual-use runways and multi-runway configurations, 24024

lateral separation, study approach, 24038

simulation study of diamond runway marks for aircraft approach guidance, 24037

see also Pavements.

Ruanyan, Jack, L., cost comparison of high and low ceilings in modern grocery warehouses, 29614

Ruos, James L., mourning dove status report, 17848

Ruppel, Edward T., geology of pre-Tertiary rocks in northern part of Yellowstone National Park, Wyo., 26506

Rural communities :

Angus cattle commemorative stamp, rural America series, 32605
 catalyst for rural development, 25293
 characteristics of U.S. rural areas with noncommuting population, 17216
 community report card, 29461
 farm workers in rural America, 1971-72, hearings, 19995

future of smalltown and rural America, impact on small business, investigation, report, 19724

health services in rural America, 29619
 moving forward, community development, 19123

non-point source pollution from agricultural, rural, and developing areas, hearings, 21289

population-migration reports, rural urban migrants, 24142

public employment programs in selected rural and urban areas, Department of Labor, GAO report, 31388

rural aging, special problems, report, 27128

rural environmental assistance program—reinstatement program, hearings, 23005
 report, 24826

rural population by farm-nonfarm residence for counties in United States, 15579

microfiche order form, 22143

rural water and—

sewer grant program, veto, 26058
 waste disposal grant programs, restore, hearings, 26144

small community needs, study, 17221

specialized language activities for rural disadvantaged, South Paris, Maine, 27778

State and local fiscal assistance act, per capita comparisons of distributions to large cities, selected small cities, and rural areas, 19970

training rural supervisors, 16221

Rural credit program, nonfarm enterprises, 30711

Rural development programs :

Alma-Bacon County story, model for rural America, 17215

catalyst for rural development, 25293
 community report card, 29461

Consolidated farm and rural development act, amend, report, 24906

decentralization and state and local intergovernmental cooperation in developing rural housing and employment programs (remarks), 21807

- Rural development programs—Continued
 director of State-USDA rural development
 committees, 26424
 impoundment of funds for farm and rural
 programs, hearings, 26248
 industrialized free-enterprise nations' sum-
 maries of activities, 27301
 moving forward, community development,
 19123
 President proposes rural development im-
 provements to Congress, 20383
 rural development—
 act—
 analysis and explanation, 21314, 23040
 explanation, 19943
 implementation, 30002
 hearings, 30001
 law, 16914
 progress and plans for implementa-
 tion, 27300
 staff explanation, 17219
 1971, year of listening, watching, and
 planning, 21315
 report on Congressional activities in 15
 major categories in 92d Congress, 1st
 session, 17220
 rural electric and telephone direct loan
 programs, restore—
 law, 30908
 reports, 26134, 26210
 rural environmental assistance program,
 27985
 and water bank program, reports, 26221,
 27126
 rural manpower developments (periodical),
 18881
 rural water and waste disposal grant pro-
 gram, restore, report, 26235
 you can do it! rural development, making
 rural America a better place to live and
 work, 19125
 Rural Development Service, appropriations,
 1974, hearings, 26146
 Rural electricity, *see* Electricity.
 Rural Electrification Administration:
 annual report, 31790
 materials acceptable for use on systems of
 REA borrowers, list—
 electrification, 18585, 25688-689, 27873
 telephone, 17821, 18586, 25690, 30616
 REA bulletins, 27874
 REA loan program, hearings, 27175
 semi-annual statistical summary, rural
 electrification program, 25691
 statistical report, rural electric borrowers,
 23949
 story of cooperative rural electrification,
 28002
 Rural environmental assistance program,
 23005, 27985
 Rural families, *see* Families.
 Rural housing, *see* Housing.
 Rural lines, story of cooperative rural elec-
 trification, 28002
 Rural population, employment profiles of se-
 lected low-income areas, rural areas, micro-
 fiche order form, 23849
 Rural poverty, *see* Poverty.
 Rural telephone bank:
 audit for initial period Oct. 1, 1971-June
 30, 1972, GAO report, 25237
 audit report, 24809
 Rural workers, *see* Farm labor.
 Rush, Kenneth:
 address, Var. 21, 1973, 27907
 current foreign policy, United States troop
 levels in Europe, 32574
 Rush County Republican Central Committee,
 annual report, 24617
 Ruskey, Frank, hazard evasion program for
 mine planning, 16339
 Russell, Harold, remarks, May 31, 1972,
 22195
 Russell, R. J., differential pressure mercury
 manometer, 28068
 Russell, T. E., animal depredations on spot-
 seeded yellow-poplar in central Tennes-
 see, 28953
 Russell County Republican Committee, an-
 nual report, 24399
 Russia, *see* Russian Soviet Federated Social-
 ist Republic—Union of Soviet Socialist
 Republics.
 Russian language, active introduction, 30651
 Russian radioecology, bibliography of Soviet
 publications with citations of English
 translations and abstracts, 21018
 Russian River, outlet works, Warm Springs
 Dam, Dry Creek, Russian River Basin,
 Sonoma County, Calif., 25101
 Russian Soviet Federated Socialist Republic:
 contemporary stage of development of psy-
 chology, USSR study 23540
 setting up, development, and basic results
 of work done by Sanitary-Epidemiologi-
 cal Service of RSFSR during last 50
 years, 16196
 Rust, Thomas, Jr., evaluation of insulation
 of crash fire protection of new flight re-
 corders, 24042
 Ruth, Robert H., maple sirup production
 from bigleaf maple, 21661
 Ruther, Martin:
 medicare—
 general enrollment period, 29500
 number of persons insured, 22234
 Rutile:
 conversion of ilmenite to rutile by car-
 bonyl process, 23658
 recovering rutile from titanium-enriched
 high-iron smelter slag, studies, 26667
 Rwanda, background notes, 26854
 Rx legend, FDA manual for pharmacists,
 17493
 Ryan, J. Patrick:
 mineral industry of—
 Australia, 16267
 Canada, 29215
 Missouri, 29222
 Ryan, John F., Jr.:
 annual report, 24587
 Citizens for Ryan political committee, an-
 nual report, 24586
 Ryan, Kenneth J., menopause and aging,
 26740
 Ryan, Leo J., Ryan for Congress Committee,
 annual report, 24430
 Ryan, Patrick, lead, 25451
 Ryan, Priscilla, Elect. Committee, *see* Elect
 Priscilla Ryan Committee.
 Ryan R. B., initial releases of *Chrysoscharis*
laricinellae and *Dicladocerus westwoodii*
 for biological control of larch casebearer
 in western United States, 32327
 Ryan, William B. F., covering leg 13 of
 cruises of drilling vessel Glomar Challenger,
 Lisbon, Portugal to Lisbon, Portugal,
 22134
 Ryan, William F.:
 memorial services, 25979
 Reelect Ryan to Congress Committee, an-
 nual report, 24320
 Ryan for Congress, annual report, 24587
 Ryan for Congress Committee, annual re-
 port, 24430
 Rye, food grain statistics, supplement, 15482

S

- S series, Federal Power Commission, 28871
 S.P.A.C.E., *see* Trust for Special Political
 Agricultural Community Education
 (S.P.A.C.E.).
 Sabghir, Aaron, construction review,
 monthly industry report, 18155
 Sabin, C. M., liquid metal boiling inception,
 17699
 Sabotage:
 aircraft sabotage convention, 21307
 suppression of unlawful acts against safety
 of civil aviation (sabotage convention
 between U.S. and other governments,
 27928

INDEX 1973

Sac County Republican Women's Club—
Finance Committee, annual report, 24735
Sac Indians, *see* Sauk Indians.
Sack, Anne M., relief, 19327, 19578, 19833
Sacks, *See* Bags.
Sacramento, Calif., aircraft accident report, 29408
Sacramento River and Valley, sediment transport in western tributaries of Sacramento River, Calif., 20357.
Saddleback Valley Republican Women's Club, Federated, annual report, 24648
Sadler, S. Gene, main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20585
Safeguarding classified defense information and material, 23423
Safety belts, *see* Restraint apparatus.
Safety equipment and appliances: principles of standardizing microclimate of individual gas-defense devices, USSR study, 25331
safety appliance standards and power brake requirements, U.S., 30617
Safety helmets, *see* Helmets.
Safety in the air, *see* Safety of life.
Safety of life:
ability of elementary and secondary school children to sense oncoming car velocity, 15625
air safety—
aerospace safety (periodical), 17959
naval aviation safety review, 18004
air taxi safety study, 25647
aircraft piracy amendments, reports, 15845, 17186
aircrew protection requirements non-nuclear weapons threat, military standard, 20065, 23111
alcohol and alcohol safety, curriculum manual—
elementary level, 22042
teacher's activities guide, 22043
junior high level, 22044
teacher's activities guide, 22045
senior high level, 22046
teacher's activities guide, 22047
alcohol safety action projects, first year evaluation preview, 16376
artificial islands and fixed structures, rules and regulations, 15610
atomic energy, application of safeguards by IAEA to United States-Republic of Korea cooperation agreement, 32580
auto safety oversight, hearings, 21327
card-gap and projectile impact sensitivity measurements, compilation, 30418
checklist guide for nuclear emergency operations planning, 30082
coal mine health and safety research program, 31594
coal mine safety inspection manual for underground mines, 20535
Consumer product safety act—
law, 19499
reports, 16986, 19719
Consumer safety act, text and description of committee prints of act, 17246-247
consumer safety series, position classification standard, 16821
convention for safety of life at sea, amendments, 17125, 31045, 31050
message from the President, 17122
criteria for recommended standard occupational exposure, 25583-584, 26735-738, 27764-765
demonstration of safety plugging of oil wells penetrating Appalachian coal mines, 16338
design guide for home safety, 21763
developing an injury and damage reduction program in municipal police department, guidelines, 29149
driver, traffic safety magazine for military driver, 18236

Safety of life—Continued
electromagnetic radiation safety, USSR study, 26573
FAA safety regulations, hearings, 23045
farm worker occupational safety and health, oversight, hearing, 21215
Federal coal mine health and safety act—
Federal coal mine health program in 1971, annual health report of act, 21763
implementation, hearing, 19996
moving forward in coal mine health and safety, report of Secretary of Interior on administration of act, 17563
1972 changes, 19992
Federal metal and nonmetallic mine safety act, oversight, hearings, 24850
Federal motor vehicle safety standards and regulations with amendments and interpretations, 17757, 18322
Federal railroad safety act, amend, report, 28506
Federal safety standards and regulations with amendments and interpretations, supplement, 16377
final report of major mine fire disaster, Sunshine Mine, Sunshine Mining Company, Kellogg, Shoshone County, Idaho, 27695
Fire research and safety act—
appropriations to carry out, authorize, law, 16868
hearings, 19796
fire safety in highrise buildings for the elderly, hearings, 28510
fire safety in HUD-assisted multifamily housing projects, 32376
first time safe—
applied to air transportation (address), 20715
for submersibles (address), 25645
frequency of anti-collision observing responses by solo pilots as function of traffic density, ATC traffic warnings, and competing behavior, 30788
gas pipeline safety, Federal-State relations, 31884
general industry, guide for applying safety and health standards, 20730
Hawaii, Public interest protection act, hearing, 27310
hazard evasion program for mine planning, 16339
hazard from engines rebreathing exhaust in confined space, 30434
highway safety—
act, 1971 report on activities—
departmental edition, 16379-380
document edition, 15670
design and operating practices, handbook, 25145
design and operations, operational deficiencies, hearings, 21286
film evaluations, summary, 20663
literature, abstract journal, announcement, 17996
1973 legislation, appropriations, authorize, hearings, 28428
horse safety guidelines, 25831
HUD-assisted housing maintenance handbook on safety, 32375
hunter safety programs, tax on bows and arrows to provide funds—
law, 19485
reports, 19669, 19937
hygienic problems of effect of microwave electromagnetic fields on body, 16194
in-flight safety of passengers and flight attendants aboard air carrier aircraft, special study, 29411
International Technical Conference on Experimental Safety Vehicles, reports, 22052, 30498
it's good food, keep it safe, 30714
jet blast hazards, special study, 30566
job safety & health (periodical), 18525

Safety of life—Continued

look at it this way, it's a cutting machine, we want you to know what we know about power mower safety (poster), 21594
 mandatory safety standards, underground coal mines, 25427
 mech, naval aviation maintenance safety (periodical), 18615
 more concerted effort needed by Federal government on occupational safety and health programs for Federal employees, GAO report, 25235
 MORT, management oversight and risk tree, 24195
 motor carrier safety regulations, 23665
 motor vehicle safety defect campaigns reported to National Highway Traffic Safety Administration, 18655
 moving forward in coal mine health and safety, report of Secretary of Interior on administration of Federal coal mine health and Safety act, 17563
 National Institutes of Health, radiation safety guide, 32500
 National traffic and motor vehicle safety act, amend—
 hearings, 28525
 law, 19477
 report, 28463
 1971 report on activities—
 departmental edition, 16379, 16381
 documental edition, 15670
 1972 authorization, hearing, 26259
 natural gas pipeline safety regulations, amend—
 law, 16903
 report, 19617
 Navy lifeline, naval safety journal (periodical), 25655
 NEISS news, product safety, 23258
 nonoperating motor vehicle safe study, special study, 30572
 nuclear safety, technical progress review, 18715
 occupational safety and health—
 act—
 implementation, hearings, 21369
 oversight and proposed amendments, hearings, 23013
 text, 24867
 maritime standards and interpretations, 30599
 other regulations and procedures, 27860
 31762
 on guard, Bureau of Motor Carrier Safety bulletin, 18729
 pesticides, insecticides, they kill almost anything that crawls, we want you to know what we know about poison control (poster), 21596
 police traffic services—
 basic training program—
 course guide, 22049
 instructor's lesson plans, 22050
 student study guide, 22051
 supervisory level training program—
 course guide, 27762
 instructor's lesson plans, 29347
 student study guide, 30496
 pool drownings and their prevention, 29042
 Ports and waterways safety act, law, 16872
 procedures for evaluating hazards to coal mining operations from hydrocarbon reservoirs, 29206
 progress in highway safety (address), 22150
 promotion of safety on Great Lakes by means of radio, agreement with Canada, 31046
 proposed highway safety program standards on pupil transportation safety and accident investigation and reporting, hearings, 17080
 public view of rail safety (address), 22151
 pupil transportation safety program, 30497

Safety of life—Continued

Radiation control for health and safety act, administration, annual report, 32026
 radiation safety and protection in industrial applications, symposium proceedings, 22206
 rail-highway grade crossing safety, improve with Federal aid, report, 17141
 rail rapid transit safety, special study, 16426
 railroad-highway safety, recommendations for solving problem, report to Congress, 32802
 railroad safety and hazardous materials control, amend, report, 29851
 railway operating and safety rules, technical manual, 30756
 reclamation safety news (periodical), 18849
 regulations for administration and enforcement of radiation control for Health and safety act, 22207
 reviews to insure safety of nuclear operations, 15519
 Safe drinking water act—
 hearings, 15754, 27222
 reports, 19862, 29956
 safer motor vehicles, more effective efforts needed to insure compliance with Federal Safety Standards, National Highway Traffic Safety Administration, Department of Transportation, GAO report, 28992
 safety—
 and health standards for general industry, 16455
 and performance tests for qualification of explosives, 20728
 and special actions, FCC, reports, 18302
 and special radio services, FCC applications and actions, reports, 18302
 digest, AMC pamphlet, 18882
 in marketplace, program for improvement of consumer product safety, 29327
 occupational health and fire protection bulletin, VA, 18883
 of dams, national program, hearing, 21348
 of life at sea convention amendments, hearing, 19972
 practices for lifeboatmen, able seamen, and qualified members of engine department, manual, 27657
 precautions for shore activities, Navy Department, 26789
 progress report, 1970, Indian Affairs Bureau, 21811
 recommendations, 18884
 reliability, maintainability and quality provisions for space shuttle program, 23692
 review, Navy Department (periodical), 18885
 road checks, motor carriers of property, 31506
 standards (periodical), 18886
 scientific and industrial applications of nuclear explosions-safety problems, 16667
 seal of safety, Coast Guard Auxiliary courtesy 1973 examination decal for motorboats, 25957
 '73 farms safety campaign, Mr. Farmer, don't get caught up in your work, 22352
 shocking, isn't it? we want you to know what we know about electrical safety (poster), 21598
 simulation as technique in power tool safety research and education, 15626
 small business and Occupational safety and health act, report, 16976
 some kids will try anything once, we want you to know what we know about protecting children from adult medicine (poster), 23260
 space benefits, safety, 21993

INDEX 1973

Safety of life—Continued

- spaceflight safety, USSR study, 26572
- standard general requirements for safe design and operation of pressurized missile and space systems, military standard, 20076
- subsidence due to underground mining, theory and practices in predicting surface deformation, 25414
- suggestions for increasing use of vehicle restraint systems, 22054
- summary of experience with use of isotopic correlation safeguard techniques, 22470
- suppression of unlawful acts against safety of civil aviation (sabotage) convention between U.S. and other governments, 27928
- surface ship & submarine safety review, fathom (periodical), 18286
- systematic approach to pipeline safety, special study, 31747
- systems for collision avoidance (address), 22152
- teacher's manual for your chance to live, 26299
- topical meeting on water-reactor safety papers, 29669
- toy safety, 20283
- Traffic and motor vehicle safety act, amend, hearing, 23018
- train accidents attributed to negligence of employees, special study report, 30574
- training requirements of occupational safety and health standards, 26790
- United States Postal Service employee safety program, 32088
- what every employer needs to know about OSHA recordkeeping, 26616
- winter storm safety rules, 16429
- workplace safety, basic responsibility (speech), 29156
- you can't see what's wrong with grilling indoors, you can't see carbon monoxide, we want you to know what we know about carbon monoxide poisoning (poster), 23261
- zero in on safety campaign slips, trips, falls, 29084

Safety officers:

- Federal minimum death and dismemberment benefit to public safety officers or their surviving dependents, reports, 21177, 21184
- public safety officers—
 - group insurance act, report, 17157
 - group life insurance, authorize, report, 24904
 - survivors' benefits, provide, report, 24903

Safety rest areas, *see* Roadside rest areas.

Safford Valley, Ariz., channel changes of Gila River, 23361

Sagamore Hill National Historic Site, Sagamore Hill and Roosevelt family, historic resource study, 27814

Sagebrush, sagebrush control with herbicide has little effect on elk calving behavior, 32331

Sagebrush control with herbicide has little effect on elk calving behavior, 32331

Sager, Richard A., Galveston Bay hurricane surge study, 27444-445

Saginaw County Democratic Committee, annual report, 24390

Saguaro National Monument:

- general information, 16416
- wilderness recommendation, 23840

Sahara:

- geologic effects of underground nuclear explosions in Sahara granite massif, research, 21023-24
- significance of ground-water chemistry in performance of North Sahara tube wells in Algeria and Tunisia, 21742

Sahara—Continued

- underground nuclear explosions—
 - French, experimental conditions, 16670
 - research on geologic effects of explosions in granite massif, 16666
 - study of mineralogical transformations, results from explosion site, 16672
- Sahel, Africa, drought crisis, hearing, 31021
- Sailing directions:
 - Africa, southwest coast, 31200
 - Australia—
 - north and west coasts, 16437
 - south coast, 26345
 - British Columbia, 28628
 - England and Wales, west coasts, 25031
 - Japan, 28630, 32182
 - Korea and China coast, 28631
 - Mexico and Central America, west coasts, 28627
 - New Guinea, 26344
 - North Pacific Ocean, 28626, 31201
 - Pacific Islands, 27418A
 - Philippine Islands, 16438
 - Red Sea and Gulf of Aden, 27418
 - Scotland, west coast, 23120
 - Union of Soviet Socialist Republics—
 - east coast, 28629
 - northern, 16436

Sailors:

- maritime manpower report, seafaring, longshore and shipyard employment, 16243
- safety practices for lifeboatmen, able seamen, and qualified members of engine department, manual, 27057
- Soldiers' and sailors' civil relief act—
 - amend, report, 19888
 - and amendments, text, 22998
- vocational training and employment problems arising from technical developments on board ship, ILO recommendations, 30951

Sailplanes, *see* Gliders (aircraft).

Sainsbury, C. L., integrated system of geologic mapping and geochemical sampling by light aircraft, 26491

St. Augustine, Fla.:

- British Garrison of St. Augustine, 1763-84, historic resource study, 27811
- British siege in 1740, historic resource study, 27812

St. Charles County, Mo.:

- Dardenne and Belleau Creek—
 - flood plain information, 28707
 - floods, 28761

St. Clair County, Serotkin for Congress Committee, *see* Serotkin for Congress Committee of St. Clair County.

St. Clair River:

- effects of submerged sills in St. Clair River, hydraulic model investigation, 17409
- investigation of mercury in St. Clair River-Lake Erie systems, 16574

St. Croix, Virgin Islands, ground water in central St. Croix, 23344

St. Croix County, Democratic Party, *see* Democratic Party of St. Croix County.

St. Croix River:

- designate segment as part of national wild and scenic rivers system—
 - hearing, 19976
 - law, 19487
 - report, 19712

St. Denis, Manley, program TRANSHIP, computer program for design of midship section of transversely-framed dry cargo ship, 22214

St. Edward, Nebr., special flood hazard information report, Beaver Creek, 28769

Saint Elias Mountain, under Mount Saint Elias, history and culture of Yakutat Tlingit, 20760

St. George, R. A., protecting log cabins, rustic work, and unseasoned wood from injurious insects in Eastern United States, 24127

St. George, Utah :
 Virgin River and Fort Pierce, Wash.—
 flood plain information, 32222
 floods, 32232
 St. John River, basin, committee on water
 quality, agreement with Canada, 22270
 St. Johnsbury, Vt. :
 Passumpsic and Moose Rivers—
 flood plain information, 23170
 floods, 25088
 St. Joseph, Mo. :
 Whitehead Creek—
 flood plain information, 21458
 floods, 21467
 St. Lawrence Island, preliminary geologic
 investigations of western St. Lawrence Is-
 land, Alaska, 26503
 St. Lawrence River and Valley :
 basin, surface water quality, 31404
 St. Lawrence Seaway, tariff of tolls, agree-
 ment with Canada, 17886
 Seaway, traffic report, 26816
 St. Lawrence River basin, *see* St. Lawrence
 River and Valley.
 St. Lawrence Seaway, *see* St. Lawrence River
 and Valley.
 St. Lawrence Seaway Authority, traffic re-
 port of St. Lawrence Seaway, 26816
 St. Lawrence Seaway Development Corpo-
 ration :
 annual report, 1971—
 departmental edition, 17822
 document edition, 15669
 financial statement, 24801
 audit, GAO reports, 21688, 30252
 traffic report of St. Lawrence Seaway,
 26816
 St. Louis, Mo. :
 census of housing, 1970, components of
 inventory change, 29692
 census of population and housing, 1970,
 census tracts, 19222
 Detoxification and Diagnostic Evaluation
 Center, general information, 29150
 harbor, shoaling conditions, Mississippi
 River, hydraulic model investigation,
 20177
 Mississippi River water pollution investi-
 gation in metropolitan area, 17802
 opportunities to improve model cities pro-
 gram in Kansas City, Mo., and Saint
 Louis, Mo., and New Orleans, La., GAO
 report, 32354
 pollution of interstate waters of Missis-
 sippi River in St. Louis metropolitan
 area, 16465
 preliminary transport wind and mixing
 height climatology, 30530
 St. Lucie County, Fla. :
 flood plain information—
 coastal areas, 23161
 North Fork St. Lucie River, 25079
 floods—
 coastline, 25089
 North Fork, St. Lucie River, 25087
 St. Mary's County Citizens for Mills, annual
 report, 24543
 St. Mary's County Republican Central Com-
 mittee, annual report, 22934
 St. Marys River and Valley, Satilla-St. Mary
 basins, plan for development of land and
 water resources of southeast river basins,
 17924
 St. Paul, Minn. :
 area wage survey, 27680
 transportation controls to reduce motor
 vehicle emissions, Minneapolis and St.
 Paul, Minn., 27487
 St. Petersburg, Fla., area wage survey, 21911
 St. Vincent, *see* Windward Islands.
 St. Vrain Creek :
 flood plain information—
 lower, 17386
 upper, 21457
 Sala, Anna Kolbiarz, *see* Kolbiarz-Sala, Anna.

Salad dressing :
 mayonnaise, salad dressing and related
 products, 15972
 current industrial reports, 16775, 30846
 Salaries :
 allotments of salary to savings accounts
 and disposition of net pay checks, 21774
 civil service classification and salary laws,
 compilation, 21142-143
 Civil Service Commission salary table 58,
 executive branch of Government, 27054
 comparison of Federal salaries in statu-
 tory pay systems to salaries in private
 enterprise, message from President,
 16943
 current salary schedules of Federal offi-
 cers and employees together with history
 of salary and retirement annuity adjust-
 ments, 21280-281
 employee compensation in private nonfarm
 economy, 29165
 supplemental to President's report,
 24871
 Federal employees—
 comparability adjustments ordered for
 Federal statutory pay system in Jan.
 1973—
 report, 24810
 Federal salary act, amend with respect to
 certain executive, legislative and
 judicial salaries—
 hearings, 30066, 31034
 reports, 29973, 32060
 Government employees, bimonthly statis-
 tics, 17952
 Government officials and employees, Fed-
 eral personnel manual supplement, 18339
 how to keep time and pay records under
 Fair labor standards act, 30682
 improvements needed in survey of non-
 Federal salaries used as basis for ad-
 justing Federal white-collar salaries,
 GAO report, 28994
 National Airport, Washington, D.C. and
 Dulles International Airport police, re-
 vise pay, structure, report, 19689
 national survey of—
 compensation paid scientists and engi-
 neers engaged in research and devel-
 opment activities, report, 21030
 professional, administrative, technical,
 and clerical pay, 21909
 operation of law permitting waiver of
 erroneous payments of pay, GAO re-
 port, 16099
 reclassification and pay of U.S. deputy
 marshals, hearing, 17075
 revised pay structure of nonsupervisory
 deputy U.S. marshals, report, 19688
 salary increases for District of Columbia
 police and firemen—
 law, 16910
 report, 16975
 Selected Service System local boards and
 appeals boards employees, increase rates,
 hearing, 31035
 teachers, District of Columbia, salary—
 act amendments—
 hearing, 21331
 report, 19671
 increase—
 hearings, 15726
 law, 19448
 report, 19928
 U.S. magistrates, remove statutory ceiling
 from salaries—
 law, 16919
 report, 15842
see also Wages.
 Salcha, Alaska, Salcha-Big Delta Area soil
 survey report, 31824
 Salem, Ill., railroad accident report, 30569
 Salem, Va., City of Salem Republican Com-
 mittee, annual report, 22887
 Salem Fork, fluvial sediment in Salem Fork
 watershed, West Virginia, 16113

INDEX 1973

Sales:

- census of business, 1967, wholesale trade, sales by class of customer, 16717
- department store sales, selected areas, special current business reports, 18920
- model state method of sale of commodities regulation, 23703
- monthly wholesale trade, current business reports, 18188
- sales of firm electric power for resale, 1967-71, by private electric utilities by Federal projects, by municipalities, 25153
- sales potential and market shares, 16473
- selling to AEC, 16677
- tax information—
 - credit sales by dealers in personal property, 20393
 - installment and deferred payment sales, 20401
 - sales and exchanges of assets, 20408
 - sales or other disposition of—
 - business or business interest, 26544
 - depreciable property, 25304
 - selling your home, 20422
- U.S. Government purchasing and sales directory, 32551
- see also* Military supplies—Surplus property—*also* names of commodities, etc.
- Sales tax, State and local general sales tax deductions on motor vehicles, authorize, report, 19938
- Salesmen and salesmanship:
 - explaining forest product selling behavior of private woodland owners, 27538
 - Federal unemployment tax in case of insurance agents remunerated solely by commissions—
 - report, 19935
 - amendments, 21296
 - how to sell to U.S. Department of Commerce, 29818
 - selling in—
 - Algeria, 27066
 - Belgium, 21102
 - Greece, 31208
 - Japan, 15617
 - Italy, 30129
 - Lebanon, 16832
 - Liberia, 15614
 - Netherlands, 16835
 - Norway, 15616
 - Spain, 31205
 - United Kingdom, 19296
 - Yugoslavia, 30128
 - selling to U.S. Government, 31795
 - training commercial salesmen, 20757
- Salina, Kans.:
 - flood plain information—
 - Mulberry Creek, Dry Creek, 20120
 - Smoky Hill River, Saline River, Dry Creek, 20129
 - floods—
 - Mulberry Creek, Dry Creek, 17404
 - Smoky Hill River, Saline River, Dry Creek, 20143
- Saline River:
 - flood plain information, 20129
 - floods, 20143
- Saline water, *see* Sea water—Water.
- Saline Water Office:
 - catalog of research projects, 31494
 - guides for submission of engineering and development proposals, 21813
 - orientation and briefing on programs for House Members, hearing, 27217
 - press releases, 18808
 - saline water conversion, summary report, 26534
- Salinity:
 - brackish water clam *Rangia cuneata* as indicator of ecological effects of salinity changes in coastal waters, 30164
 - Colorado River salinity, agreement with Mexico, 20795, 27924
 - evaluation of canal lining for salinity control in Grand Valley, 20193

Salinity—Continued

- Galveston Bay hurricane surge study, effects of proposed barriers on tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, hydraulic model investigation, 27445
- prediction modeling for salinity control in irrigation return flows, state-of-the-art review, 26416
- processing EASTROPAC STD data and construction of vertical temperature and salinity sections by computer, 22100
- salinity control, interim report for water supply and water quality control study, Brazos River basin, Tex., 28840
- salinity on optical extinction of sea ice at 6328 Å, effect, 31235
- salinity problems in arid lands irrigation, literature review and selected bibliography, 23476
- Salinometers, model 6230 portable laboratory salinometer, 23817
- Salisbury, N.C.:
 - Grants Creek, Town Creek—
 - flood plain information, 32213
 - floods, 32239
- Sallas, Gustav A., labor law and practice in Colombia, 26615
- Sallee, Kenneth H., soil survey of Lane County, Kans., 23983
- Salmon:
 - alteration tests of Abernathy salmon diet, 17849
 - fisheries—
 - and small vessels, hearings, 19790
 - conservation of Atlantic salmon, agreement with Denmark, 17881
 - off United States coast, agreement with Japan, 25761
 - hydrology of 4 streams in western Washington as related to several Pacific salmon species, 23349
 - Sockeye salmon or pink salmon fishery act, amend—
 - law, 19434
 - reports, 17018, 17208
- Salmon Falls division, *see* Upper Snake River project
- Salmon-Trinity Alps Primitive Area, Calif., mineral resources, 20346
- Salmonella:
 - FDA task force, recommendations to Commissioner for control of foodborne human salmonellosis, 30243
 - surveillance, Center for Disease Control, report, 18060
 - we want you to know what we know about, salmonella and food poisoning, 21601
- Salmonellosis, recommendations to Commissioner for control of foodborne human salmonellosis, 30243
- Salmonidae, key to field identification of anadromous juvenile salmonids Pacific Northwest, 20696
- Salomon, Michael, J., canoeist suggestions for stream management in Manistee National Forest of Michigan, 17521
- Salsbery, David L., accounting guidelines for mental health centers and related facilities, 16391
- Salt:
 - magnetic ordering in lithium-transition metal oxides with ordered rocksalt structures, 20971
 - measurement of salt-wedge excursion distance in Duwamish River estuary, Seattle, Wash., by means of dissolved-oxygen gradient, 20358
 - minerals yearbook chapter, 25483
 - origin and management of salt springs and seeps in upper Brazos River basin, Tex. (series), 30283
 - recondition and reuse of organically contaminated waste sodium chloride brines, 30182
 - water pollution and associated effects from street salting, 30192
 - see also* Salts.

- SALT (Strategic Arms Limitation Talks), *see* Disarmament.
- Salt Fork of Brazos River, *see* Brazos River.
- Salt Lake City, Utah:
area wage survey, 26624
transportation controls to reduce motor vehicle emissions, 29644
- Salt River:
basin, Kentucky, engineers report—
departmental edition, 20161
document edition, 19571
water supply outlook and snow surveys, 19056
see also South Fork Salt River.
- Saltman, R. G., heuristic cost optimization of Federal Telpak Network, 29326
- Salton Sea, area, lower Colorado River, water resources (series), 26498
- Salts:
molten salt electrowinning of magnesium-titanium alloys, 23660
quinary reciprocal salt system Na.K.Mg. Ca/Cl.SO₄, review of literature with new data, 17537
thermodynamics of molten mixtures of lithium chloride-potassium chloride at 640° C, 22407
see also Salt.
- Salute to Bill Young, political committee, annual report, 22961
- Salvage:
marine salvage and hull repair, Army technical manual, 19172
resource recovery from raw urban refuse, 29235
salvage industry, what it is, how it works, 28842
salvage markets for materials in solid wastes, 16033
- Salvatore, Sento, ability of elementary and secondary school children to sense oncoming car velocity, 15625
- SAM, *see* Society Against Mlkva (SAM).
- Samarium, preparation of samarium-cobalt magnets, 31595
- Samoa, *see* American Samoa.
- Samplers, *see* Sampling devices.
- Samples, mailing of drug samples to Government officials for analysis, report, 16964
- Sampling:
attribute sampling inspection procedure based on hypergeometric distribution, 15526
warehouse-man's sample-lot inspection service, questions and answers, 29602
see also names of substances or objects sampled.
- Sampling devices:
assessment of automatic sewer flow samplers, 31285
comparison of respirable dust concentrations measured with MRE and modified personal gravimetric sampling equipment, 30442
inexpensive water sampler, 23287
- Sampling (statistics):
approximate tests of independence of contingency tables from complex stratified cluster samples, 27743
estimating number of narcotic addicts, 20581
forest statistics for Alabama counties, 28974
prediction approach to finite population sampling theory, application to hospital discharge survey, 29329
random sample egg production tests, U.S. and Canada 1972 report, 27984
- Sampson, Arthur F., nomination, hearing, 31142
- San Andreas fault:
gravity, magnetics, and geology of San Andreas fault area near Cholame, Calif., 26500
San Andreas fault—Continued
stratigraphy of southern coast ranges near San Andreas fault from Cholmae to Maricopa, Calif., 27569
San Antonio River and Valley:
Edwards Underground Reservoir, engineers report—
departmental editions, 26383, 27441
document editions, 26043, 27106
San Bernardino, Calif., area wage survey, 30389
San Carlos, Ariz., soil-moisture and energy relationships associated with riparian vegetation near San Carlos, Ariz., 16105
San Carlos Mineral Strip, purchase property located within, hearing, 29919
San Clemente, Calif., security of the President, Federal expenditures on his properties, hearings, 29893
San Diego, Calif., area wage survey, 27672
San Diego County, Calif.:
flood plain information, Escondido Creek, 21446
floods on Agua Hedionda Creek, Pacific Ocean to Buena, San Diego County, Calif., 32237
San Diego Creek, flood plain information, 20'27
San Emigdio Mountains. Lower and middle tertiary stratigraphic units of San Emigdio and western Tehachapi Mountains, Calif., 29004
San Fernando, Calif.:
comparison of results of dynamic seismic analyses of 2 identical structures located on 2 different sites, based on site seismograms from San Fernando earthquake, 22471
recorded and processed seismic data from 1971 San Fernando earthquake and aftershocks by Nevada Special Projects Party, 17776
San Francisco, Calif.:
aircraft accident report, 16421, 27835
APEEL array, site study, 22096
census of housing, 1970, components of inventory change, 28106
log export restrictions, hearings, 28521
San Francisco Bay:
benthic faunal surveys in San Francisco Bay, review, 29011
earthquake losses in area, data and analysis, 28847
water temperatures of California streams, San Francisco Bay subregion, 23395
San Francisco Cable Car Centennial, commemorative medal, authorize, hearings, 28396
San Joaquin River and Valley:
bioengineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21520-522, 25126, 27498
effects of agricultural pesticides in aquatic environment, irrigated croplands, San Joaquin Valley, 17932
San Jose, Calif., area wage survey, 31559
San Juan, P.R.:
census of housing, 1970, metropolitan housing characteristics, 25898
census of population and housing, 1970, census tracts, 16745
San Juan-Chama Project, Azotea Tunnel instrumentation program, New Mexico, 32541
San Juan Island National Historical Park:
general information, 31734
historic resource study, 27815
San Juan Mountains:
arsenic indicator element for mineralized volcanic pipes in Red Mountain area, western San Juan Mountains, Colo., 23330
geochemical characteristics of mineralized breccia pipes in Red Mountain district, San Juan Mountains, Colo., 27558

INDEX 1973

- San Luis Obispo Republican Central Committee, annual report, 22703
 San Luis unit, *see* Central Valley project.
 San Luis Valley project:
 Closed Basin division, construct, operate, and maintain—
 law, 19444
 reports, 15712, 15820, 19643
 San Miguel County Republican Party, annual report, 24703
 San Ysidro, Calif., customs inspection station, personnel problems, report, 26092
 Sanchez, Anthony M., Citizens Committee to Elect, annual report, 22959
 Sand:
 Atlantic continental shelf and slope of United States sand-size fraction of bottom sediments, New Jersey to Nova Scotia, 21719
 injecting highly treated sewage-plant effluent into deep sand aquifer at Bay Park, N.Y., preliminary results, 17540
 minerals yearbook chapter, 25484
 recovery of feldspar and glass sand from South Carolina waste granite fines, 16335
 site preparation—
 and reforestation of droughty, acid sands, 23238
 for Jack pine on grayling sands, 16078
 Sand Creek:
 Visalia, Calif.—
 flood plain information, 21454
 floods, 21472
 Sander, Ivan L., size of oak advance reproduction, key to growth following harvest cutting, 21670
 Sanders, Herman O., toxicity of some insecticides to 4 species of malacostracan crustaceans, 26840
 Sandhill crane, *see* Cranes (birds).
 Sandman, Charles W., Citizens with, *see* Citizens with Sandman.
 Sando, Rodney W.:
 fire weather and behavior of Little Sioux fire, 16084
 method of evaluating crown fuels in forest stands, 25228
 Sandoski, Dorothy A., selected urban storm water runoff abstracts, 21502
 Sandstone:
 geochemistry of lower Eocene sandstones in Rocky Mountain region, 25259
 Project Trinidad, explosive excavation tests in sandstone and shale, 27443
 stratigraphic terminology of Dakota sandstone and Mancos shale, west-central New Mexico, 31394
 Sandusky County Republican Central Committee, annual report, 22739
 Sandwich construction, design parameters for torsion of sandwich strips having trapezoidal, rectangular, and triangular cross sections, 26475
 Sandy Hook Bay, Monmouth County, N.J. tidal flood plain information, 32219
 Sandy Hook to Cape Henry, coast pilot, 16406
 Sangamon County Republican Central Committee, annual report, 22876
 Sanger, Calif.:
 Kings River—
 flood plain information, 20118
 floods, 20145
 Sanilac County Republicans Committee, annual report, 22767
 Sanitary engineering:
 setting up, development, and basic results of work done by Sanitary-Epidemiological Service of RSFSR during last 50 years, 16196
 water supply and sanitary waste treatment facilities for safety rest areas, guidelines for review of plans, 32281
 Sanitary fills, sanitary landfills, bibliography, 16146
 Sanitation:
 50th anniversary of sanitary and epidemiological service, USSR study, 23553
 marine sanitation system demonstration, 30186
 processed fruits and vegetables, potentially adulterated products need to be better controlled, sanitation in some plants needs improvement, GAO report, 23324
 sanitation handbook of meat and poultry inspection program, 15499
 sanitary standards for milk evaporating and drying plants, military standard, 20056
 sanitary survey of drinking water systems on Federal water resource developments, pilot study, 31899
 shellfish sanitation, agreement with Republic of Korea, 25756
 work of sanitary service on natural conservation, USSR study, 25333
 Sanks, Robert L., ion exchange color and mineral removal from kraft bleach wastes, 31283
 Sanna, Robert S., 31 group response matrices for multisphere neutron spectrometer over energy range thermal to 400 MeV, 28076
 Sano, Emily, children and youth projects, comprehensive health care in low-income areas, 20521
 Sansome, Wallace T., domestic shipping and maritime policy, 20517
 Santa Ana, Calif., area wage survey, 16224, 26628
 Santa Ana National Wildlife Refuge:
 general information, 31828
 mammals, 31830
 Santa Barbara, Calif., northern, soil survey of area, 16486
 Santa Barbara Channel, MV Triple Crown sinking, loss of life, marine casualty report, 30564
 Santa Clara County, Calif., flood plain information, Guadalupe River, 23165
 Santa Clara County AFL-CIO Committee on Political Education, annual report, 24576
 Santa Clara Republican Women, Federated, annual report, 24620
 Santa Clara River:
 flood plain information, vicinity of Fillmore, Calif., 20128
 floods, vicinity of Fillmore, Calif., 20152
 Santa Cruz County, Ariz., radiometric ages of igneous rocks, 27557
 Santa Fe County, N. Mex., water resources, proposal for study, 23368
 Santa Fe County, Republican Party, *see* Republican Party of Santa Fe County.
 Santa Fe National Forest:
 boundaries, modify, law, 19399
 exchange lands within for private lands within Piedra Lumbre Grant, N. Mex., authorize—
 law, 16925
 report, 17203
 Santa Monica Bay, California, beach widening by perched beach concept, hydraulic model investigation, 31264
 Santa Rita Mountains:
 Cenozoic rocks, southeast of Tucson, Ariz., 21732
 geochemical reconnaissance of Santa Rita Mountains, southeast of Tucson, Ariz., 27554
 structural geology of Santa Rita Mountains, southeast of Tucson, Ariz., 30277
 Santa Rosa County, Fla., flood plain information, 21449
 Santa Rosa Sound, flood plain information, 21449
 Santarelli, Donald E., addresses, Aug. 29, 1973, 32409
 Sap, relationship between sap-flow rate and sap volume in dormant sugar maples, 23284

Sapstreak, sapstreak diseases of sugar maple found in Wisconsin for first time, 17513
 Sapulpa, Okla., Polecat and Rock Creeks, special flood hazard information, 25092
 SAR, *see* Search and rescue operations.
 Saraland, Ala., special flood hazard report, 20163
 Sarasota County, Fla.:
 flood plain information, 32220
 coastal areas, 32210
 Saratoga County Republican Committee, annual report, 24719
 Sartor, James D.:
 oil/sorbent harvesting system for use on vessels of opportunity, 27470
 water pollution aspects of street surface contaminants, 20203
 Sartz, Richard S., growth and hydrologic influence of European larch and red pine 10 years after planting, 25219
 Sasebo, Japan, summary of synoptic meteorological observations, Japanese and Korean coastal marine areas, 23888
 Sassaman, Robert W.:
 economics of thinning stagnated ponderosa pine in sapling stands in pine-grass areas of central Washington, 25233
 user's manual for computer program for simulating intensively managed allowable cut, 25213
 Sateen, fabric design, engineering design handbook, 19157
 Satellite triangulations, *see* Triangulation.
 Satellites:
 antennas and transionospheric propagation as related to ELF/VLF downlink satellite communications, conference proceedings, 27844
 BOMEX atlas of satellite cloud photographs, 20232
 catalog of meteorological satellite data-ITOS 1 television cloud photography, 32245
 telescope catalog of ultraviolet stellar observations, 5068 objects measured by Smithsonian experiment aboard Orbiting Astronomical Observatory (OAO-2), 27878
 communications, FCC rules and regulations, 18310
 extended torsional tests of interlocked bistem satellite boom, 32476
 furnishing of launching and associated services, agreement with Great Britain, 26870
 geostationary satellite position and attitude determination using picture landmarks, 30527
 ground control requirements for precision processing of ERTS images, 17529
 Interkosmos satellites study cosmic rays, USSR study, 21846
 international telecommunications satellite organization (INTELSAT), agreement, 25763
 ionospheric scintillation predictions for GOES, 25626
 juridical problems in use of orbits for artificial earth satellites, USSR study, 31322
 meteorological satellite data—
 application in analysis and forecasting, supplement, 29382
 ITOS 1 television cloud photography catalog, 20181
 modeling effects of clouds and rain upon satellite-to-ground system performance, 25967
 NRL OSO-4 Bragg crystal spectrometer instrument study of solar flare plasmas, 16450
 oceanographic observation of New York Bight from ERTS-1, 27802
 Orbita-2 satellite communications station, USSR study, 30367
 plasmasphere sounder satellite, 20693

Satellites—Continued
 proposed calibration target for visible channel of satellite radiometer, 22099
 radiation balance of earth-atmosphere system from Nimbus 3 radiation measurements, 27715
 satellite-derived low and cirrus level winds with conventional wind observations, 30535
 satellite situation report (periodical), 18887
 scientific results from Orbiting Astronomical Observatory (OAO-2), 17705
 SOLRAD 10 satellite, Explorer 44, 22164
 stability of multi-station communications system, USSR study, 30369
 symposium on significant results obtained from Earth Resources Technology Satellite-1—
 summary of results, 31664-664A
 technical presentations, 31618
 technical and economic trade-offs for geostationary orbit communications resources, 28285
 techniques for analysis and forecasting of tropical cyclone intensities from satellite pictures, 17773
 techniques used in display of sequential images received from geostationary satellites, survey, 22417
 topside ionosphere during sunrise at mid-latitudes, 22406
 use of satellites in coastal engineering, 23149
 verification of operational SIRS B temperature retrievals, 23506, 25627
 Zvenigorod experimental station, optical observations of artificial earth satellites, USSR study, 30329
 see also Space stations.
 Satilla River and Valley, Satilla-St. Marys basins, plan for development of land and water resources of southeast river basins, 17924
 Saturation:
 electroencephalographic changes during saturation excursion dives to simulated seawater depth of 1000 feet, 25404
 iterative method for saturation adjustment, 22414
 Saucier, Joseph R., American woods, American chestnut, 25200
 Saudi Arabia:
 background notes, 31840
 economic trends and their implications for United States, 17570, 17583, 29103
 labor laws and practice, 29160
 military assistance, agreement, 20815
 mineral industry, minerals yearbook chapter, 20564
 privileges and immunities for personnel under F-5 program, agreement, 17900
 television system and radio facility, agreement, 25758
 Sauer, Richard L., Apollo experience report, potable water system, 29293
 Sauk Indians, Sacs and Foxes, general information, 31474
 Saunders, Robert J., spatial concentration of industry in Appalachia, analysis of potential for import substitution, 30747
 Savanick, George A., adhesion at crystalline interfaces in rock, 26660
 Savannah, Ga., historic preservation plan for central area General Neighborhood Renewal Area, 29050
 Savannah, Ga. to Apalachicola, Fla., marine weather services chart, 29428
 Savannah River and Valley:
 lower, and its tributaries, South Carolina and Georgia, conference on pollution, proceedings, 26800
 Savannah basin, plan for development of land and water resources of southeast river basins, 17924
 Savannah River ABC project, Savannah River Plant deer herd, status, 16664

INDEX 1973

- Savings accounts, *see* Banks and banking.
- Savings and loan associations:
conversion prospects for 1973 (address), 21542
economic trends and savings and loan industry (address), 21543
Federal chartered or State mutual converting to stock institutions ineligible for insurance under title 4 of National housing act, hearings, 27193
future is now (address), 21544
savings and home financing, 1971, source book, 28863
savings and loan associations and national economic growth (address), 21541
savings and loan industry, challenges for 1973 (address), 21545
selected balance sheet data, all operating savings and loan associations, 17990
State boundaries and savings and loan branching, 21546
see also Federal savings and loan associations.
- Savings Association Public Affairs Committee—Mich., annual report, 26006
- Savings Associations Public Affairs Committee, political committee, annual report, 24732
- Savings attainable by revising packaging in Department of Defense, 27551
- Savings banks, *see* Banks and banking.
- Savings bonds:
issued and redeemed, 19029
legal aspects, 26817
series A-E, tables of redemption values, 18950, 20733, 27865
series E, redemption values by denomination, July 1972 only, corrected table, 17796
tax advantage story, how U.S. saving bonds build college funds, etc., 17823
tax information on United States savings bonds, 20424
unclaimed savings bonds should be returned to veterans and other individuals, GAO report, 30268
- Savitt, Harry L.:
medicare, number of persons in 1968, using reimbursed services, 22233
medicare, reimbursement by person for services in 1968, 23972
- Saward, Ernest W.:
relevance of prepaid group practice to effective delivery of health services (address), 16841
some information descriptive of successfully operating HMO, 29038
- Sawlogs, *see* Logs.
- Sawmills:
flows of mill residues to pulp and board manufacturers, Washington, Oregon, and California, 20322
increasing your lumber recovery, sawmill improvement program, 32315
lumber recovery from Douglas-fir thinnings at bandmill and 2 chipping canter, 20311
- SAWRS (supplementary aviation weather reporting stations), *see* Weather stations.
- Saws:
factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length aspen, 32321
metalworking and filing machines, industrial plant equipment handbook, 20035
- Sawtimber, *see* Timber.
- Sawtooth National Recreational Area:
and Wilderness, history, information, etc., 23313
establish in Idaho, law, 16902
information concerning Sawtooth National Recreation Area, questions and answers, 25215
- Sawyer, E. Nell, Commerce Department publications, catalogs and index, 15623, 31988
- Sawyer, Robert N., longitudinal health survey, 31579
- Sawyer, Stephen G., WAVE, computer program for one-dimensional stress wave analysis in a time-dependent inelastic rock using a generalized Voigt model, 23640
- Sawyer, Tom, 8-cent commemorative stamp (poster), 16562
- Saylor, John P., Citizens for Saylor Committee, annual report, 24315
- Saylor, Citizens Committee for, *see* Citizens for Saylor Committee.
- SBA *see* Small Business Administration.
- SBIC financing for small business, money for growth, 25694
- Scab, *see* Scabies.
- Scabies:
cattle scabies, 24140
cooperative State-Federal sheep and cattle scabies eradication, progress report and epidemiology, 22395
- Scales (weighing instruments):
model State registration of servicemen and service agencies, regulation, 23704
scales, balances and optical instruments, industrial plant equipment handbook, 23088
weighing and measurements devices, specifications, etc., 17732, 22002
- Scalf, M. R., ground water pollution in South Central States, 30194
- Scallops, calico scallop, *Argopecten gibbus*, 20701
- Scandium, bibliography of geology and mineralogy of rare earths and scandium to 1971, 26492
- Scandium isotopes, formation of scandium-46 during irradiation of calcium in high-energy neutron beams, USSR study, 16188
- Scanlon, James, color vision deficiencies in children, United States, 17748
- Scanners, detecting hot areas in dumps with handheld infrared scanner, 29241
- Scanning:
proposed calibration target for visible channel of satellite radiometer, 22099
radiographic, petrographic, and SEM evaluation of ballistically loaded clay, 31261
scanning electron microscope examination of wire bonds from high-reliability devices, 32483
- Scapegoat Wilderness, designate parts of Lewis & Clark and Lolo National Forests as wilderness area, proposal, law, 16899
- Scarce materials, short supply/anti-inflation export controls, hearings, 28399
- Scattering:
comparison of exact and approximate evaluations of single-scattering integral in nucleon-deuteron elastic scattering, 20600
feasibility study of in-situ source monitoring of particulate composition by Raman and fluorescence scatter, 30185
numerical study of electromagnetic scattering from ocean-like surfaces, 17697
point-scatterer formulation of terrain clutter statistics, 23878
scattering of 42-MeV alpha particles from copper-65, 31642
Thompson scatter radar as aid to high-frequency direction finding, preliminary investigation, 16444
wind wave studies, 27850
- Scattering of radio waves, *see* Radio waves.
- Schacht, Ralph L., coolant-side heat-transfer rates for hydrogen-oxygen rocket and new technique for data correlation, 25527
- Schaefer, Karl E.:
chronic CO₂ toxicity, species difference in physiological and histopathological effects, 21930
effects of simulated breathholding dives in dry and wet chambers on blood shifts into thorax, 29199
involvement of CO₂ and calcium stores in decompression sickness and bone necrosis, 30412

- Schaeffer, N. M., reactor shielding for nuclear engineers, 28084
- Schalle, Henry van der, effects of temperature on growth and reproduction of aquatic snails, 27452
- Schauble, Jeanne: records of Idaho Superintendency of Indian Affairs, 1863-70, microcopy, pamphlet describing, 20430 records of Montana Superintendency of Indian Affairs, 1867-73, microcopy, pamphlet describing, 21999
- Schaumburg, Frank D., influence of log handling on water quality, 25108
- Schedules, *see* names of departments, etc., issuing schedules.
- Scheduling (industrial management), *see* Critical path analysis.
- Schehl, R. R., computerized system for quantitative X-ray diffraction analysis of pyrite in coal, 29244
- Schehl, Thomas A., trace organic impurities in gaseous helium, 31622
- Scheier, Ivan H., guidelines and standards for use of volunteers in correctional programs, 17645
- Schelner, Bernard J.: extraction of silver from refractory ores, 25511 recovery of mercury from cinnabar ores by electrooxidation, 30428
- Schenectady County Republican Committee, annual report, 24747
- Schertz, Lyle P., address, Apr. 11, 1973, 28651
- Schertz, Tex., Cibola Creek, flood plain information, 32209
- Schlenker, Allen G., cost of storing and handling grain and controlling dust in commercial elevators, 1971-72, projections for 1973-74, 26354
- Schiff, Bennett, artists in schools, 26728
- Schiner, George R., Mississippian stratigraphy of northwestern Pennsylvania, 20342
- Schizophrenia: pharmacotherapy in chronic schizophrenia, 26913 schizophrenia bulletin, 23760, 27782 utilization of mental health resources by persons diagnosed with schizophrenia, 31696
- Schlader, Louise M., monthly labor review, index of v. 84-93, 29162
- Schlesinger, James R., nomination, hearing, 30007A
- Schmid, Erwin, Cholesky factorization and matrix inversion, 26772
- Schmid, J. M., bark beetle emergence cages modified for use as pit traps, 32335
- Schmid, Lawrence, pilot plant demonstration of lime-biological treatment phosphorus removal method, 32261
- Schmid, P. E., surface-refractivity measurements at NASA spacecraft tracking sites, 17711
- Schmidhauser, John R., Schmidhauser for Congress, annual report, 22810
- Schmidhauser for Congress, annual report, 22810
- Schmidt, R. A., jr., sublimation of wind-transported snow, model, 16090
- Schmidt, Robert L.: borer, ripper, and conventional mining products in Illinois No. 6 seam coal, comparison, 21945 drillability studies, percussive drilling in the field, 21942
- Schmidtling, R. C., replacement planting with potted southern pines on research plots, 23299
- Schmitz, John, Friends of Schmitz, political committee, annual report, 22764
- Schmullowitz, Jack, Spanish-surnamed social security beneficiaries in Southwest, 22243
- Schnabel, James F., United States Army in Korean War, policy and direction, 1st year, 20533
- Schneider, John H., multilevel analysis of NCI research grants by scientific category, 32485
- Schneider, Robert F., preimpoundment study of West Point Lake, Ga., 31900
- Schneider, William J., role of water in urban planning and management, 23332
- Schnur, James O., migrant education, 21425
- Schnur, Joel M., prospectus for development of liquid-crystal waveguides, 23885
- Schoephorster, Dale B., soil survey of Salcha-Big Delta Area, Alaska, 31824
- Scholars: American, abroad, tax information, 20412 foreign scholars and educational and cultural exchange visitors, tax information, 20396 presidential scholars, 1973, selection, 29450 scholar-diplomat seminars, 29537
- Scholars, Woodrow Wilson International Center for, *see* Woodrow Wilson International Center for Scholars.
- Scholarships: Foreign Scholarships Board, report on exchanges, annual report, 32306 nursing scholarships and student loans, information for schools, 23408
- Scholl, Russell, international investment position of United States, 1971 developments, 22635
- School boards, *see* Educational boards and departments.
- School buildings, federally affected areas, construction assistance 1971 annual report, 27427
- School buses: laws requiring drivers to stop for school buses, 20667 school busing, hearings, 15765 Student transportation moratorium act, hearings, 15729, 17037, 23012
- School children, *see* Children.
- School finance, *see* Education.
- School food program needs, State school food service directors' response, 32151
- School lunches: alter the destiny of your community, 31346 cash in lieu of commodity donations to schools, report, 26226 compilation of National school lunch act, Child nutrition act, and related provisions of law, 17035 National school lunch act, amend—hearings, 15727, 31019 law, 16921, 27088 payments under act, hearing, 15732 reports, 17154, 24829, 26121 national school lunch program—regulations, hearings, 19947 type A topics, 19002 pilot universal lunch program, hearing, 21220 school food program needs, State school food service directors' response, 32151 school food service financial management handbook for uniform accounting—complete system, 31347 simplified system, 31348 statutes, compilation, 25820 vending machine competition with national school lunch program, hearings, 28567
- School officers, *see* School superintendents, etc.
- School superintendents, etc., State departments of education, State boards of education, and chief State school officers, etc., 25056
- Schools: artists in schools, 26728 aviation maintenance technician schools, certification, Federal aviation regulations, 18299 behavior modification in child and school mental health, annotated bibliography on applications with parents and teachers, 23750

INDEX 1973

Schools—Continued

bond sales for public school purposes, 25050
 continuous progress program, Williamsburg County, S.C., title 1 ESEA case study, 21432
 desegregation, emergency school assistance program, background and evaluation, 19963
 difficulties of Neighborhood Youth Corps in-school program and its management problems, GAO report, 23318
 diminishing barrier, report on school desegregation in 9 communities, 21081
 drug abuse prevention materials for schools, 17751
 drugs in our schools—
 hearings, 17034, 19750-752, 21212, 23009
 print additional copies, report, 32119
 report, 28381
 elementary and secondary education, public statistics, fall 1972, advance report, 25051
 elimination of dual systems for equal educational opportunities—
 hearings, 19759, 21366
 report, 21169
 emergency school assistance program, background and evaluations, 19963
 enrollment, 1972, population characteristics advance data, 24237
 FAA certificated aviation maintenance technician schools, directory, 31315
 Federal financial assistance for deprived students and removal of dual school system, report, 19619
 federally affected areas, operation assistance, 1971 annual report, 27427
 financial accounting, classifications and standard terminology for local and State school systems, 30139
 financing, issues, 15890
 foreign curriculum consultant program, 15991
 goals and alternatives for education of minority group students in elementary and secondary schools, 17250
 mental health and learning, when community mental health centers and schools collaborate, 22075
 mental health at school, 26747
 need for teachers, education professions, 1971-72 annual report, 28656
 number of pupils with handicaps in local public schools, spring 1970, 28669
 our vocational training can guarantee you job of lifetime, guidebook to help select a good vocational school, 30239
 pocket guide to choosing vocational school, 30240
 pre-school development project, Murfreesboro, Tenn., 27776
 promoting mental health in classroom, handbook for teachers, 31698
 public school—
 desegregation, leading court decisions, 17071
 finance programs, 1971-72, States, District of Columbia, and outlying areas, 23141
 systems, education directories, 17358, 23137
 systems in 1971-72, preliminary report, census of governments, 21039
 school enrollment, census of population, subject reports, 27019
 Spanish English developmental program, Buffalo, N.Y., title 1 ESEA case study, 21433
 State systems, 1969-70, preliminary statistics, 28678
 study of our Nation's schools, 27435
 summer Head Start services to handicapped children, 28204
 tax-sheltered annuity plans for employees of public schools and certain tax-exempt organizations, 25308

Schools—Continued

teaching Spanish in school and college to native speakers of Spanish, 25058
 year round schools, hearings, print additional copies, reports, 28323, 28459
see also High schools—Medical schools—Private schools—School lunches.
 Schrader, Dieter J., Schrader for Congress Campaign Committee, annual report, 24409
 Schrader for Congress Campaign Committee, annual report, 24409
 Schramm, Eleanor C., literature survey on thermal degradation, thermal oxidation, and thermal analysis of high polymers, 27417
 Schroeder, Harold J.:
 copper, 25443
 mineral industry of Democratic Republic of Congo (Kinshasa), 20542
 Schubert, Richard F., nomination, hearing, 28564
 Schubkegel, Martin, farm index, 18283
 Schuenemeyer, John H., delineation of clustered points in 2 dimensions by measuring perimeters of convex hulls, 21940
 Schuh, David W., Schuh for Congress Committee, annual report, 24662
 Schuh for Congress Committee, annual report, 24662
 Schuleusener, Stuart A., applications of parameter analyzers in solid-state laser tests, 20979
 Schulman, Joseph D., cystinosis, 26753
 Schultz, Vincent, ecological techniques utilizing radionuclides and ionizing radiation, selected bibliography, 21016
 Schulz, Wallace W., neptunium 237, production and recovery, 22491
 Schumann, David R., dimension yields from alder lumber, 21666
 Schumm, R. H., selected values of chemical thermodynamic properties, tables for lanthanide (rare earth) elements, 29320
 Schurr, Sam H., energy research needs, 29403
 Schutz, L. A., airborne asbestos fiber concentrations in asbestos mines and mills in United States, 30445
 Schuykill County Republican Finance Committee, annual report, 22757
 Schuyler, Dean, depressive illnesses, major public health problem, 32497
 Schwab, R. N., monetary value drivers place on comfort in night driving, 31322
 Schwarz, Francis K., meteorological criteria for extreme floods for four basins in Tennessee and Cumberland River watersheds, 30519
 Schwartz, H. S., computer-controlled machines for dimensional inspection applications, 22497
 Schwengel, Fred Schwengel for Congress Committee, annual report, 24318
 Schwengel for Congress Committee, annual report, 24318
 Schwerdt, Richard W., mariners weather log (periodical), 18610
 Schwiesow, Ronald L., optical measurement of capillary wave structure, 30540
 Scialdone, John J., determination of molecular contamination performance for space chamber tests, 29285
 SCID-TR-(series), 17689, 20581, 30446
 Science:
 Academy of Sciences, USSR, vestnik (periodical), 19046
 activities at universities and colleges, 1971, resources, expenditures, etc., 26780
 agricultural science review, 17966
 annotated bibliography of Lake Ontario limnological and related studies, physical, 27455
 Apollo 16, preliminary science report, 27708
 bilateral science foundation, agreement with Israel, 25733

Science—Continued

budget request (remarks), 28240
 changes in graduate programs in science and engineering, 1970-72 and 1972-74, 16418
 classification, Library of Congress, 25386
 cold regions, bibliography, 23154
 cold regions science and engineering monograph series—
 engineering, 32199
 physical science, 21443
 cooperative science programs, in Latin America, 32516
 development of Republics' Academies of Science, USSR study, 20446
 earth sciences, East European abstracts, 18241
 East European abstracts, 18238-245
 Federal funds for research, development and other scientific activities, 22133
 Federal jobs in engineering, physical sciences & related professions, examination announcement, 21084, 29808, 30875
 Federal R&D funding continues to rise, 16419
 geography of science, past and present, USSR study, 25344
 graduate science enrollment declines 2 percent from 1971-72, 31740
 improving control of scientific-technical progress, USSR study, 26602
 international science notes (periodical), 23998, 25728, 29535
 Lazzaroni, science and scientists in mid-nineteenth century America, 23843
 leading scientists discuss contemporary science and society, USSR study, 17633
 mineral sciences investigations, 20761
 NASA scientific and technical reports and publications for 1969, selected listing, 23677
 national assessment of education progress, science group and balanced group results for color, parental education, size and type of community, and balanced group results for region of country, sex, 30146
 National science policy and priorities act, hearings, 19795
 nominations for Soviet prizes in science and technology, 17610
 opportunities and problems of regionalism, science, technology, and American diplomacy, 21230
 People's Republic of China scientific abstracts, 18752
 physical research program, research contracts and statistical summary, 21029
 physical science, critical evaluation of data, 20650
 policy—
 teaching and research, survey, 24877
 working glossary for members of Congress and professional scientists, 17093
 science indicators 1972, report of National Science Board, 31739
 science resources studies highlights, 16418-419, 22137, 23848, 32518-519
 science study aids (series), 20931, 30717
 science, technology, and American diplomacy, 21229, 28410
 science, technology, and the economy—
 hearings, 15780
 study of the interrelationships for better investment procedures, 17094
 scientific affairs, Eastern Europe, translations, 18975
 scientific and industrial applications of nuclear explosions-safety problems, 16667
 scientific and technical aerospace reports, 18889-890, 21991, 25529, 31662

Science—Continued

scientific and technical cooperation, agreement with—
 Argentina, 20804
 Italy, 24013
 Mexico, 16513
 Polish People's Republic, 27926
 Union of Soviet Socialist Republics, 16505
 scientific directory, 1973, and annual bibliography, 31703
 scientific information services in water resources agency (paper), 23942
 significant accomplishments in sciences, 32463
 Skylab experiments, physical science, solar astronomy, information for teachers, 30454
 Smithsonian contributions to earth sciences, 20761, 31799-800
 Smithsonian opportunities for research and study in history, art, science, 16478
 Soviet science after 50 years, 25356
 Soviet space programs, 1971, report, 17212
 special foreign currency science information program, lists of translations in process, 20714, 32520
 technical aids in science and engineering, opportunities, examination announcement, 19285, 28215
 USSR scientific abstracts, 19034-40
 USSR's 50th anniversary and development of Soviet science, 25327
see also names of sciences—*also* subjects.
 Science and Astronautics Committee, House: activities, 92d Congress, summary, 23024 calendar, 18556
 committee prints, 17088-95, 19794, 23023-25, 24873, 24875-877, 27241-242, 27244, 32094
 hearings, 15779-781, 19795-796, 26180, 27243, 28432-433, 31121, 32093
 investigations and studies, authorization and expenses reports, 24833, 26117
 publications, list, 17092
 reports, 15713, 17012, 27157, 28373
 Subcommittee on Science, Research and Development summary of activities, 963-72, 24876
 Science and Technology Office:
 abolish, hearing, 26271
 appropriations, 1973—
 law, 19359
 report, 16957
 appropriations, 1974, report, 29963
 reorganization plan, hearing, 24861
 Scientific Advisory Committee on Television and Social Behavior, Surgeon Generals', *see* Surgeon Generals' Scientific Advisory Committee on Television and Social Behavior.
 Scientific institutions, *see* Scientific societies.
 Scientific research:
 conference on automation of scientific research through use of computers, USSR study, 20480
 cooperative science programs in Latin America, 32516
 development of Leningrad scientific research, 17634
 Federal funds for research, development and other scientific activities, 22133
 Institute of High Temperature of USSR Academy of Sciences outstanding results in 1971, 20448
 national patterns of R&D resources, 1953-73, funds and manpower in U.S., 27832
 organization of control, USSR study, 31533
 physical research program, research contracts and statistical summary, 21029
 relationship between law and scientific and technical progress, USSR study, 16206
 research grants of PHS, NIH, 1972, index, 27788

INDEX 1973

- Science and Astronautics Committee,
House—Continued
research on geologic effects of under-
ground nuclear explosions in Sahara
granite massif, 16666
science indicators 1972, report of National
Science Board, 31739
scientific activities, goals, and personnel in
Uzbekistan and Kazakhstan, 20463
scientific directory and annual bibliogra-
phy, 31703
socioeconomic factors of scientific research
institute management, USSR study,
20464
see also subjects.
- Scientific societies, role of USSR scientific
centers in economic development outlined,
25355
- Scientists:
engineering and scientific occupational
groups, selected characteristics, 31741
immigrant scientists and engineers—
decline in fy 1972, and physicians in-
crease sharply, 32519
in United States, study of character-
istics and attitudes, 31738
Lazzaroni, science and scientists in mid-
nineteenth century America, 23843
1971 national survey of compensation paid
scientists and engineers engaged in re-
search and development activities, re-
port, 21030
persons in engineering, scientific, and
technical occupations, current popula-
tion reports, 30852
reemployment, 23577
scientific activities, goals, and personnel
in Uzbekistan and Kazakhstan, 20463
scientific directory and annual bibliog-
raphy, 31703
scientists, engineers and physicians from
abroad, 20712
see also Research scientists.
- Scintillation:
conversion of Victoreen model 6 CDV 700
GM instruments for use with scintilla-
tion or BF₃ probes, 24194
ionospheric scintillation predictions for
GOES, 25626
- Schirrhia acicola, *see* Brown spot.
- Scoggins, J. R., compilation of studies from
atmospheric variability experiment
(AVE), 32461
- Scoggins Dam, Powerplant, and Reservoir,
see Tualatin Project.
- Scomberomorus maculatus, *see* Mackerel.
- Scombrids, *see* Tuna fish.
- Scorebooks, development and validation of
scores to predict officer career status,
28035
- Scotch pine, *see* Pine.
- Scotland, west coast, sailing directions,
23120
- Scott, Arthur E., relief, 19827, 28443
- Scott, Geraldine J., preliminary statistics of
State school systems, 28678
- Scott, Hugh, overview from underside or
reopening of paths, 19809
- Scott, Kevin M., scour and fill in Tujunga
Wash, fanhead valley in urban southern
California, 27567
- Scott County Republican Committee, annual
report, 24402
- Scott, Inc., *see* H. H. Scott, Inc.
- Scour (erosion), *see* Erosion.
- Scout dog, training and employment, 24170
- Scranton, Pa.:
area wage survey, 21912
food distribution facilities, 26939
- Scrap:
iron and steel scrap, minerals yearbook
chapter, 25450
recovery of precious metals from elec-
tronic scrap, 20576
transfer of military scrap, agreement with
Vietnam Republic, 26865
use of cryogenics to reclaim nonferrous scrap
metals, 26663
- Scrap metal, *see* Metals.
- Screening tests, screening and assessment
of young children at developmental risk,
conference papers, 29447
- Screens:
reflection characteristics of screen wave
absorbers, 28783
screening and fencing, mesh, Federal Item
Identification guide, 26333
travelling screen for removal of debris from
rivers, 22102
wave damping effects of fibrous screens,
hydraulic model investigation, 20172
- Screw threads:
modified, 60°, stub double, military stand-
ard, notice, 25020
qualification of miniature internal threads
using air flow, 29665
- Screwworm:
eradication program, agreement with
Mexico, 20803
general information, 20928
- SCS, *see* Soil Conservation Service.
- Scuba, *see* Aqualung.
- Sculpture and statuary, importation of pre-
Columbia sculpture and murals, prohibi-
tions, 21179, 21310, 21312
- SD-EE series, 27656
- Sea, *see* Ocean.
- Sea grant colleges, *see* Colleges and univer-
sities.
- Sea ice, using video pulse sequencing for
sounding sea ice, USSR study, 21840
- Sea laws, *see* Maritime law.
- Sea mammals, *see* Marine fauna.
- Sea surface, aerial photographic and electro-
magnetic determination of sea surface and
its conductivity, USSR study, 23553
- Sea transportation, *see* Transportation.
- Sea water:
adsorption of chlorinated hydrocarbons
from seawater by crosslinked polymer,
28806
conversion, appropriations, 1974, author-
ize—
hearing, 31147
law, 30923
reports, 28342, 30967, 31072
improving absolute distance estimation in
clear and in turbid water, 20530
improving distance estimation under wa-
ter, long-term effectiveness of training,
20531
optimum conjunctive use of dual-purpose
desalting plant and multi-purpose sur-
face water reservoirs, 20386
planning model to project potential for
desalting in, 20388
publications, price list, 26797
Saline water conversion act, legislative
history, 23469-470, 25296
saline water conversion, summary report,
26534
surface water temperature and density,
North and South America, 30516
- Seabees, erection of memorial on public
grounds in D.C. or vicinity in honor and
commemoration, proposal, law, 16915
- Seaboard Coast Line Railroad Co., railroad
accident investigation, summary report,
20751
- Seaborg, Harold J., relief, 19322, 19830
- Seagraves, Mary Ann B., general-purpose
meteorological rocket data reduction pro-
gram, 22420
- Seal Beach National Wildlife Refuge, estab-
lish, law, 16909
- Sealants, *see* Sealing compounds.
- Sealift, 18891
- Sealing:
closing, sealing and reinforcing fiberboard
shipping boxes, general methods for,
16061
investigation of use of gel material for
mine sealing, 23191

- Sealing compounds, feasibility of plastic foam plugs for sealing leaking chemical containers, 31282
- Seals, some hydrodynamic indices of body shape of pinnipeds, USSR study, 20466
- Seals (numismatics):
seal of safety, Coast Guard Auxiliary courtesy, 1973 examination decal for motorboats, 25957
- Seals and glands, fretting of secondary-sealing candidate materials in air temperatures to 816° C, 23683
- SEAMAP Pacific, *see* Pacific SEAMAP (scientific exploration and mapping program).
- Seamen, *see* Sailors.
- Search and rescue operations:
on scene, National Maritime SAR review (periodical), 18730
underwater search system, instruments and devices, USSR study, 26591
- Search for clarity and certainties in securities transactions with more realistic information for investors (address), 29479
- Search for new world monetary arrangements, 20789
- Search radar, *see* Radar.
- Sears, Harry, honoring Senator Sears, Milburn, N.J. (remarks), 17650
- Sens, *see* Ocean.
- Seasonal distribution of tunas and billfishes in Atlantic, 25632
- Seasonal snow surface energy balance in forest opening, 25879
- Seat belts, *see* Restraint apparatus.
- Seattle, Wash.:
area wage survey, 30388
census of housing, 1970, components of inventory change, 30796
measurement of salt-wedge excursion distance in Duwamish River estuary, Seattle, Wash., by means of dissolved-oxygen gradient, 20358
Seattle-Tacoma urban complex and adjacent areas—
emergency ground-water supplies, 25250
low flows and temperatures of streams, 25249
unemployment, new poor and hunger, 17293
- Seawater, *see* Sea water
- Seay, Clant, Citizens for, *see* Citizens for Clant Seay.
- SEC, *see* Securities and Exchange Commission.
- Seckler-Hudson, Catheryn, our Constitution and Government, Federal textbook on citizenship, 31441
- Second District COPE, annual report, 24724
- Second District Democratic Convention Fund, annual report, 24433
- Second District Republican Committee, annual report, 22922
- Secondary education:
Elementary and secondary education act—
title 1—
ESEA case studies, 21432-433
handbook on performance objectives writing, 26365
history of program for educationally deprived children, 17361
title 2, parental involvement, why? what? how? 23140
title 3, model programs, program descriptions order form, 29360
elementary and secondary education, expenditures and revenues for public elementary and secondary education, 27429
Federal aid to public and private elementary and secondary education, summary of testimony, 21299
Federal support, oversight, hearings, 21219
financing of elementary and secondary education, hearings, 15730
statistics of local public school systems, fall 1970, staff, 31229
- Secondary metal forming and cutting machines, industrial plants equipment handbook, 26309
- Secondary mortgage credit act, *see* Mortgages.
- Secondary schools, *see* High schools.
- Secondary waste treatment for small diversified tannery, 28814
- Secrecy (law):
Bank secrecy act, amend, hearing, 15874
see also Trade secrets.
- Secret Service, Secret Service story, 26818
- Secretarial practice, *see* Office practice.
- Secretaries:
careers, you as international secretary, 23265
secretaries of justices and judges of United States, increased annuities, report, 19708
- Secretary of Army, *see* Army Department.
- Secretary of Defense, *see* Defense Department.
- Secretary of Senate, *see* Senate.
- Sectionalized main rotor blade design study, 20987
- Secunda, Steven K., depressive disorders, 31699
- Securities:
act, releases, SEC, 18892
conversion of worthless securities into cash, 27195
credit by banks for purpose of purchasing or carrying margin stocks, regulations, 20274, 21584-587, 28896, 30234
credit by persons other than banks, brokers or dealers, regulations, 21576-578, 30230
effects of alternative marketing margins for beef and pork, 30697
equity transactions and ownership of directors, etc., of Federal reserve member State banks, monthly summary, 18942
industry study, 28436
hearings, 21320, 27303
reports, 17021, 23021, 23044
print as Senate document, report, 27275
investment adviser regulation, subject too long neglected (address), 29470
look at private offering exemption as it approaches its 40th birthday, 29472
national securities transfer system, improve, report, 17140
organized crime—
stolen securities, hearings, interim index, 15893
securities, thefts and frauds, hearings, 32146
processing for clearance and settlement of securities transactions, provide, regulations, report, 31106
reporting and other paperwork requirements applicable to industrial issuers in securities industry, 23952
requirements of national market in real estate securities (address), 30625
research in changing structure and economics of securities markets (address), 30626
search for clarity and certainties in securities transactions with more and more realistic information for investors (address), 29479
SEC and bar have common task to assure integrity of securities markets (address), 30618
securities bar and securities laws (address), 29481
self-regulation in securities industry, hearings, 21320, 27308
some aspect of regulation of securities markets (remarks), 28901
traded on exchanges, annual listing, quarterly supplement, 18894
transaction processing act of 1972 (address), 29482

INDEX 1973

Securities—Continued

- transactions and holdings, 18725
- see also* Government securities—Stocks.
- Securities and Exchange Commission:
 - Advisory Committee on Enforcement Policies and Practices, report, 29478
 - appropriations, 1973—
 - law, 19359
 - report, 16957
 - appropriations, 1974—
 - hearings, 30005, 31011
 - reports, 28377, 29963, 32069
 - certain former employees, relief, 19593, 28263, 28316
 - Commission's policy statement, progress report (address), 30619
 - enforcement activities of SEC, interim report (address), 30621
 - general rules and regulations under Investment company act, 20752, 22213
 - index to Commission decisions, July 1, 1967–June 30, 1971, 31792
 - laws relating to securities, Commission exchanges and holding companies, compilation, 22664
 - Members, nomination of G. Bradford Cook, Phillip A. Loomis, jr., and John R. Evans, 26257
 - new prospectus and Commission's concern (address), 29474
 - news digest, 18702
 - partnership between accounting profession and SEC (address), 30623
 - releases, 17951, 18168, 18422, 18516–517, 18588, 18892–893, 18929, 18998
 - report, 1972—
 - departmental edition, 23953
 - document edition, 23004
 - reporting and other paperwork requirements applicable to industrial issuers in securities industry, 23952
 - rules of practice and rules relating to investigations and code of behavior governing ex parte communications, 32548
 - ruminations and action on enforcement (address), 30627
 - SEC and bankers (address), 29480
 - SEC and bar have common task to assure integrity of securities markets (address), 30618
 - SEC disclosure system, real estate and oil and gas (address), 30628
 - statistical bulletin, 18927
 - withholding and transfer of agency files pertaining to ITT, legislative oversight, hearings, 28418
 - work of Securities and Exchange Commission, 29486
- Securities exchanges:
 - act, amend—
 - hearings, 19779, 27306, 30013
 - reports, 17140, 31106
 - releases, SEC, 18893
 - code of Federal regulations, 28872
 - institutional membership on national securities exchanges, hearings, 21319
 - regulations of securities trading by members of national securities exchanges and sale of investment advisers of registered investment companies, report, 28487
 - separate brokerage and institutional money management, hearings, 27306
 - see also* Stock exchanges.
- Securities processors, Securities processing act, hearings, 19779
- Security *see* National defense—National security.
- Security and Safety of Cargo Commission, establish. report, 15694
- Sedgwick, Kans., stratigraphy and structure of Middle and Upper Ordovician rocks in Sedgwick basin and adjacent areas, south-central Kansas, 21726
- Sedimentary rocks, chemical composition of sedimentary rocks in Alaska, Idaho, Oregon, and Washington, 23364

Sedimentation and deposition:

- Atlantic continental shelf and slope of United States sand-size fraction of bottom sediments, New Jersey to Nova Scotia, 21719
- characteristics of estuarine sediments of United States, 17538
- control of mercury—
 - contamination in freshwater sediments, 20201
 - pollution in sediments, 20192
- development of analytical procedures for determining chlorinated hydrocarbon residues in waters and sediments from storage reservoirs, 22209
- distribution of radionuclides in bottom sediments of Columbia River estuary, 30273
- ecological effects of offshore dredging and beach nourishment, review, 27437
- effect of silt and slit removal in prairie lake, 31269
- erosion and sediment control—
 - in highway construction guidelines, 17453
 - planning and implementation, guidelines, 17415
- fluvial sediment—
 - discharge to ocean from conterminous United States, 23333
 - in Salem Fork watershed, West Virginia, 16113
- geochemistry and diagenesis of tidal-marsh sediment, northeastern of Gulf of Mexico, 20345
- geologic prediction, developing tools and techniques for geophysical identification and classification of sea floor sediments, 23802
- geomorphology and sediments of Chesapeake Bay entrance, 23151
- mercury content in fish, sediment and water in Lake Oahe, S. Dak., preliminary investigation, 17934
- mineralogy of suspended sediment in some Alaskan glacial streams and lakes, 23152
- model investigation, St. Clair River, effects of submerged sills, 17409
- neutron activation analysis of bottom sediments, 26408
- 1969 Elephant Butte Reservoir sediment survey, 23935
- Ocean sediment coring program, achievements, costs and administration, GAO report, 20324
- Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution, 25257
- phosphorus release from lake sediments, 31268
- relations among radionuclide content and physical chemical and mineral characteristics of Columbia River, sediments, 27562
- role of soils and sediment in water pollution control, reactions of nitrogenous and phosphatic compounds with soils and geologic strata, 17936
- sediment transport in—
 - alluvial channels (series), 21721, 27564
 - Mississippi River distributary, Bayou Lafourche, La., 16115
 - western tributaries of Sacramento River, Calif., 20357
- sedimentary—
 - framework of western Gulf of Maine and southeastern Massachusetts off-shore area, 29020
 - petrology and paleocurrents of Harebell Formation, Pinyon Conglomerate, and associated coarse clastic deposits, northwestern Wyoming, 21731
 - process and distribution of particulate gold in Northern Bering Sea, 17531
 - sedimentation activities, notes, 27969

- Sedimentation and deposition—Continued
 sedimentation in small drainage basins (series), 16113, 20357
 summary of alluvial-channel data from Rio Grande conveyance channel, New Mexico, 21721
 summary of reservoir deposition surveys made in United States through 1970, 29627
 underwater television survey of Atlantic outer continental margin near Wilmington Canyon, 31800
 water in urban environment, erosion and sediment, 16110
 water management and sediment control for urbanizing areas, 17846
 Seed crops, *see* Seeds.
 Seedbeds, germination and early growth of coastal tree species on organic seed beds, 20315
 Seedling, *see* Forest planting.
 Seedlings, brown-spot resistance in natural stands of longleaf pine seedlings, 20302
see also names of plants or trees.
 Seeds:
 cliffrose and mountainmahogany seeds retain viability 6 years in cold storage, 28951
 extraction and germination of Kadam seeds, 28935
 field and seed crops, production, farm use, sales, value, 25835
 foreign agriculture circulars, 18380
 judging ripeness of seeds in Black Hills ponderosa pine cones, 28950
 seed crops:
 acreage, yield, production, etc.—1964-69, 19135
 1972 preliminary, 27938
 forecast, 18895
 prices, 18896
 winterfat fruits and seeds retain high viability 3 years in cold storage, 28948
see also Oilseeds.
 SeEVERS, Gary L., nomination, hearings, 31135
 Segerstrom, Kenneth, general geology of Hahns Peak and Farwell Mountain quadrangles, Routt County, Colo., 26490
 Segismundo, Juanito, relief, 19813
 Segregated ballast VLCCs, economic and pollution abatement analysis, 30403
 Selberling for Congress Committee, annual report, 24345
 Seldenberg, Mark J., Seldenberg for Congress Committee, annual report, 22945
 Seidenberg for Congress Committee, annual report, 22945
 Selders, Victor M., geology of Isla Desecheo, P.R., with notes on great southern Puerto Rico fault zone and quaternary, stillstands of sea, 17536
 Sellier, Earl L., guide to preparation of operational plans for sewage treatment facilities, 31286
 Seismic measurements:
 Old Reliable Mine project, 30524
 seismic zoning, 31723
 Seismicity, *see* Seismology.
 Seismograms, comparison of results of dynamic seismic analyses of 2 identical structures located on 2 different sites, based on site seismograms from San Fernando earthquake, 22471
 Seismographs:
 APEEL array, site study, 22096
 high-gain, long-period seismograph station installation report, Albuquerque, N. Mex., 22097
 Kongsberg, Norway high-gain, long-period seismograph station installation report, 23804
 L-7 velocity seismograph shaking-table results, 25625
 Seismography, *see* Seismology.
 Seismology:
 Alma-Ata central seismic station, USSR study, 31535
 Amchitka geopiezomagnetic experiment, 30541
 Antarctic seismological bulletin (periodical), 17998
 construction of unattended seismological observatory (USO) in permafrost, 28687
 earthquake research in NOAA, 26770
 geologic and seismologic aspects of Managua, Nicaragua, earthquakes of Dec. 23, 1972, 29028
 high-resolution seismic survey of offshore area near Nome, Alaska for gold concentrations, 23363
 refraction surveys in—
 Colorado, Grant Valley Silt, and Equity Oil Company Plant, 30522
 Rife, Colo., 30523
 seismic design for buildings, 25862
 seismic design of building structures, 20108
 seismic exploration in cold regions, 21443
 seismic zoning, 31723
 seismicity of—
 Pahute Mesa area, Nevada test site, 23372
 southern Nevada region, 26768
 seismological publications and services, 25103
see also Earthquakes.
 Seismometers, *see* Seismographs.
 Selzinger, Donald E., oxygenates in automotive exhaust gas, estimation of levels of carbonyls and noncarbonyls in exhaust from gasoline fuels, 23649
 SEL, *see* Space Environment Laboratory.
 Selby, Norm, Volunteer Committee, *see* Norm Selby Volunteer Committee.
 Select audiovisual records, contemporary African art from Harmon Foundation, still pictures, 22000
 Select audiovisual records, Indians in United States, 26696
 Select audiovisual records, pictures of Civil War, 22001
 Select audiovisual records, pictures of Revolutionary War, 25546
 Select audiovisual records, sound recordings, voices of World War II, 1937-45, 25547
 Selected industrial air pollution control equipment, 22552, 30847
 Selected irrigation return flow quality abstracts, 20205, 32263
 Selected papers on consumerism in HMO movement, 31408
 Selected publications on environment, 27490
 Selected specific rates of reactions of transients from water in aqueous solution, hydrated electron, 29313
 Selected topic digest STD series, 32414
 Selecting and raising rabbits, 15466
 Selecting fertilizers for lawns and gardens, 24130
 Selection of coals for AVCO hydrogen plasma arc process for making acetylene, 28218
 Selective service, *see* Conscription.
 Selective Service System:
 appropriations, 1973—
 law, 19359
 report, 16957
 appropriations, 1974—
 hearings, 27185, 30005
 reports, 28377, 29963, 32069
 Director, nomination of Byron V. Peplone, hearing, 26252
 draft, past, present, future, general description of Selective Service System, 20753
 local boards—
 and appeal board employees, increase compensation, hearing, 31035
 list, 18584
 semi-annual report, 17826, 20756, 29487
 Selective withdrawal from man-made lakes, hydraulic laboratory investigation, 25102

INDEX 1973

Selenides:
properties of crystalline bismuth selenide and its use as Hall effect magnetometer, 23682
USSR study, 23535

Selenium:
mineral market report, quarterly, 18903
⁷⁵Se-binding by rat plasma proteins after injection of ⁷⁵SeO₃, 31937
stability and temperature characteristics of some silicon and selenium photo-detectors, optical radiation measurements, 29321

Self-employment, see Employment.

Self-regulation of neural mechanisms, 21879

Self-stress of electromagnetic waves in dense collisionless plasma, 22456

Selling, see Markets and marketing—Sales—Salesmen and Salesmanship.

Sellmann, Paul V., geology and properties of materials exposed in USACREL permanent frost tunnel, 17371

Semiconductors:
devices, lists, military standard, 20057
growth and structure of monocrystalline semiconductor films, USSR study, 29128
image converter based on multi-layer semiconductor-dielectric structures, USSR study, 30342
magneto-Schottky-diode-integrated circuits, 19158
materials, process control, and devices, methods of measurement, 22014, 26708, 30475, 32484
semiconductor devices for broad-application equipment, general specifications, GOST 11630-70, USSR study, 30350
specialized semiconductor, microelectronic circuit board manufacturing machinery, industrial plant equipment handbook, 26310
symposium on growth and synthesis of semiconductor crystals and films, 27647
test methods for semiconductor devices, 25016

Semi-empirical model of inclusive nucleon and pion production from proton-nucleus collisions, 22475

Seminars, see Conferences, congresses, etc.

Semmelink, A., study of noise in air route traffic control center, flight service station, air traffic control tower and remote facilities, 24032

Seminole County Democratic Executive Committee, annual report, 22894

Seminole Indians, general information, 31475

Senate:
appropriations, 1973, legislative, law, 16873
appropriations, 1974, legislative—hearings, 31129
report, 29991
automated legislative record keeping system for Senate, feasibility study, 20014
calendar, executive, 18565
calendar of business, 18562
certain officers of Executive Office of the President to be confirmed by Senate, reports, 26220, 26227, 27279
cloture rule, limitation of debate, legislative history, 17299
delegation to Mexico-United States Inter-parliamentary Group, report, 17256
documents, 15797, 17120-121, 19802-810, 21302-305, 23030-32, 24887-891, 26195-196, 27256-259, 28436-437, 29949, 31053-62, 32097
executive documents, 15799-804, 17122-123, 19811, 23033, 24892, 26197, 28438-441, 29950-951, 31045-48, 32098
executive reports, 15805, 17124-127, 21306-308, 23034, 24893-895, 26198, 29952-953, 31049-52, 32099
expenditures for committees, authorizations, 17298
hearings in records of U.S. Senate and Joint Committees of Congress, 20631

Senate—Continued

inquiries and investigations, authorizations and expenditures, staff studies, 17300, 24962
journal, 92d Congress, 1st session, 15796
journal of executive procedures of Senate, 92d Cong. 1st sess., index, 21301
majority and minority leaders, print as Senate document, report, 31110
manual, 29949
nongermane Senate amendments and other matters added to House-passed measures, provide means for House rejection, report, 19646
overview from underside or reopening of paths call to responsibility and leadership in the Congress, 19809
procedures, revised edition, print and bind subject to copyright—law, 19360
report, 19616

reports—
private bills, 15806-813, 19812-813, 28442-449
public bills, 15814-861, 17128-211, 19840-930, 21300-312, 23035-36, 24896-907, 26199-243, 27260-296, 28450-507, 29954-997, 31063-120, 32100-123

Secretary, report, 27258

standing rules—
amend rule 25 relative to open and closed sessions of committees, report, 27264
text, 17301
subcommittees, together with select, special and joint committees, 91st Congress, list, 23029

Send up more Sputniks, 28682

Sendak, Maurice, questions to artist who is also an author, conversation between Maurice Sendak and Virginia Haviland, 16242

Seneca County Republican Executive Committee, annual report, 22714

Senegal, map, 22570

Sengers, J. V., transport properties of gases and binary liquids near critical point, 20586

Senior, John R., studies on effects of hyperbaric oxygen breathing on rate of ethanol metabolism in man, 29197

Senior citizens, see Aged.

Seniority, see Labor.

Sense organs:
sensory and neurological disabilities, estimated numbers and cost, 27787
sensory disorders of infancy and childhood, collaborative study, bibliography, 26750

Sensitivity:
card-gap and projectile impact sensitivity measurements, compilation, 30418
contributions of selected residual elements to radiation-embrittlement sensitivity of steel forgings, 27855
dynamic nuclear polarization, application to increase sensitivity and speed of nuclear precession magnetometers, USSR study, 29133
experimental hypersensitivity in animals (remarks), 29353
hypersensitivity pneumonitis, farmer's lung disease and the like, 29355
sensitivity analysis of relation of well-head price to nuclear gas stimulation costs, 22483
sensitivity of hot-cathode ionization vacuum gauges in several gases, 16351

Sensitization, sensitized materials, photographic and copying, Federal item identification guide, 27395

Sensors:
design and evaluation of an optical fine-pointing control system for telescopes utilizing digital star sensor, 31628
development of indwelling intracranial pressure sensor, 29671

- Senate—Continued
 diode and thermocouple airborne temperature sensors, 31725
 evaluation of trainer for sensor operators on Gunship II aircraft, 20942
 ground truth requirements for remote sensor data, acquisition and analysis, 21478
 high-pressure vibrating pressure transducer, 24185
 integral sensor test system, military standard, 26338
 land use classification system for use with remote-sensor data, 21712
 nucleonic sensor for detecting metal in recirculating lubricating oil systems, 20989
 photosensor aperture shaping in facsimile cameras, investigation, 16352
 Rocky Mountain millivolt integrator for use with solar radiation sensors, 23294
 SKYLAB, sensors and remote sensing in support of EREP oceanographic program, 27856
 Sensory diseases, *see* Sense organs.
 Sentences (legal):
 Bronx Sentencing Project of Vera Institute of Justice, experiment in use of short-form presentence reports for adult misdemeanants, 21894
 Separation of powers:
 and National Labor Relations Board, selected readings, print as Senate document, report, 19909
 Congressional oversight of Executive agreements, hearings, 15913
 executive classification of information, security classification problems involving exemption of Freedom of Information act, report, 28347
 executive, judicial and legislative branches of Government, separation of powers, investigations and studies, authorization and expenses, reports, 15823, 19904, 19907
 Separation of services from assistance payments guide for State agencies, 21121
 Separation processes:
 behavior of uranium isotopes in separation cascades, ideal cascades, 22480
 compound type separation and characterization studies for 370° to 535° C boiling distillate of Gach Saran, Iran, crude oil, 30441
 process design manual for—
 phosphorus removal, 16547
 suspended solids removal, 16548
 removing pyrite from coal by dry-separation methods, 29230
 ultra high rate filtration of activated sludge plant effluent, 27476
 Separators, centrifugals, separators and filters, industrial plant equipment handbook, 26307
see also Magnetic separators.
 Sequatchie River and Valley, drainage basin, Tennessee Valley streams, their fish, bottom fauna, and aquatic habitat, 16552
 Sequoia National Park, general information, 29402
 Serc, *see* Betahistine hydrochloride.
 Serchuk, Frederick M., annotated bibliography of Cunner, Tautogolabrus adspersus (Walbaum), 30542
 Sergeant, Russell L.:
 intelligibility of hydrogen-speech at 200 ft. of seawater equivalent, 16249
 processing helium speech, proceedings of Navy-sponsored workshop, 25407
 reciprocity calibration of microphones under high ambient pressures, 20524
 Serial set (congressional), 15630, 16844-852, 19316-321, 21123-128, 22654-659, 24298-299, 25984-990, 28256-262, 29822-826, 30898-899, 31996-32001
 Serials:
 catalog of copyright entries, 23078, 27373, 30072
 index of serial titles currently received by National Library of Medicine, 23779
 new serial titles—
 classed subject arrangement, 18699
 union list—
 alphabetical arrangement, 18700
 3d edition, 1971, cumulation, 27686
 nuclear science abstracts, titles cited, list, 28083
 Series (infinite), *see* Infinite series.
 Series of compounds tested for sympatholytic properties, 16204
 Serio, Anne M., political cartoons in 1848 election campaign, 20766
 Serotkin, David M., Serotkin for Congress Committee of St. Clair County, annual report, 24669
 Serotkin for Congress Committee of St. Clair County, annual report, 24669
 Serpan, Charles Z., jr., damage-function analysis of neutron embrittlement in steel at reactor service temperatures, 16447
 Serra das Araras escarpment, Brazil, landslides, 27566
 Serrana Bank, status, treaty with Colombia, 21306
 Serum and serumtherapy, *see* Cytotoxins.
 Servants, health services for domestic agricultural migrant workers, 1972, hearing, 21368
 Service academies, *see* Military education.
 Service C weather schedules, 27502
 Service clubs, fraud and corruption in management of military club systems, 30034
 Service contract act of 1965, *see* Government contracts.
 Service Corps of Retired Executives:
 SCORE, one part of ACTION, 29593
 counselor's guidebook, 29592
 Service trades:
 census of business, 1967, area statistics, 16701-713
 model State registration of servicemen and service agencies regulation, 23704
 Nice agreement concerning international classification of goods and services—
 for purposes of registration of marks, 20798
 to which trademarks are applied, 20797
 plights of service workers under Government contracts, 19764
 selected services, monthly receipts, 18187
 Service, USDA's report to consumers, 18904
 Servicemen, *see* Armed Forces—Mechanics (persons).
 Services and activities offered to nursing home residents, U.S., 23725
 Serving growing economy and growing people, 25963
 Servoactuators, *see* Actuators.
 SESC, *see* Space Environment Services Center.
 Sesne Creek:
 vicinity of Fillmore, Calif.—
 flood plain information, 20128
 floods, 20152
 Set the Date Campaign, political committee, annual report, 24682
 Settleable solids, water quality standards criteria digest, 20229
 Settlement of land, *see* Land.
 Seuck County Democratic Party, annual report, 22980
 727 noise retrofit feasibility, lower goal design, fabrication, ground and flight testing, 24030
 Sevenmile Creek, flood plain information, Nashville, Tenn., 28717
 17th Congressional District Republican Committee, annual report, 24500
 Sever, Charles W., ground-water resources and geology of Cook County, Ga., 23345
 Severance pay, *see* Wages.

INDEX 1973

Sewage:

- activated carbon treatment of raw sewage in solids-contact clarifiers, 26419
- evaluation of field-type incinerator for human waste, theater of operations sewage treatment systems, 28692
- guide to preparation of operational plans for sewage treatment facilities, 31286
- oxidation ditch sewage waste treatment process, 21540
- oxygen diffusion in wet air oxidation processes, 23875
- physical-chemical treatment of combined and municipal sewage, 27465
- sewage sludge dumping in New York Bight, brief outline of study, 31302
- sewage/waste water disposal for surface ships, interface standard for shipboard systems, military standard, 27410
- temporary detention of storm and combined sewage in natural underground formations, 30190
- see also Municipal wastes—Sewerage systems—Sludge.
- Sewage plant operators, manpower requirements for waste water collection systems in cities and towns up to 150,000 in population, 30683
- Sewerage systems:
 - assessment of automatic sewer flow samplers, 31285
 - central water and sewerage systems (ownership and organization), 32380
 - combined sewer overflow study for Hudson River conference, 25115
 - flow smoothing stations in municipal sewage systems, 28802
 - injecting highly treated sewage-plant effluent into deep sand aquifer at Bay Park, N.Y., preliminary results, 17540
 - manpower requirements for waste water collection systems in cities and towns up to 150,000 in population, 30683
 - microstraining and disinfection of combined sewer overflows, phase 2, 25112
 - minimum design standards for community sewerage systems, 23437
 - Municipal Technology Branch projects through June 1972, 20202
 - need to control discharges from sewers carrying both sewage and storm runoff, GAO report, 26480
 - pressure sewer system demonstration, 23185
 - rest area sewage disposal and water supply, 32285
 - rural water and sewer grant program, veto, 26058
 - sewage treatment facilities planned for 1972-74, estimated construction cost, 21290
 - sewage treatment plants—
 - background information for proposed new source performance standards, 29643, 30722
 - dependability with special reference to activated sludge process, 16032
 - evaluation by tracer methods, 15520
 - sewage treatment system, surface-water investigations at Barrow, Alaska for planning purposes, 32364
 - storage and treatment of combined sewer overflows, 17420
 - storm sewer design, evaluation of RRL method, 20199
 - swirl concentrator as combined sewer overflow regulator facility, 20189
 - thermal wave flowmeter for measuring combined sewer flows, 27464
 - urban storm water runoff, selected abstracts, 21502
 - water supply and sanitary waste treatment facilities for safety rest areas, guidelines for review of plans, 32281
 - see also Sewage.
- Sewers, see Sewerage systems—Storm drains.

Sewing machines:

- buying a new sewing machine, 28014
- textile industries machinery and industrial sewing machines, industrial plant equipment handbook, 24985
- Sex:
 - detailed industry of employed persons by race and sex for U.S., 28126
 - education act extends discrimination and minimum wage provisions, 22304
 - estimates and projections of populations of U.S.S.R. by age and sex, 1950-2000, international population report, 25035
- Seychelles:
 - background notes, 31841
 - map, 16809
- Seymour, William R.:
 - American crafts, rich heritage and rich future, 19126
 - cooperative approach to outdoor recreation, 26425
- Shacklette, Hansford T.:
 - cadmium in plants, 20341
 - lithium in surficial materials of continental U.S. and partial data on cadmium, 23334
- Shade trees, see Trees.
- Shadow Mountain National Recreation Area, general information, 27822
- Shaffer, Jack, Friends of, see Friends of Jack Shaffer.
- Shaffer, Sylvia W., Air Force Medical Service digest, 19025
- Shafroth, John F., papers in Library of Congress, register, 32438
- Shafts:
 - FORTTRAN IV computer program for calculating critical speeds of rotating shafts, 31652
 - propulsion, ship, Federal identification guide, 28604
 - shaft collars and hub clamps, Federal item identification guide, 32174
- Shagawa Lake, project, lake restoration by nutrient removal from wastewater effluent, 30175
- Shahinian, P., effect of neutron irradiation on fatigue crack propagation in types 304 and 316 stainless steels at high temperature, 23876
- Shakers (apparatus):
 - evaluation of two tree shakers for harvesting cones, 27526
- Shale:
 - Project Trinidad, explosive excavation tests in sandstone and shale, 27443
 - stratigraphic terminology of Dakota Sandstone and Mancos Shale, west-central New Mexico, 31394
 - stratigraphy and ammonite fauna of Graneros shale and Greenhorn Limestone near Pueblo, Colo., 23360
 - see also Oil shale.
- Shale oil:
 - hydrogenating shale oil at low space velocity, 26664
 - refining improvement of shale oil naphtha, 26665
- Shambon, Arthur, evaluation of CaSO_4 : Dy and CaSO_4 : TmTLD for measurement of small gamma-ray exposures, 25876
- Shapers (tools):
 - industrial plant equipment handbook, 17322
 - lathes, milling machines and shapers, Federal item identification guide, 27391
- Shapes, structural shapes, nonmetallic, Federal item identification guide, 30113
- Shapes (metal):
 - inventories of—
 - brass and copper wire mill shapes, 1971, current industrial reports, 16765
 - steel mill shapes, current industrial report, 24234
 - metal bars, rods, wires, sheets, plates, and shapes, Federal item identification guide, 30105

- Shaping durable peace, foreign policy for 1970's, 26063, 26795
- Shapiro, Arlene K., input-output analysis as predictive tool, 23124
- Shapiro, Theresa R., black male professionals in industry, study, 25374
- Shapiro Brothers Shoe Co., Inc., Auburn, Maine, women's dress shoes, Tariff Commission report, 27952
- Shares of stocks, *see* Stocks.
- Shaughnessy, John D., effects of certain control-system nonlinearities on stability and pointing of attached double-gimbal experiment package in presence of random crew-motion disturbances, 29284
- Shaw, Dale L., cotton gin operating costs in West Texas, 28000
- Shaw, David G., meeting health manpower needs through more effective use of allied health workers, 29154
- Shaw, Elmer W., review of energy resources of public lands, based on studies sponsored by Public Land Law Review Commission, 15901
- Shawcroft, R. W., energy budget at earth's surface water relations and stomatal response in corn field, 22404
- Shawnee Indians, general information, 31476
- Shawnee National Forest, Shawnee is camping, hiking, hunting, floating, fishing, scenery, 23314
- Shawsheen River, Lawrence, Methuen, Andover, and North Andover, Mass., flood plain information, 25078
- Shay, Barry P., design considerations of programmable predetection digital signal processor for radar applications, 27843
- Shea, Keith R., hemlock, dwarf mistletoe, 17509
- Shear (mechanics):
materials handling research, shear properties of several granular materials, 27698
mechanical effects in close-in zone of underground nuclear explosion in granite, 21028
- Shear of winds, *see* Winds.
- Shearer, H. A., economic evaluation of COED process plus char gasification, 22615
- Shearing, estimating force and power requirements for crosscut shearing of roundwood, 16082
- Shearing machinery (metal squaring): presses, shearing, punching, boring, drilling, and tapping machine. Federal item identification guide, 28602
- Shearlings, washable shearlings, 28008
- Sheboygan, Wis.:
flood areas, Sheboygan River, 20111
prospects for the past, study of notable architecture, 31439
- Sheboygan County, Wis., flood plain information, Sheboygan River and Mullet River, 21455
- Sheboygan County Republican Party, annual report, 24419
- Sheboygan River:
flood areas, 20111
flood plain information, 21455
- Sheddan, Tommy L.:
fish inventory data—
Nickajack Reservoir, 24075
Pickwick Reservoir, 16550
South Holston Reservoir, 24076
- Sheehan, John E.:
address—
Oct. 16, 1972, 21573
Apr. 4, 1973, 28892
- Sheep:
and goats inventory, 24018
cooperative State-Federal sheep and cattle scabies eradication progress report and epidemiology, 22395
- Sheep—Continued
earning a living with sheep, 25135
number and classes, etc., 1965-70, 19138
on feed, 24019
early lamb crop, 26889
7 States, 22280
- Sheet glass, *see* Glass.
- Sheet metal:
application of phase-change technique to thin sections with heating on both surfaces, 32469
divergent beam (Kossel) X-ray method and its uses in measuring strain contours in individual grain of Fe-3 weight percent Si transformer sheet, 32482
effect of sheet thickness on fracture resistance K_{IC} parameter for titanium alloys, 27845
metal bars, rods, wires, sheets, plates, and shapes, Federal item identification guide, 30105
national apprenticeship and training standards for sheet metal industry, 22401
review of plane-stress fracture mechanics parameter K_{IC} determined using center-cracked tension specimen, 30589
- Sheets, Robert C., analysis of Stormiury data using variational optimization approach, 29392
- Sheets, current industrial reports, 19243, 28166
- Shekarchi, E.:
mineral industry of—
France, 20543
Liberia, 16287
Turkey, 16309
- Shelburne, Elizabeth C., characteristics of low-income population, 22562
- Shelby County Republican Campaign Committee, annual report, 24672
- Shelby County Republican Central and Executive Committee, annual report, 24403
- Shelby County Republican Women's Club, annual report, 24707
- Shell Oil Company, fate and effect of Shell oil spill, Platform B, Block 26, South Timballer Bay, studies and investigations, final report, 17930
- Shellabarger Pass, southern Alaska Range, Alaska, massive sulfide deposits, 17527
- Shelley, Philip E., assessment of automatic sewer flow samplers, 31285
- Shellfish:
Alabama landings, 17987, 20681
California landings, 18045
fish and shellfish over coals, 20685
Florida landings, 16402, 18372, 20680, 31711
Georgia landings, 16401, 18402
interstate shippers list, 18515
Louisiana landings, 18600
Maine landings, 18603
Maryland landings, 18612, 23787, 27794
Massachusetts landings, 18613, 26761
Mississippi landings, 18633, 23789
New Jersey landings, 18694
New York landings, 16398, 18701, 30514
North Carolina landings, 16399, 18711
report on pollution affecting shellfish harvesting in Galveston Bay, Tex., 20872A
Rhode Island landings, 18870, 22089
shellfish sanitation, agreement with Republic of Korea, 25756
situation and outlook (periodical), 18905
South Carolina landings, 16400, 18916
Texas landings, 18958
Virginia landings, 19047, 23788
see also Clams.
- Shells, vibration of shells, 31617
- Shells (atomic):
International Conference on Inner Shell Ionization Phenomena and Future Applications, Apr. 17-22, 1972, proceedings, 25870

INDEX 1973

- Shell (ordnance):
 insert arrangements for MIL-C-83733
 rack to panel connectors, shell size—
 A, military standard, 20079
 B, military standard, 20080, 23618
- Shells (structural):
 pressure recovery performance of conical
 diffusers at high subsonic Mach num-
 bers, 32460
 shell, instructor console, cathode ray tube,
 military standard, 15965
 stress, stability, and vibration of complex
 branched shells of revolution, analysis
 and user's manual for BOSOR4, 20588
- Shelters (protective), *see* Protective shelters.
- Shelton, Ella M.:
 aviation turbine fuels, 26655
 burner fuel oils, 32449
 diesel fuel oils, 17682
 motor gasoline—
 summer, 26654
 winter, 16256, 30421
- Shenandoah National Park, general informa-
 tion, 31735
- Shenk, Faye:
 development and validation of scores to
 predict officer career status, 28035
 predictability of expressed career intent,
 20941
- Shepherd, Wayne D., instrument for measur-
 ing tree crown width, 28944
- Sheridan, Eugene T.:
 coke and coal chemicals, 25442
 peat, 20569
- Sheridan, Patrick M., Sheridan for Congress
 Committee, annual report, 24625
- Sheridan County Democratic Central Com-
 mittee, annual report, 24557
- Sheridan for Congress Committee, annual
 report, 24625
- Sherman, Edith M., patterns for progress in
 aging, work study in social gerontology,
 30689
- Sherman, John H., relief, 28310
- Sherman County, Kans., soil survey report,
 29512
- Sherr, Theodore S., attribute sampling in-
 spection procedure based on hyperge-
 metric distribution, 15526
- Sherwood, G. E., FPL designs meet family
 housing needs, 21668
- Shetler, Stanwyn G., introduction to botani-
 cal type specimen register, 30631
- SHF, *see* Frequency band.
- Shielding:
 electronic gaskets. Federal item identifica-
 tion guide, 17328
 Federal Aviation Administration electro-
 magnetic pulse [EMP] protection study,
 26891
 national topical meeting on new develop-
 ments in reactor physics and shielding,
 19178
 reactor shielding for nuclear engineers,
 28084
- Shields, high density braid cable shields,
 fy 72-4, quarterly report, 26987
- Shigella, surveillance, Center for Disease
 Control, report, 18061
- Shilesky, D. M., industrial waste study,
 mercury-using industries, 20220
- Shimamoto, K., availability of rhenium in
 United States, 25416
- SHIP (simplified Helmholtz integral pro-
 gram), fast computer program for calculat-
 ing acoustic radiation and radiation im-
 pedance for free-flooded ring and finite-
 circular-cylinder sources, 16443
- Ship Creek, Greater Anchorage area, special
 flood hazard report, 20186
- Ship Structure Committee, SSC series,
 22214-22221
- Ship terminals, *see* Terminals.
- Shipboard quantum z-magnetometer, 21863
- Shipbuilding:
 adequacy of high-strength, low-alloy steel
 weldments for cargo ship hulls, study
 of factors which affect, 22221
- Shipbuilding—Continued
 construction subsidy be awarded after price
 has been negotiated by buyer—
 law, 29829
 reports, 29969, 32044
 further development of scientific and tech-
 nical progress in shipbuilding, USSR
 study, 25343
 impact of marine transportation and
 merchant ship construction on domestic
 and international shipping (address),
 23617
 improved productivity and technological
 advancements revitalize American ship-
 building industry (remarks), 23616
 long-term shipbuilding effort (remarks),
 27690
 maritime manpower report, seafaring, long-
 shore and shipyard employment, 16243
 merchant ship construction—
 for containerized service in foreign trade
 (address), 23619
 remarks, 25399
 national energy policy, shipbuilding and
 world trade expansion (remarks), 21926
 new ship construction, 17674
 our merchant marine, fourth arm of de-
 fence, 32286
 outlook for production on Navy's LHA and
 DD-963 shipbuilding programs, GAO re-
 view, 31383
 shipbuilding and financing in increasing
 energy imports (remarks), 25397
 ship construction restrictions, hearing,
 21270
 substantial increase in ship inventory
 needed to deal with national energy
 deficits (remarks), 21928
- Shipley, George E., Lake Committee for, *see*
 Lake Committee for George E. Shipley.
- Shipman, Gordon E., soil survey of north-
 ern Santa Barbara area, Calif., 16486
- Shipments:
 activity networks to model transportation
 systems subject to facility constraints,
 26379
 annual survey of manufactures, 1966,
 value-of-shipment concentration ratios
 by industry, 19188
 Cargo Commission act, report, 15693
 cargo security handbook for shippers and
 receivers, 20840
 cargo thefts—
 alleviating by creation of Commission to
 coordinate security and protection
 programs, report, 15693
 cargo theft and organized crime, desk-
 book for management and law en-
 forcement, 25790
 railroad industry, hearings, 20015
 chemical data guide for bulk shipment by
 water, 25956
 cooperative approach to cargo security in
 trucking industry, 32601
 foreign oceanborne trade of United States,
 containerized cargo on selected trade
 routes, 20519, 25394
 improving cargo transportation facilities
 to promote foreign commerce (address),
 25147
 intermodalism in cargo transportation (re-
 marks), 27506
 mail and cargo for cruise ships, hearings,
 15771
 manufacturers'—
 current industrial reports, 18194
 shipments, inventories, and orders,
 15596, 21068, 29785
 marking for—
 domestic shipment, civil agencies, 23249
 shipments and storage, military stand-
 ard, 25013, 27403
 value-of-shipment concentration ratios,
 19192
see also names or classes of articles
 shipped.

Shippers:

- cargo security handbook for shippers and receivers, 20840
- guide to air shippers' rights, 27043
- intermodal container services offered by U.S. flag operators, 29193
- interstate shellfish list, 18515

Shipping:

- act, amend, law, 15653
- code of Federal regulations, 17474-475, 20261, 21560-561
- conference on refrigerated containers, 27688
- conference on tank containers, 31574
- controls and environment (remarks), 27692
- domestic shipping and maritime policy, 20517
- foreign oceanborne trade of United States, containerized cargo on selected trade routes, 20519, 25394
- foreign trade reports, 19009, 19012
- impact of marine transportation and merchant ship construction on domestic and international shipping (address), 23617
- intercoastal act, amend, law, 15653
- laws, enforcement by Federal Maritime Commission, facilitate law, 15653
- laws relating to, compilation, 21145
- maritime industry and the economy (address), 24279
- maritime services, radio stations on land, shipboard, etc., FCC rules and regulations, 18307
- National Planning Conference on Domestic Shipping report, 23623
- necessity for combined governmental and shipping industry regulation of its practices (address), 25150
- need for a proposed intermodalism code regulating shipping in international ocean transportation (remarks), 27507
- new era of peace between labor and management after recent strikes in shipping industry (address), 23575
- new wave of American shipping, MARAD 1972 annual report, 25398
- occupational safety and health, maritime standards and interpretations, 30599
- on scene, National Maritime SAR review (periodical), 18730
- ship American bonus, how DISC corporations benefit by using U.S. flag ships, 21929
- ship American to American users (remarks), 28867
- shipping and shippers' problems (remarks), 28866
- single-factor rates under through bill of lading in foreign and domestic offshore commerce, hearings, 21269
- space technology applied to advanced sea transportation (remarks), 29194
- see also Merchant marine—Transportation—Water carriers.
- Shipping bags, bags, envelopes, and shipping sacks, Federal item identification guide, 30094
- Shipping conferences, steamship lines in foreign commerce of U.S., approved conference, rate and inter-conference agreements, 18005
- Shipping, National Planning Conference, Domestic, see National Planning Conference on Domestic Shipping.
- Shippingport Atomic Power Station, aerial radiological measuring survey, 30767
- Ships:
 - biological and nutrient chemistry data from participating ships, 2d survey cruise, eastern tropical Pacific Ocean EASTROPAC atlas, 29373
 - certificates of registry, enrollment, and license issued 1815-1913 at Edgartown, Mass., pamphlet describing microfilm, 25537

Ships—Continued

- Coast Guard—
 - description, 15612
 - 1974 authorization for procurement—
 - hearings, 28176, 28530
 - laws, 29828, 32007
 - report, 32102
 - computer simulation of slamming and other wave-induced vibratory structural loadings on ships in waves, further studies, 22220
 - construction, see, in main alphabet, Ship-building.
 - digital follow-up systems for ship automation, USSR study, 26577
 - drift meter log operations, USSR study, 27636
 - economies available through improved management of Navy shipboard inventories, GAO report, 28987
 - electronic equipment, maintainability design criteria handbook for designers, 16454
 - foreign flag ships owned by U.S. parent companies, oceangoing merchant type ships of 1,000 gross tons and over, 20518
 - interface standard for shipboard systems, military standards, 20073, 21410, 27409-410
 - Inter-Governmental Maritime Consultative Organization, merchant ship position reporting systems, 22616
 - licensing of personnel on certain vessels, hearing, 21325
 - loadlines on U.S. and foreign vessels, require—
 - hearings, 32087
 - report, 32107
 - loan of vessels, agreement with—
 - Argentina, 26873
 - Peru, 16501
 - Spain, 24002
 - merchant ship construction program (remarks), 27691
 - merchant vessels, United States, 18650, 19287
 - naval vessels—
 - disposal, hearing, 26251
 - military procurement, appropriations, 1973, hearings, 21200
 - transfer to foreign countries—
 - hearings, 21202
 - subcommittee report, 21207
 - oil/sorbent harvesting system for use on vessels of opportunity, 27470
 - physical oceanographic meteorological data from principal participating ships 2d survey cruise, Aug.-Sept. 1967 EASTROPAC atlas, 23782
 - program scores, ship structural response in waves, 22219
 - program TRANSHIP, computer program for design of midship section of transversely-framed dry cargo ship, 22214
 - research vessels of National Marine Fisheries Service, 20695
 - rules of the road, international, inland, 21095
 - sale of vessels stricken from Naval Vessel Register report, 28469
 - security of vessels and waterfront facilities, 16825
 - shaft, propulsion, Federal item identification guide, 28604
 - ship mortgage insurance—
 - increase amount available, law, 15646
 - Merchant marine act, amend—
 - law, 19437
 - report, 19857
 - shipboard quantum z-magnetometer, USSR study, 21863
 - shipboard shock and Navy devices for its simulation, 16445
 - structural analysis of longitudinally framed ships, 22215
 - surface ship & submarine safety review, fathom (periodical), 18286

INDEX 1973

- Ships—Continued**
 technical diagnosis of ship automation, USSR study, 26566
 U.S. and foreign coastal radio stations accentuating ships' weather observations, 31748
 U.S. passenger ship fleet, summary and prospects, 26636
 U.S. vessels, duty exemptions on foreign repairs made, report, 29856
 vessels entrances and clearances, foreign trade reports, 15597, 19011
see also Shipbuildings—Tankers—*see also* names of ships.
 Shirazi, Mostafa A., workbook of thermal plume prediction, submerged discharge, 20187
 Shirley Basin, Wyoming, geology and uranium deposits, Shirley Basin area, Wyoming, 16107
Shirts:
 boys' shirts, robes, and pajamas, I. Jablow and Company, Inc., Philadelphia, Pa., Tariff Commission report, 29548
 industry wage survey, men's and boys' shirts (except work shirts) and night-wear, 30393
 men's dress shirts, not ornamented, not knit, of cotton and manmade fibers, workers of Troy District Shirt Co., Cohoes, N.Y., Tariff Commission report, 27946
 trousers and shirts, Federal item identification guide, 20040
 Shoaf, John H., frequency stability specification and measurement, high frequency and microwave signals, 26705
Shoaling:
 hydraulic model investigation—navigation channel improvement Gastineau Channel, Alaska, 21481
 plans for reduction of shoaling in Brunswick Harbor and Jekyll Creek, Ga., 20175
 shoaling conditions, St. Louis Harbor, Mississippi River, 20177
Shock (biological), *see* Electric shock.
Shock (mechanical):
 effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, sinusoidal and random vibration, 29250
 guide for design of shock isolation systems for ballistic missile defense facilities, 32202
 prediction of ground-shock-induced airblast overpressures for subsurface explosions from peak vertical spall velocity, 17378
 shipboard shock and Navy devices for its simulation, 16445
 shock and vibration digest, 18906
 shock and vibration monograph series, 17342
Shock waves:
 analytical and experimental studies of shock interference heating in hypersonic flows, 31626
 calculation of shock wave in close-in zone of underground nuclear explosion (Cades method), 16676
 estimating water-shock-induced airblast from detonations in medium overlain with water, 26390
 implicit finite-difference solution to viscous shock layer including effects of radiation and strong blowing, 20622
 maximization and minimization of dynamic load factors, 27853
 mechanical effects in close-in zone of underground nuclear explosion in granite, 21028
 nearly spherical constant power detonation waves driven by focused radiation, 29254
see also Sonic boom.
 Shocking, isn't it? we want you to know what we know about electrical safety (poster), 21598
Shoes, *see* Boots and shoes.
 Sholtes, R. S., growth and decay of turbulent mixing in planetary boundary layer, 32252
Shooting:
 competitive marksmanship training program, 17755, 20731
 killing of polar bears, moratorium authorize, reports, 15703, 19905
 shooting animals from aircraft, provide for effective enforcement of provisions to prohibit—
 law, 19432
 reports, 15680, 15857
 Shop work, *see* Manual training.
 Shopping, availability of public transportation and shopping characteristics of SMSA households, 32233
Shops, *see* Pet shops.
 Shore, John E.:
 complete orthonormal set of 2-dimensional Haar-like functions, 27848
 convergence properties of Haar series, 27847
 on application of Haar functions, 27846
 two-dimensional Haar-like transform, 27849
 Shore, Milton F., current ethical issues in mental health, 27780
 Shore, Wayne C., suitability of using common selection test standards for Negro and white airmen, 25844
 Shore operations, *see* Military art and science.
 Shore protection, riprap stability on earth embankments tested in large- and small-scale wave tanks, 20103
Shoreline areas:
 ecological effects of offshore dredging and beach nourishment, review, 27437
 sedimentary framework of western Gulf of Maine and southeastern Massachusetts offshore area, 29020
 shore termination for oil spill booms, 28800
 Short-stay hospitals under medicare, 1969, use and charges, by major discharge diagnosis, 32555
 Short supply/anti-inflation export controls, 28399
 Short wave stations, *see* Radio stations
 Shortages and rising prices of softwood lumber, 27309
 Shortleaf pine, *see* Pine.
 Shoshone-Bannock Tribes of Fort Hall Reservation, *see* Bannock Indians.
 Shoshone Extensions Unit, Polecat Bench area, *see* Pick-Sloan Missouri Basin program.
 Shoshone National Forest:
 Stratified Primitive Area designated as part of Washakie Wilderness—
 law, 19409
 report, 19637
 Shoshoni Indians:
 general information, 31477
 judgment funds, disposition—
 law, 19377
 reports, 15710, 15832
 Shotguns, *see* Firearms.
Shrimps:
 agreement with Brazil, 17126, 31857
 hearing, 19972
 message from the President, 19811
 breaded, current fishery statistics, 18368, 25610
 fish sticks, fish portions, and breaded shrimp, 20677, 23785
 Gulf coast, data, 18411, 27795
 landings, 18907, 23790
 morphology of *Cyprina kawatai* Sohn and Kornicker, 1972 (Crustacea, Ostracoda), with discussion of genus, 26826
 two new caridean shrimps, one representing new family, from marine pools on Ascension Island (Crustacea: Decapoda: Natantia), 20765

Shrimps—Continued

- use of electricity in conjunction with 12.5-meter (headrope) Gulf-of-Mexico shrimp trawl in Lake Michigan, 22106
- western Atlantic shrimps of genus *Solenocera* with description of new species (Crustacea, Decapoda, Penaeidae), 32552

Shrouds:

- polyurethane shroud designed to prevent TACAN outages, 24043
- Skylab payload shroud jetitison tests, 17720

- Shrubs, notes on weevils from trees and shrubs in North Dakota, 28945

- Shuckrow, Alan J., physical-chemical treatment of combined and municipal sewage, 27465

- Shulman, Harry, old-age, survivors, disability and health insurance program, benefit amounts under 1972 amendments, 22241

- Shultz, Claire K., SRS research information system thesaurus, 25700

- Shultz, George P., address, Sept. 26, 1972, 20789

- Shultz, J. L., detection of organic compounds in respiratory coal dust by high-resolution mass spectrometry, 21962

- Shumway, Dean L., impairment of flavor of fish by water pollutants, 26400

- Shunt, application of shunt capacitors to rural electric system, 27874

- Shutt, William E., electron paramagnetic resonance studies of viscous nematic liquid crystal, evidence counter to second-order phase change, 21988

- Shuyler, Lynn R., national animal feedlot wastes research program, 25116

- SI (International System of Units), *see* Weights and measures

- Slam, Gulf of, southeast, north, southwest, summary of synoptic meteorological observations southeast Asian coastal marine areas, 23890

- Slaotang, Jay A. C., relief, 19575, 27116H

- Siberia, natural factors in activation of plague epizootics, USSR study, 20457

- Sibley County Republican Committee, annual report, 22844

- Sick:

- acute conditions, incidence and associated disability, July 1970-June 1971, United States, 29331

- effects of continued care, study of chronic illness in the home, 26716

- income-loss protection against illness, 23974

- noise and noise sickness, 31655

- Sicka, R. W., air modulated vacuum oil recover collection of spilled oil (foams), 17416

- Sickle cell anemia, *see* Anemia.

- SID, *see* Surveillance and Inspection Division.

- Siding:

- asphalt and tar, current industrial reports, 18194, 29754

- rigid poly (vinyl chloride) (PVC) plastic siding, 20651

- wood siding, installing, finishing, maintaining, 24131

- see also* Roofing.

- Siegel, Arthur I., some techniques for evaluation of technical training courses and students, 22363

- Siegel, Jacob S.:

- paper, Apr. 26, 1973, 27040

- some demographic aspects of aging in United States, 24238

- Siegel, Robert, net radiation method for enclosure systems involving partially transparent walls, 31651

- Siegel, William C., timber loans by U.S. life insurance companies, 20321

- Siehl, George H., issues related to surface mining, summary review, 17261

Sierra Leone:

- Guinea, boundary, study, 30649
- Liberia-Sierra Leone boundary, study, 22261

- Sierra Madera, geology of Sierra Madera cryptoexplosion structure, Pecos County, Tex., 29019

- Sierra National Forest, mineral resource evaluation of U.S. Forest Service Sierra Demonstration Project area, Sierra National Forest, Calif., 20354

- Sierra Nevada, water temperatures of streams, Delta-Central Sierra subregion, 23394

- Sierra Nevada batholiths, trace-element contents of some plutonic rocks, 17526

- Sierra Nevada Mountains, Huntington Lake quadrangle, central Sierra Nevada, California, analytic data, 21728

- Slesseger, Frederic W., basic data on economy of Bangladesh, 19298

- Sleyer, L. W., strength measurements on transistor header lead welds, 28065

- Sieves, preparation of molecular sieve materials from anthracite, 29813

- Sight:

- accommodation and stereoacuity in water, 25408

- apparent object movement produced by head movement under water, 16247

- effect of low levels of carbon monoxide on visual processes, preliminary study, 26644

- handedness and adaption to distortions of size and distance under water, 26641

- improvement of absolute distance estimation under water, use of monocular motion parallax, 31582

- improving absolute distance estimation in clear and in turbid water, 20530

- improving distance estimation under water, long-term effectiveness of training, 20531

- monetary value drivers place on comfort in night driving, 3132

- optical and visual tests on Navy prototype hard hat diving system, 26646

- sight reduction tables for air navigation 28632, 30125

- vision, hearing, coordination, and health in reading, 28674

- vision impairment services teams, report, 17926

- vision through various scuba facemasks, 30409

- visual evoked responses for divers breathing various gases at depths to 1,200 ft., 16252

- visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29256

- see also* Color blindness.

- Signal processors:

- microprogrammed control unit (MCU) programming reference manual, 22173

- signal processing element—

- functional description, microprogrammed control unit, buffer store, and storage control unit, 22175

- users' reference manual, 22174

- Signals:

- determination of focal projections of internal organs in brain of man through isolation of useful signals, 27646

- frequency stability specification and measurement, high frequency and microwave signals, 26705

- synchronous signaling rates between data terminal and data communication equipment, 20633

- universal dropout tester for magnetic storage media, 20646

- see also* Radar—Radio signals.

INDEX 1973

- Significance of cholinergic reactions in brain neuron pathology brought on by anticholinesterase intoxications, USSR study, 20458
- Significant accomplishments in sciences, 32463
- Signs, symbols, new recreation signs to guide you, 22351
- Silica:
chemical interactions of aluminum with aqueous silica at 25° C., 23392
kinetics of CO reduction of hematite to magnetite and effect of silica, 23659
- Silicides, oxidation at through-hole defects in fused slurry silicide coated columbium alloys FS-85 and Cb-752, 31635
- Silicon:
beryllium and beryllium-lithium complexes in single-crystal silicon, study, 21990
cyclic and isothermal oxidation behavior at 1100° and 1200° C. of nickel-20-percent-chromium, nickel-20-percent-chromium-3-percent-manganese, nickel-20-percent-chromium-3-percent-silicon, and nickel-40-percent-chromium alloys, 29288
divergent beam (Kossel) X-ray method and its uses in measuring strain contours in individual grain of Fe-3 weight percent Si transformer sheet, 32482
effect of copper and silicon on selected mechanical properties of hot-rolled medium-carbon steels, 31590
error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
stability and temperature characteristics of some silicon and selenium photodetectors, optical radiation measurements, 29321
- Silicon carbide, germanium cell performance with erbium oxide and silicon carbide radiators, experimental study, 16644
- Silicon dioxide, *see* Silica.
- Silicone, *see* Resins.
- Sills (geology):
effects of submerged sills in St. Clair River, hydraulic model investigation, 17409
- Silos, trench silo, concrete construction, 19114
- Silsby, Norman S., airport-area airspace used in simulated operations with experimental power-lift STOL airplane, 32473
- Silt, Colo., refraction surveys in Colorado, 30522
- Silt, *see* Sedimentation and deposition.
- Silurian period, Silurian rugose corals of Klamath Mountains region, Calif., 17535
- Silva, Manuel H., relief, 28314
- Silver:
beneficiation of Calico District, Calif., silver barite ores, 25507
disseminated silver-lead-zinc sulfide occurrence at Hahns Peak, Routt County, Colo., 26493
extraction of silver from refractory ores, 25511
mineral industry surveys, monthly report, 18403
minerals yearbook chapter, 25485
recovery of zinc, copper, silver, and iron from zinc smelter residue, 30431
- Silver City, N. Mex., Bilingual Bicultural Demonstration Center, description, cost, evaluation, etc., 27772
- Silver Gate, Mont., Cooke City, Silver Gate, winter sports area, snowmobiling, cross-country skiing, ice fishing, 23267
- Silverfish, how to control them, 24133
- Silversmiths, brief outline of origins of glassmaker, silversmith, wigmaker, and hatter in American colonies, 22090
- Silviculture, *see* Forests and forestry.
- Simmons, Gene, on the moon with Apollo 17, guidebook to Taurus-Littrow, 21978
- Simmons, George L. adjoint gamma-ray moments computer code, ADJMOM-I, 25556
- Simon, Kenneth A., educational statistics, digest, 1971 edition, 17357
- Simon, Leonard M., Simon for Congress, annual report, 24760
- Simon, William E., nomination, hearing, 23059
- Simon for Congress, political committee, annual report, 24760
- Simons, David G., relief, 19816
- Simplified mathematical modeling of water quality, 31305
- Simpson, H. J., aerosol and precipitation chemistry at Mauna Loa Observatory, 23805
- Simpson, Richard O.:
remarks—
Sept. 15, 1972, 16826
Dec. 13, 1972, 21110
Oct. 19, 1973, 22636
- Sims, Joseph L., tables for supersonic flow of helium around right circular cones at zero angle of attack, 32464
- Simsbury Republican Town Committee, annual report, 28295
- Simulated sonic booms and sleep, effects of repeated booms of 1.0 psf, 29684
- Simulation:
interaction simulation, coordinated local-State vocational education planning, evaluation report, 17354
residual performance effects of simulated sonic booms introduced during sleep, 16680
shipboard shock, and Navy devices for its simulation, 16445
simulated artificial gravity on human performance, effects, 21973
simulated in situ leaching of copper from porphyry ore, 29242
simulated sonic boom as avalanche trigger, 23293
simulation as technique in power tool safety research and education, 15626
state-trait anxiety, inventory and assessment of stress under simulated conditions, study, 16682
use of simulation models pertaining to best mix of aircraft, support personnel, spare parts, and level of repair, 30730
visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29256
wind tunnel simulation and prototype studies of barrier flow phenomena, 20974
- Simulators, visual field dependency in erect and supine positions, experimental investigation, 17715
see also Electronic pile simulators—Flight simulators.
- Simultaneous, multiple-level release from stratified reservoirs, 23178
- SINB, *see* Southern Interstate Nuclear Board.
- Sinclair, R. W., variation of low-level winds during passage of thunderstorm gust front, 31614
- Sinclair Oil Companies, wage chronology, Atlantic Richfield Co. (former facilities of Sinclair Oil Companies) 1941-72, 29166
- Sine waves, sinusoidal and random vibration, effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, 29250
- Singapore:
accessions list, Library of Congress, Djakarta, 17946
economic trends and their implications for United States, 23492, 29111
map, 30865
mineral industry, minerals yearbook chapter, 25428
surplus property off-shore sales facility, agreement, 16504, 25741

- Singer, Joseph M., dispersal of coal- and rock-dust deposits, 16332
- Single 6-year term for President, 15918
- Singler, William A., Singler for Representative Committee, annual report, 24482
- Singler for Representative Committee, annual report, 24482
- Sintering, heat resistance and sintering of nickel, USSR study, 26570
- Sioux City, Iowa, census of population and housing, 1970, census tracts, 19223
- Sioux Falls, S. Dak., area wage survey, 27675
- Sioux Indians:
- Cheyenne River Sioux Tribe, judgment funds, disposition, report, 15709
 - Dakota Indians, general information, 31478
 - Mississippi, judgment funds, disposition, law, 19483
 - see also* Yankton Indians.
- Shipsey Wilderness and Recreational Area, designate, hearings, 15863
- Shirrococo, Alvin:
- Inpatient health facilities as reported from 1969 MFI survey, 25569
 - services and activities offered to nursing home residents, U.S., 23725
- Sirups, *see* Maple sirup.
- Sisal hemp:
- disposal from national stockpile—
 - hearing, 24845
 - law, 30921
 - reports, 26139, 31064
- Sisco, Joseph J., address, May 7, 1973, 31848
- Siskind, David E.:
- fracturing in zone around blasthole, White Pine, Mich., 30430
 - mine roof vibrations from underground blasts, Pilot Knob, Mo., 30437
- Sisler, Grace F., authorizing Secretary of Interior to sell reserved mineral interests of United States in certain land in Missouri to Grace F. Sisler, 29845
- Sisseton Reservation, resources and development, potential, 31485
- Sister Rocks Research Natural Area, general information, 21645
- Site indexes:
- estimating Dunning's site index from plant indicators, 31368
 - improved growth intercept method for estimating site index of red pine, 21671
 - some soil phases in Missouri Ozarks have similar site indexes for oaks, 28960
 - soil-topographic site index for Englemann spruce on granitic soils in northern Colorado and southern Wyoming, 32330
- Sites:
- ability of laser profilometer system to evaluate unprepared landing site, analysis, 30166
 - APEEL array, site study, 22096
 - background report on powerplant siting, 17234
 - beef cattle feedlot site selection for environmental protection, 21503
 - estimating productivity on sites with low stocking capacity, 31372
 - forest-site relationships within outbreak of lodgepole needle miner in central Oregon, 28962
 - industrial location determinants, 1971-75, survey, 27419
 - installations site planning of community centers, Army technical manual, 28052
 - site alteration effects from rocket exhaust impingement during simulated Viking Mars landing, nozzle development and physical site alteration, 30448
 - site preparation—
 - and machine installation, 22500
 - and reforestation of droughty, acid sands, 22328
 - for Jack pine on grayling sands, 16078
- Sites—Continued
- special summer food service program for children site handbook, 28012
 - survey of industrial location determinants, 26352
 - see also* Historic sites.
- Sitka National Monument:
- land additions, authorize—
 - law, 19431
 - reports, 15819, 19633
- Sitka spruce, *see* Spruce.
- 6 1/2 percent treasury notes of series D-1976, 20843
- Six special studies requested for Ad Hoc Advisory Group on Presidential Vote for Puerto Rico, 22198
- Sixth District Federation of Republican Women, annual report, 24521
- Sixth District Republican Committee, annual report, 22995
- Size and shape of medical care dollar, chart books, 17835, 30635
- Size distribution of family personal income, methodology and estimates for 1964, 31213
- Sizemore, Earl M., retail trade, selected department store occupations, 16005
- Skagen, Kiki, bibliographical resources about India, annotated list of English-language reference works published 1965-70 in India, 15987
- Skerjanec, R. E., data results on panosecond pulse propagation measurements over line-of-sight paths, 22640
- Skidders:
- are you overloading your skidder tires? 20309
 - factors affecting productivity of logging crews using chain saws and wheeled skidders in tree-length aspen, 32321
- Skidding, experimental investigation of accelerometer-controlled automatic breaking system, 20607
- Skidmore, Rance W., application of meteorological satellite data in analysis and forecasting, supplement, 29382
- Skiling, *see* Skis and skiing.
- Skilkin, Lynne, for Congress Committee, *see* Lynne Skilken for Congress Committee.
- Skilled workmen, *see* Labor.
- Skilling, Darroll D., controlling lophodermium needlecast on Scotch pine Christmas trees, 32320
- Skimmers:
- fire streams used with self-propelled oil spill skimmer, 28807
 - free floating endless belt oil skimmer, 20188
 - small vacuum oil skimming system, 28801
- Skin:
- cancer, general information, 23718
 - pathogenesis of skin bends, review, 16245
 - skinfold thickness of children 6-11 years, U.S., 22028
- Skipjack tuna, *see* Tuna fish.
- Skirts, provisions for evaluating quality of women's skirts, military standard, 28620
- Skis and skiing, winter sports area, Cooke City, Silver Gate, cross-country skiing, etc., 23267
- Skodje, Marvin T., water supply and plumbing cross-connections, hazards in household and community systems, 16576
- Skogerboe, Gaylord V.:
- evaluation of canal lining for salinity control in Grand Valley, 20193
 - selected irrigation return flow quality abstracts, 20205, 32263
- Skolnik, Alfred M.:
- benefits and beneficiaries under public employee retirement systems, 16481
 - social welfare expenditures in fiscal year 1972, 22239
 - workmen's compensation payments and costs, 23975

INDEX 1973

- Skuderna, J. E.:
electrical equipment, field review of maintenance—
Hungry Horse project, Grand Coulee Dam Operations Office, Yakima project, 31780
Minidoka projects, Central Snake projects, 31781
- Skull:
certain problems of surgical aid in cranio-cerebral trauma, USSR study, 17639
development of indwelling intracranial pressure sensor, 29671
Skull Creek, geochemical anomalies and alteration in Moenkopi formation, Skull Creek, Moffat County, Colo., 21734
Sky, measurement of atmospheric transmittance from sun and sky with infrared vertical sounder, 22698
Skylab, *see* Space stations.
Skywaves, *see* Radio waves.
Slack, K. V., methods for collection and analysis of aquatic biological and microbiological samples, 29031
- Slag:
deoxidation of steel using waste aluminum dross, feasibility study, 16337
recovering rutilite from titanium-enriched high-iron smelter slag, studies, 26667
recovery of copper from converter slags by flotation, 16330
slag iron and steel, minerals yearbook chapter, 16325
Slama, Chester C., mathematical model for simulation of photogrammetric camera using stellar control, 22108
Slamming, computer simulation of slamming and other wave-induced vibratory structural loadings on ships in waves, further studies, 22220
Slash pine, *see* Pine.
Slate Canyon Creek:
Provo, Utah—
flood plain information, 23171
floods, 21471
Slater, James A., matches and lighters in flammable fabric incidents, magnitude of problem, 22016
Slatick, Eugene R., mineral industry, of Wyoming, 29229
Slattery, William J., index of U.S. voluntary engineering standards, 22006
Slaughtering:
beef carcass boning lines, operations, equipment, and layouts, 15475
commercial slaughter, meat and lard production, etc., 26888
livestock, monthly report, 18591
meat and poultry inspection regulations, 29656
pollution control costs and research priorities in animal slaughtering and processing industries, 27763, 30499
slaughtering, cutting, and processing beef on farm, 30699
- Sleep:
arousal from sleep by noises from aircraft with and without acoustically treated nacelles, 32457
effects of extreme factors of Antarctica on sleep of polar expedition members, USSR study, 30356
mechanisms of sleep, 27718A
residual performance effects of simulated sonic booms introduced during sleep, 16680
rhythm of sleep and wakefulness in crews of spaceships Soyuz 2-9 before, during and after exposure to space flight, USSR study, 23517
simulated sonic booms and sleep, effects of repeated booms of 1.0 psf, 29684
Sleeves (clothing and dress):
Federal item identification guide, 30099
Sleeving (insulating):
electrical, Federal item identification guide, 26325
Slidefilms, *see* Film slides.
- Sligo Creek Republican Women's Club, annual report, 24571
Slimes, *see* Phosphate slimes.
- Slings:
design guide for load suspension points, slings and aircraft hard points, 16655
slinging and tiedown provisions for lifting and tying down military equipment, military standard, 15958
Slip laws, *see* Law.
Slipperiness, updated inventory of existing practices and solutions to slippery pavements, 17456
Slippers, *see* Boots and shoes.
Sloan, Charles L.:
ground water hydrology of prairie potholes in North Dakota, 23359
some effects of heated pipeline on ground-water flow in Alaska, 23374
- Slopes:
computer program for pit slope stability analysis by finite element stress analysis and limiting equilibrium method, 21942, 25495
Slotnick, Henry B., selected essays and letters, 1969-70 assessment of writing, report, National Assessment of educational progress, 27371
Slots, two-dimensional slot nozzle ejectors with variable area mixing sections, analysis and testing, 29259
- Sludge:
activated sludge process, characterization, 28818
dewatering of mine drainable sludge, phase 2, 25118
fluidized bed clarification as applied to wastewater treatment, 21497
full scale parallel activated sludge process evaluation, 20198
investigation of phosphorus removal mechanisms in activated sludge systems, 26404
methods for pulp and paper mill sludge utilization and disposal, 31279
polymer film overlay system for mercury contaminated sludge, 20219
sewage treatment plant dependability with special reference to activated sludge process, 16032
sludge processing for combined physical-chemical-biological sludges, 31281
ultra high rate filtration of activated sludge plant effluent, 27476
see also Sewage.
- Sludge (fuel oil):
oily waste disposal by soil cultivation process, 23186
- Slurries:
impact of blasting agents and slurries on explosives technology, 21938
oxidation at through-hole defects in fused slurry silicide coated columbium alloys FS-85 and Ch-752, 31635
Slusher, Gerald R., relationship between SAE smoke number and jet aircraft smoke visibility, 24025
SM series, 15938
Smaldino, J., effect of electroacoustic characteristics of low-fidelity circuitry upon speech intelligibility, 25406
Small-area data notes, 18908
Small arms, *see* Firearms.
Small business, *see* Business.
Small Business Administration:
annual report, SBA story, 31794, 32549
appropriations, 1973, law, 19473
appropriations, 1974, hearings, 28388
bank/SBA loans, partnership for small business progress, 31793
current index of technical briefs, 23956
disaster loans, reduce interest rate, law, 16893
disaster relief program administration, hearings, 23043
economic opportunity loan program, 27877
increasing outstanding loan ceiling, hearing, 31013

- Small Business Administration—Continued
publications—
for-sale, booklets, 31796
free, management assistance publica-
tions, list, 30630
SBA's equal employment opportunity com-
pliance program, 25693
selling to U.S. Government, SBA services
to small firms, 31795
Small Business Administration and in-
vestment act with amendments, com-
pilation, 21151
what it is, what it does, 23957
Small Business, Select Committee on, House:
committee print, 23026
hearings, 15782-783, 17096-97, 19797,
21292, 28434
investigations and studies—
authorization and expenses report, 26108
92d Congress, final report, 21190
organization, jurisdiction, powers, and
duties to conduct studies and investiga-
tions of problems of small business, re-
port, 26068
portraits of Committee chairmen, presenta-
tion, 23026
publications and committee membership,
1941-72, 77th-92d Congresses, 24878
reports, 16970, 16976, 19611, 19626,
19723-724, 19728, 19731-732, 19734,
21190
Small Business, Select Committee on, Sen-
ate:
annual reports, 17210, 31104
committee prints, 15931, 17302-303
hearings, 15932, 17304-305, 20015-17,
24963, 26292-293, 27366, 28573, 31165-
166, 32155
investigations and studies, authorization
and expenses, report, 26216
reports, 17210, 26243, 31104
Small community needs, 17221
Small manufacturing establishments under
Fair labor standards act, 24100
Small vacuum oil skimming system, 23801
Smalley, Glandon W.:
hackberry, American wood, 31354
yellow-popular, loblolly pine, and Virginia
pine compared in Cumberland Plateau
plantations, 21664
Smallfly smiles, guide for teaching dental
health in community care programs, 17554
Smedes, Harry W., stratigraphic framework
of Absaroka Volcanic supergroup in Yel-
lowstone National Park region, 21730
Smell, influence of trigeminal stimulation on
children's judgments of odor, 15627
Smelters:
lead, background information for proposed
new source performance standards,
29643, 30722
recovering rutile from titanium-enriched
high-iron smelter slag, studies, 26667
recovery of zinc, copper, silver, and iron
from zinc smelter residue, 30431
Smelting:
autogenous smelting of copper sulfide con-
centrate, 23655
purification of yttrium by electrorefining,
26661
smelting metal with argon, USSR study,
17625
Smeltzer, Donald B., tests of mixed compres-
sion axisymmetric inlet with large tran-
sonic mass flow at Mach numbers 0.6 to
2.65, 21987
Smetana, Frederick O., point and path per-
formance of light aircraft, 30452
SMI, see Medicare
Smith, Adam, relevance of Adam Smith to
today's problems (address), 28897
Smith, Al, for Congress Committee, see Al
Smith for Congress Committee
Smith, Alberta M., food grain statistics,
wheat, rye, rice, flour, byproducts, 15482
Smith, Alexander H., high pressure reaction
vessel system I. installation, modification
and initial experiments, 21931
Smith, Allan F., toxic products from burn-
ing of fire resistant materials, 25515
Smith, Andrew J. K., brain death, bibliog-
raphy with key-word and author indexes,
22081
Smith, Carolyn R., index of institutions of
higher education by State and congress-
sional district, 31223
Smith, Carroll J., evaluation of XM20 and
XM20E1 landing mats under heavy-duty
load, 21479
Smith, Charles C. jr., effect of wing aspect
ratio and flap span on aerodynamic char-
acteristics of externally blown jet—flap
STOL model, 31629
Smith, Charles R., brief history of 12th
Marines, 23614
Smith, Clarence T., Army research and de-
velopment, newsmagazine, 18011
Smith, Franklin, guidelines for development
of quality assurance program, 31271
Smith, G. Hubert, Like-a-Fish Village and
Fort Berthold, Garrison Reservoir,
N. Dak., 20704
Smith, H.G., clean electric power, 22501
Smith, Halbert C., address, Oct. 11, 1972,
21543
Smith, Harold H., fast Fourier transform
microcode for Burroughs D-machine, 23884
Smith, Ivan C., control of mercury pollution
in sediments, 20192
Smith, John W.:
aragonite and genesis of carbonates in
mahogany zone oil shales of Colorado's
Green River formation, 25504
estimating nahcolite and dawsonite con-
tent of Colorado oil shale from oil-
yield assay data, 21947
oil yields and characteristics of Green
River Formation oil shales at WOSCO
EX-1, Uintah County, Utah, 20577
Smith, Leonard J., training commercial sales-
men, 20757
Smith, Martin F., foreign trade regulations
of Peru, 28638
Smith, Michael R., development of probe for
measuring 3-dimensional boundary layers,
16653
Smith, Patsy B., Foraminifera of North Pa-
cific Ocean, 27570
Smith, Paul A., jr., problems of communism,
18819
Smith, Paul F., mobile psychoacoustic lab-
oratory, 25405
Smith, R. E., physics of space environment,
colloquium held at University of Alabama,
Huntsville, Ala., 1970-71, 17704
Smith, R. H., black turpentine beetles, 17507
Smith, Richard B.:
mineral industry of—
Alaska, 16262
New Mexico, 20546
Smith, Robert, electrical power consumption
for municipal wastewater treatment,
31291
Smith, Roger C.:
job attitudes of air traffic controllers, com-
parison of 3 air traffic control special-
ties, 29685
state-trait anxiety inventory and assess-
ment of stress under simulated condi-
tions, study, 16632
Smith, W. L. jr., control of postharvest
brown rot of sweet cherries and peaches
with chemical and heat treatments, 19112
Smith, William E., fiber bonding and ten-
sile stress-strain properties of earlywood
and latewood handsheets, 32339
Smith, William L.:
measurement of atmospheric transmittance
from sun and sky with infrared vertical
sounder, 22098
radiometric techniques for observing at-
mosphere from aircraft, 25628
Smith, William R., signal processing ele-
ment users' reference manual, 22174

INDEX 1973

- Smith County Republican Executive Committee, annual report, 22727
- Smith, Frank, Committee for, *see* Frank Smith, Committee for.
- Smith, Quentin P., for Congress, *see* Quentin P. Smith for Congress.
- Smithsonian Institution:
annals of flight, 26692
annual report—
departmental edition, 23966
document edition, 23002
appropriations, 1973—
law, 19355
report, 16955
appropriations, 1974—
hearings, 27180, 31126
report, 29861
calendar of events, monthly, 18044
contributions to—
anthropology, 20760
astrophysics, 23958
botany, 25696, 26822, 29488, 30631
earth sciences, 20761, 31799-800
paleobiology, 20762, 23959-961, 30632
zoology, 16475-476, 17828, 20763-765,
23962-964, 25697-699, 26823-826,
27879, 29489-492, 30633, 31801-802,
32552
International exchange service, annual reports, 16477, 31803
research report, 31793
Smithsonian opportunities for research and study in history, art, science, 16478
Smithsonian, publications, price list, 26799
Smithsonian torch (periodical), 18909
studies in history and technology, 20766-768, 23965, 31804
- Smithtown Town Republican Club, Inc., annual report, 24733
- Smithtown Town Republican Committee, annual report, 24693
- Smoke:
relationship between SAE smoke number and jet aircraft smoke visibility, 24025
smoke density chamber method for evaluating potential smoke generation of building materials, 22017
- Smoky Bear, Smokey Bear trading post, help prevent forest fires, catalog of Smokey Bear items, 30248
- Smoking:
and health, bibliography, 16467, 30610
and health bulletin, 18910
chart book on smoking, tobacco & health, 16797
directory of on-going research in smoking and health, 27042
don't you get hooked (poster), Spanish edition, 27579
health consequences of smoking, Surgeon General's report, 29041
if you must smoke, what smokers should know about staying alive, 26722
Public health cigarette smoking act, report to Congress by FTC on enforcement, etc., 17490
teenage self test on smoking, 29333
unless you decide to quit, your problem isn't going to be smoking; your problem's going to be staying alive, 16798
- Smoky Hill River:
Sallina, Kans.—
flood plain information, 20129
floods, 20143
- Smuggling:
efforts to prevent heroin from illicitly reaching U.S., GAO report, 20327
heroin being smuggled into New York City successfully, GAO report, 20332
- Snails, effects of temperature on growth and reproduction of aquatic snails, 27452
- Snaketown Archaeological Site, Hohokam Pima National Monument, establish in vicinity, reports, 17002, 19918
- Snake River and Valley:
electrical equipment, Central Snake projects, field review of maintenance, 31781
fish passage report, 20100, 28683
Ice Harbor Lock, filling and emptying system, hydraulic model investigations, 28685
- SNAP (systems for nuclear auxiliary power), *see* Atomic auxiliary power generator—Atomic energy.
- Snell, Charles M.:
estimating water-shock-induced airblast from detonations in medium overlain with water, 26390
prediction of airblast overpressures from underground explosions, 17376
prediction of ground-shock-induced airblast overpressures for subsurface explosions from peak vertical spall velocity, 17378
- Snipes, hunting, possession, transportation, and importation, 1972-73, Federal regulations, 16487, 20781
- Snow:
centrifugal tensile tester for snow, 23296
computer simulation of snowmelt within Colorado subalpine watershed, 28966
conditions, weather and crop bulletin (periodical), 19081
early season snow report for Colorado, Jan. 1, 1973, water supply outlook, Federal-State-private-cooperative snow surveys, 22244
effect of snow cover on obstacle-crossing performance of vehicles, 21442
effects on image glide path systems winter 1971-72, 24045
Federal-State-private cooperative surveys—
Alaska, 18350
Arizona, 19056
Colorado and New Mexico, 19057
Idaho, 19058
Montana, 19059, 20778
Nevada, 19060
daily automatic snow sensor data summary, supplement, 20773
fall water supply, 29507
Oregon, 19061, 20779
Utah, 19062
Washington State, 19063
Western United States, including Columbia River drainage in Canada, 19064, 22245
Wyoming, 19065
Colorado, Montana and South Dakota, 1919-72 summary, 32560
pavement snow and ice control, search for new technology, 23187
physical properties of snow cover in Ft. Greely area, Alaska, 17372
probable maximum precipitation and snowmelt criteria for Red River of the North above Pembina, and Souris River above Minot, N.D., 32509
proposed system for Arizona telemetry of mountain snow pack and related data, 17839
radar cross-section measurements of snow and ice, 23155
seasonal snow-surface energy balance in forest opening, 25879
snow survey measurements, summary, Colorado and New Mexico, 25714
sublimation of wind-transported snow, model, 16090
survey and water supply forecasting, SCS national engineering handbook, 16485
terminal ballistics in ordinary snow, small arms fire attenuation, 21441
see also Precipitation.
- Snow crabs, *see* Crabs.
- Snow gages, *see* Precipitation gages.
- Snow Mountain Wilderness Area, designate, hearing, 15911
- Snow pack, *see* Snow.

- Snow vehicles, winter sports area, Cooke City, Silver Gate, snowmobiling, etc., 23267
- Snowmobiles, *see* Snow vehicles
- Snyder, E. B., glossary for forest tree improvement workers, 21651
- Snyder County Republican Committee, annual report, 24790
- So I have sickle cell trait . . . , 26756
- Soapstone, minerals yearbook chapter, 25489
- Soaring meteorology for forecasters, 20718
- Social adjustment, television and growing up, impact of televised violence, report to Surgeon General, app. A, hearings, 15878
- Social and economic characteristics by detailed industry for U.S., 28128
- Social and economic characteristics by marital status for United States, supplementary report, 27024
- Social and economic characteristics of students, 15592
- Social and psychological aspects of applied human genetics, bibliography, 25323
- Social and Rehabilitation Service: appropriations, 1974, hearings, 31009
- effectiveness of vocational rehabilitation in helping the handicapped, GAO report, 28988
- grants administration policies, research grants, demonstration grants, training grants, service grants, 20769
- national heart, blood vessel, lung and blood program, program analysis, 30492
- publications, lists, 17830, 31805
- regulations published in code of Federal regulations, public welfare, Social and Rehabilitation Service, assistance programs, compilation, 26827
- research and demonstrations briefs, 18863
- research for people in need, special SRS research report, 23968
- some problems in contracting for Federally assisted child-care services, Social and Rehabilitation Service, Dept. of Health, Education, and Welfare, GAO report, 28999
- SRS research information—
- guide to use, instruction manual, 26828
 - system thesaurus, 25700
- SRS system for project grants, 29496
- working papers, 31806
- Social gerontology, *see* Gerontology.
- Social impacts of civil aviation and implications for R & D policy, 17693
- Social indicators for small areas, 31951
- Social interaction, *see* Behavior.
- Social life and customs, *see* Manners and customs.
- Social mobility, *see* Mobility
- Social processes, *see* Society.
- Social responses to drug use, drug use in America, problem in perspective, 32440
- Social sciences: directory of information resources in United States, 29183
- environmental laboratory for social sciences, 25104
- ERIC Clearinghouse for Social Studies/ Social Science Education, interpretive series, 26742
- national assessment and social indicators, 31225
- social and health indicators system—
- census use study, 29723
 - Los Angeles, 29722
- Social security: act—
- amend—
 - extend kidney disease medicare coverage to railroad employees, their spouses and dependent children, reports, 28348, 30964, 31067
 - laws, 19526, 30929
 - reports, 19608, 21183
 - excerpts on social services, regulations, etc., 26266
- Social security—Continued
- act—continued
 - medical assistance financed under title 19, 18616
 - technical and conforming changes, report, 26125
 - agreement with—
 - Argentina, 20814
 - Liechtenstein, 22271
 - Mexico, 31869
 - United Kingdom of Great Britain and Northern Ireland, 31868
 - amendments of 1972—
 - brief description of Senate amendments to bill, 19533
 - materials related to H.R. 1, 19966-968
 - opening statement of Senate debate, 21333
 - report, 15860
 - summary of bill, 17252, 21336
 - BENDEX, beneficiary data exchange, 24193
 - beneficiaries—
 - in metropolitan areas, 31810
 - preliminary findings from survey of new beneficiaries, reports, 32557
 - under representative payment, 25704
 - who reach 100, 26832
 - benefits—
 - disabled? find out about social security disability benefits, 16479
 - increase—
 - laws, 16871, 19526
 - reports, 21183, 29868
 - bulletin, 18911
 - statistical supplement, 31813
 - cash benefits and social security financing, material related to H.R. 1, 19968
 - characteristics of State public assistance plans under Social security act, general provisions, eligibility, assistance, administration, 17829
 - checks for students 18 to 22, 17836
 - clergymen and religious workers, social security information, 20409
 - farmers, how to report your income for social security, 17831
 - farmers' tax guide, income and self employment tax, 20395
 - future directions in social security hearings, 26244, 27298, 32125
 - health insurance, hospital insurance under social security, your medicare handbook, 25706
 - hospital insurance under social security, 26836
 - income of newly entitled beneficiaries, 32557
 - information for young families, 29505
 - laws, compilation—
 - including Social security act and amendments through Jan. 1, 1973, 30958
 - print additional copies, report, 28356
 - print as House document, report, 28500
 - laws relating to social security and unemployment compensation, 21146-147
 - payment centers, construction, hearing, 26289
 - pensions, agreement with Poland, 27912
 - rent watch for social security beneficiaries, 16152
 - research and statistics notes, 16481-482, 22238-243, 23974-976, 29504, 31810-811, 32558
 - rulings on Federal old-age, survivors, disability, and health insurance, and miners' benefits, 18912, 29506
 - some aspects of dynamic projection of benefits under 1972 social security amendments, 26831
 - some mathematical aspects of social security amendments in Public Law 92-603, 26830
 - Spanish-surnamed social security beneficiaries in Southwest, 22243
 - student gazette, 25705

INDEX 1973

Social security—Continued
 survey of disabled, reports, 22229-231, 23971
 survey of institutionalized adults, report, 26833
 U.S. social security mission to Union of Soviet Socialist Republics, 26837
 women and social security, law and policy in five countries, 27886
 your check while you're outside the U.S., 31814
 your earnings record, 30636
 your social security—
 retirement, survivors, and disability insurance, medicare, 20772
 rights and responsibilities, 27887
 disability benefits, 31815
see also Disability Insurance—Old-age, survivors, disability, and health insurance—Public welfare.
 Social Security Administration:
 achievements, administrative problems, and costs in paying black lung benefits to coal miners and their widows, GAO report, 16094
 actuarial notes, 22225-227, 23969, 25701, 26830-831
 annual report, 27248
 appropriations, 1974, hearings, 31009
 national heart, blood vessel, lung and blood program, program analysis, 30492
 reminder, if you get black lung benefits, 29503
 research and statistics note, 27884-885
 Research and Statistics Office, staff papers, 22237, 26835, 27883
 research reports, 23977, 27886
 service area directories, 20771, 31812
 SSI series, 25706, 26836, 30636
 Social seminar handbook, education, drugs and society, 22079
 Social services, *see* Social work and problems.
 Social studies, *see* Social sciences.
 Social welfare, *see* Social work and problems.
 Social work and problems:
 building education into youth services, 32553
 demographic and social aspects of population growth, 25669
 determining functions and activities of public social service agency in separated system, working papers, 15629
 means of increasing use of defense technology for urgent public problems, GAO report, 21697
 separation of services from assistance payments, guide for State agencies, 21121
 social and rehabilitation services regulations as they affect child care, oversight hearing, 28406
 social development activities in Latin America promoted by Inter-American Foundation, fiscal year 1972, GAO report, 30264
 social services—
 aging, retirement, and social welfare publications, price list, 27868
 regulations—
 of Health, Education, and Welfare Dept. under Social security act, 28533
 staff and materials, 26266
 social security amendments, material related to H.R. 1, 19966
 social welfare expenditures, 22239
 State social service expenditures subsidized by Federal Government, justification, hearings, 19535
 studies in public welfare, how public welfare benefits are distributed in low-income areas, 27096, 30939
 undergraduate and graduate programs in social work, extension of grant authority, report, 19648
 volunteer services in public welfare, social services, manual, 22224

Social work and problems—Continued
 voluntary welfare agencies, fund-raising within Federal service, manual, 18608
see also Public welfare.
 Social workers, organizational structure and climate, implications for agencies, national study of social welfare and rehabilitation workers, work, and organizational contexts, 31806
 Socialism, problems of modern ideological struggle and development of Socialist ideology and culture, USSR study, 21855
 Socialist Labor Party, Michigan Campaign Committee, *see* Michigan Campaign Committee, Socialist Labor Party.
 Society:
 accountants and Government in an age of social change (address), 28976
 administration of criminal justice in modern urban society (address), 32409
 criminal, society, and victim, 32414
 drug use in America, problem in perspective social responses, 32440
 economic and social effects of highways, summary and analysis, 21537
 leading scientists discuss contemporary science and society, USSR study, 17633
 legal sanctioning and social control, 22069
 protocol to social progress, trust fund agreement with Inter-American Development Bank, 20799
 quality of life, 26742
 social and economic—
 characteristics by detailed industry for U.S., 28128
 characteristics by marital status for United States, supplementary report, 27024
 status of black population in United States, 29776
 social seminar handbook, education, drugs and society, 22079
see also Civilization.
 Society Against Mikva (SAM):
 annual report, 24791
 Society of Automotive Engineers, relationship between SAE smoke number and jet aircraft smoke visibility, 24025
 Socioeconomics:
 designs for preparation of vocational and technical teachers of socioeconomically disadvantaged youth, 21421
 height and weight of children, socioeconomic status, United States, 17749
 socioeconomic environmental studies series, 20215, 23199, 25122, 27491-494, 28841, 30197-198, 31306, 32271
 socioeconomic factors of scientific research institute management USSR study, 20464
 socio-economic profile of American Indians in Arizona and New Mexico, 22589
 syncrasis, dynamics of health, 17552-553, 20365-367, 25264
 Sociology:
 development digest (periodical), 18225
 Eastern Europe, translations, 18974
 social and psychological aspects of applied human genetics, bibliography, 25323
 USSR political and sociological affairs, translations, 18988
 Sockeye salmon, *see* Salmon.
 Soda (caustic):
 caustic dry peeling of cling peaches to reduce water pollution, its economic feasibility, 22223
 control techniques for mercury emissions from extraction and chlor-alkali plants, 27480
 Soderman, Paul T., leading-edge serrations which reduce noise of low-speed rotors, 31645
 Sodium:
 and sodium compounds, minerals yearbook chapter, 16326
 Federal and Indian lands, royalty, income and related statistics, 29013

Sodium—Continued

- in situ Ge(Li) and NaI(Tl) gamma-ray spectrometry, 22474
- use of atomic absorption spectroscopy in determination of certain concentrations, 17370
- Sodium chloride, *see* Salt.
- Sodium chromate, low-temperature heat capacities and high-temperature enthalpies of sodium chromate, 23650
- Sodium-cooled fast reactors, *see* Reactors (atomic).
- Sodium-water systems, status of LMFBR reheated in Western Europe, 1972, report of USA LMFBR sodium reheat team, 24197
- Soft contact lens, 20017
- Soft drinks, exclusive territorial allocation of franchises not unlawful, hearings, 24941, 23150
- Soft woods, *see* Softwoods.

Softwoods:

- plywood, current industrial reports, 29772
- predicting softwood cutting yields by computer, 28965
- shortages and rising prices of softwood lumber, hearings, 27309
- softwood log and lumber export restrictions, report, 28490

- Sohn, I. G., morphology of *Cypretta kawatai*
- Sohn and Kornicker, 1972 (Crustacea, Ostracoda), with discussion of genus, 26826

- Solcher, Halm, topside ionosphere during sunrise at mid-latitude, 22406

Soil conservation:

- inventory of soil and water conservation needs, 1967, basic statistics, 27888
- Ohio, 1972, report, 27892
- soil and water conservation districts, status of organization by States, etc., 23982
- Soil conservation and domestic allotment act, county committeemen to succeed themselves for 4 terms, report, 19651
- soil conservation (periodical), 18913
- statutes, compilation, 25820

Soil Conservation Service:

- American environment home study course for SCS employees, 30637
- projects, hearing, 31163
- SCS national engineering handbook, 16484-485, 25707, 26838

Soil engineering, *see* Soil mechanics.

Soil erosion:

- erosion and sediment control planning and implementation, guidelines, 17415
- soil stability and streamflow, 21684

Soil mechanics:

- computer program for pit slope stability analysis by finite element stress analysis and limiting equilibrium method, 21942, 25495

- effects of stress history on resilient response of soils, 31243
- materials handling research, penetration of selected/granular materials by wedge-shaped tools, 29232
- measuring soil properties in vehicle mobility research resistance of fine-grained soils to high-speed penetration, 31262
- soil failure under inclined loads, 21438
- soils interpretations for community planning and development, 27897
- subsurface investigations, soils, engineering and design manual, 23176
- theory of soil plasticity with indefinite angle of non-coaxiality, 30156

Soil moisture, *see* Soils.

Soil stabilizing agents, *see* Soils.

Soil temperature, *see* Soils.

Soils:

- aircraft tire behavior during high-speed operations in soil, 16350
- cation transport in soils and factors affecting soil carbonate solubility, 28823

Soils—Continued

- damping capacity of soil during dynamic loading, review of laboratory methods of determining damping, 28781
- deforestation effects on soil moisture, streamflow, and water balance in central Appalachians, 32343
- effects of soil type and watering on germination, survival, and growth of Engelmann spruce, greenhouse study, 16081
- fragment and projectile penetration resistance of soil high-velocity fragment penetration into laboratory-prepared soil targets, 31259
- gold anomaly in soil of West End Creek area, Yellow Pine District, Valley County, Idaho, 26496
- growing plants without soil for experimental use, 20916
- growth and survival of northern plants at low soil temperature, growth response, organic nutrients, and ammonium utilization, 30157
- ionic migration and weathering in frozen Antarctic soils, 32459
- lime-cement combination stabilization, 30161
- lithium in surficial materials of conterminous U.S. and partial data on cadmium, 23334
- Mission Ridge, case history of soil disturbance and revegetation of winter sports area development, 32326
- nature and properties of some forest soils in White Mountains of New Hampshire, 32344
- nitrogen fertilization increases cottonwood growth on old-field soil, 21665
- olily waste disposal by soil cultivation process, 23186
- on natural redistribution of surface contamination, 24199
- performance of soil under tire loads, application of test results to tire selection for off-road vehicles, 20173
- power requirements for wheels operating in fine-grained soils, 26386
- recording soil moisture tensiometer, 21660
- role of soils and sediment in water pollution control, reactions of nitrogenous and phosphatic compounds with soils and geologic strata, 17936
- root diseases and soil microbiology, 21683
- soil moisture energy relationships associated with riparian vegetation near San Carlos, Ariz., 16105
- soil sampling and testing for residential developments, 32379
- technical study, report, 16135
- soil surface conditions following balloon logging, 20300
- soil survey investigations report, 31825
- soil survey laboratory data and descriptions, California, 31825
- soil survey reports—
 - Alleghany County, N.C., 26839
 - Anne Arundel County, Md., 27895
 - Arkansas County, Ark., 17840
 - Ashtabula County, Ohio, 31817
 - Berrien and Lanier Counties, Ga., 31818
 - Caddo County, Okla., 30638
 - Clark County, Wash., 25708
 - Craig County, Okla., 29508
 - Edwards and Richmond Counties, Ill., 17841
 - Erath County, Tex., 26840
 - Fayette County, Pa., 29509
 - Fond du Lac County, Wis., 31819
 - Grayson County, Ky., 25709
 - Jefferson County, Okla., 31820
 - Jefferson County, W. Va., 26841
 - Kauai, Oahu, Maui, Molokai, and Lanai Islands, Hawaii, 17842
 - Lancaster County, S.C., 31821
 - Lane County, Kans., 23983
 - Lee County, Miss., 27896

INDEX 1973

Soils—Continued

- soil survey reports—continued
 - Madison County, Ky., 29510
 - Marion County area, Oreg., 17843
 - Marshall County, Miss., 25710
 - Midland County, Tex., 31822
 - Montgomery County, Tex., 20775
 - Niagara County, N.Y., 25711
 - Obion County, Tenn., 25712
 - Ochiltree County, Tex., 25713
 - Oktibbeha County, Miss., 31823
 - Ottawa County, Mich., 26842
 - Ouachita County, Ark., 30639
 - Pinellas County, Fla., 17844
 - Pontotoc County, Okla., 29511
 - Pope County, Minn., 17845
 - Salcha-Big Delta Area, Alaska, 31824
 - Santa Barbara northern area, Calif., 16486
 - Sherman County, Kans., 29512
 - Somerset County, Maine, southern part, 20776
 - South Umpqua, Oreg., 29513
 - Spencer County, Ind., 29514
 - Steele County, Minn., 32562
 - Stratford County, N.H., 26843
 - Swift County, Minn., 26844
 - Walsh County, N. Dak., 26845
 - Warren County, Ohio, 26846
 - Woodbury County, Iowa, 20777
 - soil surveys—
 - for land use planning in Alaska, 32563
 - help Vermont homeowners, farmers, planning commissioners, etc., 23984
 - soil temperature and plants in north, USSR study, 31538
 - soil-topographic site index for Engelmann spruce on granitic soils in northern Colorado and southern Wyoming, 32330
 - soils interpretations for community planning and development, 27897
 - some soil phases in Missouri Ozarks have similar site indexes for oaks, 28960
 - subsurface investigations, soils engineering and design manual, 23176
 - total soil nitrogen analysis using micro-Kjeldahl digestion and portable distillation equipment, 31369
 - tree species for plantations in granitic uplands of Puerto Rico, 28956
 - see also* headings beginning Soil.
- Sokol Day, National, *see* National Sokol Day.
- Sokoloski, Adam A., ocean fishery management, discussions and research, proceedings, 29393
- Solar activity:
- collected data reports on Aug. 1972 solar-terrestrial events, 30174
 - data on solar-geophysical activity associated with major ground level cosmic ray events of Jan. 24 and Sept. 1, 1971, 30172
 - introduction to solar terrestrial activity for geomagnetic studies, earth main field, 22095
 - Space Environment Services Center monitoring and reporting service, 28846
 - table of type NM-64 cosmic-ray neutron monitor counting rates as function of solar modulation of galactic cosmic rays expressed in terms of Ehmer potential, 21013
 - Solar batteries, effect of MeV electrons on seria-doped solar cell cover glass, 29282
- Solar cells, *see* Solar batteries.
- Solar energy:
- net radiation method for enclosure systems involving partially transparent walls, 31651
 - research, multidisciplinary approach, 24075
- Solar flares, NRL OSO-4 Bragg crystal spectrometer instrument study of solar flare plasmas, 16450
- Solar-geophysical data (periodical), 18914

Solar physics, *see* Physics.

- Solar radiation:
 - direct solar radiation on various slopes from 0 to 60 degrees north latitude, 32345
 - Rocky Mountain millivolt integrator for use with solar radiation sensors, 23294
 - solar radiation affects radiant temperatures of deer surface, 16080
 - SOLRAD 10 satellite, Explorer 44, 22164
- Solar reflectors, solar reflectance of monolayer covered and clean water surfaces, 23938
- Solar wind:
 - high speed streams in solar wind, 31265
 - solar wind, conference proceedings, 16348
- Soldan, Elsa B., Paz, *see* Pas Soldan, Elsa B.
- Soldano, B. A., basic properties of ice as related to performance of ice condensers, 24202
- Solder and soldering:
 - electrical terminations, welded, brazed, bonded, 29666
 - soldering accident dosimeter to film badge holder for radiac detecting element, process, military standard, 20069
- Soldiers:
 - civil relief act and amendments, 22998
 - legal guide for the soldier, 28047
 - Soldiers (periodical), 18915
 - Soldiers' and sailors' civil relief act, amend. report, 19588
- Soldiers' and Airmen's Home:
 - appropriations, 1973, hearings, 15866
 - appropriations, 1974—
 - hearings, 28357
 - report, 30983
 - interest paid on permanent fund, increase, hearings, 28394
- Soldier's Home, District of Columbia, *see* Soldier's and Airmen's Home.
- Sole leather, lining, and wetting leathers, former workers of Elkland Leather Co., Inc., Elkland, Pa., 20832
- Solid-liquid flow in noncircular pipes, 25502
- Solid-phase forming (cold forming) of plastics, 21412
- Solid propellants, *see* Propellants.
- Solid-state amplifier for bridge circuit of mercury detector, 17684
- Solid Waste Management Office, poster, 29515
- Solid wastes, *see* Waste products.
- Solids:
 - dissolved solids, water quality standards criteria digest, 25128
 - heat transfer coefficients of dilute flowing gas-solids suspensions, 29261
 - periodic excitation of finite standard linear viscoelastic solid, 27440
 - process design manual for suspended solids removal, 16548
 - settleable solids, water quality standards criteria digest, 20229
 - three-dimensional elastic stress and displacement analysis of finite circular geometry solids containing cracks, 29287
- Solomon Islands, mineral industry, minerals yearbook chapter, 20540
- SOLRAD, *see* Satellites.
- Soluble particulates in ice from site 2, Greenland, 31236
- Solutes:
 - tracer simulation study of potential solute movement in Port Royal Sound, S.C., 20356
 - transverse diffusion of solutes in natural streams, 21722
- Solutions:
 - properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260
 - selected specific rates of reactions of solvated electron in alcohols, 17736

- Solutions—Continued
steady-state solutions of discrete-velocity Boltzmann systems in restricted flow regions, 23874
see also Heat of solution.
- Solvents:
field study of viscous oil production by solvent stimulation, Wilmington, Calif., 21963
oxidation of pyrites in chlorinated solvents, 20209
solvent extraction status report, 27459
solvents and explosives to recover heavy oil, 21961
working with industrial solvents, 16385
see also Extraction (chemistry).
- Somali Democratic Republic, *see* Somalia.
- Somalia:
economic trends and their implications for United States, 17585
Kenya boundary study, 29533
- Some approaches to testing hypotheses for multidimensional stationary stochastic processes, 23880
- Some experiments on stirring of viscous liquids, 27735
- Some grad schools are more challenging than others, 28036
- Some hydrodynamic indices of body shape of pinnipeds, 20466
- Some information descriptive of successfully operating HMO, 29038
- Some kids will try anything once, we want you to know what we know about protecting children from adult medicine (poster), 23260
- Some problems in contracting for Federally assisted child-care services, Social and Rehabilitation Service, Dept. of Health, Education, and Welfare, GAO report, 28999
- Somerset County, Maine, soil survey report of southern part, 20776
- Somerset County, Pa., underclay deposits of Somerset and eastern Fayette Counties, Pennsylvania, 21709
- Somerset Coal Mine, instrumentation studies of earth tremors related to geology and to mining at Somerset Coal Mine, Colorado, 21735
- Somerville, Tenn., fear runs deep, report of open meeting, Somerville, Tenn., civil rights aspects, 22580
- Sommerfeld, R. A., centrifugal tensile tester for snow, 23296
- Sonar:
adaptation of NRL acoustic research tank facility for experiments in parametric sonar, with preliminary results, 32525
field evaluation of effects on hearing and general habitability of own-ship echoranging during submarine patrol, 20523
- Sondermayer, Roman V.:
mineral industry of—
Arab Republic of Egypt, 20561
Libya, 20565
- Sonett, C. P. solar wind, conference proceedings, 16348
- Sonic boom:
application of sonic-boom minimization concepts in supersonic transport design, 29277
data related to tests conducted at White Sands, N. Mex. and Edwards Air Force Base, 24054
Federal aircraft noise abatement program, 29565
Investigation of flow fields within large-scale hypersonic inlet models, 29270
regulation of public exposure to, hearing, 21258
residual performance effects of simulated sonic booms during sleep, 16680
simulated sonic booms—
and sleep, effects of repeated booms of 1.0 psf, 29684
as avalanche trigger, 23293
- Sonic boom—Continued
sonic boom measurements for SR-71 aircraft operating at Mach numbers, etc., 17712
- Sonnenberg Gardens:
conveyance of land—
law, 19331
report, 15676
- Sonoma County, Calif.:
outlet works, Warm Springs Dam, Dry Creek, Russian River Basin, 25101
timber resources, 20323
- Sope Creek:
flood plain information, 28725
floods, 28764
- Sopors, *see* Methaqualone.
- Sorbents, development and preliminary design of sorbent-oil recovery system, 27467
see also Adsorbents.
- Sorensen, Frank C., seed orchard tree as pollen sampler, model and example, 21656
- Sorensen, Jackl, aerobic dancing, rhythmic sport, 31766
- Sorensen, James E., community mental health centers, cost-finding and rate-setting, 17766
- Sorenson, James R., social and psychological aspects of applies human genetics, bibliography, 25323
- Sorghum, culture of sweet sorghum for sirup production, 27988
- Sorption, *see* Adsorption.
- Sorting devices:
electronic color separating or sorting machines from United Kingdom, determination of no injury to U.S. industry, Tariff Commission report, 32587
photoelectric color sorting of citrus fruits, 22358
- Sound:
acoustic field of infinite circular, cylindrical transducer partially covered by layer of sound-soft material, USSR study, 17596
acoustical and vibrational standard reference quantities, military standard, 28621
adaptation of NRL acoustic research tank facility for experiments in parametric sonar, with preliminary results, 32525
artillery sound ranging computer simulations, 22412
electric and acoustic fields of fishes, use in commercial fishing, etc., USSR study, 31527
environmental-acoustics atlas of Caribbean Sea and Gulf of Mexico marine environment, 22161
field test report on interoceanic acoustic release devices, 31728
interaction of ultrasound and biological tissues, 27872
loudness function derived from data on electrical discharge rates in auditory nerve fibers, 29296
mathematical model for standing-wave acoustic parametric source (SWAPS), 31758
response variations of 3 types of microphones pressurized to 19 Ata, 20525
- SHIP (simplified-Helmholtz-integral program), fast computer program for calculating acoustic radiation and radiation impedance for free-flooded-ring and finite-circular-cylinder sources, 16443
sound insulation in modular motel, 26474
sound velocity structure of north Indian Ocean, 29432
successful conditioning of stapedius muscle, 29200
ultrasonic mass flowmeter for Army aircraft engine diagnostics, 26979
ultra-sound cutting and fusing of biological tissue, USSR study, 26586
underwater sound equipment, Federal item identification guide, 32178

INDEX 1973

Sound—Continued

wave problems in hydroacoustics, USSR study, 23513

Sound recordings:

protection of producers of phonograms convention, 28438
recording rights in musical compositions, 31169

voices of World War II, 1937-45, select audiovisual records, 25547

Sounding (meteorology):

plasma-sphere sounder satellite, 20693
verification of operational SIRS B temperature retrievals, 23806, 25627

Sounding and soundings:

marine magnetovariation station for studies by magnetotelluric soundings method, USSR study, 20451

measurement of atmospheric transmittance from sun and sky with infrared vertical sounder, 22098

monitoring Northern Hemisphere transmissions in Antarctica and some oblique sounding systems, USSR study, 23522

recognition of natural brine by electrical soundings near Salt Fort of Brazos River, Kent and Stonewall Counties, Tex., 30283

using video pulse sequencing for sounding sea ice, USSR study, 21840

Soundproofing, *see* Insulation.

Source mechanisms for rotor noise radiation, 32454

Souris-Red-Rainy River Basins Commission, annual report, 32564

Souris River:

Missouri-Souris development area water pollution investigation, cooperative State-Federal report on water pollution, 17809

probable maximum precipitation and snow-melt criteria for Red River of the North above Pembina, and Souris River above Minot, N.D., 32509

South, Charles E., hearings in records of U.S. Senate and Joint Committees of Congress, 20631

South (U.S.):

agricultural South in growing America (address), 20896

census of population and housing, geographic identification code scheme, 19228

cost of transporting freight, 16170

food consumption of households, South, 1965-66 seasons and year, 22333

fresh fruit and vegetables unloads, southern cities, by commodities, 24115

mid-south, forest research news, 18386

Negro employment in South, State and local governments, 25373

nursery diseases of southern hardwoods, 16075

potential for cooperative distribution of petroleum products in South, 28849

southern pulpwood production, 21679

South Absaroka Wilderness:

change name to Washakie Wilderness—law, 19409

report, 19637

South Africa:

basic data on economy, 22631

economic trends and their implications for United States, 25309, 31503

Mozambique boundary study, 29532

plant quarantine import requirements, 20962

South-West Africa mineral industry, minerals, yearbook chapter, 16307, 25471

South West Africa (Namibia)—

background notes, 20786

boundary study, 17863

Swaziland, boundary study, 31846

U.S. business involvement, hearings, 15740

South America:

Atlantic coast, surface water temperature and density, 30516

east coast—

including Greenland, tide tables, high and low water predictions, 29381

lights and fog signals, list, 17790

mineral industry, minerals yearbook chapter, 16299

west coast, tide tables, high and low water predictions, 25614

South Asia, *see* Asia

South Atlantic Islands, evolution of rails (Aves Rallidae), 31802

South Atlantic slope basins, *see* Atlantic States.

South Atlantic States, *see* Atlantic States.

South Bend, Ind., area, wage survey, 30386

South Carolina:

census of business, 1967, selected services, 16712

census of housing, 1970, housing characteristics for States, cities, and counties, 15560

census of population, 1970, detailed characteristics, 19206

census of transportation, 1972, truck inventory and use survey, 19235

climatological data, 18109

counties, population estimates, 28181

county business patterns, 31959

electric rate book, 21557

geochemical prospecting using water from small streams in central South Carolina, 25254

landings, fish and shellfish, 16400, 18916

mineral industry, minerals yearbook chapter, 25470

pollution of interstate waters of lower Savannah River and its tributaries, conference, proceedings, 26800

precipitation data, hourly, 18459

recovery of feldspar and glass sand from South Carolina waste granite fines, 16335

rehabilitation facilities, national directory, 25686

South Central States, *see* Central States.

South Creek, flood plain information, Sarasota County, Fla., 32220

South Dade Labor Camp, Homestead, Fla.

typhoid epidemic, migrant workers' health problems, hearings, 29924

South Dakota:

census of housing, 1970, housing characteristics for States, cities, and counties, 15561

census of population, 1970 characteristics of population, 27015

census of transportation, 1972, truck inventory and use survey, 28144

climatological data, 18110

counties, population estimates, 19249

county business patterns, 29745

divisions of Federal judicial district, revise—

law, 15647

report, 15830

electric rate book, 17463

flood disaster, hearing, 15778

mineral industry, minerals yearbook chapter, 16306

precipitation data, hourly, 18460

register of minority contractors and housing professionals, listing in selected cities, 32385

report on pollution affecting water quality of Cheyenne River system, western South Dakota, 20213

snow survey measurements 1919-72, summary, 32560

stratigraphy and geologic history of Montana Group and equivalent rocks, 30281

water yield characteristics of three small watersheds in Black Hills of South Dakota, 28967

- South East, *see* Asia.
 South Fork Rivanna River, *see* Rivanna River.
 South Fork Salt River, flood plain information, 21456, 23176
 South Holston Reservoir, fish inventory data, 24076
 South Korea, *see* Korea.
 South Pacific Commission :
 membership and participation by U.S., increase ceiling—
 law, 19421
 report, 17150
 South Paris, Maine, specialized language activities for rural disadvantaged, South Paris, Maine, 27778
 South Platte River :
 communication and control systems, projects, region 7, field review of maintenance, 31778
 drainage basin, cooperative State-Federal report on water pollution, 17811
 electrical equipment, projects, region 7, field review of operation and maintenance, 31784
 South Umpqua, Oreg., soil survey report of area, 29513
 South Umpqua River, *see* Umpqua River
 South Vietnam, *see* Vietnam.
 South West Africa, *see* South Africa.
 South Wood Federation of Republican Women, annual report, 24468
 Southampton County Republican Committee, annual report, 22833
 Southampton Town Republican Committee, annual report, 22987
 Southard, Lawrence G., mineral industry of Kansas, 16284
 Southbridge, Mass., flood plain information, Quinebaug River, Cady Brook, 25080
 Southbury Republican Women's Club, annual report, 24621
 Southeast (U.S.) :
 pesticide usage and its impact on aquatic environment in the Southeast, 20868
 plan for development of land and water resources of southeast river basins, 17924
 relation of environmental and biotic factors to stump colonization and losses in residual stand, 20936
 Southeastern area, fiber quality and ginning and spinning performance of new high-quality cottons, 1967 and 1968 crop years, 16605
 Southeast Asia, *see* Asia.
 Southeast Fisheries Center, bionumeric code, fishes, 25631
 Southeastern Forest Experiment Station, publications, lists, 25217-218, 30247
 Southeastern Power Administration :
 public works appropriations, 1974—
 law, 32015
 report, 29993
 Southern Airways, Inc., accident report, 22147
 Southern California Joint Board, Political Education Committee, annual report, 22861
 Southern California League for a Strong America, annual report, 24771
 Southern Claims Commission, records, 1871-80, of Commissioners of Claims, pamphlet to accompany microfilm, 25535
 Southern Conference on Environmental Radiation, Protection from Nuclear Power Plants, proceedings, 20740
 Southern Forest Experiment Station, publications, list, 18846
 Southern Interstate Nuclear Board :
 compensation of Federal representatives—
 law, 19375
 report, 17173
 Southern Interstate Nuclear Board—Con.
 nuclear fuel cycle, transportation requirements within Southern Interstate Nuclear Board region through 1980, SINB/AEC Work Conference on Transportation of Radioactive Materials, 28079
 Southern pine, *see* Pine.
 Southern Railway System :
 railroad accident report, 30570
 railroad employee accident report, 32545
 Southern region, *see* South (U.S.).
 Southern Rhodesia, *see* Rhodesia.
 Southern Ute Indians, *see* Ute Indians
 Southold Town Republican Committee, annual report, 24766
 Southwell, Charles R. :
 biological deterioration of woods in tropical environments, long-term resistance to terrestrial fungi and termites, 31753
 termite resistance of polymeric materials phase 2-nontoxic polymers, 17792
 Southwest (U.S.) :
 aquatic and wetland plants of southwestern United States, 17432
 ground water levels, 17549
 initial assessment of mammal damage in forests of Southwest, 23289
 men who matched mountains, Forest Service in Southwest, 26467
 selected U.S. crop budgets, yields inputs, and variable costs, Southwest region, 27423
 southwest Indian report, 27044
 Spanish-surnamed social security beneficiaries in Southwest, 22243
 Southwestern Federal power program, financial progress and problems, 21699
 Southwestern Power Administration :
 appropriations, 1973, supplemental, proposal, 19568
 public works appropriations, 1974, report, 29993
 Southwestern Federal power program, financial progress and problems, GAO report, 21699
 Sovanco Fracture Zone, and Juan de Fuca Ridge, RP-5-OC-71, trackline and station operations, bathymetry, gravity, etc., 17775
 Soviet bloc, Soviet-bloc research in geophysics, astronomy, and space (periodical), 18917
 Soviet foreign policy and European security, USSR study, 20478
 Soviet public health (USSR periodical) :
 translations, 18918
 Soviet Union, *see* Union of Soviet Socialist Republics.
 Sows, *see* Swine.
 Soybeans :
 annotated bibliography of nematodes of soybeans, 1882-1968, 26928
 fertilizer used on selected crops in selected states, 1971 (corn for grain, cotton, soybeans for beans, wheat), 20820
 futures, commitments of traders, 18140
 Soyuz, *see* Spacecraft.
 SP series, *see* Federal Maritime Commission—Maritime Administration—National Aeronautics and Space Administration—National Bureau of Standards—Naval Oceanographic Office.
 Space :
 allotment of space in Federal courthouses or in Federal buildings which include Federal courts, hearings, 21283
 management for courtrooms, jury assembly and deliberation, public waiting and security, etc., design handbook, 27658
 protected educational facilities in found space, guide to converting noneducational spaces into safe, healthful environments for education, 30083
 space groups and lattice complexes, 29312
 space management and the courts, 25369
 space utilization of housing inventory, 1970 census of housing, 29693

INDEX 1973

- Space—Continued
 - see also* Outer space.
- Space Administration, *see* National Aeronautics and Space Administration.
- Space biology:
 - All-Union Conference on Space Biology and Medicine, 23545
 - cryobiological studies and space biology problems, 27641
 - problems of space biology, tissue oxygen under extreme flight factors, 31659
 - space biology and medicine (USSR periodical), translations, 18919
- Space chambers, determination of molecular contamination performance for space chamber tests, 29285
- Space charges, structure of space charge field of an ellipsoidal cluster of charged particles, 22462
- Space communications:
 - antennas and transionospheric propagation as related to ELF/VLF downlink satellite communications, conference proceedings, 27844
 - modeling effects of clouds and rain upon satellite-to-ground system performance, 25967
 - space telecommunications, agreement, 20801
- Space environment, *see* Environment
- Space Environment Laboratory:
 - activities, program areas, etc., 30205
 - NOAA technical report, ERL-SEL series, 22095, 25626
- Space Environment Services Center, activities, 28846
- Space ergonomics, 31656
- Space exploration, *see* Outer space.
- Space flight:
 - emotional stress during space flight, USSR study, 21862
 - medical and other problems, USSR study, 25350
 - preceding man's condition during space flight, USSR study, 20449
 - processing of medical information and assessment of work capacity in space flight, USSR study, 17606
 - rhythm of sleep and wakefulness in crews of spaceships Soyuz 3-9 before, during and after exposure to space flight, USSR study, 23517
 - space flight safety, USSR study, 26572
 - spare parts and maintenance support of space and missile systems undergoing RDT&E, military standards, 27413
 - see also* Astronautics—Manned space flight—Space missions.
- Space law, physics of space environment, colloquium held at University of Alabama, Huntsville, Ala., 17704
- Space medicine, *see* Medicine.
- Space missions:
 - aeronautics and space report of President, 1972, activities, 25530
 - launch vehicle estimating factors for mission planning, 23668, 25518
 - unmanned space project management, Surveyor and Lunar Orbiter, 20596
 - visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29356
 - see also* Space flight.
- Space perception:
 - differences in speed of mentally processing displays containing information about "right" and "left", 26642
 - visual field dependency in erect and supine positions, experimental investigation, 17715
- Space photography, *see* Photography.
- Space psychology, *see* Psychology.
- Space sciences:
 - aeronautics and space report of President, 1972, activities, 25530
 - application of space program fire-retardant technology to housing, 31644
- Space sciences—Continued
 - applied to advanced sea transportation (remarks), 29194
 - power systems for spacecraft, USSR study, 25347
 - significant accomplishments in sciences, 32463
 - Skylab, student project, information for teachers including classroom activities, 21979
 - space benefits—
 - and older citizens, 21992
 - safety, 21993
 - space for mankind's benefit, space congress proceedings, 21982
 - space nuclear systems, AEC authorizing legislation, hearings, 29832
- Space sensors, *see* Sensors.
- Space shuttles, *see* Spacecraft.
- Space stations:
 - environmental research by means of manned space stations, 21870
 - orbital stations and study of earth from space, USSR study, 30345
 - preliminary results of measuring H₂O content in atmosphere of Mars and Mars-3 automatic space station, USSR study, 27649
- Skylab—
 - astronauts, testimony, hearing, 31121
 - censors and remote sensing in support of EREP oceanographic program, 27856
 - circular posters, 20623, 29304, 30465
 - earth resources investigations, 29305
 - experiments—
 - physical science, solar astronomy, information for teachers, 30454
 - remote sensing of earth resources, information for teachers, 29263
 - guidebook, 29262
 - payload shroud jettison tests, 17720
 - poster, 17702
 - status of mission, hearing, 28509
 - student project, information for teachers including classroom activities, 21979
- Space structures, *see* Spacecraft.
- Space technology, *see* Space sciences.
- Space telescopes, *see* Spaceborne telescopes.
- Space trajectories, *see* Trajectories.
- Space vehicles, *see* Spacecraft.
- Spaceborne telescopes, design and evaluation of an optical fine-pointing control system for telescopes utilizing digital star sensor, 31628
- Spacecraft:
 - adapting Goddard Research and Engineering Management Exercise (GREMEX) to nonspacecraft environments, 29279
 - aerodynamic and flow-visualization studies of 2 delta-wing entry vehicles at Mach 20.3, 31631
 - analysis of cost estimates for space shuttle and two alternate programs, GAO report, 28984
 - Apollo experience report, command module uprighting system, 25525
 - Apollo-Soyuz test project (folder), 26679
 - atmospheric electricity criteria guidelines for use in aerospace vehicle development, 17718
 - boundary-layer electron profiles for entry of a blunt slender body at high altitude, 31637
 - bumper-protected laminate spacecraft mainwalls, 29260
 - Centaur space vehicle pressurized propellant feed system tests, 20599
 - comparison of advanced propulsion concepts for deep space exploration, 17725
 - convention on International Liability for damage caused by space objects, consent of Congress, 17127
 - drag characteristics of disk-gap-band parachute with nominal diameter of 1.65 meters and Mach 2.0 to 3.0, 20601

Space stations—Continued
 economic evaluation of aircraft and spacecraft, USSR study, 32407
 fasteners to be used in design and construction of aerospace—
 and airframe mechanical systems, military standard, 21411
 mechanical system, military standard, 20074, 23113
 flight test of erectable spacecraft used for decelerator testing at simulated Mars entry conditions, 20603
 flow-field measurements around Mars lander model using hot-film anemometers under simulated Mars surface conditions, 17710
 illumination in atmosphere and on surface of Venus obtained by automatic interplanetary station Venera-S, USSR study, 31544
 Interplanetary Pioneers—
 operations, 26682
 summary, 21981
 system design and development, 25521
 ion rocket engines, USSR study, 27635
 launch vehicle estimating factors for mission planning, 23668, 25518
 lee-surface heating and flow phenomena on space shuttle orbiters at large angles of attack and hypersonic speeds, 20621
 lightning criteria relative to space shuttles, currents and electric field intensity in Florida lightning, 20593
 Mariner 9 photographs of Mars (posters), 21971
 metallic materials and elements for aerospace vehicle structures, military standardization handbook, 23116
 nondestructive testing theory and practice, summary, 20589
 optical phenomena in atmosphere as observed from manned spaceships, USSR study, 17595
 Pioneer, mission to Jupiter, 17730
 Pioneer on 21-month voyage to explore planet Jupiter, and other information on Jupiter, 16356
 power systems for spacecraft, USSR study, 25347
 problem of space vehicle descent in planetary atmospheres, 26691
 processing of measurements in problems of stellar orientation of spacecraft, USSR study, 23554
 safety, reliability, maintainability and quality provisions for space shuttle program, 23692
 7th aerospace mechanism symposium, 23678
 site alteration effects from rocket exhaust impingement during simulated Viking Mars landing, nozzle development and physical site alteration, 30448
 SNAP 19 RTG for Viking lander system, semiannual progress report, 22479
 space ergonomics, 31656
 space shuttle, 21977
 and alternate programs, GAO analysis of cost estimates, hearings, 31125
 poster, 23674
 Skylab 1973, status report, 27244
 spacecraft and aircraft guidance system, USSR study, 20456
 spacecraft heating environment and thermal protection for launch through atmosphere of earth, 26687
 standard general requirements for safe design and operation of pressurized missile and space systems, military standard, 20076
 static structural tests of 1.5-meter-diameter fabric attached inflatable decelerator, 17722
 test stand for precise measurement of impulse and thrust vector of small attitude control jets, 32479

Space stations—Continued
 unmanned space project management, Surveyor and Lunar Orbiter, 20596
 vacuum and ultraviolet-radiation effects on binders and pigments for spacecraft thermal-control coatings, 23680
see also Launching.
 Spacecraft modules:
 Apollo experience report—
 command and service module—
 instrumentation system, 31647
 reaction control systems, 30455
 command module uprighting system, 25525
 lunar module electrical power subsystem, 20611
 service propulsion subsystem, 31648
 Spaceflight, *see* Space flight.
 Spaceship crews:
 Apollo experience report, crew station integration lighting considerations, 30459
 rhythm of sleep and wakefulness in crews of spaceships Soyuz 3-9 before, during and after exposure to spaceflight, USSR study, 23517
 visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29256
 Spain:
 air transport services, agreement, 17877, 22276
 background notes, 29525
 census programs of several countries in Europe and Middle East, 26091
 economic trends and their implications, for United States, 23490, 31507
 educational reform and renewal in contemporary Spain, 23139
 establishing business in, 16829
 loan of vessels, agreement, 24002
 mineral industry, minerals yearbook chapter, 20548
 money order agreement and final protocol, 25739
 nontariff barriers affecting trade in agricultural products, Spain, 20287
 parcel post agreement and related documents, 25739
 selling in Spain, 31205
 Spalding, Idaho, Spalding area, Nez Perce National Historical Park, Idaho, historic resource study, 27816
 Spallation, prediction of ground-shock-induced airblast overpressures for subsurface explosions from peak vertical spall velocity, 17378
 Spaniol, Joseph F., jr., United States, courts, their jurisdiction and work, 29931
 Spanish Americans:
 education of Spanish speaking, hearings, 15767
 Federal employment of Spanish-speaking Americans, 22609
 investigation report, 17069
 Juan Morel Campos Bilingual Center, Chicago, Ill., model programs, compensatory education, 17364
 mental health planning conference for Spanish speaking, 20671
 number of persons of Spanish origin by counties of United States, 1970, map, 29789
 persons of Spanish ancestry, census of population supplementary report, 22535
 persons of Spanish origin—
 in United States, 28173
 1970, census of population, 29706
 persons of Spanish surname, census of population, 1970, subject reports, 30805
 replication of bilingual education project, Albuquerque, N. Mex., 17367
 Spanish English Developmental program, Buffalo, title 1, ESEA case study, 21433
 Spanish-surnamed social security beneficiaries in Southwest, 22243

INDEX 1973

Spanish Americans—Continued
 voice for voiceless, Office of Economic Opportunity's programs for Spanish speaking, 15981
 we the Americans, 30858
 Spanish English developmental program, Buffalo, N.Y., 21433
 Spanish language:
 characteristics of Spanish language households, for United States, 31944
 health communications teaching aids, list of printed materials and their sources, 31410
 mental health planning conference for Spanish speaking, 20671
 teaching Spanish in school and college to native speakers of Spanish, 25058
 tutorial materials, math, reading, Job Corps, center development training programs, 29152
 Spanish mackerel, *see* Mackerel.
 Spanish Peaks Wilderness Area, designate, hearing, 19982
 Spanish-Speaking People, Cabinet Committee on Opportunities for, *see* Cabinet Committee on Opportunities for Spanish-Speaking People.
 Spanish War Veterans, *see* United Spanish War Veterans.
 Spare parts, *see* Repair parts.
 Spark ignition, *see* Ignition.
 Sparks:
 laser control of spark gaps, USSR study, 30354
 testing of coal-cutter materials for incendiarity and radlance of sparks, 21957
 Spatial concentration of industry in Appalachia, 30747
 Spatial perception, *see* Space perception.
 Spatial-temporal structure of light impulses in water, USSR study, 16207
 Speaking engagements, *see* Addresses, lectures, etc.
 Speaking for State, 31849
 Special Action Office for Drug Abuse Prevention, answers most frequently asked questions about drug abuse, 32563
 Special Affairs Committee, annual report, 22880
 Special bibliography (series), 26967-973
 Special current business reports (series), 18920
 Special districts, accounting manual for multi-funded economic development districts, 20085
 Special foreign currency science information program, 20714, 32520
 Special groups, *see* Minorities.
 Special growth of expanding flames, infrared radlance of methane-air ignitions and coal dust-air explosions, 31592
 Special military operations, 19153, 22385
 Special Political Agricultural Community Education, *see* Trust for Special Political Agricultural Community Education (S.P.A.C.E.).
 Special problems of rural aging, 27128
 Special publication SP series, 22161
 Special reports:
 Cold Regions Research and Engineering Laboratory, 16006, 17370-374, 20104, 21439, 23153, 25067, 28687 31236-237
 Rehabilitation Services Administration, 23948
 Special Representative for Trade Negotiations, Office:
 appropriations, 1973—
 law, 19473
 report, 19704
 appropriations, 1974, hearings, 28388
 press releases, 18809
 Special scientific reports, fisheries, series, 20699-701, 25631-632, 26771, 27803, 30542
 Special study, report NTSB (series), 16426-427
 Special summer food service program, sponsor handbook, 25830

Special summer food service program, training manual, 25829
 Special virus cancer program, 17743
 Specialists:
 rating specialists, legal, compensation and pension service training guide, 24091
 specialists' meeting on sodium-water reactors, 16660
 Specialized gaging equipment, 22496
 Specific gravity:
 moisture content and specific gravity of bark and wood of northern pulpwood species, 17514
 specific gravity variation with height in Black Hills ponderosa pine, 17517
 Specific impulse, *see* Thrust.
 Specifications, *see* names of departments, etc., issuing specifications—*also* subjects.
 Spectacles, impact-resistant eyeglass lenses, we want you to know what we know about, 21599
 Spectra:
 approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of $A \geq 12$, 31653
 communications-electronics management of electromagnetic spectrum, 30753
 computation of spectral data for Josephson junction circuit, 22010
 Doppler spectra, wind wave studies, 27850
 Doppler spectrum analysis using minicomputer, 17777
 interpretation of gas chromatographic spectra in routine analysis of exhaust hydrocarbons, 23651
 leaf mesophylls of 20 crops, their light spectra, and optical and geometrical parameters, 24146
 liquid state spectral emissivities of titanium, vanadium, zirconium, molybdenum, and platinum in electron-beam furnace, 29233
 one form of distribution of spectral energy density of thermal energy, USSR study, 30347
 plutonium and americium measurement in humans by X- and gamma-ray spectral analysis, 25884
 propagation factors in telecommunications applications of 10- to 100-GHz radio spectrum, review, 19304
 radio frequency spectrum—
 characteristics, measurement of, 27404
 United States use and management, 26902
 role of gas-surface interactions in reduction of OGO 6 neutral particle mass spectrometer data, 27714
 selected tables of atomic spectra, atomic energy levels and multiplet tables, H. I. D. T. data derived from analyses of optical spectra, 17735
 spectra of magnetic pulsations of nonisothermal plasma, 22461
 vertical and horizontal earthquake spectra, study, 28092
see also Spectral lines.
 Spectral lines, bibliography, 16361
 Spectrometers:
 NRL OSO-4 Bragg crystal spectrometer instrument study of solar flare plasmas, 16450
 31 group response matrices for multi-sphere neutron spectrometer over energy range thermal to 400 MeV, 28076
 verification of operational SIRS B temperature retrievals, 23806, 25627
 Spectrometry:
 analysis of trace elements in coal by spark-source mass spectrometry, 26662
 chemical flame inhibition using molecular beam mass spectrometry bromotrifluoromethane in low-pressure methane-oxygen-aragon flames, 25500
 detection of organic compounds in respiratory coal dust by high-resolution mass spectrometry, 21962

Spectrometry—Continued
dissociation energies of some high temperature molecules containing aluminum, 23689
in situ Ge(Li) and NaI (Tl) gamma-ray spectrometry, 22474
ionic and neutral reactions in glow discharges of He-SO₂-CO mixture, 30425
organic pollutant identification utilizing mass spectrometry, 32262
photonuclear activation analysis with Ge (Li) detectors, compilations, 30594, 30596
Spectrophotometry, accuracy in spectrophotometry and luminescence measurements, conference proceedings, 29317
Spectroscopy:
adhesion and transfer of polytetrafluoroethylene to metals studied by Auger emission spectroscopy, 20613
bibliography of mass spectroscopy literature for 1971 compiled by computer method, 26992
development of X-ray fluorescence spectroscopy in elemental analysis of particulate matter, evaluation of commercial multiple crystal spectrometer instruments, 31273
new technique for Auger analysis of surface species subject to electron-induced desorption, 27716
optical materials investigation for ultraviolet down-converters, 20972
scattering of 42-MeV alpha particles from copper-65, 31642
spectroscopic examination of parameters of turbulent plasma, 22457
structure of zirconium-93 and zirconium-91 as shown by various reactions, 17719
use of atomic absorption spectroscopy in determination of certain concentrations, 17370
Spectrum, damage-function analysis of neutron embrittlement in steel at reactor service temperatures, 16447
see Spectra.
Spectrum Air, Inc., aircraft accident, 29408
Speculation:
bellies, quarterly and shorter-term price forecasting models relating to cash and future quotations, 30719
cotton, frozen concentrated orange juice, potatoes, 18139
future trading—
and open contracts—
cotton and frozen concentrated orange juice, wool, 18393
potatoes and imported frozen fresh boneless beef, 18394
and open interest in regulated commodities, 18395
wheat, corn, oats, soybeans, soybean oil, etc., commitments of traders, 18140
Speech:
biblio-profile on human communication and its disorders, capsule state-of-the-art report with bibliography, 23768
binaural processing of speech in light aircraft, 22511
comparison of speech discrimination ability for simulated and real hearing loss at 3 and 6 KHZ, 25410
effect of electroacoustic characteristics of low-fidelity circuitry upon speech intelligibility, 25406
electromyographic changes in articulation muscles during emotional shifts, USSR study, 26560
hearing loss at 3 kilohertz and chaba proposed clinical test of speech discrimination in noise, 25409
Intelligibility—
during exercise at normal and increased atmospheric pressures, 16248
of hydrogen-speech at 200 ft. of seawater equivalent, 16249

Speech—Continued
Intelligibility—continued
of processed helium speech at diving depths greater than 1,000 feet, 20527
neuroanatomy of speech, 23768
objective speech, quality measurement of communication channel, 31990
processing helium speech, proceedings of Navy-sponsored workshop, 25407
relationships between speech and reading, 31692
speech discrimination in noise and hearing loss at 3000 hertz, 23632
speech, language, and hearing program, guide for Head Start personnel, 26516
Speed:
changers and components, Federal item identification guide, 30112
differences in speed of mentally processing displays containing information about "right" and "left," 26642
FORTRAN IV computer program for calculating critical speeds of rotating shafts, 31652
high-speed flow past wings, 29258
high speed streams in solar wind, 31265
mean horizontal wind speed and direction variability at heights of 1.5 and 4.0 meters above ground level at WSMR, New Mexico, 22423
see also Air speed.
Speed indicators, compressible-flow preston tube calibrations, evaluation, 29273
Speedometers, see Tachometers.
Spencer, John S., jr., Wisconsin's 1968 timber resource, perspective, 28973
Spencer, Lilly M., joys of sentiment, 1822-1902, 30483
Spencer County, Ind., soil survey report, 29514
Spend weekend with boys, 25579
Spheres:
electromagnetic radiation from single sources in presence of homogeneous dielectric sphere, 29251
experimental and analytical study of one- and two-component flows in spherical chambers, 31609
theory of electrostatic suspension of sphere, USSR study, 30352
Spherics, biaxial gyro stabilizer and superconducting spherical suspension, USSR study, 23548
Spices, foreign agriculture circulars, 18380
Spicket River, Lawrence Methuen, Andover, and North Andover, Mass., flood plain information, 25078
Spiegler, David B., four-dimensional worldwide atmospheric models (surface to 25km altitude), 17696
Spiers, Emmett F., money income in 1971 of families and persons in United States, 21064
Spillways:
model study of Trotters Shoals spillway, hydraulic model investigation, 28785
Oakley Dam, Sangamon River, Ill., type 2 spillway, 23179
survival of fish passing through spillways and conduits, compendium, 31238
Spin (aircraft):
general aviation, stall/spin accidents, 1967-69, 25646
Spina bifida, birth defect of spine, hope through research, 16394
Spinal cord, rehabilitating person with spinal cord injury, source book, 20854
Spindles (machine tools):
spindle thermal effects, 22506
Spine:
spina bifida, birth defect hope through research, 16394
voluntary activation of motor units and spinal reflexes, USSR study, 27631

INDEX 1973

- Spinning effects of monoflow cotton gin air system on ginning operations, lint quality, and spinning performance, 20912
- Spitz, Mark A., Congress to commend for individual excellence in Olympiad, report, 19883
- Splices, telephone cable splicing, cable testing, 28054
- Spline functions, computation of spectral data for Josephson junction circuit, 22010
- Spokane, Wash.:
area wage survey, 17662
international exposition in 1974, Federal participation—
proposed, 15622
provide—
hearing, 21236
law, 19521
reports, 17204
transportation controls, to reduce motor vehicle emissions in Spokane, Wash., 27489
- Spokane Indian Reservation, forest inventory analysis, 31487
- Sponagle, C. E., Colorado River basin water quality control project, 22202
- Spong, William, heroin, can supply be stopped? 21339
- Sponges, Federal identification guide, 23093
- Sponsors:
allowances for making nonprofit sponsor projects operational and use of housing consultants, HUD, 29065
sponsor's guide for nursing homes and intermediate care facilities sec. 232 of National housing act, 17558
tax information for sponsors of contests and sporting events, 20414
technical assistance grants to nonprofit sponsors of low- and moderate-income housing, 29066
- Spontaneous modeling in natural processes, 31541
- Sport Fisheries and Wildlife Bureau:
appropriations, 1974, hearings, 27180
circulars, 17847
Division of Wildlife Services, Region 4, Atlanta, Ga., annual report, 30640
poster, 29516B
refuge leaflets, 31827-830
resource publication (series), 16488, 23985, 22247-248, 25715-716, 30641, 31831
special scientific reports, wildlife series, 16489, 17848, 20782, 22249, 25717, 26847, 27899-901, 29516A, 31832
technical papers, 17849, 26848-849
- Sports:
aerobic dancing, rhythmic sport, 31766
antitrust laws and organized professional team sports, hearings, 26172
Artic winter games, authorization, report, 28482
blackout of sporting events on TV, hearings, 19957
Federal sports act, hearings, 23047
labor relations in professional sports, hearings, 17040
medical supervision in pursuit of underwater sports, USSR study, 17612
Mission Ridge, case history of soil disturbance and revegetation of winter sports area development, 32326
organized crime in sports (racing), hearings, 23010
tax information for sponsors of contests and sporting events, 20414
TV blackout of home games in professional sports prohibit. report, 31095
welfare, recreation, and morale, unit level recreational sports, 28048
winter sports area, Cooke City, Silver Gate, 23267
- Sportsmen's Association, National Inconvenienced, *see* National Inconvenienced Sportsmen's Association.
- Spot diseases, *see* Anthracnose.
- Sprackling, John A., soil-topographic site index for Englemann spruce on granitic soils in northern Colorado and southern Wyoming, 32330
- Sprague, Kenneth E.:
construction of nuclear geostorage facilities for petroleum products, 26393
middle course 2 cratering series, 32244
- Spratt, James P., standard digital data clock-rate generator with programmable digital phase shift, 31755
- Spratt, William A., urban air pollution problems, briefing document for President's Air Quality Advisory Board, 25125
- Spray towers, spray tower for application of microbial aerial sprays, 25230
- Sprays and sprayers:
aerial spray adjuvants for herbicidal drift control, 28926
behavioral changes from chronic exposure to pesticides used in aerial application, effects of phosdrin on performance of monkeys and pigeons on variable interval reinforcement schedules, 21034
concentration of brines by spray evaporation, 16140
nitrogen-pressurized spray system for C-47 airplanes, 27527
spray tower for application of microbial aerial sprays, 25230
you can poison yourself, your family, your livestock, if you don't use poison carefully, 26947
- Spring Branch, flood plain information Independence, Mo., 32221
- Spring Creek:
Houston metropolitan area, Tex.—
flood plain information, 28727
floods, 28765
- Spring River:
and tributaries, Missouri, Kansas and Oklahoma, engineers report—
departmental edition, 20167
document edition, 19563
- Spring travel, 25915
- Spring wheat, *see* Wheat.
- Springer, Victor G.:
additions to revisions of blenniid fish genera Ecsenius and Entomacrodus, with description of 3 new species of Ecsenius, 16476
synopsis of Tribe Omobranchii with descriptions of 3 new genera and 2 new species, 20764
- Springer, William L., nomination, hearings, 28529
- Springer, William L., Lake, *see* William L. Springer Lake.
- Springfield, H. W.:
cliffrose and mountain mahogany seeds retain viability 6 years in cold storage, 28951
mulching improves survival and growth of cercocarpus transplants, 21683
winterfat fruits and seeds retain high viability 3 years in cold storage, 28948
- Springfield, Mass.:
census of population and housing, 1970, census tracts, 19224
issues of concern to Puerto Ricans in Boston and Springfield, 22584
- Springfield, Oreg., ground water in Eugene-Springfield area, southern Willamette Valley, Oreg., 30286
- Springfield, Tenn., flood plain information, Sulphur Fork, 23174
- Springs:
chemical analysis of thermal waters in Yellowstone National Park, Wyo. 1960-65, 32359
hydrologic relationship of Jefferson County landfill leachate and Meramec Heights area springs, Jefferson County, Mo., 28829
origin and management of salt springs and seeps in upper Brazos River basin, Tex. (series), 30283

Springs (mechanism):
spring overriding aircraft clutch, 31936

Springville, Utah:
Hobbie Creek—
flood plain information, 31251
floods, 32230

Spruce:
black—
effect of overstory removal upon surface
wind in bog, 16077
seedling on brushy lowland successful if
vegetation density kept low, 16079

Engelmann—
age of seedlings affects ability to with-
stand low temperature, greenhouse
study, 28947
bark thickness and past diameters in
Colorado and Wyoming, 17519
effects of soil type and watering on
germination, survival, and growth,
greenhouse study, 16081
planting, 16088
field guide, 16089
seedling roots reach depth of 3 to 4
inches their first season, 32332
soil-topographic site index on granitic
soils in northern Colorado and south-
ern Wyoming, 32330
volume tables and point-sampling fac-
tors in Colorado and Wyoming, 23305

Sitka—
American wood, 26460
lumber yield in southeastern Alaska,
20314

white—
course of growth response in relaxed
white spruce, 10-year study, results,
27539
genetics, 20972
guidelines for obtaining natural regen-
eration in Alaska, 20294
key to adult bark beetles commonly as-
sociated with stands in interior
Alaska, 23288
weights and centers of gravity, 16083

Spruce budworms, *see* Budworms.

Spruce pine, *see* Pine.

Squalls, *see* Thunderstorms.

Square waves, square wave VOR tests, 30655

Squeezes, Federal identification guide,
23093

Squeeze chute for cattle, 31918

Squirrels, device and technique for handling
red squirrels, 16489

Sri Lanka, *see* Ceylon.

SRS, *see* Social and Rehabilitation Service.

SSA, *see* Social Security Administration.

SSC, *see* Ship Structure Committee.

SSS, *see* Selective Service System.

SS series, 25706, 26836, 20636

SST (supersonic transports), *see* Airplanes.

Staats, Elmer B.:
address—
Oct. 1, 1971, 28979
Oct. 20, 1971, 28976

Staatz, Mortimer H.:
geology and description of thorium-bear-
ing veins, Lemhi Pass quadrangle,
29003
geology and mineral resources of northern
part of North Cascades National Park,
Wash., 23328

Stability:
characteristics of turbulent diffusion
parameters as related to stability, 20980
computer program for pit slope stability
analysis by finite element stress analysis
and limiting equilibrium method, 21943,
25495
experimental and analytical determina-
tion of stability parameters for balloon
tethered in wind, 32472
frequency stability specification and
measurement, high frequency and micro-
wave signals, 26705
gyrostabilizers, USSR study, 32403

Stability—Continued
humidification in thermal life determina-
tion of motorett insulation systems,
23881
measurements of Loran-C skywave stabi-
lity, 28236
riprap stability on earth embankments
tested in large- and small-scale wave
tanks, 20103
soil stability and streamflow, 21684

stability—
and temperature characteristics of some
silicon and selenium photodetectors,
optical radiation measurements,
29321
constants of metal coordination com-
pounds, complexes of N-ethylethylene-
diamine and 2-(ethylthio)-ethylamine,
21949
of and insulation leakage in high tem-
perature resistance thermometers, in-
vestigation, interim report, 27731
statistical analysis of truncated-data
methods to shorten thermal-aging tests
of electrical insulation, 22172
stress, stability, and vibration of complex
branched shells of revolution, analysis
and user's manual for BOSOR4, 20588
theory of hydrodynamic stability of plasma
in field of alfvén wave of finite ampli-
tude, 22465

Stability derivatives, *see* Stability of air-
craft.

Stability of aircraft:
comparison of several methods for esti-
mating low-speed stability derivatives
for 2 airplane configurations, 20598
directional divergence characteristics of
several high-performance aircraft con-
figurations, summary, 20617
dynamic stability derivatives at angles of
attack from 0° to 90° for variable-
sweep fighter configuration with twin
vertical tails, 20602
effects of in-flight thrust reverser on sta-
bility and control characteristics of
single-engine fighter airplane model,
17716
stability of multi-station satellite com-
munications system, USSR study, 30369

Stabilization:
advanced hydrofluidic stabilization sys-
tem, 22438
blaxial gyrostabilizer and superconducting
spherical suspension, USSR study, 23548
for payments, 31244
hard maple flooring with polyethylene
glycol 1000, 31370
see also Economic stabilization—Prices.

Stable changes in frequency and synchronism
of cortical neuron population, discharges
in experiments with feedback, 20475

Stachewicz, Raymond A., Stachewicz for
Congress Committee, annual report, 24450

Stachewicz for Congress Committee, annual
report, 24450

Stacy, W. O., structure and properties of
various coal chars, 25955

Stadiums, seating, additional for RPK
stadium, hearing, 30016

Staff College, Defense Civil Preparedness
Agency, Battle Creek, Mich., catalog of
courses, 20027

Staff data and materials on social services,
28266

Staff development, *see* Administrative man-
agement.

Staff papers, Research and Statistics Office,
22237, 26835, 27883

Stafford, William, lecture, May 3, 1971,
29190

Stages and discharges of Mississippi River
and tributaries and other watersheds in
New Orleans district for 1971, 23177

Stages and discharges of Mississippi River
and tributaries in Vicksburg, Miss., 25093

INDEX 1973

- Stagnation point:
implicit finite-difference solutions to viscous shock layer including effects of radiation and strong blowing, 20622
mass diffusion in self-confined rotating flow, 23672
- Stagnation region, *see* Stagnation point.
- Stahara, Stephen S., calculative techniques for transonic flows about certain classes of wing-body combinations, 20584
- Stainless steel:
effect of neutron irradiation on fatigue crack propagation in types 304 and 316 stainless steels at high temperature, 23876
non-destructive testing of plated aluminum/stainless steel joint, 29679
plate from Sweden, Tariff Commission report, 29553
wire rods from France, determination of injury, Tariff Commission report, 32595
- Stalbaum, Merrill, Stalbaum for Congress Committee, annual report, 22962
- Stalbaum for Congress Committee, annual report, 22962
- Stall, John B., storm sewer design, evaluation of RRL method, 20199
- Stall (aircraft):
airfoil dynamic stall and its influence on helicopter control loads, 20991
general aviation, stall/spin accidents, 1967-69, 25646
helicopter gust response including unsteady aerodynamic stall effects, 29663
- Stall barns, *see* Barns.
- Stamper, J. A., laser-induced sources for magnetic fields, 17791
- Stamper, John W., aluminum, 16257
- Stamps, *see* Food Stamps—Migratory-bird-hunting stamps—Postage stamps—Revenue stamps.
- Standards and standardization:
Defense Department—
cataloging and standardization program, semiannual report, 17032
specifications and standards Index—
alphabetical listing, 15954
numerical listing, 20043, 23103
supplements, 18219
standardization documents, supply classification, listing, 17330, 18355
Federal information processing standards publications, FIPS pubs, 18315, 20623-633
Federal specifications and standards, Index, 18484, 23253
Federal standards, 16060-63, 23249-250
Federal test method standards, 16064, 17486-487, 23251-252
Industry, consumers, and public interest (remarks), 16826
military standard transaction reporting and accounting procedures, 17338
military standards, 15955-970, 17332-337, 20046-80, 21409-411, 23104-115, 25013-27, 26335-338, 27403-414, 28606-622, 30121-122, 31193
National Bureau of Standards standard reference materials—
catalog, 23316
development of 1579 powdered lead-based paint, 26697
1973 SRM price list, 25551
preparation and homogeneity characterization of austenitic iron-chromium-nickel alloy, 20636
preparation and use of superconductive fixed point devices, 22005
principles of standardizing microclimate of individual gas-defense devices, USSR study, 25331
tabulation of voluntary standards and certification programs for consumer products, 26711
voluntary product standard PS (series), 20651, 30477
see also names of departments, etc., issuing standards—*also* subjects.
- Standards of Official Conduct Committee, House:
investigation and studies, authorization and expenses, report, 26110
report, 15674
Standing waves, mathematical model for standing-wave acoustic parametric source (SWAPS), 31758
Standley, William H., papers in Library of Congress, register, 32438
Stanley, Daniel J., underwater television survey of Atlantic outer continental margin near Wilmington Canyon, 31800
Stanley, Roger, relief, 27116E
Stans, Maurice H., address, Feb. 9, 1972, 28233
Stapedius muscle, *see* Ear.
Staples and stapling machines, nails, staples, and tacks, Federal item identification guide, 25005
STAR, *see* Scientific and technical aerospace reports.
Starfishes, starfishers from Caribbean and Gulf of Mexico, 26824
Stark County Republican Central & Executive Committee, annual report, 24329
Starr, Harold, system for statewide evaluation of vocational education, 17353
Starr, Helen P., region V public report, 18851
- Stars:
astrometry and astrophysics, research of sun and stars, 31658
telescope catalog of ultraviolet stellar observations, 5068 objects measured by Smithsonian experiment aboard Orbiting Astronomical Observatory (OAO-2), 27878
colorimetric measures of stars on 6-color system of Stebbins and Whitford, catalog, 23868
design and evaluation of an optical fine-pointing control system for telescopes utilizing digital star sensor, 31628
double stars, micrometer measures, 17789
mathematical model for simulation of photogrammetric camera using stellar control, 22108
methods of investigating variable stars, 31661
micrometer measures of 618 double stars, 32523
processing of measurements in problems of stellar orientation of spacecraft, USSR study, 23554
sight reduction tables for air navigation, 28632
stellar chromospheres, 20595
trigonometric parallaxes of faint stars, 2d catalog, 29431
- Starters, *see* Starting devices.
- Starting devices, ballasts and starters, Federal item identification guide, 32164
- State Advisory Councils on Vocational Education, resource book for members of State Advisory Councils on Vocational Education, 26678
- State aid, *see* Grants-in-aid.
- State banks:
equity security transactions and ownership of directors, etc., of Federal reserve member State banks, monthly summary, 18942
member banks of Federal reserve system—
list, 25191
supplement, 18925
weekly change, 18063
- State boards and departments of education, *see* Educational boards and departments.
- State bonds, alternative to tax-exempt bonds for tax reform purposes, panel discussions, 27251
- State Committees for Children and Youth, National Council, *see* National Council of State Committees for Children and Youth.
State, county, and municipal personnel publications, 27052

- State courts:
 Federal-State cooperation in State court reform (address), 21887
 Public Printer to designate library of highest appellate court in each State as depository library, authorize, law, 15643
- State Department:
 appropriations, 1973—
 laws, 16877, 19473
 report, 19704
 appropriations, 1974—
 amendments, proposal, 32097
 hearings, 27183, 27201, 27321, 28388, 31127, 32132
 reports, 28349, 28483, 30994, 32033, 32051
 background notes, 16491-495, 17850-854, 18022, 20783-786, 22251-256, 23986-992, 25718-725, 26851-855, 27903-905, 29517-526, 30642, 31834-842, 32567-571
 biographic register, 30643
 bulletin, 18221
 commercial offices abroad, need substantial improvements to assist U.S. export objectives, GAO report, 20326
 Department of State indexes of living costs abroad and living quarters allowances, 19004
 departmental and foreign service series, 22257, 26856, 29527, 30643-644
 efforts to prevent heroin from illicitly reaching U.S., GAO report, 20327
 Foreign Service buildings program, 1974 and 1975 authorization—
 hearings, 24853
 law, 30920
 report, 32039
 Intelligence and Research Bureau, general information, 25727
 international information and cultural series, 23997
 military assistance and commitments in Philippines, GAO report, 26478
 news letter, 18222
 press releases, 18810
 records—
 availability, 23995
 pamphlet describing microfilm—
 internal affairs of Brazil, 1910-29, 20627
 international affairs, China, 25539
 notes from French Legation in U.S., 25534
 political relations between—
 Argentina and other States, 1910-29, 25540
 Turkey and other States, 1910-29, 21996
 United States and Turkey, 1910-29, 21997
 territorial papers, Territory Northwest of River Ohio, 1781-1801, 21998
 Secretary, nomination of Henry A. Kissinger, report, 32099
 speaking for State, speaker request forms, 31849
 telephone directories, 20791, 29538-539
 U.S. agreements with and assistance to free world forces in Southeast Asia show need for improved reporting to Congress on their status, GAO report, 30266
 U.S. foreign aid to education, does Brazil need it? GAO report, 30267
 U.S. interests and activities in Nepal, 25246
 what should U.S. policy be for development assistance to Ecuador? GAO report, 25247
 work, headquarters building, etc., 32572
 State Education, Political Unity of Leaders in, *see* Political Unity of Leaders in State Education.
 State government, *see* Government.
- State-of-the-art review of pulp and paper, waste treatment, 26420
 State of Union, *see* United States.
 State Workmen's Compensation Laws, National Commission, *see* National Commission on State Workmen's Compensation Laws.
 Stateham, Raymond M., detecting hot areas in dumps with handheld infrared scanner, 29241
- States:
 action on local problems, 1972, information, report, 29599
 aid to cities, counties, and States, availability and adequacy of relevant statistical population data, hearing, 23028
 air programs digests, 21518
 alcohol abuse and alcoholism, extend for one year program of grants, from Federal government for prevention, etc., report, 17065
 annual survey of manufactures, statistics, East South Central Division, 15531
 assessment of Federal and State enforcement efforts to control air pollution from stationary sources, GAO report, 32349
 boards responsible for higher education, 16000
 boundaries and savings and loan branching, 21546
 characteristics of clients rehabilitated in fiscal years 1967-71, Federal-State vocational rehabilitation program, 29460
 characteristics of State public assistance plans under Social Security act, general provisions, eligibility, assistance, administration, 17829
 climates, 17410, 20178-179, 21483
 comparison of State unemployment insurance laws, 17919
 conducted lotteries, report, 16962
 Conference of State Telecommunications Directors, 1972 proceedings, 16827
 consumer action, 1971 summary, 15935
 cooperative Federal-State tick eradication activities, 16641
 cooperative State-Federal sheep and cattle scabies eradication progress report and epidemiology, 22395
 day care licensing requirements abstracts, family day care homes & group day care homes, 30866
 departments of education—
 and Federal programs, 1970 annual report, 20097
 State boards of education, and chief State school officers, etc., 25056
 directory of State—
 and areawide comprehensive health planning agencies under sec. 314 of Public Health Service act, 22650
 USDA rural development committees, 26424
 education departments, foreign consultant program, 15991
 effects of pesticides in water, report to the States, 28795
 employment and earnings, 1939-71, States and areas, 21902
 employment and population changes, geographic divisions and States, 29784
 environmental centers, establish, report, 19652
 equal employment opportunity in State and local governments, guide for affirmative action, 24259
 fair hearings in public assistance under federally-aided programs received by State agencies, 31684
 farm income, State estimates, 1959-72, 32192
 Federal aid for educating the handicapped, hearings, 28560
 Federal aid to State and local government, overall view of issues involved, 15788

INDEX 1973

States—Continued

Federal and State parole systems—
hearings, 15763
print additional copies, reports, 28324, 28458
Federal and State statutes relating to farmworkers, 23066
Federal civilian employment by geographic area, annual report, 24269
Federal grants for vocational rehabilitation services, authorization, report, 29987
Federal-State—
cooperative program for local population estimates, Apr. 1, 1970, test results, 25934
market news service, 22336
radiation control legislation, 32302
financial aspects of administration of grants-in-aid to State and local governments, HUD, 31421
fire control laws, general administration, environmental protection and pollution control, analysis, 21603, 25204
firearms control assistance act, text, 24160
fiscal relief for States, social security amendments material related to H.R. 1, 19966
fish and wildlife and outdoor recreation agencies receive donations of surplus personal property, report, 19868
forest fire control cooperative program, financing, 23268
Forest Service comments on resolutions relating to National Forest System as adopted in 1971-72 by American National Cattleman's Association, National Wool Growers' Association and State livestock associations, 25210
4th entitlement period allocations with adjustments for entitlement periods 1, 2 & 3, 30673
gas pipeline safety, Federal-State relations, 31884
government employment and payrolls, 18924
horticultural service businesses, dollar volumes and State rankings, 32189
household income in 1969 for States, SMSA's, cities, and counties, 30811
housing authorized by building permits and public contracts, construction reports, 24232
housing conditions in areas served by Farmers Home Administration housing programs, 1970, by States, 15483
imposts on interstate wine, prohibit—
hearings, 21259, 26168
report, 32043
improving opportunities for employment of disadvantaged in State and local governments, guide for effective action, 30881
Index of Institutions of higher education by State and congressional district, 31223
injury experience and worktime in solid mineral mining industries, minerals yearbook chapter, 25448
interaction simulation, coordinated local-State vocational education planning, evaluation report, 17354
interstate carrier water supply systems by States and EPA regions, inventory, 31296-297
Job patterns for minorities and women in private industry, Nation, State, industries, 20236
labor federations and employees associations, conventions, 1973, list, 29172
land-grant colleges and universities, Extension Service review (periodical), 18275
land use, grants to assist in developing and implementing programs, hearings, 27342, 30044

States—Continued

Land use policy and planning assistance act, report, 25489
laws enacted in 1971 of interest to Housing and Urban Development Department, 25290
laws on reexamining drivers, 22057
legislation needed to simplify Federal funding of State employment security agencies' administrative expenses, GAO report, 30257
maternal and child health services of State and local health departments, 25402
meat and poultry inspection costs, Federal contribution, increase, reports, 16979, 19640, 19677
medical schools, assistance in establishing, appropriations, 1974, report, 32069
medicare, age-adjusted rates for utilization and reimbursements, by State, 22235
medicare, health insurance for aged, amounts reimbursed by State, 20770, 27880
migration between economic areas, census of population, 15577
mobility for States and Nation, 1970, census of population, 29707
1972 OBERS projections economic activity in United States, 24103
noise source regulation in State and local noise ordinances, 27478
opinion leaders in organizational structure of 2 State divisions of vocational and technical education, 27770
partnership for older Americans, 29978
pioneer imprints from 50 States, 29188
planning agency grants for law enforcement, guideline manuals, 16211, 21891, 29147
planning State airport system, 23212
policy regulations for public sector labor relations, statutes, etc., summary, 27664
postsecondary education commissions, hearings, 28407
professional workers in agricultural stations, lists, 20898, 22326
profiles, current status of public sector labor relations, 21899
property tax administration, status, compilation of responses to survey, 24931
property tax, impact and administration, hearings, 26270
provisional patient movement and administrative data, State and county mental hospital inpatient services, 25594
Public Health Service grants and awards, 1972 funds, 31702
public school finance programs, 1971-72, States, District of Columbia, and outlying areas, 23141
publications, monthly checklist, 18642
published ordinances, firearms, important information to gun dealers, 26955
radiation control, 1971 legislation, 20741
radiological health programs, State and local report, 25679
real property tax laws, assistance to carry-out reforms, hearings, 30038
reports on State and local government finances, 31941
requiring physicians to report, traffic laws commentary, 20665
revenue sharing with States and local educational agencies, hearings, 21364
review and comment responsibilities of State and areawide comprehensive health planning agencies, 28251
school systems, 1969-70, preliminary statistics, 28678
separation of services from assistance payments, guide for State agencies, 21121
solid waste laws in U.S. territories and States, compendium, 25123
State and county mental hospitals, age, sex, and diagnostic composition of resident patients, 23766

- States—Continued
 State and local—
 borrowing anticipations and realizations, 28903
 fiscal assistance act—
 general explanation, 24884
 law, 19442
 overall view, 19970
 per capita comparisons of distributions to large cities, selected small cities, and rural areas, 19970
 regulations governing payment of initial entitlements, 20845
 reports, 15673, 15679, 19886
 summary of Senate amendments to bill, 21297
 summary of testimony, public hearings, 17116
 supplemental report showing distribution of funds, 15790
 government law enforcement officers group life insurance, provide, report, 17157
 government special studies, 19261
 tax revenue, quarterly summary, 18841
 taxation of banks, report of study, 17231
 taxation of insured commercial and national banks, authorize, hearings, 15877
 States and political subdivisions employees shall be subject to National Labor relations act, hearings, 15731
 States and territories of United States publications price list, 27871
 States and their Indian citizens, 21812
 States of birth, 1970 census of population, 25908
 statutes on emergency medical services, 29043
 tax collections, 1972 report, 19254
 taxation, discriminatory, common and contract transportation property, report, 15850
 taxation of air commerce, prohibition, report, 19693
 taxation of Federally insured financial institutions, regulate, hearings, 26258
 technical services act, amend, hearings, 21263
 unemployment insurance laws, comparison, 17920, 25794
 United States energy fact sheets by States and regions, 26535
 veterans' laws, digests, 17101, 27369
 vocational rehabilitation agencies—
 caseload statistics, 30615
 fact sheet booklet, 22210
 water laws, summary digest, 30576
 water quality standards, 20858-866, 20870-873
 water quality standards digest, compilation of Federal/State criteria, 20221-231, 21524-526, 25128-131, 28845
 Water Resources Research Office, supported research, reports, 32392
 water-rights laws and related subjects, supplemental bibliography, 15479
 workmen's compensation laws, comparison of major provisions with recommended standards, 20099
 workshops in employee development, in instructor's guides for State and local training officers, 27587
see also Intergovernmental relations—
 also subjects pertaining to the States.
 Stationary internal combustion engines in United States, 30183
 Stationary motion configurations of filament, 20476
 Statistical abstract of United States, 16789, 16940, 30817, 30951A
 Statistical analysis of truncated-data methods to shorten thermal-aging tests of electrical insulation, 22172
 Statistical information program for utilization review in extended care facilities, 19306
 Statistical method of combining synoptic and empirical tropical cyclone prediction systems, 30533
 Statistical notes, 16393, 23762-767, 25592-595, 27783-785, 29365-366
 Statistical publications, *see* names of departments, etc., issuing publications—*also* subjects.
 Statistical Reporting Service:
 agricultural economics reports, checklist, 18065
 periodic reports, list, 25833
 Statisticians, national economic accounting training programs for economists and statisticians from other countries, 20084
 Statistics:
 dictionary of terms, 29493
 Federal statistical directory, 29192
 investigation of possible politicization of Federal statistical programs, report, 19690
 National Center for Health Statistics statement on release of data for individual elementary units and related matters, 23721
 statistical handbook on main sectors of Cuban economy, 30332
 statistical reporter (periodical), 18928
 statistical series releases, SEC, 18929
 summary statistical data files on magnetic tape publicly available from Department of Commerce, 22146
 users' guide to OMNITAB command, "Statistical analysis", 26709
 see also Sampling (statistics)—Vital statistics—*also* names of departments, etc., issuing statistics—*also* subject.
 Statistics Center, report SC series, 26605
 Stators, design and experimental results for turbine with jet flap stator and jet flap rotor, 29257
 Statues, *see* names of persons in whose honor statues are erected.
 Status and performance of United States Postal Service, 15776
 Status of property tax administration in States, 24931
 Status of world history instruction in American secondary schools, 21430
 Status, progress, and problems in Federal agency accounting during 18 months ended June 30, 1973, 32357
 Statutes:
 Civil Rights Commission statute, rules and regulations, 31979
 Environmental Protection Agency, current laws, statutes and executive orders, international statutes, 20183
 Federal Trade Commission, 20280
 solid waste, legal compilation, statutes and legislative history, executive orders, regulations, guidelines and reports, 32266
 Statutes at large:
 laws affected tables, 27519
 92d Congress, 1st sess., laws and concurrent resolutions, reorganization plan, etc., 23236
 Steady state, *see* Equilibrium.
 Stealing, *see* Theft.
 Steam:
 steam injection pasteurization of grade A milk and milk products, 28918
 steam stripping odorous substances from kraft effluent streams, 28810
 Steam-electric plants, *see* Electric power plants.
 Steam generators:
 specialists' meeting on sodium-water reactions, summary report and papers, 16660
 status of LMFBR reheat in Western Europe, 1972, report of USA LMFBR sodium reheat team, 24197

- Steam turbines, *see* Turbines.
- Steamboat Creek:
flood plain information, 20130
floods, 20153
- Steamboat Valley, Nev.:
flood plain information, 20130
floods, 20153
- Steamship conferences, *see* Shipping conferences.
- Steamships, lines in foreign commerce of U.S., approved conference, rate and inter-conference agreements, 18005
- Stearns, Carl A., dissociation energies of some high temperature molecules containing aluminum, 23689
- Steck, Edgar A., chemotherapy of protozoan diseases, 15516
- Steckley, Robert C., determination of paleotectonic principal stress direction, including analysis of joints by optical diffraction, 26658
- Stedman, Donald J., current issues in mental retardation and human development, 29035
- Steel:
adequacy of high-strength, low-alloy steel weldments for cargo ship hulls, study of factors which affect, 22221
carbon steel, round, flat, and shaped wire, workers of Page Steel and Wire Division, Monessen, Pa., plant of American Chain and Cable Company, Tariff Commission report, 26892
carbon steel wire rod and round wire, workers of Monessen, Pa., plant of Wheeling-Pittsburgh Steel Corp., Tariff Commission report, 26893
commercial steel forgings, 1972, current industrial reports, 28149
contributions of selected residual elements in radiation-embrittlement sensitivity of steel forgings, 27855
damage-function analysis of neutron embrittlement in steel at reactor service temperatures, 16447
deformed concrete reinforcing bars of non-alloy steel from Mexico, Tariff Commission report, 32586
deoxidation of steel using waste aluminumizing dross, feasibility study, 16337
effect of copper and silicon on selected mechanical properties of hot-rolled medium-carbon steels, 31590
effect of welding on fatigue life of high-strength reinforcing steel used in continuously reinforced concrete pavements, 31326
effects of direct reduction upon mineral supply requirements for iron and steel production, 29207
features of heat-resistant steel recrystallization, USSR study, 26585
fracture safety considerations for Hanford-N reactor coolant piping materials, 22169
ingot producers, current industrial reports, 16766
introduction of discontinuities in high strength steel weldments, 25070
iron and steel scrap—
mineral industry survey, monthly, 18519
minerals yearbook chapter, 25449-450
reducing surface hot shortness of copper-bearing steels, 20575
significance of Charpy-V test parameters as criteria for quenched and tempered steels, 23883
slag iron and steel, minerals yearbook chapter, 16325
steel and iron industry role in national defense (address), 27058
stress-corrosion cracking in high strength steels and in titanium and aluminum alloys, 16453
structural steel, structural aluminum, steel joists, and cold-formed steel for buildings, 31932
- Steel—Continued
zinc-rich coatings applied to carbon steel, performance characteristics, 31638
see also Austenitic steels—Stainless steel—
also names of manufactured articles.
- Steel castings, *see* Castings.
- Steel mills:
iron and steel plants, background information for proposed new source performance standards, 29643, 30722
products, current industrial reports, 15590, 22554, 30849
products, preparation for shipment and storage military standard, 25015
shapes, inventories, current industrial reports, 18194, 24234
steel industry and environmental quality, progress report, 23742
- Steele, W. Scott, France's institutional food market, developments and prospects for U.S. exports, 25042
- Steele County, Minn., soil survey report, 32562
- Steer beef, *see* Beef.
- Steffen A. J., pretreatment of poultry processing wastes, 30664
- Steln, D., advanced-technology high-capacity hoist-drive system, 16654
- Steinberg, Robert, new pumping system for a 150-kilovolt neutron generator to reduce present tritium hazard, 23914
- Steiner, Bruce, optical radiation measurements, 25555
- Steinhilb, H. M., weights and centers of gravity for red pine, white spruce, balsam fir, 16083
- Stellar chromospheres, 20595
- Stellar structures, *see* Stars.
- Stellar systems, *see* Stars.
- Stellarators:
density fluctuations of L-I stellarator by correlation method, study, 22458
plasma density in stellarators by means of open microwave resonator, determination, 22449
- Stemming inflation, 21435
- Stenches, *see* Odors.
- Stenographers:
examination announcement, opportunities, 16817
lost in the crowd? go Government, 22607
- Stenomidae, old world Stenomidae: preliminary survey of fauna, notes on relationships, and revision of Genus *Eriogenes* (Lepidoptera: Gelechioidea), 29491
- Stenquist, Richard J., initial mixing in coagulation processes, 20194
- Stephens, J. Briscoe, retrieval of dispersive and convective transport phenomena in fluids using stationary and nonstationary time domain analysis, 31630
- Stereocuity, *see* Sight.
- Sterling-Rock Falls Republican Women's Club, annual report, 24635
- Stern, R. K., Appalachian hardwoods for pallets, correlation between service and laboratory testing, 20304
- Sternfield, H., investigation of helicopter transmission noise reduction by vibration absorbers and damping, 20988
- Stevens, Joe G., soil survey of Berrien and Lanier Counties, Ga., 31818
- Stevens, Richard F., jr.:
rhenium, 25482
tungsten, 25491
- Stevens, Robert E., ponderosa pine needle miner in Colorado front range, 28943
- Stevens Branch, flood plain information, 28728
- Stevens County Republican Central Committee, annual report, 22795
- Stevenson, Henry E., naval training bulletin, 18683
- Stevenson, John R., nomination, report, 29953

- Stewardesses, in-flight safety of passengers and flight attendants aboard air carrier aircraft, special study, 29411
- Stewards:
- I & C, rate training manual, 26788
 - in-flight safety of passengers and flight attendants aboard aircarrier aircraft, special study, 29411
 - messhall master at arms handbook, 22178
- Stewart, Alice, epidemiologist takes look at radiation risks, 25677
- Stewart, Harold A., ash, American wood, 31352
- Stewart, J. H.:
- stratigraphy and origin of—
 - Chinle formation and related upper Triassic strata in Colorado Plateau Region, 21725
 - Triassic Moenkopi Formation and related strata in Colorado Plateau region, 17532
- Stewart, Joseph K.:
- hot water and fungicides for control of mold on cantaloups, 27995
 - ventilation of mechanical refrigerator cars to prevent carbon dioxide accumulation and brown stain in lettuce loads, 27994
- Stewart, William M., scattering of 42-MeV alpha particles from copper-65, 31642
- Stewart County, Tenn., forest inventory statistics, Houston-Stewart County unit, middle Tenn., 24078
- Stillness:
- basic properties of pavement components, 30215
 - thermal effects on clearance and stiffness of foil journal bearings for Brayton cycle turboalternator, 20587
- Stiffness (aircraft):
- structural system identification from—
 - multipoint excitation, 24187
 - single point excitation, 24188
- Stilbestrol, *see* Diethylstilbestrol.
- Still River, flood plain information, 23173
- Stilling basins:
- hydraulics and downstream fish migration, 31238
 - outlet works stilling basin for Tallahala Dam, Tallahala Creek, Miss., hydraulic model investigation, 28784
- Stimulants, protect public health and safety in District of Columbia by amending laws, report, 19674
- Stimulated coherent radiation devices, lasers, 20036
- Stimulators, influence on trigeminal stimulation on children's judgements of odor, 15627
- Stimulus:
- differences in speed of mentally processing displays containing information about "right" and "left", 26642
 - sensitivity analysis of relation of wellhead price to nuclear gas stimulation costs, 22483
 - traces of emotional stimuli in EEG spectrum and SGR in humans with normal and impaired memory, USSR study, 26590
- Stipends, institutions offering trainee stipends in psychiatric-mental health nursing for school year 1972-73 in graduate education, list, 17764
- Stipp, Henry E.:
- iron oxide pigments, 16316
 - mineral industry of—
 - Angola, Mozambique, and Portuguese Guinea, 16263
 - Gabon, 16276
 - Ghana, 16320
 - Liberia, 29220
- Stir up, *see* Sorghum.
- Stirling, Nora, stop, look, and listen, children ahead, 16119
- Stirrers (machinery), *see* Mixing machinery.
- Stochastic processes, *see* Probabilities (mathematics).
- Stock catalogs, *see* Catalogs.
- Stock exchanges:
- laws relating to securities, commission exchanges and holding companies, compilation, 22664
 - role of institutional investors in stock market, 30020
 - the public, we need them (address), 29476
 - transactions, statistical series releases, SEC, 18929
- Stock control, *see* Military supplies.
- Stockbridge Indians:
- Federally owned land declared in trust by United States for Stockbridge Munsee Community—
 - law, 19412
 - report, 16985
- Stockholders, *see* Securities.
- Stockmen, how farmer and rancher can help prevent pollution, 31300
- Stockpiling, *see* Strategic materials.
- Stocks:
- credit by banks for purpose of purchasing or carrying margin stocks, 28896, 30234
 - interest equalization tax, tax information, 21827
 - list of OTC traded over the counter margin stocks, 25187
 - market share reports catalog, 17587
 - pension trust procedures and guides for integration of qualified plans, 20403
 - see also* Securities.
- Stockyards:
- Packers and stockyards act, fair play in marketplace, 19124
 - packers and stockyards résumé, 18747
- Stoichiometry, *see* Chemical reactions.
- Stokes County Republican Executive Committee, annual report, 22704
- STOL (short takeoff and landing), *see* Aircraft.
- Stolen goods, receiving, *see* Receiving stolen goods.
- Stolzenbach, Keith D., user's manual for three-dimensional heated surface discharge computations, 23190
- Stomology, energy budget at earth's surface water relations and stomatal response in corn field, 22404
- Stone, Phillip L., materials technology programs in support of mercury rankine space power system, 32475
- Stone:
- minerals yearbook chapter, 25487
 - 1971, mineral industry surveys, 21958
- Stone Brook, flood plain information, 25081
- Stone fruit, market diseases of stone fruits, cherries, peaches, nectarines, apricots, and plums, 20899
- Stoner, Allan K., merit, red rock and Poto-mac, tomato varieties adapted to mechanical harvesting, 16613
- Stoner, J. D., determination of mass balance and entrainment in stratified Duwamish River estuary, King County, Wash., 20359
- Stoney Creek, flood plain information, 20121
- Stop, look, and listen, children ahead, 16119
- Storage:
- Army technical manual, 16652
 - construction of nuclear geostorage facilities for petroleum products, 26393
 - fertilizer storage building, 40' rigid frame, 19118
 - maintenance activities operations manual defense industrial plant equipment, 27379
 - marking for shipment and storage, military standard, 25013, 27403
 - storage and materials handling, Army technical manual, 25864
 - temporary detention of storm and combined sewage in natural underground formations, 30190
 - see also* names or classes of articles stored.
- Storage bins, *see* Bins.
- Storage tanks, *see* Tanks (containers).

INDEX 1973

Stores:

- applicability of Federal meat inspection act to retail establishments, 27657
- department stores—
 - inventory price indexes, 32433
 - sales, selected areas, special current business reports, 18920
- food dating, shoppers' reactions and impact on retail foodstores, 20914
- meat market operations commissary stores, 26975
- milk sales in foodstores, pricing and other merchandising practices, 20913
- retail—
 - drug stores under Fair labor standards act, 26922
 - sales and accounts receivable, current business reports, 18186
 - sales, current business reports, 18183, 18189
 - trade—
 - annual sales and purchases, year-end inventories, and accounts receivable of retail stores, by kind of business, 15584
 - selected department store occupations, 16005
 - union wages and hours, grocery stores, 27668
 - workers, job grading standard, civil service, 21087-88
- see also Supermarkets.
- Storey, C. L., relative toxicity of chloropicrin, phosphine, EDC-CC1, and CCE, CS₂ to various life stages, 30693
- Storey, James R., issues in welfare administration, 24309
- Storm drains:
 - assessment of automatic sewer flow samplers, 31285
 - research, development and demonstration projects, 1970 grants and contract awards, 24102
 - storm sewer design, evaluation of RRL method, 20199
- Stormfury Project, see Project Stormfury.
- Storms:
 - data, monthly, 18934
 - Galveston Bay hurricane surge study, effects of proposed barriers on—
 - hurricane surge heights, calibration tests, 27444
 - tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, 27445
 - modification of Great Lakes winter storms, 31722
 - national east coast winter storms operations plans, 20687
 - National severe local storms operations plan, 25616
 - need to control discharges from sewers carrying both sewage and storm runoff, GAO report, 26480
 - observations of severe storms on 26 and 28 April 1971, 29390
 - severe local storm warning service and tornado statistics, 23864
 - statistical method of combining synoptic and empirical tropical cyclone prediction systems, 30533
 - storm hydrographs using double-triangle model, 29563
 - techniques for analysis and forecasting of tropical cyclone intensities from satellite pictures, 17773
 - temporary detention of storm and combined sewage in natural underground formations, 30190
 - tropical storm and Atlantic hurricane, 17781
 - urban storm water runoff, selected abstracts, 21502
 - weather radar investigations on artillery test conducted in Panama Canal Zone, 20973

Storms—Continued

- when you return to a storm damaged home, 29082
- winter storm safety rules, 16423
- see also Hurricanes—Thunderstorms.
- Stout, R. W., report on CBD parking, 16041
- Stoves:
 - clean electric ranges for clean house, instructions, 16610
 - ranges, electric, gas, and oil burning, Federal item identification guide, 26332, 30110
 - ranges, gas, domestic, Federal standard, 23250
- Stowasser, William F., mineral industry of Florida, 16275, 25458
- Strafford County, N.H., soil survey report, 26843
- Strainer elements, Federal Item Identification guide, 27397, 32175
- Strainers, microstraining and disinfection of combined sewer overflows, phase 2, 25112
- Strains and stresses:
 - automated procedure for design of wing structures to satisfy strength and flutter requirements, 30456
 - basic properties of pavement components, 30215
 - bumper-protected laminated spacecraft mainwalls, 29260
 - centrifugal tensile tester for snow, 23296
 - computer program for pit slope stability analysis by finite element stress analysis and limiting equilibrium method, 21943, 25495
 - controllable twist rotor performance and dynamic behavior, analytical evaluation, 15513
 - design parameters for torsion of sandwich strips having trapezoidal, rectangular, and triangular cross sections, 26475
 - determination of paleotectonic principal stress direction, including analysis of joints by optical diffraction, 26658
 - divergent beam (Kossel) X-ray method and its uses in measuring strain contours in individual grain of Fe-3 weight percent Si transformer sheet, 32482
- effects of—
 - deformed shanks, prebored lead holes and grain orientation on elastic bearing constant for laterally loaded nail joint, 27533
 - load variations on flexural fatigue strength of plain concrete, 31319
 - neutron irradiation on fatigue crack propagation in types 304 and 316 stainless steels at high temperature, 23876
 - sheet thickness on fracture resistance K_{IC} parameter for titanium alloys, 27845
 - specimen radius on stress state near roof bolt anchor, finite element determination, 30426
 - stress history on resilient response of soils, 31243
 - welding on fatigue lift of high-strength reinforcing steel used in continuously reinforced concrete pavements, 31326
- extended torsional tests of interlocked bi-stem satellite boom, 32476
- fatigue crack growth from circular hole with and without high prior loading, 17717
- feasibility of applying fringe multiplication techniques to stress analysis in 3 dimensions, 20107
- fiber bonding and tensile stress-strain properties of early wood and latewood hand-sheets, 32339
- finite element method and geotechnical engineering in Bureau of Reclamation (talk), 26809
- full scale test on two-story house subjected to lateral load, 25549

Strains and stresses—Continued
 hodographic approach to predicting inelastic strain at high temperature, 16353
 loading conditions imposed by ground turning maneuvers with 3 jet transport airplanes, 23690
 mathematic simulation of turbidity structure within an impoundment, hydraulic laboratory investigation, 25097
 method for measuring and controlling web tension of corrugating medium during singlefacing process, 21655
 method for prediction of stresses in isotropic inclusions or orebody of irregular shapes, 23648
 method of limit point calculation in finite element structural analysis, 16347
 model tests of lined tunnels in jointed rock mass (strengthening of rock by chemical adhesive grouting), 28693
 optical measurement of capillary wave structure, 30540
 polymerized lightweight structural elements, 30160
 review of plane-stress fracture mechanics parameters K_{IC} determined using center-cracked tension specimen, 30589
 specimen thickness effects on fatigue-crack-growth behavior and fracture toughness of 7075-T6 and 7178-T6 aluminum alloys, 27712
 strength measurements on transistor header lead welds, 28065
 stress, stability, and vibration of complex branched shells of revolution, analysis and user's manual for BOSOR4, 20588
 structural-kinetic study of oxidizability of nickel-chromium based alloys, USSR study, 26569
 tensile properties to 650° C. and deformation structures in precipitation-strengthened titanium-aluminum alloy, 30460
 three-dimensional elastic stress and displacement analysis of—
 finite circular geometry solids containing cracks, 29287
 tensile fracture specimens containing cracks, 27713
 use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressures, 29280
 WAVE, computer program for one-dimensional stress wave analysis in a time-dependent inelastic rock using a generalized Volgt model, 23640
 see also Shear (mechanics).
 Strait, see name of strait.
 Straps, Federal Item Identification guide, 27380
 Strategic Arms Limitation Talks, see Disarmament.
 Strategic materials:
 disposal from national and/or supplemental stockpile—
 certain abaca and sisal cordage fiber—hearing, 24845
 law, 30921
 reports, 26139, 31064
 lead, law, 16879
 message from the President, 26062
 nickel, law, 16878
 opium, report, 31101
 Federal stockpile inventories, report, 17953
 limitation of strategic offensive weapons agreement—
 law, 19383
 reports, 17007, 19618, 21170
 with Union of Soviet Socialist Republics, 25749
 stockpile information, GSA release, 18931
 stockpiles, disposal (address), 26346
 Strategies for implementation, White House Conference on Children, 16378

Strategy, see Military art and science.
 Stratification:
 determination of mass balance and entrainment in stratified Duwamish River estuary, King County, Wash., 20359
 determining presence, thickness, and electrical properties of stratified media using swept-frequency radar, 23181
 flow into stratified reservoir, 17417
 photo stratification improves Northwest timber volume estimates, 27541
 Stratified Primitive Area:
 designate as part of Washakie Wilderness, Shoshone National Forest—
 law, 19409
 report, 19637
 Stratigraphy:
 and origin of Chinle formation and related upper Triassic strata in Colorado Plateau Region, 21725
 and structure of middle and Upper Ordovician rocks in Sedgwick Basin and adjacent areas, south-central Kansas, 21726
 contributions to stratigraphy (series), 23331, 25253, 26494-495, 29004, 31394
 Copper Harbor Conglomerate (middle Keweenaw) on Isle Royale, Mich., and its regional implications, 26508
 lower and middle Tertiary stratigraphic units of San Emigdio and western Tehachapi Mountains, Calif., 29004
 Mississippian stratigraphy of northwestern Pennsylvania, 20342
 oil yields and stratigraphy of Green River formation's Tipton Member at Bureau of Mines sites near Green River, Wyo., 20574
 Oligocene molluscan biostratigraphy and paleontology of lower part of type Temblor formation, Calif., 27572
 Paleozoic and Precambrian rocks of Alaska and their role in its structural evolution, 25257
 Silurian rugose corals of Klamath Mountains region, Calif., 17535
 southern Coast Ranges near San Andreas fault from Cholame to Maricopa, Calif., 27569
 stratigraphic distribution of significant Eocene palynomorphs of Mississippi embayment, 26507
 stratigraphic divisions and geologic history of Laney Member of Green River formation in Wasakie Basin in southwestern Wyoming, 26495
 stratigraphic framework of Absaroka Volcanic Supergroup in Yellowstone National Park region, 21730
 stratigraphic nomenclature of Cambrian and lower Ordovician rocks of easternmost southern Arizona and adjacent westernmost New Mexico, 17528
 stratigraphic terminology of Dakota Sandstone and Mancos Shale, west-central New Mexico, 31394
 stratigraphy and—
 ammonite fauna of Graneros Shale and Greenhorn Limestone near Pueblo, Colo., 23360
 geologic history of Montana Group and equivalent rocks, Montana, Wyoming, and North and South Dakota, 30281
 origin of Triassic Moenkopi Formation and related strata in Colorado Plateau region, 17532
 preliminary biostratigraphy of Flagstaff Rim area, Natrona County, Wyo., 30632
 stratigraphy, morphology, and paleoecology of fossil peccary herd from western Kentucky, 23366
 stratigraphy of Glens Ferry formation from Hammett to Hagerman, Idaho, 25251

INDEX 1973

Stratigraphy—Continued

- stratigraphy of Washakie Formation in Washakie Basin, Wyo., 27555
- structural and stratigraphic framework and spatial distribution of permeability of Atlantic Coastal Plain, North Carolina and New York, 23367
- Stratosphere:
 - distribution of odd nitrogen in lower stratosphere and possible perturbations caused by stratospheric air transport, 32462
 - meteorological and ecological monitoring of stratosphere and mesosphere, 17698
 - variations in stratospheric circulation and ozone during selected periods, 22419
- Stratton, Samuel S. Citizens for Stratton Committee, annual report, 24333
- Stratus clouds, *see* Clouds.
- Strawberries:
 - culture, eastern United States, 15467
 - fresh market, acreage, production, and value, 1964–70 revised estimates by seasonal groups and States, 19132
 - fresh market prices, revised estimates, 1964–70, 28021
 - insects, control, 24128
 - nature and extent of retail and consumer losses in apples, oranges, lettuce, peaches, strawberries, and potatoes marketed in Greater New York, 31915
- Strayhorn, Martha, changes in time and savings deposits at commercial banks, 32291
- Stream pollution, *see* Water pollution.
- Streamers, *see* Flags.
- Streamlining, *see* Aerodynamics.
- Streams, *see* Rivers.
- Streets:
 - Omnibus crime control and safe streets act title 1, amend—
 - hearings, 28552
 - law, 32010
 - reports, 28366, 29886, 29996, 30969
 - text, 24160
 - research on street crime control, 31552
 - street crime in America—
 - corrections approaches, hearings, 32075
 - police response, hearings, 29897
 - street crime, reduction through positive criminal justice responses, report, 28382
 - vehicle-free zones in city centers, European experience, 21802
 - water pollution aspects of street surface contaminants, 20203
- Strength development and reaction products in lime-montmorillonite-water systems, 31325
- Strength of materials:
 - adequacy of high-strength, low-alloy steel weldments for cargo ship hulls, study of factors which affect, 2221
 - defectoscopy of metals, USSR study, 29138
 - feasibility of applying fringe multiplication techniques to stress analysis in 3 dimensions, 26107
 - model tests of lined tunnels in jointed rock mass (strengthening of rock of chemical adhesive grouting), 28693
 - tanker transverse strength analysis—
 - programmer's manual, 22218
 - user's manual, 22217
 - user's manual and computer program, 22216
 - see also* names of materials and articles.
- Strengthening America's position in world economy, 21108
- Strengthening of fractured rock pillars by use of small radial reinforcement pressures, 30432
- Strengthening State committees and National Council. report of 1st National workshop for State committees for children and youth, 24109

Stress (physiology):

- biological effect of constant magnetic fields, USSR study, 21851
- cardiac activity in man-operator in control process, characteristics, USSR study, 21876
- effect of premortem stress, holding temperatures and freezing on biochemistry and quality of skipjack tuna, 22105
- high altitude physiology of man in Tien Shan and Pamirs, some results of studies, USSR study, 23560
- in the magnetic web, USSR study, 21883
- predicting man's condition during space-flight, USSR study, 20449
- pressure bomb measures changes in moisture stress of birchleaf mountainmahogany, 23290
- psycho-physiological testing and training of pilots, USSR study, 23551
- stable changes in frequency and synchronism of cortical neuron population discharges in experiments with feedback, USSR study, 20475
- Stress (psychological), *see* Tension.
- Stresses, *see* Strains and stresses.
- Stresses (mechanical), *see* Strains and stresses.
- Strike a note, 20515
- Strikes and lockouts:
 - analysis of work stoppages, 29171
 - right to strike and right to negotiate union shop by postal employees, hearings, 29933
 - summary of strikes and work stoppages in maritime industry, 17676
 - work stoppages—
 - analysis, 23590
 - monthly, 19089
 - see also* Labor disputes.
- Striking better balance, Federalism in 1972, 30687
- Strip mined lands, *see* Reclamation of land.
- Strip mines, *see* Coal mines and mining.
- Strips (metal, etc.):
 - design parameters for torsion of sandwich strips having trapezoidal, rectangular, and triangular cross sections, 26475
- Strizhkov, V. V., mineral industry of U.S.S.R., 25434
- Strodes Creek, member (upper Ordovician), new map unit in Lexington limestone of north-central Kentucky, 23331
- Stromsdorfer, Ernest W., cost-effectiveness studies of vocational and technical education, 17350
- Strong, Ann L., environmental protection through public and private development control, 30197
- Strontium, 2d International Conference on Strontium Metabolism, papers, 26989
- Stroup, W. H., steam injection pasteurization of grade A milk and milk products, 28918
- Struble, George R., biology, ecology, and control of lodgepole needle miner, 25837
- Structural analysis (mathematics), *see* Lattice theories.
- Structural design:
 - aircraft structural integrity program, airplane requirements, military standard, 15970
 - criteria for fracture control plans, 22163
 - evaluation of structural layers in flexible pavement for aircraft traffic, 23782
 - improved helicopter crashworthiness analytical and design techniques development program, 30759
 - seismic design of building structures, 20108
 - structural steel, structural aluminum, steel joints, and cold-formed steel for buildings, 31932
 - wood structural design for buildings, Army technical manual, 31933
 - see also* Architecture.
- Structural dynamics, *see* Dynamics.

Structural engineering, *see* Building.
 Structural geology, *see* Geology.
 Structural material, *see* Construction materials.
 Structural principles and prospects for creation of new broadcast and national communications television during 1971-75, 26593
 Structural sandwich, *see* Sandwich construction.
 Structural shapes, nonmetallic, Federal item identification guide, 30113
 Structural steel, *see* Steel.
 Structure and properties of various coal chars, 25955
 Structure of intraseasonal pricing mechanism for late summer onions, 1930-68, 30707
 Structure of seasonal supply and demand in onion market, 22338
 Structure of space charge field of an ellipsoidal cluster of charged particles, 22462
 Struthers, Ohio, flood plain information, Mahoning River, Mahoning County, Ohio, 28713
 Stubblefield, Albert S., Carlisle County Citizens for Stubblefield Committee, annual report, 26009
 Stubblefield, Frank A.:
 Citizens for Stubblefield, annual report, 24373
 Citizens for Stubblefield Committee, annual report, 24365
 Lyon County Citizens for Stubblefield, annual report, 24342
 Stubblefield for Congress Committee, annual report, 24358
 Stubbs, Mary L., Army lineage series, armor-cavalry, Army National Guard, 32445
 Stubbs, Robert M., theory of disordered Heisenberg ferromagnets, 29276
 Stuber, Charles E., transplutonium elements, bibliography, supplement, 19184
 Studdard, Gloria J., common environmental terms, glossary, 21489
 Studds, Gerry E., for Congress Committee, *see* Gerry E. Studds for Congress Committee.
 Student loan program, *see* Students.
 Students:
 achievement of our Nation's students, study, 31231
 adult basic education program statistics, students and staff data, 32194
 American student left, 32410
 American students and teachers abroad, sources of information about overseas study, teaching, work, and travel, 23135
 college—
 directory of volunteer programs, 30686
 plans of high school seniors, 31964
 work-study program manual, 17355
 consider a career in podiatry, 29368
 cross-age teaching, Ontario, Calif., 29359
 evaluation of technical training courses and students, some techniques, 22363
 Federal and State student aid programs, 1972, survey, 19807
 Federal student assistance programs, 1973, hearings, 28561
 from student to RN, report of nurse career-pattern study, 21759
 goals and alternatives for education of minority group students in elementary and secondary schools, 17250
 guaranteed student loans—
 1973, hearings, 31154
 program, interest subsidy provisions, delay effectiveness, hearings, 27199
 guide for repayment, deferment, and cancellation of health profession student loans, 23407
 high school student volunteers, 20713
 Indians, reference for young students, 31473

Students—Continued
 learning center evaluation—
 measurement of students' attitudes toward undergraduate pilot training learning centers, 28032
 teaching undergraduate pilot training academic course in learning center, 28033
 living arrangements of college students, 24236
 loan insurance fund, 1971 and 1972, financial statements, GAO examination, 30956
 loan program, effectiveness of amendments, delay law, 19361
 manual for students volunteering, 16420
 number of pupils with handicaps in local public schools, spring 1970, 28669
 nursing scholarships and student loans, information for schools, 23408
 participation in academic governance, 15995
 pilot guide, 17450
 police traffic services—
 basic training program, student study guide, 22051
 supervisory level training program study guide, 30496
 proposed highway safety program standards on pupil transportation safety and accident investigation and reporting, hearings, 17080
 public elementary and secondary day schools, fall 1971, statistics, 25057
 pupil mobility in public elementary and secondary schools during 1969-70 school year, 28680
 pupil transportation safety program, 30497
 repayment, deferment and cancellation of nursing student loans, guide, 25266
 Skylab, student project, information for teachers including classroom activities, 21979
 social and economic characteristics of students, 15592
 social security checks for students 18 to 22, 17836
 social security student gazette, 25705
 student manual, SM series, 15938
 summer research opportunities for dental students, 1973, 20668
 Talent Search, Upward Bound, Special Services, 25060
 tax information for students and parents, 20415
 teachers and students, differences in teacher interaction with Mexican American and with Anglo students, 24256
 training evaluation and student achievement measurement, review of literature, 15485
 transportation moratorium act, hearings, 15729, 17037, 23012
 Women's Army Corps, college junior program, student officer program, 19160
 Students for Carr, annual report, 27102
 Studs, *see* Bolts and nuts.
 Study, *see* Curriculum.
 Stump, Patricia L., solid waste demonstration projects, proceedings of symposium, 21515
 Stumpage, *see* Timber.
 Sturos, John A., segregation of foliage from chipped tree tops and limbs, 28936
 Style manual:
 Government Printing Office—
 style manual, 25263
 word division, supplement, 30289
 Subacute sclerosing panencephalitis, *see* Encephalitis.
 Subcommittee on Constitutional Rights, *see* Judiciary Committee, Senate.
 Subcommittee on Science, Research and Development, *see* Science and Astronautics Committee, House.

INDEX 1973

- Subcommittee to Investigate Administration of Internal Security Act and Other Internal Security Laws, *see* Judiciary Committee, Senate.
- Subcooled forced convection boiling of trichlorotrifluoroethane, 20592
- Subject headings:
- Library of Congress used in dictionary catalogs, supp., 18935
 - medical
 - and health related sciences thesaurus, 16396
 - cumulated, 25606
 - index medicus, 18481, 25606-607
 - methodological research, 1963-71, key word subject index, 29687
 - Subject reports from 1970 census of population and housing, 28191
 - Sublimation, sublimation of wind-transported snow, model, 16090
 - Submarine boats:
 - eminent Americans, namesakes of Polaris submarine fleet, 21159
 - field evaluation of effects on hearing and general habitability of own-ship echoing during submarine patrol, 20523
 - first time safe for submersibles (address), 25645
 - surface ship & submarine safety review, fathom (periodical), 18286
 - Submarine cables, ocean-cable carriers, uniform system of accounts, FCC rules and regulations, 18312
 - Submarine canyons, *see* Submarine valleys.
 - Submarine crews:
 - elevated atmospheric CO₂ on acid-base balance and red-cell electrolytes of FBM submarine crew members, effects, 20526
 - factors related to drug abuse—
 - in submarine service, 26643
 - personality trait patterns as delineated by Minnesota multiphasic personality inventory, 30411
 - special pay for nuclear-qualified members who agree to reenlist—
 - law, 19506
 - reports, 19675, 19939
 - studies in enlisted submariner motivation, etiological factors related to devoluting of submarine school candidates, 16251
 - Submarine geology:
 - bibliography on marine geology and geophysics, 23816
 - geologic prediction, developing tools and techniques for geophysical identification and classification of sea floor sediments, 23802
 - Soviet marine geological exploration, basic problems, 25349
 - studies on marine geology of Bering Sea (series), 23363
 - Submarine Medical Center, *see* Naval Submarine Medical Center.
 - Submarine valleys, currents observed in Juan de Fuca submarine canyon and vicinity, 25624
 - Submariners, *see* Submarine crews.
 - Submarines, *see* Submarine boats.
 - Subroutines, *see* Computer programs/programming.
 - Subsamples of set of symmetric, independent, identically distributed random variables which determine set of typical values, 23882
 - Subsidence (earth movements):
 - subsidence due to underground mining—ground movements and mining damage, 25415
 - theory and practices in predicting surface deformation, 25414
 - Subsidies:
 - economics of Federal subsidy programs, compendium of papers, 16929, 25992, 28267
 - government subsidy, historical review, summary, 17024
 - Subsidies—Continued
 - see also* names of commodities, industries, etc.
 - Subsonic flow, *see* Flow.
 - Subsonic speed, *see* Air speed.
 - Subsurface investigations, soils, 23176
 - Subtle changes in brain functions produced by single does of mevinphos (phosdrin), 30786
 - Suburbanites, publications, list, 23462
 - Suburbs:
 - conservation plan for developing areas, 22350
 - Federal facilities, movement to suburbs, civil rights aspects, 22586
 - our cities and suburbs, 29790
 - see also* Cities and towns.
 - Subversive activities, *see* Un-American activities.
 - Subversive Activities Control Board:
 - annual report, 25773
 - appropriations, 1973—
 - law, 19473
 - report, 19704
 - Substation observations, 26782
 - Subways, *see* Transportation.
 - Successful conditioning of stapedius muscle, 29200
 - Suction, investigation of suction system and boundary-layer characteristics on high-lift, BLC L-19 test aircraft, 30760
 - background notes, 31842
 - Sudan:
 - agricultural commodities, agreement, 31861
 - background notes, 31842
 - Democratic Republic, area handbook, 25856
 - economic trends and their implications for United States, 23494
 - Suddath, Lovick P., lime-cement combination stabilization, 30161
 - Suez Canal, sailing directions, 27418
 - Suez, Gulf of, sailing directions, 27418
 - Suffolk County Republican Committee, annual report, 22781
 - Suffolk County Republican Preprimary Committee, annual report, 22974
 - Sugar:
 - determination of wage rates, prices, acreage credit, etc., 18936
 - foreign agriculture circulars, 18380
 - payments and quotas, statutes, compilation, 25820
 - requirements and quotas, 18938
 - sugar in diet, diabetes, and heart diseases, hearings, 30063
 - sugar reports, monthly, 18937
 - Sugar beets, anaerobic-aerobic ponds for best sugar waste treatment, 26409
 - Sugar maple, *see* Maple.
 - Sugar pine, *see* Pine.
 - Sugarcane, longtime testing of sugarcane varieties in southern Florida, 20885
 - Suge, W. O., establishing business in Spain, 16829
 - Suggested 2-year post high school curriculums, 30152, 31232
 - Suggestion (mental), *see* Mental suggestion.
 - Suicide:
 - bibliography on suicide and suicide prevention, 16389
 - prevention in 70's, 27786
 - Suisun Creek:
 - Cordelia, Calif.—
 - flood plain information, 20117
 - floods, 20134
 - Sult, William T., longitudinal aerodynamic parameters of Kestrel aircraft (XV-6A) extracted from flight data, 29295
 - Suitability of using common selection, test standards for Negro and white airmen, 25844
 - Suits at law, *see* Actions at law.
 - Sulfation, sulfatization-reduction of mangiferous iron ore, 30427

- Sulfides:**
disseminated silver-lead-zinc sulfide occurrence at Hahns Peak, Routt County, Colo., 26493
massive sulfide deposits near Shellabeger Pass, southern Alaska Range, Alaska, 17527
optimizing decomposition of carbonyl sulfide in electrical discharge, 21953
- Sulfur:**
auger analysis of oxygen and sulfur interactions with various metals and effect of sliding on these interactions, 30461
chemical kinetics in C-O-S and H-N-O-S systems, bibliography, 16360
mineral industry survey—
advance summary, 27701
annual, 23662
fuel oils by sulfur content, monthly, 18392
industry in 1972, 29240
native and recovered, monthly, 18939
minerals yearbook chapter, 25485
oxygen and sulfur interactions with clean iron surface and effect of rubbing contact on these interactions, 29290
statistical and spatial evaluation of sulfur and ash in coal seams, 20573
sulfur compounds in crude oil, 16253
- Sulfur dioxide:**
development of in-situ prototype diode laser system to monitor SO₂ across stack, 30184
ionic and neutral reactions in glow discharges of He-SO₂-CO mixture, 30425
monitoring instrumentation for measurement of sulfur dioxide in stationary source emissions, 28804
properties of ammonium sulfate, ammonium bisulfate, and sulfur dioxide solutions in ammonia scrubbing processes, 32260
sulfur dioxide—
emission control by hydrogen sulfide reaction in aqueous solution, citrate system, 30443
its chemistry as related to methods for removing it from waste gases, 30419
toxicology of atmospheric sulfur dioxide decay products, 15497
- Sulphur Fork, flood plain information, 23174**
- Sulfur oxides, conceptual design and cost study, sulfur oxide removal from power plant stack gas, magnesia scrubbing-regeneration production of concentrated sulfuric acid, 31280**
- Sulfuric acid:**
conceptual design and cost study, sulfur oxide removal from power plant stack gas, magnesia scrubbing-regeneration, production of concentrated sulfuric acid, 31280
extraction of manganese from Georgia umber ores by sulfuric acid-ferrous sulfate process, concurrent extraction and centrifuge tests, 21950
methods for producing alumina from clay, evaluation of sulfurous acid-sulfuric acid process, 30435
- Sullivan, A.M., review of plane-stress fracture mechanics parameter K_{IC} determined using center-cracked tension specimen, 30589**
- Sullivan, D. B., superconducting quantum interference devices operational guide for rf-biased systems, 22011**
- Sullivan, Daniel E., review of mineral industries, 25481**
- Sullivan, P.M., resource recovery from raw urban refuse, 29235**
- Summer:**
funds, summer lunch-pre-school feeding, extend. hearings, 20006
research opportunities for dental students, 1973, 20668
- Summer—Continued**
special summer food service program—
sponsor handbook, 25830
training manual, 25829
travel, 30812
Summer employment, *see* Employment.
Summer schools, *see* Handicapped.
SUMSAT catalog, 22146
- Sun:**
astrometry and astrophysics, research of sun and stars, 31658
ephemeris, 20510
measurement of atmospheric transmittance from sun and sky with infrared vertical sounder, 22098
quite sun, 29265
solar-geophysical data (periodical), 18914
topside ionosphere during sunrise at mid-latitudes, 22406
see also headings beginning Solar.
- Sun River, Great Falls, Mont., flood plain information, 32214**
- Sun River Canyon, Mont.:**
geology of Sun River Canyon area, northwestern Montana (series), 26501
structural geology of Sun River Canyon and adjacent areas, northwestern Montana, 26501
- Sun Valley Airlines, Inc., accident report, 23854**
- Sunfishes, thermal effects on eggs, larvae, and juveniles of bluegill sunfish, 28792**
- Sunflowers, potential for oilseed sunflowers in United States, 24122**
- Sunnyvale Republican Women Federated, annual report, 24603**
- Sunshine Silver Mine, Kellogg, Idaho: disaster, hearings, 24850**
final report of major mine fire disaster, 27695
- Superalloys, *see* Alloys.**
- Superconductivity:**
characteristics and performance of superconducting bumpy-torus magnetic facility for plasma research, 31641
superconducting devices and materials, quarterly literature survey, 18946
- Superconductors:**
biaxial gyrostabilizer and superconducting spherical suspension, USSR study, 23548
superconducting magnet systems, field windings and inductors, USSR study, 17642
superconductive fixed point devices, preparation and use, 22005
- Superconductors (electric), *see* Electric conductors.**
- Supercritical flow in curved channels, hydraulic model investigation, 21477**
- Supergrade positions, *see* Civil service.**
- Superhigh frequency, *see* Frequency band.**
- Superior, Wis., census of population and housing, 1970 census tracts, errata, 19215**
- Superior, Lake:**
bibliography, 16145
paleomagnetism of some Lake Superior Keweenaw rocks, 17542
- Superior Court of District of Columbia, associate judge, nomination of H. Carl Moultrie, hearing, 19962**
- Superior National Forest, canoeing-camping, 21605**
- Superlight structural alloys, 30363**
- Supermarkets:**
demand for farm-raised channel catfish in supermarkets, analysis of selected markets, 26940
urban business profile, 15980
- Supernphosphates, *see* Phosphates.**
- Supersonic aircraft, *see* Aircraft.**
- Supersonic airplanes, *see* Airplanes.**
- Supersonic flow, *see* Flow.**
- Supersonic inlets, *see* Air inlets (aircraft).**
- Supersonic pressure, *see* Pressure.**
- Supersonic pressure distribution, *see* Pressure.**

INDEX 1973

Supervision, *see* Supervisors.

Supervisors:

experimental study of differential effects of parole supervision for group of adolescent boys and girls, summary report, 25365

Federal juvenile delinquency and related youth development programs—directory, handbook for juvenile delinquency planners, 27590

for juvenile delinquency planners, 26533 manpower planners, handbook, census use study, 21054

police traffic services, supervisory level training program—

course guide, 27762

instructor's lesson plans, 29347

student study guide, 30496

recognition is your responsibility of superior work for awards, etc., 26673

supervising paraprofessionals, 20237

supervisor's guide to labor relations in Federal Government, 30889

training rural supervisors, 16221

underwriting management and supervisory responsibilities, HUD, 29056

Supervisory committee manual for Federal credit unions, 25577

Supplemental loans for project mortgage insurance, 29069

Supplemental payment entitlement periods, 1, 2, & 3, Office of Revenue Sharing, 29567

Supplemental security income program, 28534

Supplementary compensation in PATC survey industries, 27683

Supplementary medical insurance, *see* Medicare.

Supplier quality assurance program requirements, 23115

Supplies, *see* Agricultural supplies—Government supplies—Military supplies.

Supply and demand:

demand and price situation, 18218

for forest products, 15478

estimated world fertilizer production capacity as related to future demand, 30670

petroleum supply and demand in non-Communist world, 23896

projections of demand for housing by type of unit and region, 19104

regulatory aspects of fuel oil supply, analysis, 28835

structure of seasonal supply and demand in onion market, 22338

see also Prices.

Supply catalogs, *see* Military supplies.

Supply clerks, inventory management specialist, Air Force notice, 16632

Supply Corps, Navy, *see* Navy Supply Corps.

Supply (family):

equal rights amendment and alimony and child support laws, 20384

Support Aspinall Committee, annual report, 24615

Suppression of unlawful acts against safety of civil aviation (sabotage), 27928

Suppressors (electric):

general suppression system design requirements for portable electric hand tools, military standards, 20068

Suppressors (hydraulics):

control of surging in low-pressure pipelines, 23940

Supreme Court:

annuities of widows of justices of Supreme Court, law, 16901

cases adjudged—

Court of Claims cases, 17315

official reports, 18724

United States reports, 24022, 27942, 31880

Federal rules of appellate procedure, with forms, 15768

journal, 18947

Supreme Court—Continued

opinion in case of *Doe v. McMillan* court proceedings and actions of vital interest to Congress, 32019

Sureties, *see* Bonds of officers, etc.—Guaranties and sureties.

Surface active agents, production and sales, 27951

Surface area measurements, *see* Surfaces.

Surface mining, *see* Mines and mining.

Surface mining, *see* Coal mines and mining.

Surface transportation legislation, 15883

Surface water, *see* Water.

Surfaces:

application of phase-change technique to thin sections with heating on both surfaces, 32469

delineation of clustered points in 2 dimensions by measuring perimeters of convex hulls, 21940

design of landing-mat-surfaced airfields for operation of C-5A aircraft, 30167

effective hydraulic roughness for channels having bed roughness different from bank roughness, state-of-the-art report, 25094

friction-induced surface activity of some hydrocarbons with clean and oxide-covered iron, 26690

measuring pavement roughness spectra using modified BPR roughometer with additional refinements, 31324

method of bivariate interpolation and smooth surface fitting based on local procedures, 27065

new technique for auger analysis of surface species subject to electron-induced desorption, 27716

nuclear and ion beam techniques for surface and near surface analysis, 31752

numerical study of electromagnetic scattering from ocean-like surfaces, 17697

on natural redistribution of surface contamination, 24199

oxygen and sulfur interactions with clean iron surface and effect of rubbing contact on these interactions, 29290

radiation from apertures in curved surfaces, 32456

seasonal snow-surface energy balance in forest opening, 25879

surface observations, meteorology, observing and reporting techniques, 23865

surface-refractivity measurements at NASA spacecraft tracking sites, 17711

theta pinch in electron-hole plasma with surface generation, 22464

Surge suppressors, *see* Suppressors (hydraulics).

Surgeon General, *see* Public Health Service.

Surgeon General's Scientific Advisory Committee on Television and Social Behavior, report, app. A, hearings, 15878

Surgery:

cardiosurgery, Soviet, progress and tasks, 23537

certain problems of surgical aid in cranio-cerebral trauma, USSR study, 17639

restrictions on funds for experimental use, hearings, 28566, 30060

surgical operations in—

short-stay hospitals, 27749

short-term hospitals, 25567

surgical suite, functional programing worksheets, 26518

surgery in World War II, orthopedic surgery in Zone of Interior, 16659

ultra-sound cutting and fusing of biological tissue, USSR study, 26586

Surgical catheters, *see* Surgical supplies.

Surgical dressing, *see* Bandages and bandaging.

Surgical suite, functional programing worksheets, 26518

- Surgical supplies, catheters, drains, and tubes, Federal item identification guide, 30114
- Surinam:
economic trends and their implications for United States, 31510
other South American areas, mineral industry, mineral yearbook chapter, 16299
- Surplus military property, *see* Surplus property.
- Surplus property:
act of 1944 and amendments, compilation, 21153
airport property, release from restrictions, Federal aviation regulations, 18300, 21532
Defense disposal manual, 17319, 20033, 32162
Federal, convey to State and local governments as historic monuments, law, 16883
off-shore sales facility, agreement with Singapore, 16504, 25741
surplus property donations to public museums, report, 17193
traffic in surplus war materiel, U.S. military supply systems, hearings, 15900
see also Personal property.
- Surveillance (military):
military surveillance of civilian politics, subcommittee report, 30051
- Surveillance and Inspection Division, OPR/SID [Surveillance and Inspection Division] (series), 20740, 23912-913
- Survey and Reports Section, statistical notes, 16393, 23762-767, 25592-595, 27783-785, 29365-366, 32499
- Surveying, earth resources survey systems, proceedings of international workshop, 23675
- Surveyor Project, *see* Project Surveyor (unmanned lunar exploration).
- Surveys, *see* subject of surveys.
- Survival:
and growth (2), small R & D firm, 32550
effects of soil type and watering on germination, survival, and growth of Engelmann spruce, greenhouse study, 16081
growth and survival of northern plants at low soil temperature, growth response, organic nutrients, and ammonium utilization, 30157
survival of fish passing through spillways and conduits, compendium, 31238
teacher's manual for your chance to live, 26299
winter survival of fecal indicator bacteria in subarctic Alaskan river, 20190
- Survivors, *see* Civil service pensions.
- Survivors' benefits:
plan for retired members of uniformed services, 31493
programs for retired military personnel, establish—
hearings, 15873, 17028
law, 19369
report, 15851
social security, statistics, monthly, 16480, 18638, 29502
survivor benefit plan for retired members of uniformed services, 23461
tax treatment of survivor benefit plans of uniformed services, reports, 19673, 30980
- Survivors' insurance:
social security rulings, 18912
your social security, 20772
see also Old-age, survivors, disability, and health insurance.
- Sus derechos en vivienda, 21809
- Susitna River:
Taleetna, Alaska—
flood plain information, 17393
floods, 17402
- Suspension lines:
blaxial gyrostabilizer and superconducting spherical suspension, USSR study, 23548
design guide for load suspension points, slings and aircraft hard points, 16655
Suspension of duties on certain forms of copper, 29986, 30985
public works appropriations, 1973, law, 19363
- Susquehanna River Basin Commission:
public works appropriations, 1974—
hearings, 27186, 31130
law, 32015
reports, 29993, 30989
- Sutcliffe development theory, 23673
- Sutton, Jeannine F., nursing homes, their admission policies, admissions, and discharges, 26719
- Sutton, Joseph A.:
columbium and tantalum, 20555
mineral industry of Ohio, 16298, 29225
- Swansee River and Valley, Suwanee basin, plan for development of land and water resources of southeast river basins, 17924
- Sverdlovsk, Russian SFSR, environs of Sverdlovsk, USSR study, 30327
- Swain, Frederick M., Lower Cretaceous, Jurassic(?), and Triassic ostracoda from Atlantic Coastal Region, 21736
- Swamp lands, *see* Swamplands.
- Swamplands:
aquatic and wetland plants of southwestern United States, 17432
effect of overstory removal upon surface wind in black spruce bog, 16077
preliminary classification of wetland plant communities in north-central Minnesota, 31832
rural environmental assistance and water bank programs, reports, 26221, 27126
water bank program, 22322
- Swan Islands:
cooperative meteorological program, agreement with Honduras, 25732
electric power for certain facilities, agreement between United States and Honduras, supplementing meteorological program agreement, 24000
treaty on Swan Islands between United States and Honduras, 20812
- Swann, Rita, relief, 19584
- Swans, hunting, possession, transportation and importation, 1972-73, Federal regulations, 16487
- Swanson, Howard E., standard X-ray diffraction powder patterns, 20635
- Swanson, John W., Kraft effluent color characterization before and after stoichiometric lime treatment, 25113
- Swanson, Roger W., geology and phosphate deposits of Permian rocks in central western Montana, 26497
- Swanson, Vernon E., geochemistry and diagenesis of tidal-marsh sediment, northeastern Gulf of Mexico, 20345
- Swantz, Alexander, trading in commodity futures contracts on Chicago Board of Trade, study of sources and distribution of trading and commission income, 29626
- Swartz, Marilyn J., medicare, inpatient hospital services, 1967-68, by region, 29499
- Swaziland:
background notes, 25723
basic data on economy, 22631
Mozambique boundary study, 29534
South Africa boundary, study, 31846
- Swearing-in procedures for HUD executives, 25273
- Sweaters, jumpers, sweaters, and undershirts, 31186
- Sweden:
background notes, 23988
certificate of airworthiness for imported aircraft, agreement, 31863
economic trends and their implications for United States, 16167, 25313

INDEX 1973

Sweden—Continued

- foreign trade regulations, 31210
- housing and urban development in Sweden, 21801
- mineral industry, minerals yearbook chapter, 25433
- plant quarantine import requirements, 20961
- stainless steel plates from Sweden, Tariff Commission report, 29553
- Sweeney, Andrea M., productivity, selected annotated bibliography, 31560
- Swick, David A., some approaches to testing hypotheses for multidimensional stationary stochastic processes, 23880
- Swift & Company, wage chronology, 30385
- Swift County, Minn., soil survey report, 26844
- Swift County Republican Committee, annual report, 24496
- Swimming:
 - available heated wet-suit protection for divers and swimmers, 31581
 - bioenergetic and hydrodynamic aspects of dolphin swimming, USSR study, 27630
 - physical conditioning through water exercises, 31772
- Swimming pools, minimum property standards for semi-private swimming pools and wading pools, 21795
- Swindles, *see* Fraud.
- Swine:
 - brucellosis, how to eradicate it and valid-date herd and area, 15480
 - central swine-testing and purebred-improvement programs in U.S., 24136
 - cooperation State-Federal hog cholera eradication program, progress report, 22397
 - farm building plans—
 - farrowing and nursery building, 28006
 - farrowing house, environmentally controlled, 20919
 - farrowing house for sows, 22342
 - farrowing house, slotted floor, 22339
 - hog house, modified A type, 20915
 - garbage-feeding, national status on control, 18673
 - hogs and pigs—
 - inventories, value, etc., 1965–69, 19133
 - March 1973, 25772
 - June 1973, 29543
 - ten corn belt States, statistics, 22279
 - live hogs, commitments of traders, 18140
 - protect against tuberculosis, do's and don't's for swine, cattle, etc., 22349
 - stratigraphy, morphology, and paleoecology of fossil pecary herd from western Kentucky, 23366
 - swine identification for disease eradication, 20929
- Swinzow, George K., terminal ballistics in ordinary snow, small arms fire attenuation, 21441
- Swirl concentrator as combined sewer overflow regulatory facility, 20189
- Swirling, *see* Rotation.
- SWIRS (solid waste information retrieval system), *see* Waste products.
- Swisher, Idella, income of OASDHI beneficiaries and other disabled, 26833
- Switches, *see* Electric switchgear—Electronic switches.
- Switzerland:
 - economic trends and their implications for United States, 20439, 29101
 - foreign trade regulations, 19301
 - mineral industry, minerals yearbook chapter, 20538
 - nontariff barriers affecting trade in agricultural products, 28920
 - social security agreement, 22271
 - strategic arms limitation (SALT) delegations, status, privileges, and immunities, agreement, 26861

- Sword, Bryan R., bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21520
- Sycamore, American Sycamore, American wood, 32307
- Sycamore Creek, flood plain information, 23164
- Sykes, Floyd E.:
 - approach, naval aviation safety review, 18004
 - fathom, surface ship & submarine safety review, 18286
 - mech. naval aviation maintenance safety, 18615
- Sylvester, Rita D., list of Bureau of Mines publications and articles, 31587
- Symbiosis, cyborgs, symbiosis of man and machine? USSR study, 23559
- Symbols:
 - American Revolution Bicentennial symbol, guidelines for authorized usage, official graphics standards, 29654
 - flowchart symbols and their usage in information processing, 27723
 - methodological investigation of use of semantic differential and time-lapse photography to measure attitude and behavior in dining hall at Chanute AFB, 32201
 - name or symbol of Federal Government in collection of debts, prohibit misuse, report, 28370
 - new recreation signs to guide you, 22351
 - see also* Mathematical symbols.
- Symmetry:
 - correlation for temperature profiles in plane of symmetry downstream of jet injected normal to crossflow, 17724
 - interaction of plasma streams with stationary, axially symmetric magnetic fields, 21009
 - tests of mixed compression axisymmetric inlet with large transonic mass flow at Mach numbers 0.6 to 2.65, 21987
- Sympatholytics, *see* Adrenergic blocking agents.
- Symphonic Electronic Corp., radio-phonograph and radio-phonograph-tape player combinations, workers of Lowell, Mass., plant of Symphonic Electronic Corp., subsidiary of Lynch Corp., Tariff Commission report, 26898
- Symposiums, AEC symposium series, 30768
- see also* names or subjects of symposiums.
- Synchronizers, standard digital data clock-rate generator with programmable digital phase shift, 31755
- Synchronous signaling rates between data terminal and data communication equipment, 20633
- Synchrotrons, some calculated and experimental data concerning development of synchrotrons with steady-state field in energy range of 35–300 giga-electron-volts, USSR study, 17616
- Synerisis, dynamics of health, analytic series, 17552–553, 20365–367, 25264
- Synergist, 18949
- Synopliidae, review of family Synopliidae (= Tironidae), mainly distributed in deep sea (Crustacea: Amphipoda), 17828
- Synopsis of Tribe Omobranchini with descriptions of 3 new genera and 2 new species, 20764
- Synoptic climatological studies of precipitation in Plateau States from 850-. 700-. and 500-millibar lows during spring, 17774
- Synoptic meteorology, *see* Meteorology.
- Synthesis, synthesis and spectral properties of organophosphorus compounds containing keto group, USSR study, 23512
- Synthetic ammonia, *see* Ammonia.
- Synthetic bathymetric profiling system (SYNBAPS), 30584
- Synthetic fibers, *see* Fibers.
- Synthetic filament yarns, *see* Yarn.
- Synthetic fuels, *see* Petroleum as fuel.

Synthetic methionine from Japan, 27950
 Synthetic organic chemicals, *see* Organic compounds.
 Synthetic rubber, *see* Rubber.
 Synthetic woven goods, *see* Textiles.
 Syracuse, N.Y., area wage survey, 21913
 Syria, mineral industry, minerals yearbook chapter, 16269
see also names or types of systems, e.g. Lasers, Mobile communication systems, etc.
 Systems analysis:
 bibliography on analysis of water resource systems, 25300
 development and practical application of systems analysis, USSR study, 26594
 development of design information for molecular-sieve type regenerative CO₂ removal systems, 31608
 failure modes, effects and criticality analysis (FMECA) of category 3 instrument landing system, 20825
 ideation and automata, USSR study, 32406
 parking systems analysis, guide, 25144
 project SOAP, systems approach to biomedical research program management, case study, 27730
 quantitative methods for preliminary design of water quality surveillance systems, 23199
 structural system identification from—
 multipoint excitation, 24187
 single point excitation, 24188
see also Systems engineering.
 Systems Development Office, program and accomplishments, 22157
 Systems engineering:
 development of video system for rapid generation of learning sequences, 24148
 interplanetary Pioneers, system design and development, 25521
 systems approach to airfield pavements, Allerton Park, conference proceedings, 30163
see also System analysis.
 Systems Research and Development Service, report RD series, 20825-826, 24023-55, 25774, 26891, 30654-655
 Szabo, Steven V., jr., Centaur space vehicle pressurized propellant feed system tests, 20599
 Szczepanski, Charles, review of trends in urban and regional planning in United States of America, 23451
 Szuwalski, Andre, costal imagery data bank, 25066
 Szwarc, M., studies of radiation effects, final report, 29677

T

Tackey, Herbert R., self employed doctors of medicine under OASDHI, 22238
 Tacks, nails, staples, and tacks, Federal item identification guide, 25005
 Tacoma, Wash.:
 emergency ground-water supplies in Seattle-Tacoma urban complex and adjacent areas, Wash., 25250
 equal employment opportunities in government operations, 22579
 low flows and temperatures of streams in Seattle-Tacoma urban complex and adjacent areas, Wash., 25249
 Tactics, *see* Military art and science.
 Taeuber, Ralph J., Apollo experience report, command and service module reaction control systems, 30455
 Taft, Robert A., Sanitary Engineering Center, *see* Robert A. Taft Sanitary Engineering Center.
 Tagg, A.R., high-resolution seismic survey of offshore area near Nome, Alaska, 23363
 Tagging and tag recovery experiments with Atlantic menhaden, Brevoortia tyrannus, 21803
 Tags:
 electric detector system for recovering internally tagged menhaden, genus Brevoortia, 22107
 tagging and tag-recovery experiments with Atlantic menhaden, Brevoortia tyrannus, 27803
 Tahoe, Lake:
 environmental problems of Lake Tahoe basin, hearing, 17297
 Lake Tahoe, special place, 26791
 Tail (aircraft):
 dynamic stability derivatives at angles of attack from -5° to 90° for variable-sweep fighter configuration with twin vertical tails, 20602
 Tailings (metallurgy), *see* Hydraulic mine filling.
 Tait, Jack, a drop to drink, report on quality of our drinking water, 28789
 Taiwan:
 Japan, analytical bibliography with supplementary research aids and selected data on Okinawa, Republic of China (Taiwan), Republic of Korea, 20984
 mineral industry, minerals yearbook chapter, 16322
 Republic of China—
 background notes, 16495
 economic trends and their implications United States, 26551, 31514
 technical cooperation, agreement, 22262
 wool and man-made fiber textile products, trade agreement, 25743
 Takagi, Shunsuke, theory of soil plasticity with indefinite angle of non-coaxiality, 30156
 Take-off (aircraft):
 develop acceleration and brake monitor system, 24053
 Take-up reels for one-inch perforated tape, for information interchange, category, hardware standard, subcategory, interchange codes and media, 29309
 Taking issue, analysis of constitutional limits of land use control, 31174
 Takoma Park Republican Women's Club, annual report, 24665
 Talc, minerals yearbook chapter, 25489
 Talent search, program to help students from low-income families, 23136
 Talent Search, Upward Bound, Special Services, 25060
 Talented children, *see* Children.
 Talkeetna, Alaska:
 flood plain information, 17393
 floods, Talkeetna River, Susitna River, Chulitna River, 17402
 Talkeetna River:
 flood plain information, 17393
 floods in Talkeetna, Alaska, 17402
 Talking books, strike a note, 20515

INDEX 1973

- Tallahala Creek outlet works stilling basin for Tallahala Dam, Tallahala Creek, Miss., hydraulic model investigation, 28784
- Tamm, Feliks:
business conditions digest, 18037
defense indicators, 18214
- Tampa, Fla., area wage survey, 21911
- Tandy Corporation, aircraft accident report, 20716
- Tandy, Ed, Campaign to make Congressman Tandy, *see* Campaign to make Ed Tandy Congressman Tandy.
- Tank-truck combination overturn onto Volkswagen microbus followed by fire, U.S. Route 611, Moscow, Pa., highway accident, report, 30562
- Tank vessels, *see* Tankers.
- Tankers:
build and charter program for 9 tanker ships, GAO report, 31379
deep water port development, policy issues for handling supertankers, etc., hearings, 15902
estimated international flow of petroleum and tanker utilization, estimates, 23895
tank-truck combination overturn onto Volkswagen microbus followed by fire, U.S. Route 611, Moscow, Pa. highway accident report, 30562
tank vessels, rules and regulations, 31986
tanker longitudinal strength analysis, user's manual and computer program, 22216
tanker transverse strength analysis—programmer's manual, 22218
user's manual, 22217
- Tanks (combat vehicle):
tanks units, platoon, company and battalion, Army field manual, 20981
tracked combat vehicles, military procurement, appropriations, 1973, hearings, 21200
- Tanks (containers):
adaptation of NRL acoustic research tank facility for experiments in parametric sonar, with preliminary results, 32525
background information for proposed new source performance standards, 30722
caps, radiator and tank, Federal item identification guide, 23094
conference on tank containers, 31574
performance of DC-9 aircraft liquid nitrogen fuel tank inerting system, 24034
plastic pipe for interior and exterior cold water systems, 31242
riprap stability on earth embankments tested in large- and small-scale wave tanks, 20103
storage vessels, background information for proposed new source performance standards, 29643
wing leading edge fuel tank impact tests, 24044
- Tannehill, John C., development of equilibrium air computer programs, suitable for numerical computation using time-dependent or shock-capturing methods, 20591
- Tanner, Henry O., commemorative stamp, American art series (poster), 31889
- Tanner Crabs:
fisheries, agreement with—
Japan, 25760
Union of Soviet Socialist Republics, 26880
- Tannerries, secondary waste treatment for small diversified tannery, 28814
- Tanning and tanning materials:
extension of existing suspension of duty, reports, 29854, 29990
tanning products, suspension of duty, extend, report, 19659
- Tantalum:
effect of aging at 1040° C (1900° F) on ductility and structure of tantalum alloy, 20615
minerals yearbook chapter, 20555
- Tanzania, mineral industry, minerals yearbook chapter, 16286
- Taos County, N. Mex., disclaiming U.S. interest in certain land, law, 19343
see also Adhesive tape—Electronic data processing systems.
- Tape (magnetic), *see* Magnetic tape.
- Tape recorders:
Apollo experience report, command and service module instrumentation subsystem, 31647
LOMO VK-1/2 type small video tape recorder, USSR study, 30336
radio-phonograph and radio-phonograph-tape player combinations, workers of Lowell, Mass., plant of Symphonic Electronic Corp., subsidiary of Lynch Corp., Tariff Commission report, 26898
record changers, phonographs, radio-phonograph combinations, and tape recorders, players, and decks, V-M Corp., Benton Harbor, Mich., Tariff Commission Report, 16543
- Tape, peculiarities of common deep point composite tapes, USSR study, 30370
see also Electronic data processing systems.
- Tapingkae, Amnuay, education in Thailand, some Thai perspectives, 20095
- Taps and dies:
and chasers, hand and machine, Federal item identification guide, 28605
drilling and tapping machines, industrial plant equipment handbook, 24989
presses, shearing, punching, boring, drilling, and tapping machine, Federal item identification guide, 28602
- Tar:
and nicotine content of cigarettes, Federal Trade Commission, 17752, 23729, 26723
and tar crudes, production and sales, 24070
low-temperature lignite tar, processing and utilization, 26647
Tar roofing, *see* Roofing.
- Tar siding, *see* Siding.
- Tarabusi Creek, flood plain information, 23175
- Tarawa Atoll, Gilbert Islands, carbonate lagoon and beach sediments, 25695
- Tarczynski, Tadeusz, sectionalized main rotor blade advanced design study, 20987
- Target health hazards, 20731
- Targets:
atmospheric effects for ground target signature modeling, atmospheric transmission at 1.06 micrometers, 22415
behavior of 2- β tracker for maneuvering targets under noise, false target, and fade conditions, 22167
evaluation of device to train forward air controllers to communicate target locations, 20938
proposed calibration target for visible channel of satellite radiometer, 22099
rawin radar targets, 20977
- Tariff:
common carrier tariff filings, reports, 18302
communications carriers, FCC rules and regulations, 18313
customs—
bulletin, weekly, 18199
convention on international transit of goods, 31048
duties, code of Federal regulations, 28874
hints for returning U.S. residents, know before you go, 26297
regulations, 15937, 18200, 20025, 28580-581, 24975-976, 32160
trademark information, 31887
valuation, Tariff Commission report, 20830
decisions under customs laws, Customs Court, 28583
duty exemptions for foreign repairs made to U.S. vessels, report, 29856

Tariff—Continued

GATT provisions on compensation and retaliation, 30618
 pets, wildlife, cu-toms, 28582
 publications, price list, 16460
 Sr. Lawrence Seaway, tariff of tolls, agree-
 ment with Canada, 17886
 schedules, annotated, 18952, 22284, 24069,
 27949
 USSR, customs documents, 30334
 zinc legislation (address), 26346
see also names or classes of articles im-
 ported or exported.

Tariff Commission:

appropriations, 1973—
 law, 19473
 report, 19704
 appropriations, 1974, hearings, 28388
 customs valuation, report, 24923
 notices of hearings, investigations, etc.,
 18951
 press releases, 18811
 reports—
 departmental edition, 30659
 document edition, 29840
 rules of practice and procedure, 31882
 Tarpaullins, Federal Item Identification
 guide, 32177
 Tarrant, R. F., future role of chemicals in
 forestry, 31360
 Tarrant County Republican Committee, an-
 nual report, 22884
 Tarshis, I. Barry, studies on collection, rear-
 ing and biology of blackfly (*Cnephia ornithophila*), 27901
 Tarzwell, Clarence M., biological problems
 in water pollution, 20734

Task analysis:

procedures for constructing and using task
 inventories, 32495
 task difficulty and task aptitude bench-
 mark scales for mechanical and elec-
 tronics career fields, 25843
 visual-motor response of crewmen during
 simulated 90-day space mission as
 measured by critical task battery,
 29256

Task difficulty and task aptitude benchmark
 scales for mechanical and electronics
 career fields, 25843

Task Force for study of Coal Waste Hazards,
 coal waste banks, list, 31496

Task Force on Energy, *see* Energy Task
 Force.

Tate, R. B., 727 noise retrofit feasibility,
 lower goal design fabrication, ground and
 flight testing, 24030

Tanbe, Carl A.:

differential utilization of general hospital
 psychiatric inpatient units by whites
 and nonwhites 1970-71, United States,
 23763

length of stay of discharges from general
 hospital psychiatric inpatient units,
 1970-71, United States, 23764

primary diagnosis of discharges from gen-
 eral hospital psychiatric inpatient units,
 1970-71, United States, 23762

referral of patients to and from general
 hospital psychiatric inpatient units,
 1970-71, United States, 23765

State and county mental hospitals, age,
 sex, and diagnostic composition of resi-
 dent patients, 23766

utilization of mental health resources by
 persons diagnosed with schizophrenia,
 31696

whom are community mental health cen-
 ters serving? 16393

Tauber, A., magnetic ordering in lithium-
 transition metal oxides, with ordered rock-
 salt structures, 20971

Tax Administration Advisory Staff, 29091

Tax auditors, *see* Auditors.

Tax Court:

Federal rules of appellate procedure, with
 forms, 15768

Tax Court—Continued

reports (decisions)—
 bound volumes, 20838, 29558
 consolidated pamphlets, 18953

Tax credits:

for hiring people under WIN, tax informa-
 tion, 16220
 for nonpublic education, primary and sec-
 ondary, hearings, 15789, 17114, 19800
 investment credit, tax information, 20419
 retirement income credit, tax information,
 20407

treatment of capital recovery (investment
 credit, accelerated depreciation and
 amortization), general tax reform, panel
 discussions, 26188

Tax Division, Justice Department, opportu-
 nities for attorneys, 20485

Tax exemptions:

foundations and charitable trusts, their
 impact on our economy, 31015
 minimum tax and tax shelter devices,
 general tax reform, panel discussions,
 26188, 27251

organizations, how to apply for exemp-
 tion, 27597

pension trust procedures and guide for
 integration of qualified plans, 20403

personal exemptions in case of American
 Samoans—

law, 19505

report, 19726

tax exempt foundations, compliance with
 provisions of tax reform act of 1969,
 hearings, 28400

veterans' organizations, provide, law,
 16913

your exemptions and exemptions for your
 dependents, 20428

Tax guide for small business, 1973 edition,
 21823

Tax law specialist, 23486

Tax refunds, appeals rights and claims, audit
 of returns, 20390

Tax returns, *see* Income tax—Taxation.

Tax-sheltered annuity plans for employees
 of public schools and certain tax-exempt
 organizations, 25308

Tax stamps, *see* Revenue stamps.

Taxation:

accounting methods allowed farmers, tax
 incentives and consequences, 23129

clergymen and religious workers, social
 security information, 20409

collection of taxpayers' delinquent ac-
 counts, GAO report, 31387

common carriers, property, assessments,
 report, 15850

double, convention with—

Belgium, 20817

Japan, 17873

Norway, 25737

effects of real estate property tax incen-
 tive programs upon property rehabilita-
 tion and new construction, study, 22386

farm operations, panel discussions, 27251

farm real estate taxes, recent trends and
 developments, 23134

Federal tax expenditures, estimates, 19799

Federal unemployment tax in case of in-
 surance agents remunerated solely by
 commission, report, 19935

forms, form letters, notices, catalogues,
 26539

general tax reform—

panel discussions, 26188

public hearings, 32095

income transfer programs, how they tax
 the poor, 21140

interest equalization tax extension act of
 1973—

hearing, 24924

report, 24825, 24827

Montana property tax administration and
 assessment practices, 21341

multi-family housing investments, tax
 considerations, 23452

INDEX 1973

Taxation—Continued

- new dimension, careers with Internal Revenue Service, 17568
- objectives and approaches to tax reform and simplification, panel, discussions, 26188
- Property tax relief and reform act, hearings, 30038
- property, taxable and other values, SMSA's counties and selected major cities, survey for 1972 census of governments, 27005
- property taxes and urban blight, 30039
- proposals for tax change, 27057
- publications, price list, 16460
- recordkeeping requirements, 23482
- road user and property taxes on selected motor vehicles, 1973, 31327
- small business, 1973 tax guide, 21823
- State and local—
 - tax revenue, quarterly summary, 18841
 - taxation of banks, report of study, 17231
 - taxation of insured commercial and national banks, authorize, hearings, 15877
- State tax collections, 1972, report, 19254
- State taxation of federally insured financial institutions, regulate, hearings, 26258
- tax adjustments in international trade, GATT provisions and EEC practices, 26264
- Tax Administration Advisory Staff provides technical assistance to developing countries, 29091
- tax advantage story, how U.S. saving bonds build college funds, etc., 17823
- tax calendar and check list, 20410
- tax information on—
 - depreciation, including class life asset depreciation system, 21826
 - selling your home, 20422
- tax publication, guide, 23482
- tax reform—
 - and extension of interest equalization tax, discussions and hearings, press release, 24883
 - House, compilation of press releases, announcing public hearings, 26187
 - panel discussions, 24881, 27251-253
 - participants and public witnesses for reforms list, 27252
 - subjects, press releases, 17107
- Tax reform act, summary list and brief description of provisions, 17109
- tax subsidies and tax reform, hearings, 21141
- taxpayer assistance and compliance programs, hearings, 27303
- teaching taxes program (series), 20426
- U.S. taxation of foreign direct investments, survey of tax factors affecting investments, 26347
- Union of Soviet Socialist Republics, convention on taxation matters, 32098
- withholding of contributions for educational insurance, agreement with Panama, 24007
- see also Employment taxes—Excise taxes—Income tax—Inheritance and transfer tax—Internal revenue—Sales tax—Tax refunds—also names of articles, etc., subject to tax.
- Taxes, see Taxation.
- Taxicabs, meters, D.C. Public Service Commission study, authorize, hearing, 15889
- Taxiways (aeronautics):
 - loading conditions imposed by ground turning maneuvers with 3 jet transport airplanes, 23690
- Taxonomy:
 - bibliography and zoological taxa of Paul Bartsch, with biographical sketch, 30633
 - genera of bamboos native to New World (Gramineae: Bambusoideae), 29488
 - monotremes and marsupials, reference for zoological institutions, 31797

Taxonomy—Continued

- systematics and areal distribution of pelagic cephalopods from seas of southern California, 16475
- taxonomic hierarchy and checklist of genera and higher taxa of marine nematodes, 23964
- taxonomy of Acrobasis larvae and pupae in eastern North America, 22359
- Taylor, Charles E., aerial photographs in National Archives, list, 29306
- Taylor, Curtis L., response factors and selective attention in learning from instructional materials, annotated bibliography, 22365
- Taylor, Earl G., Los Angeles wholesale food distribution facilities, 20911
- Taylor, Gene, Friends for Congress, see Friends of Gene Taylor for Congress.
- Taylor, Harold A., Jr.:
 - mineral industry of India, 16279, 29218
 - vanadium, 16329
- Taylor, John K., Development of method for NTA analysis in raw water, 20196
- Taylor, Lyle D., Taylor for Congress Committee, annual report, 24610
- Taylor, Lyle, Friends Committee, see Friends of Lyle Taylor Committee.
- Taylor, Roy A., Campaign Committee for, see Campaign Committee for Roy A. Taylor.
- Taylor, Theodore W., States and their Indian citizens, 21812
- Taylor for Congress Committee, annual report, 24610
- TDL, see Techniques Development Laboratory.
- Tea:
 - foreign agriculture circulars, 18380
 - Tea importation act, text, 26171
- Teachers:
 - additional pay for permanent professors at military academies, hearings, 17224
 - airplane flight instructor written test guide, 26453
 - alcohol and alcohol safety, curriculum manual, teacher's activities guide—
 - elementary level, 22043
 - junior high level, 22045
 - senior high level, 22047
 - American students and teachers abroad, sources of information about overseas study, teaching, work and travel, 23135
 - behavior modification in child and school mental health, annotated bibliography on applications with parents and teachers, 23750
 - comprehensive vocational education personnel development and utilization, 17356
 - designs for preparation of vocational and technical teachers of socioeconomically disadvantaged youth, 21421
 - differentiated staffings, state of art report, 1971-72 annual report on people who serve our schools and colleges as required by Education professions development act, 27428
 - District of Columbia—
 - increase salaries and revise retirement benefits—
 - hearings, 15726, 21331
 - law, 19448
 - reports, 19671, 19928
 - substitute teachers, retirement credits, law, 19389
 - education professions, 1971-72 annual report—
 - differentiated staffings, state of art report, 27428
 - need for teachers in our schools and colleges, 28656
 - Federal income taxes program, general and farm, guide, 20426
 - fire simulator, instructor's guide for forest fires, 23272

Teachers—Continued

- glider flight instructor, written test guide, 20241
- how to buy food, lesson aids for teachers, 26931
- international teacher exchange, value/summary of State regulations/U.S. Office of Education program, 28660
- liaison teacher-returnee counselor project, Milwaukee, Wis., 16002
- mobile teachers' retirement assistance, Federal-State program, establish, hearing, 19763
- opportunities abroad for teachers—teaching, seminars, 15993, 32197
- orientation handbook for right to read program, 16001
- police traffic services, basic training program instructor's lesson plans, 22050
- profiles of U.S. medical school faculty, 25601
- public elementary and secondary day schools, fall 1971, statistics, 25457
- qualification of educational personnel, authorize D.C. to enter interstate agreement, report, 27124
- ranger arithmetic for 6th grade teachers, 20297
- Skylab, student project, information for teachers including classroom activities, 21979
- talk about their feelings, 30509
- teachers and students, differences in teacher interaction with Mexican American and with Anglo students, 24256
- teacher's manual for your chance to live, 26299
- you'll be more than a teacher in Peace Corps or Vista, parts of Action, 22306
- Teaching:
 - continuous progress program, title 1, ESEA case study, 21432
 - cross-age teaching, Ontario, Calif., 29359
 - field of science policy, survey, 24877
 - home economics education, instructional materials, compilation of abstracts, 20093
 - instructional materials for manufacturing, review and analysis, 27769
 - instructional strategies for performance oriented technician course, 28034
 - interaction simulation, coordinated local-State vocational education planning, evaluation report, 17354
 - MAP-TOE instructor's guide, 19165
 - microteaching, 20096
 - preschool reading instruction, information of administrator, 23746
 - profession of change (address), 30149
 - question-answering system for CAI, computer assisted instruction, model driven, 28028
 - reading—
 - getting help, outside of school, 28676
 - teacher's guide to preschool instruction, 29361
 - what can communities do to improve programs? 28677
 - response factors and selective attention in learning from instructional materials, annotated bibliography, 22365
 - Spanish-language health communications teaching aids, list of printed materials and their sources, 31410
 - special education careers, programs for professional training in special education, 23144
 - teaching children about safety belts, grades K-3, 20664
 - teaching International relations, 17366
 - teaching Spanish in school and college to native speakers of Spanish, 25058
 - trainers guide to andragogy its concepts, experience and application, 29497
- see also subjects taught.

- Teaching machines, automated apprenticeship training (AAT), systematized audiovisual approach to self-paced job training, 30729
- Teamsters Political Fund, Drive Michigan Conference, see Democratic Republican Independent Voter Education.
- Technical aids, see Technicians.
- Technical and Vocational Education Center, see Center for Vocational and Technical Education.
- Technical assistance:
 - grants to nonprofit sponsors of low-and moderate-income housing, 29066
 - property disposition handbook, reconditioning acquired properties, 21796, 31427
 - see also Foreign aid.
- Technical assistants, examination announcement, amendments, 21082, 22612-613, 29804
- Technical bulletins:
 - Agriculture Department, 16615, 20935-937, 22358-360, 24145-146, 25837-838, 28024-25, 29636, 30719
 - Army Department, 22433
 - Land Management Bureau, 30397
 - National Oceanographic Instrumentation Center, 22114-115, 31728
- Technical cooperation, see Foreign aid.
- Technical education:
 - conceptual framework for diffusion of innovations in vocational and technical education, 30501
 - cost-effectiveness studies of vocational and technical education, 17350
 - designs for preparation of vocational and technical teachers of socioeconomically disadvantaged youth, 21421
 - evaluation of Air Force technical training courses and students, some techniques, 22363
 - French approach to career education, 26375
 - home economics education, instructional materials, compilation of abstracts from Abstracts of Instructional Materials in Vocational and Technical Education, 20093
 - opinion leaders in organizational structure of 2 State divisions of vocational and technical education, 27770
 - professional and technical refresher courses, noncredit activities in institutions of higher education, 26373
 - research on preparation of leadership personnel for vocational and technical education, review and synthesis, 17352
 - review and synthesis of—
 - literature on job training in industry, 15998
 - research concerning adult vocational and technical education, 17351
 - road to work, technical school training or directing duty assignment, 25842
 - vocational education, state instructional materials for trade and industrial occupations, 30153
- Technical facilities of Sirena-1 data link system, 30349
- Technical information pamphlet on use of fibrous concrete, 28891
- Technical manuals, Army Department, 16648-652, 19171-173, 26986, 22434-435, 24180-182, 25861-864, 26974-975, 28051-54, 29662, 30756, 31952-933
- Technical manuscripts, Construction Engineering Research Laboratory, 25071-72, 26379-380, 30160-162, 32200
- Coastal Engineering Research Center, 20103, 23151
- Technical memorandums:
 - Defense Communications Agency, 24978
 - National Aeronautics and Space Administration, 21985, 23678
 - National Oceanic and Atmospheric Administration, 17771-774, 20690, 23801, 25619-622, 29386-390, 30520-539, 31719-720

INDEX 1973

- Technical news bulletin, National Bureau of Standards, 18954
- Technical news from National Bureau of Standards, 18955
- Technical notes:
- National Aeronautics and Space Administration, 16350-354, 17709-727, 20598-621, 21986-989, 23679-691, 25523-528, 26687-690, 27712-716, 30455-462, 31621-654, 32466-479
 - National Bureau of Standards, 16362-363, 17738-742, 20641-650, 22008-17, 23708-714, 25554-558, 26701-712, 27726-737, 30473-476, 31676-680, 32483-484
 - Tennessee Valley Authority, 29564, 31883
- Technical papers:
- Census Bureau, 16792
 - Sport Fisheries and Wildlife Bureau, 17849, 26848-849
- Technical personnel access directory, 28843
- Technical progress report:
- Mines Bureau, 16337-339, 30445
- Technical progress reviews, 18522, 18715, 18843
- Technical reports:
- Air Force Human Resources Laboratory, 15485, 20938-943, 22362-366, 24148, 29651, 25840-844, 26948-950, 28028-35, 30729-731
 - Army Air Mobility Research and Development Laboratory, 15513, 16653-656, 20987-991, 22436-438, 24183-190, 25865, 26977-982, 28055-59, 29663, 30758-763, 31934-936
 - Army Engineer Division, North Pacific, 28685
 - Civil Defense Office, 23083
 - Cold Regions Research and Engineering Laboratory, 17375, 21440-442, 23154-155, 28688-689, 30158-159
 - Construction Engineering Research Laboratory, 20105-108, 25073-74, 26381, 27438-440, 28692-694, 30163, 31241-244, 32201-202
 - corporate author hearings used by AEC in cataloging reports, 15522
 - Defense Civil Preparedness Agency, 20028-29, 28585, 30083
 - Environmental Science Services Administration, 20686
 - Explosive Excavation Research Office, 17376-378
 - format requirements when prepared by or for Defense Department, military standard, 23108
 - highway planning technical reports, 30212-213
 - National Aeronautics and Space Administration, 20622, 21990, 27717, 29270-300
 - National Bureau of Standards, 29320-326
 - National Oceanic and Atmospheric Administration, 20691-701, 22094-108, 23802-814, 25623-633, 26767-772, 27800-803, 29391-394, 30540-543, 31721-726, 32510
 - Naval Oceanographic Office, 29432, 30584
 - Oil and Gas Office, 23898
 - Robert A. Taft Sanitary Engineering Center, 20735-738, 22204-205
 - Waterways Experiment Station, 17408-409, 20173-177, 21481, 23179-181, 26390-394, 27443-446, 28784-786, 32244
- Technical reviews and audits for systems, equipment and computer programs, 20075
- Technical services:
- Engineers Corps, construction in United States, 20534
 - examination announcement, 22605
 - guidelines for services of State air pollution control agency, 22377
- Technical studies reports, TS series, 31900-902
- Technical translations, National Aeronautics and Space Administration, 26691, 27718-718A, 29301-303, 30463-464, 31655-661
- Technicians:
- examination announcement, technical aids in science and engineering, opportunities, 19285
 - instructional strategies for performance oriented technician course, 28034
 - National Guard technicians—reduction in force, 26732
 - retirement, correct inequities in creditting service, report, 31099
 - standards of conduct for National Guard technicians, 23734
 - national survey of professional, administrative, technical, and clerical pay, 21909
 - nuclear technician manpower symposium, proceedings, 21015
 - persons in engineering, scientific and technical occupations, current population reports, 30852
 - re-employment, 23577
 - supervising paraprofessionals, 20237
 - supplementary compensation in PAIC industries, 27683
 - technical aids in science and engineering, examination announcement, 28215
 - technical personnel access directory, 28843
 - technician personnel pamphlets, 23734, 26732, 30486
 - see also Agricultural research technicians—Biological laboratory technicians—Medical technicians—Physical science aids.
- Technique for measuring hypersonic flow velocity profiles, 30457
- Techniques Development Laboratory, NOAA technical memorandum, NWS TDL series, 17774
- Technology:
- application of modern technologies to international development, list of reports, 18000
 - applied technology, AEC authorizing legislation, hearings, 29832
 - assessment and forecast, 28343
 - budget request (remarks), 28240
 - building technology, weekly Government abstracts, 19068
 - cold regions, bibliography, 23154
 - commerce today, developments in business and technology, 18135
 - conference on public need and role of inventor, based on recommendation of National Inventors Council, 27719
 - development of Leningrad scientific research, USSR study, 17634
 - Educational technology act, hearings, 19758
 - Experimental technology incentives program, program area description—assistance to inventors and small R&D firms, 27720
 - Federal procurement policy, 27721
 - Federal regulatory policy, 27722
 - field operations and enforcement manual for air pollution control, control technology and general source inspection, 22376
 - human factor in contemporary technology, USSR study, 26575
 - improved technology in Federally assisted housing, provide for, hearings, 15875
 - improving control of scientific-technical progress, USSR study, 26602
 - man, biosphere and technology progress, USSR study, 29142
 - means of increasing use of defense technology for urgent public problems, GAO report, 21697
 - metals, methods of mechanical and technological testing, 29129
 - nitrogen oxide abatement technology in Japan, 30196
 - nominations for Soviet prizes in science and technology, USSR study, 17610

Technology—Continued

- opportunities and problems of regionalism, science, technology, and American diplomacy, 21230
- patent documentation use in—
 - analyzing technological development trends, USSR study, 31523
 - medium-term technological forecasting, USSR study, 31524
- patent information and technological forecasting, USSR study, 31547
- patent system, keystone to technological progress (remarks), 22636
- public technology, proceedings of 2 conferences, 24874
- relationship between law and scientific and technical progress, USSR study, 16206
- results of 1972 International Labor Conference, technological change and adherence to relevancy stressed, 21915
- science, technology, and American diplomacy, 21229, 28410
- science, technology, and the economy—
 - hearings, 15780
 - study of the interrelationships for better investment procedures, 17094
- scientific and technical cooperation, agreement with—
 - Argentina, 20804
 - Mexico, 16513
 - Polish People's Republic, 27926
 - Union of Soviet Socialist Republics, 16505
- Smithsonian studies in history and technology, 20766-768, 23965, 31804
- State technical services act, amend, hearings, 21263
- technical cooperation, agreement with Republic of China, 22262
- technologic and related trends in mineral industries, 29213
- technologic trends in minerals industry, 23644
- technological forecasting, introduction, 26381
- technology and health care systems in 1980's conference proceedings, 27740
- technology of producing new materials, USSR study, 31530
- technology, reassessment and reassurance (remarks), 21111
- technology transfer, bridge between research and use (periodical), 18956
- technology utilization (series), 27710
- see also Automation—also names of departments, etc., developing technology—also subjects.
- Technology Assessment and Forecast Office, initial publication, 28243
- Technology Assessment Office:
 - establish—
 - law, 19416
 - reports, 19638, 19853
- Technology Transfer, EPA Technology Transfer seminar publications, 30661-665
- Tectonics, tectonic events at intersection between Hope fault and Purcell Trench, northern Idaho, 16106
- Teenagers, *see* Youth.
- Teeth:
 - do you hesitate to smile, 29196
 - national caries program, 1972 status report, 22060
 - now you are in charge of your dental health, methods, materials, etc., 30406
 - phosphate research and dental decay, nutrition education, 1973, hearing, 28569
 - smalfry smiles, guide for teaching dental health in community care programs, 17554
 - ten-State nutrition survey, 22569
 - tooth care, 27576
- Teflon, *see* Polytetrafluoroethylene.
- Tehachapi Mountains, lower and middle Tertiary stratigraphic units of San Emigdio and western Tehachapi Mountains, Calif., 29004
- Telecommunication:
 - code of Federal regulations, 17476-477, 20262, 21562
 - Conference of State Telecommunications Directors, 1972 proceedings, 16827
 - draft proposals of United States for World Administrative Radio Conference for Maritime Mobile Telecommunications, 31843
 - international telecommunications satellite organization (INTELSAT), agreement, 25763
 - propagation factors in telecommunications applications of 10- to 100-GHz radio spectrum, review, 19304
 - space telecommunications, agreement, 20801
 - telecommunication partnership (remarks), 21112
 - telecommunications research and engineering report, OT/TRER series, 16837, 19304-305, 21113, 22640-642, 25976
 - see also Mobile communication—Tropospheric scatter communications—also special method of communication.
- Telecommunications Office:
 - annual report, 28234
 - OT bulletin, 28234
 - OT reports, 25966-967, 27062-65, 28235-236, 30895, 31989-990
 - OT special publications, 16827
 - OTR (series), 24285
 - press releases, 18776
- Telecommunications Policy Office:
 - Federal advisory committees, annual report, 28539
 - overview, hearing, 24922
- Telegraph:
 - carriers, quarterly operating data, 18839
 - franks, FCC rules and regulations, 18313
 - radiotelegraph carriers, uniform system of accounts, FCC rules and regulations, 18312
 - statistics of domestic and overseas telegraph carriers reporting annually to Commission, 25140
 - wire, classification of employees, FCC rules and regulations, 18313
 - wire-telegraph and ocean-cable carriers, uniform system of accounts, FCC rules and regulations, 18312
- Telemeters, implantation of telemetering devices in skin of sea animals, USSR study, 20477
- Telemetry:
 - proposed system for Arizona telemetry of mountain snow pack and related data, 17839
 - telemetered profiling isotopic snow gauge, final report and specifications, 28062
- Telephone:
 - carriers, quarterly operating data, 18838
 - companies—
 - class A and class B, classification and compensation of employees, FCC rules and regulations, 18313
 - consolidation, acquisition, or control applications, FCC rules and regulations, 18313
 - uniform system of accounts, FCC rules and regulations, 18311
 - directories—
 - Atomic Energy Commission, 19186
 - Defense Department, 18220
 - Environmental Protection Agency, 28844
 - Interior Department, 21815
 - NASA headquarters, 18661
 - State Department, International Development Agency, Arms Control and Disarmament Agency, 20791, 29538-539, 31850

INDEX 1973

Telephone—Continued

- directories—Continued
 - Transportation Department, 18223
 - Treasury Department, 18957
- FCC monitoring of employees' telephones—
 - hearings, 21256
 - report, 21194
- franks, FCC rules and regulations, 18313
- geographical areas serviced by Bell and independent telephone companies in U.S., 25966
- materials acceptable for use on systems of REA borrowers, lists, 17821, 18586, 25690, 30616
- rural, restore direct loan program—
 - law, 30908
 - reports, 26134, 26210
- Telephone cables, slicing, cable testing, Army technical manual, 28054
- Telephone Education Committee Organization, annual report, 24369
- Telephone lines, extension, etc., FCC rules and regulations, 18313
- Telephone poles, *see* Poles.
- Telescopes, *see* Spaceborne telescopes.
- Television:
 - and growing up, impact of televised violence, report to Surgeon General, app. A, hearings, 15878
 - blackout of home games in professional sports, prohibit, report, 31095
 - blackout of sporting events on TV, hearings, 19957
 - broadcast actions, reports, 18302
 - broadcast and production statistics of public television licensees, 31220
 - broadcast services and miscellaneous documents, Federal Communications Commission decisions and reports, 28856
 - broadcasting stations of the world—
 - frequency modulation, 17502
 - television stations, 17503
 - cable antenna television (CATV), hearing, 19782
 - cable television—
 - actions, reports, 18302
 - certificate of compliance actions, reports, 18302
 - manpower, job descriptions and educational requirements, 24285
 - relay service (CAR) applications, reports, 18302
 - service applications, reports, 18302
 - catalog of meteorological satellite data-ITOS 1 television cloud photography, 32245
 - cloud photography, meteorological satellite data, catalog, 20181
 - Color television picture tubes from Japan, determination of no injury, etc., Tariff Commission reports, 24061
 - components of CATV and MATV systems, workers of Philadelphia, Pa., plant of Jerrold Electronics Corp., Tariff Commission report, 24057
 - employment statistics of public television licensees, 30138
 - FCC decisions and reports, 28857
 - major market CATV requests filed under FCC rules, reports, 18302
 - noncommercial educational television and radio broadcasting facilities, construction grants, report, 32048
 - programs, copyright, general information, 30074
 - Public Broadcasting act, amend, hearings, 27314
 - Public Broadcasting Corporation, appropriations, 1973, authorization—
 - law, 16911
 - reports, 16966, 16971
 - public television licensees, fiscal year 1971, financial statistics, 30140
 - remedy of TV network domination of prime time programming (address), 23213
 - sets, current industrial reports, 29764

Television—Continued

- structural principles and prospects for creation of new broadcast and national communication television during 1971–75, USSR study, 26593
- television receivers, radio receivers, phonographs, and radio-phonograph combinations, workers of Zenith Radio Corp., Tariff Commission report, 29555
- television receivers, radio-television-phonograph combinations, and radio-phonograph combinations, workers of Wheeling, Ill., plant of TMA Co., Tariff Commission report, 29556
- television system and radio facility, agreement with Saudi Arabia, 25758
- television yokes, workers of Warrensville Heights, Cleveland, Ohio, plant of Pemcor, Inc., Tariff Commission report, 32597
- tune in, drug abuse news for broadcasters about broadcasting, 19000
- TV advertising of food to children, hearings, 26286, 27359
- underwater television survey of Atlantic outer continental margin near Wilmington Canyon, 31800
- Television broadcasting of news, inquiry into alleged rigging of television news programs, hearings, 19778
- Television picture tubes, *see* Television.
- Television receivers, *see* Television.
- Telluric currents, *see* Earth currents.
- Temblor formation, Oligocene molluscan biostratigraphy and paleontology of lower part of type Temblor formation, Calif., 27572
- Temperature:
 - accuracy of automated temperature forecasts for Philadelphia as related to sky condition and wind direction, 30531
 - age of Engelmann spruce seedlings affects ability to withstand low temperature, greenhouse study, 28947
 - air temperature at remote site from official weather station records, 23292
 - annealing of thin magnetic films at high temperatures, USSR study, 30340
 - application of model of porous body for calculation of field of velocities and temperatures in reactor core, USSR study, 30371
 - automatic pyrometer for measuring true temperature of metals on basis of radiation, USSR study, 30348
 - bibliography of temperature measurement, 20640
 - calorimeters for heat of solution and low-temperature heat capacity measurements, 17541
 - correlation for temperature profiles in plane of symmetry downstream of jet injected normal to crossflow, 17724
 - damage-function analysis of neutron embrittlement in steel at reactor service temperature, 16447
 - double electrostatic probe for measuring density, temperature, and velocity of flowing plasma, 25528
 - effect of premortem stress, holding temperatures and freezing on biochemistry and quality of skipjack tuna, 22105
 - error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
 - flaw growth behavior in thick welded plates of 2219–T87 aluminum at room and cryogenic temperatures, 32477
 - fretting of secondary-seal-ring candidate materials in air temperatures to 816° C., 23683
 - gamma induced low temperature oxidation of textile effluents, study, 30193
 - high temperature superconductor Nb₃Ga, 31616

Temperature—Continued

- holographic approach to predicting inelastic strain at high temperature, 16353
- inexpensive meteorological radiation shield for thermistors and thermocouples, 26472
- liquid and gas flow, pressure, temperature, humidity, and mechanical motion measuring and controlling instruments, 24986
- low-temperature lignite tar, processing and utilization, 26647
- neutron irradiation effects on fatigue crack propagation in types 304 and 316 stainless steels at high temperature, 23876
- oxidation rate at high temperatures, reaction-rate control or transport control, errata, 23679
- Pacific Northwest, monthly, 18743
- platinum resistance thermometry, 29311
- river temperatures, Pacific Northwest, 18876-877
- soil temperature and plants in north, USSR study, 31538
- solar radiation affects radiant temperatures of deer surface, 16080
- stability and temperature characteristics of some silicon and selenium photodetectors optical radiation measurements, 29321
- temperature and C_2 profiles measured over land and ocean to 3 km above surface, 25623
- use of model output statistics (MOS) to estimate daily maximum temperatures, 30536
- verification of operational SIRS B temperature retrievals, 23806, 25627
- see also Heat—Heat transfer—Ocean temperature—Water temperature.
- Temperature indicators, diode and thermocouple airborne temperature sensors, 31725
- Templates, template converter program, 31320
- Temporary detention of storm and combined sewage in natural underground formations, 30190
- Temporary extension of FHA mortgage insurance authority, 16992, 19906
- Temporizing, major cause of uncertainty in financial community (remarks), 29483
- Ten-year growth of planted paper birch in old fields in Maine, 20308
- Tenants, see Landlords and tenants.
- Tennessee:
 - animal depredations on spot-seeded yellow-poplar in central Tennessee, 28953
 - census of housing, 1970, housing characteristics for States, cities, and counties, 16728
 - census of population, 1970—
 - characteristics of population, 30803
 - detailed characteristics, 19207
 - census of transportation, 1972, truck inventory and use survey, 28145
 - climatological data, 18111
 - county business patterns, 29746
 - electric rate book, 17464
 - forest resources, 21680
 - income limits for—
 - rent supplement housing, 29077
 - see, 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
 - land transfer for use of University of Tennessee—
 - law, 19429
 - report, 19880
 - Life Underwriters Political Action Committee-Tennessee, annual report, 24670
 - list of North Carolina land grants in Tennessee, microfilm, pamphlet, describing, 20626

Tennessee—Continued

- modification of West Tennessee tributaries feature, Mississippi River and tributaries project, Obion and Forked Deer Rivers, engineers report—
 - departmental edition, 20159
 - document edition, 19567
- precipitation data, hourly, 18461
- Tennessee River and Valley:
 - concentration by raw fuel industries in energy market and its impact on small business, investigation, report, 16970
 - fish, bottom fauna, and aquatic habitat, 16552
 - forest industries in Tennessee Valley counties, decade of progress, 26903
 - meteorological criteria for extreme floods for four basins in Tennessee and Cumberland River watersheds, 30519
 - precipitation in basin, monthly, 18770
 - regular income limits for sec. 235-236 housing, 29075
 - rehabilitation facilities, national directory, 25686
- Tennessee Valley streams, their fish, bottom fauna, and aquatic habitat, Buffalo River drainage basin, 30672
- producing and marketing catfish in Tennessee Valley, conference proceedings, 16551, 30666
- wood residue volumes in 125 Tennessee Valley counties, 1970, guide, 29564
- wood residues produced at planing mills, Tennessee Valley area, 31883
- Tennessee Valley Authority:
 - annual report, text and appendixes, 22285
 - appropriations, 1974, hearings, 28392
 - Board of Directors member, nomination of William L. Jenkins, hearing, 20011
 - bulletins, 30666
 - electricity sales statistics, retail distribution, 18253
 - financial statements, 30667
 - fiscal year report, GAO examination, 25239, 26057
 - forestry bulletins, 22286-87, 24077-79, 29560-561, 30671
 - Health and Environmental Science Office, annual report, 24074
 - operations, municipal and cooperative distributors, report, 24080
 - public works appropriations, 1973, law, 19363
 - public works appropriations, 1974—
 - law, 32015
 - reports, 29993, 30989
 - research papers, 29562-563
 - technical notes, 29564, 31883
 - use of formal advertising for government procurement can, and should, be improved, GAO report, 31385
- Teno in Congress, Committee to Keep, see Keep Teno in Congress Committee.
- Tensile strength, see Strains and stresses.
- Tensile stress, see Strains and stresses.
- Tension:
 - aircraft as instrument of self destruction, 29686
 - emotional stress during spaceflight, USSR study, 21862
 - helicopter-load tension-member study, 22436
 - masking as indicator of neural fatigue, preliminary study, 20529
 - psycho-physiological testing and training of pilots, USSR study, 23551
 - state-trait anxiety inventory and assessment of stress under simulated conditions, study, 16682
 - study of some indices of higher nervous activity of men subjected to underwater environment for many hours, USSR study, 25335

INDEX 1973

- Tension—Continued
traces of emotional stimuli in EEG spectrum and SGR in humans with normal and impaired memory, USSR study, 26590
see also Strains and stresses.
- Tension and detente, congressional perspectives and Soviet-American relations, 27208
- Tensionmeters, recording soil moisture tensionmeter, 21660
- Tensors, tensor manipulations in complex coordinates with applications to mechanics of materials, 30592
- Tent caterpillars, controlling eastern tent caterpillar, 26935
- 10th District Republican Committee, annual report, 24590
- Tents, Federal item identification guide, 32177
- Tepper, Lloyd B., survey of air and population lead levels in selected American communities, 31270
- Term insurance, *see* Life insurance.
- Terminal ballistics in ordinary snow, small arms fire attenuation, 21441
- Terminal boards:
automated engineering procurement document, preparation system, military standard, 20048
Federal item identification guides, 30115, 31191
synchronous signaling rates between data terminal and data communication equipment, 20633
- Terminal processing, 30084
- Terminals (transportation):
computer simulation and validation of Travis freight terminal facility, 27438
deep water port development, policy issues for handling, supertankers, etc., hearings, 15902
development of standard data base and computer simulation model for air cargo terminal, 23156
rail and marine interface, 25400
railroad deposits, unused, make into cultural centers, hearing, 19767
stochastic network to model air cargo terminals, 25071
terminal air traffic control handbooks, 19154, 22386, 28038, 31928
terminals, docks, mooring locations and warehouses, lists—
Illinois, River, 31254
Mississippi River, 31255-257
- Termination of hostilities in Indochina, 16967
- Termination of Phase II economic stabilization regulations for HUD programs, 27584
- Terminology, *see* Terms and phrases.
- Termites:
long-term resistance to terrestrial fungi and termites, 31753
termite resistance of polymeric materials phase 2-poatoxic polymers, 17792
- Terms and phrases:
common environmental terms, glossary, 21489
definitions of tactical, prime, precise, and utility terminologies for classification of DOD mobile electric power engine generator set family, military standard, 25019
dictionary of economic and statistical terms, 29493
understanding words and word relationships, national assessment of educational progress, 30143
reference aid, glossary of abbreviations, acronyms, and terms used in West European press, West Europe study, 26599
- Terpenes, geographic survey of monoterpenes in loblolly and shortleaf pines, 21676
- Terrain, point-scatterer formulation of terrain clutter statistics, 23878
- Terrell, Marion L., international educational and cultural exchange (periodical), 18504
- Terrestrial magnetism:
aeromagnetic, Bouguer gravity, and generalized geologic studies of Great Falls-Mission Range area, northwestern Montana, 21729
Amchitka geoplezomagnetic experiment, 30541
cosmic rays in earth's magnetic field, 30464
geomagnetic research in NOAA, 1971-72, review, 26769
gravity and magnetic features as related to geology in Leadville 30-minute quadrangle, Colo., 23362
gravity, magnetics, and geology of San Andreas fault area near Cholame, Calif., 26500
information capacity of gradient method of measuring earth's magnetic field, USSR study, 32405
interpretation of aeromagnetic survey of Amchitka Island area, Alaska, 17534
introduction to solar terrestrial activity for geomagnetic studies earth's main field, 22095
marine magnetovariation station for studies by magnetotelluric soundings method, USSR study, 20451
Pacific SEAMAP 1961-70 data, bathymetry, magnetics and gravity, 17778-780, 23810-813
paleomagnetism of some Lake Superior Keweenawan rocks, 17542
- Terrestrial physics, *see* Geophysics.
- Territories:
briefing on territorial matters, hearings, 28541
exclusive territorial allocation of franchises not unlawful for soft drinks, etc., hearings, 24941, 27350
letters sent by Surveyor General of Territory Northwest of River Ohio, 1797-1854 pamphlet describing microfilm, 23700
solid waste laws in U.S. territories and States, compendium, 25123
State Department territorial papers, Territory Northwest of River Ohio, 1781-1801, pamphlet describing microfilm, 21998
States and territories of United States, publications price list, 27871
territorial papers of United States, pamphlet to accompany microfilm, 25543
- Terrorism, current foreign policy, role of international law in combating terrorism, 23993
- Terry Gully:
flood plain information, 20131
floods in Vidor, Tex., how to avoid damage, 20139
- Tertiary period:
description of tertiary mollusks, geology and paleontology of Canal Zone and adjoining parts of Panama, 29018
geology of pre-Tertiary rocks in northern part of Yellowstone National Park, Wyo., 26506
lower and middle tertiary stratigraphic units of San Emigdio and western Tehachapi Mountains, Calif., 29004
- Tertiary treatment of combined domestic and industrial wastes, 30188
- Tessarzik, J. M., effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, sinusoidal and random vibration, 29250
- Test ban treaty, *see* Nuclear explosions.
- Test equipment, *see* Testing apparatus.
- Test kitchen series, 20685.
- Test-observation well near Almira, Wash., 23377
- Test-observation well near Davenport, Wash., 23378
- Test-observation well near Odessa, Wash., 23379

Testimonial Dinner for Commissioner Charles E. Rainey, annual report, 24666
 Testimony, *see* Evidence.

Testing:

accessibility, its use as evaluation criterion in testing and evaluating alternative transportation systems, 30213
 effects of chemical variations in aquatic environments, lead toxicity to rainbow trout and testing application factor concept, 27449
 evaluation of item-by-item test administration, 30731
 nondestructive testing—
 survey, 31620
 and practice, summary, 20589
 testing methods and techniques, quality control and non-destructive testing, compilation, 27710
see also names of substances or objects tested.

Testing apparatus:

integral sensor test system, military standard, 26338
 physical properties testing unit, industrial plant equipment handbook, 21398
 preparation and submission of data for approval of non-standard general purpose electronic test equipment, military standard, 15966
 propellers and test clubs, Federal item identification guide, 31190
 test stand for precise measurement of impulse and thrust vector of small attitude control jets, 32479

Testing machines, testing methods and techniques, quality control and nondestructive testing, 20758
see also Testing apparatus.

Tests, mathematical considerations about effects of guessing on test variance, 20939
see also types or names of tests.

Tethering, experimental and analytical determination of stability parameters for balloon tethered in wind, 32472

Tetrachlorethylene, perchlorethylene from Italy, Japan, and France, determination of no injury, etc., Tariff Commission report, 24068

Tetrafluoromethane, thermodynamic and transport properties of gaseous tetrafluoromethane to chemical equilibrium, 31627
 Texaco Oklahoma (SS):

structural failure and sinking off Cape Hatteras, March 27, 1971, marine casualty report, 30565

Texarkana, Tex., census of population and housing, 1970, census tracts, 19225

Texas:

census of housing, 1970, housing characteristics for States, cities, and counties, 16729

census of population, 1970, detailed characteristics, 22525

census of transportation, 1972, truck inventory and use survey, 28146
 climatological data, 18112

cotton gin operating costs in—
 Blacklands of Texas, 25825
 lower Rio Grande Valley of Texas, 27999
 West Texas, 28000

cotton varieties planted in early producing sections, 27979

county business patterns, 30834
 drillers' logs in lithologic studies of Ogallala Formation of Southern High Plains of Texas, evaluation of use, 23339

final environmental statement, FES 73-19, proposed 1973 Outer Continental Shelf, east Texas general oil and gas lease sale, 29176

grand jury venue, to consider rights of citizens in proceedings, northern district of Texas, 27231

hydrologic significance of lithofacies of Cane River Formation or equivalents, 27565

Texas—Continued

income limits for sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076

landings, fish and shellfish, 18958

Mexican-American education in Texas, function of wealth, 15600

mineral industry, minerals yearbook chapter, 20549

particulate emissions of cotton gin in Texas stripper area, 26945

Permian brachiopods of west Texas, 23959

pollution of navigable waters of Galveston Bay and its tributaries, conference proceedings, 31294

precipitation data, hourly, 18462

school finance reform in Texas, civil rights aspects, 22588

Venezuelan equine encephalomyelitis, national emergency, Vector control program, 22398

Texas Committee on Political Education, annual report, 29220

Texas Medical Political Action Committee (TEXPAC):
 annual report, 26008

Texas Socialist Workers Campaign Committee, annual report, 25998

TEXPAC, *see* Texas Medical Political Action Committee (TEXPAC).

Textile machinery, textile industries machinery and industrial sewing machines, industrial plant equipment handbook, 24985

Textile waste, *see* Waste products.

Textiles:

broadwoven fabrics, finished, current industrial reports, 30838

broadwoven goods, summary of looms in place, current industrial reports, 16757

certain plain-woven cotton fabrics and certain woven fabrics of manmade fibers, Willingham Cotton Mills, Ga., Tariff Commission report, 20829

certain woven fabrics of cotton and of manmade fibers, Arkwright Mills, Inc., Spartanburg, S.C., Tariff Commission report, 24058

certain woven fabrics of wool, manmade fibers, and blends, including laminated fabrics, workers of Gonic Division of Klinge Industries, Inc., Tariff Commission report, 24060

cloth, Federal item identification guides, 27382, 31182

consumer products by design, report on new foods, fabrics and materials from agricultural research, 29618

cotton broadwoven gray goods, current industrial reports, 28152

fabric design, engineering design handbook, 19157

flammable fabrics—

act, extend, law, 19471

act, text, 26171

4th annual report under act, 30242

matches and lighters incidents, magnitude of problem, 22016

programs, 22015

gamma induced low temperature oxidation of textile effluents, study, 30193

imports, reflections on past and challenges of future (remarks), 22637

impression fabric of manmade fibers from Japan, Tariff Commission report, 27945

knits in Western Europe, their impact on cotton, 30246

man-made fiber—

broadwoven gray goods, current industrial reports, 18194A, 25925, 28162

textile products, trade agreement, 31875

narrow fabrics, current industrial reports, 16771

nonwoven fabrics, current industrial reports, 16772, 30844

relationship between fabric structure and filtration performance in dust filtration, 31292

INDEX 1973

- Textiles—Continued
static structural tests of 1.5-meter-dia-meter fabric attached inflatable decelerator, 17722
test methods, Federal standard, 23252
textile industry and pollution control, progress report, 25582
United States and Canadian fabric flammability standards, 20647
wage survey, textile dyeing and finishing, 17665
wool and man-made fiber textiles, trade agreement with—
Japan, 25744
Macao, 26868
Republic of China, 25743, 25746
Republic of Korea, 22277
wool broadwoven goods, current industrial reports, 16779, 18194A, 29775
woven fabrics, current industrial reports, 18194, 21057, 30851
see also names of textiles.
textured yard production, 29773
Thackston, Edward L., secondary waste treatment for small diversified tannery, 28814
Thad Cochran Campaign for Congress Committee, annual report, 24461
Thaddeus Kosciuszko Home National Historic Site:
establish—
hearings, 21248
law, 19454
report, 19691
Thailand:
background notes, 26855
bibliographic survey of literature, 29660
economic trends and their implications for United States, 27605
education in Thailand, some Thai perspectives, 20095
establishing business in, 15615
foreign trade regulations, 32183
Laos and Cambodia, Jan. 1972 report, military situation, facts and future prospects, 17257
Laos, Cambodia, and Vietnam, Apr. 1973 report, military situation, facts and future prospects, 30031
narcotic enforcement efforts by local government and American missions, report, 27229
radio transmitting and receiving facilities, telecommunications, agreement, 16522
Thant, U., conversation with U Thant, Secretary General of United Nations by members of committee, 17254
Theater of operations, see Combat areas.
Theft:
cargo theft, alleviating by creation of Commission to coordinate security and protection programs, report, 15693
cargo theft and organized crime, deskbook for management and law enforcement, 25790
civil remedies for victims of racketeering activity and theft, reports, 15844, 24902
criminal redistribution systems and their economic impact on small business—
appendix to analysis, 15931
hearings, 31165
organized crime and stolen securities, hearings, interim index, 15898
organized crime, securities, thefts and frauds hearings, 32146
tax information on disasters, casualty losses and thefts, 26545
Theodore Roosevelt National Memorial Park, addition to National Wilderness Preservation System, proposal, 23000, 23841
Theoretical problems of conservation of Antarctic resources under international law, 23555
Theories on extraterrestrial life, 20467
Theory of disordered Heisenberg ferromagnets, 29276
Theory of electrostatic suspension of sphere, 30352
Theory of streamer breakdown, USSR study, 29143
Therapeutics:
facts about—
electroshock therapy, 22072
group therapy, 23753
see also Chemotherapy.
Therapy, see Therapeutics.
There are lots of safety belt myths, why not consider the truths? 17758
There lived a wicked dragon, environmental coloring book for children and adults, 30199
There's a way to help others while you help yourself, 24276
There is no turning back, 17455
Theresa F. (MV):
capsizing in Gulf of Mexico on Jan. 9, 1969, marine casualty report, 32522
Thermal analysis, see Differential thermal analysis—Heat.
Thermal conductivity, see Heat transfer.
Thermal degradation, see Degradation.
Thermal detectors, detecting hot areas in dumps with handheld infrared scanner, 29241
Thermal diffusion, see Diffusion.
Thermal effects on eggs, larvae and juveniles of bluegill sunfish, 28792
Thermal energy:
laser-induced sources for magnetic fields, 17791
one form of distribution of spectral energy density of thermal energy, USSR study, 30347
spindle thermal effects, 22506
31 group response matrices for multi-sphere neutron spectrometer over energy range thermal to 400 MeV, 28076
waste heat utilization, proceedings of national conference, 19177
Thermal expansion, see Expansion (thermal).
Thermal gradients, see Temperature.
Thermal insulation, see Insulation.
Thermal pollution, see Water pollution.
Thermal properties:
ASRDI oxygen technology survey, thermophysical properties, 17706
vacuum and ultraviolet-radiation effects on binders and pigments for spacecraft thermal-control coatings, 23680
Thermal protection:
effects of material composition on ablation performance of low-density elastomeric ablators, 29283
oxidation at through-hole defects in fused slurry silicide coated columbian alloys FS-85 and Ch-752, 31635
spacecraft heating environment and thermal protection for launch through atmosphere of earth, 26687
Thermal radiation:
analysis of engineering alternatives for environmental protection from thermal discharges, 27468
atmospheric transmission from 4 π light source to 2 π receiver, survey of studies, 22408
Thermal stability, see Stability.
Thermal waters, see Springs.
Thermal wave flowmeter for measuring combined sewer flows, 27464
Thermionic converters, evaluation of practicability of radioisotope thermal converter for artificial heart device, phase 1 final report, 30775
Thermistors:
inexpensive meteorological radiation shield for thermistors and thermocouples, 26472
wind recorder, current meter and thermistor chain measurements in northeast Pacific, 22094

- Thermochemistry, description of magnetic tape version of Bulletin of thermodynamics and thermochemistry, 26710
- Thermocouples:
diode and thermocouple airborne temperature sensors, 31725
inexpensive meteorological radiation shield for thermistors and thermocouples, 26472
- Thermodynamic properties of three sodium titanates, 31591
- Thermodynamics:
aerothermodynamic test model materials and fabrication technique, study for development, 17694
automatic pyrometer for measuring true temperature of metals on basis of radiation, USSR study, 30348
chemical thermodynamic properties, tables for lanthanide (rare earth) elements selected values, 29320
computer programs for thermodynamic transport properties of hydrogen (Tabcode-II), 26703
description of magnetic tape version of Bulletin of thermodynamics and thermochemistry, 26710
development of equilibrium air computer programs, suitable for numerical computation using time-dependent or shock-capturing methods, 20591
kinetics and thermodynamics of processes of interaction of gases with liquid metals, summaries of symposium reports, 23530
thermodynamic and transport properties of gaseous tetrafluoromethane in chemical equilibrium, 31627
thermodynamic cycles of atomic power plants with MHD-generators, USSR study, 27652
thermodynamics of molten mixtures of lithium chloride-potassium chloride at 640° C, 22407
see also Heat—Liquids.
- Thermoelectric cooling, marine thermoelectric cooling systems, USSR study, 20453
- Thermoelectric generators, power systems for spacecraft, USSR study, 25347
- Thermoelectricity, photoelectric and thermoelectronic instruments and their applications, USSR study, 31542
- Thermographs, color presentation of thermograms for cancer research, 29249
- Thermoluminescence, *see* Luminescence.
- Thermometers:
platinum resistance thermometry, 29311
stability of and insulation leakage in high temperature resistance thermometers, investigation, interim report, 27731
- Thermometry:
low temperature thermometry, interim report, 27732
rotary drilling and coring in permafrost, deep core drilling, core analysis and bore hole thermometry at Cape Thompson, Alaska, 21440, 28689
- Thermonuclear reactions, *see* Nuclear reactions.
- Thermonuclear reactors, *see* Reactors (atomic).
- Thermophysical properties of helium-4 from 2-1500 K pressures to 1000 atmospheres, 23709
- Thermophysical properties of helium-4 from 4-3000 R with pressures to 15000 PSIA, 23708
- Thermophysical properties of parahydrogen from freezing liquid line to 5000 R for pressures to 10000 PSIA, 17738, 26702
- Thermoplastics, *see* Plastics.
- Thermosphere, role of gas-surface interactions in reduction of OGO 6 neutral particle mass spectrometer data, 27714
- Thesauruses:
medical and health related sciences thesaurus, 16396
SRS research information system thesaurus, 25700
see also Dictionaries.
- Theses, *see* Dissertations (academic).
- Theta pinch, *see* Plasma.
- Thetford, Vt., flood plain information, Connecticut, White, Mascoma Rivers, 20115
- Thickness measurement:
bark thickness and past diameters of Engelmann spruce in Colorado and Wyoming, 17519
mass thickness manual for walls, floors, and roofs, 28585
specimen thickness effects on—
fatigue-crack-growth behavior and fracture toughness of 7075-T6 and 7178-T6 aluminum alloys, 27712
fracture resistance K_{IC} parameter for titanium alloys, 27845
- Thilenius, John F., classification of deer habitat in ponderosa pine forest of Black Hills, S. Dak., 16091
- Thin films:
annealing of thin magnetic films at high temperatures, USSR study, 30340
investigation of some principles of electrodeposition of cylindrical magnetic films, USSR study, 30341
measurement of demagnetizing fields in cylindrical magnetic films, USSR study, 30339
- Thinning of forests, *see* Forest thinning.
- Thiram, Arasan in edrin treatments to protect Douglas-fir seed from deer mice, 20316
- Third branch, bulletin of the Federal courts, 18959
- Third District Congressional Fund, political committee, annual report, 22800
- Third District Republican Committee, annual report, 24424
- 3rd payment, entitlement period 3, Office of Revenue Sharing, 26906
- 31-day battery-operated recording weather station, 23285
- This administration's education record (address), 31234
- This is USDA's Agricultural Marketing Service, 19127
- This is your Air National Guard, 17756
- This is your manual of common sense fish cookery, 20683
- Thomas, Anquetta G., employment profiles of minorities and women in SMSA's of 16 large cities, 23207
- Thomas, Bruce I., gold-lode deposits, Fairbanks mining district, Central Alaska, 30417
- Thomas, David G., hydrodynamic flux for waste water application of hyperfiltration systems, 28820
- Thomas, Ella C., reports of United States Tax Court, 20838, 29558
- Thomas, Jack Ward, non-game wildlife research in megalopolis, Forest Service program, 32314
- Thomas, James L., aerodynamic effects of five lift-fan pod arrangements on an unpowered V/STOL transport model, 29275
- Thomas, Rosanna, relief, 28306
- Thomas, Rose, relief, 28309
- Thomas Jefferson University:
recognize university in Philadelphia, Pa., as first to bear full name of president—
law, 19435
report, 17133
- Thompson, Edward F., wave climatology for U.S. coastal waters, 20102
- Thompson, Erwin N.:
San Juan Island National Historical Park, Wash., 27815
Spalding area, Nez Perce National Historical Park, Idaho, 27816

INDEX 1973

- Thompson, Gayle B., income of aged population, 31811
- Thompson, J. R., Rocky Mountain millivolt integrator for use with solar radiation sensors, 23294
- Thompson, John R., ecological effects of offshore dredging and beach nourishment, review, 27437
- Thompson, M. C., jr., review of propagation factors in telecommunications applications of 10- to 100 GHz radio spectrum, 19304
- Thompson, R. E., catalytic combustion, pollution-free means of energy conservation?, 31274
- Thomsen, Arvid L., riprap stability on earth embankments tested in large- and small-scale wave tanks, 20103
- Thorax, *see* Chest.
- Thoria, *see* Thorium oxide.
- Thorium :
 geology and description of thorium-bearing veins, Lembi Pass quadrangle, Idaho and Montana, 29003
 minerals yearbook chapter, 16327
- Thorium isotopes, absolute intensities of gamma rays from decay of ^{238}U and ^{232}Th , 22476
- Thorium oxide, diffusional creep and creep degradation in dispersion-strengthened alloy TD-NiCr, 23686
- Thornless blackberries for home garden, 26936
- Thornton, Ray, for Congress Committee, *see* Ray Thornton for Congress Committee.
- Thorpe, Jim, commemorative medal, authorize, hearings, 28396
- Thorpe, Jim, Day, *see* Jim Thorpe Day.
- Thorson, Lee C., fishery publications, lists and indexes, 29394, 31726
- Threaded fasteners, 23102
- Threaded studs, 25009
- Threadfin (U.S.S.) :
 loan of vessels, agreement with Turkey, 17885
- Threads, *see* Screw threads.
- Three-dimensional elastic stress and displacement analysis of—
 finite circular geometry solids containing cracks, 29287
 tensile fracture specimens containing cracks, 27713
- Three station lighting detection system, 20692
- Thresholds (perception) :
 pitch discrimination in background noises up to 95 dB SPL, 30410
 uncertainty of pulse position due to noise, 16448
- Throat, hearing and related medical findings among children, race, area and socioeconomic differentials, 22030
- Thrombolysis, fibrinolysis, thrombolysis, and blood clotting, bibliography, 27759
- Thrust :
 effective specific impulse of external nuclear pulse propulsion systems, 17727
 flight of aircraft with partial and unbalanced thrust, 29301
 test stand for precise measurement of impulse and thrust vector of small attitude control jets, 32479
- Thrust bearings, *see* Bearings (machinery).
- Thrust reversers, effects of in-flight thrust reverser on stability and control characteristics of single-engine fighter airplane model, 17716
- Thruston, Alfred D., jr., liquid chromatography of carbamate pesticides, 17422
- Thudium, Vern F., drug information services, 2 operational models, regional drug information network, 20658
- Thulium, evaluation of CaSO_4 ; Dy and CaSO_4 ; Tm TLD for measurement of small gamma-ray exposures, 25876
- Thunderstorms :
 cloud-to-ground lightning versus radar reflectivity in Oklahoma thunderstorms, 23801
 gravity current model applied to analysis of squall-line gust front, 25620
 ionospheric disturbances produced by severe thunderstorms, 26766
 variation of low level winds during passage of thunderstorm gust front, 31614
 vertical transport by thunderstorms, observations, 27800
- TIAS series, 16501-537, 17869-908, 18996, 20792-818, 22262-277, 23999-24014, 25729-766, 26861-884, 27910-934, 29540, 30652-653, 31851-875, 32576-582
- Tice, A. R., mineralogy of suspended sediment in some Alaskan glacial streams and lakes, 23152
- Ticks, cooperative-Federal tick eradication activities, 1971 fiscal year, 16641
see also Cattle ticks.
- Tides :
 current tables, 1973, Pacific Coast of North America and Asia, 17769
 current tables, 1974, Atlantic Coast of North America, 32508
 Galveston Bay hurricane surge study, effects of proposed barriers on tides, currents, salinities, and dye dispersion for normal tide conditions, calibration tests, hydraulic model investigation, 27445
 tables—
 Europe, West Coast of Africa and Mediterranean Sea, 31716
 North and South America—
 east coast including Greenland, 29381
 west coast, etc., 25614
 tidal flood plain information, Sandy Hook Bay and Karitan Bay shore areas, Monmouth County, N.J., 32219
- Tie downs, slinging and tiedown provisions for lifting and tying down military equipment, military standard, 15958
- Tie rods, turnbuckles, clevis/connector rod ends and tie rods, Federal item identification guide, 30116
- Tiedemann, Arthur R. :
 first-year vegetation after fire, reseeding, and fertilization on Entiat Experimental Forest, 31367
 Meeks Table Research Natural Area, 21628
- Tiemann, Norbert T., nomination, hearing, 31162
- Tien Shan, high altitude physiology of man in Tien Shan and Pamirs, some results of studies, USSR study, 23550
- Tierney, Richard K., Army aviation digest, 19026
- Tiger Creek :
 flood plain information, 20131
 floods, in Vidor, Tex., how to avoid damage, 20139
- Tihanksy, Dennis P., cost analysis of water pollution control, 27494
- Tiles :
 ceramic glazed wall tile from Philippines, determination of no injury to U.S. industry, Tariff Commission report, 32585
 desalination of agricultural tile drainage, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21520
- Tilia americana, *see* Linden.
- Tillery, Winston L. :
 major collective bargaining agreements—
 administration of seniority, 21903
 layoff, recall, and worksharing procedures, 20499
- Timbalier Bay, fate and effect of Shell oil spill, Platform B, Block 26, South Timbalier Bay, studies and investigations, final report, 17930

- Timber:**
 additional actions needed to minimize adverse environmental impacts of timber harvesting and road construction on forest land, GAO report, 25236
 average yarding distance on irregular-shaped timber harvest settings, 21658
 black walnut, planting for timber, 16602
 Douglas-fir coast cruising grades, 28975
 exports, limit, reports, 30997, 32049
 forest resources of Tennessee, 21680
 forestry returns evaluated, for uneven-aged management in 2 Appalachian woodlots, 20306
 identifying regional opportunities for accelerated timber management, 25232
 increased use of felled wood would help meet timber demand and reduce environmental damage in Federal forests, GAO report, 32353
 journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy to survey timber resources between Mermentau and Mobile Rivers, Nov. 1817-May 1819, with appendix, etc. microcopy, pamphlet describing, 21994
 local net timber volume equations for Wisconsin, 28939
 new timber cruising grades for coast Douglas-fir, 31371
 Oregon timber harvest, 1971, 23312
 photo stratification improves Northwest timber volume estimates, 27541
 preview of Delaware's timber resource, 28942
 probability approach to sawtimber tree-value projections, 27535
 products milling and utilization, publications, list, 31357
 timber harvest clearcutting and nutrients in Northeastern United States, 31365
 timber industries of New Jersey and Delaware, 27542
 timber loans by U.S. life insurance companies, 20321
 timber resources of Mendocino and Sonoma Counties, Calif., 20323
 volume and value of sawtimber stumpage sold from national forests (periodical), 19051
 Washington, 1971, timber harvest, 23310
 Wisconsin counties, volume, statistics, 25220
 Wisconsin's 1968 timber resource, perspective, 28973
see also Hardwoods.
- Time:**
 Apollo experience report, evolution of attitude time line, 25526
 generation of accurate and uniform time scale with calibration and prediction, 22009
 Loren C. navigation and timing, 22003
 NBS frequency and time broadcast services, radio stations, WWV, WWVH, WWVB, and WWVL, 27725, 30471
 relativistic time corrections for Apollo 12 and 13, 17709
 simulated real-time displays of Doppler Radar velocity field, 25619
 WAVE, computer program for one-dimensional stress wave analysis in a time-dependent inelastic rock using a generalized Voigt model, 23640
see also Hours of labor.
- Time clocks:**
 tape playback and serial-time decoder for TFF light test instrumentation, 22171
 time measuring instruments, Federal Item Identification guide, 27398
- Time deposits:**
 time and savings deposits at commercial banks, changes, 20264, 32291
- Time for progress report, report of President's National Advisory Council on Supplementary Centers and Services, 32536**
- Time keeping, tree rings, timekeepers of the past, 30284**
- Time measuring instruments, *see* Time clocks.**
- Time series:**
 recent computational experience with method of phase and amplitude diagrams, 22168
 retrieval of dispersive and convective transport phenomena in fluids using stationary and nonstationary time domain analysis, 31630
- Time study, 1969-70 Federal District Court time study, 30219**
- Timepieces, *see* Clocks and watches.**
- Timers, Apollo experience report, command and service module instrumentation with system, 31647**
- Timing devices, *see* Timers.**
- Timm, Robert D.:**
 addresses, etc.—
 Sept. 13, 1972, 16811
 Nov. 15, 1972, 19270
 Jan. 23, 1973, 22573
 Sept. 18, 1973, 31977
- Timus, Daniel E., world demand prospects for coffee in 1980 with emphasis on trade by less developed countries, 25041**
- Timpe, W. G., kraft pulping effluent treatment and refuse, state of art, 25117**
- Tin:**
 mineral industry surveys, monthly, 18960
 minerals yearbook chapter, 20571
 phase composition of Ni-Sn alloys hardened from liquid state, USSR study, 25353
 prevention of tin-lead overhang in plated copper-clad printed wiring boards, final report, 26985
 tin as alloying element in heat-resistant alloys, USSR study, 23515
- Tindle, Roger C., handbook of procedures for pesticide residue analysis, 26348**
- Tippecanoe County Republican Central Committee, annual report, 22796**
- Tippecanoe County Republican Women's Club, annual report, 24677**
- Tips (monetary), *see* Gratuities.**
- Tips, Army personnel magazine, 18961**
- Tires:**
 aircraft tire behavior during high-speed operations in soil, 16350
 are you overloading your skidder tires?, 20309
 commercial vehicle front-tire failures, 32452
 comparison of tire reserve load for 1973 passenger cars, 23737
 cord and fabrics, current industrial reports, 18194A, 29774
 inner tube, pneumatic tire, 16063
 performance of soils under tire loads, application of test results to tire selection for off-road vehicles, 20173
 pneumatic and solid, Federal Item Identification guide, 28606
 pneumatic, inner tube, Federal Item Identification guide, 20038
 tire inflation and consumer, program to improve safety and economy, 22019
- Tironidae, *see* Synopiidae.**
- Tishomingo County, Miss., forest inventory statistics, 22287**
- Tissues:**
 determining cholinesterase activity in animals' tissues following action of reversible inhibitors, USSR study, 21868
 evolution of changes in loose connective tissue under influence of optical quantum generator, USSR study, 21885
 inactivation of O-Alkyl-S Hexylmethylphosphonates by animal body tissues, USSR study, 23520
 interaction of ultrasound and biological tissues, 27872
 manual of tissue typing techniques, 31690
 problems of space biology, tissue oxygen under extreme flight factors, 31659
 tissue typing antisera, 1972-73 catalog, 23743

INDEX 1973

Tissues—Continued

ultra-sound cutting and fusing of biological tissue, USSR study, 26586

Titanates, thermodynamic properties of three sodium titanates, 31591

Titanium:

application of hot-isostatic pressing hydrostatic extrusion, and deformable-die tube tapering processes to production of titanium-6Al-4V tapered tubes, 26980
cleaning titanium alloy chips, 25496
creep and other properties of zinc-copper-titanium alloys anneals after rolling, 16333

determination of hydrogen in milligram quantities of titanium and its alloys, 29299

ductility of titanium alloys and atomic ordering in nickel chromium alloy, USSR study, 17631

economic effectiveness of powder metallurgy of titanium, USSR study, 23524

economics of byproduct metals, 26649

effect of sheet thickness on fracture resistance K_{IC} parameter for titanium alloys, 27845

graphites and titanium alloys, USSR study, 20452

heat treatment of 6Al-4V titanium forgings to obtain high yield strength, 28066

hot press and roll welding of titanium-6-percent-aluminum-4-percent - vanadium bar and sheet with auto-vacuum cleaning, 17723

ingot mill products and castings, current industrial reports, 18194, 25929

liquid state spectral emissivities in electron-beam furnace, 29233

mineral industry survey, quarterly, 18962

mineral yearbook chapter, 16328

physical characteristics of magnesiothermal titanium sponge with hardness less than 100 Hb, USSR study, 23547

solvent extraction of nitrate from titanium leacher effluent, 25508

stress-corrosion cracking in high strength steels and in titanium and aluminum alloys, 16453

tensile properties to 650° C. and deformation structures in precipitation-strengthened titanium-aluminum alloy, 30460

use of composite diaphragms in electro-winning of titanium, 16334

Titanium oxide, recovering rutile from titanium-enriched high-iron smelter slag, studies, 26667

Title 4 and school desegregation, study of neglected Federal program, 22590

Title insurance, processing instructions for home mortgage insurance under sec. 240—purchase of fee simple title from lessors, 21784

Title listing of civilian power reactor docket literature in Nuclear science abstracts, v. 21-26 (1967-72), 28080

Title 1, property improvement loan operating handbook, 31429

Titles (land). *see* Land.

Titus, Joan B.:

environmentally degradable plastics, review, 28624

solid phase forming (cold forming) of plastics, 21412

Tlingit Indians, under Mount Saint Elias, history and culture of Yakutat Tlingit, 20760

TMA Co., television receivers, radio-television-phonograph combinations, and radio-phonograph combinations, workers of Wheeling, Ill., plant of TMA Co., Tariff Commission report, 29556

To find way to services in your community, 25813

To improve forest inventory with access data, measure transport distance and cost to market, 25226

Toasters, automatic toasters, 26450

Tobacco:

acreage poundage marketing quota, lease and transfer, law, 16864
adult use of tobacco, 30864

alcohol, tobacco, firearms and explosives, internal revenue bulletin, cumulative index digests, supplement system, 17567

chart book on smoking tobacco & health, 16797

emergency allotment transfer in Georgia and South Carolina for 1973, report, 29992

fire-cured and dark air-cured market review, 1972 crop, 27930

flue-cured market review, 1972 crop, 24114

foreign agriculture circulars, 18380

implications of European community enlargement for U.S. tobacco exports, 27525

light air-cured tobacco market review, 29603

marketing quotas—

hearing, 31123

provisions, amend, hearing, 31007

products, code of Federal regulations, 26444

revenue rulings, etc., internal revenue bulletin, cumulative, index-digest supplement system, 18480

scheduling arrival of tobacco at auction warehouses, 31909

statistics 1972, annual report, 25836

tax guides, 18965, 19155, 22392

tobacco situation (periodical), 18963

tobacco stocks report, 18964

United States, production, marketing, manufacturing, exports, 28003

see also Cigars.

Tobacco budworms, *see* Budworms.

Tobago, *see* Trinidad and Tobago.

Tobias, Jerry V.:

auditory effects of noise on air-crew personnel, 24205

binaural processing of speech in light aircraft, 22511

Tobin, Albert, development of closed pore insulation material, 31605

Tocopherol, distribution of α -tocopherol in human plasma lipoproteins, 28060

Today's Army wants to join you, 19174, 30757

Today's dynamic Army looks to future, 15511

Todd, Donal T., deportation, suspension, opposing, 19821

Todd, Karen P., promoting mental health in classroom, handbook for teachers, 31698

Todd County Republican Committee, annual report, 22869

Toerber, Erwin D., full scale parallel activated sludge process evaluation, 20198

Toftner, Richard O., developing local & regional solid waste management plan, 31308

Togo:

Dahomey-Togo boundary study, 17862

economic trends and their implications for United States, 30317

Ghana-Togo boundary study, 17864

Upper Volta boundary study, 17866

Toilet articles, personal toiletry articles, Federal item identification guides, 27393, 30107

Toiletries, *see* Toilet articles.

Tolbert, Robert E. L., broadcast and production statistics of public television licensees, 31220

Toledo, Ohio, area wage surveys, 16226, 31557

Tolerance (engineering):

tolerances for aluminum alloy and magnesium alloy wrought products, 16062

- Tolls, St. Lawrence Seaway, tariff of tolls, agreement with Canada, 17886
- Tom Crouch for Congress, annual report, 24368
- Tom Green County Republican Party Executive Committee, annual report, 22820
- Tom Lowry for Congress, annual report, 24704
- Tomato fruitworm, *see* Bollworms.
- Tomatoes:
- diseases and their control, 16588, 16594
 - merit, red rock and Potomac, tomato varieties adapted to mechanical harvesting, 16613
 - pricing performance in marketing fresh winter tomatoes, 19111
- Tomb, Thomas F.:
- comparison of respirable dust concentrations measured with MRE and modified personal gravimetric sampling equipment, 30442
 - evaluation of machine-mounted dust collector, 30444
- Tombigbee River, special flood hazard information, report, 17407
- Tomchak, Joseph L., Tomchak for Congress Committee, annual report, 24495
- Tomchak for Congress Committee, annual report, 24495
- Tomlinson, Roy E., review of literature on endangered masked bobwhite, 22247
- Tommie C. Kinard and Larry L. Ramsey motor carrier accident, Merrifield, Va., 29245
- Tomorrow is now . . . [for women] in U.S. Air Force, 15496
- Tomorrow's manpower needs, research report on manpower projection needs, 29164
- Tompkins, Stephen S., effects of material composition on ablation performance of low-density elastomeric ablaters, 29283
- Toms, M. Elaine, photonuclear activation analysis with GE(LI) detectors, compilations, 30594, 30596
- Tong, L.S., boiling crisis and critical heat flux, 21022
- Tonga Islands:
- background notes, 32571
 - Eocene brachiopods from Eua, Tonga, 25256
 - late Eocene fossils from Eua, Tonga, 25256
- Tonto National Monument, general information, 25636
- Tools:
- geologic prediction, developing tools and techniques for geophysical identification and classification of sea floor sediments, 23802
 - materials handling research, penetration of selected granular materials by wedge-shaped tools, 29232
 - see also* Hand tools—Power tools.
- Tooth, *see* Teeth.
- Topical meeting on water reactor safety, March 26-28, 1973, 29669
- TOPICS is on the move, 16042
- TOPICS (urban area traffic operations improvements), *see* Traffic control.
- Topography, soil-topographic site index for Englemann spruce on granitic soils in northern Colorado and southern Wyoming, 32330
- Topside ionosphere during sunrise at mid-latitudes, 22406
- Topside sounder, *see* Satellites.
- Tordilla Hill, geology of oxidized uranium ore deposits of Tordilla, Hill-Deweesville area, Karnes County, Texas, study of district before mining, 26509
- Tornadoes, severe local storm warning service and tornado statistics, 23864
- Torrance, K. E., mass diffusion in self-confined rotating flow, 23672
- Torres-Reyes, Ricardo:
- British Garrison of St. Augustine, 1763-84, Castillo de San Marcos National Monument, Fla., 27811
- Torres-Reyes, Ricardo—Continued
- British siege of St. Augustine in 1740, Castillo de San Marcos National Monument, Fla., 27812
- Torrieri, Don J., uncertainty of pulse position due to noise, 16448
- Torsion, *see* Strains and stresses.
- Tortuguero Lagoon, ground water in Tortuguero area, P.R., as related to proposed harbor construction, 23383
- Torus, resonance phenomena in configurations with helical magnetic axes when calculating toroidality, 21011
- Total soil nitrogen analysis using micro-Kjeldahl digestion and portable distillation equipment, 31369
- Tourism, *see* Tourist trade.
- Tourist trade:
- career education for leisure occupations, curriculum guidelines for recreation, hospitality and tourism, 28654
 - charter air carriers, definition for inclusive charter group, hearings, 23051
 - destination USA—
 - domestic tourism, 30555
 - Federal role, 30557
 - international visitors, 30556
 - special studies, 30558
 - selling of America, 1972, analysis of international travel to United States, by USTS Regional Office areas, 16568
 - small business opportunities in outdoor recreation and tourism, investigation, report, 19723
 - study of British travel habits and patterns, 20851
 - visit USA outlets abroad, 27963
- Tourists, large groups in boundary waters canoe area, their numbers, characteristics, and impact, 17515
- see also* Tourist trade.
- Toward developing quality control system for rawinsonde reports, 25622
- Toward health manpower opportunity, 16124
- Toward national materials policy, world perspective, 2d national interim report, 23730
- Toward national policy on aging, 24106
- Toward philosophy of planning, attitudes of Federal water planners, 27493
- Toward Renaissance generation (address), 23576
- Towels, sheets, pillowcases, and towels, current industrial reports, 19243, 28166
- Towers:
- high-activity level tower cab, evaluation, 24052
 - noise in air route traffic control center, flight service station, air traffic control tower and remote facilities, 24032, 25774
- Town Branch, North Fork Big Nemaha River, Tecumseh, Nebr., special flood hazard information, 25091
- Town Creek:
- flood plain information, Salisbury, N.C., 32213
 - floods on Grants Creek and Town Creek, Salisbury, N.C., 32239
- Towns, *see* Cities and towns.
- Townsend, Dennis P., friction losses in a lubricated thrust-loaded cageless angular-contact bearing, 31643
- Toxaphene, environmental effects on toxaphene toxicity to selected fishes and crustaceans, 26403
- Toxic organophosphorus compounds, USSR study, 30331
- Toxic substances:
- control act, amend—
 - hearings, 30014
 - reports, 19656, 29871, 29879, 31080
 - toxic products from burning of fire-resistant materials, 25515
- Toxic substances control legislation, 1973, 28419
- Toxicants, *see* Poisons.
- Toxicity, *see* Poisons.

INDEX 1973

Toxicology:

- toxicology information program, 29372
- toxicology of—
 - atmospheric sulfur dioxide decay products, 15497
 - beryllium, 16386

Toxins, gas chromatography, method of determining harmful substances in air and in biological media, USSR study, 31529
see also Poisons.

Toys:

- fun in the making, 31976
- playing safe in toyland, 21597
- toy safety, 20285

Trace elements:

- analysis of trace elements in coal by spark-source mass spectrometry, 26662
- oil slick identification by trace element patterns measured with neutron activation analysis, instruction manual, 15518
- photonuclear activation analysis with Ge (Li) detector, compilations, 30594, 30596
- poisoning and intoxication by trace elements in children abstract review of worldwide medical literature, 25977
- radioelement and trace-element content of Ione formation, central California, 29007
- trace-element contents of some plutonic rocks of Sierra Nevada batholith, 17526
- trace organic impurities in gaseous helium, 31622

Trace oxygen analyzers:

- dissolved oxygen analyzer—
 - model 735, 22109
 - model 1131, 22111
- laboratory evaluation of dissolved oxygen analyzers, 22115

Tracer studies:

- evaluation of treatment plants by tracer methods, 15520
- method for concentrating and determining trace organic compounds in atmosphere, 20104
- tracer simulation study of potential solute movement in Port Royal Sound, S.C., 20356

Tracking:

- effect of vertical active vibration isolation on tracking performance and on ride qualities, 21975
- evaluation of trainer for sensor operators on Gunship II aircraft, 20942
- methodology in measurement of complex human performance, two-dimensional compensatory tracking, 19187
- self-focusing antenna for low-angle tracking, 31757
- see also* Radar tracking.

Tracking stations:

- surface-refractivity measurements at NASA spacecraft tracking sites, 17711
- Zvenigorod experimental station, optical observations of artificial earth satellites, USSR study, 30329

Traction, soil failure under inclined loads, 21438

Tractor-tankers, *see* Tankers.

Tractors, current industrial reports, 18194, 22555, 28168

Trade, *see* Agricultural products—Business—Commerce—Wholesale trade—*also* names or classes of commodities.

Trade agreements, *see* Commercial treaties.
 Trade associations, directory of national unions and employee associations, 1971, including State labor organizations, developments since 1969, structure and membership, 21905

Trade marks, *see* Trademarks.

Trade Negotiations, Office of Special Representative, *see* Special Representative for Trade Negotiations, Office of.

Trade policy, *see* Commercial policy.

Trade schools, *see* Technical education.

Trade secrets:

- corporate secrecy—
 - agribusiness, hearings, 28573, 31166
 - overviews role of giant corporations in American and world economies, hearings, 17305, 20016, 26293

Trademarks:

- act, amend, report, 17174
- code of Federal regulations, 30225
- customs, trademark information, 31887
- examination and review of administration and statutes, subcommittee report, 26237
- index, 22188
- International Bureau of Intellectual Property, U.S. participation, authorize—law, 19441
- reports, 17149, 19686
- new developments in international trademark protection, (address), 23903
- Nice agreement concerning international classification of goods and services agreement with other countries, 20797-798
- official gazette of Patent Office, 18722
- patents, trademarks, and licensing in Japan, 24288
- rules of practice of Patent Office with forms and statutes, 22191
- statutes relating to, investigation report, 17129
- trademark examining procedure directive, 18968

Trades, *see* Occupations—Vocational education.

Tradescantia, influence of atmosphere of molecular hydrogen upon evolution of oxygen by leaves of *Tradescantia fuminiensis* Vell, 23539

Tradewater River, effects of coal mining on water resources of Tradewater River basin, Ky., 25261

Trading in commodity futures contracts on Chicago Board of Trade, 29626

Tradition:

- human self-development, our moral heritage, Army pamphlet, 26963
- world cultural and natural heritage, protection convention, 26197

Traffic:

- effect of suspension of bus service on local peak hour traffic congestion, case study, 30212
- operations, urban area improvement program, Transportation Dept. report, 17081
- police traffic services—
 - basic training program—
 - course guide, 22049
 - instructor's lesson plans, 22050
 - student study guide, 22051
 - supervisory level training program course guide, 27762
 - instructor's lesson plans, 29347
 - student study guide, 30496
- reduction of traffic congestion, and improved operational efficiency, 32280A
- requiring physicians to report, traffic laws commentary, 20665
- St. Lawrence Seaway report, 26816
- traffic laws commentary, 20665-667, 22055-57, 23739
- see also* Air traffic—Traffic control.

Traffic control:

- TOPICS is on the move, 16042
- traffic management regulations for personal property, Defense Dept., 17341, 27416, 31197
- urban area traffic operations improvement programs (TOPICS), annual report, 32284
- see also* Air traffic.

Traffic safety, *see* Safety of life.

Trailer parks, minimum design standards for mobile home parks, 31430

Trailers:

- additional movements at Government expense of household goods and personal effects, or mobile homes, of dependents of Armed Forces members who are in missing status, authorize—
law, 19410
- report, 19890
- automobile, truck, trailer, and farm implement dealers under Fair labor standards act, 26915
- buying and financing mobile home, 32372
- Coordinated Evaluation System (CES)
Project model documentation for building regulation, 27736
- minimum design standards for mobile home parks, 31430
- mobile homes and low-income rural families, 25037
- mobile homes, 1970 census of housing, 29694
- programa in HUD-FHA para la compra de casas movibles, 31438
- truck, current industrial reports, 18194, 25930

Trails, establishing trails on rights-of-way, principally railroad abandonments, reports, 23901

see also names of the trails.

Train, Russell E., nomination, hearing, 31164

Train brakes, see Brakes.

Traineeships:

- allied health professions traineeships for advanced training, 23405
- general purpose traineeships, grants for public health traineeships, 23406
- National biomedical research fellowship, traineeship, and training act, reports, 28350, 29997, 30965

Trainers, see Training devices.

Trainers (devices), see Link trainers—
Training devices.

Training:

- apprentice training, sure way to a skilled craft, 26957
- deaf leadership training for community interaction manual for grassroots leadership, 22209A
- employee training in Federal service, 30888
- financial assistance for work and training and year-round recreational opportunities for youth, hearing, 31017
- Institute for Air Pollution Training, 13 regional training locations, 20952
- inventory of Federal programs supporting health manpower training, 26521
- job training, provide financial assistance to enable States and local governments to assume responsibility, hearing, 28562
- Manpower development and training act, hearing, 21361
- National Institutes of Health—
grants for training projects, policy statement, 22084
- training programs, 1974 FY, policy analysts, 22085
- relationships between design characteristics of avionics subsystems and training cost, training, difficulty, and job performance, 28031
- review and syntheses of literature on job training in industry, 15998
- training and equipping Army National Guard for maintaining order during civil disturbances, GAO report, 16102
- training evaluation and student achievement measurement, review of literature, 15485
- training requirements of occupational safety and health standards, 26790
- Veterans Administration training guide, 24091
- veterans, special training allowance, increase rates, law, 19469

Training—Continued

- vocational evaluation and work adjustment services in vocational rehabilitation, 26812
- weight training for strength and power, 32537
- see also Education—Employee training—
Naval education—Vocational education—also subjects.
- Training aids, see Training devices.
- Training camps, see Military training camps.
- Training devices:
design of simplified formation trainer, 22362
- development of low-cost cockpit/outside time sharing training equipment, 24048
- electronic simulator and training console for indication and degasification of poisons, USSR study, 17619
- guide, Naval Training Equipment Center, 22176
- power supplies, direct-current, rack-mounted, for ground-based training equipment, 25022
- printed wiring for ground-based training equipment, military standard, 20071
- shell, instructor console, cathode ray tube, military standard, 15965
- training device developments (Navy periodical), 18969
- Trains, see Railroads.
- Trajectories:
Apollo experience report, evolution of rendezvous-maneuver plan for lunar landing missions, 31654
- application of matched asymptotic expansions to lunar and interplanetary trajectories, 30449, 31606
- engineering optimization method with application to STOL-aircraft approach and landing trajectories, 17726
- Trans-Alaska pipeline, economically sound and nationally essential, 21114
- Trans World Airlines, Inc., aircraft accident reports, 27835, 29410
- Transactions of 18th conference of Army mathematicians, 28045
- Transcripts, National Center for Health Statistics micro-data tape transcripts available for public use, 23722
- Transducers:
acoustic field of infinite circular cylindrical transducer partially covered by layer of sound-soft material, USSR study, 17596
- calibration of displacement of transducers, 22498
- high-pressure vibrating pressure transducer, 24185
- Transfer of heat, see Heat transfer.
- Transformations (mathematics):
complete orthonormal set of 2-dimensional Haar-like functions, 27848
- computation of spectral data for Josephson junction circuit, 22010
- convergence properties of Haar series, 27847
- design considerations of programmable predetection digital signal processor for radar applications, 27843
- electromagnetic waves into longitudinal oscillations in nonhomogeneous plasma in presence of perfectly conducting surface, 22443
- fast Fourier transform microcode for Burroughs D-machine, 23884
- injections of neighborhood size 3 and 4 on set of configurations from infinite one-dimensional tessellation automata of two-state cells, 22405
- Laplace transform inversion by Fourier series expansion, 25072
- localization of wave transformation region in superhigh-frequency discharge plasma, study, 21006
- multidimensional stationary stochastic processes, testing hypotheses, etc., 23880

INDEX 1973

- Transformations (mathematics)—Con.
on application of Haar functions, 27846
two-dimensional Haar-like transform, 27849
variable property turbulent boundary layers by means of modified compressibility transformation, analysis, 21976
Transformation temperatures, crystal structure transformations in binary halides, 16358
Transformers, *see* Electric transformers.
Transient blindness due to combined effects of mevinphos and atropine, 30787
Transients (electricity):
selected specific rates of reactions of transients from water in aqueous solution hydrated electron, 29313
Transistors:
error estimate for thermal resistance measurements on uncoated Si microwave transistors as result of temperature gradients, 20970
strength measurements on transistor header lead welds, 28065
transistors and diodes, workers of Buffalo, N.Y., plant of General Electric Co., Tariff Commission, report, 32598
volt-ampere characteristics of optically controlled avalanche transistor, 23542
Transit (International):
customs convention on international transit of goods, 31048
Transit systems, *see* Local transit.
Transition, guide to retirement, 17868
Transition, magazine for Action volunteers, 18970
Transition elements, transplutonium, bibliography, supplement, 19184
Transitions (hydraulics):
evaluation of flared outlets transitions, hydraulic model investigation, 20171
Transitions, abstracts of reports presented at 1st All-Union Conference on Metal-Dielectric Phase Transitions, USSR study, 17635
Translations:
air pollution, bibliography with abstracts, 28833
aviation medicine translations, annotated bibliography of recently translated material, 16679
translations on metallurgy, USSR study, 23549, 27640, 30338
special foreign currency, science information program, lists of translations in process, 20714, 32520
technical, National Aeronautics and Space Administration, 26691, 27718-718A, 29301-303, 30463-464, 31655-661
welding, selected translations, USSR study, 23533
Transliteration, reference aid, guide to transliteration of Algerian Arabic place names, 21864
Translog, 18992
Transmission lines, *see* Electric lines.
Transmission loss, *see* Transmissions.
Transmissions:
atmospheric effects for ground target signature modeling, atmospheric transmission at 1.06 micrometers, 22415
atmospheric transmission from 4π light source to 2π receiver, survey of studies, 22408
electric transmission specifications and drawings, 26815
investigation of helicopter transmission noise reduction by vibration absorbers and damping, 20988
monitoring Northern Hemisphere transmissions in Antarctica and some oblique sounding systems, USSR study, 23522
parallel plate transmission line Pockels cell, 23879
synchronous signaling rates between data terminal and data communication equipment, 20633
Transmissions—Continued
tradeoff study for extended-life helicopter transmission, 26977
transmission of 2.0-3.4 micron infrared radiation in ice fog, 31237
transmissions of gamma rays through aluminum and laminated lead, aluminum slabs, 26991
wave transmission through rock structures, hydraulic model investigation, 25096
Transmittances, measurement of atmospheric transmittance from sun and sky with infrared vertical sounder, 22098
Transmitters, multiple-use wildlife transmitter, design, etc., 26847
Transmitting equipment, *see* Transmitters.
Transonic flow, *see* Flow.
Transonic speed, *see* Air speed.
Transpiration cooling, *see* Cooling.
Transplants, *see* Grafting (physiology).
Transplutonium elements bibliography, 19184
Transport aircraft, *see* Aircraft.
Transport airplanes, *see* Airplanes.
Transport properties:
BEAMR, an interactive graphic computer program for design of charged-particle beam transport systems, 31640
computer programs for thermodynamic and transport properties of hydrogen (Tabcode-II), 26703
random walk study of electron motion in helium in crossed electromagnetic fields, 31623
retrieval of dispersive and convective transport phenomena in fluids using stationary and nonstationary time domain analysis, 31630
thermodynamic and transport properties of gaseous tetrafluoromethane in chemical equilibrium, 31627
transport properties of gases and binary liquids, near critical point, 20586
Transport Workers Union, Local 100 Political Contribution Committee, annual report, 24572
Transportation:
accessibility, its use as evaluation criterion in testing and evaluating alternative transportation systems, 30213
activity networks to model transportation systems subject to facility constraints, 26379
Army water transport units, field manual, 19163
availability of public transportation and shopping characteristics of SMSA households, 32283
Bicentennial advanced technology transportation system demonstration act, report, 28491
census, 1972—
national travel survey, 25915, 28135-146, 30812
publication and computer summary tape program announcement, 27625
truck inventory and use survey, 19230-236, 21048-52, 22538-545, 24222-230, 27026-29, 29720-721, 30813-815
code of Federal regulations, 16052, 17478-480, 21563-564
Departments of Transportation and Housing and Urban Development on urban transportation policies, report, 15665
domestic and international transportation of U.S. foreign trade, 16786
economics, monthly comment, 18993
Emergency commuter relief act—
hearing, 26253
report, 31107
facilitate payment of transportation charges—
law, 19479
report, 21309
Hazardous materials transportation control act, amend, report, 29851

Transportation—Continued

high speed ground and water demonstration project, hearing, 24921
 highway and urban mass transportation, 18421
 imaginative transportation, the road to international leadership (remarks), 23223
 impact of marine transportation and merchant ship construction on domestic and international shipping (address), 23617
 improve forest inventory with access data, measure transport distance and cost to market, 25226
 in nineteenth-century America, survey of cartographic records in National Archives of United States, 31670
 intermodal transportation, through rates, hearings, 21269
 it's your move! 22177
 marketing and transportation situation, 18611
 medical emergency transportation and service programs, establish—
 hearings, 15753, 31153
 report, 29874
 migratory birds, 1972-73 in United States, etc., Federal regulations, 16487, 20781
 military medical helicopter services to civilians in emergencies, authorize, report, 28336
 military transportation management journal, translog (periodical), 18992
 MILSTEP, military supplies and transportation evaluation procedures, 20081
 mobility, commuting, and veteran status for U.S., 1970 census, 21045
 National Capital transportation act, law, 16876
 National transportation act, hearing, 21326
 national transportation report, 1974, special review, hearing, 28386
 nationwide personal transportation study, report, 32282-283
 need for improved inspection and enforcement in regulating transportation of hazardous materials, Department of Transportation, GAO report, 28997
 1972 national transportation report, 22288
 noise (rail and other), public hearings on noise abatement and control, 21513
 nuclear fuel cycle, transportation requirements within Southern Interstate Nuclear Board region through 1980, SINB/AEC Work Conference on Transportation of Radioactive Materials, 28079
 opportunity for AEC to improve its procedures for making sure that containers used for transporting radioactive materials are safe, GAO report, 30258
 patterns of commuting in large metropolitan areas, 1970, supplementary report, 29714
 planning conference, National Defense Executive Reserve regional directors designate, regional emergency transportation coordinators, secretarial, representatives, 20841
 Project Helping Wheels, transportation for elderly people, 31905
 public hearings on noise abatement and control manufacturing and transportation noise (highway and air), 16029
 publications, price list, 30606
 pupil transportation safety program, 30497
 radioactive materials, marking and labeling of items, etc., military standard, 25024
 reference data, Army field manuals, 19162, 22425, 30752
 revise and improve national transportation programs, hearing, 21326
 risk concepts in dangerous goods, transportation regulations, special study, 16427

Transportation—Continued

should appropriated funds be used for transportation procured specifically for Armed Forces exchange goods? GAO report, 32356
 space technology applied to advance sea transportation (remarks), 29194
 SST again, Federal transportation policy, 24303
 statistics in United States, 20443-444, 21837, 23508, 30325
 subsidies, economics of Federal subsidy programs, 25992
 Surface transportation act, report, 19861
 surface transportation legislation to provide financial assistance, to encourage investment, to improve process of Government regulations, etc., 15883
 surface transportation system, improve and insure safe, efficient, and economic system, hearings, 15751
 tax information on moving expenses, 20420
 there is no turning back (address), 17455
 transport statistics in United States, 25322
 transportation and mentally retarded, 16459
 transportation characteristics of school children, 32282
 transportation control strategies—
 Dayton metropolitan area, 27482
 Denver metropolitan area, development, 27483
 Houston area, development, 27486
 Philadelphia, State implementation plan, 27485
 Phoenix-Tucson air quality area, 27484
 transportation controls to reduce motor vehicle emissions in—
 Minneapolis and St. Paul, Minn., 27487
 Salt Lake City, Utah, 29644
 Spokane, Wash., 27489
 transportation noise and its control, 17915
 transportation of hazardous materials, hearings, 23017
 transportation topics for consumers from Office of Consumer Affairs (periodical), 18994
 urban mass transportation—
 abstracts, 25799
 act, amend, reports, 15853, 28330
 assistance act of 1973, financial assistance for operating expenses, hearings, 28402
 authorize grants to assure adequate commuter service in urban areas—
 hearings, 26253
 report, 31107
 substantial increase in assistance, report, 27149
 travel surveys, 16043
 urban origin-destination surveys, 30216
 urban transportation needs, lecture series, 16555
 Washington, D.C., accommodations for handicapped on Metro system, hearings, 21287
 weekly government abstracts, 19073
 White House Conference on Aging, recommended for action, transportation, 24105
 see also Freight rates—High speed ground transportation—Local transit—Motor-trucks in freight service—Railroads.
 Transportation Department:
 annual report, 32603
 appropriations, 1973, law, 19362
 appropriations, 1974—
 hearings, 27181, 28386
 law, 32016
 reports, 30977, 31004
 authorization, reports, 29849, 29995
 Assistant Secretary, nomination of John E. Hirtlen, hearings, 19954
 DOT TST series, 16553

INDEX 1973

- Transportation Department—Continued
 national heart, blood vessel, lung and blood program, program analysis, 30492
 national transportation report, 1974, special review, hearings, 28386
 need for improved inspection and enforcement in regulating transportation of hazardous materials, Department of Transportation, GAO report, 28997
 press releases, 18812
 Secretary, nomination of Claude S. Brinegar, hearings, 26262
 telephone directory, 18223
 Under Secretary, nomination of Egil Krogh, jr., hearings, 26262
 urban area traffic operations improvement programs, report, 17081
 urban transportation policies, report, 15665
 Transverse diffusion of solutes in natural streams, 21722
 Transverse mercator grid, 28051
 Transverse waves, measurement of transverse diffusion coefficient in SHF plasma, 20995
 Trapping, trapping techniques for sandhill crane studies in Platte River Valley, 25715
 Traps, *see* Insect traps.
 Traumas, *see* Injuries.
 Travel :
 air travel clubs using large aircraft, certification and operations, Federal aviation regulations, 18297, 20239
 American students and teachers abroad, sources of information about overseas study, teaching, work, and travel, 23135
 Army recreation and travel guide, 29659
 census of transportation, 1972, national travel surveys, 25015, 28135-146, 30812
 destination USA—
 domestic tourism, 30555
 Federal role, 30557
 international visitors, 30556
 special studies, 30558
 Immigration and Naturalization Service reports of passenger travel between United States and foreign countries, 21810
 Interior and Insular Affairs Committee, House, authorize travel expenses, report, 27129
 international air travel by Government officials, economy and efficiency, hearings, 19773
 International travel—
 act, amend with respect to fees and charges for exhibits, publications, etc., hearings, 20527
 by residents of foreign countries, market analysis, 18940
 to U.S., summary and analysis, 18940
 Japanese, habits and patterns, 22296
 joint regulations—
 Defense Department civilian personnel, 18527
 uniformed services, 18526, 30120
 nationwide personal transportation study, reports, 32282-283
 passenger, between U.S. and foreign countries, reports, 18475, 29085
 restraints on travel to hospital areas, hearings, 15749, 28416
 selling of America, 1972, analysis of international travel to United States, by U.S.'s Regional Office areas, 16568
 Soviet correspondents report motor trip through United States, USSR study, 29137, 31520
 spring travel, census of transportation, 1972, national travel survey, 25915
 study of British travel habits and patterns, 20851
 summer travel, census of transportation, 1972, national travel survey, 30812
 travel, entertainment, and gift expenses, deducting from income tax, 20427
 travel patterns of foreign visitor arrivals, 16569
 urban mass transportation travel surveys, 16043
 youth travel abroad, what to know before you go, 30646
 Travel agents, visit USA outlets abroad, 27963
 Travelers, arrivals and departures by selected ports, 16567
 Traveling screen for removal of debris from rivers, 22102
 Traverse County Republican Committee, annual report, 22845
 Travis Air Force Base :
 computer simulation and validation of Travis freight terminal facility, 27438
 dining facility user-attitudes and environmental design research, 31239
 Trawls and trawling, use of electricity in conjunction with 12-5 meter (headrope) Gulf-of-Mexico shrimp trawl in Lake Michigan, 22106
 Treacherous torrent, flash floods, 23797
 Treasury, daily statement, 18203
 Treasury bonds, *see* Bonds of United States.
 Treasury Department :
 annual report—
 departmental edition, 22289
 document edition, 21157
 annual report, statistical appendix—
 departmental edition, 26905
 document edition, 26042
 appropriations, 1973—
 hearings, 15719
 law, 15640
 appropriations, 1974—
 amendment, proposal, 32025
 hearings, 28393, 31012, 31131, 32132, 321135
 reports, 29885, 31117
 Assistant Secretary, nomination, Edward L. Morgan, hearing, 23059
 bulletin, 18995
 code of Federal regulations, 32288
 customs bulletin, weekly, 18199
 department circulars, 17916, 24081
 public debt series, 17917, 20842-843, 24082, 25792-793, 27954-955
 Deputy Secretary, nomination, William E. Simon, hearing, 23059
 foreign exchange operations, 32298
 interest equalization tax, proposal for extension, 27319
 law enforcement agent, career opportunities, 16556
 management of U.S. participation in Inter-American Development Bank, hearing, 21233
 national historic landmark, Department of Treasury, 20844
 press releases, 18813
 revenue sharing, its use by and impact on State governments, GAO report, 32355
 single agency needed to manage port-of-entry inspections, particularly at U.S. airports, GAO report, 28998
 telephone directory, 18957
 U.S. foreign aid to education, does Brazil need it? GAO report, 30267
 unclaimed savings bonds should be returned to veterans and other individuals, GAO report, 30268
 Treasury enforcement agents, career opportunities, 16556
 Treasury notes :
 5½ percent, series F-1976, 17917
 6 percent, series E-1974, 20842
 6¼ percent, series D-1976, 20843
 6½ percent treasury notes, series G-1976, 25792
 6% percent treasury notes, of series B-1979, 25793

- Treasury notes—Continued
6% percent treasury notes, series A-1980, 27954
treasury and Federal Reserve foreign exchange operations, 23244
- Treaties:
in force, list, 25767
International Council for Exploration of the Sea, convention and other governments, 31873
treaties and other international acts series, 16501-537, 17869-908, 18996, 20792-818, 22262-277, 23999-24014, 25729-766, 26861-884, 27910-934, 29540, 30652-653, 31851-875, 32576-582
treaties and other international agreements, 20819, 31876
1776-1949 compilation, Nepal-Peru, 17909
see also subjects.
- Treatment height for mountain pine beetles in front range ponderosa pine, 17520
- Treatment of complex cyanide compounds for reuse or disposal, 30195
- Tree hurts too, 30249
- Tree nuts, *see* Nuts.
- Tree planting:
hybrid mahogany recommended for planting in the Virgin Islands, 28957
tree planters' notes, 18997
see also Forest planting.
- Tree rings, timekeepers of the past, 30284
- Trees:
benzomyl-derived fungitoxicant for tree wilt disease control, 27532
evaluation of two tree shakers for harvesting cones, 27526
germination and early growth of coastal tree species on organic seed beds, 20315
glossary for forest tree improvement workers, 21651
notes on weevils from trees and shrubs in North Dakota, 28945
segregation of foliage from chipped tree tops and limbs, 28936
shade, for home, 24124
treatment of Alaskan species by double-diffusion and modified double-diffusion methods, 23301
tree hurts too, infection of wounds causes decay, 30249
tree species for plantations in granitic uplands of Puerto Rico, 28956
vener species that grow in United States, 23300
see also names of trees.
- Trempealeau County, Democratic Party, *see* Democratic Party-Trempealeau County.
- Trends in long term care, 15862, 19942, 23039
- Trent, Donald S., numerical thermal plume model for vertical outfalls in shallow water, 27469
- Trent Lott for Congress Committee, annual report, 24437
- Trenton, N.J., area wage survey, 21914
- Trevino, Alberto F., jr., nomination, hearing, 31136
- Trevino, George, on natural redistribution of surface contamination, 24199
- Trials:
analysis of pretrial delay in felony cases, summary report, 16215
competency to stand trial and mental illness, 31695
- Triangle Pacific Cabinets, Inc., motor carrier accident, 26672
- Triangles, storm hydrographs using double-triangle model, 29563
- Triangulation, reduction of photographic plate measurements for satellite triangulation, 30543
- Triassic period:
Lower Cretaceous, Jurassic (?), and Triassic ostracoda from Atlantic Coastal Region, 21736
- Triassic period—Continued
stratigraphy and origin of—
Chinle formation and related upper Triassic strata in Colorado Plateau Region, 21725
Triassic Moenkopi Formation and related strata in Colorado Plateau region, 17532
upper Triassic and pre-Morrison Jurassic rocks, 26490
- Tributes to B. Everett Jordan of North Carolina in Congress upon his retirement from the Senate, 24888
- Tributes to Clinton P. Anderson in Senate upon occasion of his retirement from Senate, 24887
- Tributes to John Sherman Cooper of Kentucky, upon occasion of his retirement from Senate, 19810
- Trichinosis, surveillance, annual summary, 31974
- Trickling filters, *see* Filters and filtration.
- Triclad: freshwater planarians, Turbellaria, of North America, 17433
- freshwater triclads (Turbellaria) of North America genus Dendrocoelopsis, 25699
- Trienens, Roger J., pioneer imprints from 50 States, 29188
- Trigg County, Ky., forest inventory statistics, 24079
- Trigonometry, trigonometric parallaxes of faint stars, 2d catalog, 29431
- Trilobites, distribution of Middle Ordovician Copenhagen Formation and its trilobites in Nevada, 17539
- Trimble, G. R., jr., response to crop-tree release by 7-year-old stems of yellow-popular and black cherry, 27534
- Trimmable film resistors, final report, 22469
- Trinidad and Tobago:
background notes, 30642
economic trends and their implications for United States, 29116
mineral industry, minerals yearbook chapter, 20539
- Trlo, Talent Search Upward Bound, Special Services, 25060
- Triodes, ionization gauge characteristics of SA1463 triode electron tube and effects of internal gas pressure on pulse emission and arcing, 22484
- Triple Crown (M/V):
sinking with loss of life, Santa Barbara Channel, marine casualty report, 30564
- Trips, *see* Travel.
- Tritium:
monitoring, control and disposal of tritium, selected bibliography, 29680
new pumping system for a 150-kilovolt neutron generator to reduce present tritium hazard, 23914
observation of airborne tritium waste discharge from nuclear fuel reprocessing plant, 29456
- Tritium isotope, in situ Ge(Li) and NaI(Tl) gamma-ray spectrometry, 22474
- Tri-Town Republican Women's Club, annual report, 24685
- Trivisonno, Roger J., FORTRAN IV computer program for calculating critical speeds of rotating shafts, 31652
- Troops, *see* Armed Forces.
- Tropical disturbances, *see* Storms.
- Tropical Forestry Institute, available publications for distribution, list, 28930
- Tropical storm Agnes, 19550
- Tropics:
biological deterioration of woods in tropical environments, 31753
resistance of tropical wood *Dalbergia retusa* to marine borer, preliminary investigation, 16449
termite resistance of polymeric materials phase 2-nontoxic polymers, 17792

- Tropopause, radar monitoring of turbulence at tropopause level, 23803
- Troposphere:
- remote sensing of troposphere, 16037
 - surface-refractivity measurements at NASA spacecraft tracking sites, 17711
- Tropospheric scatter communications, line-of sight microwave and tropospheric scatter communication systems, naval shore electronics criteria, 20722
- Troth, D. L., investigation of aircraft gas turbine combustor having low mass emissions, 30761
- Trotter, W. K., potential for oilseed sunflowers in United States, 24122
- Trotter Shoals, Ga., model study of Trotters Shoals spillway, hydraulic model investigation, 28785
- Trousers:
- and shirts, Federal item identification guide, 20040
 - provisions for evaluating quality of trousers, military standard, 15968, 28616
- Trout:
- effects of chemical variations in aquatic environments, lead toxicity to rainbow trout and testing application factor concept, 27449
 - toxic effects of aqueous aluminum to rainbow trout, effects of chemical variations in aquatic environments, 26401
- Trowbridge, Charles L., quantity-price relationships in health insurance, 23969
- Troy, Joseph C., oxidation of pyrites in chlorinated solvents, 20200
- Troy District Shirt Co., men's dress shirts, not ornamented, not knlt. of cotton and manmade fibers, workers of Troy District Shirt Co., Cohoes, N.Y., Tariff Commission report, 27946
- Trucial States, mineral industry, minerals yearbook chapter, 16269
- Truck drivers, *see* Motortruck drivers.
- Truck-top markings for visual identification, 31885
- Truck trailers, *see* Trailers.
- Trucking, *see* Motortrucks in freight service.
- Trucks, *see* Motortrucks.
- Truk:
- live-bait survey, 20694
 - some marine benthic algae, 25695
- Truman, Harry S.:
- 8-cent memorial stamp (poster), 26907
 - eulogies and encomiums of, print as House document, report, 28354
 - legislative origins of Truman Doctrine, executive session, hearings, 30028
- Trumbull, James V. A., Atlantic Continental Shelf and slope of United States sand-size fraction of bottom sediments, New Jersey to Nova Scotia, 21719
- Trumbull, Ohio, floods, 28756
- Trumbull County, Ohio, flood plain information, Mahoning River, Niles-McDonald-Girard Weathersfield township, 28714
- Trumbull County Republican Central Committee, annual report, 22738
- Trust for Special Political Agricultural Community Education (S.P.A.C.E.), annual report, 24360
- Trust funds, *see* Trusts and trustees.
- Trust Territory of Pacific Islands:
- administration report to United Nations, 27909
 - briefing on territorial matters, with text of trusteeship agreement, hearing, 28541
 - census of housing, 1970, housing characteristics for States, cities and counties, 24213
 - census of population, 1970, characteristics of population, 28119
 - claims against Japan, agreement, 32579
 - claims for damages in World War II, enlarge class for persons eligible to receive benefits—
 - hearing, 26159
 - report, 27137
- Trust Territory of Pacific Islands—Con.
- continuance of civil government, reports, 28477, 32042
 - future fiscal year budget authorizations, hearings, 27218
 - general information, 30307
 - mineral industry, minerals yearbook chapter, 20566
 - progress report on Trust Territory status negotiations, hearing, 27216
- Trusts (industrial):
- antitrust laws—
 - amend, report, 29975
 - and organized professional team sports, hearings, 26172
 - exclusive territorial allocation not unlawful for soft drinks, etc., hearings, 27350
 - see also* Competition.
- Trusts and trustees:
- airport and airways, annual report on financial conditions of trust funds, 26054
 - employer contributions to jointly administered trust funds established by labor organizations to defray costs of legal services—
 - hearings, 28405
 - reports, 28339, 29878, 32031
 - highway trust fund, financial condition and operations, annual report, 26052
 - joint labor-management trust funds for legal services, authorize—
 - bill text and background material, committee print, 27355
 - hearings, 26280
 - report, 29989
 - labor-management trust funds to defray costs of legal services, report, 28456
 - legal investments for trust funds in District of Columbia, lists, 23122
 - national transportation trust fund, establish, hearing, 21326
 - pension trust procedures and guides for integration of qualified plans, 20403
 - trust indenture act of 1939, releases, SEC, 18998
- Truth in lending, *see* Credit.
- TRW Good Government Fund, political committee, annual report, 22783
- TS series, 16135
- Tsakhadzor, Armenian SSR, 4th all-Union conference on growth of crystals, papers, 23556
- Tshudy, Bernadine D., palynology of upper Campanian (Cretaceous) Judith River formation, north-central Montana, 29022
- Tschudy, Robert H., stratigraphic distribution of significant Eocene palynomorphs of Mississippi embayment, 26507
- Tsilvoglon, E. C., characterization of stream reeration capacity, 21490
- Tualatin Project, hydraulic model studies of Scoggins Dam fishtrap aeration and supply structure, 23939
- Tuberculosis, status of immunization in tuberculosis in 1971, report of conference on progress to date, future trends and research needs, 16174
- Tuberculosis in animals, protect against tuberculosis, do's and don'ts for swine, cattle, etc., 22949
- Tubes:
- accuracy of determining mountain beetle attacks in ponderosa pine utilizing pitch tubes, frass, and entrance holes, 23291
 - application of hot-isostatic pressing, hydrostatic extrusion, and deformable-die tube tapering processes to production of titanium-6Al-4V tapered tubes, 26980
 - hose, pipe and tube fittings, quick disconnect and self-sealing, Federal item identification guide, 26322
 - metallic, Federal item identification guides, 23099, 30109
 - multitude generating bank, 20996
 - shipments of thermoplastics pipe, tube, and fittings, current industrial reports, 18194, 22553

- Tubes**—Continued
 significance of ground-water chemistry in performance of North Sahara tube wells in Algeria and Tunisia, 21742
 tubes and tubing assemblies, Federal Item Identification guide, 26323
see also Electron tubes—Pneumatic lines—also names of metals, etc., of which tubes are made.
- Tubes (inner)**, *see* Inner tubes.
- Tucker, Edwin A.**, men who matched mountains, Forest Service in Southwest, 26467
- Tucson, Ariz.**:
 chemical quality of water in Tucson basin, Ariz., 17548
 geochemical reconnaissance of Santa Rita Mountains, southeast of Tucson, Ariz., 27554
 incident, accident report, 22148
 southeast, Cenozoic rocks of Santa Rita Mountains, 21732
 structural geology of Santa Rita Mountains, southeast of Tucson, Ariz., 30277
 transportation control strategy, Phoenix-Tucson air quality area, 27484
- Tuff**, *see* Volcanic ash, tuff, etc.
- Tujuana Wash**, scour and fill, fanhead valley in urban southern California, 27567
- Tulga, Louis C.**, First 36 years, history of Albuquerque District, 1935-71, 28695
- Tulip tree**, *see* Tuliptree.
- Tuliptree**:
 American wood, description, etc., 26461
 animal depredations on spot-seeded yellow-poplar in central Tennessee, 28953
 response to crop-tree release by 7-year-old stems of yellow-poplar and black cherry, 27534
 yellow-poplar, loblolly pine, and Virginia pine compared in Cumberland Plateau plantations, 21664
- Tulsa County Republican Committee**, annual report, 22967
- Tumacacori National Monument**, general information, 23830
- Tumors**:
 conference and workshop on cellular immune reactions to human tumor-associated antigens, 30478
 laser irradiation and melanoma, 21852
see also Cancer—Oncology.
- Tuna fish**:
 development of tuna and other fisheries in Central, Western and South Pacific Ocean—
 law, 19379
 report, 15835
 distribution of forage of skipjack tuna (*Euthynnus nelsoni*) in eastern tropical Pacific, 22103
 effect of premortem stress, holding temperatures and freezing on biochemistry and quality of skipjack tuna, 22105
 indexed bibliography of eggs and young of tunas and other scombrids (Pisces, Scombridae), 20700
 review of literature on development of skipjack tuna fisheries in central and western Pacific Ocean, 26771
 seasonal distribution of tunas and billfishes in Atlantic, 25632
- Tune in**, drug abuse news for broadcasters about broadcasting, 19000
- Tung nuts**:
 price support, continue—
 hearings, 27177
 report, 28357
- Tungsten**:
 electrical contact points, workers of Solon, Ohio, plant of Cleveland Refractory Metals, Division of Chase Brass and Copper Co., Tariff Commission report, 26900
 electrolytic preparation and evaluation of tungsten bronzes, 20969
 mineral industry survey, monthly, 19001
 minerals yearbook chapter, 25491
- Tunisia**:
 agricultural commodities, agreement, 22265
 economic trends and their implications for United States, 23497
 map, 16810
 mineral industry, minerals yearbook chapter, 16308, 29228
 significance of ground-water chemistry in performance of North Sahara tube wells in Algeria and Tunisia, 21742
- Tunnels**:
 description and calibration of Langley 6-by 19-inch transonic tunnel, 29271
 geology and properties of materials exposed in USACREI permafrost tunnel, 17371
 model tests of lined tunnels in jointed rock mass (strengthening of rock by chemical adhesive grouting), 28693
 tunnel workers and decompression illness, 17759
- Tunzi, Milton G.**, effects of agricultural waste water treatment on algal bioassay response, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21522
- Tupelo**, American woods, description, etc., 17505
- Turbellaria**, freshwater triclads (Turbellaria) of North America, genus *Polycelis*, 23963
see also Triclad.
- Turbidity**:
 mathematical simulation of turbidity structure within an impoundment, hydraulic laboratory investigation, 25097
 turbidity, water quality standards criteria digest, 20230
- Turbine blades**, *see* Blades.
- Turbine fans**, acoustic and aerodynamic performances of 6-foot-diameter fan for turbofan engines, QF-1 fan innacelle without acoustic suppression, 32466
- Turbine fuel**, aviation, petroleum products survey, 26655
- Turbine powered transport airplanes**, *see* Airplanes.
- Turbines**:
 automobile gas turbine, optimum cycle selection study, final report, 29642
 cold-air investigation of turbine, for high-temperature-engine application, two-stage turbine performance, 20609
 design and cold-air investigation of turbine, for small low-cost turbofan engine, 20610
 design and experimental results for turbine with jet flap stator and jet flap rotor, 29257
 effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, sinusoidal and random vibration, 29250
 emission characteristics of aircraft auxiliary power unit, 25510
 engines, aircraft gas turbine, technical design requirements, military standard, 23114
 environmental gamma radiation from ¹⁶N decay in turbines of large boiling water reactor, 25877
 evaluation of several cryogenic turbine flowmeters, 20644
 experimental investigation of a 4½-stage turbine with very high stage loading factor, turbine design, 23670
 feasibility investigation for determining army helicopter gas turbine engine maximum power available, 26978
- FORTTRAN** program for calculating velocities and streamlines on hub-shroud and mid-channel flow surface of axial-or mixed-flow turbocachine, user manual, 31639
- gas turbine engines, aircraft propulsion, designation, military standard, 20060

INDEX 1973

Turbines—Continued

- investigation of aircraft gas turbine combustor having low mass emissions, 30761
- low NO_x emission combustor for automobile gas turbine engines, 31922
- status of LMFBK reheat in Western Europe, 1972, report of USA LMFBK sodium reheat team, 24197
- Turboengines, *see* Engines (aircraft).
- Turboalternators, thermal effects on clearance and stiffness of foil journal bearings, for Brayton cycle turboalternator, 20587
- Turbofan engines, *see* Engines (aircraft).
- Turbojet engines, *see* Engines (aircraft).
- Turbomachines, *see* Turbines.
- Turbulence:
 - atmospheric turbulence and dispersal of atmospheric pollutants, 32255
 - characteristics of turbulent diffusion parameters as related to stability, 20980
 - derivation of non-Boussinesq set of equations for atmospheric shear layer, 32256
 - development of concept of plasma turbulence, 22463
 - effect of vertical active vibration isolation on tracking performance and on ride qualities, 21975
 - model of wind shear and turbulence in surface boundary layer, 31613
 - plasma Bremsstrahlung from relativistic physics, 20992
 - possible mechanisms of turbulent heating of plasma by ultrashort laser pulses, USSR study, 27622
 - radar monitoring of turbulence at tropopause level, 23803
 - summary of turbulence data from rivers, conveyance channels, and laboratory flumes, 23375
 - turbulence characteristics at heights of 1.5, 4.0 and 16.0 meters at White Sands Missile Range, New Mexico, 20976
 - use of dual electric probes for measuring fluctuations and fluctuating currents in turbulent plasma, 22444
- Turbulent boundary layer, *see* Boundary layer.
- Turbulent flow, *see* Flow.
- Turbulent fluid friction of rotating disks, 31607
- Turbulent immersed wall jet of air on burning graphite surface, 16182
- Turling machines, injections of neighborhood size 3 and 4 on set of configurations from infinite one-dimensional tessellation automata of two-state cells, 22405
- Turk, Austin T., legal sanctioning and social control, 22069
- Turkey:
 - Ambassador, nomination of William B. Macomber, jr., 26268
 - census programs of several countries in Europe and Middle East, 26091
 - economic trends and their implications for United States, 20437
 - educational system, 21422
 - establishing business in, 32185
 - forecasting wheat production in Turkey, 25040
 - legislative origins of Truman Doctrine to provide aid, executive session, hearings, 30028
 - loan of vessels—
 - U.S.S. Entemedor and U.S.S. Threadfin, agreement, 17885
 - U.S.S. Hugh Purvis, agreement, 17882
 - mineral industry, minerals yearbook chapter, 16309
 - narcotic enforcement efforts by local government and American missions, report, 27229
 - U.S. assistance programs, hearings, 27324

Turkeys:

- eggs, chickens, turkeys, annual revisions, 25771, 26886
- improved methods and equipment for boning turkeys, 29615
- inventories, 20823, 24020
- number raised, 17910, 27940
- prices and price spreads for eggs, frying chickens and turkeys in 12 major cities, 1966-71, 30718
- production, etc., monthly report, 18250
- records of Department of State relating to political relations 1910-29, pamphlet describing, microfilm, between Turkey and—
 - other States, 21996
 - United States, 21997
- revised estimates, 1965-70, inventory and value, number raised, etc., 16614
- turkey industry, structure, practices, and costs, 27998
- turkey marketing guide, 24116
- see also* Poultry.
- Turnage, G. W.:
 - measuring soil properties in vehicle mobility research resistance of fine-grained soils to high-speed penetration, 31262
 - performance of soils under tire loads, application of test results to tire selection for off-road vehicles, 20173
- Turnbuckles, turnbuckles clevis/connector rod ends and tie rods, Federal item identification guide, 30116
- Turnbull Pine Research Natural Area, general information, 21646
- Turner, Billy, for U.S. Congress Committee, *see* Billy Turner for U.S. Congress Committee.
- Turner, D. Bruce, workbook of atmospheric dispersion estimates, 22374
- Turner, D. T., radiation crosslinking of polymers with segregated metallic particles, 25872
- Turnkey program, *see* Housing.
- Turnover of labor, *see* Labor turnover.
- Turslops truncatus, *see* Dolphins.
- Tuscarawas County, Republican Organization of, *see* Republican Organization of Tuscarawas County.
- Tuskegee Institute National Historical Park, establish, hearing, 21349
- Tussock moths:
 - decay in white fir ton-killed by Douglas-fir tussock moth, 20313
 - Douglas-fir, description, control, etc., 26464
 - major outbreaks of Douglas-fir tussock moth in Oregon and California, 27529
- Tutors and tutoring:
 - teacher orientation handbook for right to read program, 16001
 - tutorial assistance for veterans, dependents and servicemen under GI bill, 29585
- TV, *see* Television.
- TVA, *see* Tennessee Valley Authority.
- Twelfth Congressional Republican Committee, annual report, 24506
- Tweto, Ogden, gravity and magnetic features as related to geology in Leadville 30-minute quadrangle, Colo., 23362
- Twill, fabric design, engineering design handbook, 19157
- Twin Creek Research Natural Area, general information, 23270
- Twin Falls (USNS):
 - transfer to Board of Education, New York City—
 - law, 19481
 - report, 19658
- Two Bottle Creek:
 - flood plain information, 20113
 - floods in Research Triangle area, N.C., 20142
- Two-dimensional Haar-like transform, 27849
- Two-dimensional short-range fog forecast model, 22413

- 2, 4, 5-T, *see* Phenoxy herbicides.
 Two new species and new subgenus of Lucinidae (Mollusca: Bivalvia), with notes on certain aspects of Lucinid phylogeny, 20763
 Tyler, M. C., soil survey report of Marshall County, Miss., 25710
 Tynes, William O., aggregate concrete mixtures with high water-cement ratios, laboratory investigation, 20174
 Type approval actions, reports, 18302
 Type-material of North American clearwing moths (Lepidoptera: Sesidae), 29492
 Types of maps published by Government agencies, 23380
 Typewriters:
 and office composing machines, Federal Item Identification guide, 27399
 current industrial reports, 18194, 25931
 see also Ribbons for typewriters.
 Typhoid fever, epidemic at South Dade Labor Camp, Homestead, Fla., migrant workers' health problems, hearings, 29924
 Typical poisonous plants, 31407
 Typists:
 examination announcement, opportunities, 16817
 lost in the crowd? go Government, 22607
 Typography, *see* Printing.
 Tyrrell, Miles E., waste glass as flux for brick clays, 21955

U

- U.S. Army Command and General Staff College, *see* Army Command and General Staff College.
 U.S. business involvement in southern Africa, 15740
 U.S. Coast Guard Academy, New London, Conn., bulletin of information, 25958
 U.S. Department of State indexes of living costs abroad and living quarters allowances, 19004
 U.S. Government information policies and practices, 17058, 21241
 U.S. in changing world economy (address), 21115
 U.S. Information Agency, *see* United States Information Agency.
 U.S. kidney transplant fact book, information from AGS/NIH Registry, 16387
 U.S. leads global war on drug abuse, 20788
 U.S. military supply systems, traffic in surplus war material, 15900
 U.S. naval aerospace physiologist's manual, 23631
 U.S. participation in Expo '74, 21236
 U.S. participation in UN, 20790
 U.S. social security mission to Union of Soviet Socialist Republics, 26837
 U.S.-Soviet commercial agreements, 1972, texts, etc., 25034
 U.S.-Soviet commercial relationships in new era, 16838
 U.S.-Soviet trade, what's in it for me, 22643
 U.S. system for appraising and evaluating Inter-American Development Bank projects and activities, 21700
 U.S. trade promotion facilities abroad, 31212
 U.S. vaneer species information, 26477
 UC, *see* University of California.
 Udall, Morris K., letter regarding growth of Executive Office of the President, 17076
 Udell, Gilman G.:
 bankruptcy laws of United States, 19537
 Civil relief act of 1940 and amendments, 22998
 civil service classification and salary laws, 21142
 civil service preference, retirement, and salary classification laws, 21143
 compilation of laws relating to mediation, conciliation, and arbitration between employers and employees, 19538
 farm relief and agricultural adjustment acts, 19540
 hospital survey and construction act, with amendments, 21144
 laws relating to—
 shipping and merchant marine, 21145
 social security and unemployment compensation, 21146-147
 liquor laws, 22665
 naturalization laws, 19541
 opium and narcotic laws, 21148
 passport control acts, 22997
 pension laws, 21149
 radio laws of United States, 21150
 Small Business Administration and investment act with amendments, compilation, 21151
 supplement to compilation of veterans laws, 21152
 surplus property act of 1944 and amendments, 21153
 Uganda:
 Kenya-Uganda boundary, study, 32575
 mineral industry, minerals yearbook chapter, 16286
 Ugolini, Florenzo C., ionic migration and weathering in frozen Antarctic soils, 32459
 UHF, *see* Ultrahigh frequency.
 UHF television, *see* Television.
 Uinta National Forest, designate part of land as Lone Peak Wilderness Area, report, 17170
 Uintah County, Utah, oil yields and characteristics of Green River Formation oil shales at WOSCO-Ex-1, Uintah County, Utah, 20577
 Ulatis Creek:
 Vacaville, Calif., flood plain information, 32203
 floods, Alamo and Ulatis Creeks, Vacaville, Calif., 32228
 ULF, *see* Frequency band.
 Ullman, Al, Reelect Committee, *see* Reelect Al Ullman Committee.
 Ultra high rate filtration of activated sludge plant effluent, 27476
 Ultra low frequency, *see* Frequency band.
 Ultrahigh frequency:
 theory of UHF and microwave measurements using power equation concept, 27727
 UHF irradiation and worker in industry, USSR study, 20460
 Ultrasonics, *see* Sound.
 Ultraviolet light, *see* Light.
 Ultraviolet rays:
 calibration of radioaction detectors in ultraviolet region between 972-2500 Å, 20616
 plastics fabrication by ultraviolet, infrared, induction, dielectric and microwave radiation methods, 25030
 vacuum and ultraviolet-radiation effects on binders and pigments for spacecraft thermal-control coatings, 23680
 Uman, Martin A., lightning criteria relative to space shuttles, currents and electric field intensity in Florida lightning, 20593
 UMBER, extraction of manganese from Georgia umber ores by sulfuric acid ferrous sulfate process, concurrent extraction and centrifuge tests, 21950
 Umpqua National Forest, accelerated road-building on North Umpqua, economic analysis, 20317
 Umpqua River:
 flood profiles in Umpqua River, Ore., 29014
 South, Oregon, engineers report—
 departmental edition, 20162
 document edition, 19570
 UN, *see* United Nations.
 Un-American activities:
 Internal security act and other internal security laws, report of subcommittee to investigate administration, 28454
 Investigation of attempts to subvert United States armed services, hearings, 15750

INDEX 1973

- Un-American activities—Continued
 - registration of certain organizations wishing to control by force or overthrow Government, rules, etc., prescribed by Attorney General, 17649
- Unauthorized use of funds for construction and alteration of public buildings, 21701
- Uncertainty of pulse position due to noise, 16448
- Unclaimed benefits in civil service retirement fund, 21702
- Underclay deposits of Somerset and eastern Fayette Counties, Pa., 21709
- Underdeveloped areas:
 - agricultural machinery and equipment in developing countries and Eastern Europe, 25318
 - developing countries' external debt and U.S. foreign assistance, case study, GAO report, 28986
 - economic development (periodical), 18246
 - international housing, review of U.S. assistance to developing countries, hearings, 15876
 - minimum wage fixing with special reference to developing countries, ILO recommendation, 28304
 - population program assistance, aid to developing countries by United States, other nations, and international and private agencies, 30322
 - potential fertilizers for developing countries, 30671
 - symposium on popular participation in manpower and employment development, 20493
- Tax Administration Advisory Staff provides technical assistance to developing countries, 29091
- U.S. development aid, reorganization, comparison and summary analysis of some proposals, 29006
- world demand prospects for coffee in 1980 with emphasis on trade by less developed countries, 25041
- Underemployment, *see* Unemployed.
- Undergraduate work, *see* Colleges and universities.
- Undergraduates, *see* Students.
- Underground construction, construction of nuclear geostorage facilities for petroleum products, 26393
- Underground mining, *see* Mines and mining.
- Underground nuclear explosions, 16669, 16672
- Undershirts, jumpers, sweaters, and undershirts, Federal item identification guide, 31186
- Understanding fair housing, 25947
- Understanding national energy dilemma, 30937
- Understanding words and word relationships, 30143
- Underwater research, *see* Oceanography.
- Underwater sound, *see* Sound.
- Underwater vision, *see* Sight.
- Underwear, knit, current industrial reports, 18194A
- Underwriting, *see* Mortgage Insurance.
- Unemployed:
 - area trends in employment and unemployment, 18006
 - crisis of high unemployment, report, 29981
 - unemployment security programs, Federal-State funds to finance cost of administering, report, 19608
 - opportunities by assisting States and local communities in providing needed public services, hearings, 21213
 - public service programs for unemployed persons, interim assessment, 17279
 - reducing unemployment, hearings, 21139, 23041
 - Seattle, Wash., unemployment, new poor and hunger, 17293
- Unemployed—Continued
 - unemployment among Vietnam-era veterans, hearings, 23075
 - unemployment and racial discrimination in employment oversight, hearings, 23011
- Unemployment, *see* Unemployed.
- Unemployment compensation, *see* Unemployment insurance.
- Unemployment insurance:
 - additional unemployment insurance benefits provided, 22242
 - benefit series service, 18026
 - claims (periodical), 19019
 - Emergency unemployment compensation act, experience under, report, 17108, 29924.
 - Federal-State unemployment compensation program, report, 19608
 - Federal unemployment tax in case of insurance agents remunerated solely by commission—
 - report, 19935
 - summary of Senate amendments to bill, 21296
 - laws relating to social security and unemployment compensation, 21146-147
 - legislation needed to simplify Federal funding of State employment security agencies' administrative expenses, GAO report, 30257
 - local offices, directory, 25372
 - program, Railroad Retirement Board, benefit, statistics, monthly, 18639
 - properly designed for administration proposal to tide individuals over unemployment period, 29939
 - State laws—
 - comparisons, 17919-920, 25794
 - employment and wages of workers covered, 18257
 - unemployment insurance statistics (periodical), 19020
 - unemployment insurance system, proposals for reform, message from the President, 28061
 - use of Reed act funds for certain administrative purposes, report, 19608
- Unger, Robert R., percussive drilling with independent rotation, 21948
- Uniform accounting system for nonappropriated funds, 15491
- Uniform appraisal standards for Federal land acquisitions, 30304
- Uniform crime reports, 31318
- Uniform hospital abstract, minimum basic data set, 23723
- Uniform motor carrier standards act, 17177
- Uniformed services, *see* Armed Forces—Pay, allowances, etc.
- Uniformed Services University of Health Sciences, establish, law, 16917
- Uniforms, Navy regulations, 30588
- Union Bank Good Government Association, *see* Good Government Association of Union Bank.
- Union County Republican Central Committee, annual report, 22689
- Union Faith (SS):
 - collision involving M/V Warren J. Doucet and tow in Mississippi River, Apr. 6, 1969, marine casualty report, etc., 30563
- Union of Soviet Socialist Republics:
 - abuse of psychiatry for political repression in Soviet Union, 19984
 - Academy of Medical Sciences, vestnik (periodical), 19045
 - Academy of Sciences, vestnik (periodical), 19046
 - agricultural statistics of Eastern Europe and Soviet Union, 28649
 - agriculture, translations, 18984
 - air transport services, agreement, 31862

Union of Soviet Socialist Republics—Con.
all-Union conferences and congresses—
control problems, reports, 21861
crystal growth, 23556
metal-dielectric phase transitions, ab-
stracts of reports presented, 17635
space biology and medicine, 23545
all-Union meeting of educators, 26601
arms limitation in light of SALT decisions
based on United States and Soviet posi-
tions during international negotiations,
27333
Arms Limitation Standing Consulative
Commission, agreement, 26871
automated management system for Union
republic economy, 25348
background notes, 27904
communications, herald (periodical),
18419
contemporary biographies from Large
Soviet encyclopedia, 25340
cooperation in agriculture, agreement,
32581
customs documents, 30334
development of Republics' Academies of
Science, 20446
east coast, sailing directions, 28629
economic affairs, translations, 18985
economic prospects for the seventies
28269
effects of extreme factors of Antarctica on
sleep of polar expedition members, USSR
study, 30356
embassy sites, conditions of construction,
agreement, 25754
estimates and projections of population of
U.S.S.R. by age and sex, 1950–2000, in-
ternational population report, 25035
facts about Russian grain sale (inter-
view), 22331
field of USSR and U.S. management science
surveyed, USSR stud, 23527
fisheries—
agreement, 25766
consideration of claims resulting from
damage to fishing vessels, agreement,
26883, 32582
northeastern Pacific Ocean, agreement,
26882
fishery problems on high seas in western
areas of middle Atlantic Ocean, agree-
ment, 27929
fishing operations, northeastern Pacific
Ocean, agreement, 26881
foreign relations of U.S., diplomatic
papers—
departmental edition, 17857
document edition, 16935
grain trade with Russia (address), 16590
grains, agreement, 17898
grant and pension regulations for USSR
servicemen, handbook, 30361
heat supply diagrams for USSR climatic
regions, 21882
improving management in the Sel'khoztek-
hnika system, 25357
industrial affairs, translations, 18986
international negotiation, Chinese com-
ment on Soviet foreign policy, 19973
ionospheric research, 17614
king and tanner crab fisheries, agreement,
26880
labor camps, conditions, etc., hearings,
26278
labor in U.S.S.R., 20497
laws of USSR government, collection on
natural resources, 29139
leading scientists discuss contemporary
science and society, 17633
limitation of—
anti-ballistic missile systems, agreement,
25748
strategic offensive weapons, agree-
ment—
law, 19383
reports, 17007, 19618, 21170
text, 25749

Union of Soviet Socialist Republics—Con.
look to future of Soviet public health,
25360
magnetometry, selected articles, 30351.
maps, 16808
marine geological exploration, basic prob-
lems, 25349
maritime matters, agreement, 29540
market profiles, 24289
may atom be worker and not soldier, AEC
delegation to USSR, report, 28086
military affairs, translations, 18987
mineral industry, minerals yearbook chap-
ter, 25434
national economy, 23528
negotiation and statecraft, hearings,
26269, 30037
nominations for Soviet prizes in science
and technology, 17610
northern, sailing directions, 16436
nutrition research, 17591
observations on East-West economic rela-
tions, U.S.S.R. and Poland, trip report,
22661
party control in medical establishment,
16183
political and sociological affairs, trans-
lations, 18988
prevention of incidents on and over high
seas, agreement, 16523
privileges, pensions, and allowances for
military personnel, 25345
psychiatry in Soviet Union, 27619
quadrupartite agreement on Berlin and
final protocol between USA and other
governments, 27918
recent Soviet emigration to Israel, 17047
resources, translations, 18989
role of USSR scientific centers in economic
development outlined, 25355
Russian radioecology, bibliography of So-
viet publications with citations of Eng-
lish translations and abstracts, 21018
scientific abstracts, 19034–40
scientific and technical cooperation, agree-
ment, 16505
selected U.S.S.R. and Eastern European
economic data, 30133
settlement of lend lease, reciprocal aid and
claims, agreement, 22272
Soviet activities in Cuba, hearings, 21231
Soviet aerometeorological service de-
scribed, 30330
Soviet-American working group on remote
sensing of natural environment from
space, meeting, 30364
Soviet and Polish agriculture, observa-
tions, 24910
Soviet correspondents report motor trip
through United States, 29137, 31520
Soviet medical graduate study standards,
17608
Soviet nuclear reactors, fast neutron re-
actors and prospects for future, 16185
Soviet science after 50 years, 25356
Soviet sea power presence, 30585
space cooperation, agreement, 16506
space programs, 1971, report, 17212
taxation matters, convention, 32098
tension and detente, congressional perspec-
tives and Soviet-American relations,
27208
trade and services, translations, 18990
training of Soviet health workers, 25363
U.S. social security mission to Union of
Soviet Socialist Republics, 26837
U.S.-Soviet commercial agreements, 25034
U.S.-Soviet commercial relations, interplay
of economics, technology transfer and
diplomacy, 28410
U.S.-Soviet commercial relationships in
new era, 16838
U.S.-Soviet trade, what's in it for me (ad-
dress), 22643
U.S.-U.S.S.R. cooperative agreements,
17095
USSR State prize winners for 1972, 20468

INDEX 1973

- Union of Soviet Socialist Republics—Con.
USSR's 50th anniversary and development of Soviet science, 25327
visit to USSR by U.S. Energetic Beam Team, Apr. 1-15, 1972, report, 15523
Washington Summit, General Secretary Brezhnev's visit to United States, June 18-25, 1973, 32573
wheat purchase, hearings, 19739
- Union wages, *see* Wages.
- Unions, *see* Labor unions.
- Uniroyal, Inc., reinforced rubber and/or plastic hose suitable for conducting liquids or gases, belting and belts for machinery, and rubber sheeting, workers of Passaic, N.J., plant, Tariff Commission report, 27944
- United Arab Emirates:
economy, basic data, 25969
map, 16803
- United Arab Republic (Egypt):
economy, basic data, 21105
mineral industry, minerals yearbook chapter, 20561
- United Kingdom of Great Britain and Northern Ireland, *see* Great Britain.
- United Nations:
charter, art. 61, amendment, 28441, 29952
conference on human environment, report, 17086
conference, single convention on narcotic drugs, 1961, amend, hearing, 15894
current foreign policy, United Nations, problems and opportunities, 17867
environment program, U.S. participation, provide, reports, 27138, 27152, 28409, 32101
foreign relations of U.S., 1947—
departmental edition, 31844
document edition, 30942
General Assembly—
26th annual meeting, report, 21234
27th annual meeting, issues, hearings, 21225
Secretary General U Thant, conversation with members of committee, 17254
United Nations in '72, 27th General Assembly, Sept. 19-Dec. 19, 1972, report on brief, 27908
United States participation, report—
departmental editions, 20790, 31847
document edition, 30945
Vandenberg resolution that United States reaffirm its policy to achieve international peace and security through United Nations, executive session, hearings, 30033
United Nations International Children's Emergency Fund, additional money, authorize, hearings, 27324
United Nations Seabed Committee, law of the sea crisis, staff report on United Nations Seabed Committee Outer Continental Shelf and marine mineral development, 17270-271
United Nations Security Council, meeting in Panama, hearings, 28411
United Spanish War Veterans, convention, proceedings, 22999, 29842
United States:
NOTE—For all subjects pertaining to the United States, except its government, general history, and description, *see* such subjects.
American history publications, price list, 29453
becoming a citizen series, our United States, 30302
new wonders of the world in America, 23922
our American Government, what is it, how does it work?, print revised edition, report, 31090
real America (speech), 31553
Soviet correspondents report motor trip through United States, 29137, 31520
state of the Union message from the President, 24889
- United States—Continued
statistical abstract, 1972—
departmental edition, 16789
document edition, 16940
supplement, 16790
strengthening America's position in world economy (remarks), 21108
U.S. in changing world economy (address), 21115
United States and changing world, 27907
what is happening to America (address), 30155
United States and Japan, 14th Air Force Academy Assembly, proceedings, 25839
United States Arms Control and Disarmament Agency:
appropriations, 1973, authorize, law, 16877
biographic register, 30643
United States Capitol Historical Society, audit, for year ended Jan. 31, 1972, GAO report, 21690
United States Coast Guard, ships, planes and stations, 15612
United States coast pilots, *see* Coast pilots.
United States Code, *see* Codes of law.
United States Court of Appeals for District of Columbia, associate judge, nomination of Stanley S. Harris, hearing, 19962
United States courts, *see* Courts of United States.
United States District Court opinion and order relating to relationship between legislative and executive branches of Government and Economic opportunity act, 29902
United States Forgecraft Corp., relief by referring bill S. 3969 to chief Commissioner of U.S. Court of Claims, report, 19820
United States Government policy and supporting positions, 26200
United States Information Agency:
appropriations, 1973—
authorize, law, 16877
law, 19473
report, 19704
appropriations, 1974—
authorize, hearings, 27230, 32080
hearings, 28388
biographic register, 30643
field staff, Foreign Service list, 18384
magazine reprint MR series, 18602
operations, survey and hearings, 24857
report on programs by Advisory Commission on Information, 31903
U.S. interests and activities in Nepal, 25246
what should U.S. policy be for development assistance to Ecuador?, 25247
United States interests in and policies toward South Asia, 29910
United States magistrates:
magistrate system, examination of personnel and salaries, hearing, 19988
proposed rules of evidence for Federal courts and magistrates—
extend time for congressional consideration—
law, 27087
reports, 26104-105, 26206
hearings, 27230
salaries, remove statutory ceiling—
law, 16919
report, 15842
United States Mission to United Nations, biographic register, 30643
United States National Committee on Vital and Health Statistics, annual report, 25564
United States pilot guides, *see* Coast pilots.
United States Postal Service:
airmail improvement program objectives unrealized, GAO report, 32348
annual report, 24084, 24089
appropriations, annual authorization, report, 27135
appropriations, 1973, law, 15640

- United States Postal Service—Continued
 appropriations 1974—
 hearings, 28393, 31131, 32135
 reports, 29885, 30971, 31117
 Board of Governors, nomination of Robert
 Earl Holding and Frederick Russell
 Kappel, hearing, 20009
 employee safety program, 32088
 improvements needed in collection of data
 for United States Postal Service's re-
 venue and cost analysis system, GAO re-
 port, 23321
 methods handbook series M, 29569
 negotiating equality for postal employees
 and uniformity in labor relations, hear-
 ings, 29933
 payments to civil service retirement fund,
 provide, report, 26137
 postal contracting manual, 16565, 17923,
 18765, 22295, 24088, 25796, 31892
 postal oversight, hearings, 28570, 32152
 postal service manual, 18767
 posters, commemorative stamp series,
 16557-563, 18133, 20848-849, 22290-
 294, 24085, 25795, 26907-909, 27958-
 960, 29568, 30676-677, 32605-606
 press releases, general, 18814
 procurement and supply handbook, 29571
 quality of service is the best despite many
 myths (address), 30675
 status and performance, hearings, 15776
 United States Code, amendments, 20010,
 24957
 working conditions and postal construc-
 tion program, hearings, 21274
 United States reports, *see* Supreme Court.
 United States Soldiers' and Airmen's Home:
 appropriations, 1973—
 report, 16987, 19615, 21311
 supplemental, hearings, 26149
 veto message, 19556
 increase interest paid on permanent fund,
 report, 30982
 United States Soldiers' Home, *see* United
 States Soldiers and Airmen's Home.
 United States Tax Court:
 appropriations, 1973, law, 15640
 appropriations, 1974—
 hearings, 32135
 reports, 29885, 31117
 United States Travel Service:
 annual report, visit USA, 29575
 press releases, 18776
 Regional Directors Conference, 1972, sell-
 ing of America, 16568
 Universal City, Tex., Cibolo Creek, flood
 plain information, 32209
 Universal dropout tester for magnetic stor-
 age media, 20646
 Universities, *see* Colleges and universities.
 University of California:
 historical summary of activities in UC-
 FAA fog chamber, 24027
 Santa Barbara, duty-free entry of carl-
 lon—
 law, 19512
 report, 19932
 University of Tennessee:
 land transfer by Tennessee—
 law, 19429
 report, 19880
 Unloading and lading:
 and the wheat goes on, 30715
 fresh fruit and vegetable unloads—
 eastern cities, etc., 25816
 FVUS (series), 24115, 25816, 26926,
 30691-692
 southern cities, by commodities, 24115
 total for 41 cities, 26926
 palletized unit loads for 40" x 48" pallets,
 military standard, 23104
 reduction of electrostatic charge in jet
 fuels during refueler loading, 22165
 road and landing criteria for mobile-crane
 yarding systems, 26471
 Unless you decide to quit, your problem isn't
 going to be smoking, your problem's going
 to be staying alive, 16798
 Unloading, *see* Unloading and lading.
 Unmanned space project, management,
 Surveyor and Lunar Orbiter, 20596
 Unmarried persons, tax treatment of single
 persons and married persons where both
 spouses are working, summary of testi-
 mony, 17117
 Unskilled labor, *see* Labor.
 Up to now, chronicle of Manpower pro-
 grams, 17657
 Updating asymptotic data for use in objective
 analyses, 30532
 Updating of numerical precipitation guid-
 ance, 30534
 Updegraph, Charles L., jr., U.S. Marine
 Corps, special units of World War II,
 23615
 Upper air, *see* Atmosphere.
 Upper atmosphere, *see* Atmosphere.
 Upper Cretaceous period, *see* Cretaceous
 period.
 Upper Deerfield Democrats, annual report,
 24786
 Upper Great Lakes Regional Commission:
 economic development plans, 28241A
 press, releases, 18815
 Upper Iowa River, wild and scenic river
 study, 21163
 Upper Mississippi River National Recrea-
 tion Area, establish, hearings, 21245
 Upper River Rouge, flood plain information,
 23175
 Upper St. Vrain Creek, *see* St. Vrain Creek.
 Upper Snake River project:
 American Falls Dam, Idaho, replace under
 government or nongovernmental control,
 hearings, 30040
 Salmon Falls division, construct, operate,
 and maintain—
 law, 19444
 report, 15712, 19643
 Upper Volta:
 background notes, 27905
 Togo-Upper Volta boundary study, 17866
 Urania, *see* Uranium oxides.
 Uranium:
 economic of byproduct metals, 26649
 geology and uranium deposits, Shirley
 Basin area, Wyoming, 16107
 minerals yearbook chapter, 25492
 survey of United States uranium market-
 ing activity, 28089
 uranium and its alloys, USSR study, 17593
 uranium enrichment activity, financial
 statements supplementing AEC's finan-
 cial report, 25886
 Uranium carbides, high power and heat flux
 irradiation of uranium-plutonium car-
 bides, fast reactor mixed carbide fuel ele-
 ment development program, 30772
 Uranium hexafluoride, handling procedures
 and container criteria, 21014
 Uranium isotopes:
 absolute intensities of gamma rays from
 decay of 238u and 232Th, 22476
 behavior in separation cascades, ideal
 cascades, 22480
 Uranium mills, disposal of uranium-mill
 effluent by well injection in Grants area,
 Valencia County, N. Mex., 30272
 Uranium oxides, geology of oxidized uranium
 ore deposits of Tordilla Hill-Deweesville
 area, Karnes County, Texas, study of dis-
 trict before mining, 26059
 Urban areas, *see* Cities and towns.
 Urban business profile (series), 15974-980,
 21416
 Urban development, *see* Community develop-
 ment programs.
 Urban education, partnership for survival,
 25061
 Urban life, *see* Cities and towns.
 Urban Mass Transportation Administration,
 appropriations, 1974, report, 31004
 Urban origin-destination surveys, 30216
 Urban planners, *see* City planners.
 Urban planning, *see* Redevelopment (city
 planning, etc.)

INDEX 1973

- Urban rat control, 1969-71 status report, 21118
- Urban renewal, *see* Redevelopment (city planning, etc.).
- Urban river, staff proposal for waterfront development in District of Columbia, 23719, 25562
- Urban transportation needs, 16555
- Urban water planning, bibliography, 16147
- Urbston, D. F., status of Savannah River Plant deer herd, herd dynamics and deer hunts through 1971, 16664
- Urea, potential fertilizers for developing countries, 30671
- Uremia, 6th annual contractors' conference of artificial kidney-chronic uremia program, National Institute of Arthritis, Metabolism, and Digestive Diseases, 26739
- Urethanes:
 - concept evaluation, recovery of floating oil using polyurethane foam sorbent, 17418
 - effects of amine catalyst on compressive properties of urethane foam, 28064
 - guidelines for selection of, and use of foam polyurethane roofing systems, 29324
 - polyurethane shroud designed to prevent TACAN outages, 24043
- Urging Congress to curb Federal spending, 19552
- Uruguay:
 - agricultural commodities, agreement, 25738
 - economic trends and their implications for United States, 16163, 27602
 - extradition and cooperation in penal matters, treaty, 28440
 - mineral industry, minerals yearbook chapter, 16299
- USA, economics, politics, ideology, 19031
- USA, foreign policy mechanism, organization, functions, and management, 27621
- USA statistics in brief, 16790
- USAMRDL technical reports, 15513, 16653-656, 20987-991, 22436-438, 24183-190, 25865, 26977-982, 28055-59, 29663, 30758-7637, 31934-936
- USDA, *see* Agriculture Department.
- Usdin, Eugene, validity of background and interest tests for officer stated career intent, 26949
- Use of ancillary health personnel in maternal and child health projects, 31576
- Use of circumaural earphones for attenuating ambient noise in bone conduction audiometry, 26645
- Use of composite diaphragms in electrowinning of titanium, 16334
- Use of electricity in conjunction with 12.5-meter (headrope), Gulf-of-Mexico shrimp trawl, in Lake Michigan, 22106
- Use of fire streams to control floating oil, 28799
- Use of market share reports, 21100-101
- Use of medicine, review of prescribed and nonprescribed medicine use, 20203
- Use of naturally impaired water, bibliography, 27595
- Use of oxygen for reducing fatigue of man in flight, 27626
- Use of simple indicators for detecting potential coronary heart disease susceptibility in air traffic controller population, 16631
- Use of simulation models pertaining to best mix of aircraft, support personnel, spare parts, and level of repair, 30730
- Use of special aids, United States, 22026
- Use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressure, 29280
- Use tax, Federal use tax on civil aircraft, 27596
- User requirements for airfield pavement system, 23157
- User's guide to diffusion/kinetics, DIFKIN, code, 32253
- User's guide to NODC's data services, 26395
- Users' guide to OMNITAB command, "Statistical analysis," 26709
- User's manual for computer program for simulating intensively managed allowable cut, 25213
- User's manual for three-dimensional heated surface discharge computations, 23190
- Users-Producers Conference, creative partnerships, Government and professional services, proceedings, 31675
- USES, *see* Employment Service.
- USIA, *see* United States Information Agency
- Using diseases to kill plant insect pests, 20884
- Using holographic matched filters in correcting phase discontinuities in antenna apertures, 27650
- Using video pulse sequencing for sounding sea ice, 21840
- USPS, *see* United States Postal Service.
- USSR, *see* Union of Soviet Socialist Republics.
- USTS, *see* United States Travel Service.
- Utah:
 - census of housing, 1970, housing characteristics for States, cities, and counties, 15562
 - census of population, 1970, characteristics of population, 27016
 - chemical quality of surface water in Flaming Gorge Reservoir area, Wyoming and Utah, 26512
 - climatological data, 18113
 - counties, population estimates, 16784
 - county business patterns, 29747
 - electric rate book, 16049
 - field instrumentation studies of earth tremors and their geologic environments in central Utah coal mining areas, 26504
 - geology of Green River Formation, bibliography, 27560
 - Glen Canyon National Recreation Area, establish, report, 17011
 - mineral rights conveyance, 19913
 - placer gold deposits, 30269
 - precipitation data, hourly, 18463
 - register of minority contractors and housing professionals, listing in selected cities, 22385
 - truck inventory and use survey, 24228
 - water supply outlook and snow surveys, 19062
- Utah County Republican Central Committee, annual report, 22678
- Ute Indians:
 - general information, 31479
 - sales of lands of Southern Ute Indian Tribe, authorize, law, 16865
- Utica, N.Y., area wage survey, 20505
- Utilities:
 - identification of utility systems, 23667
 - retail prices and indexes, 18869
- Utility companies, *see* Electric utilities—Gas utilities—Public utilities.
- Utilization of health services, indices and correlates, research bibliography, 25563
- Utilization of psychiatric facilities by persons under 18 years of age, United States, 32499
- Utilization of short-stay hospitals, summary of nonmedical statistics, United States, 1970, 32490
- Utilization of short-stay hospitals under medicare by type of control and bed size, 29498
- Utilization of southern pines, 15464
- Utilization review program for home health agencies, 19307
- Uttech, Gary R., relief, 15633
- UVW anemometer dynamic performance study, 22411
- Uzbek Soviet Socialist Republic:
 - problems in creating network of information and computer centers in Uzbekistan, for planning and controlling national economy, USSR study, 17622

- Uzbek Soviet Socialist Republic—Continued scientific activities, goals, and personnel in Uzbekistan and Kazakhstan, 20463
Uzbekistan, *see* Uzbek Soviet Socialist Republic.
- V
- V-M Corp., record changers, phonographs, radio-phonograph combinations, and tape recorders, players, and decks, V-M Corp., Benton Harbor, Mich., Tariff Commission report, 16543
VA, *see* Veterans' Administration.
Vacations, national forest vacations, 30712
Vacaville, Calif.:
Alamo and Ulatis Creeks, flood plain information, 32203
floods, Alamo and Ulatis Creeks, 32228
Vaccination:
assistance, provide grants, law, 19384
VEE vaccinations, reimbursement of owners and veterinarians for expenses, authorize, report, 17142
Vacuum:
air modulated vacuum oil recover collection of spilled oil (foams), 17416
small vacuum oil skimming system, 28801
theoretical and experimental studies of direct high-current discharges in vacuum, 22451
vacuum and ultraviolet-radiation effects on binders and pigments for spacecraft thermal-control coatings, 23680
Vacuum gases:
development and evaluation of vacuum pressure gauge components from carbon and graphite, 20583
piston manometer as absolute standard for vacuum-gauge calibration in range 2-500 millitorr, 20619
see also Ionization gases.
Vacuum pumps, *see* Pumps.
Valdez, E. G., use of cryogens to reclaim nonferrous scrap metals, 26663
Valence, characterization of valence state of iron in coal dust, 25503
Valencia County, N. Mex., disposal of uranium-mill effluent by well injection in Grants area, Valencia County, N. Mex., 30272
Valencia oranges, *see* Oranges.
Valenzuela, G. R., point-scatterer formulation of terrain clutter statistics, 23878
Valley County, Idaho, gold anomaly in soil of West End Creek area, Yellow Pine District, 26496
Valley County, Mont., hydrology and effects of conservation structures, Willow Creek Basin, Valley County, Mont., 1954-68, 20355
Valley Head, Ala.:
flood plain information, Big Wills Creek, 28699
floods, Big Wills Creek, 28759
Valleys, scour and fill, fanhead valley in urban southern California, 27567
Valuation:
appraisal of ground water for irrigation in Little Falls area, Morrison County, Minn., 25262
customs valuation, 20830
donated property, tax information, 26546
economic appraisal of supply of copper from primary domestic sources, 30415
tests and other applicant appraisal procedures, Federal personnel manual, supplement, 24262
uniform appraisal standards for Federal land acquisitions, 30304
Values, *see* Worth.
Valverde, Horace H.:
annotated bibliography of Advanced Systems Division, reports, 28029
evaluation of device to train forward air controllers to communicate target locations, 20938
- Valves:
hydraulic presses and industrial hydraulic valves, certain workers of Columbus, Ohio, plant of Denison Division of Abex Corps., Tariff Commission report, 17912
regulating, Federal item identification guide, 27401
valves, poppet, engine, Federal item identification guide, 30117
Vanadium:
hot press and roll welding of titanium-6-percent-aluminum-4-percent-vanadium bar and sheet with auto-vacuum cleaning, 17723
liquid state spectral emissivities in electron-beam furnace, 29233
mineral industry survey, monthly, 19041
minerals yearbook chapter, 16329
Van Arsdall, Roy N.:
cattle raising in United States, 22324
economic implications of water pollution abatement in family farm livestock production, 21418
Vanatta, Earl S., Jr., soil survey of Pinellas County, Fla., 17844
Van Buren County Republican Central Committee, annual report, 24592
Van Buren County Republican Committee, annual report, 22890
Vance, John M., dynamic compatibility of rotary-wing aircraft propulsion components, 28059
Van Cleave, William R., international negotiations, 27333
Van Cott, Harold P., human engineering guide to equipment design, 21407
Vancouver Lake:
correlated studies of hydraulic model study, 17421
correlated studies of Vancouver Lake-water quality prediction study, 21500
Van Deerlin, Lionel, Committee to Reelect Congressman Van Deerlin, annual report, 25999
Vandenberg, Arthur H., resolution that United States reaffirm its policy to achieve international peace and security through United Nations, executive session, hearings, 30033
Vander Jagt, Guy, Vander Jagt Boosters, annual report, 22745
Vander Jagt boosters, annual report, 22745
Vander Meer, A. W., Jr., proceedings of Marine Safety Council, 18821
Van Deusen, James L., judging ripeness of seeds in Black Hills ponderosa pine cones, 28950
VanDevender, J. P., internal friction of single-crystal ice, 28686
Vaneanemometers, *see* Anemometers.
Vanes, flow through wire-form transpiration-cooled vane, 30462
Van Hooser, Dwane D., evaluation of two-state 3 P sampling for forest surveys, 23308
Van Nostrand, Joan F., employees in nursing homes, U.S., 22031
van Rossum Daum, Tobias, driver, traffic safety magazine for military driver, 18236
Vanwyckhouse, Roger J., synthetic bathymetric profiling system (SYNBAPS), 30584
Vapor, *see* Water vapor.
Vapor deposition, *see* Vapor-plating.
Vapor-phase deposition, *see* Vapor plating.
Vapor-plating:
high temperature superconductor Nb₃Ga, 31616
vapor phase epitaxy of gallium arsenide, 27854
Vapor pressure, thermophysical properties of parahydrogen from freezing line to—
5000 R for pressures to 10,000 psia, 17738, 26702

INDEX 1973

- Vaporization, dissociation energies of some high temperature molecules containing aluminum, 23689
see also Heat of vaporization.
- Vapors:
 detonations of flammable cloud following propane pipeline break, Dec. 9, 1970, explosion in Port Hudson, Mo., 26688
 influence of method of liquefying vapor phase on flow characteristics of accelerator output of liquid-metal MHD-converter, USSR study, 21848
 liquid-vapor equilibrium in binary systems of He⁴ and He³ with nD₂ and nH₂, 22008
- Vars, Jorge Ortuzar, *see* Ortuzar-Varas, Jorge, and wife.
- Variability (psychology):
 effect of personal treatment of Navy subjects on hearing discrimination task, 20528
- Variables (mathematics):
 dynamic characteristics of two-stage variable-mass flexible missile with internal flow, 17695
 effect of load variations on flexural fatigue strength of plain concrete, 31319
 effect of variability in received power on probabilities of communication and delay in land mobile communication systems, 25976
 Jacobian variational principles and equivalence of 2d order systems, 16446
 subsamples of set of symmetric, independent, identically distributed random variables which determine set of typical values, 23882
 U.S. standards for inspection by variables, 27983
- Variance analysis:
 iterative solution of integral equation for radiative transfer by using variational technique, 31632
 mathematical considerations about effects of guessing on test variance, 20939
 mean horizontal wind speed and direction variability at heights of 1.5 and 4.0 meters above ground level at WSMR, New Mexico, 22423
 turbulence characteristics at heights of 1.5, 4.0 and 16.0 meters at White Sands Missile Range, N. Mex., 20976
 Variation of low level winds during passage of thunderstorm gust front, 31614
 Variations in stratospheric circulation and ozone during selected periods, 22419
- Varnish and varnishing:
 current industrial reports, 18194
 Federal test method standard, 23251
 Vatican City, background notes, 25725
- Vats, weight loss of pond-raised channel catfish (*Ictalurus punctatus*) during holding in processing plant vats, 20699
- Vaughn, Charles L., national survey of oyster industry's problems, 29378
- VD and you, 30611
- Veca, Angelo C., vibration effects on helicopter reliability and maintenance, 30762
- Vecchioli, John, injecting highly treated sewage-plant effluent into deep sand aquifer at Bay Park, N.Y., preliminary results, 17540
- Vectors (biological):
 movement and impact of pesticides used for vector control on aquatic environment in Northeast, 17933
 Venezuelan equine encephalomyelitis, national emergency, vector control program, Texas and Louisiana, 22398
- Vectors (mathematics):
 forecasting precipitation at Bakersfield, Calif., using pressure gradient vectors, 30539
- Vedros, Phillip J., jr., evaluation and maintenance of expedient-surfaced airfield facilities, 28779
- Vegetables:
 acreage marketing guides—
 spring vegetables and melons, 22315
 winter, 19100
 culture, etc., publications, price list, 16461
 fresh—
 fresh fruit and vegetable unloads FVUS (series), 24115, 25816, 26926, 30691-692
 shipment by commodities, States, months, 30692
 shipment totals by States, commodities, counties, stations, 30691
 market—
 acreage and estimated production, monthly report, 19043
 acreage, production, and value, 1964-70 revised estimates by seasonal groups and states, 19132
 acreage, yields, etc., annual summary, 20824
 market news, weekly summary, 18388
 prices, revised estimates, 1964-70, 28021
 unloads—
 eastern cities, by commodities, States, etc., 25816
 forty-one cities, 26926
 southern cities, by commodities, States, etc., 24115
 fruit and vegetable grower and PACA (Perishable agricultural commodities act), 20925
 Spanish edition, 22348
 growing, 20907
 low water volume enzyme deactivation of vegetables before preservation, 31278
 market news service, 31914
 prices, 1972, Chicago and New York City, 26946
 processed—
 plants under USDA continuous inspection, 20882
 potentially adulterated products need to be better controlled, sanitation in some plants need improvement, GAO report, 23324
 standards for grades, 25817
 processing—
 1972 annual summary, 26890
 statistical report, 19044
 seeds, foreign agriculture circulars, 18380
 U.S. standards for—
 determination of fill weights, 27982
 inspection by variables, 27983
 vegetable situation, 19042
 vegetables, revised estimates, 1964-70, acreage, production, value, by States, 19131
- Vegetation:
 air pollution damage to vegetation in New Jersey, 1972 survey and assessment, 32271
 characterizing vegetation from existing source material for predicting munition height of burst in inaccessible areas, 31258
 first-year vegetation after fire, reseeding and fertilization on Entiat Experimental Forest, 31367
 interpretation of trend in range condition from 3-step data, 31373
 Kentucky guide for classification, use and vegetative treatment of surface mine spoil, 17838
 soil-moisture and energy relationships associated with riparian vegetation near San Carlos, Ariz., 16105
- Vehicles:
 administrative wheeled vehicles treatment, painting, rustproofing, undercoating, identification marking, data plates and warranty notice standards, military standard, 20062
 effect of snow cover on obstacle-crossing performance of vehicles, 21442

- Vehicles—Continued
exhaust emission from uncontrolled vehicles and related equipment using internal combustion engines, small air-cooled spark ignition utility engines, 30726
off-highway vehicles, laws regulating, 23739
tire selection for off-road vehicles, performance of soils under tire loads, application of test results, 20173
use of external information on linear velocity of vehicle for correcting inertial navigation systems, USSR study 16201
see also Air cushion vehicles—Motor vehicles—Spacecraft.
- Velocity:
ability of elementary and secondary school children to sense oncoming car velocity, 15625
application of model of porous body for calculation of field of velocities and temperatures in reactor core, USSR study, 30371
calculation of profile drag at high gas velocities and in presence of heat transfer, USSR study, 16179
double electrostatic probe for measuring density, temperature and velocity of flowing plasma, 25528
FORTRAN program for calculating velocities and streamlines on hub-shroud and mid-channel flow surface of axial- or mixed-flow turbomachine, user's manual, 31639
fragment and projectile penetration resistance of soils, high-velocity fragment penetration into laboratory-prepared soil targets, 31259
hydrogenating shale oil at low space velocity, 26664
L-7 velocity seismograph shaking-table results, 25625
laser Doppler velocity measurements of swirling flows with upstream influence, 31610
measurements of velocity components in wake of full-scale helicopter rotor in hover, 24184
prediction of ground-shock-induced airblast overpressures for subsurface explosions from peak vertical spall velocity, 17378
simulated real-time displays of Doppler Radar velocity field, 25619
sound velocity structure of north Indian Ocean, 29432
steady-state solutions of discrete-velocity Boltzmann systems in restricted flow regions, 23874
technique for measuring hypersonic flow velocity profiles, 30457
use of external information on linear velocity of vehicle for correcting inertial navigation systems, USSR study, 16201
Vema's Brachlopoda (recent), 23961
Venator, C. R., extraction and germination of Kadam seeds, 28935
Vencermos Brigade, hearings, 24864
Vending machines:
coin operated, current industrial reports, 28169
competition with national school lunch program, hearings, 28567
Venditti, John M., cancer chemotherapy reports, part 2, 18048
Vendors and purchasers:
licensed vendor listing, postal service, uniform allowance program, 17921
vendor substantiation for aerospace propulsion system items, 20078
Veneers:
dry veneer volume losses in production of red and white fir plywood, 26473
veneer species—
information, 26477
that grow in United States, 23300
Venera-8, see Spacecraft.
Venereal diseases:
current literature, abstracts and bibliography, 18195
VD and you, general information, 30611
Venezuela:
air transport services, agreement, 27917
background notes, 29526
economic trends and their implications for United States, 25317
map, 15598
military assistance, deposits under Foreign assistance act, agreement, 17888
mineral industry, minerals yearbook chapter, 25472
trade, agreement, 16530.
Venezuelan equine encephalomyelitis, see Encephalomyelitis.
Ventilation:
air inlets for dwellings, 23710
direct method of determining methane content of coalbeds for ventilation design, 20238
mechanical refrigerator cars to prevent carbon dioxide accumulation and brown stain in lettuce loads, 27994
ventilation system for cold, free-stall barns, 28005
see also Exhaust systems—Mine ventilation.
Venture capital, guidebook for new enterprises, 17222
Venue, grand jury venue, to consider rights of citizens in proceedings, northern district of Texas, 27231
Venus (planet):
illumination in atmosphere and on surface of Venus obtained by automatic interplanetary station Venera-8, USSR study, 31544
what is known about Venus, USSR study, 21873
Verde River, water supply outlook and snow survey, 19056
Verdigris River, navigation conditions at confluence of Arkansas, Verdigris, and Grand Rivers, hydraulic model investigation, 25100
Verhoven, Peter J., career education for leisure occupations, curriculum guidelines for recreation, hospitality and tourism, 28654
Verification of operational SIRS B temperature retrievals, 23806
Vermejo Ranch:
New Mexico and Colorado, acquisition for addition to national forest system—
hearings, 19741
report, 19672
Vermiculite, minerals yearbook chapter, 25493
Vermis, see Pests.
Vermont:
census of housing, 1970, housing characteristics for States, cities, and counties, 15563
census of population, 1970, characteristics of population, 28118
counties, population estimates, 22558
county business patterns, 29748
floods in vicinity of White River Junction, Vt. and N.H., 20144
mineral industry, minerals yearbook chapter, 25473
registry of minority contractors and housing professionals, listing in selected cities, 32383
soil surveys help Vermont homeowners, farmers, planning commissioners, etc., 23984
truck inventory and use survey, 27029
Vermont Educational Medical Political Action Committee, annual report, 22696
Vermont Republican State Committee, annual report, 22802
Vernon County Democratic Party, annual report, 24650.

INDEX 1973

Vernon, Rosa, for Congress, *see* Rosa Vernon for Congress.

Vesic, Aleksandar S., cratering in layered media, 26394

Vessels, *see* Boats—Fishing vessels—Ships—Tankers.

Vesting, *see* Pensions.

Vestnik of USSR Academy of Medical Sciences (periodical), 19045

Vestnik of USSR Academy of Sciences (periodical), 19046

Veterans:

- benefits—
 - available for veterans and dependents, fact sheets, 25802
 - calculator, slide chart, 26186
 - veterans with service before Feb. 1, 1955, and their dependents, summary, 24092
 - veterans with service since Jan. 31, 1955, and their dependents, 29581
- best bets for returning veterans in Washington, D.C. area, 18027
- better use of outpatient services and nursing care bed facilities could improve health care delivery to veterans, GAO report, 27546
- burial benefits, study, 30071
- census of population, 30809
- characteristics of civilian male veterans for U.S., 25911
- Drug and alcohol treatment and rehabilitation act—
 - report, 15849, 24897-898
- testimony submitted to Veterans' Affairs Committee, 27370
- economic validation of rating schedule for veterans' pensions, 21293
- educational assistance, increase rates, law, 19469
- Federal contractor job listing emphasizing employment of veterans, questions and answers on Secretary of Labor's regulation, 31572
- Health care expansion act of 1973—
 - hearings, 27246
 - law, 32009
 - report, 30995
- testimony submitted to Veterans' Affairs Committee, 27370
- home-buying guide, 27966
- insurance operations, U.S. Government life insurance, 1973 regular dividend schedules, 22298
- job seekers guide, inventory of jobs, military job fair, 20045
- jobs for veterans (address), 17653
- laws, compilation, supplement, 21152
- legislation reported, 92d Congress, 17102, 29798
- liberalization of disability and death pension, reports, 19916, 31113
- loan guaranty program, flexible GI interest rate authority in VA, report, 30992
- mobility, commuting, and veterans status for U.S., 1970 census, 21045
- National cemeteries act, reports, 15678, 17206
- opportunities in Federal service, 16819, 30887
- pensions, disability and death pension, increase rates, report, 32066
- rates relating to compensation, pensions, dependency and indemnity compensations, education and vocational rehabilitation from 1971 to present, 26181
- readjustment appointments, questions and answers about program of assistance to returning veterans, 24266
- recommendations of veterans' organizations, 1973, hearings, 26183, 27367
- reemployment rights, legal guide and case digest, 31894
- review of veterans' insurance programs, hearings, 30070

Veterans—Continued

- service-connected disabled veterans, increase compensation payments—
 - hearings, 15784
 - law, 16870
- specially adapted housing for disabled veterans, questions and answers, 26914
- State veterans' laws, digests, 17101, 27369
- survey of veterans health insurance coverage and preference for hospital and outpatient care, 17103
- tutorial assistance for veterans, dependents and servicemen under GI bill, 29585
- unclaimed savings bonds should be returned to veterans and other individuals, GAO report, 30268
- veteran petty officers, you can make over \$21,000.00, 28220
- veterans affairs, publications, price list, 30608
- veterans, train for skilled trade through apprenticeship, 24164
- veterans with mental disorders, 20672

Vietnam—

- disabled Vietnam veterans, new look (remarks), 22195
- educational benefits available for returning veterans, hearings, 21384, 24964
- in Federal employment, as you were, 15606
- summary of benefits, 26185
- unemployment, hearings, 23075
- visual impairment services teams, report, 17928

see also Life Insurance—Pensions—Rehabilitation of the disabled

Veterans' Administration:

- activities, 17309-312, 21386-387, 23076
- Administrator, Veterans' Affairs—
 - exchange of medical information and sharing of medical facilities, 20018
 - exchange of medical information, annual report, 15933
 - sharing medical facilities, annual report, 15934, 17098, 17306
- advertising guidelines for fair housing, 24093
- annual report—
 - departmental edition, 26911
 - document edition, 26046
- appropriations, 1973—
 - law, 19359
 - report, 16957
 - supplemental, reports, 27136, 27154
- 27288
- appropriations, 1974—
 - hearings, 27185, 31124
 - reports, 28377, 29963, 32069
- better use of outpatient services and nursing care, bed facilities could improve health care delivery to veterans, GAO report, 27546
- conveyance of land in Canandaigua, N.Y. to Sonnenberg Gardens—
 - law, 19331
 - report, 15676
- cooperative studies in mental health and behavioral sciences, conference highlights, 17925
- education programs, Department of Medicine and Surgery, 30680
- financial statements of Veterans Canteen Service for fy 1972, GAO examination, 21693
- hospital pay grade deescalation summary, 21294
- hospital questionnaire, summary, 17104
- index to transmittal sheets for VA regulations, program guide, 16571
- information bulletin IB series, 17925-926, 20853-855, 25801, 26912-913, 29576-578, 30680
- loan guaranty program, flexible GI interest rate authority in VA, report, 30992

Veterans' Administration--Continued

- manuals, 16570, 22298
- medical research, 17099, 27245
- data supplement, 17100
- minimum property requirements for proposed construction in housing credit shortage areas, 29583
- minority businessmen, VA invites you to get share of multimillion dollar business, 29584
- national cemetery system in Veterans' Administration, establish—
 - hearings, 26182
 - report, 26140
- national heart, blood vessel, lung and blood program analysis, 30492
- nurse careers in VA hospitals, nationwide locations, 31893
- Office of Chief Attorney, operating procedures, 16570
- operations of hospital and medical program, selective data, 29937
- opportunities to reduce cost in acquiring properties resulting from defaults on home loans, GAO report, 20335
- program guides, 29579
- publications, index, 20852
- regionalization of health care systems, 27368
- role of management representative in hearings, 29579
- safety, occupational health and fire protection bulletin, 18883
- San Francisco regional office lease prospectus, hearing, 31040
- schedule for rating disabilities, revision, 27372
- State medical schools, establish, assistance, law, 19470
- survey of factors relating to job satisfaction among VA nurses, 29578
- training guide, 24091
- VA fact sheet IS (series), 25802
- VA pamphlets, 17927, 24092, 26914, 27965-966, 29580-585, 30681, 31898
- VA, what it is, was, and does, history in brief, 17927
- Veterans Administration Central Cancer Registry, 1958-63 report, 29577
- Voluntary Service, National Advisory Committee, report of annual meeting, 29586
- Veterans' Affairs Committee, House:
 - activities, 92d Congress, summary, 21197
 - calendar, 18557
 - committee prints, 17098-104, 21294, 26181, 27245, 29937
 - hearings, 15784-785, 17105, 26182-184, 27246
 - investigations and studies, authorization and expenses, report, 24836, 26082
 - printing for use of Veterans Affairs Committee, provide, report, 15839, 16996
 - reports, 15675-678, 16950, 21197, 26140, 30975, 30992, 30995, 32066
 - veterans' legislation reported, 92d Congress, summary, 17102, 19798
- Veterans' Affairs Committee, Senate:
 - calendar, 18575
 - committee prints, 15933-934, 17306-312, 20018, 21386-387, 23076, 27368-372, 30071
 - hearings, 21384-385, 21388, 23075, 24964, 27367, 30070
 - inquiries and investigations, expenses, reports, 17145, 17153
 - reports, 15849, 17145, 17206, 19916, 19919, 23036, 24897-898, 37113
- Veterans Benefits Department, index to transmittal sheets for VA regulations, program guide, 16571
- Veterans Canteen Service, financial statements for fy 1972, GAO examination, 21693
- Veterans Employment Service, employment services to veterans, year of action, 1972 fiscal year report, 25063

Veterans' hospitals:

- Administrator, Veterans' Affairs—
 - exchange of medical information and sharing of medical facilities, 20018
 - exchange of medical information, annual report, 15933
 - sharing medical facilities, annual report, 15934, 17098, 17306
- better use of outpatient services and nursing care bed facilities could improve health care delivery to veterans, GAO report, 27546
- cafeteria and retail management careers in Veterans Administration hospital canteens, 29580
- hospitalization, veterans of World War I priority, hearings, 15785
- nurse careers, nationwide locations, 31893
- operations of Veterans' Administration hospital and medical program, selective data, 29937
- practical nurses in VA, career opportunities in Veterans Administration hospitals nationwide, 27965
- regionalization guidelines, 20853
- regionalization of Veterans Administration's health care system, 27368
- survey of veterans health insurance coverage and preference for hospital and outpatient care, 17103
- VA hospital building system, integration of mechanical electrical, structural and architectural systems in VA hospital facilities, 24090
- Veterans' Administration hospital questionnaire, summary, 17104
- Veterans' Administration pay grade de-escalation, summary, 21294
- Veterans of Foreign Wars:
 - convention proceedings, 29841
 - legislative recommendations, 1973, hearings, 26183, 27367
- Veterans of World War I of United States, Inc.:
 - convention, 1972, proceedings, 26051
 - legislative recommendations, 1973, hearings, 26183, 27367
- Veterans organizations:
 - legislative recommendations, 1973, hearings, 26183, 27367
 - tax-exempt status, law, 16913
- Veterinarians:
 - practitioners, informational outline of Controlled substances, act, 26675
 - veterinary medical officer in Federal service, examination announcement, 22606
- Veterinary Corps, Army, fact sheet, 19176
- Veterinary medicine:
 - career in veterinary medicine, 16122
 - CDC veterinary public health notes, 18057
 - veterinary biologies notice, biological products produced in licensed establishments, list, 22400, 24163, 30741
- Veto messages, see President of United States.
- Vettel, Ruth:
 - home care of purchased frozen foods, 29622
 - storing perishable foods in home, 29623
- Vetter, Louise, women in work force, development and field testing of curriculum materials, planning ahead for world of work, 26741
- Veysey, Vic, D.C. Friends of, see D.C. Friends of Vic Veysey.
- VHF television, see Television.
- Vibration:
 - acoustical and vibrational standard reference quantities, military standard, 28621
 - effect of vertical active vibration isolation on tracking performance and on ride qualities, 21975
 - effects of vibration and shock on performance of gas-bearing space-power Brayton cycle turbomachinery, sinusoidal and random vibration, 29250

INDEX 1973

Vibration—Continued
 equivalence techniques for vibration testing, 17342
 high-pressure vibrating pressure transducer, 24185
 mine roof vibrations from underground blasts, Pilot Knob, Mo., 30437
 shock and vibration digest, 18908
 shock and vibration monograph series, 17342
 stress, stability, and vibration of complex branched shells of revolution, analysis and user's manual for BOSOR4, 20588
 vibration effects on helicopter reliability and maintenance, 30762
 vibration of shells, 31617
 Vick, Charles B., yellow-poplar, American wood, 26461
 Vickerman, John, Vickerman for Congress Committee, annual report, 24325
 Vickerman for Congress Committee, annual report, 24325
 Vicksburg, Miss.:
 Mississippi River and tributaries in district, stages and discharges, 21476, 25093
 Vicksburg National Military Park, Miss., general information, 32515
 Victims of crime act of 1973, 24905
 Victoria, Tex., aircraft accident report, 20716
 Victoria Point, Burma, summary of synoptic meteorological observations, Southeast Asian coastal marine areas, 23891
 Victory 1972 Committee, annual report, 24606
 Video displays, *see* Display systems.
 Video pulses, *see* Pulses.
 Video recording system:
 development of video system for rapid generation of learning sequences, 24148
 LOMO VK- $\frac{1}{2}$ type small video tape recorder, USSR study, 30336
 Vidor, Tex.:
 flood plain information, 20131
 floods, Tiger & Caney Creek, Meyers Bayou, Anderson & Terry Gullies, how to avoid damage, 20139
 Vieira, Frank J., soil survey, Strafford County, N.H., 26843
 Vieland, L. J., high temperature superconductor Nb₃Ga, 31616
 Vienna convention on diplomatic relations and optional protocol on disputes, 24005
 Viet Nam, *see* Vietnam.
 Vietnam:
 agreement, documentation, 29529
 agriculture in Vietnam economy, system for economic analysis, 31218
 Armed Forces members, voluntarily extending tour of duty in hostile fire areas, special 30-day period of leave, extend, authorization—
 law, 19413
 report, 19889
 base development, Vietnam studies, 26983
 bombing—
 as policy tool in Vietnam, effectiveness, 21337
 directing the President and Secretary of Defense to furnish to House of Representatives information with respect to bombing in Vietnam, hearing, 17027
 cease-fire agreements, and situation in Indochina, hearings, 26157
 communications-electronics, 1962-70, Vietnam studies, 16657
 Congress and termination of Vietnam war, study, 27320
 current foreign policy, U.S. assistance program in Vietnam, 16496
 Democratic Republic, *see below*, North.
 human cost of communism in Vietnam—
 compendium, 21355
 myth of no bloodbath, hearing, 23062
 impact of war, cost, casualties, effect on civilians, etc., 23060

Vietnam—Continued
 International Conference on Vietnam, act, 26878
 logistics aspects of vietnamization, 1969-72, Defense Dept., GAO report, 25241
 medical support of U.S. Army in Vietnam, 30764
 mobility, support, endurance, story of naval operational logistics in Vietnam war, 20726
 North—
 bombing—
 adverse report, 26094-97
 hearings, 24840, 27190
 ending war and restoring peace in Vietnam, agreement, 26869
 mineral industry, minerals yearbook chapter, 25428
 prohibit use of any funds for combat activities by U.S. forces, law, 32004
 translations, 18981
 unauthorized bombing of military targets—
 hearings, 21210
 report, 21211
 permitting appointment by President of sons of Vietnam prisoners to service academies, law, 15642
 press conference by Secretary of State William F. Rogers following International Conference on Viet-Nam, 26860
 problems of war victims in Indochina, hearings, 19989-989A
 Republic—
 agricultural commodities, agreement, 17907-908, 20811, 24010, 27919, 31870
 illegal currency manipulations affecting South Vietnam, 30034
 loan of U.S.S. Camp, agreement, 24008
 map, 22571
 prohibit use of any funds for combat activities by U.S. forces, law, 32004
 South Vietnam mineral industry, minerals yearbook chapter, 25428
 U.S. assistance programs, report, 17022
 South, *see above*, Republic.
 Thailand, Laos, Cambodia and Vietnam, Apr 1973, military situation, facts and future prospects, 30031
 transfer of military scrap, agreement, 26865
 2 reports on Vietnam and Southeast Asia to President of United States, 26196
 U.S. involvement in overthrow of Diem, 17258
 veterans—
 in Federal employment, as you were, 15606
 summary of benefits, 26185
 Vietnam, May 1972, staff report, 17259
 war—
 briefing on needs, appropriations, 1973, hearings, 15715
 causes, origins, and lessons, hearings, 24925
 victims in Indochina, GAO report, 19990
 Vietnam, International Conference on, *see* International Conference on Vietnam.
 Views on foreign assistance policy, 24928
 Viezbicke, Peter P., NBS frequency and time broadcast services, radio stations WWV, WWVH, WWVB, WWVL, 27725
 Viking, *see* Spacecraft.
 Vikse, A., measurement and reduction of noise from detonating cord used in quarry blasting, 17685
 Vilhauer, Emil, Vilhauer for Congress Committee, annual report, 24652
 Vilhauer for Congress Committee, annual report, 24652
 Vincent, Lillie, service, USDA's report to consumers, 18904
 Vine, James D., geochemistry of lower Eocene sandstones in Rocky Mountain region, 25259

Vinton, Va.:
 flood plain information, Glade Creek, 23162
 floods on Glade Creek, how to avoid damage, 21461
 Vinyl, printed vinyl films from Brazil and Argentina, Tariff Commission report, 32594
 Viola, Herman J., prologue, journal of National Archives, 18826
 Violence:
 and media, 23717
 prevention of violence in correctional institutions, criminal justice monograph, 30377
 television and growing up, impact of television violence, report to Surgeon General, hearings, 15878
 Viral diseases, *see* Virus diseases.
 Virgin Islands:
 briefing on territorial matters, with text of Virgin Islands organic act, hearing, 28541
 census of agriculture, 24211
 census of housing, 1970, housing characteristics for States, cities, and counties, 24213
 census of population, 1970, characteristics of population, 28119
 climatological data, 18108
 coast pilot, Atlantic Coast, Gulf of Mexico, Puerto Rico, and Virgin Islands, supplement, 27798
 county business patterns, 30835
 establishment of National Guard, authorize—
 law, 19423
 report, 19881
 fish diversity on coral reef, 25695
 general information, 30308
 hybrid mahogany recommended for planting in Virgin Islands, 28957
 legislature, filling of vacancies, hearing, 31027
 mineral industry, minerals yearbook chapter, 20566
 minimum age for membership in Legislature to be determined by Legislature, law, 16895
 nautical chart catalog, 22092, 29379
 Revised organic act of Virgin Islands, amend, law, 16895
 Virgin Islands Medical Political Action Committee, annual report, 24381
 Virgin River:
 floods, Virgin River and Fort Pierce Wash, St. George, Washington County, Utah, 32232
 vicinity of St. George, Washington County, Utah, flood plain information, 32222
 Virginia:
 census of business, 1967, major retail centers, 16695-696
 census of housing, 1970, housing characteristics for States, cities, and counties, 15564
 census of population, 1970, detailed characteristics, 21042
 census of transportation, 1972, truck inventory and use survey, 24229
 climatological data, 18114
 counties, population estimates, 28183
 county business patterns, 29749
 electric rate book, 16050
 First Congressional District Republican Womens Club, annual report, 22929
 landings, fish and shellfish, 19047, 23788
 Life Underwriters Political Action Committee, Virginia, annual report, 24550
 Maryland-Virginia seaward boundary agreements, consent of Congress—
 law, 19492
 reports, 16983, 19936
 North Carolina-Virginia seaward boundary agreement, consent of Congress—
 law, 19513
 report, 16984, 19931

Virginia—Continued

mineral industry, minerals yearbook chapter, 16310
 precipitation data, hourly, 18464
 Third District Republican Committee, annual report, 24424
 Virginia Beach, Va.:
 area wage survey, 29167
 engineers report—
 departmental edition, 20168
 document edition, 19565
 Virginia pine, *see* Pine.
 Virus diseases:
 neurotropic viral diseases surveillance, encephalitis, annual summary, 31973
 special virus cancer program, 17743
 viral tumorigenesis report, 17744, 27739
 virus-cancer program, 32486
 Viruses, live virus influenza vaccine discoveries, hearings, 15756
 Visa, *see* Passports.
 Visa Office, annual report, 26859
 Visalia, Calif., flood plain information, Sand and Cottonwood Creeks and lower Kaweah River, 21454
 Viscoelasticity, *see* Elasticity.
 Viscose rayon, *see* Rayon
 Viscosity:
 aircraft-pavement interaction studies, finite-element model of jointed concrete pavement on non-linear viscous subgrade, 31240
 electron paramagnetic resonance studies of viscous nematic liquid crystal, evidence counter to second-order phase change, 21988
 some experiments on stirring of viscous liquids, 27735
 use of torsional pendulum as high-pressure gage and determination of viscosity of helium gas at high pressures, 29280
 Viscous flow, *see* Flow.
 Visibility:
 aircraft exterior lighting and marking for avoiding collisions, 20826
 appearance and visibility of thin oil films on water, 26405
 effect of low visibility on performance of vehicle operators, 17375
 relationship between SAE smoke number and jet aircraft smoke visibility, 24025
 Visible records, *see* Records.
 Vision, *see* Sight.
 Visit USA, 29575
 Visit USA outlets abroad, 27963
 Visitor Center, National, *see* National Visitor Center.
 Visitors:
 cultural exchange visitors, tax information, 20396
 explore! visitor's guide to discovery in national forests, 29632
 Visitors:
 foreign, arrivals—
 and departures by selected ports, 16567
 1962-72, statistics, 25798, 27926, 30679
 travel patterns, 16569
 International visitors, destination USA, 30556
 tax information for visitors to United States, 23484
 visit USA outlets abroad, 27963
 visitor arrivals to U.S. statistics on, 18940
 Visnapuu, A., conversion of ilmenite to rutile by carbonyl process, 23658
 VISTA, *see* Volunteers in Service to America.
 Visual acuity, *see* Sight.
 Visual aids, audiovisual material, 20022
 Visual arts program guidelines, 1973 fiscal year, 20661
 Visual-motor response of crewmen during simulated 90-day space mission as measured by critical task battery, 29256
 Visual perception, *see* Perception.
 Visual stimulus, *see* Stimulus.

INDEX 1973

- Vital statistics:
 analytic studies, 25565
 data evaluation and methods research, 17746, 27742-744, 29329, 32489
 data from national health survey, 16367-370, 17747-749, 22026-32, 23724-725, 25566-567, 26718-720, 27745-751, 29330-331, 30481, 31682, 32490
 data from national vital statistics system, 26721, 27753
 data on national health resources, 25568-569, 27752, 29332, 31683
 documents and committee reports, 23723
 1900-40 rates in U.S., 22033
 provisional, monthly report, 18651
 United States, 25570
 vital and health statistics series—
 current listing and topical index, 22025, 30479
 programs and collection procedures, 26717
see also Birth—Death—Divorce—Marriage
 Vitola, Bart M., comparison of 1970 and 1971 Air Force enlistees by draft-vulnerability category, 28030
 Vivlenda justa, U.S.A., 23454
 Vlcek, Charles L., observations of severe storms on 26 and 28 April 1971, 29390
 VLF, *see* Frequency band.
 Vocational and Technical Education Center, *see* Center for Vocational and Technical Education.
 Vocational counselors, *see* Counselors.
 Vocational education:
 amendments of 1968, reports on implementation, 17041
 automotive mechanics, occupational performance survey, 29357
 career education practice, 27768
 census of population statistics, 28123
 comprehensive vocational education personnel, development and utilization, 17356
 conceptual framework for diffusion of innovations in vocational and technical education, 30501
 cost-effectiveness studies of vocational and technical education, 17350
 designs for preparation of vocational and technical teachers of socioeconomically disadvantaged youth, 21421
 determining occupational emphases for high school program design, 27771
 directory of representative work education programs, 32195
 directory of schools with occupational programs, public and private—
 postsecondary, 30135
 secondary, 30136
 French approach to career education, 26375
 guidelines for identifying, classifying, and serving disadvantaged and handicapped under vocational education amendments of 1968, 25054
 home economics education, instructional materials, compilation of abstracts, 20093
 information utilization by vocational educators, 30502
 interaction simulation, coordinated local-State vocational education planning, evaluation report, 17354
 opinion leaders in organizational structure of 2 State divisions of vocational and technical education, 27770
 our vocational training can guarantee you job of lifetime, guidebook to help select a good vocational school, 30239
 pocket guide to choosing vocational school, 30240
 resource book for members of State Advisory Councils on Vocational Education, 26678
 Vocational education—Continued
 review and synthesis of—
 literature on job training in industry, 15998
 research concerning adult vocational and technical education, 17351
 research on preparation of leadership personnel for vocational and technical education, 17352
 Roswell Residential Training Center and related Indian vocational education policy, hearings, 24911
 selected career education for the handicapped, 26376, 27434
 suggested 2-year post high school curriculums, 30152, 31232
 system for statewide evaluation of vocational education, 17353
 training America's labor force, potential, progress and problems of vocational education, GAO report, 20338
 State instructional materials for trade and industrial occupations, 30153
 voices from real world (address), 30154
 Vocational evaluation and work adjustment services in vocational rehabilitation, 26812
 Vocational rehabilitation, *see* Rehabilitation of the disabled.
 Vocational training, 28123
 Voelker, D. J.:
 electrical equipment—
 Central Valley project, mid-Pacific region, field review of maintenance, 31779
 North Platte River projects, South Platte River projects, region 7, field review of operation and maintenance, 31784
 Parker-Davis project, Yuma project, Boulder Canyon project, region 3, field review of operation and maintenance, 31785
 Vogel Creek:
 Harris County, Tex., special flood hazard information, 28777
 Houston metropolitan area, Tex., floods, 28766
 Vogler, L. E., bibliography on propagation effects from 10 GHz-1000 THz, 16837
 Vogler, Raymond D., low-speed aerodynamic characteristics of fuselage model with various arrangement of elongated lift jets on V/STOL model, 31633
 Voice communication:
 intelligibility of hydrogen-speech at 200 ft. of seawater equivalent, 16249
 speech intelligibility during exercise at normal and increased atmospheric pressures, 16248
 synchronous signaling rates between data terminal and data communication equipment, 20633
 Voice for the voiceless, Office of Economic Opportunity's programs for Spanish speaking, 15981
 Volador (U.S.S.):
 load of vessels, to Italy, agreement, 20800
 Volatilization, *see* Evaporation.
 Volcanic ash, tuff, etc.:
 petrology of welded tuff of Devine Canyon, southeastern Oregon, 27573
 pumice and volcanic cinder, minerals year-book chapter, 25480
 Volcanic rocks, *see* Igneous rocks.
 Volcanoes:
 arsenic as indicator element for mineralized volcanic pipes in Red Mountain area, western San Juan Mountains, Colo., 23230
 atlas of volcanic phenomena (posters), 21706
 Pine Creek volcanic assemblage at Mount St. Helens, Wash., 29008
 Volchok, Herbert L., Health and Safety Laboratory program, index to fallout program, 19182

Volpe, John A., remarks, June 4, 1972, 17914

Voltage:

- electric transmission, construction contract, labor and material, 26814
- electron tube circuits, electron voltage regulation, student guide, 22179
- field repairs of EHV bushing oil leaks, 25874
- volt-ampere characteristics of optically controlled avalanche transistor, 23542

Volume and composition of individuals' saving, 19050

Volume and value of sawtimber stumpage sold from national forests (periodical), 19051

Volume and yield tables:

- dry veneer volume losses in production of red and white fir plywood, 26473
- economically oriented production functions for slash and loblolly pine plantations, 23297
- estimating productivity on sites with low stocking capacity, 31372
- forest statistics for central Alabama counties, 21682
- forest survey, cubic-foot volume equations, 31364
- local net timber volume equations for Wisconsin, 28939
- logging residue, volume and characteristics, 31375
- photo stratification improves Northwest timber volume estimates, 27541
- predicting softwood cutting yields by computer, 28965
- procedure for using yield simulation programs for dwarf mistletoe-infested lodgepole and ponderosa pine, 32328
- simulating yields of southwestern ponderosa pine stands, including effects of dwarf mistletoe, 16086
- volume tables and point-sampling factors for Engelmann spruce in Colorado and Wyoming, 23305

Volume of selected hardwood species suitable for turnery bolts in Maine, 31363

Voluntary activation of motor units and spinal reflexes, 27631

Voluntary P.A.C. Fund, annual report, 26022

Voluntary product standard PS (series), 20651

Voluntary Republican Party of Kewaunee County, annual report, 24508

Volunteer forces, *see* Recruitment and enlistment.

Volunteer workers:

- child nutrition programs, handbook for volunteers, 17495
- citizen advocacy for handicapped, impaired, and disadvantaged, overview, 16457
- Domestic volunteer service act—
 - hearing, 28559
 - reports, 29889, 32114
- future is now, 29586
- high school student volunteers, 20713
- InterACTION (periodical), 18495
- manual for students volunteering, 16420
- 1,000 volunteers, university year for ACTION, 19098
- volunteer homemakers, picture story, 26944
- volunteer services in public welfare, social services, manual, 22224
- volunteers in correctional programs, guidelines and standards for use, 17645
- volunteers in law enforcement programs, staff study, 17651

see also Volunteers in Service to America.

Volunteers for Young (Young Volunteers). political committee, annual report, 24406

Volunteers in Service to America:

- ACTION for businessman, Peace Corps, VISTA, 25810
- architects, city planners in Peace Corps and VISTA, 22308
- domestic programs fact book, 18235

Volunteers in Service to America—Continued

- nurses in action, career opportunities, 29591
- VISTA fact book (periodical), 19048
- VISTA lawyers practice law, 29597
- VISTA, one part of Action, 27973
- VISTA volunteer, 19049
- you'll be more than teacher in Peace Corps or VISTA, parts of ACTION, 22306

VOR, *see* Omniranges.

Voroshilov, V. I., astrometry and astrophysics, research of sun and stars, 31658

Vortex flow:

- investigation of dissipation of tip vortex of rotor blade by mass injection, 20990
- laser Doppler velocity measurements of swirling flows with upstream influence, 31610
- mass diffusion in self-confined rotating flow, 23672

Vortex generators, experimental investigations of open-cycle vortex MHD generator, 21954

Vortex-lattice FORTRAN program for estimating subsonic aerodynamic characteristics of complex platforms, 31621

Vortex motion, flight evaluation of methods for predicting vortex wake effects on trailing aircraft, 23681

Vortex for Peace, political committee, annual report, 24775

Voter Education and Political Fund, Local Union 364, *see* Local Union 364 Voter Education and Political Fund.

Voter registration, 26287

Voter Registration Administration, establishment—

- hearings, 26287
- report, 27269

Voting:

- Ad Hoc Advisory Group on Presidential Vote for Puerto Rico, 6 special studies requested for the group, 22198
- 18, 19, 20, will they vote? suggestions and resources for students and teachers, 17359
- electronic voting in House of Representatives, provide report, 16994
- Federal election reform, hearings, 30069
- information booklet, 20382
- representation for District of Columbia in Congress, hearing, 23065
- voter participation in Nov. 1972, advance statistics, 21058
- voter registration—
 - hearings, 26287
 - nation, concept, hearings, 21276
 - reports, 26239, 27269

Voyenno-meditsinskij zhurnal (USSR periodical):

- selections, 17624

V/STOL (vertical or short takeoff and landing), *see* Aircraft—Airplanes.

VSWR (voltage standing wave ratio), *see* Waveguides.

W

W. P. Franklin Dam, controlled discharge from dam, as means of flushing saline water from fresh-water reach of Caloosahatchee River, Lee County, Fla., 23336

W series, 19079

Wabash County Republican Central Committee, annual report, 24476

Wabasha County Republican Committee, annual report, 22925

Wabash River, quantitative methods for preliminary design of water quality surveillance systems, 23199

Wabbert, M. Virginia, establishing business in Indonesia, 24286

Waco, Ga., automobile-truck collision followed by fire and explosion of dynamite on cargo on U.S. Highway 78, highway accident report, 30561

INDEX 1973

Wade, Lewis V., effects of specimen radius on stress state near roof bolt anchor, finite element determination, 30426
Wagar, J. Alan, recording quizboard, device for evaluating interpretive services, 20319
Wage and Hour Division:
Federal labor laws, administered by Wage and Hour Division with regulations and interpretations, 17928, 18318, 22300, 24093, 26918, 31895
Interpretative bulletins, 24098
Wage chronology, *see* Wages.
Wages:
accrued vacation pay, authorize continued deductions, reports, 19924, 19938
achievement, mobility and draft, their impact on earnings of men, 26835
age and earnings by industry for U.S., supplementary report, 29713
annual earnings and employment patterns of private nonagricultural employees, 30384
area surveys—
Akron, Ohio, 26626
Albuquerque, N. Mex., 29168
Allentown-Bethlehem-Easton, Pa., 17658
Atlanta, Ga., 16225
Austin, Tex., 27674
Baltimore, Md., 25379
Binghamton, N.Y., 20507
Birmingham, Ala., 31558
Boise City, Idaho, 25383
Boston, Mass., 23594
Buffalo, N.Y., 23598
Burlington, Vt., 26620
Canton, Ohio, 16223
Charlotte, N.C., 27671
Chattanooga, Tenn., 23595
Chicago, Ill., 17663
Cleveland, Ohio, 25378
Columbus, Ohio, 25381, 27669
Dallas, Tex., 26617
Davenport-Rock Island-Moline, Iowa-Ill., 29169
Dayton, Ohio, 27670
Denver, Colo., 26625
Des Moines, Iowa, 16234
directory, 31565
Durham, N.C., 30390
Fort Lauderdale-Hollywood and West Palm Beach, Fla., 16222
Fort Worth, Tex., 25382
Green Bay, Wis., 20503
Houston, Tex., 16227
improving area wage survey indexes, 25385
Indianapolis, Ind., 26619
Jackson, Miss., 27676
Jacksonville, Fla., 26623
Kansas City, Mo., 23597
Lawrence-Haverhill, Mass.-N.H., 16229
Lexington, Ky., 25380
Little Rock, Ark., 20504
Los Angeles-Long Beach, and Anaheim-Santa Ana-Garden Grove, Calif., 16224, 26628
Louisville, Ky., 26627
Lubbock, Tex., 30387
Manchester, N.H., 21910
Memphis, Tenn., 26622
metropolitan areas—
selected, 21904
U.S. and regional summaries, 27667
Miami, Fla., 26621
Midland, Tex., 27673
Milwaukee, Wis., 16231
Minneapolis-St. Paul, Minn., 27680
Muskegon-Muskegon Heights, Mich., 16233
New Haven, Conn., 27678
New Orleans, La., 27679
Newark and Jersey City, N.J., 27681
New York, N.Y., 17661
Norfolk-Virginia Beach-Portsmouth and Newport News-Hampton, Va., 29167
Oklahoma City, Okla., 20508
Omaha, Nebr., 23596
Paterson-Clifton-Passaic, N.J., 17659

Wages—Continued
area surveys—continued
Philadelphia, Pa., 27677
Phoenix, Ariz., 20500
Portland, Maine, 23600
Portland, Oreg., 17660
Poughkeepsie-Kingston-Newburgh, N.Y., 16228
Raleigh, N.C., 20509
Riverside-San Bernardino-Ontario, Calif., 30389
Rochester, N.Y., 20506
Rockford, Ill., 16232
Salt Lake City, Utah, 26624
San Diego, Calif., 27672
San Jose, Calif., 31559
Scranton, Pa., 21912
Seattle-Everett, Wash., 30388
Sioux Falls, S. Dak., 27675
South Bend, Ind., 30386
Spokane, Wash., 17662
Syracuse, N.Y., 21913
Tampa-St. Petersburg, Fla., 21911
Toledo, Ohio, 16226, 31557
Trenton, N.J., 21914
Utica-Rome, N.Y., 20505
Washington, D.C., 17664
Waterloo, Iowa, 26618
Wichita, Kans., 16230
York, Pa., 29170
Youngstown-Warren, Ohio, 23599
calendar, 26629
chartbook on prices, wages, and productivity, 18064
chronologies—
Atlantic Richfield Co., 1941-72, (former facilities of Sinclair Oil Companies), 29166
Dan River, Inc., 23593
directory, 27682
Firestone Tire and Rubber Co., and B. F. Goodrich Co., 1937-73, (Akron Plants), 17667
Ford Motor Company, June 1941-Sept. 1973, 31563
International Harvester Co., 32431
Pacific Gas and Electric Company, 17666
Swift & Company, 30385
coordinated Federal wage system, FPM supplement, 18330
current developments, 18198
earnings by occupation and education, census of population, 22534
earnings distributions in U.S., 1968 data, 31807
education act extends sex discrimination and minimum wage provisions, 22304
employment and earnings—
periodical, 18256
States and areas, 21902
United States, 30383
equal pay for women under Fair labor standards act as amended, 27967
Federal wage system, FPM supplement, 22602
impact of health on earnings and labor market activity, 21916
industry survey—
contract cleaning services, 31561
fertilizer, 21908
footwear, 31564
industrial chemicals, 29163
men's and boys' shirts (except work shirts) and nightwear, 30393
textile dyeing and finishing, 17665
wood household furniture, except upholstered, 30392
method of computing under Service contract act, revise, 21371
minimum—
and maximum hours standards under Fair labor standards act, 23147
fixing with special reference to developing countries, 28304
increase—
hearings 27198, 30056
reports, 27174, 28361, 28507, 29976, 31105

- Wages—Continued
phase 4 announcement, economic stabilization program, 30075
prevailing rate pay system for Government employees—
law, 15650
report, 19340
price and wage control, evaluation of—
current policies, hearings, 22662
year's experience, 19536
productivity, wages, and prices, 18823
railroad employees, class 1 railroads, statistics, 16173, 26555
removal of prevailing wage requirements in Federally assisted housing, provide, hearings, 15875
selected earnings and demographic characteristics of union members, 20498
severance pay, what it is, 29811
sugar, harvesting, processing, etc., wage rate determination, 18936
telephone company employees, FCC rules and regulations, 18313
union wages and hours—
grocery stores, 27668
local-transit operating employees, 31562
wage rates under Service contract act, revise methods of computing, hearings, 21378
workers covered by State unemployment insurance laws, 18257
your social security earnings record, 30636
see also Salaries.
- Wagner, Billy J., soil survey of Erath County, Tex., 26840
- Wagner, Herman L., characterization of linear polyethylene SRM 1475, 17737
- Wagner-O'Day act, *see* Handicapped.
- Wah, Hank-kiu, relief, 28447
- Wake County Committee to Elect Wense Grabarek, annual report, 24624
- Wake Island, code, civil administration, Federal aviation regulations, 18300, 21532
- Wakefield, Stephen A.:
nomination, hearing, 27340
remarks—
July 9, 1973, 31499
July 24, 1973, 32391
- Wakelin, James H., jr., remarks, May 16, 1972, 21111
- Wakes:
flight evaluation of methods for predicting vortex wake effects on trailing aircraft, 23681
main rotor free wake geometry effects on blade air loads and response for helicopters in steady maneuvers, theoretical formulation and analysis of results, 20585
measurements of velocity components in wake of full-scale helicopter rotor in hover, 24184
- Waksberg, Joseph, reliability of estimates with alternative cluster sizes in health interview survey, 27742
- Waksman, David, hazard elimination procedures for leaded paints in housing, 27734
- Wald, F., cadmium telluride detectors, 2d interim technical report, 29672
- Waldron, Kenneth D., fish larvae collected from northeastern Pacific Ocean and Puget Sound during April and May 1967, 23808
- Wales, Robert O., adapting Goddard Research and Engineering Management Exercise (GREMEX) to nonspacecraft environments, 29279
- Wales, west coast, sailing directions, 25031
- Walk together children, 24257
- Walker, G. B., simulated real-time displays of Doppler Radar velocity field, 25619
- Walker, R. L., jr., micrometer measures of 618 double stars, 32523
- Walker, Robert H.:
market factors in Belgium, 12925
selling in Belgium, 21102
- Walking, Shawnee Is camping, hiking, hunting, floating, fishing, scenery, 23314
- Walkotten, William J., recording soil moisture tensiometer, 21660
- Wall, Brian R.:
log production in Washington and Oregon, historical perspective, 23311
1971 Washington timber harvest, 23310
Oregon timber harvest, 23312
relationship of log production in Oregon and Washington to economic conditions, 28963
- Wall, Leo A., mechanisms of pyrolysis, oxidation, and burning of organic materials, 23706
- Wall, James M., for Congress Committee, *see* James M. Wall for Congress Committee.
- Walla Walla County, Wash.:
flood plain information, Mill Creek, 28729
floods on Mill Creek, 28763
- Walla Walla County, Republican Women, *see* Republican Women of Walla Walla County.
- Wallace, Carl S., nomination, hearing, 26252
- Wallace, Sarah L., quarterly journal of Library of Congress, 18837
- Wallowa National Forest, designate certain lands as addition to Eagle Cap Wilderness, report, 19654
- Walls:
bumper-protected laminated spacecraft mainwalls, 29260
FPL facility for evaluating strength-performance of walls exposed to fire, 32341
mass thickness manual for walls, floors, and roofs, 28585
net radiation method for enclosure systems involving partially transparent walls, 31651
parents, are your walls poisoning your children?, 28250
turbulent immersed wall jet of air on burning graphite surface, USSR study, 16182
weak thermal points or thermal bridges, building research translation, 27728
- Walnut:
black—
American wood, general information, 25201
planting for timber, 16602
- Walnut Canyon National Monument, general information, 20710
- Walsh, Michael J., Mike Walsh for Congress, annual report, 28273
- Walsh County, N. Dak., soil survey report, 26845
- Walsh-Healy Public contracts act, *see* Government contracts.
- Walt, Lewis W., global context, world drug traffic and its impact on U.S. security, 19991
- Walter Reed Army Institute of Nursing, educational opportunity in nursing field, general information, 30765
- Walters, Kenneth L.:
test-observation well near—
Almira, Wash., description and preliminary results, 23377
Odessa, Wash., description and preliminary results, 23379
- Walton, Graham, problems in ground water pollution, 22205
- Waltz, Friedl W., Elect Waltz to Congress Committee, annual report, 22946
- Walworth County Republican Women, annual report, 24711
- Walz, August F., relief, 19598, 19835
- Wamsley, Mary Ann, Extension Service review, 18275
- Wanchek, George A., materials handling research, shear properties of several granular materials, 27698

INDEX 1973

- Wang, Fun-den, computer program for pit slope stability analysis by finite element stress analysis and limiting equilibrium methods, 21942
- Wang, K. P.:
boron, 16315
mineral industry of—
Japan, 20563
Taiwan, 16322
- Wang, Richard C., solid-liquid flow in non-circular pipes, 25502
- Wanner, Raymond E.:
French approach to career education, 26375
some French initiatives in educating socially and culturally disadvantaged, 30151
- Wappingers Federation of Teachers Committee on Political Education, annual report, 24657
- Wapsipinicon River, Independence, Iowa, flood plain information, 32223
- War:
ending war and restoring peace in Vietnam, agreement with Republic of Vietnam, Democratic Republic of Vietnam, and Provisional Revolutionary Government, 26869
hazards compensation act, 21372
impact of war, cost, casualties, effect on civilians etc., 23060
Indians, wars and local disturbances, 31481
principles of war (supplement), special bibliography, 26973
termination of hostilities in Indochina subject to release of American prisoners and safe withdrawal of remaining forces, report, 16967
Vietnam War, causes, origins, and lessons, hearings, 24925
war victims in Indochina—
GAO report, 19990
problems, hearing, 19989
relief and rehabilitation, hearings—
crisis in Cambodia, 28556
orphans and child welfare, 30053
- War and emergency powers:
Congress and the President, define—
hearings, 27211
reports, 15700, 15814, 30978, 31070, 32047
war powers legislation, 1973, rules in absence of declaration of war by Congress, 28538
- War gases, *see* Gases.
- War Manpower Commission:
inventory of records, record group 211, 32480
- War materials, *see* Military supplies.
- War on hunger, report from Agency for International Development, 19052
- War refugees, *see* Refugees.
- Ward, David H., address, May 12, 1972, 17861
- Ward, Lorin A., sagebrush control with herbicide has little effect on elk calving behavior, 32331
- Ward, Robert C.:
data acquisition systems in water quality management, 31306
extension of QZ algorithm for solving generalized matrix eigenvalue problem, 31634
- Ward, Tom, Businessmen for Tom Ward, annual report, 22965
- Ward, Tom, Fayette Countians for, *see* Fayette Countians for Tom Ward.
- Ward Creek, flood plain information, 23159
- Ware, John H., III, Citizens for Ware Committee, annual report, 25994
- Ware, John H., for Congress Committee, *see* John H. Ware for Congress Committee.
- Warehousemen:
District of Columbia, lien for charges and expenses for household goods stored against depositor, provide, hearing, 15888
warehouse-man's sample-lot inspection service, questions and answers, 29602
- Warehouses:
census of business, 1967, public warehousing, wholesale trade, 16718
cost comparison of high and low ceilings in modern grocery warehouses, 29614
detecting stored-product moths in peanut warehouse by using light and larval traps, 15474
scheduling arrival of tobacco at auction warehouses, 31909
terminals, docks, mooring locations and warehouses, list—
Illinois River, 31254
Mississippi River, 31255-257
warehouse acts, compilation, 19539
- Warfare, *see* Biological warfare—War.
- Warlick, Carol S., market factors in Yugoslavia, 16836
- Warm Springs Creek, floods, Ketchum, Idaho, and vicinity, 28730, 28753
- Warm Springs Dam, outlet works, Warm Springs Dam, Dry Creek, Russian River Basin, Sonoma County, Calif., 25101
- Warm Springs Reservation:
Confederated Tribes, inheritance of enrolled members—
law, 19358
report, 19845
Federal lands within reservation declared held in trust by United States for Confederated Tribes of Warm Springs Reservation of Oregon—
law, 16918
reports, 15696, 15831, 19622
- Warning systems:
Agnes floods, post-audit of effectiveness of storm and flood warning system of National Oceanic and Atmospheric Administration, report, 26676
aircraft control and warning radar repairman, Air Force notice, 16626
Federal plan for natural disaster warning and preparedness, 30517
pilot warning indicator system, install on aircraft, hearings, 23046
severe local storm warning service and tornado statistics, 23864
warning, emergency operations, and support programs, civil defense role, 21395
- Warranties and guarantees:
application through firm commitment for project mortgage insurance, 23432
consumer warranty protection, 1973, hearings, 28421
disclosure standards, provide, report, 28464, 29970
product warranties, business guidelines to meet consumer needs, 23716
- Warrantless wiretapping, 32150
- Warren, Charles E., development of dissolved oxygen criteria for freshwater fish, 28791
- Warren, Cline J., Netherlands poultry meat industry, 17499
- Warren, Forest G.:
farm mortgage characteristics, Jan.-June 1971 and, 1961-69, historical data, 32190
farm mortgage debt, 26357, 32193
farm mortgage lending experience of life insurance companies, Federal land banks, and Farmers Home Administration, 20090, 23132, 26358
- Warren, Marquerite Q., correctional treatment in community settings, report on current research, 22068
- Warren, Ohio, area wage survey, 23599
- Warren County, Ohio, soil survey report, 26846
- Warren County Republican Party, *see* Republican Party of Warren County.

- Warren County Republicans and Executive Committee, annual report, 24404
- Warren J. Doucet (motor vessel): collision involving Union Faith (SS) in Mississippi River, Apr. 6, 1969, marine casualty report, etc., 30563
- Wars, *see* War.
- Warsaw, Poland, ghetto uprising, proclaim April 29, 1973 as day of observance of 30th anniversary, reports, 27286-287
- Warshawsky, Isidore, piston manometer as absolute standard for vacuum-gage calibration in range 2-500 millitorr, 20619
- Warships:
- Cairo, gunboat, restore, reconstruct and exhibit, authorize, law, 19415
 - nuclear propulsion for naval warships, hearings, 19532
- Warwick, R.I., census of population and housing, 1970, census tracts, errata, 19221
- Wasatch National Forest:
- conveyance of land, report, 17167
 - designate part of land as Lone Peak Wilderness Area, report, 17170
 - land acquisition, hearings, 21350, 24932
- Washakie Basin:
- stratigraphic divisions and geologic history of Laney Member of Green River formation in Washakie Basin in southwestern Wyoming, 26495
 - stratigraphy of Washakie Formation in Washakie Basin, Wyoming, 27555.
- Washakie Formation, stratigraphy of Washakie Formation in Washakie Basin, Wyo., 27555
- Washakie Wilderness:
- change boundaries and include Stratified Primitive Area—law, 19409
 - report, 19637
- Washer, Francis E., method for determining resolving power of photographic lenses, 30472
- Washers (metal, etc.):
- automated engineering document preparation system, military standard, 15956
 - Federal item identification guide, 30118
- Washichek, Jack N.:
- early season snow report for Colorado, Jan. 1, 1973, water supply outlook, Federal-State-private-cooperative snow surveys, 22244
 - summary of snow survey measurements for Colorado and New Mexico, 25714
 - water supply outlook and Federal-State-private cooperative snow surveys for Colorado and New Mexico, 19057
- Washing machines, washers and dryers, consumer information series, 16059
- Washington, Booker T., appreciation of the man and his times, 29399
- Washington County, Utah, floods, Virgin River and Fort Pierce Wash, St. George, Washington County, Utah, 32232
- Washington County Democratic Executive Committee, *see* Democratic Executive Committee of Washington County.
- Washington County Republican Committee, annual report, 22951, 24680
- Washington, D.C., *see* District of Columbia.
- Washington Area Friends of Ab Mikva, annual report, 26010
- Washington Metropolitan Area Transit Authority:
- acquisition of mass transit bus systems in National Capital area—hearings, 15884
 - law, 19447
 - legislative history of bill, 23056
 - report, 19911
 - appropriations, 1973, law, 19362
 - appropriation 1974—authorization, report, 29995
 - law, 32016
 - report, 30977
- Washington Metropolitan Area Transit Authority—Continued
- Federal guarantees of debt obligations issued in form of bonds, etc., incurred by the transit authority, law, 16876
- Washington State:
- census of population, 1970, detailed characteristics, 16741
 - chemical composition of sedimentary rocks, 23364
 - climatological data, 18115
 - coast pilot, 26765
 - county business patterns, 29750
 - economics of thinning stagnated ponderosa pine in sapling stands in pine-grass areas of central Washington, 25233
 - electric rate book, 17465
 - feasibility of artificially recharging basalt aquifers in eastern Washington, 23340
 - Federal Research Natural Areas in Oregon and Washington, guidebook for scientists and educators, 20291
 - separates, 21607-650, 23270
 - flows of mill residues to pulp and board manufacturers, 20322
 - forest insect outbreak, 21652
 - housing characteristics for State, cities, and counties, 15565
 - generalization of stream-temperature data in Washington, 29033
 - hydrology of 4 streams in western Washington as related to several Pacific salmon species, 23349
 - income limits for sec. 221(d)(3) below-market interest rate housing and exception limits for sec. 235-236 housing, 29076
 - log production—historical perspective, 23311
 - in Oregon and Washington, relationship to economic conditions, 28963
 - pollution of interstate waters, Puget Sound, Strait of Juan de Fuca, and their tributaries and estuaries, State of Washington, Joint Federal-Washington State Pollution Control Conference, transcript of conference, 27801-801A, 29455
 - population characteristics, census, 27017
 - precipitation data, hourly, 18465
 - public investments and population changes in 3 rural Washington State towns, 20894
 - quality of ground water in basalt of Columbia River Group, 20360
 - rehabilitation facilities, national directory, 23947
 - timber harvest, 23310
 - truck inventory and use survey, 22545
 - water supply outlook and snow surveys, 19063
- Washington State Health Facilities Education & Political Action Committee, annual report, 22991
- Washington Summit, General Secretary Brezhnev's visit to United States, June 18-25, 1973, 32573
- Washoe County, Nev.:
- flood plain information, Steamboat Creek, 20130
 - floods, Steamboat Creek, 20153
- Wassall, Robert B., accuracy of automated temperature forecasts for Philadelphia as related to sky condition and wind direction, 30531
- Wasson, James A., procedures for evaluating hazards to coal mining operations from hydrocarbon reservoirs, 29606
- Waste disposal:
- disposal of cattle feedlot wastes by pyrolysis, 23189
 - injecting highly treated sewage-plant effluent into deep sand aquifer at Bay Park, N.Y., preliminary results, 17540
 - let's dump the dump, 17425

INDEX 1973

Waste disposal—Continued

Mines Bureau research programs on recycling and disposal of mineral, metal, and energy-based wastes, 25426
 minimum industrial waste load discharge requirements, economic feasibility, 28841
 national animal feedlot wastes research program, 25116
 ocean disposal practices and effects, report, 32268
 ocean dumping of waste materials, radiological, chemical, etc., prohibit—
 law, 19461
 report, 19696
 patent abstracts—
 international solid waste management, 23203
 U.S. solid waste management, 23202
 pulp and paper mill sludge utilization and disposal, methods, 31279
 rest area sewage disposal and water supply, 32285
 restore water and waste disposal grant program, reports, 24828, 26087
 rural water and waste disposal grant programs, restore—
 hearings, 26144
 report, 26235
 sewage sludge dumping in New York Bight, brief outline of study, 31302
 sewage/waste water disposal for surface ships, interface standard for shipboard systems, military standard, 27410
 Solid waste disposal—
 act—
 extend—
 hearing, 28417, 31029
 law, 30900
 reports, 26123, 26201
 text, 24867
 metropolitan housewives' attitudes toward, 20215
 solid waste handling and disposal in multistory buildings and hospitals, summary, conclusions, and recommendations, 21516
 waste disposal system for livestock wastes, demonstration, 28824
 water supply and waste disposal series, 21540
 see also Industrial wastes—Municipal wastes—Radioactive waste disposal—Waste products—Waste treatment.
 Waste glass as a flux for brick clays, 21955
 Waste not, want not, 23204
 Waste products:
 airborne tritium waste discharge from nuclear fuel reprocessing plant, observation, 29456
 bioengineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21520-522, 25126, 27498
 cattle feedlot wastes, disposal by pyrolysis, 23189
 caustic dry peeling of cling peaches to reduce water pollution, its economic feasibility, 22323
 coal waste banks, list, 31496
 development and demonstration of nutrient removal from animal wastes, 23188
 effective dry methods of separating thermoplastic films from wastepapers, 32342
 glass wool from waste glass, 26659
 industrial waste study, mercury-using industries, 20220
 Kentucky guide for classification, use and vegetative treatment of surface mine spoil, 17838
 let's dump the dump, 17425
 livestock wastes—
 aerobic treatment, 20216
 demonstration of waste disposal system, 28824
 management, bibliography, 21499
 making polyethylene more disposable, 26423

Waste products—Continued

mine drainage from coal mine mineral wastes, control, pollution abatement and monitoring, 28821
 national meat-packing waste management research and development program, 26418
 pollution implications of animal wastes, forward oriented review, 30200
 recovering plastics from urban refuse by electrodynamic techniques, 25512
 recovery of feldspar and glass sand from South Carolina waste granite fines, 16335
 relationship between animal wastes and water quality, 28837
 resource recovery—
 from raw urban refuse, 29235
 state of technology, 24974
 salvage industry, what it is, how it works, 28842
 salvage markets for materials in solid wastes, 16033
 solid waste—
 demonstration projects, proceedings symposium, 21515
 economic realities of reclaiming natural resources, report, 17431
 handling and disposal in multistory buildings and hospitals, summary, conclusions, and recommendations, 21516
 industrial, staff report, 16382
 information retrieval system, accession bulletin, 17942
 laws in U.S. territories and States, compendium, 25123
 legal compilation, statutes and legislative history, executive orders, regulations, guidelines and reports, 32266
 management—
 abstracts from literature, 20217
 available information materials, 23201, 27496, 31307
 closing the circle, 25124
 contracts, summaries, 17429
 developing local & regional plan, 31308
 list of available literature, 17430, 21517
 need for Federal agencies to improve practices, GAO report, 20333
 recycling and recovery of resources, hearings, 21383
 regional, planning study, 27497
 role of packaging, 23200
 series, 16033, 17428-431, 20216-217, 21515-517, 23200-203, 25123-142, 26423, 27496-497, 28842, 30199, 31307-309
 waste sources in Calcasieu River basin, La., evaluation report, 20210
 wood residue volumes in 125 Tennessee Valley counties, 1970, guide, 29564
 see also Agricultural wastes—Industrial wastes—Municipal wastes—Radioactive substances—Refuse—Sewage—Waste disposal—Waste treatment—Waste water.
 Waste treatment:
 activated carbon—
 adsorption, new process for treating wastewater, 16545
 treatment of raw sewage in solids-contact clarifiers, 26419
 activated sludge process, characterization, 28818
 aerobic secondary treatment of plywood glue wastes, 28809
 aerobic treatment of livestock wastes, 20216
 ammonia removal in physical-chemical wastewater treatment process, 20207
 anaerobic-aerobic ponds for beet sugar waste treatment, 26409
 anaerobic-aerobic treatment of textile wastes with activated carbon, 28825

Waste treatment—Continued

application of selected industrial engineering techniques to wastewater treatment plants, 27471
 calcium phosphate precipitation in wastewater treatment, 21498
 cannery waste treatment by anaerobic lagoons and oxidation ditch, 25107
 cannery wastewater treatment with rotating biological contactor and extended aeration, 28797
 chemical treatment of plating waste for removal of heavy metals, 28798
 chemical wastewater treatment, selected abstracts, 27833
 desulfurization of fuel oil and waste gas in Japan, recent developments, 30187
 economic feasibility study of Fayetteville, N.C. treating Fort Bragg's wastewater, 25074
 effects of agricultural waste treatment on algal bioassay response, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21522
 Federal guidelines, pretreatment of discharges to publicly owned treatment works, 31897
 field-type incinerator for human waste, theater of operations sewage treatment systems, evaluation, 28692
 fluidized bed clarification as applied to wastewater treatment, 21497
 full scale parallel activated sludge process evaluation, 20198
 hollow fiber technology for advanced waste treatment, 27460
 ion exchange color and mineral removal from kraft bleach wastes, 31283
 kraft pulping effluent treatment of refuse, state of art, 25117
 metal-finishing facilities, 30662
 Municipal Technology Branch projects through June 1972, 20202
 need to improve administration of water pollution research, development and demonstration program, GAO report, 20334
 oxidation ditch sewage waste treatment process, 21540
 oxygen diffusion in wet air oxidation processes, 23875
 phosphorus removal, bibliography, 29090, 30310
 photochemical methods for purifying water, 20206
 physical-chemical treatment of combined and municipal sewage, 27465
 pilot plant—
 demonstration of lime-biological treatment phosphorus removal method, 32261
 for tertiary treatment of wastewater with ozone, 26414
 poultry-processing facilities, 30665
 procedures for evaluating performance of wastewater treatment plants, manual, 17935
 process design manual for—
 carbon adsorption, 16547
 phosphorus removal, 16547
 suspended solids removal, 16548
 upgrading existing waste-water treatment plants, 16549
 processing and recovery of Jon Thomas, cool cat, 17428
 pulp and paper waste treatment, state-of-the-art review, 26420
 recycled waste-process water pounds, management, 28817
 research, development and demonstration projects, 1970 grants and contract awards, 24102
 revegetation augmentation by reuse of treated active surface mine drainage, 21501
 secondary treatment requirements, water quality standards digest, 25131

Waste treatment—Continued

secondary waste treatment for small diversified tannery, 28814
 sewage treatment facilities, guide to preparation of operational plans, 31286
 sludge processing for combined physical-chemical-biological sludges, 31281
 storage and treatment of combined sewer overflows, 17420
 treatment for urban wastewater reuse, evaluation, 30177
 treatment of complex cyanide compounds for reuse of disposal, 30195
 treatment of laundromat wastes, 26412
 treatment plant at Richardson, Tex., description, advantages, etc., 26901
 treatment plants, evaluation by tracer methods, 15520
 waste treatment plant construction, July 1, 1971-June 30, 1974, Federal funding available, 32272
 wastewater treatment studies in aggregate and concrete production, 26407
 water quality and waste treatment requirements on upper Holston River, Kingsport, Tenn. to Cherokee Reservoir, 31902
 water quality investigations, North Platte River basin, Torrington, Wyo.-to-Bayard, Nebr., report, 20214
 water reuse, bibliography, 30311
 water supply and sanitary waste treatment facilities for safety rest areas, guidelines for review of plans, 32281
 see also Industrial wastes—Municipal wastes—Recycle operations (chemical technology)—Waste disposal—Waste products.
 Waste water:
 activated carbon adsorption, new process for treating wastewater, 16545
 ammonia removal in physical-chemical wastewater treatment process, 20207
 analytical quality control in water and wastewater laboratories, handbook, 25788
 application of selected industrial engineering techniques to wastewater treatment plants, 27471
 biological removal of colloidal matter from wastewater, 31276
 calcium phosphate precipitation in wastewater treatment, 21498
 cannery wastewater treatment with rotating biological contactor and extended aeration, 28797
 chemical wastewater treatment, selected abstracts, 27833
 Chicago, Ill. regional wastewater management systems, Chief of Engineers Office, report, 24958
 consideration for preparation of operation and maintenance manuals for municipal wastewater treatment plants, 31896
 construction is only half the answer, municipal waste treatment, 16022
 economic feasibility study of Fayetteville, N.C. treating Fort Bragg's wastewater, 25074
 effects of agricultural waste treatment on algal bioassay response, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 21522
 electrical power consumption for municipal wastewater treatment, 31291
 end, not the means, 16023
 estimating staffing for municipal wastewater treatment facilities, 29589
 financial and institutional arrangements for wastewater management, Denver SMSA, 32264
 fluidized bed clarification as applied to wastewater treatment, 21497
 guide to preparation of operational plans for sewage treatment facilities, 31286

INDEX 1973

Waste water—Continued

- hydrodynamic flux control for waste water application of hyperfiltration systems, 28820
- initial mixing in coagulation processes, 20194
- Kraft effluent color characterization before and after stoichiometric lime treatment, 25113
- lake restoration by nutrient removal from wastewater effluent, Shagawa Lake project, 30175
- management of recycled waste-process water pounds, 28817
- manpower requirements for waste water collection systems in cities and towns up to 150,000 in population, 30683
- marine sanitation system demonstration, 30186
- physical-chemical treatment of municipal wastewater using powdered carbon, 31287
- pilot plant for tertiary treatment of wastewater with ozone, 26414
- possibility of reducing nitrogen in drainage water by farm practices, bio-engineering aspects of agricultural drainage, San Joaquin Valley, Calif., 27498
- procedures for evaluating performance of wastewater treatment plants, manual, 17935
- process design manual for—
 - carbon adsorption, 16546
 - phosphorus removal, 16547
 - suspended solids removal, 16548
 - upgrading existing wastewater treatment plants, 16549
- radioactivity in laboratory waste water, new method of controlling, 21019
- sewage/waste water disposal for surface ships, interface standard for shipboard systems, military standard, 27410
- solvent extraction status report, 27459
- state-of-the-art review of pulp and paper waste treatment, 26420
- storage and treatment of combined sewer overflows, 17420
- Waste water:
 - treatment for urban wastewater reuse, evaluation, 30177
 - treatment of complex cyanide compounds for reuse or disposal, 30195
 - treatment plant at Richardson, Tex., description, advantages, etc., 26901
 - waste sources in Calcasieu River basin, La., evaluation report, 20210
 - waste waters from petroleum and coal processing, evaluation, 21494
 - wastewater treatment studies in aggregate and concrete production, 26407
 - water reuse, bibliography, 30311
 - see also Waste disposal—Waste products.
- Waste water treatment plant operators, see Sewage plant operators.
- Wastewater, see Waste water.
- Watauga County, N.C., forest inventory statistics, Avery-Watauga County unit, western North Carolina, 29561
- Watauga Reservoir, fish inventory data, 20839
- Watch out for lead poisoning, Spanish edition, 25401
- Water:
 - acidity-alkalinity (pH), water quality standards, 20221, 20857
 - aeration of natural waters, bibliography, 32393
 - aggregate concrete mixtures with high-water-cement ratios, laboratory investigation, 20174
 - aircraft emergency procedures over water, 21093
 - Apollo experience report, potable water system, 29293
 - appearance and visibility of thin oil films on water, 26405

Water—Continued

- appraisal of ground water for irrigation in Little Falls, area, Morrison County, Minn., 25262
- artificial recharge of groundwater, bibliography, 26537
- atmospheric water resources program, Project Skywater—
 - numerical modeling of atmospheric processes, 23930
 - review of draft plans for precipitation management program for Northern plains region, 23931
- beneficial use of storm water, 23192
- bibliography on analysis of water resource systems, 25300
- brackish water clam *Rangia cuneata* as indicator of ecological effects of salinity changes in coastal waters, 30164
- case studies of desalted water for irrigation, 25297
- chemistry of aluminum in natural water (series), 23392
- Congress should reevaluate 160-acre limitation on land eligible to receive water from Federal water resources projects, 23317
- community water supply study—
 - analysis of national survey findings, 32539
 - significance of national survey findings, 32608
- conservation—
 - and full utilization of water (poster), 31775
 - Ohio, 1972 report, 27892
- deforestation effects on soil moisture, streamflow, and water balance in central Appalachians, 32343
- Delmarva Peninsula, summary report on water resources, 26056
- design characteristics for national system to store, retrieve and disseminate water data, 23338
- dispersion in surface water (series), 21722
- drinking water, a drop to drink, report on quality of our drinking water, 28789
- early season snow report for Colorado, Jan. 1, 1973, water supply outlook, Federal-State-private-cooperative snow surveys, 22244
- economics of clean water, 21492
- effects of pesticides in water, report to States, 28795
- emergency ground-water supplies in Seattle-Tacoma urban complex and adjacent areas, Wash., 25250
- energy budget at earth's surface water relations and stomatal response in corn field, 22404
- environmental quality as objective of water resources planning, 23061
- Erwin-1 production well, city of Gallup, McKinley County, N. Mex., 20348
- estimated use of water in U.S., 23335
- estimating water-shock-induced airblast from detonations in medium overlain with water, 26390
- facts and figures for planners and managers, 29009
- feasibility of cloud seeding to enhance water resources in Cassia and Oneida Counties, Idaho, and Box Elder County, Utah, 22208
- feasibility of desalting municipal water supplies in Montana, 20387
- Federal-State private cooperative surveys, Western United States, including Columbia River drainage in Canada, 22245
- Federal water laws and programs, summary digest, 29413
- Florida land and water resources study in Kissimmee-Everglades area, 27891
- fluorescent probes in detection of insecticides in water, 28816

Water—Continued

- geochemical prospecting using water from small streams in central South Carolina, 25254
- geology and ground-water characteristics of Hanford Reservation of Atomic Energy Commission, Wash., 26505
- glossary of water resource terms, 24101
- Great Smoky Mountains National Park, 23381
- ground water—
 - along Rio Bucana at Ponce, P.R., and effects of proposed floodway on ground-water quality, 23384
 - central St. Croix, U.S. Virgin Islands, 23344
 - Eugene-Springfield area, southern Willamette Valley, Oreg., 30286
 - hydrology of prairie potholes in North Dakota, 23359
 - levels in United States—
 - North-Central States, 31401
 - Southwestern States, 17549
 - pollution in South Central States, 30194
 - pollution, problems, 22205
 - quality in basalt of Columbia River Group, Washington, Oregon, and Idaho, 20360
 - resources and geology of Cook County, Ga., 23345
 - significance of ground-water chemistry in performance of North Sahara, tube wells in Algeria and Tunisia, 21742
 - Tortuguero area, P.R., as related to proposed harbor construction, 23383
- Han River basin, Korea, reconnaissance report, water resources study, 31786
- hardness effect on toxicity of several organic and inorganic herbicides to fish, 26849
- health guidelines for water and related land resources planning, development and management, 32609
- heated pipeline, some effects on ground-water flow in Alaska, 23374
- herbicide contamination of surface runoff waters, 28826
- hydrologic engineering methods for water resources development—
 - hydrologic data management, 20155
 - principles of ground-water hydrology, 20154
 - requirements and general procedures, 20154
- hydrology and effects of conservation structures, Willow Creek Basin, Valley County, Mont., 20355
- icings developed from surface water and ground water, 32199
- interstate carrier water supply systems by States and EPA regions, inventory, 31296-297
- inventory of soil and water conservation needs, 1967, basic statistics, 27888
- Land and water conservation fund act, amend—
 - hearings, 15908, 21243
 - law, 15638
 - reports, 28462, 31084
- large groups in boundary waters canoe area, their numbers, characteristics, and impact, 17515
- low water volume enzyme deactivation of vegetables before preservation, 31278
- mathematical simulation of turbidity structure within an impoundment, hydraulic laboratory investigation, 25097
- mercury content in fish, sediment and water in Lake Oahe, S. Dak., preliminary investigation, 17934
- methods of estimating half-life of biological activity of toxic chemicals in water, 20780
- mineral and water resources of North Dakota, 30045
- model for water metabolism in organism, USSR study, 26579

Water—Continued

- National Weather Service and water management, 30580
- new directions in U.S. water policy, summary, conclusions and recommendations, 30575
- new method for generating waterdrops of specified mass, 27737
- 1972 OBERs projections economic activity in United States, 24103
- nutrient survey of surface waters in southern Florida during wet and dry season, 23354
- operation and maintenance bulletin, 19053
- organic substances in water (series), 27575
- origin of mineralized water in Precambrian rocks of upper Paraíba basin, Paraíba, Brazil, 16112
- Pacific Northwest—
 - current discharge at selected stations, 18190
 - new reports by Geological Survey, list, 18698
 - water quality data for selected sites, Oct. 1971-Sept. 1972, annual summary, 23327
 - water resources—
 - summary, 18745, 23355
 - weekly runoff report, 18746
- PCB in water, bibliography, 26536
- people, land and water (address), 23927
- pesticides in aquatic environment, 16575
- physical conditioning through water exercises, 31772
- plant analysis for nutrient assay of natural waters, 28796
- polarographic determination of NTA in natural or waste waters, 30191
- polices for future, final report to President and to Congress, 30577
- preliminary results of measuring H₂O content in atmosphere of Mars and Mars-3 automatic space station, USSR study, 27649
- primary-zone water injection on pollutants from combustor burning liquid ASTM A-1 and vaporized propane fuels, effect, 29294
- public works appropriations, 1973, law, 19363
- public works appropriations, 1974—
 - hearings, 27186, 31130, 32134
 - law, 32015
 - reports, 29993, 30989
- quality, Hubbard Creek watershed, Tex., records, 16111
- quality management planning in United States, 23205
- rapid detection system for organophosphates and carbamate insecticides in water, 23183
- raw, development of method for NTA analysis, 20196
- reclamation era, water review quarterly, 18848
- records of wells in Harris County, Tex., 23369
- replenishing underground water supplies on farm, 16601
- research in water supply and water pollution, 22204
- resource developments, feasibility investigations—
 - law, 19502
 - reports, 19683, 32056
- resources—
 - California—
 - data, 23385, 31396
 - reports, list, 32363
 - Colorado, data, 23386
 - conservation, code of Federal regulations, 27511, 28873
 - cooperative research and training, 1971 annual report, 23465

INDEX 1973

Water—Continued
resources—Continued
Florida—
data, 23387-388
southern, surface water, 31397
Hawaii and other Pacific areas, 23389
Hempstead, Lafayette, Little River,
Miller, and Nevada Counties, Ark.,
30285
Idaho, data, 23390, 31398
investigations along proposed trans-
Atlantic pipeline routes, 21739
Kansas, data, 31399
Mississippi, development, 32243
Missouri, investigation, 21740
Mount Rushmore National Memorial,
S. Dak., 29032
New Mexico—
data, 32365
development by Corps of Engineers,
28778
omnibus, authorizations, 1972, hearings,
15930, 21382
planning act, amend—
laws, 16900, 30926
reports, 28368, 28481
regions and subregions for national
assessment of water and related land
resources, 20876
research act, research reports, 32392
research catalog, project summaries and
lists of subjects, performing organiza-
tions, and supporting organizations,
30309
Santa Fe County, N. Mex., proposal for
study, 23368
selected water resources abstracts (peri-
odical), 18901
soil conservation (periodical), 18913
summary analysis, summary and analy-
sis of public response to proposed
principles and standards for planning
water and related land resources and
draft environmental statement, 17937
Tradewater River basin, Ky., effects of
coal mining, 25261
water resources review (periodical),
19054
Western New York river basins, Oswego
River basin, USDA report, 31921
workshop, proceedings, 16466
rest area sewage disposal and water sup-
ply, 32285
river basin authorizations and related
water resource projects, 32154
role in urban planning and management,
23332
rural environmental assistance and water
bank programs, report, 27126
rural water and sewer grant program,
veto, 26058
rural water and waste disposal grant pro-
grams, restore—
hearings, 26144
reports, 26087, 26235
safe drinking water—
act—
hearing, 27222
reports, 19862, 29956
hearings, 15754
saline water—
catalog of research projects, 31494
conversion—
act, legislative history, 23469-470,
25296
program, appropriations, 1974, au-
thorize, law, 30023
summary report, 26534
program—
appropriations, 1974, authorize—
hearing, 31147
reports, 28342, 30967, 31072
authorization, hearing, 26166
research and development progress re-
ports, 16140-141, 17564, 20385-388,
25297

Water—Continued
sanitary survey of drinking water systems
on Federal water resource developments,
pilot study, 31899
scientific information services in water
resources agency (paper), 23942
selected specific rates of reactions of tran-
sients from water in aqueous solution
hydrated electron, 29313
soil and water conservation districts,
status of organization by States, etc.,
23982
solar reflectance of monolayer covered and
clean water surfaces, 23938
spatial-temporal structure of light im-
pulses in water, USSR study, 16207
State water laws, summary digest, 30576
storage analyses for water supply, hydro-
logic analysis and interpretation, 26511
supply—
aquatic and wetland plants of south-
western United States, 17432
Colorado River, watershed conditions
affecting, 18945
Nevada, fall summary, 29507
Nuclear Rocket Development Station at
AEC's Nevada test site, 17547
outlook—
Arizona, 19056
Colorado and New Mexico, 19057
Idaho, 19058
Montana, 19059, 20778
Nevada, 19060
Oregon, 19061, 20779
Utah, 19062
Washington State, 19063
western United States—
including Columbia River drainage
in Canada, 19064
water year, 19066
Wyoming, 19065
proposed system for Arizona telemetry
of mountain snow pack and related
data, 17893
water supply and plumbing cross-con-
nections, hazards in household and
community systems, recommended con-
trol practices, 16576
water supply and sanitary waste treat-
ment facilities for safety rest areas,
guidelines for review of plans, 32281
western United States, fall summary,
23980
surface water—
Barrow, Alaska, investigations, 32364
Duval and Nassau Counties, Fla., 23376
quality, United States, 16116, 20363,
21743, 31402-404
supply, 1966-70, United States, 16117,
20364, 21744, 30288, 31405-406
survey and water supply forecasting, SCS
national engineering handbook, 16485
techniques of water-resources investiga-
tions, 26511, 27574, 29031
toward philosophy of planning, attitudes
of Federal water planners, 27493
tree growth and water use response to
thinning in 47-year-old Lodgepole pine
stand, 31366
urban storm water runoff, selected ab-
stracts, 21502
urban water planning, bibliography, 16147
use of water on Federal irrigation projects,
water use research study, Boulder Can-
yon project, All-American Canal System,
Coachella Division, Calif., report, 23944-
945
user's manual for three-dimensional heated
surface discharge computations, 23190
water and industry, 25260
water and land resource accomplishments,
Federal reclamation projects, 16469,
17817
water and waste-water laboratories, ana-
lytical quality control, handbook, 25788
water bank program—
background information, 22322
report, 26221

- Water—Continued
 water, diseases, and man, USSR study, 17613
 water in urban environment—
 erosion and sediment, 16110
 series, 23332, 29009
 water infiltration control to achieve mine
 water pollution control, feasibility
 study, 26413
 water information series report, 23382
 water management and sediment control
 for urbanizing areas, 17846
 water-resources bulletins, Commonwealth
 of Puerto Rico, 23383-384
 water on planets, USSR study, 20459
 water resources of Tucson basin (series),
 17548
 water spectrum, issues, choices, actions,
 (periodical), 19055
 water supply and waste disposal series,
 21540
 water supply papers, 16112-117, 17547-
 550, 20355-364, 21741-744, 23392-393,
 25261-262, 26512, 27575, 29032-33,
 30285-288, 31400-406
 what about water, conservation, resources,
 etc., 23025
 what is water? description etc., 16118
 yield characteristics of three small water-
 sheds in Black Hills of South Dakota,
 28967
see also Hydrology—Sea water—Waste
 water—Waves—*also* headings beginning
 Water.
 Water birds:
 aerial surveys of waterfowl production in
 North America, 20782
 hunting, possession, transportation, and
 importation, 1972-73, Federal regula-
 tions, 20781
 status report, 29516A
 water bank program, 22322
 Water boiler nuclear reactors, *see* Reactors
 (atomic).
 Water carriers:
 Army water transport units, field manual,
 19163
 chemical data guide for bulk shipment by
 water, 25956
 Interstate carrier water supply systems by
 States and EPA regions, inventory,
 31296-297
 revenue and traffic of class A and B water
 carriers, 21836, 30324
 segregated ballast VLCCs, economic and
 pollution abatement analysis, 30403
 transport statistics, 23508
 Water distributors, *see* Tanks.
 Water levels:
 Everglades National Park, analysis of
 water level data, 20340
 Great Lakes, report, hearing, 28429
 ground water, United States—
 North Central States, 31401
 Northwestern States, 17549
 Water moderated reactors, *see* Reactors
 (atomic).
 Water plant operator, *see* Water-pump man.
 Water plants, *see* Aquatic plants.
 Water pollution:
 action for environmental quality, stand-
 ards and enforcement for air and water
 pollution control, 28787
 aerial surveillance spill prevention system,
 25105
 feasibility demonstration, 25127
 aspects of street surface contaminants,
 20203
 assessing water pollution potential of man-
 ufactured products, 27472
 biological problems, 20734
 caustic dry peeling of cling peaches to re-
 duce water pollution, its economic fea-
 sibility, 22323
 central Missouri River drainage basin,
 cooperative State-Federal report on
 water pollution, 17806
 Water pollution—Continued
 comprehensive program for water pollution
 control for Minnesota River Basin,
 17812
 control activities of Environmental Pro-
 tection Agency, 21284
 controls, cost analysis bibliography, 27494
 control of mercury pollution in sediments,
 20192
 controlling thermal pollution in small
 streams, 17423
 convention on prevention of marine pol-
 lution, 31051
 curriculum activities guide to water pol-
 lution and environmental studies—
 activities, 16573
 appendices, 17929
 data acquisition systems in water quality
 management, 31306
 decision of Florida District Court in case
 of American Waterways Operators, Inc.,
 et al., v. Askey, analysis, 17296
 economic implications of water pollution
 abatement in family farm livestock pro-
 duction, 21413
 economics of clean water, 21492
 effect of ionizing radiation on organism,
 problem of effect of radioactive water
 pollution on reproduction of commercial
 fishes, 26984
 effects of pesticides in water, report to
 States, 28795
 enforcement of Refuse act, report, 16972
 environmental applications of advanced
 instrumental analyses, assistance proj-
 ects, fy 69-71, 28803
 estuarine and marine pollution, selected
 studies, bibliography, 20738
 estuarine pollution, bibliography, 27591
 fate of radioactive contaminants in water,
 20735
 Federal water pollution control act—
 amend—
 law, 15658
 hearing, 24960
 reports, 17015, 17199, 19612, 19679
 amendments of 1972, highlights, 25119
 implementation, hearing, 32092
 veto, 21302
 fish kills caused by pollution in 1971, an-
 nual report, 23195
 Grand-Charlton drainage basins, coopera-
 tive State-Federal report on water pol-
 lution, 17804
 ground water pollution—
 problems, 22205
 South Central States, 30194
 impairment of flavor of fish by water pol-
 lutants, 26400
 in-process pollution abatement—
 metal-finishing facilities, 30661
 poultry-processing facilities, 30663
 international convention for prevention of
 pollution of sea by oil 1954, implement
 1969 and 1971 amendments, report,
 19664
 Interstate waters—
 Mississippi River, St. Louis metropoli-
 tan area, 16465
 Missouri River, conference, proceedings,
 16464
 Puget Sound, Strait of Juan de Fuca,
 and their tributaries and estuaries,
 State of Washington, Joint Federal-
 Washington State Pollution Control
 Conference, transcript of conference,
 26801-801A, 29455
 investigation of nitrate problem in Run-
 nels County, Tex., ground water, etc.,
 31289
 James River drainage basin, co-operative
 State-Federal report on water pollution,
 17810
 Kansas River basin, report, 20739
 laws relating to water pollution control
 and environmental quality compilation,
 26178

INDEX 1973

Water pollution—Continued

- legislative history of Water pollution control act, amendments, 1972, with index, 26288
- lower Savannah River and its tributaries, S.C. and Ga., conference on pollution, proceedings, 26800
- marine pollution, convention on prevention from dumping of wastes and other matter at sea, 24892
- marine protection, research and sanctuaries act—
 - highlights, 27457
 - law, 19461
 - report, 19696
- mercury discharges and enforcement of Refuse act of 1899, hearings, 24859
- Mississippi River water pollution investigation, St. Louis metropolitan area, 17802
- Missouri-Souris development area water pollution investigation, cooperative State-Federal report on water pollution, 17809
- movement and dispersion of soluble pollutants in Northeast Cape Fear Estuary, N.C., 16114
- National Study Commission plan of study, 27363
- navigable waters—
 - Galveston Bay and its tributaries, conference proceedings, 31294
 - Pearl Harbor and its tributaries, Hawaii, conference proceedings, errata, 16028
- need to improve administration of water pollution research, development and demonstration program, GAO report, 20334
- neutron activation analysis of bottom sediments, 26408
- numerical thermal plume model for vertical outfalls in shallow water, 27469
- ocean disposal practices and effects, report, 32208
- oil pollution research newsletter, 18727
- Oregonians restore Willamette, joint citizen, State & Federal efforts clean river waters, 23198
- Ossage (Marais des Cygnes)-Gasconade drainage basins, co-operative State-Federal report on water pollution, 17808
- pollution as result of fish cultural activities, 27450
- pollution affecting—
 - Las Vegas Wash, Lake Mead, and Lower Colorado River, Nevada, Arizona, and California, report, 20211
 - shellfish harvesting in Galveston Bay, Tex., report, 20872A
 - water quality of Cheyenne River system, western South Dakota, report, 20213
- pollution implications of animal wastes, forward oriented review, 30200
- polymer film overlay system for mercury contaminated sludge, 20219
- potential of manufactured products—
 - chemical ingredient listing, 27475
 - product list, 27474
 - summary, 27473
- President's Water Pollution Control Advisory Board, Honolulu, Hawaii, report, 28838
- President's water pollution control and air quality advisory boards, 16027
- pretreatment of poultry processing wastes, 30664
- projects of Agricultural and Marine Pollution Control Section, 26417
- pyrographic gross characterization of water contaminants, 28819
- rehabilitation of brine-polluted aquifer, 21495
- research, development and demonstration projects, 1970 grants and contract awards, 24102
- research in water supply and water pollution, 22204

Water pollution—Continued

- restore water and waste disposal grant program, reports, 24828, 26087
- role of soils and sediment in water pollution control, reactions of nitrogenous and phosphatic compounds, with soils and geologic strata, 17936
- segregated ballast VLCCs, economic and pollution abatement analysis, 30403
- selected irrigation return flow quality, abstracts, 20205, 32263
- South Platte River drainage basin, co-operative State-Federal report on water pollution, 17811
- temporary partial exemption for issuing of permits to discharge waste into navigable waters, hearings, 15772
- upper Missouri River drainage basin, co-operative State-Federal report in water pollution, 17807
- waste treatment—
 - metal-finishing facilities, 30662
 - poultry-processing facilities, 30665
- water infiltration control to achieve mice water pollution control, feasibility, study, 26413
- water pollution and—
 - associated effects from street salting, 30182
 - Caspian Sea fishing industry, USSR study, 17629
 - rule of law (address), 21519
- water pollution control research series, 17432-441, 20219-220, 21520-523, 25126-127, 27498, 30200, 31310, 32273
- water pollution series, 17804-812, 20739
- water quality and waste treatment requirements on upper Holston River, Kingsport, Tenn. to Cherokee Reservoir, 31902
- water quality investigations, North Platte River basin, Torrington, Wyo.-to-Bayard, Nebr., report, 20214
- water resources work-shop, proceedings, 16466
- workbook of thermal plume prediction submerged discharge, 20187
- Yellowstone River drainage basin, cooperative State-Federal report on water pollution, 17805
- see Industrial wastes—Municipal wastes—Oil spills.
- Water Pollution Control Advisory Board, organization, duties, etc., 16027
- Water power, publications, price list, 26797
- Water Programs Office, technical studies reports, TS series, 31900-902
- Water properties:
 - biota and chemistry of Piceance Creek, effects of chemical variations in aquatic environments, 28790
 - observations of currents and water properties in Puget Sound, 26767
- Water-pump man, fluoridation engineering manual, 31898
- Water purification:
 - compounds, military standards, 25018
 - cost analysis of water pollution control, bibliography, 27494
 - evaluation of treatment for urban wastewater reuse, 30177
 - photochemical methods for purifying water, 20206
 - rehabilitation of brine-polluted aquifer, 21495
- see also Waste treatment—Waste water.
- Water quality:
 - characteristics of water quality and streamflow, Passaic River basin above Little Falls, N.J., 31400
 - chemical quality of water in Tucson basin, Ariz., 17548
 - Colorado River basin water quality control project, near Yuma, Ariz., 22202
 - committee on water quality in St. John River basin, agreement with Canada, 22270

Water quality—Continued
 community water supply study, significance of national findings, 32808
 correlated studies of Vancouver Lake-water quality, prediction study, 21500
 criteria data book, 21523
 data acquisition systems in water quality management, 31306
 economic benefits from improvement in water quality, 25122
 economics of ion exchange technology applied to municipal water quality improvement, 16141
 effects of coal mining on water resources of Tradewater River basin, Ky., 25261
 environmental assessments for effective water quality management planning, 32250
 flow into stratified reservoir, 17417
 ground water quality in basalt of Columbia River Group, Washington, Oregon, and Idaho, 20360
 hydraulic testing and sampling of holes RB-E-01 and RB-D-01, Project Rio Blanco County, Colo., 23347
 hydraulic tests in hole UAe-1, Amchitka Island, Alaska, 23348
 hydrolab IIA portable water quality analyzer, 22112
 hydrologic engineering methods for water resources development, water quality determinations, 28767
 improving water quality management planning in nonmetropolitan areas, 28830
 inexpensive water sampler, 23287
 influence of log handling on water quality, 25108
 investigation into recreational water quality, water quality criteria data book, 21523
 investigations, North Platte River basin, Torrington, Wyo.-to-Bayard, Nebr., report, 20214
 management planning in United States, 23205
 measurement and instrumentation, proceedings of symposium, 20737
 Municipal Technology Branch projects through June 1972, 20202
 Pacific Northwest, data for selected sites, annual summary, 23327
 pollution affecting—
 Las Vegas Wash, Lake Mead, and Lower Colorado River, Nevada, Arizona, and California, report, 20211
 shellfish harvesting in Galveston Bay, Tex., report, 20872A
 water quality of Cheyenne River system, western South Dakota, report, 20213
 preimpoundment study—
 Carters Lake, 31901
 West Point Lake, Ga., 31900
 programs, cost effectiveness, 31266
 quantitative methods for preliminary design of water quality surveillance systems, 23199
 records, Hubbard Creek watershed, Tex., 16111
 relationship between animal waste and water quality, 28837
 remote sensing of water quality, 23371
 salinity control, interim report for water supply and water quality control study, Brazos River, basin, Tex., 28840
 sanitary survey of drinking water systems on Federal water resource developments, pilot study, 31899
 selected irrigation return flow quality, abstracts, 20205, 32263
 simplified mathematical modeling of water quality, 31305
 standards—
 acidity-alkalinity (pH), 20221, 20857
 antidegradation, 20858
 bacteria criteria, 20222, 20859

Water quality—Continued
 standards—Continued
 criteria digest—
 disinfection, 20223, 20860
 dissolved solids, 25128
 nitrates, 25129
 oil, 21524
 phosphates, 21525
 radiation, 20228
 settleable solids, 20229
 sampling and analytical methods, 20231
 temperature, 21526
 turbidity, 20230
 digest—
 antidegradation, 25130, 28845
 general streams use designations, 20225
 secondary treatment requirements, 25131
 dissolved oxygen criteria, 20224, 20861-862
 guidelines for developing or revising, 21509, 28828
 mercury and heavy metals, 20226, 20863
 mixing zones, 20227, 20864
 phosphates criteria, 20870
 nitrates, 20865
 oil criteria, 20866
 questions and answers, 20209, 20871-872
 summary—
 Iowa, 25132
 Kansas, 16034
 Missouri, 16035
 Nebraska, 16036
 temperature, 20873
 steam-electric plant air and water quality control data, 27508
 stream quality preservation through planned urban development, 30198
 use of naturally impaired water, bibliography, 27595
 water quality and waste treatment requirements on upper Holston River, Kingsport, Tenn. to Cherokee Reservoir, 31902
 water quality and water source investigations, Missouri River and Kansas River, Kansas City, Kans., report, 28839
 water quality standards digest, compilation of Federal/State criteria, 20221-231, 21524-526, 25128-131, 28845
 water quality standards (series), 16034-36, 25132
 water resources workshop, proceedings, 16466
 Water Resources Council:
 coordination directory for planning studies and reports, 25806
 memorandum to Water Resources Council, findings and recommendations of Special Task Force, 20875
 public works appropriations, 1973, law, 19363
 public works appropriations, 1974—
 hearings, 27186
 law, 32015
 reports, 29993, 30989
 publication list, 22302
 Water Resources Division:
 bulletin of training, July 1972-June 1973, 23391
 report for California, bibliographic lists, 32363
 Water resources research catalog, 30309
 Water Resources Research Office:
 cooperative water resources research and training, 1971 annual report, 23465
 orientation and briefing on programs for House, members, hearing, 27217
 research reports, 32392

INDEX 1973

Water Resources Scientific Information Center:
 selected water resources abstracts (periodical), 18901
 WRSIC series, 16142-147, 23478, 25300, 26536-538, 27591-595, 29089-90, 30310-311, 32393
 Water reuse, bibliography, 30311
 Water rights, State water-rights laws and related subjects, supplemental bibliography, 15479
 Water supply, *see* Water.
 Water systems:
 central water and sewerage systems (ownership and organization), 32380
 management workshop, lecture notes, 17818, 23946
 plastic pipe for interior and exterior cold water systems, 31242
 potable water system, Apollo experience report, 29293
 sanitary survey of drinking water systems on Federal water resource developments, pilot study, 31899
 strength development and reaction products in lime-montmorillonite-water systems, 31325
 water resource systems, analysis, bibliography, 25300
 water supply and plumbing cross-connections, hazards in household and community systems, recommended control practices, 16576
 Water temperature:
 effects on growth and reproduction of aquatic snails, 27452
 generalization of stream-temperature data in Washington, 29033
 low flows and temperatures of streams in Seattle-Tacoma urban complex and adjacent areas, Wash., 25249
 streams—
 Delta-central Sierra subregion, 23394
 San Francisco Bay subregion, 23395
 water quality standards, 20873
 water quality standards criteria digest, 21526
 Water vapor:
 heat and water vapor exchange between water surface and atmosphere, 31284
 vertical transport of water vapor, ozone and aerosols by thunderstorms observations, 27800
 Waterborne exports and general imports, 19012
 Watercraft, *see* Boats.
 Waterfowl, *see* Water birds.
 Waterfronts:
 security of vessels and waterfront facilities, 16825
 urban river, staff proposal for waterfront development in District of Columbia, 23719, 25562
 Watergate hearings, *see* Presidential Campaign Activities, Select Committee on.
 Watergate investigation, 31159
 Waterloo, Iowa:
 area wage survey, 26618
 housing and education, civil rights aspects, walk together children, 24257
 Watersheds:
 annual streamflow summaries from 4 subalpine watersheds in Colorado, 23276
 computer simulation of snowmelt within Colorado subalpine watershed, 28966
 cost analysis of clearing ponderosa pine watershed, 28946
 evapotranspiration and watershed research as related to riparian and phreatophyte management, abstract bibliography, 25826
 meteorological criteria for extreme floods for four basins in Tennessee and Cumberland River watersheds, 30519

Watersheds—Continued
 morphometry of 3 small watersheds, Black Hills, South Dakota, and some hydrologic implications, 21673
 projects, miscellaneous, hearings, 19740
 water yield characteristics of three small watersheds in Black Hills of South Dakota, 28967
 watershed protection and flood prevention act, law, 16914
see also names of rivers, etc.
 Waterways:
 Ports and waterways safety act—
 amend, hearings, 30015
 law, 16872
 Waterways Experiment Station:
 instruction reports, 28779
 miscellaneous papers, 20169-170, 21478-480, 25094-95, 26386-389, 28780-782, 30166-167, 31258-261
 research reports, 20171-172, 23178, 25096-97, 28783
 technical reports, 17408-409, 20173-177, 21481, 23179-181, 25098-102, 26390-394, 27443-446, 28784-786, 30168-169, 31262-264, 32244
 Waterweed, aquatic pests on irrigation systems, identification guide, 23915
 Watson, Allan, illustrated catalog of Neotropical Arctiinae types in United States National Museum (Lepidoptera; Arctidae), 26825
 Watson, Edgar, Jr., selected specific rates of reactions of solvated electron in alcohols, 17736
 Watson, Gordon K., effect of aging at 1040° C (1900° F) on ductility and structure of tantalum alloy, T-111, 20615
 Watson, Ian C., feasibility of desalting municipal water supplies in Montana, 20387
 Watson, Richard W., card-gap and projectile impact sensitivity measurements, compilation, 30418
 Watt, Richard F., some soil phases in Missouri Ozarks have similar site indexes for oaks, 28960
 Watts, Gwendolyn M., apparent consumption of industrial explosives and blasting agents in United States, 23633
 Waugh, John G., hydroballistics modeling, 25664
 Waupaca County Republican Party, annual report, 24372
 Waushara County Republican Women Campaign Committee, annual report, 22963
 Wave filters, *see* Filters and filtration.
 Wave lengths, approximations for neutron emission spectra from proton collisions between 20 and 500 MeV on nuclei of A-12, 31653
 Wave Propagation Laboratory:
 collected reprints, 20233
 NOAA technical memorandum, ERL-WPL series, 30526
 NOAA technical reports, ERL-WPL series, 23803, 25623, 30540
 Waveguides:
 engineering feasibility study of communications via subterranean waveguide, 22642
 millimeter attenuation and reflection coefficient measuring system, 17739
 prospectus for development of liquid-crystal waveguides, 23885
 Waves:
 absorption of SHF waves by plasma at upper hybrid frequencies, study, 22440
 applications of remote sensing techniques to buoy-based environmental data gathering, 30526
 artificial stimulation of ULF waves in ionosphere and magnetosphere, magic mode, investigations, 29436
 computer simulation of slamming and other wave-induced vibratory structural loadings on ships in waves, further studies, 22220

Waves—Continued
 finite-amplitude, shallow water-waves of periodically recurring form, 23150
 instabilities and anomalous dissipation of parametric plasma in strong electromagnetic field of pumping wave, USSR study, 31534
 model A-2/Q-6 wave recording system, 17783
 nonthermal emission of magnetoactive plasma in field of superhigh frequency pumping waves, 22455
 optical measurement of capillary wave structure, 30540
 penetration of waves into plasma at frequencies close to lower hybrid frequency, 22460
 program scores, ship structural response in waves, 22219
 reflection characteristics of screen wave absorbers, 28783
 riprap stability on earth embankments tested in large- and small-scale wave tanks, 20103
 telecommunications via certain guided wave structures, 27063
 theory of transformation of surface waves into longitudinal oscillations in surface layer of plasma wave-guide, 21002
 theory of wave interactions in beam-plasma systems in magnetic fields, 21010
 transmission through rock structures, hydraulic model investigation, 25096
 wave climatology for U.S. coastal waters, 20102
 WAVE, computer program for one-dimensional stress wave analysis in time-dependent inelastic rock using generalized Voigt model, 23640
 wave damping effects of fibrous screens, hydraulic mode, investigation, 20172
 wave problems in hydroacoustics, USSR study, 23513
 wind wave studies, 27850
see also Elasticity—Electroacoustic waves—Electromagnetic radiation—Radio waves—Seismology—Shock waves.
 Wax, *see* Waxes.
 Waxes:
 Federal item identification guide, 32171
 postharvest wax-fungicide treatments of nectarines, peaches and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
 Wayne, Mich., flood plain information, Lower River Rouge and vicinity, 23167
 Wayne County, Mich., flood plain information, Upper River Rouge, Minnow Pond Drain, Bell Branch and Tarabusi Creek, 23175
 Wayne County, W. Va.:
 flood plain information—
 Big Sandy River, 25077
 Ohio River, 32215
 floods—
 Big Sandy River, 25065
 Ohio River, past and future, Cabell County, Wayne County, West Va., 32240
 Waynesboro Republican Committee, annual report, 22983
 Ways and Means Committee, House:
 calendar, 18558
 committee prints, 15788, 17106-111, 17113, 17252, 19799, 24880-883, 26187, 26190-191, 26188A, 27247-248, 27250-252, 28435, 29938-943
 hearings, 15786-787, 15789, 17114, 19800, 23027-28, 24879, 26188, 27249, 29944, 31042, 32095-96
 investigations and studies, authorization and expenses, report, 26114
 legislative record, 92d Congress, 24880
 legislative review activity, 92d Congress, report, 21193

Ways and Means Committee, House—Con.
 reports, 15673, 15686, 16968, 19647-648, 19650, 19657, 19659-660, 19673, 19681, 21193, 24825, 26125, 28369 29854-856, 29865, 30980-981, 30984-988, 32065
 We Care Committee, annual report, 28283
 We the Americans (series), 16795-796, 28201-202, 29790-792, 30858-863, 31972
 We the American elderly, 30861
 We the American foreign born, 30863
 We the American women, 28201
 We, the Americans, Mexican Americans, Puerto Ricans, Cuban Americans, Americans from Central America, Americans from South America, 30858
 We the Americans, work we do, 30860
 We, the Asian Americans, 31972
 We the black Americans, 16796
 We, the first Americans, 30862
 We, the Youth of America, 29792
 We want you to know about diagnostic X-rays, 31342
 We want you to know about FDA, 17492
 We want you to know about labels on foods, 31343
 We want you to know about labels on medicines, 31344
 We want you to know about microwave oven radiation, 32303
 We want you to know what we know about adverse reactions to medicines, 17494
 We want you to know what we know about cooking utensils, 25195
 We want you to know what we know about cosmetics, 25196
 We want you to know what we know about drugs for food-producing animals, 30244
 We want you to know what we know about impact-resistant eyeglass lenses, 21599
 We want you to know what we know about medicines without prescriptions, 25197
 We want you to know what we know about nutrition labels on food, 31345
 We want you to know what we know about prescription drugs, 25198
 We want you to know what we know about safe use of eye cosmetics, 21600
 We want you to know what we know about salmonella and food poisoning, 21601
 Weak thermal points or thermal bridges, 27728
 Wealth, Mexican-American education in Texas, function of wealth, 15600
 Weapons:
 acquisition of weapons systems, hearings, 15659, 17227, 32020
 aircrew protection requirements, nonnuclear weapons threat, military standard, 20065, 23111
 antimissile and space defense weapons, USSR study, 17597
 arms control in hydrospace, legal aspects, 17827
 better management needed over decisions to start full-scale development of minor weapons systems, GAO report, 17523
 detection systems to avoid air piracy, hearing, 23048, 26170, 27221
 Europe and nuclear weapons, USSR study, 25334
 limitation of strategic offensive weapons, agreement—
 law, 19383
 reports, 17007, 19618, 21170
 text, 25749
 nuclear weapons, effects and shelter, 21393
 status of procurement of F-14 weapon system as of June 1, 1972, GAO report, 25244
 weapon control systems mechanics (electronics repairman), Air Force notice, 16637
 weapon system oriented items, defense integrated materiel management manual for consumable items, 30089

INDEX 1973

- Wear, Jerrold D., effects of fuel nozzle design on performance of experimental annular combustor using natural gas fuel, 20620
- Wear, *see* Friction.
- Wearing apparel, *see* Clothing.
- Wearing rings, Federal item identification guide, 30119
- Weather, Terry M., NASA contributions to fluidic systems, survey, 17707
- Weather:
- beating heat-wave weather, 16408
 - daily weather and river bulletin, Albuquerque, N. Mex., 18204
 - daily weather maps, weekly series, 18205
 - fire weather and behavior of Little Sioux fire, 16084
 - maps, synoptic, Northern Hemisphere, 18202
 - mariners weather log (periodical), 18610
 - polyurethane shroud designed to prevent TACAN outages, 24043
 - review, monthly, 18652
 - service C schedules, 27502, 28853
 - U.S. and foreign coastal radio stations accepting ships' weather observations, 31748
 - substation observations, 26782
 - weather and crop bulletin (periodical), 19081
 - weather radar investigations on artillery test conducted in Panama Canal Zone, 20973
 - weather radar manual, national network observing and reporting procedures, 23866
 - weather service observing handbooks, 17787, 20721, 26782
 - world weather program, plan for 1974, fiscal year, 29820
 - see also* Climate—Meteorology—Weather forecasts.
- Weather control:
- characteristics and operation of cloud condensation nuclei collection/detection/recording instrument, technical manual, 22416
 - feasibility of cloud seeding to enhance water resources in Cassia and Oneida Counties, Idaho, and Box Elder County, Utah, 22208
 - fog dissipation techniques for emergency use, 20975
 - helicopter downwash applied to fog clearing, status summary, 22422
 - high plains precipitation enhancement research project, preliminary planning, document, 30201-202
 - iterative method for saturation adjustment, 22414
 - military weather modification, prohibit, hearings, 19971
 - modification of Great Lakes winter storms, 31722
 - Project Skywater atmospheric resources program, conference proceedings—numerical modeling of atmospheric processes, 23930
 - review of draft plans for precipitation management program for Northern Plains Region, 23931
 - Reclamation's Great Plains weather modification program (paper), 23941
 - weather modification—precipitation inducement, bibliography, 27593
 - summary report, 1969-71 fiscal years, 29395
- Weather forecasts:
- accuracy of automated temperature forecasts for Philadelphia as related to sky condition and wind direction, 30531
 - adequacy of national weather service's hurricane and flood warning system, hearings, 19770
- Weather forecasts—Continued
- Agnes floods, post-audit of effectiveness of storm and flood warning system of National Oceanic and Atmospheric Administration, report, 26676
 - application of meteorological satellite data in analysis and forecasting, supplement, 29382
 - average monthly weather outlook (periodical), 18020
 - forecasters handbook, 20718
 - key to aviation weather reports, 22154
 - marine weather services, 22155
 - charts—
 - Alaskan waters, 29415
 - Cape Hatteras, N.C. to Savannah, Ga., 29416
 - Eastport, Maine to Montauk Point, N.Y., 29417
 - Eureka, Calif. to Canadian border, 29418
 - Eureka to Point Conception, Calif., 29419
 - Great Lakes—
 - Huron, Erie and Ontario, 29420
 - Michigan and Superior, 29421
 - Hawaiian waters, 29422
 - Manasquan, N.J. to Cape Hatteras, N.C., 29423
 - Mexican border to Point Conception, Calif., 29424
 - Montauk Pt., N.Y. to Manasquan, N.J., 29425
 - Morgan City, La. to Apalachicola, Fla., 29426
 - Morgan City, La. to Brownsville, Tex., 29427
 - Savannah, Ga. to Apalachicola, Fla., 29428
- national east coast winter storms operations plans, 20687
 - national severe local storms operations plan, 25616
 - NOAA VHF radio weather, 23863
 - numerical weather prediction activities, National Meteorological Center, 22156, 30581
 - soaring meteorology of forecasters, 20718
 - techniques for analysis and forecasting of tropical cyclone intensities from satellite pictures, 17773
 - two-dimensional short-range fog forecast model, 22413
 - use of model output statistics (MOS) to estimate daily maximum temperatures, 30536
- Weather modification, *see* Weather control.
- Weather Modification Program Office, NOAA technical report ERL-WMPO series, 29392, 31725
- Weather observers, *see* Meteorological observers.
- Weather satellites, *see* Satellites.
- Weather stations:
- air temperature at remote site from official weather station records, 23292
 - cooperative meteorological program—agreement with Bahamas, 27910
 - at Choluteca, agreement with Honduras, 16516
 - oceanographic observations, North Atlantic Ocean Station DELTA, 28224
 - SAWRS [Supplementary Aviation Weather Reporting Stations] surface observations, 17787, 20721
 - 31-day battery-operated recording weather station, 23285
- Weathersfield township, Ohio, flood plain information, Trumbull County, Ohio, 28714
- Weathering:
- concrete and concreting materials exposed to natural weathering, performance investigation, 31263
 - ionic migration and weathering in frozen Antarctic soils, 32459

- Weaver, Leo, water quality measurement and instrumentation, proceeding of symposium, 20737
- Weaver, Lewis K. :
offshore petroleum studies—
composition of offshore U.S. petroleum industry and estimated costs of producing petroleum in Gulf of Mexico, 21937
historical and estimated future hydrocarbon production from U.S. offshore areas and impact on onshore segment of petroleum industry, 25417
- Weaver, Mary F., bank debits, deposits, and deposit turnover, 16053
- Weaving, fabric design, maximum weavable equations, engineering design handbook, 19157
- Webb, Anne Ilka, transition, 18970
- Webb, E. D., evaluating milling, cooking and processing characteristics required of rice varieties in United States, 25818
- Webb-Pomerene act, *see* Commerce.
- Weber, Dean, who's home when, 24247
- Weber, Max, status of LMFBR reheat in Western Europe, 1972, report of USA LMFBR sodium reheat team, 24197
- Webs (sheets) :
method for measuring and controlling web tension of corrugating medium during singlefacing process, 21655
- WESEEC-70, ecological survey in eastern Chukchi Sea, 24275
- Webster, Daniel P., pool drownings and their prevention, 29042
- Webster County Republican Central Committee, annual report, 24535
- Wedges, research, penetration of selected/granular materials by wedge-shaped tool, 29232
- Weedman, Parmula K. :
sea grant newsletter index, 17772
sea grant publications index, 17771, 20690, 29386-387
- Weeds :
chemical control of plant growth, 20931
guidelines for weed control, 31912
must Honduras pine be weeded frequently in Puerto Rico? 28958
weed harvest and lake nutrient dynamics, 31267
see also Herbicides—Waterweed.
- Weekly :
NOTE—For all publications which begin with the word "Weekly", *see* subject, or name of department, etc., issuing publication.
- Weeks, *see* names of special weeks.
- Weevils, notes on weevils from trees and shrubs in North Dakota, 28945
- Weickmann, Helmut K., modification of Great Lakes winter storms, 31722
- Weight control, *see* Obesity.
- Weight loss of pond-raised channel catfish (*Ictalurus punctatus*) during holding in processing plant vats, 20699
- Weight training for strength and power, 32537
- Weightlessness, simulated artificial gravity on human performance, effects, 21973
- Weights and measures :
commercial specifications, tolerances, and other technical requirements, replacement pages, 17732, 22002
International System of Units, physical constants and conversion factors, 29268
measurement systems, brief history with charts of modernized metric system, 26698
method of estimating log weights, 20318
model State unit pricing regulation, 23705
model State weights and measures law, 1971 as adopted by National Conference on Weights and Measures, 29310
model weights and measures ordinance, 17734, 30469
U.S. standards for determination of fill weights, 27982
- Weight and measures—Continued
weights and centers of gravity for red pine, white spruce, balsam fir, 16083
see also Body weight—Mertic system.
- Weights and Measures, National Conference, *see* National Conference on Weights and Measures.
- Weigley, Russell F., lecture, Oct. 5, 1972, 24147
- Well, Thomas E. :
area handbook for—
Ecuador, 26965
Peru, 24176
- Weinberger, Caspar W., nomination, hearing, 21335, 24945
- Weinberger, John H., growing apricots for home use, 30705
- Weiner, Louis, L., fabric design, engineering design handbook, 19157
- Weinstein, B., intensity of control of flashers, 24035
- Weir, J. E., jr., hydraulic testing and sampling of holes RB-E-01 and RB-D-01, Project Rio Blanco, Rio Blanco County, Colo., 23347
- Weirunga, Bruce B., analysis of Army helicopter inspection requirements, 22437
- Weirs, *see* Dams.
- Welch, J. R., silver, 25485
- Welch, Robin L., feasibility demonstration of aerial surveillance spill prevention system, 25127
- Welcome to Agricultural Research Center, 29616
- Welcome to Washington, 27823
- Weld, Betsy A., reports and maps released only in open files, 29010
- Welded joints, *see* Joints.
- Welders, and flame cutters, career, general information, 23604
- Welding :
adequacy of high-strength, low-alloy steel weldments for cargo ship hulls, study of factors which affect, 22221
collection of annotations of foreign patents relating to electroslog refining, USSR study, 16202
effect on fatigue life of high-strength reinforcing steel used in continuously reinforced concrete pavements, 31326
electrical terminations, welded, brazed, bonded, 29666
electron-beam welding in various spatial situations, USSR study, 16200
Federal item identification guide, 32179
flaw growth behavior in thick welded plates of 2219-T87 aluminum at room and cryogenic temperatures, 32477
hot press and roll welding of titanium-6-percent - aluminum - 4 - percent - vanadium bar and sheet with auto-vacuum cleaning, 17723
improved diffusion welding technique for TD-NiCr sheet, 23691
introduction of discontinuities in high strength steel weldments, 25070
selected translations on welding, USSR, 23533
selection of coals for AVCO hydrogen plasma arc process for making acetylene, 24218
welding, heat cutting and metalizing equipment, industrial plant equipment handbook, 17323
welding technology, 20597
- Weldments, *see* Welding.
- Welds, *see* Joints.
- Welfare, *see* Public welfare—Social work and problems.
- Welfare funds :
employee pension and welfare benefit plan, strengthen and improve protection and interests of participants, report, 27291
private welfare and pension plans—
investigation, report, 19760
study report of hearings on pension plan terminations, 17285

INDEX 1973

- Welfare funds—Continued
retirement income security for employees
act—
hearings, 15925
reports, 17175, 19882
welfare and pension plans—
disclosure act—
administration, 1972, report of Secretary of Labor, 27659
revise, hearings, 31020
legislation, hearings, 31020
programs, authorization and expenses, report, 26111
Welfare in review (periodical), 19082
Welfeld, Irving H., European housing subsidy systems, American perspective, 17556
Wellesley Women's Republican Club, *see* Women's Republican Club of Wellesley.
Wells, Alfred, housing and urban development in United Kingdom, 28528
Wells, H. Bradley, completeness and quality of response in North Carolina marriage follow-back survey, 30480
Wells, J. Robert:
feldspar, nepheline syenite, and apfite, 20556
mineral industry of Georgia, 16277
talc, soapstone, and pyrophyllite, 25489
Wells, John H., placer examination, principles and practices, 30397
Wells, John M., postharvest wax-fungicide treatments of nectarines peaches and plums for reducing decay, reducing moisture loss, enhancing external appearance, 26938
Wells, Joseph W., frequency and phase stabilization of HCN laser by locking to synthesized reference, 30473
Wells, Kenneth D., Wells for Congress Committee, annual report, 24579
Wells:
deep-well artificial-recharge experiments at Bay Park, Long Island, N.Y. (series), 30278
design and operation of artificial-recharge plant at Bay Park, N.Y., 30278
disposal of uranium-mill effluent by well injection in Grants area, Valencia County, N. Mex., 30272
Erwin-1 production well, city of Gallup, McKinley County, N. Mex., 20348
procedures for evaluating hazards to coal mining operations from hydrocarbon reservoirs, 29206
records of wells in Harris County, Tex., 23369
significance of ground-water chemistry in performance of North Sahara tube wells in Algeria and Tunisia, 21742
test-observation well near—
Almira, Wash., description and preliminary results, 23377
Davenport, Wash., description and preliminary results, 23378
Odessa, Wash., description and preliminary results, 23379
yields of wells in consolidated rocks, Virginia to Maine, evaluation, 17550
Wells Creek:
flood plain information, Erin, Tenn., 32224
floods, Wells Creek and tributaries, Erin, Tenn., 32233
Wells for Congress Committee, annual report, 24579
Wellsburg, W. Va., aircraft accident report, 29407
Wellton-Mohawk Division, *see* Gila Project.
Welpro, Inc., women's dress and casual shoes, Welpro, Inc., Seabrook, N.H., Tariff Commission report, 20836
Welsh, Harold, Navy civil engineer, 18685
Weng, Robert E., review and synthesis of literature on job training in industry, 15998
Wenk, Karen L., educational system of Turkey, 21422
Wentworth, Gary, relief, 19348, 19600
Wentz, Witt, Jr., effects of leading-edge camber on low-speed characteristics of slender delta wings, 20582
West, A. W., sewage treatment plant dependability with special reference to activated sludge process, 16032
West, J. M.:
gold, 20559
mineral industry of—
Ireland, 16283
Montana, 16293
other South American areas, 16299
West, S. W., disposal of uranium-mill effluent by well injection in Grants area, Valencia County, N. Mex., 30272
West, William J., relief, 16855
West, Vita R., U.S. Naval aerospace physiologist's manual, 23631
West (U.S.):
aerospace museum in western United States, feasibility study, 27241
census of population and housing, 1970, geographic identification code scheme, 19229
Federal-State-private cooperative surveys, Western United States, including Columbia River drainage in Canada, 22245
food consumption of households in the West, 22334
rivers, rules of road, 22622
synoptic climatological studies of precipitation in Plateau States from 850-, 700-, and 500-millibar lows during spring, 17774
water supply—
outlook—
and snow surveys, 19064
water year, 19066
summary, 23980
western wood density survey, report, 23302
West coast, *see* Pacific coast.
West End Creek, gold anomaly in soil of area, Yellow Pine District, Valley County, Idaho, 26496
West Fork River, flood plain information, Clarksburg and vicinity, Harrison County, W. Va., 32226
West Germany, *see* Germany.
West Indies:
climatological data, 18116
defense areas, facilities on North and South Calcos Islands, agreement with Great Britain, 20792
lights and fog signals, changes, 17790
revision of genus *Petalium* LeConte in United States, Greater Antilles, and Bahamas (Coleoptera: Anobiidae), 29636
West North Central States, *see* Central States.
West Palm Beach, Fla., area wage survey, 16222
West Point Lake, preimpoundment study, 31900
West River, flood plain information, 17381
West Virginia:
census of business, 1967, selected services, 16713
census of housing, 1970, housing characteristics for States, cities, and counties, 15566
census of population, 1970—
characteristics of population, 29704
detailed characteristics, 16742
climatological data, 18117
counties, population estimates, 28179
county business patterns, 29751
electric rate book, 17466
income limits for rent supplement housing, 29077
mineral industry, minerals yearbook chapter, 16311

West Virginia—Continued
 outdoor recreation potential in West Virginia's eastern panhandle, Potomac Headwaters RC & D Project, 20774
 precipitation data, hourly, 18466
 regular income limits for sec. 235-236 housing, 29075
 truck inventory and use survey, 19236
 Wester, Robert E., growing vegetables, 20907
 Western Air Lines, Inc., accident report, 16422
 Western Atlantic shrimps of genus *Solenocera* with description of new species (Crustacea, Decapoda, Penaeidae), 32552
 Western Environmental Research Laboratory, monthly activities report, 19083
 Western Europe, *see* Europe.
 Western Hemisphere, *see* Hemisphere, Western.
 Western Interstate Nuclear Board: compensation of Federal representatives—law, 19375
 report, 17173
 Western Marketing and Nutrition Research Division: poultry and egg research, bibliography and abstracts, 20889
 publications and patents, semiannual list, 19101
 Western States, *see* West (U.S.).
 Westerstrom, L. W., coal, bituminous and lignite, 25440
 Westlands water district, *see* Central Valley project.
 Westley, Francis: chemical kinetics in C-O-S and H-N-O-S systems, bibliography, 16360
 supplementary bibliography of kinetic data on gas phase reactions of nitrogen, oxygen, and nitrogen oxides, 26699
 Westoff, Charles F., demographic and social aspects of population growth, 25669
 Westport, Conn., cooperative individualized reading project, 27774
 Wetlands, *see* Swamplands.
 Wetmore, Kevin G., improvements in employee health care benefits, 23601
 Wetrogan, Signe, projections of population of United States by age and sex, 19247
 Wetzel County, W. Va.: floods, 28758
 flood plain information, Ohio River, 23169
 Wexford County Republican Committee, Michigan, annual report, 22749
 Weybrew, Benjamin B., factors related to drug abuse in submarine service, 26643, 30411
 Whalen, Charles W., Jr., Whalen for Congress Committee, annual report, 24352
 Whalen for Congress Committee, annual report, 24352
 Whaley, Bob L., water supply outlook and Federal-State-private cooperative snow surveys for Utah, 19062
 Whaling, international convention schedule amendments, 25735
 What about reading failure? 15999
 What can communities do to improve reading programs? 28677
 What does advertising do for consumer? 25559
 What every employer needs to know about recordkeeping, 26616
 What factors influence union representation elections? 23602
 What general revenue sharing is all about, 20847
 What happens next? explanation of procedural rights options open to you now, 20755
 What is Emergency Petroleum and Gas Administration? 23899
 What is water? 16118
 What you can do about bovine mastitis, 15468

What you should know about U.S. Army Reserve, 15514
 What's happened to food prices? 28026, 31991
 What's happening to food prices? 31992
 What's your move? U.S. Coast Guard Auxiliary, 24277
 Wheat:
 and the wheat goes on, 30715
 certificates, statutes, compilation, 25820
 deferral of wheat referendum—law, 29827
 reports, 28492, 29850
 deficiency payment to certain wheat farmers in southern wheat belt, report, 19662
 fertilizer used on selected crops in selected states, 1971 (corn for grain, cotton, soybeans for beans, wheat), 20820
 food grain statistics, supplement, 15482
 forecasting wheat production in Turkey, 25040
 futures, commitment of traders, 18140
 Russian wheat sales and weaknesses in agriculture's management of wheat export subsidy program, GAO report, 30263
 sale to Russia, hearings, 19739
 spring wheat—
 biological features, varieties, farming and irrigation, USSR study, 31545
 forecasting harvest before planting by interlar factors, USSR study, 31517
 wheat situation, 19084
 WURLD wheat in foods of many lands, 16586
 Wheeler, Frankie F., soil survey of Ochiltree County, Tex., 25713
 Wheeler, Lawrence E., hallmark, 18413
 Wheeler, Robert T., trapping techniques for sandhill crane studies in Platte River Valley, 25715
 Wheeling, W. Va., census of population and housing, 1970, census tracts, 19226
 Wheeling-Pittsburgh Steel Corp., Monessen, Pa., plant carbon steel wire rod and round wire workers, Tariff Commission report, 26893
 Wheelwright, Charles D., Apollo experience report, crew station integration lighting considerations, 30459
 Wheels:
 experimental investigation of accelerometer-controlled automatic braking system, 20607
 power requirements for wheels operating in fine-grained soils, 26386
 Project Helping Wheels, transportation for elderly people, 31905
 When injured at work, 25142
 When to do house cleaning jobs, 19121
 When you return to a storm damaged home, 29082
 When your child goes off to school, 26748
 Where are we going? 30629
 Where the action is . . . labor management relations examiner, 29370
 Where to write for birth or death records of U.S. citizens who were born or died outside of United States, etc., 23726
 Whetstone Brook, flood plain information, 17381
 Whey, Whey Products Conference, held at Chicago, Ill. June 14-15, 1972, proceedings, 31910
 Whey Products Conference, 31910
 Whiskey Creek, flood plain information, Orofino, Idaho, 32216
 Whitaker, Donald P.:
 area handbook for—
 Khmer Republic (Cambodia), 25858
 Laos, 26966
 People's Republic of China, 15507
 Whitaker, John C., nomination, hearings, 24939
 Whitaker, Orville J., soil survey of Grayson County, Ky., 25709

INDEX 1973

- White, A. H., advanced engine control program, 25865
- White, David, low NOX emission combustor for automobile gas turbine engines, 31922
- White, Dewey W., Jr.:
evaluation of Dow Chemical Company extruded aluminum 4-piece 4-by 4-ft landing act (MX18-E), 26388
evaluation of Dow Chemical extruded truss-web landing mat, 21480
- White, Emily T., statistical reporter, 18928
- White, Helen W., report number codes used by USAEC Technical Information Center in cataloging reports, 22487
- White, Richard P. Jr., investigation of dissipation of tip vortex of rotor blade by mass injection, 20990
- White, Robert D., Apollo experience report, command module uprighting system, 25525
- White-collar workers, *see* Government officials and employees.
- White County Boehning for Congress Committee, annual report, 22851
- White County Republican Central Committee, annual report, 22968
- White Earth Reservation, Minn., federally owned lands declared in trust by United States for Minnesota Chippewa Tribe, 15824
- White fir, *see* Fir.
- White House Conference on Aging, toward national policy on aging, proceedings of 1971 White House Conference on Aging, 24106
- White House Conference on Children strategies for implementation, 16578
- White House Conference on Industrial World Ahead:
look at business in 1990, 24107
press releases, 18816
- White House Conference on the Handicapped, convene within two years, report, 29988
- White House Conference on Youth, report on follow-up activities, 1971 White House Conference on Youth, 20877
- White House Fellows, program, 30603, 32538
- White Mountains:
nature and properties of some forest soils in White Mountains of New Hampshire, 32344
petrography of some granitic bodies in northern White Mountains, Calif.-Nev., 29023
- White Oak Bayou:
floods, Cole and Vogel Creeks, Houston metropolitan area, Tex., 28766
special flood hazard information, Harris County, Tex., 28777
- White Pine, Mich., fracturing in zone around blasthole, 30430
- White race, *see* Caucasian race.
- White River and Valley:
Earlhart, Calif., flood plain information, 16009
flood plain information, 20115
floods in vicinity of White River Junction, Vermont and New Hampshire, 20144
- White River National Forest, designate part as Flat Tops Wilderness, report, 19915
- White Sands Missile Range, N. Mex.:
mean horizontal wind speed and direction variability at heights of 1.5 and 4.0 meters above ground level at WSMR, New Mexico, 22423
sonic boom data related to tests conducted at White Sands, N. Mex. and Edwards Air Force Base, 24054
turbulence characteristics at heights of 1.5, 4.0 and 16.0 meters at White Sands Missile Range, New Mexico, 20976
- White Sands National Monument:
addition to National Wilderness Preservation System proposal, 23000
wilderness recommendation, 23842
- White spruce, *see* Spruce.
- White-winged doves, *see* Pigeons.
- White Creek:
flood plain information, 21458
floods in St. Joseph, Mo., 21467
- Whiteman, Majorie M., digest of international law, 29528
- Whitenack, Frank W., land conveyance in vicinity of Georgetown, Colo., report, 19917
- Whitfield County, Republican Party, *see* Republican Party of Whitfield County.
- Whiting, Kenneth R., ideologies in conflict, 15495
- Whitley County Republican Central Committee, annual report, 22803
- Whitman National Forest, designate certain lands as addition to Eagle Cap Wilderness, report, 19684
- Whitney, Warren J., cold-air investigation of turbine for high-temperature-engine application, two-stage turbine performance, 20609
- Whittenberger, John D., diffusional creep and creep degradation in dispersion-strengthened alloy TD-NiCr, 23686
- WHO, *see* World Health Organization.
- Who are we? 16795
- Wholesale prices, *see* Prices.
- Wholesale trade:
census of business, 1967—
area statistics, 16714-716
subject reports, 16717-718, 27004
sales and inventories, current business reports, 18188
see also names of commodities and industries.
- Whom are community mental health centers serving? 16393
- Who's home when, 24247
- Why here? 23455
- Why industry invests abroad, 27612
- Why tenant organizations? role of residents of rental housing, 29083
- Wichita, Kans., area wage survey, 16230
- Wichita County Republican Party Executive Committee, annual report, 24429
- Wickenburg, Ariz., flood plain information, Hassayampa River, 17384
- Wickersham (MV):
use by Alaska, authorize, hearings, 15771.
- Wickman, Boyd E.:
decay in white fir top-killed by Douglas-fir tussock moth, 20313
Douglas-fir tussock moth, 26464
major outbreaks of Douglas-fir tussock moth in Oregon and California, 27529
- Wide world of children's books, an exhibition for International Book Year, annotated catalogs, 29191
- Widman, Michael V., polymer film overlay system for mercury contaminated sludge, 20219
- Widnall, William B., D.C. Committee for Re-election, *see* D.C. Committee for Re-election of William B. Widnall
- Widows and widowers:
achievements, administrative problems, and costs in paying black lung benefits to coal miners and their widows, GAO report, 16094
annuities of widows of justices of Supreme Court, law, 16901
disabled widows, statistics, 22231
- Wieder, Bernard:
measurements of Loran-C skywave, stability, 28236
method for finding D-regions electron density distributions for L. F. broadband pulse measurements, 22641
- Wieder, Samuel, radiation data and reports (periodical), 18842
- Wiener, Howard L., recent computational experience with method of phase and amplitude diagrams, 22168
- Wiggin, Chester M., jr., nomination, hearings, 18955

Wigmakers, brief outline of origins of glass-maker, silversmith, wigmaker and hatter in American colonies, 22090
 Wigs, Kanekalon wigs from Hong Kong, determination of no injury. etc., Tariff Commission report, 24063
 Wilbur Mills Seminar Committee, annual report, 22690
 Wilcox, Stanley, international teacher exchange, value/summary of state regulations/U.S. Office of Education program, 28660
 Wild animals, *see* Wildlife
 Wild areas act of 1972, 19736
 Wild areas in national forests, 15863
 Wild life, *see* Wildlife
 Wildcat Mountain Research Natural Area, general information, 21647
 Wilder, Charles S.:
 acute conditions, incidence and associated disability, United States, 16370, 29331
 dental visits, volume and interval since last visit, United States, 16369
 limitation of activity due to chronic conditions, 1969-70, United States, 27746
 physician visits, volume and interval since last visit, United States, 16368
 use of special aids, United States, 22026
 Wilderness areas:
 designate—
 Aldo Leopold Wilderness, Gila National Forest, N. Mex., report, 17163
 Cedar Keys National Wildlife Refuge in Florida, law, 16884
 certain lands in—
 Lassen Volcanic National Park—
 hearing, 17059
 law, 19440
 reports, 17001, 19897
 Lava Beds National Monument, Calif.—
 law, 19424
 reports, 17000, 19900
 more populous eastern half of U.S. as wilderness areas, hearing, 26274, 31143
 Flat Tops Wilderness from parts of Routt and White River National Forests, report, 19915
 Indian Peaks area, Colo.—
 law, 19457
 report, 19698
 Lincoln Back Country Wilderness in Montana, law, 16899
 Lone Peak Wilderness Area, report, 17170
 Minam River Canyon as addition and part of Eagle Cap Wilderness, law, 19451
 Scapegoat Wilderness from parts of Lewis & Clark and Lolo National Forests, law, 16899
 Spanish Peaks Wilderness, hearing, 19982
 designation of wilderness areas, hearings, 15910, 17059, 21242
 Federal research natural areas in Oregon and Washington, guidebook for scientists and educators, separates, 21607-650, 23270
 National forest, wild areas, establish—
 hearings, 15863
 reports, 19874, 26211
 national forest wilderness and primitive areas, 27530
 National wilderness preservation system, additional, proposals, message from the President, 19561, 23000
 studies related to wilderness primitive areas (series), 20346-347, 27556
 wilderness recommendations, 22125-130, 23831-842, 27824-829
 Badlands National Monument, 22125
 Bandelier National Monument, 27824
 Carlsbad Caverns National Park, 23831
 Colorado National Monument, 22126

Wilderness areas—Continued
 wilderness recommendations—continued
 Crater Lake National Park, 23832, 27825
 Cumberland Gap National Historic Park, 27826
 Glacier Bay National Monument, 23833
 Grand Canyon Complex, 27827
 Grand Teton National Park, 23834
 Great Sand Dunes National Monument, 23835, 27828
 Guadalupe Mountain National Park, 23836
 Haleakala National Park, 22127
 Joshua Tree National Monument, 23837
 Katmai National Monument, 22128
 Mesa Verde National Park, 23838
 Padre Island National Seashore, 27829
 Saguaro National Monument, 23840
 Theodore Roosevelt National Memorial Park, 23841
 White Sands National Monument, 23842
 Yellowstone National park, 22129
 Yosemite National Park, 22130
 Wildfire, *see* Forest fires.
 Wildlife:
 code of Federal regulations, 17481
 conservation and development of our nation's fish and wildlife resources, environmental quality, and oceanography, compilation of Federal laws, 17072
 conservation, 8-cent stamp poster, 16563
 conservation of natural resources and wild life, USSR study, 23561
 construction of an 8-mm time-lapse camera for biological research, 16087
 endangered species—
 conservation—
 hearings, 19960, 28424
 reports, 19856, 29891, 29983
 convention, 31052
 world wildlife conference efforts to save, 30647
 Everglades wildguide, 27809
 Federal aid in fish and wildlife restoration, manual, 31826
 Federal laws and treaties on sport fish and wildlife, selected list, 31833
 fish and wildlife miscellaneous bis, hearings, 19790
 how outdoorsmen can help preserve, 31301
 multiple-use wildlife transmitter, design, etc., 26847
 non-game wildlife research in megalopolis, Forest Service program, 32314
 pets, wildlife, customs, 28582
 restoration projects, additional fund provided by tax on bows and arrows, law, 19485
 special scientific report, wildlife series, 16489, 17848, 20782, 22249, 25717, 26847, 27899-901, 28915, 31832
 use of property for wildlife conservation purposes, law, 15656
 when wildlife tries to tell us something about pollution we'd better pay attention (poster), 29516B
 wildlife leaflets, 3133
 wildlife research 1971 problems, programs, progress, 25716
 wildlife research reports, 22250, 26850
 wildlife review, abstracting service, 19087
 Yellowstone wildlife, description, etc., 22132
 see also Natural resources.
 Wildlife management:
 Delaware wildlife management guide, 27890
 fairest one of all, eastern region wildlife, 26463
 ocean fishery management, discussions and research, proceedings, 29393
 Wildlife refuges, refuge leaflets, 31827-830
 see also names of refuges.
 Wildung, R. E., phosphorus release from lake sediments, 31268
 Wildwood Creek, flood plain information, San Bernardino County, Calif., 28731

INDEX 1973

- Wiley, Llewellyn N., analysis of difficulty of jobs performed by first-term airmen in 11 career ladders, 29651
- Wilkes, James W., establishing business in Zambia, 25972
- Wilkes-Barre, Pa., food distribution facilities, 26939
- Wilkes County Republican Executive Committee, annual report, 22691
- Wilkinson, F. Clyde, relief, 19827, 28443
- Wilkinson, Thomas L., effect of deformed shanks, prebored lead holes, and grain orientation on elastic bearing constant for laterally loaded nail joints, 27533
- Willacy County, Executive Committee of Republican Party, *see* Executive Committee of Republican Party, Willey County
- Willamette National Cemetery, general information, 19175
- Willamette River and Valley :
ground water in Eugene-Springfield area, southern Willamette Valley, Oreg., 30286
- Oregonians restore Willamette, joint citizen, State and Federal efforts clean river waters, 23198
- Willard, Beatrice, nomination, hearing, 19979
- Willard, David G., graphite, 25445
- William Becker-Forsythe Golf Day, *see* Forsythe Golf Day—William Becker.
- William L. Springer Lake, designate Oakly Reservoir on Sangamon River, Decatur, Ill., law, 19523
- Willamette Floodplain Research Natural Area, general information, 21648
- Williams, Catherine P., welfare in review, 19082
- Williams, Dorothy D., automated collection of transient data for electrochemical studies, 16643
- Williams, James L., extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687
- Williams, Jeffrey W., education directory, public school systems, 17358, 23137
- Williams, Llewellyn, growing ginseng, 24129
- Williams, Lon R., Williams for Congress Committee, annual report, 22882
- Williams, Lynn H., soil survey of Marlon County area, Oreg., 17843
- Williams, Raymond, analysis of emerging cooperatives financed by Farmers Home Administration, 20238
- Williams, S. Jeffress, regional shelf studies, guide to engineering design, 23148
- Williams, W. D., freshwater isopods (Asellidae) of North America, 17439
- Williams County Republican Central & Executive Committee, annual report, 24561
- Williams Creek :
flood plain information, Marlon County, Ind., 28706
- floods, Marlon County, Ind., how to avoid damage, 28741
- Williams for Congress Committee, annual report, 22882
- Williamsburg, Va., City of Williamsburg Republican Committee, annual report, 22927
- Williamsburg County, S.C., continuous progress program, title 1, ESEA case, study, 21432
- Williamson, G. R., fibrous concrete, technical information pamphlet on use for military facilities, 28691
- Williamson, H. F., soil survey of Spencer County, Ind., 29514
- Williamson, John W., health services research, bibliography, 16365
- Williamson, William R., attitude-referenced radiometer study, primary calibration system, 21972
- Willingham Cotton Mills, certain plain-woven cotton fabrics and certain woven fabrics of manmade fibers, Willingham Cotton Mills, Ga., Tariff Commission report, 20829
- Willis, Conrad M., static structural tests of 1.5-meter-diameter fabric attached inflatable decelerator, 17722
- Willis, Edwin D., behavior of ocellated antbirds, 27879
- Willis, Ernest M., comparison of actual and reported previous psychiatric care, 27785
- Willis, James W., review of world rice markets and major suppliers, 17498
- Willman, W. W., oxygen diffusion in wet air oxidation processes, 23875
- Willow Creek :
flood plain information, Houston metropolitan area, Tex., 28727
- floods, Houston metropolitan area, Tex., 28765
- hydrology and effects of conservation structures, Willow Creek Basin, Valley County, Mont., 20355
- Wilmington, Calif., field study of viscous oil production by solvent stimulation, Wilmington, Calif., 21963
- Wilmington, Del., census of population and housing, 1970, census tracts, 19227
- Wilmington, N.C., housing market analysis, 23221
- Wilmington Canyon, underwater television survey of Atlantic outer continental margin near Wilmington Canyon, 31800
- Wilmot, Charles A. :
cotton gin operating costs in—
Blacklands of Texas, 25825
- lower Rio Grande Valley of Texas, 27999
- Wilshin, Francis, Sagamore Hill and Roosevelt family, 27814
- Wilshire, H. G., geology of Sierra Madera cryptoexplosion structure, Pecos County, Tex., 29019
- Wilson, C. A., evaluation of use of drillers' logs in lithologic studies of Ogallala Formation of Southern High Plains of Texas, 23339
- Wilson, Charles H. :
Neighbors of Charles and Jerry Wilson, annual report, 22899
- Wilson Key Committee, annual report, 24359
- Wilson, Jack A., water supply outlook and Federal-State-private cooperative snow surveys for Idaho, 19058
- Wilson, Jerry, Neighbors of Charles and Jerry Wilson, annual report, 22899
- Wilson, John W. :
comparison of exact and approximate evaluations of single-scattering integral in nucleon-deuteron elastic scattering, 20600
- isosinglet approximation for nonelastic reactions, 20605
- Wilson, Peter T., Truk live-bait survey, 20694
- Wilson, Raymond H., toward philosophy of planning, attitudes of Federal water planners, 27493
- Wilson, Ronald W., current estimates from health interview survey, 27745
- Wilson Creek, flood plain information, San Bernardino County, Calif., 28731
- Wilson Key Committee, annual report, 24359
- Wilson Shoe Corp., women's casual shoes, Wilson Shoe Corp., Shamokin, Pa., Tariff Commission report, 20834
- Wilt diseases, benomyl-derived fungitoxicant for tree wilt disease control, 27532
- Wiltshire, Lillas, calendar of Smithsonian Institution, 18044
- WIN (work incentive program), *see* Work.
- Winchell Shoe Manufacturing Co., Natick, Mass. footwear for men, Tariff Commission report, 32590

- Winches, capstans, hoists, winches, and windlasses, Federal item identification guide, 24993
- Winchester, Conn.:
flood plain information, Still and Mad Rivers, 23173
floods in Winchester, Conn., 21468
Winchester Democratic Committee, annual report, 24710
- Wind, *see* Winds.
- Wind Cave National Park, general information, 22131
- Wind instruments, brass wind musical instruments and parts thereof, Tariff Commission report, 24056
- Wind profile, *see* Winds.
- Wind River Research Natural Area, general information, 21649
- Wind-tunnels:
investigation of effects of variations in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configurations, 32470
low-speed wind tunnel investigation of semispan STOL jet transport wing body with upper-surface blown jet flap, 29272
wind tunnel simulation and prototype studies of barrier flow phenomena, 20974
- Wind waves, *see* Waves.
- Windings, *see* Electric coils.
- Windlasses, *see* Winches.
- Windom, Minn., West Fork, Des Moines River and Perkins Creek, flood plain information, 32225
- Window wipers, *see* Windshield wipers.
- Windows:
glass, observation, Federal item identification guide, 25002
net radiation method for enclosure systems involving partially transparent walls, 31651
- Windows to bureaucracy, 17690
- Winds:
accuracy of automated temperature forecasts for Philadelphia as related to sky condition and wind direction, 30531
effect of overstory removal upon surface wind in black spruce bog, 16077
effect of shear on aircraft landing, 31612
experimental and analytical determination of stability parameters for balloon tethered in wind, 32472
gravity current model applied to analysis of squell-line gust front, 25620
guying to prevent wind sway influences loblobly pine growth and wood properties, 21677
helicopter gust response including unsteady aerodynamic stall effects, 29663
mean horizontal wind speed and direction variability at heights of 1.5 and 4.0 meters above ground level at WSMR, New Mexico, 22423
model of wind shear and turbulence in surface boundary layer, 31613
preliminary transport wind and mixing height climatology, St. Louis, Mo., 30530
radar sea returns, JOSS II, 30591
satellite-derived low and cirrus level winds with conventional wind observations, 30535
statistical prediction of impact displacement due to wind effect on unguided artillery rocket during powered flight, 20978
sublimation of wind-transported snow, model, 16090
variation of low level winds during passage of thunderstorm gust front, 31614
wind recorder, current meter and thermistor chain measurements in northeast Pacific, 22094
see also Solar winds.
- Windshield wipers, windshield wiper component parts, 25010
- Windsor, Canada, aircraft accident report, 27834
- Windward Islands, investment guaranties, agreement with St. Vincent, 26863
- Wine:
code of Federal regulations, 22391
State imposts in interstate wine, prohibit—
hearing, 21259, 26168
report, 32043
- Winema National Forest, Klamath Indian forest lands acquisition, report, 17128, 27131, 28503
- Wing, Richard L., MAC flyer, 18601
- Wing-body combinations, *see* Airplanes.
- Wing-tail-fuselage combinations, *see* Airplanes.
- Wings (aircraft):
aerodynamic and flow-visualization studies of 2 delta-wing entry vehicles at Mach number of 20.3, 31631
automated procedure for design of wing structures to satisfy strength and flutter requirements, 30456
dynamic compatibility of rotary-wing aircraft propulsion components, 28059
effect of wing aspect ratio and flap span on aerodynamic characteristics of externally blown jet-flap STOL model, 31629
effects of leading-edge camber on low-speed characteristics of slender delta wings, 20582
extraction of longitudinal aerodynamic coefficients from forward-flight conditions of tilt wing V/STOL airplane, 23687
fixed wing flight, technical manual, 30751
high-speed flow past wings, 29258
investigation of effects of variations in Reynolds number and leading-edge treatment on aerodynamic characteristics of externally blown jet-flap configurations, 32470
low-speed wind tunnel investigation of semispan STOL jet transport wing body with upper-surface blown jet flap, 29272
numerical simulation of three-dimensional transonic flow with applications to C-141 wing, 31624
wing leading edge fuel tank impact tests, 24044
- Wininger, Donald C.:
mineral industry of—
Burma, 16318
New Jersey, 25464
- Winn, L. W., development of high speed parallel hybrid boost bearings, 25519
- Winnebago County Republican Campaign Coordinating Committee, annual report, 24793
- Winnebago County Republican Central Committee, annual report, 24501
- Winnebago County Republican Party, annual report, 24742
- Winnebago Indians, general information, 31482
- Winooski, Vt.:
floods in Burlington, Colchester, Winooski, Vt., Winooski River, 32235
Winooski River, flood plain information, 32227
- Winooski River:
flood plain information—
Colchester, Burlington and Winooski, Vt., 32227
Montpelier, Vt., 28732
floods in Burlington, Colchester, Winooski, Vt., 32235
North Branch, flood plain information, 28732
Stevens Branch, flood plain information, Barre, Vt., 28728

INDEX 1973

Winter, Jerry M., oxidant-fuel-ratio-zoned rocket injector for high performance and ablative engine compatibility, design and evaluation, 17721

Winter:

Arctic winter games, authorization, report, 28482
modification of Great Lakes winter storms, 31722
national east coast winter storms operations plans, 20687
storm safety rules, general information, 16429
winter Olympic games, 15837
winter sports area, Cooke City, Silver Gate, 23267
winter survival of fecal indicator bacteria in subarctic Alaskan river, 20190
Winter sports, *see* Sports.

Wipers (window), *see* Windshield wipers.

Wire:

aluminum plating of beryllium wire, 28067
carbon steel round, flat, and shaped wire, workers of Page Steel and Wire Division, Monessen, Pa., plant of American Chain and Cable Company, Tariff Commission report, 26892
carbon steel wire rod and round wire, workers of Monessen, Pa., plant of Wheeling-Pittsburgh Steel Corp., Tariff Commission report, 26893
flow through a wire-form transpiration-cooled vane, 30462
inventories of brass and copper wire mill shapes, current industrial reports, 16765, 18194-194A
measurements of performance of multiwire proportional chambers, 29297
metal bars, rods, wires, sheets, plates, and shapes, Federal item identification guide, 30105
stainless steel wire rods from France, determination of injury, Tariff Commission report, 32595
see also Electric wire and wiring—Wire-work.

Wire insulation, *see* Insulation.

Wire netting, strainer elements, Federal item identification guide, 27397, 32175

Wire rope:

Federal item identification guide, 30098
steel, from Japan, Tariff Commission report, 32596

Wire tapping:

FCC monitoring of employees' telephones, hearings, 21258
warrantless wiretapping, hearings, 32150

Wiretapping, *see* Wire tapping.

Wirework, scanning electron microscope examination of wire bonds from high-reliability devices, 32483

Wiring, *see* Electric wire and wiring.

Wisconsin:

census of housing, 1970, housing characteristics for States, cities, and counties, 15567
census of population, 1970—
characteristics of population, 30804
detailed characteristics, 19208
climatological data, 18118
counties, population estimates, 28176
county business patterns, 29752
criminal justice agencies, 1971, list, 23568
local net timber volume equations for Wisconsin, 28939
LUPAC Wisconsin, political committee, annual report, 22939
9th District—
Republican Organization, annual report, 22798
Young Republican Federation annual report, 22913
police isolation and community needs, 19276
precipitation data, hourly, 18467

Wisconsin—Continued

sapstreak disease of sugar maple found for first time, 17513
timber volume in counties, statistics, 25220

Wisconsin's 1968 timber resource, perspective, 28973

Wisconsin Federation of Young Republicans, annual report, 22870

Wisconsin River, flood plain information, 25082

Wise, John P., seasonal distribution of tunas and billfishes in Atlantic, 25632

Wise Shoe Company, Inc., footwear for women, Wise Shoe Company, Inc., Exeter, N.H., report to President on worker investigation, Tariff Commission report, 24062

Wister, Owen, papers in Library of Congress, register, 21920

Witherell, Julian W., French-speaking Central Africa, guide to official publications in American libraries, 27685

Witherow, Jack L., national meat-packing waste management research and development program, 26418

Withholding tax, *see* Income tax.

Witkind, Irvin J., igneous rocks and related mineral deposits of Barker quadrangle, Little Belt Mountains, Mont., 30279

Witt, Carter, Friends of, *see* Friends of Carter Witt.

Wittenberg, Ernest, address, May 4, 1972, 22194

Wittlin, G., experimental program for development of improved helicopter structural crashworthiness, analytical and design techniques, 30759

Wives, metropolitan housewives' attitudes toward solid waste disposal, 20215

WMATA, *see* Washington Metropolitan Area Transit Authority.

WMPO, *see* Weather Modification Program Office.

Woelfl, Paul A., Woelfl for Congress, political committee, annual report, 24462

Woelfl for Congress, political committee, annual report, 24462

Wolf, Charles H., predictors of job tenure in lumber-plywood mill, 31362

Wolf, Robert S., research vessels of National Marine Fisheries Service, 20695

Wolf Creek:

flood plain information, 21459
floods in vicinity of Lawton, Okla., 21482

Wolf Creek Research Natural Area, general information, 21650

Wolf Trap Farm Park, general information, 20711

Wolfensberger, Wolf, citizen advocacy for handicapped, impaired, and disadvantaged, overview, 16457

Wolf, Kenneth J., relief, 19337, 19589

Wolicki, Eligius A., nuclear and ion beam techniques for surface and near-surface analysis, 31752

Wollenberg, H. A. radioelement, and trace-element content of lone formation, central California, 29007

Wolves, survey of red wolf (*canis rufus*), 22249

Women:

and social security, law and policy in five countries, 27886

and their pregnancies, collaborative perinatal study of National Institute of Neurological Diseases and Stroke, 23772
and work, news from Department of Labor, 27666

be you, be someone new, Army Reserve for women, 15503

brief highlights of major Federal laws and order on sex discrimination, 22303

broadening equal employment opportunities for women (remarks), 32428

calling all women in Federal service, know your rights and opportunities, 16579

Women—Continued

careers for women in 70's, 27970
 careers in Forest Service, 16607
 comparative study of female and male air
 traffic controller trainees, 21033
 discrimination against women—
 in federally assisted programs, in em-
 ployment and in education, extend
 Equal pay act to prohibit, hearings,
 print additional copies, report, 16998
 Office of Education and Office of Educa-
 tion grant and contract procedures,
 hearings, 23014
 dual careers, longitudinal study of labor
 market experience, 26611
 educational act extends sex discrimination
 and minimum wage provisions, 22304
 employment—
 in Federal Government, 1971, study,
 24268
 problems of women, classic example of
 discrimination, 28848
 profiles of minorities and women in
 SMSA's of large cities, 23207, 30206
 enlistment and commissioning in Coast
 Guard Reserve, provide, hearings, 32087
 equal pay under Fair labor standards act
 as amended, 27967
 equal rights amendment and alimony and
 child support, laws, 20384
 expanding opportunities, women in Fed-
 eral Government, 27045
 Federal women's program (address),
 30518
 fertility of women by education and
 family income for U.S., 29718
 footwear—
 Frank H. Pfeiffer Co., Inc., Worcester,
 Mass., Tariff Commission report,
 16544
 Freepoint, Me., plant of Kayser-Roth
 Shoes Division of Kayser-Roth Corp.,
 New York, N.Y., Tariff Commission
 report, 29552
 Regina Footwear, Inc., Brooklyn, N.Y.,
 Tariff Commission report, 30658
 job patterns for minorities and women in
 private industry, Nation, State, indus-
 tries, 20236
 laws on sex discrimination in employment,
 Federal civil rights act, title 7, State
 fair employment practices, law, execu-
 tive orders, 29590
 maximal control force capability of fe-
 male pilots, preliminary study, 22510
 minorities and women, availability data,
 32366
 question of opportunity, women and con-
 tinuing education, 31601
 research on women in world of work, 17349
 role in labor (remarks), 25376
 spend weekend with boys, women in Army
 National Guard, 25579
 tomorrow is now . . . [for women] in
 U.S. Air Force, 15496
 we the American women, 28201
 woman's place is in the Guard, 30487
 women in 1972, report, 26532
 women in work force, development and
 field testing of curriculum materials,
 planning ahead for world of work, 26741
 women's dress and casual shoes, Genesco,
 Inc., Nashville, Tenn., Tariff Commis-
 sion report, 20835
 workers, utilization in public utilities in-
 dustry, Equal Employment Opportunity
 Commission, hearings, 25134
 Women workers, *see* Women.
 Women's Army Corps:
 college junior program, student officer pro-
 gram, 19160
 educational opportunities, exciting jobs,
 15504
 Women's Bureau:
 leaflets, 16579, 24108
 legislative series, 22304
 pamphlets, 25807
 publications, list, 24108

Women's clothing, *see* Clothing.
 Women's Republican Club of Dedham, an-
 nual report, 28294
 Women's Republican Club of Denver, annual
 report, 24582
 Women's Republican Club of Lake Forest-
 Lake Bluff, annual report, 24596
 Women's Republican Club of the Lower Cape,
 annual report, 24709
 Women's Republican Club of Wellesley, an-
 nual report, 24645
 Won, Kyong Ok, *see* Goodwin, Kyong Ok.
 Wong, F. Michael:
 space management and courts, 27658
 summary, 25369
 Wood, H. B., fluorspar and cryolite, 16260,
 25444
 Wood, L. E., optical communication systems
 for short-haul applications, 27062
 Wood, Milton E., design of simplified forma-
 tion trainer, 22362
 Wood, S. O., Jr.:
 mineral industry of—
 Louisiana, 16288
 Mississippi, 16291
 natural gas liquids, 25476
 Wood, Sharrill D., stability of and insulation
 leakage in high temperatures resistance
 thermometers, investigation, interim re-
 port, 27731
 Wood, Stephen C., methemoglobin formation
 in humans during exposure to hyperbaric
 oxygen in standard Navy decompression
 treatment table, 25403
 Wood, Walter, black American heritage,
 17348
 Wood:
 American woods, 17505, 25199-203,
 26459-461, 31352-355, 32307-309
 biological deterioration of woods in trop-
 ical environments, 31753
 compression wood formation and other
 characteristics of plantation-grown
 Pinus caribae, 28955
 correlation of ASTM exposure test for
 evaluating durability of fire-retardant
 treatment of wood, 32340
 determining loss of wood substance in out-
 side chip storage, comparison of two
 methods, 32338
 dividends from wood research, recent pub-
 lications of Forest Products Laboratory,
 list, 25206, 32310
 drying of wood, publications, list, 20292
 estimating force and power requirements
 for crosscut shearing of roundwood,
 16082
 FHA form 2053, wood infestation report,
 26526
 finishing of surfaces, military standards,
 23105
 freezing decayed wood to facilitate ring
 counts and width measurements, 23286
 guying to prevent wind away influences
 loblolly pine growth and wood proper-
 ties, 21677
 how PEG helps hobbyist who works with
 wood, 20205
 increased use of felled wood wood help
 meet timber demand and reduce envi-
 ronmental damage in Federal forests, GAO
 report, 32353
 land clearing and wood use in Delaware,
 31361
 marine borer resistance of tropical wood
 Dalbergia retusa, preliminary investiga-
 tion, 16449
 moisture content of wood in use, 32319
 preservation, finding and keeping a healthy
 house, 28929
 primary wood-product industries of Penn-
 sylvania, 23309
 product suitability of wood determined by
 density gradients across growth rings,
 25225
 products, home and farm building, selec-
 tion and use, 15465

INDEX 1973

- Wood—Continued
 protecting log cabins, rustic work, and unseasoned wood from injurious insects in Eastern U.S., 24127
 residues produced at planing mills, Tennessee Valley area, 31883
 western wood density survey, report, 23302
 wood and bark properties of spruce pine, 21675
 wood structural design for buildings, Army technical manual, 31933
 Wood supply and national forest lands investment act, report, 28494
see also Hardwoods—Lumber—Softwoods—Veneers—*also* names of articles manufactured from wood.
 Wood chippers, *see* Chippers (tools).
 Wood County, Republican Committee, *see* Republican Party of Wood County.
 Wood County Republicans, annual report, 22762
 Wood finishing, painting outside wood surfaces, 21654
 Wood pulp:
 compression debarking of wood chips, 28959
 current industrial reports, 18194
 moisture content and specific gravity of bark and wood of northern pulpwood species, 17514
 northern bleached hardwood kraft pulp from Canada, determination of injury, etc., Tariff Commission report, 24066
 pulpwood production—
 Lake States, 28938, 32322
 southern, 21679
 Wood siding, *see* Siding.
 Wood waste, *see* Waste products.
 Woodbury County, Iowa, soil survey report, 20777
 Woodcocks, migratory birds, 1972-73 in United States, etc., Federal regulations, 20781
 Wooden beverage cases cause little damage to bottle caps, 32324
 Woodfin, Richard O.:
 dry veneer volume losses in production of red and white fir plywood, 26473
 sitka spruce, American wood, 26460
 Woodford County Republican Campaign Committee, annual report, 24794
 Woodhead, R. W., proceedings, Allerton Park conference on systems approach to airfield pavements, 30163
 Woodlands, *see* Forests and forestry.
 Woodmansee, Walter C.:
 mineral industry of Territory of South-West Africa, 16307
 thorium, 16327
 uranium, 25492
 Woodpulp, *see* Wood pulp.
 Woodring, F. A., geology and paleontology of Canal Zone and adjoining parts of Panama, description of Tertiary mollusks (additions to gastropods, scaphopods, pelecypods; Nuculidae to Malleidae), 29018
 Woodrow Wilson International Center for Scholars:
 appropriations, 1974—
 hearings, 28385, 31126
 report, 29861
 ocean series, 17827
 Woodruff, James R., test stand for precise measurement of impulse and thrust vector of small attitude control jets, 32479
 Woodruff, Robert R., dynamic observation in T-37 undergraduate pilot training (UPT) link trainers (T-4), 26950
 Woodruff, William W., nomination, hearing, 26252
 Woods, W. Fred, increasing impact of Federal estate and gift taxes on farm sector, present law and proposed changes, 30696
 Woods, *see* Timber—Wood.
- Woodson, John P., and heirs:
 relief—
 hearings, 19742
 law, 19333
 Woodsy Owl:
 prevent unauthorized manufacture and use of character, reports, 17195, 28495
 give a hoot, don't pollute, posters, 20293, 23275
 Woodward, F. A., improved method for aerodynamic analysis of wing-body-tail configurations in subsonic and supersonic flow, 29253
 Woodward, Paul W., natural history of Kure Atoll, northwestern Hawaiian Islands, 26820
 Woodworkers:
 job grading standard, 19282
 publications, list, 31358
 Woodworking machinery, industrial plant equipment handbook, 24983
 Wool:
 broadwoven goods, current industrial reports, 16779, 18194A, 29775
 certain woven fabrics of wool, manmade fibers, and blends, including laminated fabrics, workers of—
 Dorman Mills, Parson, W. Va., Tariff Commission report, 24059
 Gonic Division of Rindge Industries, Inc., Tariff Commission report, 24060
 consumption on woolen and worsted systems, current industrial reports, 18194, 29759
 foreign agriculture circulars, 18380
 futures trading and open contracts, 18393
 lamb crop report, wool statistics, 24016
 Market News Service on livestock, meat and wool, 29624
 market news, weekly summary and statistics, 18590
 production, price and value, 24021, 27941
 products labeling act, amend with respect to recycled wool, report, 31085
 statistics and related data, 1930-69, supplement, 28019
 stocks of wool and related fibers, current industrial reports, 30850
 wool and man-made fiber textile products—
 Macao, trade agreement with Portugal, 26868
 trade agreement with—
 China, Republic, 25743, 25746, 30652
 Japan, 25744
 Korea, 22277, 31875
 Malaysia, 31854
 wool and polyester/wool worsted fabrics from Japan, determination of no injury to U.S. industry, 20837
 wool situation, 19088
 Woollam, John A., properties of crystalline bismuth selenide and its use as Hall effect magnetometer, 23682
 Woolley, P. O., syncrisis, dynamics of health, 17552-553, 20365-367
 Word division, *see* Words.
 Words:
 division, supplement to Style manual, 30289
 understanding words and word relationships, national assessment of educational progress, 30143
 Work:
 administrators of nursing and personal care homes, work experience, 26720
 college work-study program manual, 17355
 contracting out Government work, hearing, 32090
 difficulties of Neighborhood Youth Corps in-school program and its management problems, GAO report, 23318
 directory of representative work education programs, 32195
 employment status and work experience, 1970 census of population, 30808

Work—Continued

- financial assistance for work and training and year-round recreational opportunities for youth, hearing, 31017
- guidelines for police performance appraisal, promotion and placement procedures, 27654
- improving employee performance, 15608
- living and working in Germany, guide for Department of Army civilians, 22432
- New Mexico work-effort analysis computer program, 17530
- occupational alcoholism, some problems and some solutions, 23759
- persons with work disability, census of population, subject reports, 22533
- relationship between design characteristics of avionics subsystems and training cost, training difficulty, and job performance, 28031
- road to work, technical school training or directed duty assignment?, 25842
- secretarial science occupational performance survey, 29358
- statement of work preparation guide, acquisition management, 15493
- vocational evaluation and work adjustment services in vocational rehabilitation, 26812
- we, the Americans, work we do, 30860
- women & work, news from Department of Labor, 27666
- work disability of family heads by family income in 1969 for U.S., 24220
- work in America, report by special task force to Secretary of Health, Education, and Welfare, 26283
- work incentive program (WIN)—
for AFDC recipients, assessments completed and referrals to manpower agencies by welfare agencies, 18015
- implementation of amendments to improve, 21334
- WIN II program, way for everyone to win, 25377
- worker alienation problem (address), 27060
- working for USA, how to apply for civil service job, what government can offer you as Federal worker, 28216
- see also* Employment—Occupations—Work measurement.
- Work force, *see* Labor.
- Work injuries, *see* Injuries.
- Work measurement:
processing of medical information and assessment of work capacity in space flight, USSR study, 17606
- work measurement standards manyear allowances for area offices, HUD staff, 21775
- Work-sharing procedures, *see* Employment management.
- Work stoppages, *see* Strikes and lockouts.
- Work with GAO for more effective government, 31390
- Workbooks:
atmospheric dispersion estimates, 22374
- national emissions data system control device workbook, 29650
- thermal plume prediction, submerged discharge, 20187
- Workers, *see* Farm labor—Government officials and employees—Labor—Women.
- Working conditions and postal construction program, U.S. Postal Service, 21274
- Working life, *see* Labor.
- Working with ammonia, 32493
- Working with cutting fluids, 16383
- Working with industrial solvents, 16385
- Working with lead in industry, 16384
- Working women, *see* Women.
- Workmen's compensation, *see* Employers' liability and workmen's compensation.

Workplaces:

- clean room and work station requirements, controlled environment, 28911
- clean work station machinery, industrial plant equipment handbook, 15943
- Workshops:
chemist-meteorologist workshops, 29682-683
- DIME workshops program, census use study, interim report, 28147
- employee development, instructor's guides for State and local training officers, 27587
- International Workshop on Earth Resources Survey Systems, proceedings, 23675
- limited resource farmers, proceedings, 30669
- lung cell identification, isolation and culture, 30494
- National range workshop, Tucson, Ariz., 23979
- natural radiation environment, 25875
- nuclear energy, environment and engineering education, proceedings, 28072
- processing helium speech, proceedings of Navy-sponsored workshop, 25407
- water systems management workshop, lecture notes, 17818, 23946
- World, *see* specific subjects.
- World Administrative Radio Conference, draft proposals of United States for Maritime Mobile Telecommunications, 31843
- World affairs, *see* International relations.
- World agricultural production and trade, statistical report, 19090
- World agricultural situation, 20091
- World Bank, *see* International Bank for Reconstruction and Development.
- World Data Center A:
Oceanography, oceanographic data exchange, 20182
- Solar-Terrestrial Physics—
preliminary compilation of data for retrospective world interval, 21484
- report UAG series, 23182, 30172-174, 31265
- World data handbook, 17860
- World demand prospects for coffee in 1980 with emphasis on trade by less developed countries, 25041
- World drug traffic and its impact on U.S. security, 15920, 19931, 19991, 31152
- World Environmental Institute, establish, recommendations for need, 17240
- World Health Organization, facilities, services, privileges and immunities for 23rd session of Western Pacific Regional Committee, agreement, 16527
- World heroin problem, 15741
- World iron-ore, pellet and direct-iron policy, 22649
- World military expenditures, 19156
- World monetary conditions in relation to agricultural trade, 27426
- World Ploughing Contest, *see* Farmfest—U.S.A. and World Ploughing Contest.
- World strength of Communist Party Organizations, 31877
- World trade, *see* Commerce.
- World Trade Center, world's greatest exclamation points (address), 29159
- World War 1914-18, *see* European War, 1914-18
- World War 1939-45:
Japan's World War II balloon bomb attacks on North America, 26692
- sound recordings, voices of World War II, select audiovisual records, 25547
- special Marine Corps units of World War II, 23615
- surgery in World War II, orthopedic surgery in Zone of Interior, 16659
- Trust Territory of Pacific Islands damages, enlarge class of persons eligible to receive claim benefits—
hearing, 26159
- report, 27137

INDEX 1973

World War 1939-45—Continued
 United States Army in World War II, 20534
 World weather program, plan for fiscal year 1974, 29820
 World wildlife conference efforts to save endangered species, 30647
 Worldwide crude oil prices, second report, summer, 23898
 Worley, Charles E., micrometer measures of 1,056 double stars, 17789
 Worms:
 and insects harmful to man, animals and plants, publications, price list, 17798
 behavior, and histogenesis of pelagospira larva of *Phascolosoma agassizii*, *Sipuncula*, 25697
 role of sludge worms in eutrophication, 32249
 Worsted:
 systems, consumption, current industrial reports, 18194, 29759
 wool and polyester/wool worsted fabrics from Japan, 20837
 Worster, John R., soil survey of Woodbury County, Iowa, 20777
 Worth:
 food consumption of households by money value of food and quality of diet, United States, north, south, 15472
 monetary value drivers place on comfort in night driving, 31322
 probability approach to sawtimber tree-value projections, 27535
 value and rent by household composition for United States, 31945
 value-of-shipment concentration ratios, annual survey of manufactures, 19192
 Worthington, Louisa E., neuroanatomy of speech, 23768
 Worthington, Robert B., autogenous smelting of copper sulfide concentrate, 23655
 Worthington, William, Worthington for Congress Committee, annual report, 22981
 Worthington for Congress Committee, annual report, 22981
 Worzel, J. Lamar, covering leg 10 of cruises of drilling vessel, *Glomar Challenger*, Galveston, Tex., to Miami, Fla., 25638
 Wotring, Donald W., relief, 19328, 19838
 Woven goods, *see* Textiles.
 WPL, *see* Wave Propagation Laboratories.
 Wrapping, *see* Packing.
 Wrapping paper, *see* Paper.
 Wrecking, housing units authorized for demolition in permit-issuing places, 16751-752
 Wrench sets, box and open end, Federal standard, 32300
 Wrenches:
 and components, hand, nonpowered, Federal item identification guide, 25011
 gages, wrench opening, Federal standard, 30238
 wrench sets, box and open end, Federal standard, 32300
 Wright, J. W., wind wave studies, Doppler spectra, 27850
 Wright, John C., limnology of Yellowtail Reservoir and Blighorn River, 26398
 Wright, Lockwood, minutes of meetings of Federal Open Market Committee, 1936-, and of its executive committee, 25541
 Wright, M. L., feasibility study of in-situ source monitoring of particulate composition by Raman and fluorescence scatter, 30185
 Wright, R. M., development of design information for molecular-sieve type regenerative CO₂-removal systems, 31608
 Wright, Donald H., Citizens for, *see* Citizens for Donald H. Wright.
 Writing:
 author's introduction to Human needs, 29494

Writing—Continued
 national assessment of educational progress—
 group results A and B for objectively scored exercises, national results by region, sex, color, size and type of community, and parental education, 30147
 selected essays and letters, 1969-70 assessment of writing, report, 26371
 writing mechanics, report, 21424
 Wrought metals, *see* names of metals.
 WRSIC, *see* Water Resources Scientific Information Center.
 WS series, 18388
 WSMR, *see* White Sands Missile Range, N. Mex.
 Wu, William R. K., coal composition, coal plasticity, and coke strength, 29202
 Wuersch, Donald E., preliminary tranport wind and mixing height climatology, St. Louis, Mo., 30530
 WURLD wheat in foods of many lands, 16586
 Wyandot County Republican Committee, annual report, 22692
 Wyche, Charlie, antimony, 20552
 Wylie, Aubrey E., forestry research progress in 1971, McIntire-Stennis cooperative forestry research program, 20019
 Wyman, Citizens for, *see* Citizens for Wyman.
 Wynn, Clayton S., pilot plant for tertiary treatment of wastewater with ozone, 26414
 Wynn, N. A., Jr., costs of storage and selected services for farmers' stock payments in commercial facilities, 32188
 Wynne, Ronald D., effective coordination of drug abuse programs, guide to community action, 26746
 Wynoochee River, hydrology of four streams in western Washington as related to several Pacific salmon species, 23349
 Wyoming:
 bark thickness and past diameters of Engelmann spruce, 17519
 census of housing, 1970, housing characteristics for States, cities, and counties, 15568
 census of population 1970, characteristics of population, 25906
 census of transportation, 1972, truck inventory and use survey, 24230
 chemical quality of surface water in Flaming Gorge Reservoir area, Wyoming and Utah, 26512
 climatological data, 18119
 county business patterns, 29753
 Drive Teamster's Colorado-Wyoming Committee, annual report, 24328
 electric rate book, 16051
 geology of—
 gold-bearing conglomerates in northwestern Wyoming (series), 21731, 27568
 Green River Formation, bibliography, 27560
 Harebell formation (upper Cretaceous) and Pinyon conglomerate (uppermost Cretaceous and Paleocene), 27568
 John D. Rockefeller, jr. Memorial Parkway, establish—
 law, 18906
 report, 15691
 mineral industry, minerals yearbook chapter, 20550, 29229
 precipitation data, hourly, 18468
 register of minority contractors and housing professionals, listing in selected cities, 32385
 sedimentary petrology and paleoecurents of Harebell Formation, Pinyon Conglomerate, and associated coarse clastic deposits, northwestern Wyoming, 21731
 snow survey measurements, 1919-72, summary, 32560

Wyoming—Continued

southwestern stratigraphic divisions and geological history of Laney Member of Green River formation in Washakie Basin in southwestern Wyoming, 26495
stratigraphy and geologic history of Montana Group and equivalent rocks, 30281
volume tables and point-sampling factors for Engelmann spruce, 23305
water supply outlook and snow surveys, 19065

Wyoming Political Action Committee (WYOPAC), annual report, 24436

WYOPAC, *see* Wyoming Political Action Committee (WYOPAC).

X

X-ray apparatus, course manual for machine sources of X-rays, radiation exposure, 26806

X-ray beams, divergent beam (Kossel) X-ray method and its uses in measuring strain contours in individual grain of Fe-3 weight percent Si transformer sheet, 32482

X-ray cameras, *see* Cameras.

X-rays:

applications, instructor course manual, 25680

chest X-ray as screening procedure for cardiopulmonary disease, policy statement, 26805

development of X-ray fluorescence spectroscopy in elemental analysis of particulate matter, evaluation of commercial multiple crystal spectrometer instruments, 31273

diffraction of X-rays in aging alloys having different degree of volumetric discrepancy between precipitation phase and matrix, USSR study, 26565

experimental short-pulse X-ray detection system, 24031

measurements, course manual, 26807

National Conference on Radiation Control, 4th annual conference, 16468

plutonium and americium measurement in humans by X- and gamma-ray spectral analysis, 25884

quantitative X-ray diffraction analysis of pyrite in coal, computerized system, 29244

standard X-ray, diffraction powder patterns, 20635

200 mCi 55Fe X-ray diffraction source in focusing and Debye-Scherrer analytical applications, evaluation, 25871

volume of X-ray visits, U.S., 29330

W. H. Zachariasen's theory of X-ray diffraction in ideal crystals, explanatory notes, 30595

we want you to know about diagnostic X-rays, 31342

X-ray mineralogy of Parachute Creek member, Green River formation, in northern Piceance Creek basin, Colo., 30282

Xenon resonance phenomena during multi-photon ionization of xenon atom in electric field $E=5 \times 10^7$ V/cm, 22452

Y

Yachnin, Mara, selling in Greece, 31208.

Yachts, admeasurement and documentation, 15613

Yadlowsky, Edward J., laboratory investigations of Driven low frequency plasma oscillations, 29389

Yakima project:

electrical equipment, region 1, field review of maintenance, 31780

mechanical equipment, Pacific Northwest region, field review of maintenance, 31782

Yakowitz, Harvey:

divergent beam (Kossel) X-ray method and its use in measuring strain contours in individual grain of Fe-3 weight percent Si transformer sheet, 32482
preparation and homogeneity characterization of austenitic iron-chromium-nickel alloy, 20636

Yakutat, Alaska, under Mount Saint Elias, history and culture of Yakutat Tlingit, 20760

Yalobusha River, flood plain information, 20132-133

Yamamoto, Teruo, morphometry of 3 small watersheds, Black Hills, South Dakota, and some hydrologic implications, 21673
Yams, yam production methods, 20930

Yanlv, Shlomo S., plutonium and americium measurement in humans by X- and gamma-ray spectral analysis, 25884

Yankton Indians:

Sioux Tribe, judgment funds, disposition—law, 19402
report, 19634

Yanowitch, Robert E., aircraft as instrument of self destruction, 29686

Yao, J.T.P., seismic design of building structures, 20108

Yap, Western Caroline Islands, additional records of marine benthic algae, 25695

Yarding, *see* Lumbering.

Yarn:

cotton cloth and yarn values, cotton prices and mill margins, etc., mill margin report, 16582

spun, production, 1972, current industrial reports, 30848

textured, production, current industrial reports, 29773

viscose rayon yarns wholly of continuous fibers, workers of Lewistown, Pa., rayon plant of American Viscose Division, FMC Corp., 24071

Yarnall, John J., relief, 19815

Yates, B. C., millimeter attenuation and reflection coefficient measuring system, 17739

Yates, Graem, for Congress, *see* Graem Yates for Congress.

Yates, Sidney R., Yates for Congress Committee, annual report, 24327

Yates for Congress Committee, annual report, 24327

Yaukey, Raymond S., Caribbean Free Trade Association, 16833

Yavapai-Apache Indians, *see* Yavapai Indians.

Yavapai County, Ariz., precambrian geology of northern Bradshaw Mountains, 20343

Yavapai Indians:

Payson Band of Yavapai-Apache Indians, land acquisition, authorize—law, 19404
report, 19636

Yavapai Apache Tribe, judgment funds, disposition—law, 19396
reports, 15827, 17004

Yaw, E. Eugene:

laws requiring drivers to stop for school buses, 20667

laws requiring helmets and eye protectors for motorcyclists, 22055

Year-books, *see* Yearbooks.

Year round schools, 28323

Yearbooks:

minerals, 1970, area reports—domestic—

departmental edition, 19542

document edition, 20537

international—

departmental edition, 26653

document edition, 26041

1971 HUD statistical yearbook, 21804

Yellow Medicine County Republican Committee, annual report, 24518

INDEX 1973

- Yellow Pine District, gold anomaly in soil of West End Creek area, Valley County, Idaho, 26496
- Yellow poplar, *see* Tuliptree.
- Yellowstone, Fort, Yellowstone National Park, historic structure report, 27830
- Yellowstone National Park:
addition to National Wilderness Preservation System, proposal, 23000
chemical analysis of thermal waters, 32359
- Fort Yellowstone, historic structure report, 27830
- geology of pre-Tertiary rocks in northern part, 26506
- geology of Yellowstone National Park (series), 21730, 26506
- maps, 17786, 31736
- place where hell bubbled up, history of 1st national park, 23829
- stratigraphic framework on Absaroka Volcanic Supergroup in region, 21730
- wilderness recommendation, 22129
- wildlife, description, etc., 22132
- Yellowstone River, drainage basin, cooperative State-Federal report on water pollution, 17805
- Yellowtail Reservoir, limnology, 26398
- Yemen:
Arab Republic—
investment guaranties, agreement, 31853
mineral industry, minerals yearbook chapter, 16269
People's Democratic Republic, minerals industry, minerals yearbook chapter, 16269
San'a' map, 29800
- Yentna River:
geology and mineral deposits of—
Chulitna-Yentna mineral belt, Alaska, 29021
upper Chulitna and Yentna Districts, south-central Alaska (series), 29021
- Yeomen, yeoman 1 & C, Navy rate training manual, 31760
- Yerkes, R. F., geology and oil resources of western Puente Hills, southern California, 21718
- Yet another stream search among 2401 photographic meteors, 23958
- Yield tables, *see* Volume and yield tables.
- Yields on newly issued corporate bonds, 23245
- Yields on recently offered corporate bonds, 26906
- Yockanookany River, special flood hazard information report, 20165
- Yocom, Herbert A., burning to reduce understory hardwoods in Arkansas Mountains, 23298
- Yokel, Felix Y.:
full scale test on two-story house subjected to lateral load, 25549
structural performance evaluation of innovative building systems, 16362
- Yokes:
television yokes, workers of Warrensville Heights, Cleveland, Ohio, plant of Pemcor, Inc., Tariff Commission report, 32597
- Yokohama Specie Bank, Ltd.:
depositors, relief—
hearing, 17064
law, 19393
report, 17180
- Yonovitz, Albert:
eardrum displacement following stapedius muscle contraction, 29198
successful conditioning of stapedius muscle, 29200
- York, Pa., area wage survey, 29170
- York County Republican Committee, Virginia, annual report, 22785
- Yosemite National Park:
addition to National Wilderness Preservation System, proposal, 23000
general information, 30550
wilderness recommendation, 22130
- Yoshikawa, Kenneth, K., iterative solution of integral equation for radiative transfer by using variational technique, 31632
- Yoshimura, Kazuyuki, generation of accurate and uniform time scale with calibration and prediction, 22009
- Yoshpe, Harry B., stemming inflation, 21435
- Yotsukura, Nobuhiro, transverse diffusion of solutes in natural streams, 21722
- You and forest fires, 22344
- You and vocational rehabilitation services, 16483
- You and your passport, 30644
- You can do it: rural development, making rural America a better place to live and work, 19125
- You can poison yourself, your family, your livestock, if you don't use poison carefully, 26947
- You can't see what's wrong with grilling indoors, you can't see carbon monoxide, we want you to know what we know about carbon monoxide (poster), 23261
- YOU-IN program guide, 16127
- YOU-IN program, what's it all about? 16128
- YOU-IN, youth opportunities unlimited in nursing, series, 16126-128
- You'll be more than a teacher in Peace Corps or Vista, parts of Action, 22306
- Young, Carol, playing safe in toyland, 21597
- Young, E. J., disseminated silver-lead-zinc sulfide occurrence at Hahns Peak, Routt County, Colo., 26493
- Young, Gary M.:
census data for community action, 21037
1970 census and you, general introduction to census data, subjects, areas, reports, tapes, microfilm, 24209
- Young, R. A., water supply for Nuclear Rocket Development Station at AEC's Nevada test site, 17547
- Young, Richard K., systematics and areal distribution of pelagic cephalopods from seas of southern California, 16475
- Young, Samuel H.:
Lawyers for Young political committee, annual report, 26038
Volunteers for Young (Young Volunteers), political committee, annual report, 24406
Youth for Young (Young Youth), political committee, annual report, 24440
- Young, Bill, Salute to, *see* Salute to Bill Young.
- Young, John, Campaign Fund, *see* John Young Campaign Fund.
- Young, John, Congressman. Campaign Committee, *see* Campaign Committee for Congressman John Young.
- Young marrieds, 29791
- Young people, *see* Youth.
- Young Volunteers, *see* Volunteers for Young (Young Volunteers).
- Young Youth, *see* Youth for Young (Young Youth).
- Youngstown, Ohio:
area wage survey, 23599
flood plain information, Mahoning River and Crab Creek, Mahoning County, Ohio, 28713
- Your Agriculture Department, how it serves people on farm and in community, nation, world, 22345
- Your exemptions and exemptions for dependents, 20428
- Your Federal Income tax for individuals, 20429
- Your future is looking upward, 22361
- Your Navy from viewpoint of Nation's finest artists, 29440

Your personal affairs, 15510
 Your rights under new work incentive program, 23589
 Your social security, 20772
 Your social security rights and responsibilities, 27887
 Youth:
 better ways to help youth, 3 youth services systems, 25808
 building education into youth services, 32533
 characteristics of American youth, 24239
 children and youth projects, comprehensive health care in low-income areas, 20521
 Comprehensive youth opportunities act, hearing, 31017
 creating independence, 1763-89, background reading for young people, 23606
 designs for preparation of vocational and technical teachers of socioeconomically disadvantaged youth, 21421
 difficulties of Neighborhood Youth Corps in-school program and its management problems, GAO report, 23318
 District of Columbia youth act for prevention of juvenile delinquency, hearings, 21329
 education for parenthood, 26361
 18, 19, 20 will they vote? suggestions and resources for students and teachers, 17359
 experimental study of differential effects of parole supervision for group of adolescent boys and girls, summary report, 25365
 facts about adolescence, 20670
 Federal juvenile delinquency and related youth development programs—analysis for juvenile delinquency planners, 26533
 directory, handbook for juvenile delinquency planners, 27590
 Federal youth programs, discussion paper, 28646
 financial assistance for work and training and year-round recreational opportunities, hearing, 31017
 growing up in America, background to contemporary drug abuse, 30505
 height and weight of youths 12-17 years, U.S., 23724
 how USDA can help you involve youth in community development, 28013
 MEDICAID, early and periodic screening, diagnosis, treatment for individuals under 21, guidelines, 23627
 National Council of State Committees for Children and Youth, report of 1st national workshop, 24109
 Neighborhood Youth Corps, general information, 17655
 odd-job program, comprehensive guide, 16219
 publications, price list, 27867
 report on follow-up activities of 1971 White House Conference on Youth, 20877
 Runaway youth—
 act, reports, 17137, 31063
 hearings, print additional copies, reports, 26213, 28325
 teenage self test on smoking, 29333
 today's Army, meaningful alternative for young people, 26976
 toward Renaissance generation (address), 23576
 training young people (speech), 32422
 utilization of psychiatric facilities by persons under 18 years of age, United States, 32499
 we, youth of America, 29792
 YOU-IN, youth opportunities unlimited in nursing series, 16126-128
 youth crisis services, hearing, 15928

Youth—Continued
 youth service bureaus—
 and delinquency prevention, 27971
 challenge, 30634
 national study, 25809
 youth travel abroad, what to know before you go, 30646
 Youth Advisory Board, newsletter, 19093
 Youth centers, see Recreation centers.
 Youth Commission, District of Columbia, establish, hearings, 21329
 Youth Conservation Corps:
 act, amend—
 hearings, 19766
 law, 21135
 report, 21173
 environmental education, 25207
 Youth for Blesdoo, annual report, 24679
 Youth for Young (Young Youth), political committee, annual report, 24440
 Yttrium:
 cyclic oxidation of cobalt-chromium-aluminum-yttrium and aluminide coatings on IN-100 and via alloys in high-velocity gases, 17714
 molten salt electrowinning of magnesium-yttrium alloys, 23660
 purification by electrorefining, 26661
 Yugoslavia:
 economic trends and their implications for United States, 17574, 29099
 finance, debt rescheduling under certain agricultural commodity and AID loan agreements, 16502
 foreign trade regulations, 21103
 investing in, 31204
 map, 29801
 market factors, 16836
 NBS special foreign currency program, 23713
 selling in, 30128
 Yukon River and Valley:
 hydraulic geometry of some Alaska streams south of Yukon River, 23346
 reconnaissance geology of northern Yukon-Koyukuk province, Alaska, 27571
 Yuma Desert, geophysical studies in Yuma area, Ariz. and Calif., 30275
 Yuma project, electrical equipment, region-3, field review of operation and maintenance, 31785
 Z
 Zabetakis, Michael G., methane control, 1972, in U.S. coal mines, 27697
 Zachariasen theory, see Diffraction.
 Zaffarano, Richard F.:
 mineral industry of—
 Texas, 20549
 Wyoming, 20550
 Zaid, Charles:
 inventory of records of War Manpower Commission, 32480
 journal and report of James Leander Cathcart and James Hutton, agents appointed by Secretary of Navy to survey timber resources between Mermentau and Mobile Rivers, 21994
 list of North Carolina land grants in Tennessee, 20626
 preliminary inventory of records of Reconstruction Finance Corporation, 31669
 Zaire:
 Congo-Zaire boundary study, 17865
 economic trends and their implications for United States, 23491, 29110
 map, 29802
 military assistance, deposits under Foreign assistance act, agreement, 17897
 Zalewski, Edward F., optical radiation measurements photometric instrumentation and research, 1970-71, 20641
 Zambia:
 establishing business in, 25972
 foreign trade regulations, 30127
 mineral industry, minerals yearbook chapter, 16312

INDEX 1973

- Zanoni, A. E., phosphorus removal by trickling filter slimes, 31290
- Zasada, John C.:
guidelines for obtaining natural regeneration of white spruce in Alaska, 20294
paper birch seed production in Tanana Valley, Alaska, 21657
- Zaval, Frank J.:
vegetation augmentation by reuse of treated active surface mine drainage, 21501
water infiltration control to achieve mine water pollution control, feasibility study, 26413
- Zelisset, Paul T., index to 1970 census summary tapes, 28192
- Zeller, John R., analytical and experimental performance of optimal controller designs for supersonic inlet, 26689
- Zenith Radio Corp., television receivers, radio receivers, phonographs, and radio-phonograph combinations, workers of Zenith Radio Corp., Tariff Commission report, 29555
- Zeolites, properties of natural zeolites, 29234
- Zero gravity, experimental investigation of laminar gas jet diffusion flames in zero gravity, 32467
- Zero in on safety campaign slips, trips, falls, 29084
- Zevakina, R. A., ionosphere disturbances and their influence on radio communications, 29303
- Zinc:
creep and other properties of zinc-copper-titanium alloys annealed after rolling, 16333
disseminated silver-lead-zinc sulfide occurrence at Hahns Peak, Routt County, Colo., 26493
economics of byproduct metals, 26649
engineering evaluation of non-reserve zinc-air cells, 19159
industry, mineral industry survey, monthly, 19094
recovery of zinc, copper, silver, and iron from zinc smelter residue, 30431
smelters, air pollution control (address), 26346
zinc-rich coatings applied to carbon steel, performance characteristics, 31638
- Zinc oxide, mineral industry survey monthly, 19095
- Zinn, Samuel V., jr., develop acceleration and brake monitor system, 24053
- Zion National Park, general information, 30551
- Zip code, directory, with Zip code numbers, 26910
see also Post offices.
- Zirconium:
liquid state spectral emissivities in electron-beam furnace, 29233
minerals yearbook chapter, 25494
- Zirconium isotopes, structure of zirconium-93 and zirconium-91, 17719
- Zirconium oxide, increasing heat and impact resistance of zirconium-dioxide based ceramics, USSR study, 20470
- Zohdy, Adel, A. R., recognition of natural brine by electrical soundings near Salt Fork of Brazos River, Kent and Stonewall Counties, Tex., 30233
- Zonars, Charles, relief of estate, 15808
- Zoning:
model airport hazard zoning ordinance, 21533
zoning inspector aide, career ladder and curriculum guide, instructor's guide, 27580
- Zoology:
bibliography and zoological taxa of Paul Bartsch, with biographical sketch, 30633
Smithsonian contributions to zoology, 16475-476, 17828, 20763-765, 23962-964, 25697-699, 26823-826, 27879, 29489-492, 30633, 31801-802, 22552
- Zoonoses:
surveillance, Center for Disease Control, rabies—
annual summary, 29793
monthly summary, 18062
- Zorunski, William E., acoustic impedance of curved multilayered duct liners, 30458
- Zuluaga-Angel, Antonio A., flow into stratified reservoir, 17417
- Zuni Indians, general information, 31483
- Zurinskas, Thomas E., simulation study of diamond runway marks for aircraft approach guidance, 24037
- Zvenigorod, Russian SFSR, Zvenigorod experimental station, optical observations of artificial earth satellites, USSR study, 30329
- Zwingle, J. L., State boards responsible for higher education, 16000
- Zyzys, Edmund A., test and evaluation of category 3 ILS ground guidance equipment STAN-38 glide slope tests at NAFEC on runway 4, 24051

MONTHLY CATALOG



OF UNITED STATES

GOVERNMENT PUBLICATIONS

JANUARY-DECEMBER 1973

Nos. 936-947

Entries 15461-32609

Including Annual Cumulative Index

Issued by the **SUPERINTENDENT OF DOCUMENTS**

U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 : 1973

INTERNATIONAL

ASSOCIATION

OF THE

TELEPHONE

INDUSTRY

OF THE

UNITED STATES

AND

CANADA

INCORPORATED

1908

NEW YORK

OFFICE

100 NASSAU ST.

To Superintendent of Documents,
Government Printing Office,
Washington, D.C. 20402

For Use of Supt. of Docs.

..... Enclosed

To be mailed
later

..... Subscriptions

Refund _____

Coupon refund

Postage

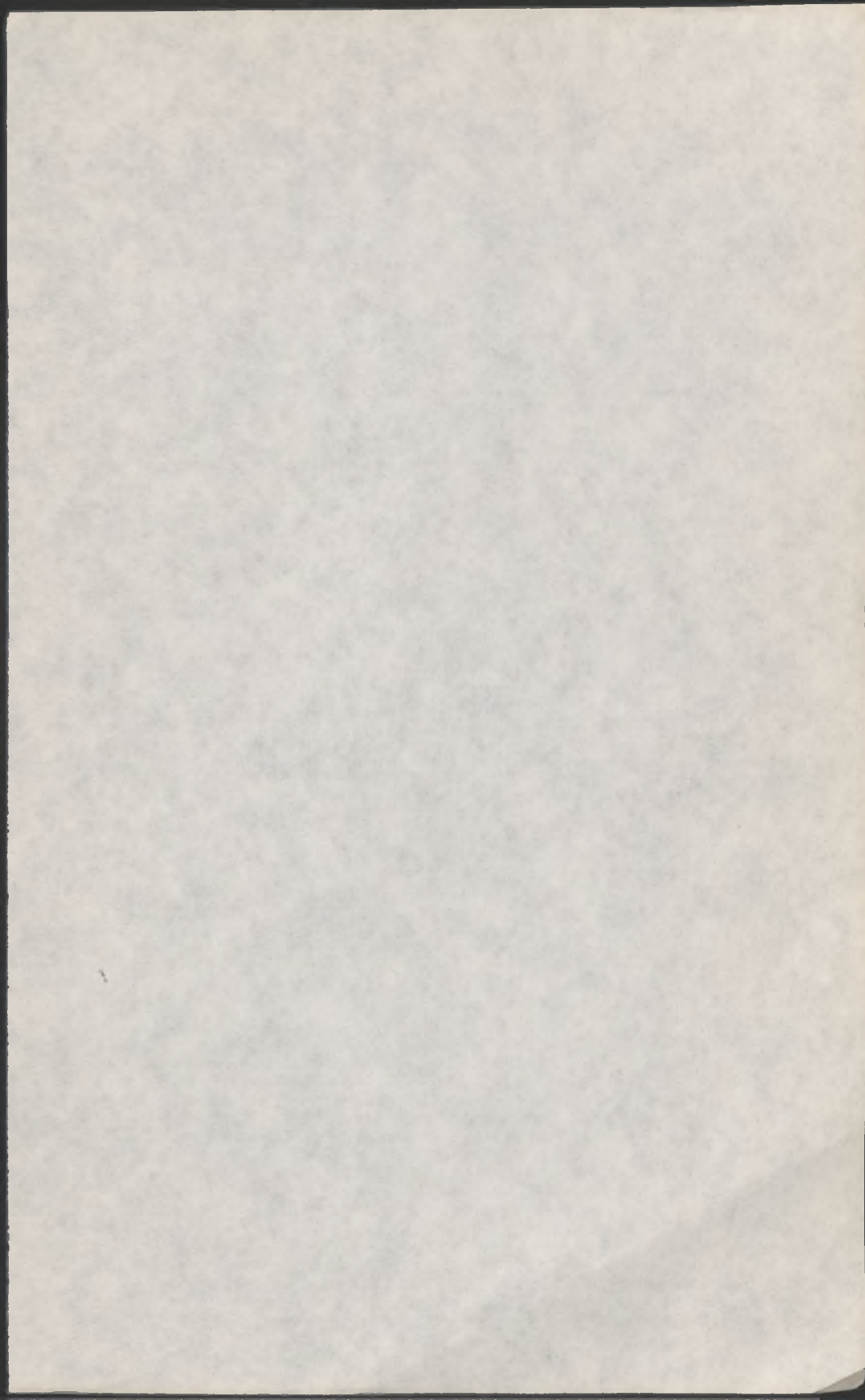
City, State, and ZIP Code _____

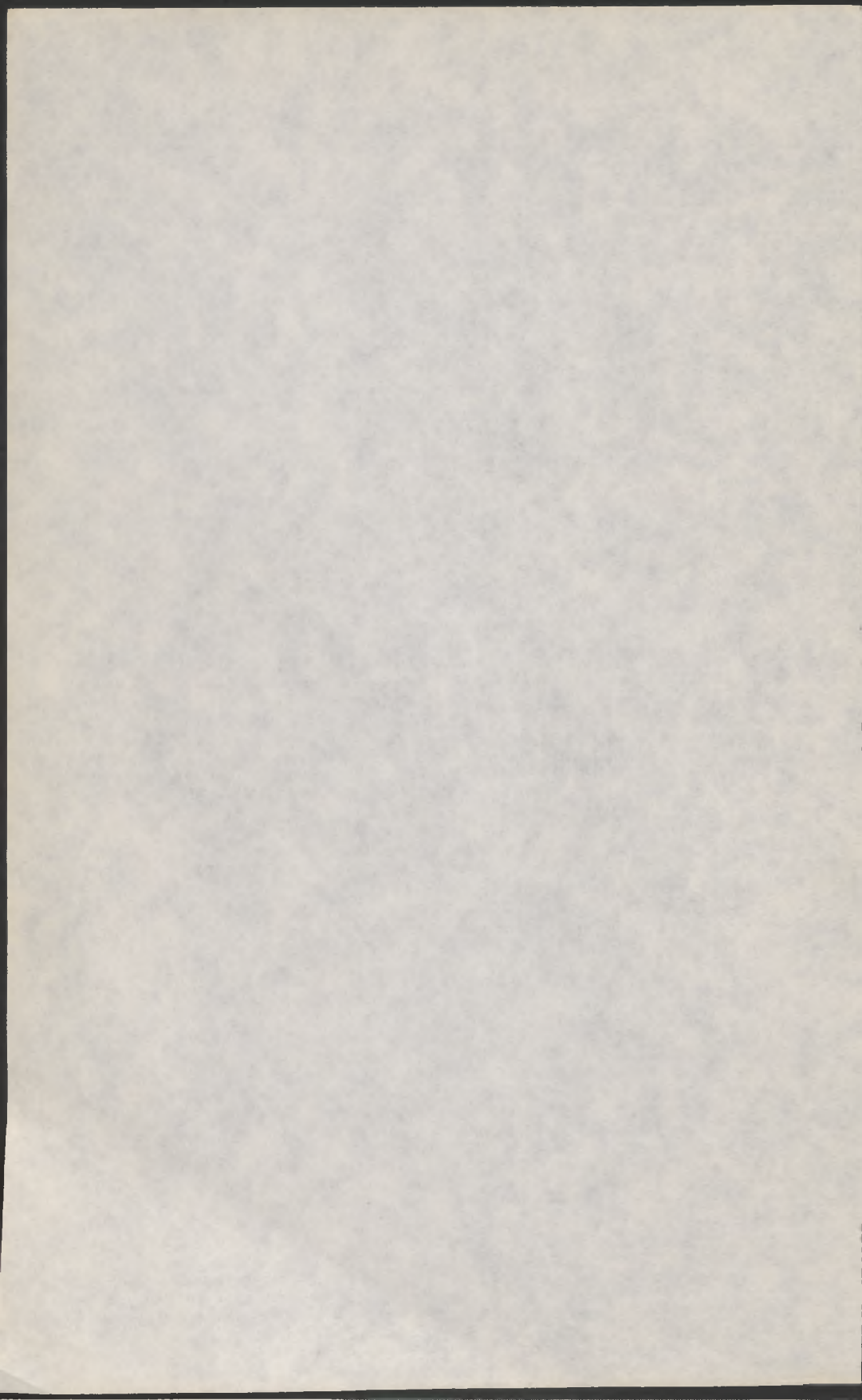
Additional space for your order

[illegible]

Do not write in space below

Total \$_____





GOVERNMENT PRINTING OFFICE BOOKSTORES

In addition to the mail-order service provided by the Office of the Superintendent of Documents, Government Printing Office, there are also 13 retail bookstores outside of Washington, D.C., each of which have in stock approximately 1,000 of our most popular titles. You are invited to stop in any time. The locations of these stores are shown below:

Government Printing Office
710 North Capitol Street
Washington, D.C. 20402
Telephone: Area code 202—783—3238

Forrestal Bookstore
Room 1—J—001
James Forrestal Building
1000 Independence Ave.
(L'Enfant Plaza)
Washington, D.C. 20407
Telephone: Area code 202—426—7937

Department of Commerce, Lobby
14th and Constitution Avenue NW.
Washington, D.C. 20230
Telephone: Area code 202—967—3527

Atlanta Bookstore
Room 100, Federal Building
275 Peachtree Street NE.
Atlanta, Georgia 30303
Telephone: Area code 404—526—6947

Birmingham Bookstore
Room 102A, 2121 Building
2121 Eighth Avenue North
Birmingham, Alabama 35203
Telephone: Area code 205—325—6056

Boston Bookstore
Room G25, John F. Kennedy Federal
Building
Sudbury Street
Boston, Massachusetts 02203
Telephone: Area code 617—223—6071

Canton, Ohio Bookstore
Federal Office Building
201 Cleveland Avenue SW.
Canton, Ohio 44702
Telephone: Area code 216—455—8971

Chicago Bookstore
Room 1463—14th floor
Everett McKinley Dirksen Building
219 South Dearborn Street
Chicago, Illinois 60604
Telephone: Area code 312—353—5133

Dallas Bookstore
Room 1C46
Federal Building—U.S. Courthouse
1100 Commerce Street
Dallas, Texas 75202
Telephone: Area code 214—749—1541

Detroit Bookstore
Room 229, Federal Building
231 W. Lafayette Blvd.
Detroit, Michigan 48226
Telephone: Area code 313—226—7816

Denver Bookstore
Room 1421
Federal Building—U.S. Courthouse
1961 Stout Street
Denver, Colorado 80202
Telephone: Area code 303—837—3965

Kansas City Bookstore
Room 135, Federal Office Building
601 East 12th Street
Kansas City, Missouri 64106
Telephone: Area code 816—374—2160

Los Angeles Bookstore
Room 1015, Federal Office Building
300 North Los Angeles Street
Los Angeles, California 90012
Telephone: Area code 213—688—5841

New York Bookstore
Room 110
26 Federal Plaza
New York, New York 10007
Telephone: Area code 212—264—3826

Philadelphia Bookstore
U.S. Post Office and Courthouse
Main Lobby
Ninth and Chestnut Streets
Philadelphia, Pennsylvania 19107
Telephone: Area code 215—597—0677

San Francisco Bookstore
Room 1023, Federal Office Building
450 Golden Gate Avenue
San Francisco, California 94102
Telephone: Area code 415—556—6657

UNITED STATES
GOVERNMENT PRINTING OFFICE

PUBLIC DOCUMENTS DEPARTMENT
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE
375
SPECIAL FOURTH-CLASS RATE
BOOK

