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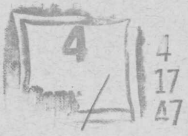

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SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1945

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1946

United States National Museum,
Under Direction of the Smithsonian Institution,
Washington, D. C., November 1, 1945.

Sir: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1945.

Very respectfully,

Alexander Wetmore,
Director, U. S. National Museum.

The Secretary,
Smithsonian Institution.

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REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1945

By ALEXANDER WETMORE
Secretary of the Smithsonian Institution, Director of the United States National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

FUNDS available for the National Museum for the fiscal year ended June 30, 1945, were provided by the appropriation "Salaries and Expenses, Smithsonian Institution" in the Independent Offices Appropriation Act approved June 27, 1944. These allotments are summarized as follows:

National Museum	$444,151
Maintenance and operation	451,843
Printing and binding	43,000
Total available for year	938,994

The allotment "National Museum" is concerned with the national collections in natural history, anthropology, engineering and the industries, and history, including their exhibition, preservation, and increase as well as research based on them. The allotment for "Maintenance and Operation" is for maintaining, operating, and guarding the buildings. The allotment for "Printing and Binding" covers the cost of publications and the necessary binding of books and pamphlets in the Museum library.

In addition to the regular appropriation, $10,525 was received for promotions granted under Public Law 200. The amount allotted for overtime service was $1,001 less than in the fiscal year 1944, but since this is a year-to-year allotment it has no influence on the amount of service available for the regular operation of the Museum. There was no change from 1944 in the funds available for miscellaneous expenses, for printing and binding, or for the personal services available to the Museum.

Owing to the serious reduction of personnel under the ceiling established in 1943, and to the necessity of continuing informational

and research services to the war agencies, it was necessary to postpone certain activities of the Museum. The functions most adversely affected by these wartime restrictions related to accessions, publications, cataloging and classification, renovation of exhibitions, and the normal research of the Museum. These difficulties were increased by considerable delays in filling vacancies and by the impossibility of obtaining certain sorely needed supplies and equipment. It is to the great credit of the staff that the varied activities of the Museum proceeded so well under these adversities. This has been possible only through their industry and ingenuity and the realization that they are the custodians of a trust that must be preserved for the science and culture of future generations of our Nation.

The principal factors that still retard the work of the Museum are lack of adequate space, shortage of personnel, and inadequate supplies and equipment. The national collections include one of the most complete gatherings of scientific materials of the kind in the world and contain much information that can be useful in the development of our natural resources, our agriculture, and our industry. The extent to which this usefulness can be realized is directly related to the personnel available to unlock this knowledge, to the space that will permit the proper arrangement and accessibility of the collections, and to the availability of working tools that will facilitate the study of the collections. It is planned that with the cessation of hostilities the Museum will resume many of its activities that were postponed owing to the heavy requirements placed upon the Nation by the global war.

Consideration of plans for additional housing was kept steadily in mind and the various projects were reconsidered to bring them down to date and have them in readiness whenever a program for public buildings was initiated. Additions to the Natural History Building through wings at either end have already been authorized by the Congress. The continuation of Ninth Street through the Mall to provide a through traffic lane across this section will cut through the eastern end of the present Arts and Industries Building, an antiquated brick structure completed in 1883 at a cost of $225,000, which is no longer suitable for modern installations in museum display. At the present time it is badly crowded and offers only a part of the space necessary for the great fields of interest that it is supposed to accommodate. Our program includes a separate building for Engineering and Industries, which will cover the field of aviation, in which the Smithsonian has the most historically important collection in the country. This collection should be displayed in an appropriate manner with space to include many additional objects. There is

great need as well for further room for expansion in all the industrial collections, which cover the record of American ingenuity and progress, and are thus the story of the growth and development of our Nation along these lines.

A separate building for American history is also planned, our present collections being displayed in the Arts and Industries Building. The existing space that can be assigned to this subject is badly crowded with no hope of necessary expansion in its present quarters. The collections contain some of the most valuable objects of their kind in existence, and they are viewed annually by many thousands of our citizens. The years of war that have just closed will yield many more mementos that must be displayed adequately for present and future generations. A building should be dedicated to this purpose alone.

The two projects, one for a building for engineering and the industries and one for a building for history, have been estimated for authorization by Congress.

COLLECTIONS

In examining the list of accessions acquired during the year it has been interesting to observe the steady flow of valuable specimens into the Museum collections. Most of the lots have been small but the aggregate number has been about average, a surprising fact in view of the widespread condition of war. A large part of the specimens came from service men and represented extensive areas from which we have had little or no material before. Specimens from various remote islands in the Pacific area are especially notable and in some instances are equal in importance to larger sendings from some of the continental areas.

New material came in 1552 separate lots, with a total of 232,822 specimens, distributed among the five departments as follows: Anthropology, 6,642; biology, 197,462; geology, 23,770; engineering and industries, 3,199; history, 1,749.

For examination and report 1,122 lots of specimens were received, covering all the fields embraced in our laboratories, an increase of 398 over last year. Some of this material is returned to the senders and some that is especially desirable remains as an addition to the Museum's collections.

Gifts of duplicates to schools, museums, and other institutions numbered 1,089 specimens. Exchanges of duplicate materials with other collections amounted to 19,351 specimens, and 1,782 specimens were transferred by request to other governmental agencies. Loans for scientific study to investigators outside Washington totaled 28,065 specimens. The summary of the collections given below has been

adjusted to reflect additions and eliminations from the various series and represents the material cataloged at the close of the fiscal year.

Anthropology	719, 333
Biology	14, 047, 650
Geology	2, 710, 613
Engineering and industries	142, 624
History	531, 180
Total	18, 151, 400

EXPLORATIONS AND FIELD WORK

The principal studies in the field, like those of last year, related directly or indirectly to the war and were considerably reduced below the usual level of times of peace. The results, however, were valuable and covered a variety of subjects.

In continuation of the program for the promotion of cultural relations with scientists in the other American republics in cooperation with the Department of State, Dr. E. A. Chapin, curator of insects, traveled in Chile for work in connection with entomologists and entomological collections in that country. Upon his arrival in Santiago arrangements were made by the Chilean Government for him to visit forested areas, both natural and artificial, the agricultural extension stations, and the agricultural schools in southern Chile between Santiago and the Island of Chiloé. About five weeks were spent on this trip, and many important contacts were made. Although the season was unfavorable, some very interesting insects were observed and collected. The last three weeks of Dr. Chapin's 2-month sojourn were spent in Santiago, where considerable work was done on the Chilean national collection at the museum. Arrangements were also made to assist the department of agriculture in Chile in their white-grub investigations and exchanges were arranged with certain collectors in Santiago.

In connection with this same program of cultural cooperation with the American republics, Dr. T. Dale Stewart, curator of physical anthropology, went to Mexico on March 8, returning on June 23. The primary purpose of this trip was to give training in methods of osteometry to the graduate students of the Escuela Nacional de Antropología. Owing to the recent activities of the Instituto de Antropología e Historia, of which the Escuela and Museo Nacional are part, Mexico is now one of the leading anthropological centers in this hemisphere. The subject of physical anthropology is handled by such able workers as Dr. D. F. Rubín de la Borbolla, the acting director of the Escuela, Sr. Javier Romero, curator in the Museo, Dr. Juan Comas, and Srta. Ada d'Aloja. Under them young students are developing who already have had extensive field experience. In addition, Dr. Stewart was able to study a collection of skeletal remains

in the Museo Nacional de Antropología collected by Dr. Eduardo Noguera earlier in the year at Xochicalco. This collection, although small, is unusually well preserved, and contains interesting examples of tooth mutilation and cranial deformity. The teaching and research supplemented each other, as the Xochicalco collection was used for demonstration purposes, particularly as regards restoration, sexing, aging, and pathological changes. Much interest in this field of research has developed as a result of this work.

The Department of Anthropology was further represented in the good-will program by the detail of Herbert W. Krieger, curator of ethnology, to attend conferences and conduct surveys at Isabela, Dominican Republic, relative to the exact location and possible restoration of the settlement established there by Christopher Columbus.

Another project was concerned with work in Haiti by Dr. Alfred Métraux, of the Institute of Social Anthropology, from September 18 to November 30. His investigations concerned anthropology and were made for the Museum in cooperation with the Bureau of Ethnology of Haiti and the Scientific Society of Haiti. For one month Dr. Métraux conducted cooperative archeological investigations on Tortue Island in the north, and for another month he was in Port-au-Prince engaged in lectures and anthropological investigations. During the entire period Dr. Métraux maintained close contact with the Scientific Society, for which he organized seminars for the discussion of anthropology.

In continuation of the ornithological reconnaissance of northeastern Colombia, M. A. Carriker, Jr., went into the field to complete the examination of the valley separating the Sierra Nevada de Santa Marta from the Sierra Perijá. At the end of the fiscal year he had moved into the lower elevations of the Sierra Nevada where this range extends to the east toward the Guajira desert. Excellent results were reported in additional specimens for our rich collections from this area. This work is financed by the income of the W. L. Abbott fund.

A few local collections were made by Dr. Leonard P. Schultz and Dr. Robert R. Miller, curator and associate curator of fishes, respectively, who secured fossils at Scientists Cliffs, on Chesapeake Bay, and fishes from various creeks in the State of Maryland.

Several of the insect specialists made extensive, largely local, collections within their own groups, some 3,000 specimens being added to the national collections through these efforts. Numerous new forms were obtained through these collections, especially to the coleopterous larvae and the Aleyrodidae. Most of the aleyrodid material was obtained by Miss Louise Russell from preserved plant material in the National Herbarium and in the herbarium of the New York Botanical Gardens.

Dr. Paul Bartsch, curator of mollusks, and Dr. J. P. E. Morrison, assistant curator, conducted several field trips for the purpose of acquainting members of the staffs of the National Naval Medical Center, Naval Medical School, and the National Institute of Health with the habitat of certain mollusks that might serve as intermediate hosts of trematode worms.

Paul S. Conger, associate curator in charge of the diatom collection, spent several weeks in the region of the Chesapeake Biological Laboratory in investigations concerning the food and fattening of oysters and other problems of diatom ecology. Mr. Conger's researches were sponsored by the Maryland Board of Natural Resources.

Dr. G. Arthur Cooper, curator of invertebrate paleontology, in company with Dr. Byron N. Cooper, of the Virginia Geological Survey, carried on further investigations in the complicated geology and paleontology of the nearby Appalachian Valley, during two brief field trips. The first, in July 1944, was designed to study facies changes in the Ordovician limestone (Chambersburg formation) from its type area near Chambersburg, Pa., to a point in the vicinity of Staunton, Va. About 2 weeks were spent in the study, which resulted in interesting information and good collections.

A second trip, which included Dr. Raymond S. Edmundson, also of the Virginia Geological Survey, extended these studies through the Ordovician rocks of southern Virginia and Tennessee. The party began the study about the middle of October near Athens, Tenn., and visited type sections of Ordovician formations in Virginia and Tennessee to see if the Tennessee formations could be recognized in southern Virginia. The men worked from Athens north to Knoxville, then went to Clinton, Tenn., and worked from there to Cumberland Gap in northern Tennessee. From here they traveled for a short distance along the Cumberland Front and on to Natural Bridge, and then to Harrisonburg to tie the studies into the work of the early part of the summer. The study was completed early in November.

The curator of mineralogy and petrology, Dr. W. F. Foshag, continued his supervision of surveys for strategic minerals in Mexico.

At the end of January 1944, Dr. Alexander Wetmore, assistant secretary, with Dr. J. P. E. Morrison, assistant curator, division of mollusks, as assistant, went to Panama in connection with some biological investigations for the War Department. Dr. Wetmore returned late in March leaving Dr. Morrison to continue the work until October. As one result the Museum now has extensive collections of birds, mollusks, and reptiles as well as valuable lots in other fields from some islands of the Archipiélago de las Perlas (Pearl Islands) that have not been known well previously.

THE MUSEUM IN WARTIME

It was with considerable relief that we were able during the year to bring back to Washington the thousands of valuable type specimens and other irreplaceable objects that early in the war had been removed from the Capital for safekeeping in the event of enemy air raids on the city. Return of this material, which aggregated more than 60 tons, was completed in November 1944, and by the end of the year most of the specimens had been reinstalled.

As in previous years since 1941, all possible efforts of the staff were concentrated on projects related to the prosecution of the war, directly or indirectly, though naturally these lessened toward the close of the year, as the end of the war became imminent. Again this year several members of the staff were called upon for work in connection with the Department of State's program for cultural cooperation with the other American republics. This entailed travel and study in Mexico and the Dominican Republic, respectively, by two Museum anthropologists, and in Chile by the curator of insects. Strategic geological work was conducted in Mexico in cooperation with the Geological Survey; and biological investigations in Panama were made for the War Department by two Museum staff members. Others undertook specific research projects directly connected with the war and its attendant disease, food, and other problems. Still others were granted furloughs for military service or for work with the Office of Strategic Services and other war agencies. Hundreds of specimens were identified for the Army and Navy, and special attention was given to material sent in by members of the Armed Services from remote corners of the earth where few or no collectors had previously been. All these activities add up to considerable when their far-flung results are carefully evaluated, and the Museum staff may be justly proud of its part in the war effort which now has ended so victoriously.

VISITORS

An increase of 197,951 visitors to the Museum buildings was recorded over the previous year, the totals being 1,730,716 for 1945 and 1,532,765 for 1944. August 1944 was the month of largest attendance, with 183,394 visitors; July, the second largest, with 177,065. Records for the four buildings show the following number of visitors: Smithsonian Building, 342,762; Arts and Industries Building, 674,920; Natural History Building, 531,712; Aircraft Building, 181,322.

A summary of attendance records is given in table 1:

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1945*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building	
1944					
July	34, 764	68, 516	55, 433	18, 352	177, 065
August	35, 956	74, 468	55, 153	17, 817	183, 394
September	33, 842	62, 939	47, 153	18, 188	162, 122
October	33, 414	60, 665	48, 023	16, 867	158, 969
November	28, 227	56, 761	40, 440	14, 164	139, 592
December	19, 374	39, 374	32, 807	10, 652	102, 207
1945					
January	19, 095	38, 031	32, 447	10, 717	100, 290
February	21, 996	43, 877	37, 255	11, 973	115, 101
March	27, 402	54, 230	44, 864	15, 967	142, 463
April	32, 053	63, 804	46, 176	18, 306	160, 339
May	27, 317	55, 305	45, 980	13, 435	142, 037
June	29, 322	56, 950	45, 981	[2] 14, 884	147, 137
Total	342, 762	674, 920	[1] 531, 712	181, 322	1, 730, 716

[1] Not including 12,816 persons attending meetings after 4:30 p. m.
[2] Building closed June 4 and 5 and June 12 through June 15 during moving and assembling of Bell jet-propelled plane.

LIBRARY

The over-all picture of the growth of the Museum library and of its services during the year ended June 30, 1945, is not greatly different from that of the year before. Both growth and use might be described as normal for a war year. Such changes as there were followed or anticipated more or less closely the progress of the war itself. Demands made on our reference and informational resources by the war agencies were not quite so heavy on the whole. There was, for example, a noticeable and natural decline in their use of our collections of scientific voyages and travels as sources of geographical information.

Accessions from abroad were much the same in number and kind as in the preceding year, with almost no losses of material known to have been shipped. Toward the end of the year a few journals published during the years of enemy occupation had begun to come in directly from France and Belgium.

Most of the library's acquisitions, whether domestic or foreign, were made by purchase or exchange, but there were also, as always, a considerable number of gifts from members of the scientific staff and other friends of the Museum. Especially notable among these was a collection of more than 100 publications on photography presented by George R. Goergens. Included in the collection are many

rare items issued in the 1880's and 1890's that are important additions to the sectional library of the division of photography.

The cataloging of currently received material was well kept up on the whole, with now and then some unavoidable time-lag between the receipt of the publications and the completion of their preparation for use. Another permanent subprofessional assistant is much needed to make secondary and shelf-list cards, to do preliminary filing, and to relieve the professional catalogers of other routine and time-consuming tasks. The services of a highly competent cataloger for two months during the summer of 1944 were a great help in the cataloging program, and even resulted in a small reduction of the library's huge backlog of inadequately cataloged books and serial publications. To deal effectively with the backlog, however, it would be necessary to set up a carefully planned special project with a temporary staff of a sufficient number of well-qualified persons engaged to complete it within a specified time. The arrearage is too large and too complex ever to be completely and satisfactorily reduced by the regular staff, always busy with current work, or by the occasional temporary appointment of an extra cataloger or two.

A generous allotment of funds for binding again this year made it possible to prepare and send to the bindery 2,351 volumes, many of which have already been returned. In October a temporary position of bindery aide to do book mending was set up, and the results of the good work done in repairing and restoring 1,149 volumes are so obvious that there can be no question about the desirability of making the position permanent.

The Museum library is a working reference library and not a museum of fine books, but a large number of the most useful books on its shelves are old books. Many of them are rare and irreplaceable, and some of them are in fine bindings. Usage, shelf age, and dust all contribute to their physical deterioration, and constant care is needed to keep them in good condition.

The most serious unsolved problem in the physical care of the library continues to be shelf room adequate to house the existing collections and to provide for future growth. Even before the war the shelves in the Natural History Building were badly overcrowded, and only by moving several thousand volumes that could ill be spared to an inconvenient location in the attic stacks of the Arts and Industries Building could room be made to shelve the current accessions. Now the shelves in both buildings are filled, and in some sections the books are double shelved. Unless it is possible to obtain new shelving soon, and to find space in which to install it, the only relief to the situation would seem to be to box up and remove to dead storage some of the books in the less frequently consulted classes in order to make space for new accessions.

Besides the routine business of selecting, obtaining, classifying, and cataloging new publications, caring for existing collections, circulating books and periodicals, and giving reference, bibliographical, and spot informational service to readers and correspondents, some special pieces of work are noteworthy. First among these was the completion of Miss Mathilde M. Carpenter's Bibliography of Biographies of Entomologists, which was published in the American Midland Naturalist, vol. 33, No. 1, pp. 1–116, January 1945. This fine and useful piece of work, undertaken because of constant demands for information, sometimes very hard to find, about the lives and publications of collectors and students of insects all over the world, had occupied all the time that could be spared from Miss Carpenter's routine duties in the division of insects for several years.

Another important special piece of work was the preparation of the record of the Museum's serial holdings for inclusion in the forthcoming supplement to the Union List of Serials, one of the most useful of bibliographical tools for a scientific library.

In the Arts and Industries library, the taking of an inventory was continued as time permitted, and catalog and shelf-list records for the contents of 42 shelves were revised.

On April 3, a joint meeting of the Museum group with the Geography and Map group of the Special Libraries Association's local chapter, at which Dr. Wetmore gave a talk on his travels in the Guajira Desert of Northeastern Colombia, offered an opportunity to place on exhibition a few of the library's rare illustrated books on museums and natural history that had recently been brought back after their evacuation from Washington for safekeeping. The little exhibit received a good deal of favorable notice both on the evening of the meeting and from later visitors to it.

A number of changes were made in the staff. Miss Elizabeth G. Moseley, who had been in charge of serial publications and binding, resigned on August 31, 1944, and her position was filled by the appointment of Miss Mary L. Fleet on October 16. Miss Leona Haviland was appointed library assistant on September 18 and was assigned to duties in the cataloging division. From June 30 to August 31 the cataloging division had the services of Miss Beatrice E. Smith under temporary appointment. By transfer from the division of insects to the library staff Miss Mathilde M. Carpenter was promoted on August 31 to the position of biological aide in charge of the library of the division of insects. On October 9 Mrs. Carmen G. Randall was transferred from the temporary position of library assistant and promoted to the temporary position of senior bindery aide.

Statistics

Accessions of cataloged volumes	2,852
Volumes, pamphlets, and maps cataloged or recataloged	3,420
Periodical parts entered	6,310
Cards added to catalogs and shelf-lists	14,289
Volumes sent to the Public Printer for binding	2,351
Volumes repaired in the Museum	1,149
New exchanges arranged	140
Circulation of books and periodicals by the main library	8,191
Publications sent to sectional libraries for intradivisional circulation and filing	3,531

The estimated number of cataloged volumes now in the Museum library is 233,545. Not included in this figure are incomplete volumes of periodicals, wholly uncataloged material, and the large collections of pamphlets on special subjects in the sectional libraries.

PUBLICATIONS AND PRINTING

The Museum was allotted a total of $43,000 for its publication requirements during the fiscal year 1944–45, the same sum as for the previous year. Of this, $24,000 was used for printing Bulletins and Proceedings, $15,000 for binding, and $4,000 for the salary of the Museum printer. Twenty publications were issued—1 Bulletin, 1 Contribution from the National Herbarium, and 18 Proceedings papers. A list of these publications is given on page 111. Volumes bound totaled 2,351.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 33,264 copies, while in addition 7,001 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

The editor, Paul H. Oehser, continued to serve as chairman of the Efficiency Rating Committee of the Smithsonian Institution and devoted considerable time to the efficiency-rating program.

Indexing.—Miss Gladys O. Visel, editorial clerk, and Mrs. Marguerite W. Poole, information clerk, have continued work as time permitted on the general index of Museum publications. Indexing of the publications issued prior to the year 1900 is nearing completion. Indexes for Proceedings volume 94 and for Bulletins 186, 187, and 188 also were prepared in the editorial office during the year.

Museum print shop.—F. W. Bright was detailed from the Government Printing Office, as in previous years, to print museum and herbarium labels and special forms at the Museum print shop, a branch of the Government Printing Office. Mr. Bright completed 132 of the 155 requisitions submitted for printing; 5 that were submitted during the previous fiscal year were likewise finished, making a total of 137 for the year. Of the uncompleted requisitions, 8 represent

large exhibition labels or specimen labels, involving much hand setting of type or long press runs. The remaining 15 requisitions were submitted too late in the year for completing before June 30. With the exception of these, the work of the print shop is nearly up to date.

PHOTOGRAPHIC LABORATORY

In continuation of the cooperative arrangement between the Smithsonian, the National Zoological Park, and the Bureau of American Ethnology, the photographic laboratory has made 3,305 negatives, opaked 119, and retouched 26; processed 1,394 microfilm negatives (74 of which were for the Army Medical Museum under an exchange plan), 111 lantern slides, 10 transparencies, 87 kodachromes, 28 photomicrographs, 227 dry mounts, 31 cloth mounts, 12,130 prints, and 1,422 enlargements; and developed 15 rolls of film. Many of the requisitions for photographic services were in connection with information furnished the armed services.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—Repairs of a routine nature engaged most of the time of the skilled labor force. In the Arts and Industries Building, however, two important pieces of work were undertaken: A security storage vault was constructed in the division of history for the protection of valuable coins and medals; work was begun on the construction of two rooms to house a seventeenth-century apothecary shop, an exhibit which will doubtless be very popular when installation is completed.

Heat, light, and power.—Electric current used during the year amounted to 1,544,139 kilowatt-hours.

In line with the governmental program of coal conservation to help in the war effort, steam was cut off in all buildings an hour a day for two and a half months, and during that period a saving of 4,000,000 pounds was effected. Because of unusually low temperatures during the winter, however, the over-all saving was only 1,908,081 pounds. The total steam consumption for the fiscal year was 57,121,888.

Ice production.—The Museum ice plant produced 183 tons of ice at a cost of $2.70 a ton, exclusive of labor. Twice during the year the plant was closed for emergency repairs and during these periods ice in the amount of 4½ tons was purchased at a cost of $5 a ton.

Fire protection.—Of the $1,182.79 spent for fire protection, more than a thousand dollars was used for the purchase of new equipment. The principal items purchased were five wheel-type extinguishers, and hose for testing the standpipes on the exhibition floors. Inspections of apparatus were made each month, and soda and acid extinguishers were discharged and recharged.

Air-raid alarms were removed and many of the gongs were replaced in the exhibition cases. The work of completing the reinstallation will be continued during the coming year.

Two old fire plugs were removed from the Astrophysical Observatory yard and connections were made with the District of Columbia mains from the group of buildings located near the Smithsonian building. The two plugs that were removed were so old as to have become museum specimens, and they will be preserved by the division of engineering.

Furniture and fixtures.—Furniture acquired during the year consisted of 23 exhibition cases and bases and 85 items of storage, office, laboratory, and other furniture. Condemned and disposed of were 10 exhibition cases and bases and 39 pieces of storage cases, office, laboratory, and other furniture. On hand on June 30, 1945, were 3,535 exhibition cases and 20,414 pieces of storage, office, laboratory, and other furniture; 118,539 drawers, boxes, and wing frames.

MEETINGS AND SPECIAL EXHIBITS

The Museum continued to make available the auditorium and lecture room of the Natural History building to educational, scientific, welfare, and governmental organizations and groups for meetings and lectures. During the past year 236 groups availed themselves of this opportunity.

The foyer and adjacent space in the Natural History building, customarily used for special exhibits, were in constant use. The 12 special exhibits were:

July 3 to 14, 1944: Exhibit by the Boy Scouts of America illustrating work carried on by the Scouts during their meetings and field trips.

July 15 to August 31, 1944: Cultural survey of Burma, Thailand, Malay States, Sumatra, Borneo, Java, the Philippines, and Formosa. The exhibit was in the form of enlarged photographs of native people, houses, and cultural objects of these areas.

September 1 to 31, 1944: Exhibition of oil and water-color paintings under the auspices of the National Photograph Society.

October 1 to 31, 1944: Exhibition by Mrs. Enit Kaufman of oils and water colors painted through the years by members of her family.

November 1 to 30, 1944: Exhibition of oil and water-color paintings under the auspices of the D. C. Federation of Women's Clubs.

December 1 to 31, 1944: Exhibition of oil paintings of members of American Indian tribes by Tom J. Moore.

January 1 to 31, 1945: Exhibition of water-color paintings by Carl Sahlin, under the auspices of the Pan American League of Miami, Fla.

February 1 to 28, 1945: Exhibition of Cuban modernistic oil paintings under the auspices of the Pan American Union.

March 1 to 31, 1945: Exhibition of oil and water-color paintings under the auspices of the Society of Washington Artists.

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April 1 to 31, 1945: Pan Americanism in postage stamps—an exhibition of stamps arranged to represent the several South American republics, under the auspices of the Pan American Union.

May 1 to 31, 1945: Exhibition of the handicrafts of Great Britain, comprising principally glassware, silverware, china, pottery, and weaving.

June 1 to 30, 1945: Exhibition of photographs and kodachrome prints entered in competition by the members of the Potomac Appalachian Trail Club.

CHANGES IN ORGANIZATION AND STAFF

Changes during the year in the organization and staff included the advancement of John E. Graf from associate director, United States National Museum, to the position of assistant secretary of the Smithsonian Institution, on April 1, 1945.

The department of anthropology lost through retirement Richard G. Paine, scientific aide in the division of anthropology, on February 28, 1945, and to this vacancy Joseph R. Caldwell was appointed on April 9, 1945. Robert A. Elder, Jr., was appointed assistant curator in the division of ethnology on May 16, 1945.

On the staff of the department of biology an honorary appointment was conferred on Maj. W. L. Jellison, A. S. F., U. S. A., as collaborator in the division of insects, on August 2, 1944. Other additions were the appointment of Dr. Raymond M. Gilmore, associate curator in the division of mammals on September 2, 1944; Mrs. Marie P. Fish, scientific aide in the division of fishes, on December 4, 1944; William E. Hoffmann, associate curator in the division of insects, on August 18, 1944; and Mrs. Mildred S. Wilson, assistant curator (aquatic biology), in the division of marine invertebrates, on August 21, 1944. Three employees left the service: James O. Maloney, aide in the division of marine invertebrates resigned effective April 15, 1945; John A. Mirguet, osteologist, retired October 31, 1944; and Earl D. Reid, scientific aide, division of fishes, retired February 28, 1945.

Through the retirement of Nicholas W. Dorsey, accountant and auditor, on May 31, 1945, after long service to the Museum, Thomas F. Clark was advanced to this position on June 16, 1945. Mrs. Anna W. Murray was appointed assistant accountant and auditor on April 30, 1945, to fill the position made vacant by the transfer of Mrs. Florence L. Weirich to the Department of Agriculture on April 8, 1945.

Other changes on the administrative staff during the year were the resignations of Mrs. Margaret M. Pflieger, assistant purchasing officer on February 28, 1945, and Mrs. Margaret L. Vinton, personnel assistant, on January 4, 1945. These vacancies were filled by the promotion of Armstead D. Hilliard and Gertrude R. R. Bogdan, respectively, on March 1, 1945.

On the staff of maintenance and operation, William Crossingham, mechanic (foreman of paint shop), retired September 30, 1944, and on October 9, 1944, Axel J. Anderson succeeded him in charge of the paint shop.

The following, upon completion of military duty, returned during the year to their positions in the Museum: Reuben W. Gore, February 14, 1945; Robert E. Kirk, May 16, 1945, and John B. J. Peck, January 12, 1945. On February 26, 1945, Oliver N. Armstead was furloughed for military duty.

Through the operation of the retirement act, 11 employees were retired, as follows: For age: Mrs. Marie Arm, forewoman of charwomen, on August 31, 1944, with 32 years 3 months service; Nicholas W. Dorsey, accountant and auditor, on May 31, 1945, with 50 years 3 months service; Richard G. Paine, scientific aide, on February 28, 1945, with 44 years 4 months service. Through optional retirement: William Crossingham, mechanic (foreman of paint shop), on September 30, 1944, with 47 years of service; Harry Kaiser, mechanic (painter) on June 30, 1945, with 35 years 10 months service; John A. Mirguet, osteologist, on October 31, 1944, with 35 years 4 months service; Earl D. Reid, scientific aide, on February 28, 1945, with 34 years 8 months service; Clarence T. Taylor, guard, on June 30, 1945, with 25 years 7 months service; and Mrs. Eleanor C. White, scientific aide, on November 30, 1944, with 25 years 8 months service. Through disability retirement: James W. Burns, guard, on May 31, 1945, with 9 years 11 months service and Winfield S. Dean, mechanic, on November 1, 1944, with 18 years 7 months service.

Through death the Museum lost during the year Louis B. Hanks, guard, on June 21, 1945, and Carter C. Wood, laborer, on April 2, 1945.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(FRANK M. SETZLER, *Head Curator*)

THE limited staff extended every effort during the year in the preparation of special exhibitions relating to those areas of the South Pacific and the Asiatic mainland where members of our armed forces have been engaged in military and naval operations. They kept current all regular routine assignments and reduced as rapidly as possible the accumulation of large archeological collections recovered before the attack on Pearl Harbor.

Our popular exhibition of emergency rescue equipment was revised, and new equipment was added as soon as war restrictions permitted. A symbol of gratitude in the form of a doll for the children of those men who drove out the Nazis from Normandy, which had been presented to our Supreme Commander, Gen. Dwight D. Eisenhower, was placed on special exhibition. A remarkably fine collection of early American silver assembled by the late Arthur Michael and bequeathed to the Smithsonian Institution was placed on public view at the close of the year.

In connection with the Department of State's program of cultural cooperation with the other American Republics, Dr. T. Dale Stewart, curator of physical anthropology, was detailed to teach osteometry to graduate students at the Escuela Nacional de Antropología, Mexico City, from March 8 to June 23, 1945. In addition to this teaching he was enabled to make a study of the recovered skeletal material from Xochicalco now in the Museo Nacional de Antropología, which was collected by Dr. Eduardo Noguera.

A similar gesture of good will was accomplished upon the acceptance of an invitation from the Sociedad Colombista Panamericana by detailing Herbert W. Krieger, curator of ethnology, to spend the month of May attending conferences and conducting surveys in relation to the exact location and possible restoration of the settlement established by Columbus at Isabela, on the north coast of the Dominican Republic.

During the first part of June the head curator examined the famous archeological sites of Kolomoki, near Blakely; Ocmulgee, near Macon; and Etowah, near Cartersville, Ga. As a result of his recommendations a specific program of preservation has been inaugurated by the State of Georgia in regard to Kolomoki and Etowah. As a member

of the Advisory Board of the National Park Service he attended a historical conference at Morristown National Historical Park in New Jersey on June 7–8, 1945.

Requests from the war agencies to examine and identify specimens from the Pacific area continue. Other Government agencies, especially the Federal Bureau of Investigation, have used the facilities offered by the department. The division of physical anthropology was fortunate to obtain the voluntary services of Dr. Beatrice Bickel, former librarian at the Surgeon General's Library, to catalog the books in the division's library assembled by the late Dr. Aleš Hrdlička.

ACCESSIONS

During the year the department of anthropology received 57 accessions totaling 6,642 specimens as compared to 852 specimens received during the previous year. This increase is largely due to the reduction of a backlog of accumulated specimens in the division of archeology which could not be processed during the years in which they were received because of lack of sufficient laboratory space and manpower. The 57 accessions were assigned within the department as follows: 2 loans of material for special exhibitions in the foyer of the Natural History Building assigned to the head curator's office, consisting of an exhibition on modern British crafts and the addition to the emergency rescue equipment exhibition of an emergency sustenance vest, issued to Army fliers; archeology, 23; ethnology, 22; period art and textiles, 1; physical anthropology, 9. The most noteworthy specimens received under the above accessions are briefly described under the divisions to which they pertain.

Archeology.—Two painted Neolithic jars, a gift from Gen. Ku Chung-lun, chairman of the Kansu Provincial Government, on the occasion of Vice President Henry A. Wallace's visit to northwestern China in June 1944, were presented by Mr. Wallace; 5,677 specimens excavated from Indian village and burial sites in Scott and Lane Counties, Kans., were collected for the Museum in 1939 under the direct supervision of Associate Curator Waldo R. Wedel; 343 archeological specimens from the Kansas collection of the late Dr. Norman L. Roberts were donated by Mrs. Roberts; 10 Nasca and Early Chimu vessels from Peru were presented by Mrs. Emerson Howe in memory of her daughter and son-in-law, Sr. and Sra. A. González de Prada; an old Chamorro stone adz found in a shell hole during the initial fighting on Saipan, Marianas Islands, was presented by Capt. Allan W. Phelps, M. A. C.

Ethnology.—Included in the year's accessions were collections from the Northwest Pacific Coast and Alaska, Micronesia, Polynesia, the Solomon Islands, New Guinea, Burma, China, Jivaro Indians of Ecuador, and several North American Indian tribes.

An important contribution to the Micronesian collection was the gift from Dr. V. W. T. McGusty of a large model outrigger canoe from Tarawa in the Gilbert Islands. This canoe is the Gilbertese *baurua*, generally called war canoe, but a craft whose uses are far more varied than the name would imply. It is a model of the usual deep-water craft of the islanders, the vehicle of interisland traffic of all kinds. The hull is built of four slabs of timber, lashed end to end and edge to edge with sennit. It is equipped with a triangular mat sail, movable mast, spars, steering oar, and three paddles. When space is available it is the plan of the division to place this interesting specimen on permanent exhibition.

An interesting addition to the collections is a royal Hawaiian cape (*ahuula*), which is fully feathered with tufts of black and pale yellow feathers of the *oo* bird and with red feathers of the *iiwi* mounted on a medium meshed net of olona fiber tailored to form a foundation in the shape of a flattened, irregularly margined semicircle.

Two specimens from eastern New Guinea received through transfer from the National Zoological Park are particularly noteworthy. One, a wooden figurine, is a stylized carving of an ancestral figure, and the other, a boat bailer, is cut from solid wood, with handle inside the trough and a stylized bird carving projecting from the proximal end.

An Arab costume presented to Gen. H. H. Arnold by Abdul Aziz I'bn Saud, King of Saudi Arabia, was lent to the Museum by General Arnold. The costume consists of an embroidered headdress and coil, a robe embroidered in gold thread, and an inscribed sword. This costume was placed on temporary exhibition for several months.

Other accessions of importance include a walrus tusk engraved by a Maritime Chukchee, donated by John G. Haviland, and a collection of woven decorative pouches from the Otomi Indians in the State of Hidalgo, Mexico, presented by Dr. W. F. Foshag.

The section of period art and textiles received through deposit from the Smithsonian Institution the well-known Arthur Michael collection of early American silver, which constitutes one of the most outstanding bequests received by the Institution during the past few years. Among the 121 silversmiths whose work is represented are some of the most outstanding craftsmen of the Colonial and Federal periods (1675–1850). The earliest American silversmith represented is John Coney, famous not only for the excellent quality of his silverware but also because he was the engraver of the plates used for the printing of the first paper currency in America. The collection includes examples of silver candlesticks and a pitcher made by Paul Revere, Sr., who served as an apprentice to John Coney, as well as several artistic pieces by his son, the patriot Paul Revere. Such families as the Burts of Boston (John Burt and his sons Benjamin, Samuel, William), the Hurds (Jacob Hurd and his sons Benjamin and

Nathaniel), and others are well represented. A great variety of patterns is shown by individual silversmiths even in the more commonly duplicated objects, which include numerous tankards, porringers with keyhole piercing, goblets, cans, teaspoons and tablespoons, teapots and coffee pots, cream pitchers, and sugar bowls. Other objects included in the exhibition are brandy saucepans, skewers, large 2-handled punch strainers, smaller single-handled tea or coffee strainers, scissors, sugar tongs, a silver fork (rare in Colonial collections), muffineer or caster, candlesticks with baluster stem, candle snuffer and tray, patch or snuff boxes, knee buckles, wine taster, riding spurs, dress sword, alms basin, and chalices. Most of the silver in the collection was produced during the eighteenth century, which usually is divided into three periods. The objects made in the first period are essentially plain and unornamented, with practically no embossed or engraved decoration, but showing originality, skill, and fine feeling for form. In the second period, middle eighteenth century, shapes are generally made up of curves, with ornament consisting of a combination of shells, fantastic scrolls, leafwork, and escutcheons, but all tending toward lightness of effect. The third period was influenced by examples of classic art excavated about the middle of the eighteenth century at Pompeii and Herculaneum. The classic style is formal, delicate, and graceful and expresses itself chiefly in straight structural lines and by slender columns, pilasters, flutings, and moldings.

This collection forms an exceedingly worth-while nucleus for the addition of future collections of this nature. An excellent opportunity to study and become acquainted with Colonial silver has been afforded visitors to the National Museum by a temporary exhibition in the lobby of the Natural History Building.

Physical anthropology.—Out of the 78 specimens received by this division the following are considered noteworthy:

Twenty-two skeletons from Amchitka Island in the Aleutians came as a gift from Capt. Paul Guggenheim, Medical Corps, Army Air Forces, who in 1937 spent a season in this region as a member of the late Dr. Aleš Hrdlička's field party. This collection, recovered during the Army's recent occupation of the island, supplements the material obtained by Dr. Hrdlička in 1938.

A collection of 35 embryological specimens was donated by Dr. Samuel Rabkin. For many years Dr. Rabkin has been assembling embryos and fetuses, which he has cleared by the Schultze technique in order to demonstrate the stage of skeletal development. This interesting and unique collection provides the division with an unusually complete series for research in the early stages of human development.

Three specimens from various localities recovered under conditions suggesting considerable antiquity were received: One from a gravel pit near Campbell, Minn., sent as a gift by Orville R. Edner, through Robert Teeters; another from Clear Fork, 60 miles northeast of Abilene, Tex., by Dr. Cyrus N. Ray; and the well-known skull of *Homo novusmundus*, found near Folsom, N. Mex., in 1935 and described and donated by the late J. D. Figgins.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Several special exhibitions were prepared and installed in the foyer and lobby of the Natural History Building for a temporary period. These were assembled under the supervision of the head curator assisted by the staff in the division of ethnology and installed through cooperation of the superintendent of buildings.

From July 15 to August 31, 1944, the entire foyer was used for an exhibition entitled "Cultural Survey," illustrating decorative arts and handicrafts made by the native peoples of Burma, Thailand, Malay States, Sumatra, Borneo, Java, the Philippine Islands, and Formosa. This exhibition was well received by the many service men and women visitors who for the first time had an opportunity to examine objects from some of the ancient sophisticated conservative cultures as well as those from more primitive inhabitants in this South Pacific and Asiatic area.

In December 1944 three new temporary exhibitions were installed and the air-sea rescue exhibition was completely renovated by the substitution of new equipment loaned to the department by the Air Sea Rescue Agency of the United States Coast Guard. During this same period an exhibition of "Rocky Mountain Indian Paintings" by Tom James Moore was placed on view. These paintings were portraits of Indians belonging to the Blackfoot, Flathead, Kutenai, and Shoshoni tribes.

Mentioned elsewhere in this report (division of history) is the beautifully costumed doll that was sent to the Museum by Gen. Dwight D. Eisenhower, to whom it had been presented by the children of Normandy in gratitude for their liberation from the Nazis. This fine example of Breton doll-making was prominently featured and placed on public display by the division of ethnology among some of the general exhibits in the Natural History Building.

Received as a loan from Gen. H. H. Arnold was a Bedouin costume similar to those worn by members of the royal family in Saudi Arabia, presented to General Arnold by Abdul Aziz I'bn Saud, King of Saudi Arabia. It consists of a full-length homespun robe embroidered with gold thread, a colorful headdress and gold-wrapped coil worn only by royalty, and an inscribed sword. The costume was draped over a

manikin representing a typical individual from Saudi Arabia and placed on exhibition.

In May 1945 the head curator assisted Miss Muriel Rose in the arrangement and installation of a large exhibition of modern British crafts. This consisted of several furnished room interiors and a miscellaneous group of handicrafts such as furniture, ceramics, linens, glass, and silver.

By June 1945 the staff in the division of ethnology had completed the classification and cataloging of the large Arthur Michael collection of early American silver. The pieces were then arranged according to silversmiths in two large exhibition cases for special display. The quality and beauty of these specimens made by the master craftsmen of their period have aroused considerable interest during the short period that they have been on public view.

Archeology.—During the fiscal year four entirely new exhibits were installed and nine others revised. Nine boxes of specimens evacuated for the war period were restored either to exhibition or to the study collections.

Sorting and marking of the Museum-Gates collections of 1905, begun during the previous year, were completed during the third quarter. Following their return from evacuation, rare copper plaques exhumed in 1885 at the Etowah Mound in Georgia, and from other sites, were partially cleaned and otherwise prepared for temporary protection between glass. To insure their permanent preservation these priceless examples of aboriginal American art should be mounted finally in some variety of transparent plastic. Prehistoric Peruvian textiles and associated materials were unwrapped, identified in most instances, and marked with their respective catalog numbers.

Associate Curator Wedel unpacked and analyzed his 1939 and 1940 Kansas collections, and prepared the customary descriptive lists for accessioning. The collections representing the 12 Hrdlička expeditions to Alaska and the Aleutian Islands were again separated from one another; the collection for 1936 was cataloged and a beginning made on that for 1937. Preparation of these two large accessions, from Kansas and from the Aleutians, respectively, reduces the arrearage noted in the last Annual Report by 6,645 specimens.

Ethnology.—A minimum personnel, consisting of a curator, a newly appointed assistant curator, and a clerk-stenographer, performed the varied duties necessary for the care of the normal collections of the division and the three sections under the jurisdiction of the division. Continued close cooperation and wide adaptability within the staff served to fulfill the numerous requirements for service; nevertheless additional personnel is needed to maintain the collections and to give the service requested through correspondence and by daily visitors. All current accessions have been properly cared for and

entered in the permanent records of the division. Specimens have been placed either on exhibition or in the study series. In the cleaning, restoration, and preservation of specimens the laboratory of the department of anthropology continued to contribute valuable assistance in making the collections more usable. Considerable time and effort were given by the entire staff in the preparation and installation of special exhibitions as described in the general statement pertaining to such activities for the whole department.

Physical anthropology.—No important changes were made in the permanent exhibitions during the year. Two exhibition cases were retained in the division offices as a result of last year's reorganization. This year the interiors of both of these cases were painted, and one of them was selected to demonstrate the development of the skeleton. On one side skeletons were laid out to show the changes in size and epiphyseal development from birth onward. On the other side a series of innominate bones was arranged to show changes in the pubic symphysis between the ages of 20 to 70 years. In the upright central portion a fluorescent panel was installed to form a lighted background for the embryological specimens donated by Dr. Samuel Rabkin. These working exhibits are frequently referred to in the course of determining the ages of miscellaneous human skeletons. Further progress was made in the improvement of the storage arrangements. The drawers in rooms 343–349 and those on the south side of the corridor outside the division were painted a light gray, which has lightened both the rooms and the corridor. Following this, numbers were stenciled on the drawers as the initial step in the installation of a numerical finding system. With the removal of the threat of air bombardment, the material that was evacuated from the division in 1942 was returned and stored temporarily on the fourth floor. In the course of the year most of the boxes were unpacked and the specimens returned to their proper places in the study collections.

The return to the Museum of evacuated specimens created a problem as to the disposition of the large zoological brain collection. Since no provision had been made in the reorganization of the division offices for the housing of this collection on the third floor, it was decided to divide it—to allot the brains of mammals, birds, and reptiles to their respective divisions in the department of biology and retain only the human brains within the division. The number of human brains is small compared with the entire collection, and it was found that they could be adequately accommodated in room 374. Except for the possible fire hazard resulting from the presence of alcoholic specimens on the third floor, this arrangement in a room with a cement floor and running water is entirely satisfactory and makes it possible to service the collection with a minimum of labor.

At the close of the year the large and important collection of Indian skeletal material donated by Dr. P. F. Titterington had been unpacked, sorted, and repaired. This collection, not yet accessioned, consists of approximately 400 skeletons from Calhoun and Jersey Counties, Ill. This task was accomplished largely by the energy and resourcefulness of the scientific helper during the three and a half months' absence of the curator.

Anthropological laboratory.—During the year the chief preparator, Andreas J. Andrews, completed a piece mold and cast of the portrait bust of Dr. Aleš Hrdlička that was modeled in the laboratory. A base was made with raised inscription to complete the plaster bust, and the entire figure was then bronzed. It has now been placed on exhibition near the Hrdlička memorial in the division of physical anthropology offices. A manikin was constructed and outfitted with the Bedouin costume presented to Gen. H. H. Arnold by Abdul Aziz I'bn Saud, King of Saudi Arabia. Piece molds and 21 casts of classical heads were made for the Newton D. Baker General Hospital, Martinsburg, W. Va. From February 8 through March 15, 1945, the chief preparator was assigned to the David Taylor Model Basin to assist in the building of a diorama for the Bureau of Ships, Navy Department. Miss Bertha P. Dutton, curator of ethnology, Museum of New Mexico, was assisted in making molds of the prehistoric man series of sculptures for her museum. An improved signal mirror was mounted in the emergency rescue equipment exhibition.

For the division of archeology Mr. Andrews made two copies in natural color of the Tuxtla statuette and a duplicate in natural color of a pipe in the form of a deity. An embossed copper design of a dancing human figure was mounted between glass; a petrified mastodon tooth, some fragments of basketry, and specimens of corn-on-cob were treated with a preservative; an Indian dugout boat was cleaned; two gourds and a petrified rib were repaired; a carved wooden dagger with a figure on the handle was cleaned and restored; and numerous pieces of Indian pottery were repaired and restored.

For the division of ethnology the laboratory polished 144 pieces of early American silver and a Chinese silver bowl. The design on a Northwest coast canoe was restored; seventeen 3-inch labels for the cultural survey exhibition were made and installed; the figure of a woman in the family group of Philippines was repaired; the armor worn by the first Governor of Alaska (a Russian) was treated with a preservative; and numerous minor repairs and restorations on specimens were completed.

Two replicas in natural color and an endocranial cast of the Vero skull were made for the division of physical anthropology; a cast of the Melbourne skull was painted; endocranial casts of 31 human and 9 orang skulls were made and painted.

For other departments within the Smithsonian the following assignments were completed: The manikin for the exhibition of the dress of Mrs. Calvin Coolidge was repaired and repainted, and a piece mold and 20 casts of a woman's torso were made and painted for the division of history. A modillion from which 14 casts are to be made was modeled for the division of medicine and public health. Four copies in natural color of an arrowhead from San Jon, N. Mex., were made for the Bureau of American Ethnology. Duplicates in natural color of two type specimens were made for the division of invertebrate paleontology. The statue "The Fallen Gladiator" was repaired and painted for the National Collection of Fine Arts. Three pieces of pottery were repaired for the modern British crafts exhibition.

INVESTIGATION AND RESEARCH

Even though the demand by the various war agencies for identification of specimens from distant primitive groups has somewhat decreased, the number of visitors submitting objects as well as of specimens received through the mail has increased. This department, because of the variety of disciplines under its jurisdiction, found it necessary to devote considerable time to the wide gamut of inquiries submitted to the Museum and Smithsonian Institution. Along with this time-consuming service to the public, several manuscripts were in preparation throughout the year. Then, too, the curators of physical anthropology and ethnology were detailed for teaching and research in Mexico and the West Indies for a period of several months. Such absences, owing to the understaffed condition in both of these divisions, placed additional burdens and responsibilities on the remaining staff members. Nevertheless, considerable investigation and research were concluded during the year, as indicated by the divisional reports that follow.

During the early part of May the head curator spent 10 days in Georgia reexamining the large archeological site of Kolomoki, near Blakely, in the southwestern part of the State. Every effort is being made to preserve this unusual prehistoric site, consisting of one of the three largest aboriginal mounds within the State. The head curator also visited Ocmulgee National Monument at Macon and the famous Etowah mound group near Cartersville. In June Mr. Setzler participated in a conference at Morristown, N. J., to outline the contribution that controlled archeological field work can make in a study of our early American settlements such as Jamestown, Va., St. Augustine, Fla., and Plymouth, Mass.

Throughout the fiscal year 75 lots of specimens were received by the department for identification and report. This represents an increase of 32 such lots over the previous year. All these were subsequently returned to the owners. Out of a total of 831 official letters

submitted to the various divisions within the department, 70 percent, or 583, were prepared for official reply, representing many man-hours spent in research and investigation. These statistics do not include the numerous identifications supplied to visitors and colleagues coming directly to the offices of the various curators or the correspondence resulting from such visits.

Archeology.—At times during the year the curator found opportunity to resume his long-delayed report on collections obtained at Pueblo Bonito, N. Mex. Associate Curator W. R. Wedel completed his analysis of the archeological collections he excavated in Kansas during 1939 and 1940, and at the close of the year he had under way a monograph on his field work in that State from 1937 through 1940. As heretofore, he has made direct reply to various individuals and institutions primarily concerned with the archeology of the Great Plains and Upper Mississippi Valley.

Twenty-eight lots of material were received for examination and report and subsequently returned to the senders. During the previous fiscal year 13 such lots were reported upon.

Ethnology.—The classifying and cataloging of ethnological and auxiliary collections were diligently pursued throughout the year. Supplying information for individuals and organizations continued to assume major proportions. Though the compilation of data was still requested by the war agencies and armed forces, this aspect of the work materially decreased during the year.

Assistance by the division in the research work of outside investigators consisted primarily in making available for examination specimens from the collections. The files of photographs, paintings, manuscripts, and other documentary data and the indexed references to filed classified data were in almost constant use. The demand by individual correspondents and visitors for photographs is steadily increasing. This involves the assembling of appropriate specimens to be photographed and the identification and captioning of prints.

Government departments and agencies continued to use the division's files and collections. The study and identification of ceramics, silver, glass, and lace continue to be of primary interest to the public, and compiling information for distribution to interested persons requires much time on the part of staff members.

Forty-two written reports were made pertaining to the examination and identification of individual specimens and collections, totaling 106 specimens. These reports covered ethnological specimens, silver objects, ceramics, laces, rugs, cutlery, jewelry, and musical instruments. The number of visitors to the office of the division seeking information or an informal report on specimens brought in person for examination and identification greatly exceeded the number of

enumerated written reports. Several bibliographies were prepared and forwarded to correspondents.

Dr. José T. Barón, Minister Counselor of the embassy of Cuba, following instructions from the Minister of State of his government, on April 25 transmitted to the curator of the division, H. W. Krieger, an invitation of the Sociedad Colombista Panamericana to participate in work on the investigation and restoration of the settlement established by Christopher Columbus at Isabela, in the Dominican Republic. The investigation of this site was recommended by the Inter-American Scientific Association in accordance with Resolution XX of the Second Inter-American Caribbean Meeting. As a result of this official request Mr. Krieger was detailed to participate, and he spent the month of May in conferences in Habana, Cuba, and the Dominican Republic and on field surveys of this historical site, important to Spanish-American colonial history.

Physical anthropology.—The curator, Dr. T. Dale Stewart, undertook two main research projects during the year. The first of these involved the reconstruction of the Melbourne skull from Florida, which, on the basis of paleontological evidence, is believed to be of considerable antiquity. Because this is one of the few human skulls recovered from an early period, a correct restoration is important. When the work of restoration was well advanced it became necessary to secure for comparative purposes the so-called Vero skull, also from Florida, which is believed to be of comparable age. This was obtained on loan from the Geological Survey of Florida. The reconstruction and description of these specimens may result in some changes in the opinions earlier expressed regarding their antiquity. A second project concerned the repair and examination of the skeletal material that the curator excavated in 1941–42 from an Indian ossuary on Potomac Creek, in Virginia, this being the first ossuary in this region to be carefully excavated by a physical anthropologist. The curator's aim was to show how much information could be obtained from these ossuaries.

As mentioned in the introduction, the curator worked in the Museo Nacional de Antropología during his sojourn in Mexico. He also visited museums in the cities of Morelia, Pátzcuaro, and Puebla. Mexico is developing a system of regional museums, some of which are historical in character, whereas others are devoted largely to anthropological subjects.

Agents of the Federal Bureau of Investigation submitted skeletal material for identification oftener this year than heretofore. They were very appreciative of the information and identifications that resulted from these examinations, which represent a service we are well equipped to render.

Among those who used the division library during the year may be mentioned Miss Katherine Simmons, United States Department of Agriculture, and M. Lonie, United States Bureau of Standards, both of whom were assembling measurements for the standardization of clothing.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

For the use of other museums, schools, and research organizations, both in this and other countries, 232 items were distributed. These included 72 specimens sent out as gifts from the division of archeology to the Instituto de Antropología e Historia, Mexico City, the Pettis County Historical Society, Sedalia, Mo., the Ocmulgee National Monument, Macon, Ga., the Florida State Geological Survey at Tallahassee, and the Florida State Museum at Gainesville. The division of ethnology made three gifts and transfers, with a total of 160 specimens, to various oganizations and governmental agencies. Several uncataloged and miscellaneous specimens were distributed by the division of physical anthropology.

NUMBER OF SPECIMENS UNDER DEPARTMENT

At the close of the fiscal year the department of anthropology had a total of 719,333 cataloged specimens, representing a net increase of 7,416. The following summary indicates the distribution of specimens as assigned to the various divisions and sections within the department:

Archeology	486, 887
Ethnology	182, 810
Ceramics	7, 585
Musical instruments	2, 414
Period art and textiles	2, 429
Physical anthropology	37, 208
Total	719, 333

DEPARTMENT OF BIOLOGY

(WALDO L. SCHMITT, *Head Curator*)

THE routine care of collections and requests for information and the identification of specimens occupied the greater part of the time of the limited staff of the several divisions in biology. Only in the division of fishes, where some extra help was available, was any appreciable attack made on the department's ever-growing backlog of unprocessed study material. There was time for little more than only the most necessary research—that required for the proper classification of the Museum's collections or needed to further the work of the sanitary, medical, and research units of the armed services.

Field work was restricted because of the war. Under the auspices of the Division of Cultural Cooperation of the State Department, Dr. E. A. Chapin, curator of insects, visited Chile from February to April.

Except for the continuance of the ornithological reconnaissance of Colombia by M. A. Carriker, Jr., financed by the W. L. Abbott fund, only more or less local collections were undertaken. The curator and associate curator of fishes collected fossils at Scientists' Cliffs, on Chesapeake Bay, and fishes from various creeks in the State of Maryland. Several of the insect specialists made extensive, largely local, collections within their own groups, about 3,000 specimens being added through these efforts, a number being forms new to the collections, especially in the case of coleopterous larvae and the Aleyrodidae. Most of the aleyrodid material was obtained by Miss Louise M. Russell from preserved plant material at the National Herbarium and in the herbarium of the New York Botanical Gardens.

The curator and assistant curator of mollusks devoted some time to field trips undertaken for the purpose of acquainting members of the staffs of the National Naval Medical Center, Naval Medical School, and the National Institute of Health with the habitat of certain fresh-water mollusks that might serve as intermediate hosts of schistosomes and other trematode worms. The associate curator in charge of the diatom collection devoted two months last summer to field work at and in the vicinity of the Chesapeake Biological Laboratory investigating the subject of oyster food and fattening and related problems of diatom ecology sponsored by the Maryland Board of Natural Resources.

ACCESSIONS

Accessions for the year aggregated 1,135, an increase of nearly 50 percent over last year. There was, on the other hand, a slight recession in the number of specimens received, 197,462 as compared with 229,546 for 1944. Of particular importance in connection with the prosecution of the war and the maintenance of public health are the specimens of mammals, mollusks, and insects involved in the transmission of disease received for identification from the services concerned with sanitation and epidemiology in the armed forces as well as those received from the United States of America Typhus Commission and the Pan American Sanitary Bureau.

Mammals.—The total of the year's mammalian accessions received through the National Naval Medical School, 18 accessions in all, comprises 455 rodents, 54 bats, 29 cuscus and 23 other marsupials, 3 pigs, and 1 dingo from the Indo-Pacific, including species heretofore unrepresented in the collections from Australia and the Philippines, and 1 bat from Natal, Brazil; through the Army Medical Museum 18 accessions, covering 92 rats and other rodents, 24 bats, 3 bandicoots, and 1 shrew; from the United States of America Typhus Commission 6 accessions of 63 mammals; and from the Pan American Sanitary Bureau, 2 accessions of 23 rats and guinea-pigs; from Drs. A. Wetmore and J. P. E. Morrison 76 mammals collected for the Museum in the Republic of Panama.

Birds.—The largest of the year's 87 accessions comprised 584 skins, 1 alcoholic specimen, and 2 skeletons from Panama collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison. Other large collections from areas from which we possessed little or no material include 354 skins and 1 skeleton from Ceylon taken by S. Dillon Ripley, and 143 bird skins and 7 skeletons by H. G. Deignan from the same island. The first and only material in the Museum from the Admiralty Islands, 95 bird skins, were donated by the collector, Lt. Logan J. Bennett, who also obtained 45 other skins from Nissan Island, Solomons, from which the Museum likewise had not previously had material. Included in a gift of eight specimens of Venezulean birds from William H. Phelps were seven species and a genus, *Cercibis*, new to the collections. The type of a new blackbird subspecies, *Agelaius xanthomus monensis*, from Puerto Rico was received from its describer, Señor Ventura Barnés, Jr. Sixty-two skins from extreme eastern Brazil, including several forms new to the collection, were received as a gift from Donald W. Lamm. Eight specimens, all new to the collection, were received from the Museum of Vertebrate Zoology, of the University of California, as a permanent deposit.

Reptiles and amphibians.—In the Pearl Islands, Panama, Drs. A. Wetmore and J. P. E. Morrison collected 347 specimens for the

Museum. By exchange 142 specimens, representing 81 forms new to the collections and including paratypes and cotypes of 22 species, were obtained from the Museum of Comparative Zoology. Anthony Curtiss continued his generous donations of Haitian material, amounting to 212 specimens this year. Other notable gifts included 324 specimens from New Guinea collected by William H. Stickel; 100 specimens from Sierra Leone, Trinidad, Virgin Islands, and other localities collected by Lt. Murray L. Johnson; 97 specimens from Ceylon by H. G. Deignan. Four accessions, representing 693 specimens from the Indo-Pacific area, were received as transfers from the National Naval Medical School.

Fishes.—Noteworthy among the accessions of ichthyological material was a bramble shark, washed ashore on the California coast, received from the California State Fisheries Laboratory, as far as known the only specimen extant in any North American museum. Exchanges brought many other valuable specimens to the collection, including 12 paratypes of Venezuelan fishes from the Natural History Museum, Stanford University, 24 paratypes and cotypes, mostly South American, from the Museum of Comparative Zoology, 4 paratypes and 30 other specimens from the California Academy of Sciences, and 1 paratype of *Emmelichthyops atlanticus*, from the Bingham Oceanographic Laboratory of Yale University. Fifty-eight Cuban fishes, including 43 paratypes, were received as a gift from Luis René Rivas. The largest single collection of the year comprised 1,180 specimens collected for the Museum chiefly in the Pearl Islands, Panama, by Drs. A. Wetmore and J. P. E. Morrison.

Insects.—Most important among the year's 257 accessions is the large quantity of mosquito material from various units of the Army and Navy, which has added a considerable number of species to our already excellent collection in this group. Other valuable mosquito material was received from the Rockefeller Foundation. The outstanding accession for the year, aside from the mosquitoes, is the Dayton Stoner collection of the Scutelleroidea, a highly specialized collection contained in about 70 schmitt boxes, accompanied by a considerable series of Coleoptera and other insects. Other accessions of importance include the gift of 201 Coccinellidae and Cleridae received from Ramón Gutiérrez A.; 122 Coccinellidae and Cleridae from P. Guillermo Kuschel; about 3,000 specimens of all orders, from the Pearl Islands, collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison; about 1,500 specimens collected by the curator during his recent trip to Chile; and 311 sphecoid wasps, including 29 types, donated by Dr. H. T. Fernald. As in former years, the largest single accession, 72,000 insects, was received by transfer from the Department of Agriculture.

Marine invertebrates.—Six of the year's accessions brought type material to the collections. From Dr. W. Templeman were received the type and cotype of a new genus and species of parasitic copepod found on a lobster; from Dr. Rendell Rhoades, cotypes of a new species of crayfish; from Drs. Wilbur M. Tidd and Ralph V. Bangham, holotype of one new species of parasitic copepod and holotype and paratypes of another; from Dr. Horton H. Hobbs, Jr., types and paratypes of two new species of crayfish; from Dr. E. G. Reinhard, cotypes of a parasitic isopod; from the Miller School of Biology, University of Virginia, type of a new species of turbellarian worm; from Drs. A. Wetmore and J. P. E. Morrison a large collection of marine invertebrates from the Pearl Islands, Panama.

Mollusks.—Types of 11 species of mollusks in five accessions were presented to the Museum during the year, namely, 4 by John Q. Burch, 3 by A. R. V. Arellano, together with 24 other land shells, 3 paratypes of one species by the late George Willett, 1 by James Zetek, together with 200 specimens of shipworms, and 2 by Miss Marie E. Bourgeois, included in a shipment of 228 Mexican mollusks. From Miss Bourgeois the Museum received two other accessions comprising 66 specimens of land, fresh-water, and marine shells; Dr. Zetek in another accession donated 385 land shells from Panama. The year's largest accession, 25,000 mollusks, was collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison in the Pearl Islands, Panama. In eight accessions from the National Naval Medical School, 631 shells were received from the Pacific area. In addition, 2,894 shells were received from various Pacific localities in 17 accessions from 13 members of the armed services.

Helminths.—With the exception of two accessions comprising 99 helminths from the Pearl Islands, Panama, collected for the Museum by Drs. A. Wetmore and J. P. E. Morrison, and 13 specimens collected by Capt. M. C. Meyer in New Guinea, the other nine accessions for the year contained paratype and cotype material of 10 new forms.

Corals.—Five accessions, totaling 34 specimens, were received from five members of the armed forces serving in the Pacific area.

Echinoderms.—Three of 27 accessions contained specimens of more than passing interest. Among the echinoderms from the Pearl Islands collected by Drs. A. Wetmore and J. P. E. Morrison were found two undescribed species. A specimen of starfish, *Linckia rosenbergi*, not seen since originally described in 1866, was donated by Ensign R. E. Lando, who collected it in the South Pacific; and 85 specimens from Biak Island, the first echinoderms ever received from that part of the world, were collected and donated by Corporals Frederick M. Bayer and Gilbert Neurohr.

Plants.—There were many important accessions among the 283 recorded for the year in the division of plants. Perhaps the most important was the set of 8,000 photographs of types in European herbaria obtained by purchase from the Chicago Natural History Museum, exceptionally valuable material since the great majority are of specimens in the Berlin Herbarium. Other very important accessions included 2,400 specimens of plants from Colombia, collected in the spring of 1944 by E. P. Killip, associate curator; 1,403 specimens, transferred from the U. S. Department of Agriculture, of which 1,360 are specimens collected in northern Brazil by J. T. Baldwin; 1,320 specimens collected in Colombia by the donor, Oscar L. Haught; 111 specimens and 299 photographs largely of type material of *Crepis* and related genera, presented by Prof. E. B. Babcock; 625 plants, mostly trees, collected in Ecuador by Elbert L. Little, Jr., and received as a transfer from the U. S. Forest Service; 454 specimens from Venezuela, received from Dr. H. Pittier; 576 specimens from Mexico, presented by Prof. P. Lyonnet; 495 specimens from Texas, received from the Bureau of Entomology and Plant Quarantine; 250 specimens from Cuba, donated by Brother Léon; 297 specimens from Martinique and Guadeloupe, presented by Dr. H. Stehlé; 172 specimens of ferns, mostly from the Pacific Islands, presented by Lt. (jg) W. H. Wagner, Jr.; and 291 specimens of grasses from various regions, presented by Mrs. Agnes Chase, custodian of grasses.

In continuation of exchanges, the National Herbarium also received 830 specimens from the Comisión de Botánica, Cali, Colombia; 497 specimens from the Instituto de Ciencias Naturales, Bogotá, Colombia; 1,607 specimens of plants from various sources from the University of Michigan; 800 specimens, mainly from Mexico and the western United States, from the California Academy of Sciences; 44 specimens of plants from Colombia, including many isotypes, from the Escuela Superior de Agricultura Tropical, Cali, Colombia; 595 specimens from several sources, from the Arnold Arboretum; 638 specimens, mostly from the western United States, from the New York Botanical Garden; 525 specimens of grasses from the western United States, received from Dr. Frank W. Gould, in continuation of exchanges; 339 specimens, mostly from California and Oregon, from the University of California; 200 specimens, mostly from Canada, from the Gray Herbarium, Harvard University; 286 specimens, mostly from Texas, from the University of Texas; and 193 specimens of Indiana grasses from Butler University.

Diatoms.— Interesting diatom material was received from two remote places: 10 samples from various deposits at Oamaru, New Zealand, donated by Fred Reed, of Christchurch, and 2 samples of planktonic species from the vicinity of Attu Island, Alaska, collected by Dr. A. Bajkov.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Two years ago the removal of the types from all biological collections in the Museum to safer storage elsewhere as a defense measure was reported as virtually complete. All these types have now been safely returned to the building, and their restoration to their respective study series in the several divisions in turn is virtually completed.

Exhibition series.—A most striking improvement in the North American mammal hall was accomplished this year. Following the shifting of certain large cases and the removal of duplicated exhibits, the taxidermist force, under the direction of W. L. Brown, chief taxidermist, completed the overhaul and refurbishing of the hair-seal exhibit. With the addition of a 35-foot-long background of rock work and other suitable accessories and the cleaning, repairing, and restoring of the original color in the 11 specimens, this exhibit has become much more attractive and correspondingly more instructive. New exhibits enhancing the several bird ranges in which they have been placed are those illustrating courtship in birds, unusual bird nests, the extinct New World birds, and the infinite variety of the colors of hummingbirds. These several exhibits are in the modern style and are all fluorescent-lighted. Nine individual animals and two small groups, green frog and scaled salamander, were added to the exhibition series. The District of Colombia mammals on exhibition and the cases in which they are contained were all cleaned, and nine birds were added to the District avifauna display.

Mammals.—Inability to obtain requisitioned storage cases seriously taxed the existing storage facilities in the division. The storage of incoming large and small skulls presents a more difficult situation each year. Many of the present cases are crowded to capacity. Only limited space is left in the division for the intercalation of new cases. Shelf space in the alcoholic storage has been at a premium for some time. Some relief came with the construction of temporary wooden shelves for the reception of the large collection of mammalian brains assembled by the late Dr. Aleš Hrdlička. Additional stacks of steel shelving should be constructed in the gallery of the alcoholic room, where there is yet space for them. Work on the collection of large skulls and skeletons in the attic is at a standstill, and little progress can be made until the portion of the collection removed to the second floor as a defense measure can be recombined with the collections remaining in the attic.

Birds.—The rearrangement, reidentification, and labeling of the study series of bird skins consumed a large amount of time of the curator and the scientific aide. All in all, the contents of 114 quarter-unit cases and 50 half-unit cases were rearranged and reidentified. The collection of type specimens also was rearranged and expanded.

The physical condition of the collection is as good as the crowded condition of the cases permits.

On May 1 arrangements were completed for merging the Museum and the Fish and Wildlife Service ornithological collections. Though the two collections have not yet been actually combined, steps are being taken to put the merger into effect.

Reptiles and amphibians.—The very crowded condition of the alcoholic herpetological collections calls for definite action on the matter of finding some suitable storage for the extensive series of alcoholic birds occupying 177 shelves in the reptile stack.

A complete check of the type collection was made at the time of the return of the types to the Museum. Several errors in the records were detected and corrected.

Fishes.—The alcoholic collections of fishes are much overcrowded, a condition requiring an unusually large amount of rearranging in order to make place for newly cataloged specimens in the study series. The joint efforts of the temporary cataloger and the scientific aide attached to the division resulted in 4,843 catalog entries for the year, mostly for fishes of the *Albatross*-Philippine collections of 1907–10. The collections continue in good physical shape and are being improved by the elimination of all wooden barrels, which are being replaced by earthenware crocks as rapidly as they can be obtained. Unless more floor space can be provided, little can be done to alleviate the present crowded condition of the stack.

Insects.—As a result of the combined efforts of all members of the curatorial and custodial staff of the Museum and the division of insect identification of the Bureau of Entomology and Plant Quarantine, the study collections as a whole are in good physical shape, but little time has been available for urgently needed rearrangements. No change has been made in the installation of the collections, and there is still a considerable backlog of unavailable material, the reduction of which is dependent upon an increase in the staff. The return of the types to the Museum has facilitated the daily work of identification, but there has not yet been time to isolate them in individual trays except in two or three of the insect groups. Despite all handicaps, the great volume of service work, and a reduced staff, improvements were affected in many collections and progress was made in the incorporation of both old and new material. Much more would have been accomplished but for obstacles resulting from the inadequacy of space and from the lack of equipment and supplies.

The curator, Dr. E. A. Chapin, rearranged the material of the family Melandryidae and nearly completed the rearrangement of the scarabaeid subfamily Cetoniinae. Some rearrangement incidental to the making of identifications was made in the Coccinellidae group. The associate curator, W. E. Hoffmann, arranged the collection of

Oriental Pentatomidae and Scutelleridae to genera and then began the task of making the specific determinations. It was necessary to spread some of the material and in some cases to remount it in order to make critical studies.

No major progress was made in the rearrangement of the Orthoptera and Neuroptera groups, but gross sorting was kept up to date by Dr. H. K. Townes, who also incorporated the valuable R. C. Smith collection of Neuroptera in the study series. All the Nearctic Trichoptera were sent to Herbert H. Ross and the Corrodentia belonging to the genus *Lachesilla* to Kathryn Sommerman, both of the Illinois Natural History Survey, for study and identification.

The rearrangement of the larval Coleoptera collections of Elateridae was completed and included the incorporation of material received from Robert Glen, of the Canadian Department of Agriculture, who used it as a partial basis for a large paper on elaterid larvae now awaiting publication by the Museum. Parts of the Anthribidae also were sorted, identified, and arranged in accordance with the findings of W. H. Anderson. In the collections of adult Coleoptera there were no large-scale rearrangements, although rather large quantities of new material were incorporated. This material represents the equivalent of about 50 schmitt boxes of specimens and resulted from the "special survey" conducted by the Bureau's division of foreign plant quarantines, involving areas in the vicinity of ports of entry. On the whole, the collections of Coleoptera are in good physical condition. They are still far from satisfactory, however, with respect to completeness, accuracy of identifications, and availability for reference use. Large quantities of material in schmitt boxes and old cork-lined drawers still remain to be sorted, identified, and incorporated in the regular collection.

In the section of Lepidoptera Dr. Harrison M. Tietz, of Pennsylvania State College, was again employed for three months by the Bureau in the division of insects to continue his work of incorporating and arranging in one unit the North American Phalaenidae of the Barnes, Blackmore, Engelhardt, Brooklyn Museum, Schoenfeld, and old United States National Museum collections. He succeeded in incorporating and arranging the material of four subfamilies in conformity with the latest accepted classification. Until more standard drawers can be provided, Dr. Tietz will have to use the empty drawers of the Barnes collection as temporary storage for the arranged material. Although this is the best that can be done under the circumstances, it is a very unsatisfactory arrangement, since these collections will have to be moved again when standard drawers are again available. The alcoholic larval collection of Phalaenidae was also rearranged and labeled to conform with the latest classification. The special survey of the division of foreign plant quarantines contributed

a large quantity of interesting and important reared Lepidoptera, which has been identified and placed in the regular collection.

In the course of the year's work on the Hemiptera collections, Dr. R. I. Sailer rearranged, determined, or incorporated from various other collections some 14,000 specimens. Probably the most important single improvement, making the collection infinitely more usable for reference purposes, was the establishment of an arranged collection of Neotropical Miridae. In the Homoptera J. C. Caldwell rearranged and incorporated over 8,000 specimens. In spite of this volume of work, the collection of leafhoppers and allied groups is in a discouraging condition because, except for the family Cercopidae, the volume of unincorporated and unidentified material is almost equal to that in the arranged and identified collection. In the family Psyllidae excellent progress was made. Miss Louise M. Russell completely rearranged this family during the fiscal year, incorporated in the Museum series the Crawford, Baker, Ball, McAtee, Morrison, Compere, and Koebele collections. Approximately six months were spent in transferring and identifying this material and adding donor labels wherever necessary. The psyllid collection can now be said to be in good shape, and, though little time could be given to the aleyrodid collection, it is in fair condition. As the aphid collection was reorganized and expanded last year, no further extensive curatorial work was necessary. However, a large volume of material, particularly aphids, received from the special survey activity of the Bureau, was incorporated. The aphid collection is one of the few that can be considered in very good condition. It even includes provision for anticipated expansion during the next several years.

Some definite improvement has been made in the Muscoidea of the Diptera collections in two tribes of the parasitic flies comprising the family Larvaevoridae. The tribe Leskiini was studied by Dr. M. T. James, who completely reidentified and reorganized the Museum collection of these forms. A. R. Brooks, of the Canadian Department of Agriculture, studied, identified, and reorganized the tribe Phasiini, the rather considerable material of which in the National collection was sent to Ottawa for his attention. During the fiscal year most of the collection of dipterous larvae was transferred to standard vials in standard jars for more satisfactory arrangement and preservation, and the individual vials, as well as the jars and racks, were fully labeled. Two-thirds of this task has been completed, but its consummation will have to await additional subprofessional assistance. The most extensive and important work of the year involving the Diptera collections concerned the mosquitoes. The mosquito collection under Dr. Alan Stone has grown immensely, particularly in species of the Oriental and Australian regions. About 60 species were added which were not previously represented, and the mosquito collection is now undoubtedly one of the best in exist-

ence. It has required one full-time subprofessional worker to mount, label, and store the large quantities of incoming material. Very little rearrangement has been necessary in the case of the collection of adults, but the alcoholic collection, containing larvae and pupae, has been greatly expanded and has been reorganized. Another accomplishment of Dr. Stone's unit has been the expansion of the type collection of mosquitoes so that each type specimen is in a separate labeled tray. The trays are arranged according to family and author and alphabetically under the author by the original combinations. This collection of types now occupies a total of 21 drawers. The associated slide collection is similarly arranged, with the slides filed flat.

In the Hymenoptera, following the retirement of R. A. Cushman and the appointment of Dr. H. K. Townes to his position, rather extensive rearrangement of the collections of Ichneumonoidea and Serphoidea was undertaken. The Braconidae, the Aphidiinae, and the Cheloniinae were reorganized to permit more effective reference use, and the entire collection of Ichneumonidae was rearranged to conform with the classification given in Dr. Townes's recently published catalog of this family. In the Chalcidoidea, the subfamily Cerocephalinae of the family Pteromalidae was completely reidentified and rearranged in accordance with a revision of the group prepared by A. B. Gahan. A great deal of miscellaneous, unsorted material of all the groups of parasitic Hymenoptera was sorted and incorporated in the regular collections, approximately 100 drawers and 220 schmitt boxes of specimens. About 85 drawers and 450 schmitt boxes still await identification and incorporation. The holotypes of the Ichneumonoidea, except the Braconidae, were transferred to individual trays with the original name and author pasted on each tray. These now occupy 15 drawers. In spite of the lack of a regular worker on the bees and wasps, some improvements in that part of the Hymenoptera collections were accomplished with the assistance of outside investigators. R. M. Bohart redetermined and rearranged the contents of 20 drawers of Vespidae, and P. H. Timberlake worked over 6 drawers of bees belonging to the family Panurgidae. Dr. M. R. Smith reports complete rearrangement of the ants of the subfamily Dolichoderinae and the tribes Attini and Dacetoni, and the incorporation of the excellent collection of identified ants belonging to the genus *Atta* received from C. R. Gonçalvos, of Rio de Janeiro, Brazil. Although on the whole the collections of parasitic Hymenoptera are comparatively well housed at present, this is definitely not true for the aculeate Hymenoptera, including the ants. At least 60 percent more space is urgently required for the collection of bees, wasps, and ants. The general organization of the Thysanoptera collection, under the care of J. C. Crawford, is good; new material has been incorporated as received.

During the fiscal year Grace E. Glance was appointed to a specialist position with responsibility for identifications and research in the Collembola, Thysanura, and Entrophi. Since assuming charge Miss Glance has sorted, labeled, and arranged the recent material, which is being used as a base for the development of the collections. To this has been added a considerable quantity of material from the old collections, but more than half of the older material still remains to be studied, reidentified, and incorporated. Every opportunity should be used to obtain material in these groups by gift or exchange, as they have been long neglected, with the result that the collections are weak and most of the material poor. It is proposed to have Miss Glance spend some time in Montana after the war in order that she may study the Mills and Folsom collections at Bozeman. Dr. Mills, who has been very cooperative, has indicated that he would be prepared to turn over for the National collection at that time representatives of many Collembola not now contained in it. Meanwhile, every specimen of Collembola, Thysanura, and Entotrophi received for identification that is in even reasonably good condition will be retained.

During the year Dr. E. W. Baker was appointed as a second specialist in the section of ectoparasites and Acarina, with responsibility for the free-living mites. He has assumed custodianship of the collection of these forms and has rearranged the material comprising 10 different families. A beginning was made also on the reorganization of the collection of the large group Oribatoidea. In addition, Dr. Baker undertook to enlarge the series of individual species, as the representation of many species has been too poor to permit the critical study required for revisionary work. An alcoholic collection is also being developed to supplement the slide collection. Many slide preparations are being remounted to take care of deterioration due to the mountant employed. E. A. McGregor, working at the Bureau's laboratory in Whittier, Calif., undertook to complete the revision of the spider mites, or Tetranychidae, on which he is the outstanding authority. Many hundreds of slides have been sent to him for review and reidentification. The collection, which has been in poor condition, will thereby be reorganized and brought up to date. Dr. H. E. Ewing rearranged the collection of Trombiculinae in conformity with a generic revision of the group published during the year. The collection of Anoplura is in good order and is arranged in accordance with modern ideas of the classification of the group; but that of the Mallophaga is in need of complete overhauling. In order that the great deal of Mallophaga material received for identification may be handled more expeditiously and may be more accurately identified in the future, E. W. Stafford, of Mississippi State College, was given a 3-month appointment for rearranging and reidentifying this collection. On the whole the collection of fleas is well arranged, with

nearly every specimen identified. Larger series, however, are needed for many of the forms.

Marine invertebrates.—The physical condition of the collections continues good. The necessary routine records are up to date, having been carried along by the head curator's secretary, Miss Lucile McCain. At the present time, the type collections returned from storage out of the building are being checked and relabeled where necessary. This is the first time that a complete inventory of the series of types has been undertaken. Library work in this division occupied a considerable part of the time of the temporary typist assigned to the head curator's office, but a great deal more remains to be done. There were no changes in the exhibits except for the removal of two small cases of duplicate sponges.

Mollusks.—The mollusk collections continue in good order, but quarter-unit cases are needed for the redistribution of types returned from storage during the year.

Helminths, corals, and echinoderms.—There were no changes in these collections during the year except for the incorporation of new material in the helminth collection by the staff of the zoological division of the Bureau of Animal Industry.

Plants.—During the year 14,346 specimens of flowering plants and ferns were mounted, wholly by adhesive straps. In addition, 3,657 photographs of type specimens were mounted for incorporation in the herbarium, 4,740 mounted herbarium specimens were repaired, and 5,314 typed or printed descriptions (with reference labels) were mounted on herbarium sheets. During the year 14,051 mounted specimens were stamped and recorded and thus made ready for the herbarium; about 1,000 are still unstamped. Of material awaiting mounting there is a backlog of about 31,000 specimens, approximately the number mentioned a year ago as unmounted. There are, besides, about 4,500 photographs of type specimens in European herbaria that should be mounted and added to the herbarium as promptly as possible. Sixty-five thousand mounted, stamped, and recorded specimens and sheets bearing mounted photographs or descriptions are on hand awaiting incorporation in the herbarium. Nearly all are American, about 5,000 being West Indian and the remainder continental.

In incorporating United States, Mexican, and Central American specimens in the herbarium during the year, C. V. Morton spent two months in rearranging the Compositae, and in the course of this work he identified several hundred specimens in that and other families. Ellsworth P. Killip likewise incorporated a great deal of South American material, this mainly in connection with identification work upon recent large collections. Lack of cases delayed the insertion of this material in the herbarium. Furthermore, the time that could be devoted to this work was greatly limited because of the pressure of other routine.

Mrs. Agnes Chase continued to serve as custodian of grasses and devoted her time almost wholly to the maintenance of this collection and its special library and to the identification of a wide array of material from many regions, especially the southwest Pacific. There was a steady influx of desirable material, much of which still awaits mounting. During the year 14 new herbarium cases of standard size were installed under the immediate charge of Dr. F. A. McClure, research associate, who is now engaged under the auspices of the Department of Agriculture in an extended study of the American species of bamboos.

The type herbarium, the specimens of which were tightly packed for wartime storage, has now been entirely rearranged by Mr. Morton. It consists of 44,394 specimens, 784 additional types having been segregated during the year, and is contained in 120 small unit cases of eight pigeonholes each.

As in other years, Mr. Leonard gave general attention to the lower cryptogams, devoting about one day a week to processing recent and accumulated collections (mostly mosses and lichens) and distributing identified specimens into the herbarium. John A. Stevenson, honorary curator of the C. G. Lloyd mycological collections, in reporting upon their basic utility in taxonomic work, makes special mention of the Xylariaceae, Tylostomaceae, and tropical Polyporaceae, the last group directly concerned with timber decay.

In April the sectional library was placed in immediate charge of Dr. E. H. Walker. The shelves have now been completely rearranged, permitting far readier access to the books and a very advantageous new disposition of table space for study purposes. Much work was done in rearranging and cataloging the books; also the reprint series was renovated and made more useful. More volumes than usual were bound, and in general the library is greatly improved.

Taxidermist shop.—In addition to the improvements in the public exhibits already noted, the taxidermists performed a great deal of work in planning better future exhibits and in preparing study material, skins, and skeletons for the mammal, bird, and reptile divisions. Miniature models were made of four animals for the Firestone Liberian group and of five groups intended for the North American hall. Forty-three animals were mounted for the exhibition series, as well as a celluloid replica of a 25-foot reticulated python. Skins made up, remade, repaired, degreased, or dismounted, including animals skinned, totaled: Mammals, 180; birds, 520. Skeletons, as well as individual skulls and sets of leg bones, other than those accompanying complete skeletons, attended to during the year included 721 mammals and 92 birds; nine eggs were blown. Of 170 requisitions submitted by the curators of the department for taxidermist services, all but 24 were completed.

INVESTIGATION AND RESEARCH

Mammals.—The curator of mammals, Dr. Remington Kellogg, prepared, for the use of investigators working for the Board for the Coordination of Malarial Studies, a check list with keys for macaque monkeys, which was published in the National Research Council report on primate malaria. He also published two papers on rodents from the South Pacific, a description of a macaque from Borneo, an account of the fossil cetaceans from the Florida Tertiary, and in joint authorship with E. A. Goldman a review of the spider monkeys. The associate curator, Raymond H. Gilmore, completed the identification of approximately 30,000 bone fragments, obtained during the course of field investigations by a number of American archeologists working in various parts of this country and Mexico, and also identified about 50 Siamese and a number of Bolivian and Peruvian mammals transferred from the Office of the Coordinator of Inter-American Affairs and the Pan American Sanitary Bureau. Gerrit S. Miller, Jr., research associate, continued work on a revised edition of his list of "North American Recent Mammals." H. Harold Shamel, scientific aide, made a study of the rats belonging to the *Rattus rattus* group and completed a brief synopsis of the bats of the genus *Eptesicus* of the Western Hemisphere, including the description of a new form from Jamaica.

Birds.—The curator of birds, Dr. Herbert Friedmann, completed a report on the extensive collection of birds made by E. G. Holt on the upper Rio Negro, Brazil, and the Upper Orinoco, in southern Venezuela, and, in this connection, published two papers and wrote two others now in press describing new forms. Work was continued on the manuscript of the twelfth volume of "The Birds of North and Middle America," and the manuscript of volume 11, dealing with the falconiform birds was brought up to date. Some time was spent on the fifth edition of the "Check-list of North American Birds" and on the "Check List of Birds of Mexico" being prepared by R. T. Moore, L. Griscom, and the curator. He also published several papers on Antarctic and American birds. The associate curator, H. G. Deignan, began work on a check list of the birds of Siam and on a critical catalog of the bird types in the Museum collection. The assistant curator, S. D. Ripley, though absent from the Museum on war work, published two papers, one of the birds of the West Sumatran Islands and one on the golden oriole in Ceylon, and completed three others dealing with barbets, nightjars, and the use of certain terms in speciation studies. Dr. Wetmore devoted some time to the A. O. U. "Check-list of North American Birds" and supplements and worked on the collection of birds from the Pearl Islands, Bay of Panama. He also worked on birds from Tabasco, Mexico, and published on a few unusual records, such as that of a golden plover in Nicaragua and a blue-winged teal on the high seas. Dr. E. M. Hasbrouck, volunteer

worker in the division, published a paper on the status of Barrow's goldeneye in eastern North America.

Reptiles and amphibians.—The associate curator, Dr. Doris M. Cochran, completed a paper on the reptiles and amphibians of the Pearl Islands, Panama, based on the collections made by Drs. A. Wetmore and J. P. E. Morrison, and completed notes on a collection of frogs borrowed from Instituto Butantan, drawing and describing several species not represented in North American collections.

Fishes.—Nine papers by the curator of fishes, Dr. Leonard P. Schultz, were published during the year, and the final report on the Venezuelan fishes collected by him in 1942 and those collected by the U. S. S. *Niagara* in 1924–25 is nearly completed; other studies completed deal with the carangid fishes of the genus *Oligoplites* inhabiting American waters, a revision of the genera of mullets, fishes of the family Mugilidae, and a revision of the genera of atherine fishes with descriptions of two new species and four new genera. The associate curator, Dr. Robert R. Miller, published two papers during the year and submitted four others for publication. At the end of the year he was engaged in studying certain collections from Mexican streams and caves, the cyprinids of Californian waters and southwestern Nevada, and the fish fauna of the District of Columbia. The scientific aide, Earl D. Reid, published one paper on two rare fishes from off the Virginia capes.

Insects.—The curator of insects, Dr. E. A. Chapin, devoted his available research time to the family Coccinellidae, with special reference to the Neotropical species, and continued his revision of the genus *Hippodamia*.

The associate curator, W. E. Hoffmann, is revising the Scutelleroidea of the Oriental region. In the orthopterous insects Dr. H. K. Townes made some small advance in the generic classification of the Dermaptera.

Current work on the Coleoptera included W. S. Fisher's studies on the wood-infesting beetles of the families Bostrichidae and Anobiidae. In order to complete his paper on the Bostrichidae it will be necessary to study certain type material in other institutions. Dr. W. H. Anderson completed a key to the genera of Anthribidae, based on larval characters and with numerous illustrations. In addition, he prepared nearly 300 permanent slides from dissected specimens of adult Scolytidae in furtherance of studies on several of the genera. The most intensive research work in the Coleoptera concerned certain genera of Elateridae, in connection with which J. M. Valentine has made a serious study of *Drasterius* and allied genera; it is expected that this valuable revisionary work will be completed during the next fiscal year.

Part 3 of Blackwelder's "Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America" was

published by the Museum during the year and the manuscript of Part 4 prepared.

In Lepidoptera, H. W. Capps was able to devote a little time to the further development of his detailed study of lepidopterous larvae. In connection with an economic problem involving the pyraustid genus *Leucinodes* which arose during the year, Mr. Capps also initiated a revisionary study of the species comprising that small group.

The assignment of R. I. Sailer to certain DDT studies in the field somewhat delayed his research on the Hemiptera-Heteroptera. Some progress was made on the revision of two genera of Pentatomidae, which contain important economic species, and on a revision of the bed-bug genus *Cimex*. Dr. J. S. Caldwell began a reclassification of the Cicadidae in the Homoptera and completed a rough key to the genera for testing in identification work. He also nearly completed a generic classification of the membracid tribe Ceresini, in which he depended to a large extent on characters of the genitalia, believing that a classification developed on this basis would be soundest from a phylogenetic standpoint. Since at least half of Miss Louise Russell's time during the fiscal year was devoted to the reorganization of the collection of the Psyllidae, she had little opportunity to extend her research studies in the Aleyrodidae. She was able to accomplish some work on the small genera *Aleuroparadoxus* and *Aleurotithius* and nearly completed a paper dealing with the known species. In the aphids, the large project of Dr. P. W. Mason involving a reclassification of the species of the genus *Macrosiphum* was continued. Emphasis during the past year was placed on a critical study of various closely related genera that will probably need to be covered by the treatment.

In the Diptera Dr. M. T. James completed a paper on "The Flies That Cause Myiasis in Man," which attempts to provide a means for identification of the many different forms involved in human myiasis, and a shorter paper revising the larvaevorid tribe Leskiini. He began a study of the Stratiomyidae of the Solomon Islands based largely on the collections of C. O. Berg.

A. B. Gahan, in the course of his Hymenoptera studies, completed a revision of the chalcidoid genus *Cerocephala* and related genera, as well as a provisional revision of the Encyrtidae comprising the genus *Pseudaphycus*, and has continued a classification of the supergeneric groups of Chalcidoidea. Most of Dr. M. R. Smith's research time was devoted to the preparation of a generic and subgeneric synopsis of the Nearctic ants based on the worker caste, now virtually completed except for illustrations. He also made a beginning on the development of a much-needed catalog of the Nearctic ants.

In the section of ectoparasites Dr. E. W. Baker undertook a study of certain groups of oribatid mites, containing forms of medical importance, since they serve as intermediate hosts of tapeworms. He completed one paper dealing with mites of the family Cunaxidae and

another on the trichadenid genus *Brevipalpus* with keys and descriptions for all known species. He has in rough draft a generic classification of the family Cheyletidae. Dr. H. E. Ewing continued his work with the chigger mites, a group upon which a great deal of attention has been focused during the war, particularly because of the significance of these species as vectors of human diseases, and published one paper dealing with the forms of most importance in that connection.

In the section of Isoptera Dr. T. E. Snyder, termite specialist of the Bureau's division of forest insect investigations, is devoting two days a week to the termite collections, giving special attention to the development of a catalog of the termites of the world projected many years ago, a joint undertaking with Dr. A. E. Emerson, of the University of Chicago.

Marine invertebrates.—The head curator of biology, Dr. Waldo L. Schmitt, compiled a chronology of the operations of the U. S. Fisheries steamer *Albatross* from the day of her launching to the day of her decommission, which was published in the *American Neptune* as an appendix to a brief historical account of the vessel by Joel W. Hedgpeth. He also prepared for publication reports on the miscellaneous lots of zoological material for the general report on the scientific results of the U. S. Antarctic Service Expedition. Two other manuscripts describing two new species of shrimps from South America and a rare crustacean from Africa are complete except for illustrations. Clarence R. Shoemaker, associate in zoology, continued his studies on the amphipod fauna of the western Atlantic and completed his study of the genus *Bactrurus*. His report on the amphipods of the U. S. Antarctic Service Expedition was published in April. Mrs. Mildred S. Wilson, assistant curator, who has been rearranging the collection of copepods, perhaps one of the most complete in any museum, began some studies of a number of rare forms and one new genus detected among the unidentified material. Dr. R. S. Bassler assisted Dr. Raymond C. Osburn's studies preliminary to a handbook of American Bryozoa with photographs of many new species that he had segregated from west coast material. Dr. J. A. Cushman continued studies of Foraminifera begun earlier in the war period and, in addition, completed several monographic studies of generic and subfamily groups. The type faunas of various geologic formations have also been studied and some of them published for use in correlations.

Mollusks.—The curator of mollusks, Dr. Paul Bartsch, continued his studies on the east Pacific turrid mollusks, and, in collaboration with Dr. Harald A. Rehder, associate curator, is working on a monograph on the wood-boring mollusks of the genus *Martesia* infesting the west Atlantic. His section on the mollusks of "Fishes and Shells of the Pacific World" for the New York Zoological Society is in process of being published. Dr. Rehder devoted considerable time to identifying mollusks received in large part from men in the armed services,

but he found time to prepare descriptions of several new species. The assistant curator, Dr. J. P. E. Morrison, as time permitted, worked on the collections obtained during his detail for work in the Pearl Islands from February to October 1944.

Echinoderms.—The curator, Austin H. Clark, reports that Part 4c of his "Monograph of the Existing Crinoids" has been very nearly completed except for the plates and that a preliminary report on the Ophiuroidea of the *Albatross* Hawaiian collections has been prepared. Papers dealing with the Onychophora of Panama and the Canal Zone and with the echinoderms collected by Drs. A. Wetmore and J. P. E. Morrison at the Pearl Islands, Bay of Panama, including a revision of the Pacific species of the echinoid genus *Encope*, were submitted for publication. Two other papers by the curator were published during the year.

Plants.—The curator of plants, Dr. William R. Maxon, published descriptions of several new ferns detected in the course of identifying various large tropical American collections. Ellsworth P. Killip continued his researches upon the flora of northern South America. Emery C. Leonard is continuing with the Acanthaceae of Colombia and, in collaboration with H. A. Allard, published a supplementary paper on the flora of the Bull Run Mountains, Va. C. V. Morton continued work upon his synoptical catalog of the vascular plants of Cuba, with keys, and published a critical review of the Mexican plants (exclusive of Compositae) described by the late Marcus E. Jones. Dr. E. H. Walker published a paper on the plants of the Aleutian Islands, designed especially for service men, and carried on studies on New World Myrsinaceae. Mrs. Agnes Chase, custodian of grasses, resumed her monographic study of Brazilian grasses, and Dr. F. A. McClure, research associate, continued his study of bamboos, mainly tropical American.

Diatoms.—The principal investigations carried on in the section of diatoms dealt with the diatom flora of Chesapeake Bay, the diatom content of oyster stomachs, and the diatoms of the Presidential Cruise. A method of marking rings on cover glasses was perfected and a study made of a better storage system for diatom collections.

IDENTIFICATION, DISTRIBUTION, AND EXCHANGE OF SPECIMENS

The number of lots of specimens sent in with requests for identification was as follows: Mammals, 68; birds, 43; reptiles and amphibians, 30; fishes, 34; insects, 142; marine invertebrates, 59; mollusks, 101; helminths, 6; corals, 2; echinoderms, 11; plants, 291; diatoms, 1; a total of 788, involving more than 20,000 specimens. Besides these, 30,184 lots of specimens were received by the division of insect identification, United States Department of Agriculture, which furnished 59,492 identifications. The total number of lots received by the Museum for identification represents a 30 percent increase over the

previous year. Each year there are a great number of requests for information other than identifications.

The total number of specimens from all sources identified during the year by all divisions approximated 30,000 (not including 57,825 identified by members of the staff of the division of insect identification, Bureau of Entomology and Plant Quarantine).

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions, governmental agencies, and private individuals aggregated 80 transactions, 3,053 specimens; 587 specimens were sent out in exchange, 853 as gifts, and 1,613 as transfers to military and naval centers. The 18,645 plants distributed were sent out as exchanges to 93 institutions and correspondents. In addition, 74 photographs were distributed as transfers.

NUMBER OF SPECIMENS UNDER THE DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year, with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. No estimate has yet been made for the corals, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens, though they may contain hundreds and even thousands of individuals, the enumeration of which could serve no useful purpose. Processed specimens, such as plants mounted or diatoms mounted on slides during the year from duplicate and other material on hand, account for any unspecified increase in the annual totals of these groups.

Mammals		247,826
Birds:		
Skins	291,905	
Alcoholics	10,082	
Skeletons	18,251	
Eggs	90,439	
		410,677
Reptiles and amphibians		130,486
Fishes		1,304,651
Insects		5,640,199
Marine invertebrates		1,057,042
Mollusks		3,123,220
Helminths		35,093
Echinoderms		177,587
Plants		1,877,000
Diatoms:		
Slides	20,300	
Crude and prepared samples	25,031	
		45,331
Total		14,049,112

DEPARTMENT OF GEOLOGY

(R. S. Bassler, *Head Curator*)

Although the operation of the department continued difficult in the fiscal year 1945, the third year of global war, the care and preservation of the collections and, indeed, some reduction in the backlog progressed satisfactorily. The safe return to Washington of the type specimens evacuated in 1942, with restoration to their proper places in the Museum collections, was a heartfelt relief. Good progress was made on the several war projects that have been under way for the past three years, particularly the cooperative work with Mexico carried on by Dr. G. A. Cooper in paleontology and Dr. W. F. Foshag in economic geology.

An event of considerable importance to the division of invertebrate paleontology and paleobotany was the decision of the Director of the Geological Survey, upon invitation of the Secretary of the Smithsonian Institution, to transfer the large collection of Carboniferous and Permian fossils, hitherto located in the Interior Building, to the National Museum. This transfer will consolidate both the fossil collections and the paleontological staffs of the two institutions. A substantial portion of the Survey collection has already been moved to the Museum.

Progress was made in Dr. Cooper's study of the Paleozoic paleontology of Mexico, which yielded information that will be helpful in future location of ore deposits. With the help of several collaborators the project should be completed early in the next fiscal year. As a further part of this program, a 6-week visit from Ing. Albert Arellano, stratigrapher for the Geological Institute of Mexico, gave opportunity for closer collaboration with that country. Another visitor, under similar auspices, Dr. Y. Wang, of the National Geological Survey of China, came for a year's stay to learn American research methods and to study the faunas of Ordovician formations, well developed both in the United States and in China.

Wartime restrictions necessarily curtailed field work in vertebrate paleontology, but, offsetting this, more time became available to concentrate on preparatory work. The result was not only a considerable reduction in the backlog of unprepared specimens, but also the completion of several mounted skeletons of outstanding merit for the exhibition halls.

Two mineral collections, one from the classic Copper Queen mine at Bisbee, Ariz., and the other the T. Sterry Hunt collection, both ob-

tained from the estate of the late Dr. James Douglas, form a gift of exceptional merit to the division of mineralogy and petrology. The rock and mineral collections in general were consulted frequently by representatives of war agencies, and the staff continued to furnish information to military authorities and to soldiers in the various combat areas.

The temporary appointment for the first quarter of 1945 of Dr. J. Brookes Knight, of Princeton University, an authority on Paleozoic gastropods, to revise the Museum collection of this class, led to later arrangements whereby, through the Walcott bequest, he would continue his studies during the coming year.

Continuing on detail from the Museum, Dr. W. F. Foshag, curator of mineralogy and petrology, spent the year in furthering war work in Mexico by supervising surveys for strategic minerals. Dr. C. Lewis Gazin has been absent since July 20, 1942, on military detail in the service of the United States Army.

ACCESSIONS FOR THE YEAR

Study and exhibition materials received by the department during the year number 130 accessions and 23,770 specimens, in contrast with 123 accessions and 3,466 specimens during 1943–44, a noteworthy gain not only in amount but in quality. The figures for the individual divisions follow: Mineralogy and petrology, 70 accessions (868 specimens); invertebrate paleontology and paleobotany, 50 accessions (22,542 specimens); vertebrate paleontology, 10 accessions (360 specimens).

Mineralogy and petrology.—The income from the Canfield and Roebling funds was again instrumental in bringing valuable accessions to the mineral and gem collections. Four accessions credited to the Canfield fund during the past year contained the finest specimen so far recovered of the new mineral brazilianite, from near Arrasuahý, Brazil; 10 tantalite crystals from Ceará, Brazil; an excellent beryl crystal from Pala, Calif.; from Madagascar, a colorless glassy spodumene and, for the exhibition series of gems, a 25-carat clear yellow spodumene.

Through the Roebling fund 10 accessions were recorded, comprising principally gems and minerals. The minerals included 70 specimens of unusual calcite crystals with a new crystal habit from La Aurora mine, Chihuahua, Mexico; a specimen of natrolite from Livingston, Mont.; a 39-carat beryl from Wray mine, Yancey County, N. C.; and 2 specimens of quartz from Pacú, Minas Gerais, Brazil. Credited also to this fund was a series of 8 minerals from Mexico, consisting of 2 crystallized argentites (silver sulphide) from Guanajuato, 2 native silvers from Batopilas, one legrandite (zinc arsenate) from Coahuila, 1 aguilarite (silver sulphide and selenide) from Taxco, and 1 stephanite and 1 pyrargyrite (both silver antimony sulphides) from Zacatecas.

The more important additions to the gem collection obtained through the Roebling endowment were as follows: A 40-carat Ceylon cat's-eye chrysoberyl; a fine blue Ceylon sapphire of 9 carats; a white phenacite from Brazil, 9 carats; an attractive green diopside of 11 carats from Madagascar; and a series of 8 cabochon jades of various colors, all gems of rare exhibition quality and value. The gem collection was further enriched by a gift from Mr. and Mrs. Calvin Joyner of 16 different-colored jade rings and by an acquisition from the United States Customs Service of a series of 160 cut stones consisting of aquamarine, amethyst, opal, sapphire, garnet, zircon, and citrine quartz. A synthetic emerald of 90 points was presented by C. F. Chatham.

The mineral collections benefited by a number of outstanding specimens acquired as a result of the special efforts of the associate curator to interest persons possessing good minerals to deposit them in the National Museum. The most important accession comprised the Dr. James Douglas collection of copper minerals from Bisbee, Ariz., and the T. Sterry Hunt mineral collection. Before disposing of his general mineral collection, Burnham S. Colburn presented his more important and choice specimens of hiddenites, green spodumene, and cyanite. Likewise, a superb suite of 10 muscovite and biotite crystals was donated by S. P. Cronheim from his mine at Mitchell Creek, Upson County, Ga.

Dean Frasche continued his interest in our collections by depositing a series of chromite crystals from the Sierra Chrome Mines, Ltd., Sierra Leone, Africa. The American Museum of Natural History, through F. H. Pough, exchanged seven tourmalines, one fluorite, and one amblygonite from Brazil and a specimen each of emmonsite (iron tellurite) and a new mineral, mackayite (also an iron tellurite), from Nevada. Frank L. Hess, in continuance of his interest, donated a specimen of goldfieldite (a complex copper antimony bismuth sulphide and telluride) from the Mohawk Lease, Goldfield, Nev., and A. N. Goddard presented a crystallized specimen of gold from California and one opal in the matrix from the Carbanera mine, Guerrero, Mexico. The Foreign Economic Administration, through James S. Baker, transferred five specimens of cassiterite, tantalite, and muscovite, from Madagascar and Brazil. Another transfer came from the Metals Reserve Co., through Charles B. Henderson, consisting of a quartz crystal weighing 5.7 pounds, from Ashe County, N. C. This is said to be the finest quality quartz found in the United States.

While temporarily stationed at the School of Tropical Medicine, Walter Reed Hospital, Maj. W. B. S. Thomas presented a twinned diamond crystal from near Accra, Gold Coast, Africa. An unusually fine crystal of ruby muscovite from Urubu mica mine, Espera Feliz, Minas Gerais, Brazil, was acquired from A. Renato Semola and Elipidio Pitta, through the efforts of D. M. Larrabee.

Prof. Paul F. Kerr donated a specimen of tungstite and hydrotungstite, a new mineral from near Oruro, Bolivia, and Prof. John W. Gruner presented a specimen of groutite, a new hydrous manganese oxide from Cuyuna Range, Minn. An unusually elongated concretionary form of marcasite from Delaware County, Ohio, was a gift of R. F. McAlester. The Geological Survey transferred an analyzed sample of siderophyllite (an iron-rich biotite mica) from Alaska.

A sample of uraninite, 1,002 grams in weight, from Cornwall, England, and a crystallized andradite garnet from Graham County, Ariz., were obtained by exchange with Ward's Natural Science Establishment. Various muscovite mica specimens were collected for the Museum from many different producing areas in New Hampshire, and presented by Philip W. Gates. A series of cross sections of twinned crystals of Brazilian quartz formed a gift by Paul B. Bunton. From the Eureka Mica Mining Co., through N. W. Sides, several specimens of muscovite from Rio Arriba County, N. Mex., were received, and five natrolite specimens from San Benito, Calif., came from W. W. Bradley. Other gifts were one thulite (pink variety of clinozoisite) from Singatse Range, Lyon County, Nev., from Hatfield Goudey, and a fluorite from San Juan, Ouray County, Colo., from Mrs. Mary E. McClellan, through the Geological Survey.

The Drum Mountain, Millard County, Utah, meteorite was added to the collections through the Roebling income. This 1,164-pound example was discovered last year by Y. Nishimoto and A. Ujihara, two Japanese who were temporarily located at the camp near Topaz, Utah. Dr. Stuart H. Perry, associate in mineralogy, presented an 81-pound mass of the Odessa meteorite, while Ensign Floyd A. Rapp, of the Merchant Marines, acquired a good specimen of australite while he was in Perth, Southwest Australia, which he donated to the collections.

A suite of 22 nickel ores from New Caledonia was an important addition to the ore collections during the past year, received by gift from C. H. Schneider. Frank L. Hess presented two specimens of uranium minerals from the Ruggles mine, Grafton Center, N. H., and one of granite from the dike at Hodgeon Hill, Buckfield, Maine. Chauncey L. Butts presented a gold ore sample from the Independence mine, Alaska, and 3 specimens of obsidian from Amchitka Island, Aleutians. The Geological Survey transferred 6 specimens of high-iron and high-alumina clays from Clinton County, Pa., a specimen of lead-zinc ore from the Kimberly mine, Kokomo district, Summit County, Colo., collected by A. H. Koschmann, and a specimen of calomel (mercury ore) from the Mariposa mine, Brewster County, Tex., collected by R. G. Yates and G. A. Thompson. While on field work for strategic minerals in Mexico under the direction of Dr. W. F. Foshag, Ivan F. Wilson visited the Compagnie du Boleo, Santa Rosalia, Baja California,

where he collected eight specimens of copper ores and shipped them to the Museum as a gift from Pierre Mahieux of that company.

The rock series and objects illustrating physical geology received the following additions: The Geological Survey transferred a collection of 34 samples of manganiferous and ferruginous cherts from Perry and Lewis Counties, Tenn. Through Maj. Thomas C. Holland, Chaplain, U. S. Army, Mrs. Clarissa Humphreys presented the silicified interior of a septarium nodule from Montague County, Tex. Kaolin from Ringgold, Tenn., and a bauxite from McIntyre, Ga., were gifts of P. S. Roller. Further interesting additions to the geological collections were 28 marcasite septaria from the Devonian of Ohio, from C. C. Hamel, and 13 iron concretions from the northern area of the Black Hills, S. Dak., from L. Allen Higley.

Invertebrate paleontology and paleobotany.—The total of 22,542 specimens for the year in this division is more than 7 times the number accessioned in 1944 and is reminiscent of the good years before the war.

One of the most noteworthy transfers from the Geological Survey for some years was recorded this year. This was the extensive Paleozoic collection made in the southern Appalachians by Dr. Charles Butts, geologist in that organization now retired, but still engaged in research in this division. This collection, numbering more than 10,000 specimens and representing the accumulation of many years of field work in Alabama, Georgia, Kentucky, Pennsylvania, and Virginia, is highly important for the information it contains bearing on the stratigraphy of the Appalachians.

Another worthy transfer from the United States Geological Survey was that received through the Chief of Engineers, U. S. Army, from the Canol Project, Canada. The 3,500 specimens of Silurian, Devonian, and Cretaceous fossils comprising this transfer, mostly of fair quality, are of particular interest in their source, the remote regions of the Canadian Northwest.

An outstanding addition of the year, the Bruno Louis Zimm collection of about 3,000 Devonian (Oriskany) fossils from the famous locality at Glenerie, N. Y., came to the Museum as a purchase through the Walcott fund. This collection includes many rare and unusual types, mostly of silicified specimens of brachiopods weathered from a siliceous limestone. Mr. Zimm, noted sculptor and amateur geologist, painstakingly gathered these delicate, beautifully preserved shells from solution cavities in the rock where they had accumulated.

Eight lots received by transfer from the Geological Survey contained mostly specimens sent in by geologists for identification.

Important type specimens were received as follows: E. R. Applin, University of Texas, presented 55 slides of Cretaceous and Tertiary Foraminifera from subsurface formations in Florida, including many primary types; Dr. Rousseau Flower deposited half of the type

specimen of the interesting cephalopod *Endoceras faberi* Foerste; Dr. J. Brookes Knight presented five specimens of a Pennsylvanian gastropod soon to be described as a new genus; Dr. S. A. Northrop gave four type specimens of nautiloid cephalopods from Permian rocks of New Mexico; Dr. Bradford Willard presented the type specimen of the Ordovician starfish *Taeniaster maximus* Willard; Dr. J. Stuart Williams gave the types of the peculiar Mississippian blastoid genus *Ambolostoma;* and Dr. G. A. Cooper, curator, turned over a unique color-marked Devonian brachiopod received as a personal gift to him from Dr. Darling K. Greger.

In the section of Cenozoic invertebrates, Benton Stone donated the types of a Peruvian Upper Eocene foraminifer. Tertiary larger Foraminifera from Panama and countries to the south formed a gift of Dr. A. A. Olsson, and similar larger Foraminifera from the Tertiary deposits of Morocco were received from Dr. Alfred Senn. Fifteen lots of the larger Tertiary Foraminifera of Panama were presented by Robert A. Terry.

Other interesting gifts included a collection of Devonian invertebrates from Rockford, Iowa, received from A. L. Haines; over 800 specimens of Upper Ordovician Ostracoda from Missouri, received from James E. Keenan; 19 Permian brachiopods from New Mexico, from Dr. R. E. King; 250 specimens of Silurian and Devonian corals from western New York for the biologic series, gift of Irving G. Reimann; and 500 specimens of Middle Devonian brachiopods received from Charles Southworth.

Three accessions were made up of material collected by the curator in the Appalachians and Mexico. The two accessions of Appalachian material brought mostly stratigraphic lots, including 1,350 specimens of invertebrate fossils and some silicified material to be etched. The Mexican collections consisted of Cambrian, Devonian, Mississippian, and Permian fossils from northwestern Sonora and will add a fair number of types to the collection. No count of the specimens can be given until all the material is prepared and then divided with the Geological Institute of Mexico according to prior agreement.

Through the special fund left for the purpose, the Springer collection of fossil echinoderms was enriched by purchases of Devonian crinoids from Ontario, from Charles Southworth, and of unusual Mississippian crinoids from the vicinity of St. Louis, Mo., collected by William Saalfrank. Additional specimens from the same St. Louis area were received in exchange with Charles E. Rhodes.

Ordovician fossils numbering over 350 from the St. George and Table Head formations of Newfoundland, an exchange from Dr. Helgi Johnson, were valuable additions to the stratigraphic series.

In paleobotany, a fossil hazelnut and 58 specimens of fossil woods from the Virgin Basin of Nevada, gift of Mark M. Foster, formed a worthy addition to the fossil-plant study series.

Vertebrate paleontology.—In spite of the necessary cessation of field work, an annual source of valuable material in this division, the 10 accessions received included some unique specimens desirable for both the exhibition and study series.

The outstanding exhibition specimen received was a composite skeleton of the large flightless pigeon *Dodo ineptus*, from Mauritius, which came by transfer from the division of birds. Although this unique bird continued to exist into historic time, its skeletal remains are exceedingly rare.

A collection of 350 sharks' teeth presented by the Misses Eleanor R. Binger and Anita James; a nearly complete dental plate of the extinct ray *Myliobatis*, presented by James B. Schultz, both from the Miocene of the Chesapeake Bay region; a molar tooth of the northern elephant *Mammonteus primigenius*, donated by Orville R. Edner through Robert Teeters; and a bird egg found 7½ feet below the surface of Tinian Island in the Marianas Islands, the gift of Villion E. Riker, are accessions to the study series deserving special mention.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Three years ago the evacuation of the fossil, mineral, and rock type specimens to a place of safety was the major object of our activities. Now, happily, the time has arrived to announce the safe return of these specimens and their replacement in the study collections of each division.

The head curator unpacked and replaced the type specimens of fossil echinoderms, corals, Bryozoa, Ostracoda, and insects, segregating them, in the case of the small and delicate organisms, from the general biological series. He was assisted materially by Miss Helena M. Weiss in checking and arranging the several thousand type specimens of microscopic fossils and thin sections. Similarly, Curator G. A. Cooper cared for the brachiopods, trilobites, and mollusks. In some instances he assembled the types in a body at the end of their particular groups, but with the brachiopods and gastropods it was necessary for the present to restore them to their original places in the biological collections. The Mesozoic invertebrate types, all restored through the help of Dr. J. B. Reeside, Jr., and several members of the Geological Survey staff, will henceforth be maintained as a separate type collection. Dr. R. W. Brown, of the same staff, undertook the care of the large collections of Mesozoic and Cenozoic plant types. Dr. Brown has done invaluable work in preparing, identifying, and generally improving the plant collections of these two eras. The Paleozoic plant types, which were packed by Dr. C. W. Read, also of the Geological Survey, await his return from field work before their return to the collection. Dr. Bartsch reports the safe return of the Cenozoic invertebrate types under his care.

Curtailment of staff and preoccupation with war activities, as well as an unusually large amount of examination and report work, have slowed progress in caring for the general collections of the division of invertebrate paleontology and paleobotany. The curator was able to do but little on the exhibition collections, but some work was carried on in that field by the head curator with the assistance of Miss Jessie Beach and James Benn. This consisted mainly in cleaning and rearranging the exhibits and replacing or adding lettered labels of explanation or orientation to the exhibition cases.

The paleobotany hall in the east wing, first floor, was reorganized during the year to permit an expansion of the vertebrate fossil exhibits through its center. Both the taxonomic and stratigraphic displays of fossil plants were restricted to a single series occupying the long continuous south wall case, with one exception. The fossil tree trunks and other large striking displays were retained on the floor at the west end not only because of their size but as an introduction to the hall. This streamlining of the plant exhibition series permits better lighting and in other ways makes it more easily comprehended by the visitor.

The small steady increments that are usually added to the study collections continued. Each year sees these collections enriched by choice specimens acquired by exchange or purchase, through endowment funds, or through field work of the staff members. The best specimens are transferred from the stratigraphic collection as they are studied, and a cross reference of such specimens is maintained so that the stratigraphic value of the original collection is not destroyed.

The head curator continued the work of identifying and modernizing the Paleozoic coral collection This work, requiring thin sections, necessarily goes slowly, but the slide collection is constantly being enlarged. Curator Cooper assembled all the Crustacea into one continuous series and completed the arrangement of the trilobites and brachiopod portions in rooms adjacent to his office. Dr. J. Brookes Knight, associate curator, likewise assembled the Paleozoic gastropod collection and made progress in its revision and relabeling.

A good part of the curator's time during the year was devoted to the preparation of the fossils resulting from his 1944 expedition to Sonora. All this material has been prepared except the Mississippian, which consists of numerous blocks of fossiliferous limestone now being dissolved in acid in order to free the fossils, an operation that has been going on for many months. The large vat for etching by acid was also in constant use during the year, yielding many fine specimens from the silicified blocks collected in Texas in 1941. The curator prepared and photographed all the Cambrian trilobites and Permian fossils from Mexico, including the specimens that will become types. In addition, he prepared for photography about 150 specimens from

the southern Appalachians to be added to the brachiopods that are to be illustrated in a monograph on the Chazyan and related brachiopods.

Special mention should also be made of the work of L. G. Henbest on the collection of Foraminifera. Mr. Henbest, the Geological Survey specialist on this subject, reports that all foraminiferal types, preserved mainly mounted on standard slides, have been segregated and stored in a steel cabinet. He also brought together into one room all the Museum collections of this group except those now under study by Dr. T. Wayland Vaughan. This organization of the collection has greatly enhanced its usefulness as well as its safekeeping.

Little work could be done on the stratigraphic series during the year because of lack of preparatory help. Some collections were added through Dr. Cooper's field work in the Appalachians and by transfer from the Geological Survey. Much work is needed here in the way of weeding out poor material, concentrating the collections, and rearranging them to make better use of the space they occupy. These moves, however, will have to await additions to the staff.

The division's lack of staff, especially preparatory help, is piling up a backlog of work on the collections that will become staggering if it cannot soon be arrested. The war has diverted the Geological Survey paleontologists from whom we normally receive a great deal of aid so that our progress since the coming of war has been exceedingly slow and sporadic. The collections are in reasonably good arrangement and fairly clean, but they are naturally getting out of date.

The assignment to the division of vertebrate paleontology of additional exhibition space in the north range of the east hall, formerly occupied by paleobotany, has permitted a rearrangement that has not only greatly improved the appearance of the exhibits as a whole but also has brought about a more natural grouping. For the first time in the division's history the extinct birds are brought together as a unit, filling one alcove. The specimens have been newly renovated, and, with the added attraction of a dodo skeleton transferred from the division of birds, they present an assemblage that should prove interesting to our visitors.

Besides supervising the preparatory work in the laboratory, Chief Preparator Norman H. Boss finished the mount of the *Hypertragulus* skeleton mentioned in a previous report. He also mounted and installed a skeleton of the primitive titanothere *Paleosyops paludosus*, which is a beautifully executed piece of preparatory work. He is well advanced at the present time in mounting a skeleton of *Merycoidodon culbertsoni*, a mammal from the Oligocene rocks of Wyoming. All three of these animals are new to the exhibition series.

After spending the early part of the year in the preparation of miscellaneous specimens for the study collection, Thomas J. Horne has since been continuously employed in restoring the missing parts and mounting a skeleton of *Scelidodon*, a large sloth from Bolivia. This specimen, acquired through an exchange with the Chicago Natural History Museum, will form a unique as well as an attractive addition to the exhibition hall.

Arlton C. Murray, in addition to assisting the two preparators, has been engaged in the preparation of various specimens for the study collections. He also made a considerable number of plaster bases for delicate specimens, thus insuring them against breakage through the opening and closing of the drawers in which they are kept.

Mrs. Vera M. Gabbert, outside of her regular stenographic duties and keeping up the records of the office, rendered efficient service in checking and revising the card catalogs. She finished the fish, amphibian, reptilian, and avian files and made a good beginning on the mammalian cards. Now it can be reported that, for the first time in the history of the division, the catalogs are in splendid condition.

In order to determine the status of outstanding loans to various individuals and institutions, a circular letter was sent to all these correspondents, with the result that a majority of the specimens were promptly returned. In a few instances where research problems were still in progress requests for extension of the loans were granted.

At the time the choice minerals were removed from the exhibition cases for evacuation in the division of mineralogy and petrology, they were replaced by other samples from the study series. Therefore, with the return of the evacuated material, the first task was to remove the temporarily installed specimens and incorporate them again into the study collection. These, with the crystal ball, valuable gems and precious stones of exceptional worth, and the many type and analyzed rocks and minerals, were returned to the exhibition or study series without loss or damage.

In the mineral exhibition hall two new cases were constructed for the installation of some exceptionally fine gem stones. These cases introduced special lighting problems, making it necessary to build a preliminary model for experimental work in the display of the material. One case exhibits only gems with chatoyant properties, such as star sapphires, rubies, and the mineral cat's-eye, while the other one is devoted entirely to fire opals of exceptional color display. All the regular gem and mineral displays were improved with a number of additions during the past year, and new labels replaced the older ones whenever it was deemed necessary.

In January Mr. Benn inaugurated a new mineral exhibit, namely, a case devoted to the current birthstone of the month. Located at the entrance to the mineral hall, this display has attracted considerable

attention. Mr. Benn continued the locality index of all minerals now in our collections, which is particularly useful at present with the many calls for locality information. The type collection of minerals was rearranged and carded by a new system permitting additions without the many shifts necessary in the former method. The lantern slides of meteorites were indexed and cataloged up to date.

B. O. Reberholt reports that during the year the grinding and polishing laboratory completed 80 thin sections of rocks and fossils; cut, polished, and etched 39 meteorites; and cut and polished 136 ores, rocks, and minerals, in addition to performing the other usual tasks of his laboratory.

INVESTIGATION AND RESEARCH

In the identification work on the collections of corals, bryozoans, and echinoderms under his special care the head curator made fair progress and completed a manuscript entitled "New Species and Faunal Lists of Paleozoic Corals." Less advance was made on several previously reported research works because of the time required to unpack and restore the evacuated type specimens. One paper, "Memorial to Edward Oscar Ulrich," former honorary associate in paleontology, was prepared and published by the Geological Society of America.

Dr. G. A. Cooper spent most of his research time on fossils from Sonora, Mexico, with the result that all the Permian fossils have been studied and manuscript prepared on them. In addition to this, some time was found for the Appalachian studies, which led to a discussion of the Appalachian Middle Ordovician stratigraphy for the National Research Council chart. A joint paper with Dr. Byron N. Cooper, of the Virginia Geological Survey, largely written by B. N. Cooper, was also finished for publication.

Dr. Cooper prepared about 3,000 photographs of fossils during the winter for use in the reports on Sonora, the Appalachians, brachiopod studies, and the Permian brachiopod studies. No continuous work has yet been done on the Permian brachiopods of the Glass Mountains, Tex., but over a hundred specimens were photographed during the winter when conditions were good for photography. He planned to take up this study of Permian brachiopods in earnest as a postwar project. Early in the fiscal year the paper on the stratigraphy of the Devonian of Illinois was delayed by new developments in connection with the subsurface discussion. In order to correct the difficulties Dr. A. S. Warthin, of Vassar College, coauthor of the paper, spent several days in Washington in further study and is now rewriting the subsurface portion. As soon as this part is completed the paper can be submitted for publication.

Dr. J. Brookes Knight, temporary associate curator, during the three months spent at the Museum, prepared two papers describing new genera of Paleozoic gastropods of the superfamilies Bellerophontacea and Pleurotomariiacea.

Dr. T. Wayland Vaughan, associate in paleontology, was busy during the year with his studies on the larger fossil Foraminifera and with his care of the collections of this group and also of the Cenozoic corals.

The members of the Geological Survey staff with offices in the National Museum have, as in past years, continued their investigations of the geological collections. Dr. J. B. Reeside, Jr., chief of the section of paleontology, when not occupied in administrative matters, forwarded his researches on Mesozoic fossils. He also reports progress on the National Research Council correlation chart of the Jurassic and Cretaceous of the western interior of the United States. Dr. Ralph Imlay is studying the Jurassic fossils of the western interior of the United States and Alaska. Dr. H. E. Vokes is occupied with Tertiary fossils from Oregon and Washington, as well as his studies of Mesozoic Pelecypoda. Dr. L. W. Stephenson is engaged on the description of the Cretaceous (Louisville formation) of Texas; Dr. Edwin Kirk is proceeding with his studies of Paleozoic crinoids; Dr. R. W. Brown, paleobotanist, has a revision of the Eocene (Wilcox) flora of southern United States well under way. Dr. Wilbert Haas, assisted by Miss Patricia Proctor, is restudying and redescribing the type specimens of conodont fossils belonging to the National Museum and conducting research on these fossils occurring in late Devonian and early Mississippian rocks. L. G. Henbest is continuing work on fossil Foraminifera. Dr. Charles Butts, retired member of the Geological Survey, is continuing his researches on the fossils and stratigraphy of the Paleozoic rocks of Georgia and parts of southern Virginia. Dr. C. Wythe Cooke is preparing a monograph on the Upper Cretaceous echinoids of the United States.

Curator C. W. Gilmore, of the division of vertebrate paloentology, completed a manuscript entitled "A New Carnivorous Dinosaur from the Lance Formation of Montana." This was based on a specimen belonging to the Cleveland Museum of Natural History. A second manuscript, "A New Crocodilian from the Eocene of Utah," was finished and transmitted for publication. Mr. Gilmore also devoted some time to assembling information for a revision of the type catalog.

Associate Curator E. P. Henderson reports that because of numerous interruptions many of the research investigations in mineralogy and petrology that were started could not be completed and that the pressure of identification work made it necessary to interrupt some of the work in progress and start new investigations. At present there is a rather large backlog of partly completed research. During the

year a chemical analysis and mineralogical identification were made of brazilianite (hydrous sodium aluminum phosphate), the new mineral from Brazil.

Several new meteorites were analyzed: New Westville, Edmonton, Linwood, Drum Mountains, and Pine River. A specimen of taenite, the nickel-rich alloy, was laboriously selected from the New Westville meteorite, and the nickel and cobalt and phosphorous contents determined. Dr. Stuart H. Perry partly completed the metallographic study of the above-mentioned meteorites, and within a short time their descriptions should appear.

Many of the minerals in the collection were X-rayed and spectrographed by members of the Geological Survey. Some of this work was necessary to assist the Survey members to identify minerals under investigation. These X-ray studies in part represent an effort for the division to have a more authoritative classification of many of our minerals. Dr. M. A. Peacock, of the University of Toronto, also studied in detail some of our minerals.

Curator W. F. Foshag continued on detail throughout the year in his investigations of the economic resources of Mexico. Much of his time was spent in the field as director of the Geological Survey projects for the discovery of strategic mineral bodies.

There were 207 lots of geological material referred officially to the department for examination and report, many of these involving large numbers of specimens requiring special attention. For instance, the 38 lots of fossils referred to invertebrate paleontology and paleobotany consisted of over 1,000 specimens. The division of mineralogy and petrology was charged with 104 lots of rocks and minerals; vertebrate paleontology with 20 lots; and general geology cared for by the head curator, 45 lots. In addition to the material received officially, each division reported on specimens mailed directly to the curators or brought in person, as noted in the reports given below. Official correspondence requiring replies on problems of geological nature numbered 347 letters.

Sixteen loans were made to outside investigators totaling 464 specimens of invertebrate fossils, and in addition 93 photographs of Ordovician brachiopods were prepared for Rutgers University in exchange for a collection of Newfoundland Ordovician fossils. Several other institutions throughout the country were aided in various ways. As in the past, the invertebrate paleontology and paleobotany staff and the members of the Geological Survey worked together in exchanging identifications of materials sent in to each organization.

Loans of mineralogical and petrological materials were made to 15 institutions for research. In addition much professional service was given to the public—this year 467 individuals called in person for assistance pertaining to gems, minerals, and meteorites.

Curator Cooper, in connection with his two field trips in the Appalachians, visited the Geological Survey of Virginia in the summer and fall of this fiscal year. He also made a trip to New York State to pack the large collection of Devonian fossils purchased from Mrs. Louise Zimm. Associate Curator Henderson visited the Carnegie Institute of Technology in Pittsburgh and discussed work in the metallography of meteorites. Early in the year he spent several days in New York City packing and shipping the fine mineral collection obtained from the estate of the late Dr. James Douglas.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Geological materials distributed during the year totaled 876 specimens. Thirteen gifts, containing 180 specimens, were sent out including principally rock and mineral sets to schools and universities, and paleontological specimens to research organizations. Exchanges of 88 specimens were completed with 16 institutions and individuals engaged upon research. Eighteen specimens, comprising three transactions, were transferred to other governmental agencies. Universities, research students, Government war agencies, the Red Cross, and similar organizations arranged for 44 loan transactions during the year, aggregating 590 mineralogical and paleontological specimens.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The total number of specimens indicated below for the three divisions of the department is computed by adding to the estimated figures of last year the number representing the difference between the number of specimens received and those sent out this year. Inasmuch as the early estimates were approximate, the present sums must continue to be so.

Mineralogy and petrology	257,085
Invertebrate paleontology and paleobotany	2,423,720
Vertebrate paleontology	29,808
Total	2,710,613

DEPARTMENT OF ENGINEERING AND INDUSTRIES

(CARL W. MITMAN, *Head Curator*)

IN this war year with its continuing emergency measures and manpower shortages, the activities of the department of engineering and industries were confined almost entirely to the processing of new accessions and to the unpacking and redistribution of its large tonnage of specimens returned from air-raid protection storage. New accessions were greatly in excess of the expected volume, being comparable in number to the average annual increment of 10 years ago. Fortunately, the demands on the department staff for assistance to war agencies and for information from private investigators and students were considerably less than in previous war years, so that by the end of the year all current work was well in hand.

During the first four months of the year, Carl W. Mitman, head curator, continued with his special assignment of the maintenance of the Museum's collections in protective storage outside of Washington. This undertaking was terminated, however, in November 1944, and under Mr. Mitman's direction the entire collection of more than 60 tons of valuable specimens was safely returned to the Museum.

With great sorrow the death on March 21, 1945, of Lt. Stephen C. Stuntz, Jr., former scientific aide in the division of graphic arts, is here reported. Lt. Stuntz was on military furlough from his position in the Museum and in the course of his brief military life advanced from inductee to liaison officer between ground and air forces. He was killed in a plane crash over Cebu City, Philippine Islands. Stephen Stuntz was one of the best known and best liked of Smithsonian employees, and his loss is deeply felt by the entire Institution. Of all the 43 Smithsonian men in the service in this war, this was the only fatality.

ACCESSIONS

Accessions for the year totaled 178, comprising 3,199 specimens. This is an increase of 14 accessions and 1,811 specimens over the previous year. The accessions were distributed as follows: Engineering 39 (77 specimens); crafts and industries, 57 (2,681 specimens); graphic arts, including photography, 82 (441 specimens). Of this large group, the following are deserving of special mention:

Engineering.—The outstanding accession in this division is the first experimental jet-propelled pursuit airplane built and successfully flown in the United States. Known as the Bell Airacomet XP 59A, it was designed and constructed by the Bell Aircraft Corporation at the

request of the U. S. Army Air Forces in 1941–42 and was first flown by Robert M. Stanley, former chief test pilot of that corporation, on October 1, 1942. Following over 2 years of "guinea-pig" service in the Air Forces involving several hundred flights, the airplane was transferred by the War Department to the National Museum. Here it holds the unique position of being the first propellerless airplane in the collection, and it represents as well, perhaps, the greatest new development in aeronautical engineering of the past decade. The Airacomet may be technically described as a twin-engine, single-seater fighter plane with retractable tricycle landing gear. The engines, located beneath the wing, one on each side of the fuselage, were produced by the General Electric Co. on modifications of a British design developed by Group Captain Frank Whittle, RAF.

The automotive collections were enhanced by two unique gifts—a radial 9-cylinder Diesel engine and an original 1902 Oldsmobile. The Diesel engine is one of the type designed for and used in the U. S. Army M3 light tank. It was made especially for the Museum, with the Army's permission, by the Guiberson Diesel Engine Co. and is sectionalized and operating. It serves well to demonstrate to the layman the modus operandi of a modern Diesel, and at the same time reveals a type of power plant used by the United States armored forces in World War II. The 1902 Oldsmobile came to the Museum as a bequest of the late Thomas A. Peabody. It is a beautifully preserved, complete, unaltered, original specimen of the famous curved-dash tiller-steered, 2-passenger runabout, produced by the pioneer automobile manufacturer R. E. Olds. The Museum's model is one of 2,500 produced in 1902, a quantity far above that of any other contemporary automobile manufacturer, and sold at the then unheard of price of $650. This low cost in combination with the proven sturdiness and dependability of the "Merrie Oldsmobile" of the early 1900's contributed much to making America automobile-minded.

Two accessions of note added to the department's communications collections, radio section, were a Marconi coherer and a spark transmitter presented by Oscar C. Roesen. The Marconi coherer was the "heart" of wireless telegraphy before the invention of the electron tube and is, therefore, a required object in any visual record of wireless communication. Heretofore an original coherer was not included in the Museum's collection, and so Mr. Roesen's gift was especially appreciated. The wireless transmitter is of the year 1911 and is one of the earliest experimental sets designed by Mr. Roesen for wireless communication between an airplane and the ground. With this set installed in a Curtiss airplane, the pilot while in flight transmitted intelligible Morse-code messages to a receiver on the ground. Another interesting communications object added to the collections was an original electric telegraph fire-alarm and street box

such as was installed on the streets of Boston in 1851. One of the earliest practical systems of fire alarm signaling by electric telegraph was invented by Moses G. Farmer and Dr. William F. Channing, of Boston, and it is believed that the street box outfit, described here, is a relic of one of the first commercial installations made by the inventors. The street box and contents were presented to the Museum by the Gamewell Co., well-known manufacturers of fire-alarm equipment.

Crafts and industries.—The 2,681 specimens covered by the new accessions of this division were distributed as follows: Textiles, 1,083; woods, 118; chemical industries, 91; agricultural industries, 24; and medicine, 1,365. In textiles, an outstanding accession of the year is a historic document deposited by Mrs. Georgia Slater Bartlett and her sister, Miss Lydia R. Slater. This is the original indenture of their great-grandfather, Samuel Slater, to Jedediah Strutt and was signed by both of the contracting parties in Derbyshire, England, on January 8, 1783. After completing his apprenticeship of 6½ years in the art of cotton spinning, Samuel Slater, a youth of 20, decided to try his fortune in America. The English, or Arkwright system, of continuous spinning was unknown here, and a strict embargo was enforced in England to prevent workers, models, or drawings of any sort from leaving the country. Consequently, young Slater brought with him only the indenture. Owing to his remarkable photographic memory he was able to build in Pawtucket, R. I., the machinery for the first mill in this country for spinning cotton by the Arkwright system. The National Museum, as custodian of Samuel Slater's original cotton-spinning frame and of one of his cotton-carding machines, is indeed fortunate in being able to include the indenture with the original machinery. Another historically important gift, presented by Mrs. Mary Stafford Reed, consists of a collection of books containing samples of printed cotton and wool fabrics, with recipes for dyeing and printing. These were used during the 1870's and 1880's in England, and in Dover and Manchester, N. H., by an English dyer, Thomas Stafford.

Wartime textiles and those inspired by the war are represented in the following gifts: A machine-gun turret-slot installation using "Tackle Twill" for extending the tape of a slide fastener, from the Spool Cotton Co. and Crown Fastener Corporation, through William Skinner & Sons; types of fireproof cloths of fiberglas and asbestos yarns, and the application of these in a side section of the tail-wheel boot for a P–47 Thunderbolt plane, from Campbell Products; acetate rayon fluorescent satin, used for signal panels by the U. S. Army Signal Corps, from J. P. Stevens & Co.; and a series showing the screen-printing process of ornamenting a jacquard-figured rayon crepe with a 3-color, army automobile motif, together with the actual

screens used for the application of each successive color, from William Skinner & Sons. A particularly interesting item with this group is a printed nylon camouflage cloth with irregular-shaped blotch patterns simulating foliage, and designed as protective coloring for army parachutes. The textile study series were enhanced through the generous gifts of Miss Ruth M. Brenner and Mrs. Blanche C. Lewton. Miss Brenner gave 984 pictorial prints on cotton, rayon, and silk cloths classified by inspirational sources, while Mrs. Lewton presented representative rayon fabrics identified by name, weave, material, use, and source.

To the collections of early homecraft textiles a number of noteworthy specimens of weaving, needlework, and supplementary items were added by gifts and loans. Included were a pictorial linen tablecloth from Everett Mellen Stevens and his children and household homespuns from the Rev. Walker Mayfield; coverlets in overshot and single and double jacquard weaves from Miss Lou Babb Rusk, Mrs. Gertrude O. S. Cleveland, and Mrs. Ethel V. Noel; pieced and appliqued quilts from Mrs. Helen R. Payne and Norman L. Kilpatrick; and examples of hand-embroidered cotton, linen, and silk, and pen-and-ink work, from Mrs. Clarence J. Robinson and Miss Maude M. Fierce.

A gift of historical importance to the section of chemical industries was a series of specimens of lewisite, American mustard gas, or "blister gas," and derivatives therefrom, prepared by Maj. H. W. Stiegler for use by Col. W. Lee Lewis, in his many lectures on chemical warfare. The specimens are in sealed glass tubes arranged in an ingenious mahogany case, designed and made by Major Stiegler in such a way that they can be easily removed for classroom demonstration. The case of specimens was presented by Mrs. W. Lee Lewis, the widow of the man who first isolated and developed this deadliest of World War I gases. An umbrella frame constructed with ribs of whalebone and used by G. Hobbs between 1835 and 1865 at Barre, Mass., was presented by his grandson, A. M. Harrington. This was added to the extensive series of articles made from whalebone already in the Museum. Two pneumatic life rafts, a U. S. Army A–3–4 type and a U. S. Navy Mark IV type D, made of synthetic rubber, with full sets of the contractor's emergency equipment were loaned by the Goodyear Tire & Rubber Co., for exhibition with other materials showing important uses of rubber in World War II.

Accessions of scientific value in woods and wood technology were 20 woods collected with herbarium material by Lt. C. H. Stoddard, U. S. Naval Reserve, in the Russell Islands group of the Solomon Islands; 12 woods, collected mostly in the State of Amazonas, Brazil, also with herbarium material, by Dr. J. T. Baldwin, Jr., and transferred by the Office of Rubber Investigations of the Department of

Agriculture; 63 specimens, mostly trade samples of the woods of the Philippine Islands, a gift from Maj. Alfred H. Thiessen, U. S. Army (retired); and 2 very interesting specimens collected by J. L. Stearns. One is a piece of the wood of a chinaberry tree, *Melia azedarach*, grown near Memphis, Tenn., which shows unusually wide annual growth. The other is stemwood of the common poison ivy, *Toxicodendron radicans*, cut on the bank of the Patuxent River near Laurel, Md., from a vine over 3 inches in diameter.

The outstanding accession in the division of medicine was the entire equipment and furnishings of an Old World apothecary shop of the period of 1750. This large collection, consisting of nearly 1,200 specimens, was gathered in Europe over a period of 40 years. It is unique in completeness of original materials and in its variety. It was acquired by E. R. Squibb & Sons and brought to the United States in 1932, when part of it was exhibited at the Century of Progress Exposition at Chicago. Subsequently it was assembled in New York City as a private museum. The fixtures of the old shop were part of the Cathedral Pharmacy, Freiburg, Germany. The mortars, bottles, drug jars, and other objects of the original shop are supplemented by like specimens from shops of the same vicinity and period. Wooden drawers, which were once filled with drugs, still retain their original labels. Books, many handwritten and some incunabula, from which pharmacists of the eighteenth century obtained their knowledge, are part of the collection, as are the instruments, appliances, and tools, with which they worked. Of unusual interest are the franchises, issued and signed in 1728, 1791, and 1824, by Emperor Carl VI, Emperor Leopold II, and Pope Leo XII, respectively. The seals of the first two are enclosed in walnut boxes, and the seal of the last in a silver-plated brass case. These franchises gave the pharmacists to whom they were issued the right to prepare and sell "life pills," to produce and sell a healing plaster, and to establish a new pharmacy in Rome, respectively. Stuffed animals, which were prominent adornments of early apothecary shops, are also included. In the eighteenth century, parts of crocodiles, lizards, tortoises, sharks, and similar animals were medicinal agents, and people were convinced that the store that exhibited the animals dispensed the real medicines and not substitutes. Today, as in the days of old, drug stores consist of two rooms, one in which the pharmacist makes contact with customers, and the other a combination of laboratory, workshop, and study. The collection when exhibited in New York City followed this pattern, and a similar installation is now under way in the Museum. This valuable collection was donated by E. R. Squibb & Sons to the American Pharmaceutical Association, and the association in turn has made it available to the Museum as a deposit.

Graphic arts.—The accessions received by this division surpassed those of the previous year both in quantity and in general importance. Chief among the accessions was the unique gift of Charles W. Dahlgreen, who presented the Smithsonian Institution with 76 copper plates of his work in etching, aquatint, and drypoint. These plates, many of which are in almost unused condition, were deposited with the division of graphic arts with the understanding that they are to be used to make prints, to be sold as a Smithsonian Edition. The proceeds from the sales will compose the Charles W. Dahlgreen fund, which will be used to enlarge and improve the collections of graphic arts. In addition, Mr. Dahlgreen presented a series of 76 etchings and drypoints printed from these plates. This handsome collection of prints makes one of the largest representations of fine prints by a single artist in the Museum's collections.

Another accession of importance was a miniature working replica of the Stephen Daye press, the first printing press to be used in the American colonies, 1639. The model is the work and gift of Alfred T. Breitengross. It is made in brass and executed with such accuracy and precision that, although the model press is but 7 inches high, it is possible to do actual printing with it.

Dr. Edwin Kirk presented 12 etchings, a number of them of outstanding quality. "La Pompe Notre Dame" and "Ministère de la Marine," by Charles Meryon, the great nineteenth-century French etcher, are works of considerable value and are the only examples by this artist in the collection. "La Place Pigalle," by Felix Buhot, another famous French etcher, is a highly desirable print. Dr. Kirk also contributed excellent prints by Lalanne, Pennell, Ribot, Flameng, Moran, Chauvel, Taylor, and Rajon. Another accession worthy of mention was the gift made by Joseph P. diGemma of three fine prints made from plaster relief blocks and one print from a rubber relief block. The prints from plaster constitute a new use of this material and form a contribution to graphic-arts printing processes. The work is executed in the same manner as that of the linoleum cut or wood cut, but, since the plaster would absorb the printer's ink and crumble under pressure, the surface is treated with a coat of linseed oil, which has the property of preventing absorption as well as making the edges of the plaster firm. No press is used in the printing, which is done by rubbing the back of the paper with a smooth, hard object.

Little has remained of the technical equipment of American painters of a hundred years ago, a circumstance that makes particularly desirable a gift from Mrs. Olive Cole Smith of a paint box, bladders, tins, and packets of pigment used by Deborah Goldsmith Throop in 1830. The bladders are especially to be noted since they were in general use as pigment-containers before the invention in 1841 of the collapsible metal tube. Mortimer Borne contributed to the

collections a color print of a unique type, a drypoint printed in color from three plates in red, yellow, and blue inks. Mr. Borne states that this process has never been used before, although other artists have used drypoint in combination for color work. His gift of "The Road" is therefore of unusual interest. Artists whose work was shown during the year in the division's special monthly exhibitions were the source of interesting additions to the permanent print collection. Thus two color aquatints, a lift-ground etching and a soft-ground etching, were contributed by Mrs. Kathleen Macy Finn; Mrs. Gene Kloss gave one of her brilliant aquatints; and Ben Messick presented two of his vigorous lithographs.

Among other accessions of importance is a miniature painting on glass, falsely attributed to Rembrandt Peale but nevertheless a painting of considerable merit. The gift of Mrs. Natal Sussanne, it represents a difficult and unusual example of miniature painting in that the subject, a classical landscape, is painted directly on the reverse side of the glass. From Earle W. Huckel the division acquired by gift 12 examples of graphic arts, the most important of which is an invitation card used by Thomas Sully. Others include seven mezzotints of prominent men of the pre-Civil War Period executed by A. H. Ritchie, from R. P. Tolman; an old-fashioned water lens and stand, from Mrs. Macowin Tuttle; an engraving of the Lord's Prayer, executed about 1862–64, in a circle 13/32-inch in diameter, from Mrs. Flora H. Wetzel; two original engraved wood-blocks by James Bann, from Miss Helen Bann; and an American wood-engraving of a religious subject printed from four color-blocks, from Jacob Kainen. The Smithsonian Institution deposited in the division the current Associate Member's print of the Society of American Etchers, "The Flight into Egypt," by Carl M. Schultheiss, A. N. N.

During the year the section of photography acquired a wide variety of pertinent material for addition to its extensive collections. The principal accession probably is the gift of Fuller & d'Albert of a collection of rare old lenses of French, English, German, and American manufacture. These were acquired over many years by the late Mr. d'Albert during the conduct of his photographic supply business. The collection includes two viewing lenses for the early type of "Mutoscope." From the Brenner Photo Co. and from E. E. Strong, Edward Strauss, and Mrs. T. J. Holzberg the section received as gifts a number of historically interesting cameras of the 1890's and early 1900's. Another valuable accession was a Beidler-Viken twin-lens camera presented by A. J. Viken. This type of camera was invented by Messrs. Beidler and Viken and was the first practical large twin-lens instrument designed especially for portraiture. It has been widely used for both home and studio work since 1923. An important addition to the motion-picture series came as a gift from

the DeVry Corporation, the first portable motion-picture projector, designed, patented, and made in 1912 by Dr. H. A. DeVry, who is often referred to as the father of visual education. George R. Goergens contributed a speeding-up mechanism for motion-picture cameras patented by him in 1919 and a tripod head geared for attachment to an ordinary camera for making panorama pictures which he invented in 1915.

Other gifts were as follows: A Wynne Infallible Exposure Meter from Oscar Ehrlich; two daguerreotypes and two ambrotypes called "Sphereotypes," patented May 27, 1856, hitherto unrepresented in the collections, from Miss Heloise Brainard; four specimens of very early motion-picture film, with bound edges, which can be projected in 50-foot lengths on an Amet projector, one of which is in the collections, from Arthur F. Johnson; and from Mrs. Everett Tutchings, 29 portraits by her father, Pirie MacDonald, representing his work before 1900.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The work involved in the installation and preservation of the collections in the department was particularly heavy as it included the unpacking and redistribution of about 2,000 specimens returned from air-raid protective storage and the processing of over 3,000 new specimens. The task was a difficult one because of the lack of help and because of the critical shortages of both exhibition and storage space. Three weeks' time of the total available manpower of the engineering division was consumed, for example, in the unpacking, assembling, and exhibition of the historic Wright airplane when it was returned from storage. Again, to obtain space in the Aircraft Building for the exhibition of the Bell jet-propelled airplane, every airplane and exhibition case had to be moved. The task consumed two weeks' time of the engineering staff, the help of four laborers, and a crew of five skilled men furnished by the Bell Aircraft Corporation. With this installation, no space remains for additional aircraft. The same critical situation exists in the department's sections of land and water transportation, textiles, chemical industries, and wood technology. Only such additions to the collections can be accepted as can be accommodated in the existing overcrowded exhibition and storage cases.

Engineering.—All specimens returned from storage were cleaned and some repaired before being placed on exhibition or in storage. As time permitted, additional exhibits were renovated, involving the cleaning and repairing of specimens and repainting case interiors. In this connection two innovations were introduced, i. e., the use of a hard enamel paint on the flat surfaces of unglazed exhibition bases, and the use of a fast-drying plastic paint on the shelves of exhibition cases. The enamel paint used in place of the customary flat finish oil

paint makes the cleaning of bases easier and provides a durable surface. The plastic interior shelf paint speeds up the job of renovation of cased exhibits in that the delays to permit ordinary oil paint to dry are eliminated. All new specimens received during the year were fully processed involving accessioning, cataloging, numbering, repairing, and placement, either on exhibition, in study collections, or in storage.

Crafts and industries.—The return of evacuated materials made necessary the reinstallation of many important specimens, including the Slater spinning frame, a model of the cotton gin from Eli Whitney, Jr., sewing-machine models, looms, and other textile machinery. One-yard record samples of textiles numbering 1,861 were unpacked, allocated, recorded, and stored for convenient reference and study. The large case showing progressive steps in the manufacture of worsted and woolen yarns was painted, the specimens were renovated, and the method of installation was improved. New parts were obtained for the demonstration braiding machine, and labels throughout the collections were improved.

An entire rearrangement was made of the oilcloth, linoleum, and carpet exhibits on the east-south range gallery to accommodate the collections relating to agriculture and foods. This over-all change provided additional space on the main floor range for the expanding handcraft textile exhibit. The major task involved in this move was the complete dismantling and reinstallation of the operating diorama depicting the production of Borden condensed milk. The diorama is 24 feet long and its scenic background was painted on one long piece of canvas. This was removed, renovated, cut into three pieces and mounted on three panels to fit the back of the triple case, and joining strips were painted to match. This unusual undertaking was accomplished under the direction of Edward A. Avery, assisted by the shops and artists of the National Collection of Fine Arts.

Six new installations and 11 reinstallations of chemical industries exhibits were made on the south gallery and the southwest court gallery. All the woods from type trees, and other wood specimens brought back from safety storage, were unpacked and returned to their original places in the collection, where they are again easily available for comparison and study. All are in good condition.

In the division of medicine and public health the major installation undertaken was the preparation of plans and the starting of construction of a full-size reproduction of an apothecary shop 1750. This is intended to accommodate and exhibit the valuable collection deposited by the American Pharmaceutical Association described earlier in this report. The shop consists of two rooms, one in which customers were met, and the other the pharmacist's study and laboratory where medicines were made. Progress has been necessarily slow in the under-

taking for it involves the accurate and faithful reproduction of a typical eighteenth-century building as well as the creation of the atmosphere of the late Renaissance period when the shop was in operation. At the close of the year the basic construction and plastering work was completed, and the completion of the shop and the installation of the collection is anticipated during the coming year.

Graphic arts.—No major changes in exhibition were made in this division during the year. The Franklin press exhibit was augmented by the inclusion of a photograph of a painting by Charles B. Mills, depicting Benjamin Franklin as a young man at work on the identical press on exhibition. In this picture one can see the press in operation and the interior of a printing establishment of that period. Franklin's early newspaper, *The New England Courant*, was moved closer to the front of the case so that it can be read more easily. Additional prints were placed in the solander cases on the shelf built two years ago in the section adjoinging the office. Twentieth-century American prints, for the most part, after matting and labeling, were added, filling three more solander cases. Thirty-four of these cases, devoted to fine prints, have now been labeled and filled. The cases stand like books on a library shelf, and their contents are readily available for examination, while receiving much better protection than in flat sliding drawers.

In the section of photography no important changes were made. Most of the available time of the associate curator was consumed in personally unpacking and redistributing the 20 boxes of specimens returned from storage, in processing new material, and in arranging and preparing a special exhibit each month during the year.

A list of the special monthly exhibitions held during the year is as follows:

GRAPHIC ARTS

July–September: Drypoints by Louis C. Rosenberg, Diana Thorne, and Walter Tittle, selected from the permanent collection of the division of graphic arts.
September: 31 prints and drawings by members of the National Association of Women Artists.
October: 29 prints by Albert Sterner, Pittsfield, Mass.
November: 40 block prints by William S. Rice, Oakland, Calif.
December: 35 drypoints in color by Mortimer Borne, Brooklyn, N. Y.
January: 96 original Christmas cards executed by artists, lent by R. P. Tolman.
February: 33 aquatints by Kathleen Macy Finn, Ardsley-on-Hudson, N. Y.
March: 34 etchings, drypoints, and aquatints by Gene Kloss, Taos, N. Mex.
April: 52 etchings and lithographs by Lester Hornby, Rockport, Mass.
May: 35 etchings and drawings by Isabel Bishop, New York City.
May: 35 etchings and aquatints by L. O. Griffith, Nashville, Ind.
June: 32 prints by contemporary American artists, selected from the permanent collection of the division of graphic arts.

PHOTOGRAPHY

July: 41 prints by Capt. Fred Willcox, Arlington, Va.
August: 106 prints by the Photographic Society of America.
September: 40 prints by John H. Vondell, Amherst, Mass.
October: 40 prints by Jerome H. Krimke, South Orange, N. J.
November: 92 prints by the National Photographic Society.
December: 10 prints by Eugene Kibbe, Elsah, Ill.
January: 87 prints by the Metropolitan Camera Club.
February: 77 prints by the American Photographic Publishing Co.
March: 30 prints by P. H. Oelman, Cincinnati, Ohio.
April: 50 prints by James H. Thomas, Oneonta, N. Y.
May: 40 prints by Charles B. Phelps, Grosse Point, Mich.
June: 50 prints by G. G. Granger, Lansing, Mich.

INVESTIGATION AND RESEARCH

Study and research are the daily requirements of the small staff of this department in order to keep abreast of the progress and developments in the wide field of technology and the applied sciences. Added to this is the time devoted daily in investigation and research to satisfy the information requested by Federal agencies and private investigators. These two major calls on the staff's time leave little to devote to other major research projects. Nevertheless, during the year the curator and assistant curator, section of textiles, continued their studies of textile-machinery developments and inventions and textile-handcraft techniques; the associate curator of woods and wood technology found time to study in detail the taxonomy and wood anatomy of certain woods to aid in their correct classification; and the head curator of the department pursued his long-range studies on details of American land-transportation developments.

The materials maintained in this department and available to all accredited investigators are grouped in five classes: Exhibited collections; collections arranged in study series; divisional and sectional technical libraries; subject files of published and original data; and subject files of photographs, drawings, and miscellaneous illustrations. During the year outside investigators, both governmental and private, used these materials, assisted by staff members. Professional weavers, textile designers, and lay students studied in detail the collections of coverlets, quilts, shawls, hooked rugs, and tapestries. Two groups of document inspectors of the Federal Bureau of Investigation received special instructions by the assistant curator in the identification of the various types of printing. Exhibited and study collections in graphic arts were used in conducting this course of instruction. Again, the data and photographic files were consulted day after day for information on a variety of subjects such as ships, woods, Colonial household implements, stipple engraving, automobiles, aircraft, history of the public-health movement, and the origin of writing. Inquiries both in person and by letter or telephone

directed to the department by Government personnel and by private individuals covered an equally wide range of subjects. Included were questions on cleaning and preserving gold braid, the manufacture of fish oils, definitions used in leather terminology, devices for testing cloth, refining of beeswax, formulas for casein paints, and luminous elements for electric lamps. In addition to these classes of assistance given by the department, the staff made many identifications of materials brought to the Museum or sent in by common carrier. These included textiles, woods, timepieces, surveying and navigation instruments, fabricated metal products, and lithographs and prints.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Materials distributed from the department consisting of specimens, photographs, drawings, and prints exceeded 3,000 items. Some 2,700 of these were contained in traveling exhibits on the graphic arts, which were exhibited a total of 26 months in 14 States. For use in war veteran educational and rehabilitation work at Walter Reed Hospital there was prepared and donated a cotton chart with a series of 18 mounted specimens and 16 illustrated booklets outlining cotton production and manufacture. During the year, too, 332 copies of drawings contained in the Historic American Merchant Marine Survey maintained by the division of engineering were furnished to private purchasers. This brings the total volume of copies distributed since 1938 to 4,311. Of the specimens loaned or donated for educational purposes, mention may be made of an original Philippine plow to the War Department Quartermaster Corps, and of a series of American war posters to the U. S. S. R. Society of Cultural Relations and Foreign Countries.

NUMBER OF SPECIMENS UNDER DEPARTMENT

Engineering	17, 539
Textiles	16, 986
Woods and wood technology	13, 485
Chemical industries	23, 308
Agricultural industries	2, 267
Medicine and public health	21, 423
Graphic arts, including photography	47, 616
Total	142, 624

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

IN the division of history the past year was marked by a number of important acquisitions to the collections and by several noteworthy reinstallations of materials in the exhibition halls.

ACCESSIONS

The total number of accessions received was 62, aggregating 1,749 specimens.

The most outstanding addition to the art collection was a series of 48 bronze statuettes of notable contemporary American public men, made from life by the distinguished sculptor Max Kalish. About one-third life size, the statuettes show the subjects full length, with unusual detail of appearance and mannerisms. They include many of the high-ranking officials of the Government during the war year 1944—President Roosevelt and his entire cabinet, most of the war-agency administrators, and some of the leading generals and admirals—labor leaders, industrialists conspicuous in war production, and other private citizens regarded as public men. The series is entitled "The Living Hall of Washington, 1944" and was presented to the Museum by W. M. Kiplinger.

The costume collection was increased by a number of valuable additions, although many gifts had to be refused because of the limited exhibition and storage space. Ex-President Herbert Hoover presented the Museum with two gowns that were worn by Mrs. Hoover in the White House. One is a yellow taffeta dress worn when the President entertained the King of Siam in 1931, and the other is a silver-thread gown that Mrs. Hoover particularly liked.

For the same collection Mrs. Franklin D. Roosevelt presented two dresses—the Fourth Inaugural gown of mauve crepe, which she wore at the formal reception at the White House on the afternoon of January 20, 1945, and the street dress of Eleanor-blue velvet that she wore at the First Roosevelt Inaugural ceremony in 1933. The Museum now has, as gifts from Mrs. Roosevelt, gowns worn by her at three of the Roosevelt inaugural receptions.

Mrs. Hamilton Fish, Jr., presented a cape worn by the Honorable Hamilton Fish, Secretary of State of the United States, 1869–1877, in his college days in New York City in the early nineteenth century. It is a good example of a type of garment popular as a part of the men's costume of the period.

A costume doll of unusual historical interest was received from General Eisenhower. This doll was given to him by the children of Normandy in gratitude for their liberation from the Nazis. It was placed on exhibit by the division of ethnology in the Natural History Building. An infant girl doll of about 1881, dressed in the style of that year, was presented by Miss Elsie Witchen.

A very handsome Peruvian diplomatic uniform of the present day was presented by Mrs. Emerson Howe. It includes coat, breeches, overcoat, shoes, and stockings and is accompanied by two decorations, the Order of the Sun of Peru and the Order of the Crown of the Congo. Mrs. Howe also presented a diplomatic sword of the same period as the suit and a number of handsome French military swords of the early part of the nineteenth century.

Accessions to the military collections included an office desk and chair used in the European war zone by General Dwight D. Eisenhower in 1944. These were deposited by General Eisenhower. A captured German parachute was lent by Miss Elizabeth O. Cullen. Various other pieces of German and Japanese military paraphernalia were lent by the War Department.

Accessions to the naval collections included a series of 12 United States ensigns and one pennant flown by United States naval vessels during engagements with the enemy in the South Pacific Ocean and the Mediterranean Sea in 1942 and 1943, transferred from the Bureau of Ships, Navy Department. These have been placed on exhibition in the west hall of the Arts and Industries Building.

A number of interesting additions were made to the numismatic collection. These included 30 specimens of the various types of United States coins struck at the Denver, Philadelphia, and San Francisco mints during the calendar year 1944. This series included coins of the following denominations: Cent, nickel, dime, quarter, and half-dollar. These coins were transferred to the Museum from the Treasury Department. From the American Numismatic Association was received as a loan a Canadian 5-cent piece struck in 1943 bearing the following legend in Morse code: "We win when we work willingly." A silver token or medalet commemorating the airplane flight of Amelia Earhart across the Atlantic Ocean in 1928 was presented by the Whitehead & Hoag Co. A silver badge of the Fifth Universal Postal Congress, held in Washington, D. C., in 1897, and a bronze badge of the Admiral Dewey celebration held in Washington in 1899 were presented by the estate of the Honorable Joseph L. Bristow.

The philatelic collection was increased by the addition of 1,306 specimens during the year. These as usual included new issues of the United States transferred from the Post Office Department, foreign stamps from the Universal Postal Union, stamps sent direct from the

country of issue, and gifts from individuals. An item of special interest, a 2-cent, black (trial color), Navy Department stamp imperforate, was presented by Dr. Serge A. Korff, and a souvenir sheet of Chinese semipostal stamps, issued in 1944 for war-refugee relief, was a gift of H. Charles Chu and T. U. Chu. Sgt. E. B. Nasif presented a cover of the "Victory" set mailed the first day of issue, January 19, 1945, at Tacloban, Leyte, Philippine Islands, and a cover postmarked April 15, 1945, the date of the official reopening of the Manila Post Office.

INSTALLATION AND PRESERVATION OF COLLECTIONS

An important installation task accomplished during the year was the complete rearrangement of the military materials in the north hall. Uniforms in the wall cases were arranged in chronological order, and above them was hung a series of colored drawings of historic United States flags. Special attention was given also to the memorial collections of china, silverware, furniture, and costumes owned during the eighteenth and nineteenth centuries by noted American soldiers, diplomats, and statesmen. Many of these articles were owned by General and Mrs. Washington at Mount Vernon. The collection now occupies the entire west hall, except for the space devoted to mementos of the scientific careers of the Secretaries of the Smithsonian Institution.

The new series of bronze statuettes entitled "The Living Hall of Washington, 1944," already described, was installed in the costume hall. The crowded condition of this hall, as well as of others containing the historical exhibits, is becoming increasingly aggravated, until only a few of the exhibits can now be shown to advantage. There is little chance of this situation improving, however, until a new and spacious building is provided.

It is well now to record a little of the history of the evacuation of our valuable historical specimens that the war necessitated, although fortunately Washington suffered no enemy air attacks. The first plans for the evacuation of this material were made in January 1942. From March to December 1942, 14 boxes of valuable and irreplaceable historical materials were evacuated from the Museum by the staff of the division. Ten boxes were packed by James R. Sirlouis, scientific aide, and 4 by Wilbur Chapman, scientific aide. The objects chosen for evacuation included the Washington sword, uniform, and camp chest and many pieces of china, glass, and silverware owned by General and Mrs. Washington during the latter part of the eighteenth century; mementos of the careers of Presidents Thomas Jefferson, Andrew Jackson, and Ulysses S. Grant; a large series of jeweled and gold mounted military and naval presentation swords; the original Star Spangled Banner in a single box; and various types of rifles, pistols, and revolvers of technical interest. All this material was

returned to the Museum in November 1944 during the serious illness of Mr. Sirlouis. The objects were unpacked and temporarily placed in the exhibition cases. Later they were reinstalled by Mr. Sirlouis in the cases that they originally occupied. The unpacking and reinstallation of the original Star Spangled Banner constituted a special task which was accomplished by 2 carpenters with the assistance of a large crew of laborers. In all, the packing, the unpacking, and the reinstallation of these valuable and fragile materials constituted a large undertaking, and much credit must be given Mr. Sirlouis for the successful performance of this important and responsible task.

The problem of storage continues to be a serious one in the division. During the year storage materials were removed from the floor space under the east and west galleries of the northeast court to various storage rooms on the second and third floors of the north and west towers. This, however, was only a temporary expedient and did not permit proper classification of the materials. If these collections are to be properly preserved from deterioration and made available for study and use, it will be necessary to classify and rearrange them, but this cannot be done until adequate mechanical assistance, laboratory facilities, and space are available.

In the philatelic section all the exhibition series of stamps were rearranged while adding new issues—this under the direction of Mrs. Catherine Manning, philatelist, assisted by Wilbur Chapman, scientific aide. Practically all the recent issues are now on exhibit in the regular series, and stamps from enemy and enemy-controlled countries are mounted and displayed at intervals in the frames outside the cabinets. Cataloging of current specimens is practically up to date, and some further work was done on the large task of cataloging the Michel collection of postal stationery.

INVESTIGATION AND RESEARCH

The various members of the staff have each performed important tasks in connection with historical research and investigation in the fields represented by the division. The curator has added a valuable series of notes concerning coins, medals, and flags to those already assembled by him in recent years. The associate curator has made similar progress in connection with the history of arms and uniforms. Miss Margaret Brown, scientific aide, has assembled a series of notes pertaining to the White House dresses in the care of the division, constituting an admirable basis for a bulletin on this subject.

Members of the staff on various occasions assisted the War, Navy, Treasury, and Post Office Departments in connection with materials of military, naval, numismatic, or philatelic interest. Many data of this character were furnished also to individuals upon request in correspondence not accompanied by specimens. Twenty-seven lots

of material were submitted by outside agencies and individuals for identification.

EDUCATIONAL WORK

A special educational exhibit in the fields of stamps and coins was furnished the Washington Cathedral for its spring festival, May 10–12. The philatelic portion consisted of 4 frames of stamps selected to illustrate the topic "Religion on Stamps." The numismatic part consisted of 50 photographic prints of the obverses and reverses of 162 coins arranged in chronological sequence, labeled and mounted in 4 standard museum frames. In the first frame were installed 2 series of prints, 1 illustrating the first use of Christian symbols in numismatics during the reign of Constantine the Great, 307–337, and the other showing use of such symbols on Roman coins during the period from A. D. 337 to 460, during which the use of such designs became an established custom. These designs included the following subjects: The Greek cross in the field; the Latin cross in the field; the Chi-Rho on the helmet; the Iota-Chi in the field; the Chi-Rho in the field; the Chi-Rho above the labarum; the Chi-Rho on the labarum; the Chi-Rho as a type; and the Latin cross as a type. The second frame also contained two series of prints, one illustrating the use of religious designs on Roman coins during the period from A. D. 460 to 500, the other the use of religious designs on the coins of the Byzantine Empire during the period from A. D. 500 to 600. The third and fourth frames bore a series of prints illustrating the use of religious designs on modern coins from 1500 to 1800.

This exhibit proved of much interest to students of history of the Christian religion and to philatelists and numismatists as well. The first use of Christian symbols on Roman coins during the reign of Constantine the Great marked the turning away from paganism of the Roman Empire and its conversion to Christianity. It is difficult for anyone to view the photographs of these early Christian symbols on Roman coins without being moved to devote some attention to the history of Christianity and the Roman Empire. Thus these prints have both historical and inspirational value.

NUMBER OF SPECIMENS UNDER DIVISION

Art	1,641
Civil	16,270
Military	27,313
Naval	2,308
Numismatic	50,935
Philatelic	415,808
Pictorial	16,905
Total	531,180

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ACCESSIONS DURING THE FISCAL YEAR 1944–45

(Except when otherwise indicated, the specimens were presented or were transferred, in accordance with law, by Bureaus of the Government)

ABBOTT, Lt. (jg) R. TUCKER, F. P. O., San Francisco, Calif.: 36 fresh-water mollusks from the Philippines and China (169881, exchange).

ABBOTT FUND, W. L., Smithsonian Institution: 117 bird skins and 1 set of eggs, 3 muskoxen, 5 Arctic hares, 1 Arctic fox, and 3 walruses (167361); 21 skins and 2 skeletons of birds from Colombia, collected by Carlos Lehmann (169033).

ÅBERG, Dr. EWERT, Beltsville, Md.: 2 plants (170347).

ACKERLY, ERNEST, Atlanta, Ga.: Artificially deformed skull of an Indian child from Lookout Mountain Cave, Chattanooga, Tenn. (169542); 2 amphipods (169724).

ADDY, C. E., Newburyport, Mass.: 10 shrimps, 20 amphipods (167331).

ADELAIDE, UNIVERSITY OF, Adelaide, South Australia: (Through Nancy T. Burbidge) 21 grasses from Australia (170305), exchange).

AGRICULTURE, U. S. DEPARTMENT OF: (Through Dr. F. A. McClure) 3 cultivated plants from Canal Zone (170229).

Bureau of Entomology and Plant Quarantine: 495 plants collected in Texas by Ivan Shiller (162514); 32 isopods, 6 amphipods, 1 crab larva, 1 crab, 7 mollusks, 1 slug from Venezuela, 1 frog (167964, 168130, 168427, 168685, 169856); 1 blindsnake and 1 frog from Martinique (168130); 2 mollusks from Freeport, Tex. (168768); 72,000 miscellaneous insects retained by the various specialists out of material received by them for identification during the fiscal year 1944–45 (170523). (See also under C. B. Manifold.)

Forest Service: (Through W. A. Dayton) 616 plants, mostly of timber trees, collected in Ecuador (167955, 168406, 169018); 7 woody plants from Texas (168809); a grass from Louisiana (169434); 1 plant from North Carolina (170041).

Bureau of Plant Industry, Soils, and Agricultural Engineering: 1,360 plants, mostly from Brazil, collected by Dr. J. T. Baldwin, Jr., and 12 wood specimens (167807); (through Dr. Rogers McVaugh) 1 plant from Texas (169003); 30 photographs of herbarium specimens (169183); 12 plants from Costa Rica (169540); 1 plant from Alabama (169617).

ALBERTO, Brother TOMÁS, Salamina-Caldas, Colombia: 11 ferns from Colombia (168930).

ALDRICH, Dr. JOHN W., Washington, D. C.: 1 robin (170301). (See also under U. S. Department of the Interior, Fish and Wildlife Service.)

ALIEN PROPERTY CUSTODIAN, Washington, D. C.: Broken pieces of oriental carved objects in jade, carnelian, crystal, agate, etc., for mineralogical study, seized from the firm of Yamanaka & Co., New York City (166936).

ALLANSON, Sgt. HENRY E., Jr., and Corp. JAMES C. KEMP, A. P. O., San Francisco, Calif.: 132 butterflies and a few other insects from New Guinea (169517).

ALLARD, H. A., Arlington, Va.: 15 plants from Virginia (168810); 175 plants from vicinity of Washington, D. C. (169472).

ALLEE, Prof. W. C., Chicago, Ill.: 30+ amphipods (168556).

ALVARENGA, Dr. LEONIDAS, San Salvador, El Salvador: 17 insects from El Salvador (167033).

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, Washington, D. C.: (Through Dr. F. L. Campbell) 2 photographs of Capt. Jacob Chaitkin, U. S. Army Air Forces (166746).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: 11 minerals (167987, exchange); (through Dr. John T. Zimmer) 1 bird (169364, exchange).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.: (Through Robert H. Lloyd) 6 coins of Canada, Ceylon, and Chile and a Canadian token (167976, loan).

AMERICAN PHARMACEUTICAL ASSOCIATION, INC., Washington, D. C.: A collection of furniture, fixtures, drug bottles and jars, working implements, books, and other equipment of the

Cathedral Pharmacy, Freiburg, Germany, period of 1750, and similar specimens from other drug stores of the same period and vicinity (170211, deposit).

AMERICAN PHOTOGRAPHIC PUBLISHING Co., Boston, Mass.: 77 pictorical photographs, originals of reproductions in 1945 American Annual of Photography (169783, loan).

AMERICAN WAR MOTHERS, Indianapolis, Ind.: (Through Mrs. E. May Hahn) Gold-star flag flown on the ships that conveyed contingents of Gold Star Mothers from the United States to France and return during the period 1930–1933 (167801).

AMMON, G. A., Lansing, Mich.: 4 plants from the Aleutian Islands (168362).

ANDERSON, Dr. J. P., Ames, Iowa: 110 grasses from Alaska and Yukon (169607).

ANDERSON, J. W., Spokane, Wash.: 1 calcite geode from Orderville, Kane County, Utah (169001).

ANDERSON, LYLE. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

ANONYMOUS: Egyptian figurine of Osiris in green faience (168223); 8 bird skeletons and miscellaneous bones and 2 nests (169792); 8 specimens of Japanese currency printed for circulation in the Philippine Islands during World War II (169991); 28 bird skins (170222); 8 sets of old lens stops, used over a period of years from 1840 to 1880 up to the time of the introduction of adjustable diaphragms in lens tubes and shutters (170404); 1 pictorial photograph by Thomas W. Smillie, his initials in red in lower right corner (170531); 1 colored portrait of Secretary Samuel P. Langley (170533).

ANTHONY, LUCEY E., Swarthmore, Pa.: Gavel owned by Susan B. Anthony (166408).

APOLINAR ÁNGEL, Brother, Cartegena, Colombia: 96 plants from Colombia (169803).

APOLINAR-MARÍA, Rev. Brother, Bogotá, Colombia: 9 ferns from Colombia (169851).

APPLIN, E. R., Austin, Tex.: 55 slides of diagnostic Cretaceous and Tertiary Foraminifera from Florida, including many primary types (169156).

ARCHBOLD BIOLOGICAL STATION, Lake Placid, Fla.: (Through L. J. Brass) 24 grasses from Florida (170461).

ARCHINO, Pvt. SAMUEL P., Camp Atterbury, Ind.: 26 land and fresh-water mollusks from Camp Atterbury (168639).

ARELLANO, A. R. V., Mexico, D. F.: 24 land shells, including types of 3 new species, from State of Querétaro, Mexico (169363).

ARIZONA, UNIVERSITY OF, Tucson, Ariz.: (Through Prof. Walter S. Phillips) 21 ferns from Arizona (170232, exchange).

ARNOLD, Gen. H. H., Washington, D. C. An Arab costume presented by Abdul Aziz I'bn Saud, King of Saudi Arabia, to General Arnold, consisting of an embroidered headdress and coil, a robe embroidered in gold thread, and an inscribed sword embellished with overlay of gold and silver together with a corded sword belt (168988, loan).

AUGUSTSON, Lt. G. F., Fort Sam Houston, Tex.: 2 fleas, type and allotype (167867); 1 slide with holotype male flea (168928).

AUSTRALIAN GOVERNMENT, *Council for Scientific and Industrial Research*, Canberra City, Australia: 96 grasses from Australia and Papua (167783, exchange).

AYDELOTTE, Dr. W. D., Fairburn, Ga.: 3 barnacles (170074).

BABCOCK, Prof. E. B., Berkeley, Calif.: 110 plants (169241); 299 photographs and 1 fragment of plants (169421).

BAHOVEC, FRED, Baranof, Alaska: 18 mollusks, 2 marine invertebrates, 1 starfish, 1 ascidian, and 6 hermit crabs from Alaska (167362, 169236).

BAILEY HORTORIUM, Ithaca, N. Y.: 1 plant from Mexico (156462).

BAJKOV, Dr. A., Dayton, Ohio: 55 flies collected in Tamnak Valley, Attu Island, March 12, 1945, on the snow at a temperature of 0° C.–1° C., and 2 vials of plankton (170504).

BAKER, JAMES S. (See under Foreign Economic Administration.)

BAKER, Sgt. RAYMOND L., A. P. O., San Francisco, Calif.: 531 mollusks from the Netherlands East Indies (170486).

BALDWIN, Dr. J. T., Jr. (See under Blandy Experimental Farm.)

BALL, WILLIAM HOWARD, Brownsville, Tex.: 101 Crustacea and 21 millipedes (168072); 167 marine invertebrates, 3 echinoderms, and 10 insects (169525); 40+ invertebrates from Texas (170208).

BANGHAM, Dr. RALPH V. (See under Dr. Wilbur M. Tidd.)

BANKS, Prof. NATHAN. (See under Harvard University, Museum of Comparative Zoology.)

BANN, HELEN, Cincinnati, Ohio: 2 original engraved wood-blocks by James Bann, one a self portrait and the other a portrait of the donor (168170).

BARKER, R. WRIGHT, Houston, Tex.: (Through Dr. T. Wayland Vaughan) Foraminiferal material from approxi-

mately 20 yards above the Atlantic Coast Line Railroad bridge, on west bank of Flint River, Bainbridge, Ga. (170153): 15 slides of Lower Cretaceous larger Foraminifera from Texas (170544).

BARKLEY, Dr. FRED A. (See under University of Texas.)

BARLOW, Dr. C. H., Leonia, N. J.: 266 fresh-water and marine shells from Egypt (168991); 78 land and fresh-water mollusks and 7 fossils (6 mollusks, 1 fish) (169951); 1 mollusk from the Red Sea (170137).

BARNÉS, VENTURA, Jr., Mayagüez, Puerto Rico: 18 birds from Mona Island, Puerto Rico, including 1 type (168744).

BARNETT, Lt. HERBERT C., A. P. O., San Francisco, Calif., 1 tick from Tacloban, Leyte, Philippine Islands (168991).

BARRETT, Mrs. W. E., Greenview, Calif.: 10 amphipods (167871).

BARTLETT, Mrs. GEORGIA SLATER, and LYDIA R. SLATER, Webster, Mass.: Original indenture of apprenticeship of Samuel Slater to Jedediah Strutt, dated January 8, 1783 (169666, deposit).

BARTLEY, FLOYD, Circleville, Ohio: 37 plants, mostly from Ohio (169029)

BARTOS, Lt. WILLIAM A., F. P. O., San Francisco, Calif.: 40 shrimps, 25 crabs, 1 worm, brittle-star, octopus, mollusk, and fish, all from Saipan (168008); approximately 42 marine invertebrates, 4 brittle-stars, and 3 fishes from Saipan and Eniwetok (168584); 160 marine invertebrates, 13 echinoderms, 11 mollusks, and 12 fishes from South Pacific Islands (169259).

BARTSCH, Dr. PAUL, Washington, D. C.: 1 shrew collected in Fairfax County, Va.; by donor (168806); 1 golden-crowned kinglet (168852); 1 meadow mouse from Fairfax County, Va. (169613); partial skeleton of blue goose (169730); 1 chimney swift (170161); 1 specimen of carpenter bee, collected at "Lebanon," Fairfax County, Va., in April 1945 (170238); 2 seaside sparrows (170453).

BAUM Co., W. A., New York, N. Y.: 1 Baumanometer (No. 444634) for registering blood pressure (168968).

BAYER, Corp. FREDERICK M., Muskogee, Okla.: 35 fishes and 1 annelid from the vicinity of Sarasota, Fla. (167861); 3 brittle-stars from Palm Beach Inlet, Fla. (168298); 7 echinoderms (169906); 4 crinoids (170157); (with Corp. Gilbert Neurohr) 85 echinoderms from the reef at Sirido Village, Biak, Schouten Islands, collected in February 1945, 29 brittle-stars, 22 starfishes, 28 crinoids, 6 sea-urchins, and 25 mosses (170509).

BEALS, ROBERT V., A. P. O., San Francisco, Calif.: 215 mollusks and 26 corals, chiefly from New Guinea (168473).

BEAMER, Prof. R. H., Lawrence, Kans.: 6 bugs (169859).

BEATTY, HARRY A., Christiansted, St. Croix, Virgin Islands: Small collection of insects from Virgin Islands (151600); 6 pairs of deer antlers (168352); approximately 167 crustaceans, 3 bats, 1 brittle-star, and 8 fishes (168557).

BECKLEY, W. O., F. P. O., San Francisco, Calif.: 6 fossils and 2 minerals (167963).

BEEBE, Dr. WILLIAM, New York, N. Y.: 1 owl jaw (140039); 8 beetles (167875); 21 beetles, representing 6 species (168109).

BEGGS, J. D., Orlando, Fla.: (Through Dr. F. L. Lewton) 3 specimens of "Australian pine" wood, grown in Orange County, Fla. (170162).

BELASCO, DAVID, F. P. O., San Francisco, Calif., 1 mollusk and 1 lot of Foraminifera (169694).

BELKIN, Capt. J. N., A. P. O., San Francisco, Calif.: 107 specimens (70 adults and 37 slides) of mosquito material from Guadalcanal (170298).

BELL AIRCRAFT CORPORATION. (See under War Department.)

BENNETT, Maj. HARRY J., A. P. O., San Francisco, Calif.: 240 land and fresh-water mollusks from the Philippine Islands (170407).

BENNETT, Lt. LOGAN J., F. P. O., San Francisco, Calif.; 45 birds skins from Nissan Island (169154); 95 birds from Admiralty Islands (170422).

BERG, Lt. (jg.) CLIFFORD O., F. P. O., San Francisco, Calif.: 235+ flies, of which 135 are Stratiomyidae, including a new species, 100 or more flies of other families (169769); 77 flies collected on Guadalcanal (170042).

BERNER, Maj. LEWIS, A. P. O., Miami, Fla.: 1 bird spider from Tarkwa (168886).

BERNHARDT, ALTON, North Liberty, Ind.: 1 turkey bone from the Pleistocene of Indiana (170439).

BERQUIST, H. R., Washington, D. C.: 88 land shells from the Dominican Republican (168800).

BERRY, Dr. E. W. (See under Johns Hopkins University.)

BIBBY, Lt. (jg.) F. F., F. P. O., San Francisco, Calif.: 70 mollusks and 11 insects from the Philippines (170445).

BICK, Lt. (jg) GEORGE H., F. P. O., San Francisco, Calif.: A small collection of insects, spiders, and lizards and 1 shrimp (169265).

BINGER, ELEANOR R., Upper Marlboro, Md., and ANITA JAMES, Washington, D. C.: Sharks' teeth (about 350) collected between Chesapeake and North Beach (Stennetto's Wharf), Md. (168075).

BISHOP, ISABEL, New York, N. Y.: 13 drawings and 22 etchings for special exhibition, April 9 through May 6, 1945 (170055, loan.)

BLACK, RALEIGH A., Mont Albert, Victoria: 55 grasses from Australia (168904); 14 grasses from Australia (169868).

BLAKE, S. T., Brisbane, Queensland: 2 plants (168680, exchange).

BLANDY EXPERIMENTAL FARM, Boyce, Va.: (Through Dr. J. T. Baldwin, Jr.) 35 plants (170472).

BOEHLKE, JAMES, Buffalo, Minn.: 2 salamanders from Buffalo, Minn. (168769); 2 fishes (169913); 2 amphipods (170356).

BOGEN, Lt. Comdr. EMIL, A. P. O., San Francisco, Calif.: 3 lizards, 8 snakes, and 1 fish from Manus Island, Admiralty Islands (170465).

BOHART, Lt. GEORGE E., F. P. O., San Francisco, Calif.: A small collection of miscellaneous insects taken on Guadalcanal (169944); a collection of miscellaneous insects collected at Siota, Little Florida Island, in the South Solomons (170378).

BOLES, THOMAS. (See under U. S. Department of the Interior, National Park service.)

BORN, KENDALL E. (See under Tennessee Department of Conservation.)

BORNE, MORTIMER, Brooklyn, N. Y.: 35 drypoints in color for special exhibition from November 20 through December 17, 1944 (168953, loan); 1 color print, "The Road," by the donor, printed from 3 drypoint plates (yellow, red, and blue inks used) (170054).

BOULTER, Mrs. HARRIET K., Washington, D. C.: A negative and a transparency of the Adams Memorial statue (sometimes called "Grief") by August Saint-Gaudens, in Rock Creek Cemetery, Washington, D. C. (167950).

BOURGEOIS, MARIE E., Mixcoac, D. F.: 60 land, fresh-water, and marine shells from Mexico (167891); 228 mollusks from Mexico (169263); 6 subulinid mollusks from Huitzlahuaca Cave, Guerrero, Mexico, collected by Professor Sokoloff (170440).

BOURQUIN, Dr. FERNANDO, Buenos Aires, Argentina: 15 Lepidoptera from Argentina (168709, exchange).

BOWMAN, Mrs. GERTRUDE L. (See under Hon. Herbert Hoover.)

BOWMAN, KENNETH, Edmonton, Alberta: 1 insect (paratype) (168804).

BOWMAN, Mrs. MARIA G., Seattle, Wash.: Stone lamp from old village site on Korovin Bay, Atka Island, Alaska (168677).

BRADLEY, TOM, Washington, D. C.: 1 wood thrush and 1 flicker (170430).

BRADLEY, W. W. (See under California Division of Mines.)

BRAINARD, HELOISE, Washington, D. C.: 2 daguerreotypes and 2 ambrotypes (sphereotypes), the latter new to the collection (169340).

BRAMAN, CHESTER A., Old Chatham, N. Y.: A cane owned by President William McKinley (168579).

BRASS, L. J. (See under Archbold Biological Station.)

BRASSEUR, CHARLES L., Orange, N. J.: 1 portrait of James W. McDonough in color, McDonough process; 1 positive transparency, albumen process; 4 wet-plate stereoscopic negatives of 1860 Polar Eclipse Expedition to Labrador, 2 wax paper negatives, Le Gray process, 1 carbon print made by donor from one of above negatives; 3 metallographs, made by donor, 1888–89, carbon prints on collodion; 1 Blanquart Evrard silver print (doubtful) (170365).

BRAUN, Dr. ANNETTE F., Cincinnati, Ohio: 2 Lepidoptera (168976, exchange).

BREITGENGROSS, ALFRED T., Baltimore, Md.: 1 miniature working replica of the Stephen Daye press, the first printing press in the American Colonies, 1639, made in brass by the donor (170348).

BRENNER, RUTH M., San Francisco, Calif.: 984 samples of modern pictorial prints on cotton, rayon, and silk fabrics, classified by inspirational sources, collected in the late 1930's (168479).

BRENNER PHOTO Co., Washington, D. C.: Eastman #4 Bulls-eye camera of 1896 (168199); 1 #4 Panoram kodak of 1914 (168568); 1 Powers "Cameragraph," motion-picture projector #6, manufactured in 1906 (168814); 1 kodak developing box and tank of 1907, 1 kodak oil-burning dark room lamp (169684); 1 #2 Bullet camera, model 1898, 1 Photo-See camera, 1 Eastman film loading fixture, #4, 1 kodak film tank, 3½-inch model L–B–2 (169909).

BRIGHAM YOUNG UNIVERSITY, Provo, Utah: (Through Prof. Bertram F. Harrison) 57 plants from Utah (168657).

BRINKMAN, A. H., Craigmyle, Alberta: 6 plants from Canada (169169); grass from Oregon (169449, exchange).

BRISTOW, Estate of the Hon. JOSEPH L., Fairfax, Va.: Silver badge of the Fifth Universal Postal Congress, Washington, 1897, and a bronze badge of the Dewey celebration, Washington, D. C., 1899 (169904).

BRITISH GOVERNMENT, *British Council*, London, England: "British Crafts Exhibition," consisting of handicrafts such as needlework, books, furniture, silver, etc., temporary exhibition, May 8–28, 1945 (170686, loan).

Royal Botanic Gardens: (Through Dr. Dr. E. J. Salisbury), 3 plants from Mexico (139796, exchange).

BROOKS, A. R. (See under Canadian Government, Department of Agriculture.)

BROOKS, ST. CLAIR, Falmouth, Va.: (Through Fred B. Inglis) Fragments of dugout canoe from Rappahannock River near Falmouth (168764).

BROWER, Dr. A. E., Augusta, Maine: 35 insects, representing 5 species and including 3 topotypes of 2 species, 10 paratypes of another, and 8 specimens from the type lot of a third (170111, exchange).

BROWN, Dr. HERBERT H., Port-of-Spain, Trinidad, B. W. I.: A collection of marine invertebrates, mollusks, echinoderms, and fishes (169095).

BROWN, HUBERT H., Toronto, Ontario: 1 fern from Ontario (170268).

BROWN, Lt. K. S., Arlington, Va.: Japanese rubber hood, gloves, trousers and shoes, captured on Tarawa (168350).

BROWN, RICHARD A., College Park, Md.: A specimen of anorthosite from the "Hills of Laramie," 18 miles north of Laramie, Wyo. (168934).

BROWN, W. J. (See under Canadian Government, Department of Agriculture.)

BROWN & BIGELOW, St. Paul, Minn.: 13 calendar covers printed by offset lithography and 1 calendar printed by rotary intaglio, with reproductions of etchings by R. H. Palenske (167934).

BROWN FUND, E. J., Smithsonian Institution: 4 skins of Iceland birds of forms new to the collections (169323).

BRUNNER, Pfc. ALBERT R., A. P. O., San Francisco, Calif.: 1 beetle (169877).

BUCHHOLZ, Prof. JOHN T. (See under University of Illinois.)

BUEHLER, Capt. MILTON H., Washington, D. C. (See under War Department, Army Medical Museum.)

BULLOCK, D. S., Angol, Chile: 34 Lepidoptera from Chile (170045).

BUNTON, PAUL B., Atlanta, Ga.: 4 cross sections of a quartz crystal, probably from Brazil (170292).

BURBRIDGE, NANCY T., Adelaide, South Australia: 14 grasses from Australia (168670, exchange). (See also under University of Adelaide.)

BURCH, JOHN Q., Los Angeles, Calif.: Holotype of 4 species of marine shells from southern California and Mexico (170185).

BUREN, WILLIAM F., Alexandria, La.: 188 ants, representing 52 species (169146, exchange).

BURKE, Corp. JAMES PAUL, A. P. O., San Francisco, Calif.: 115 Lepidoptera (168322); 94 butterflies from the Lunga District, Guadalcanal, Solomon Islands (169518); 100 Lepidoptera from Guadalcanal (170525).

BURTON, R. E., F. P. O., San Francisco, Calif.: 28 plants from the South Pacific (168111); 40 plants (grasses and sedges) from South Pacific Islands (168789).

BUSS, IRVEN, A. P. O., San Francisco, Calif.: 1 swallow (169099);

BUTLER UNIVERSITY, Indianapolis, Ind.: (Through Dr. J. E. Potzger) 190 grasses from Indiana (168545, 168712, exchange); 3 grasses from Indiana (169327, exchange).

BUTTS, CHAUNCEY L., Fairfax, Va.: Specimen of gold ore from Independence mine, Talkeetna Valley, Alaska, and 3 specimens of obsidian from Amchitka Island, Alaska (168161).

CABALLERO y C., Dr. EDUARDO, Chapultepec, D. F.: Cotype of parasitic worm (168285).

CABRERA, Dr. ÁNGEL L. (See under Museo de La Plata.)

CALHOUN, JOHN B., Columbus, Ohio: 2 bird skins (168693).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: (Through Dr. Wilbert M. Chapman) 4 paratypes of fishes, collected at Santa Isabel, Rio Negro, Amazonas, Brazil, January 14, 1925, by Carl Ternetz (168959, exchange); (through Dr. Robert T. Orr) 1 brown pelican (169168, exchange); 54 plants from California (169322, 169819, 170206, exchange); (through Dr. L. G. Hertlein) 6 brachiopods from California (169414); 746 plants, mostly from Mexico and western United States (169521, exchange); 30 fresh-water fishes from South America (107273, exchange).

CALIFORNIA DEPARTMENT OF AGRICULTURE, Sacramento, Calif.: A weedy plant from California (168499).

CALIFORNIA DIVISION OF FISH AND GAME, Terminal Island, Calif.: (Through the Scripps Institution of

Oceanography) 1 bramble shark (169135).

CALIFORNIA DIVISION OF MINES, San Francisco, Calif.: (Through W. W. Bradley) 5 specimens of natrolite from Clear Creek, San Benito, Calif. (168389).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: 339 plants, mostly from California and Oregon (169230, exchange).

Museum of Vertebrate Zoology: (Through Prof. Alden H. Miller) 8 birds, representing 5 races (170492, permanent deposit).

CALIFORNIA, UNIVERSITY OF (AT LOS ANGELES), Los Angeles, Calif.: (Through Dr. Ralph H. Smith) 8 amphipods (170033).

CAMARGO, Dr. FELISBERTO. (See under Instituto Agronómico do Norte.)

CAMPBELL, DAN S., (See under Campbell Products.)

CAMPBELL, DR. F. L. (See under American Association for the Advancement of Science.)

CAMPBELL PRODUCTS, Owensboro, Ky.: (Through Dan S. Campbell) Study samples of fiberglas thread and 2 types of fireproof fabrics of fiberglas and asbestos yarns, and a specimen illustrating the use of these in a side section of the Tail Wheel Boot for a P–47 Thunderbolt plane (168567).

CANADIAN GOVERNMENT, *Department of Agriculture, Division of Entomology*, Ottawa, Canada: (Through Dr. H. H. J. Nesbitt) 3 mites on 1 paratype slide (169238); (through W. J. Brown) 4 beetles, paratypes (169295, exchange); (through A. R. Brooks) 3 flies, including 2 paratypes (169729); (through A. R. Brooks) 8 flies, paratypes of 3 species (169814).

CANFIELD FUND, Smithsonian Institution: 1 beryl crystal from Pala, Calif. 168160); 10 tantalite crystals from Cera, Parahiba, and Minas Gerais, Brazil (168882); 1 colorless spodumene crystal and 1 cut stone of spodumene (169181); a specimen of brazilianite from near Arrasuahý, Conselheira, Pena District, Minas Gerais, Brazil (170293).

CANNON, Dr. J. N., Seldovia, Alaska: 2 pelecypods, from Snug Harbor, Alaska, from Jurassic rocks; also a native moosehide handbag with beaded eagle emblem (170020).

CAPRILES, JENARO MOLDANADO. (See under Federal Security Agency, U. S. Public Health Service, San Juan, Puerto Rico.)

CARDENAS, Dr. MARTÍN, Cochabamba, Bolivia: 110 mollusks from Lake Poopo, Bolivia (167809); 109 plants from Bolivia (168095); 27 plants from Bolivia (169123).

CARDER, ROBERT. (See under Charles F. Jones.)

CARNEGIE MUSEUM. (See under National Geographic Society.)

CARPENTER, Mrs. J. S., New York, N. Y.: U. S. Naval officer's uniforms of the period about 1935 (169728).

CARPENTER, Maj. STANLEY J., Fort McPherson, Ga.: 187 adult mosquitoes, representing 43 species, collected in the southern United States (168049); 75 specimens of mosquito larvae on slides, comprising 7 species, collected in Guadalcanal (168828); 388 slides of mosquito material representing 40 species occurring in the southeastern United States (169110); 7 slides of mosquito material (170467).

CARPINTER FAMILY. (See under Dr. Milton Carpinter Cobey.)

CARR, A. T., Port-of-Spain, Trinidad, B. W. I.: 1 otter skull (165357).

CARTER, DEWITT W., Washington, D. C.: 2 flies (169147).

CASSELL, Sgt. JOSEPH F., A. P. O., San Francisco, Calif.: 25 reptiles and amphibians from New Guinea, also 1 scorpion (167459).

CASTELLO, Maj. ROBERTO LEVI, Guayaquil, Ecuador: A small collection of mosquitoes (168173).

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: (Through Rev. Hugh O'Neill) Cultivated plant (168053).

CAVALIER CORPORATION, Chattanooga, Tenn.: 2 cedar chests, one a "Stowaway," faced with Honduras mahogany veneer, and the other conventional, faced with primavera and aspen crotch veneers (168970, exchange).

CERNY, JOSEPH J. (See under Anthony Kovarik.)

CERTIFIED GAUGE & INSTRUMENT CORPORATION, Long Island City, N. Y.: 1 4½-inch Certified pressure gauge used for indicating the pressure of steam, air, water, and other fluids (168337).

CHAMBERLAIN, Dr. JOSEPH C., Palmer, Alaska: 91 beetles collected in Alaska (168760).

CHANDLER, Pvt. PERCY A., A. P. O., New York, N. Y. (See under War Department, Army Medical Museum.)

CHAPIN, Dr. EDWARD A., Washington, D. C.: 4 crayfishes from Lake Garfield, Mass. (168225); 40 mollusks from Lake Garfield, Monterey, Berkshire County, Mass. (168958).

CHAPMAN, Dr. WILBERT M. (See under California Academy of Sciences.)

CHARLESTON MUSEUM, Charleston, S. C.: Fossil bird bone (tarsometatarsus) from near Drum Island, Cooper River, Charleston, S. C. (166377).

CHASE, Mrs. AGNES, Washington, D. C.: 17 grasses (167929); 46 grasses from Australia (168068); 37 plants from Australia (168167); 67 grasses (168679); 102 South American grasses of the Second Goodspeed Expedition of the University of California (168-942); 12 plants from British Guiana (169435).

CHATHAM, C. F., San Francisco, Calif.: 1 synthetic emerald (168609).

CHEN, SUI FONG, Washington, D. C.: 77 mollusks from northern Alabama (169676); 180 specimens of land and fresh-water snails from northern Alabama (170186); 70 mollusks from Alabama and 5 vials of insects, ectoparasites, from rats collected in Chicago, 1943 (170542).

CHICAGO NATURAL HISTORY MUSEUM, Chicago, Ill.: 66 photographs of ferns from Peru (86423, exchange); 69 plants (cellular cryptogams) (168-482, exchange); 25 plants from Hawaiian Islands (169761, 170346, exchange).

CHU, H. CHARLES and T. U., Washington, D. C.: 6 Chinese souvenir postage stamps (169858).

CIVILIAN DEFENSE, *Sector Post I, Zone E, Area 47*, Washington, D. C.: (through Hayner H. Gordon) Air-raid warden's equipment of the period of World War II, 48 specimens (170295).

CLARE, STEWART, Kansas City, Mo.: 20 miscellaneous insects (169807); 4 insects (170099).

CLARK, AUSTIN H. (See under Dr. Lawrence I. Hewes.)

CLARK, Prof. W. MANSFIELD. (See under National Research Council.)

CLAUSEN, Prof. ROBERT T., Ithaca, N. Y.: 19 plants (168481, exchange).

CLEMENT, Rev. Brother, Santiago de Cuba, Cuba: 98 plants from Cuba (168363, 168872, 169287).

CLEVELAND, Mrs. GERTRUDE O. S., Quinebaug, Conn.: Homespun cotton quilt with block-printed chintz top and a hand-woven overshot weave coverlet, both made before 1803 on the Corey farm in Plainfield, Conn., by Abbie Corey Brackett (1782–1880); also a pieced silk quilt in the "Crazy Patch" pattern made in 1888 by the donor, her mother, Mrs. Gertrude Olney Stevens, and her sister, Celia Campbell Stevens (169638).

COBEY, Dr. MILTON CARPINTER, Washington, D. C.: (Through the Carpinter family) 2 porcelain medicine spoons (169698); an old household drug and spice mill (170039).

COCHRAN, Dr. DORIS M., Washington, D. C.: 1 turtle, 1 salamander, 3 crayfishes, and a small collection of insects from Adams County, Pa. (167889); 1 cultivated plant (170230).

COCKERELL, Prof. T. D. A., Boulder, Colo.: 222 insects, mostly bees (167840).

COLBURN, BURNHAM S., Biltmore, N. C.: 7 lots of hiddenite, including 4 large individuals, and 1 cyanite from North Carolina (170138).

COLLINS, LEE R., Knoxville, Tenn.: Cast of fossil tooth, original of which was found in cave near Bulverde, Tex. (167941).

COLLINS, W. N. (See under Charles F. Jones.)

COLORADO STATE COLLEGE, Fort Collins, Colo.: (Through Prof. H. D. Harrington) 1 grass from Colorado (169172).

COLUMBIA INSTITUTION FOR THE DEAF, Washington, D. C.: About 3,900 mollusks (168194).

COMISIÓN DE BOTÁNICA, Cali, Colombia: 125 plants from Colombia (167564, exchange); (through Dr. J. Cuatrecasas) 157 plants from Colombia (168784, exchange); 368 plants from Colombia (168849, exchange); (through Dr. J. Cuatrecasas) 179 plants and 1 palm from Colombia (168910, 170421, exchange).

COMMERCE DEPARTMENT OF, *Metals Reserve Company*, Washington, D. C.: A quartz crystal, weight 5.7 pounds, from Ashe County, N. C. (168686).

COMMERFORD, LESTER E., Washington, D. C.: 1 cedar waxwing (169935).

CONOVER, WILLARD D., A. P. O., San Francisco, Calif.: 8 butterflies (4 duplicates and 4 unique) (168508).

CONSTANTINE, DENNY, Los Angeles, Calif.: 4 bats from Azusa, Calif., and 6 from Concan, Tex. (168730, exchange).

CONWELL, L. A., F. P. O., San Francisco, Calif.: A small collection of miscellaneous insects, spiders, lizards, crabs, hermit crabs, and mollusks from the South Pacific (169015, 169134, 169220, 169225, 169256, 169331, 169351, 169531, 169691, 169745).

COOK, HAROLD J., Agate, Nebr.: 5 pelecypods from "Old Woman Creek Anticline," eastern Wyoming (170409).

COOLEY, Dr. R. A. (See under Federal Security Agency, U. S. Public Health Service, Hamilton, Mont.)

COOPER, Dr. G. ARTHUR, Washington, D. C.: 1 specimen of Devonian brachiopod containing unusual color marks (169853).

COOPER, Prof. KENNETH W., Princeton, N. J.: 35 beetles from Barro Colorado Island, Canal Zone (169239); (through Dr. M. R. Smith) a small collection of insects, mostly beetles (170188).

COPELAND, Lt. R. A., Jr., F. P. O., San Francisco, Calif.: 19 plants from the Philippine Islands (170109).

CORE, Prof. EARL L. (See under West Virginia University.)

CORNELL UNIVERSITY, Ithaca, N. Y.: (Through Dr. Henry Dietrich) 8 flies comprising 4 paratypes each of 2 species (169933, exchange); 1 slide of insect material (169934, exchange).

CORNER, Prof. GEORGE W., Baltimore, Md.: 1 cuscus from the Admiralty Islands, collected by Dr. G. W. Corner, Jr. (169000).

COVILLE, Mrs. F. V., Washington, D. C.: A collection of baskets from western Indian tribes, a powder flask, and a shot flask (170195).

COYLE, JOHN. (See under James Mayer.)

CRAIGHEAD, Lt. (jg) FRANK. (See under Navy Department, U. S. Naval Air Station.)

CRAM, Dr. ELOISE B. (See under Federal Security Agency, Public Health Service, National Institute of Health.)

CRANS, EMMA CORNELIA, Washington, D. C.: (Through Grace M. Denison), knitted cover for horse's ears, ca. 1900 (169231).

CROCKETT, Dr. R. L., Oneida, N. Y.: 7 plants from Texas (164975).

CRONHEIM, S. P., Atlanta, Ga.: 10 specimens of muscovite and biotite crystals from Mitchell-Creek mica mine, Upson County, Ga. (168801, exchange); 41 specimens of muscovite mica from same locality (169415).

CROSS, RICHARD. (See under Lloyd F. Gunther.)

CROSSETT, EDWARD C., Wianno, Mass.: 6 pictorial photographs (168007).

CROWN FASTENER CORPORATION. (See under Spool Cotton Co.)

CUATRECASAS, Dr. J. (See under Comisión de Botánica.)

CULLEN, ELIZABETH O., Washington, D. C.: (Through J. E. Graf) German parachute with carrying case, inspection booklet, and certificate of authenticity (168995).

CURTISS, ANTHONY, Port-au-Prince, Haiti: A small collection of miscellaneous insects from Haiti (167873); 122 reptiles and amphibians, 50 fishes, 5 mammals, 10 mollusks, 1 parasitic worm, 22 marine invertebrates, and a small collection of insects (167978); 90 reptiles and amphibians, 18 fish, 154 insects, 18 mollusks, and 2 mammals from Haiti (169732).

DAHLGREEN, CHARLES W., Oak Park, Ill.: 76 etchings and drypoints by the donor (170141).

DAILY, Mrs. F. K., Indianapolis, Ind.: 1 plant from Indiana (169296).

DANIEL, Brother, Medellín, Colombia: 85 plants from Colombia (168399, 168902, 169615).

DANTE, JOHN, Austin, Tex.: Mounted skeleton of striped bass, skeletonized by the donor (168226).

DAVIS, Maj. H. A. (See under War Department, Army Medical Museum.)

DAVIS, HELEN EDITH, Stillwater, Okla.: (Through Prof. R. Chester Hughes) 7 slides of helminths, including type and paratypes of a new species (168212).

DAYTON, W. A. (See under U. S. Department of Agriculture, Forest Service.)

DEAN, G. B., Collegedale, Tenn.: 1 bug (168518).

DEARING, PAUL, Washington, D. C.: 1 Devonian coral from Williamsburg, N. Y. (167920).

DECASTRO, Hon. MORRIS F., St. Thomas, Virgin Islands: 2 pieces of wood containing approximately 20 marine borers (169108).

DEGENER, OTTO, New York, N. Y.: 1 nematode (168656).

DEIGNAN, H. G., Washington, D. C.: 143 bird skins, 7 bird skeletons, mammals, insects, reptiles, snails, worms, and shells (169226); 236 land, freshwater, and marine shells and some barnacles from Ceylon (170508).

DENISON, GRACE M. (See under Emma Cornelia Crans.)

DENNING, D. G. (See under Federal Security Agency, Public Health Service, New Orleans, La.)

DENSMORE, FRANCES, Red Wing, Minn.: Columbia gramaphone, 1908, with 8 cylindrical records, some blank and some with recorded Indian songs, and several spare parts (167996).

DESIGN CENTER, INC., New York, N. Y. (Through Louis Pfohl) A recognition model of the Russian heavy bomber TB–7, 1942 (168227).

DEVRY CORPORATION, Chicago, Ill.: 1 No. 1 DeVry portable suitcase motion-picture projector (170266).

DEWOLF, EDWARD, Washington, D. C.: 1 Prosch "Athlete" high-speed camera shutter (169620).

DIAMANT TYPOGRAPHIC SERVICE, INC., New York, N. Y.: 3 miniature books printed by the donor and known as the "Diamant Classics"—"On the Typographic Beam," by George F. Trenholm; "Why Go Modern?" by Frederic W. Goudy; and "The Art of Printing," by Stanley Morison (170567).

DICKASON, DR. F. G., Wooster, Ohio: Plant from India (169229).

DICKERMAN, Dr. E. E., Bowling Green, Ohio: Type and paratype of trematode (168738).

DIETRICH, Dr. HENRY, Ithaca, N. Y.: 4 beetles (168614). (See also under Cornell University.)

DIGEMMA, JOSEPH P., Brooklyn, N. Y.: 3 relief prints by the donor made from plaster blocks, a new process developed by the artist: "The Farmer," "The Old Barn," and "Farm in Vermont," a color print; 1 relief print by the donor, "Semper Paratus," made from a rubber surface (170259).

DISTRICT OF COLUMBIA. *Public Health Office*, Washington, D. C.: 1 pine mouse collected in the District of Columbia (170529).

DODGE, HAROLD R., Macon, Ga.: 40 species of mosquito larvae, melanistic form (169883).

DODGE, HENRY, Clearwater, Fla.: 3 marine shells from Sulu Islands, Philippines (165665).

DONALDSON, R. S., Stockton, Calif.: 1 pair of women's gloves, fancy gauntlet type, of black leather that has been treated by a preserving process using linseed oil (168208).

DORSEY, H. W., Washington, D. C.: 2 skulls of the redhead duck (168853); 2 skulls of canvasback ducks (169337).

DOUGHERTY, ELLSWORTH C., Berkeley, Calif.: 2 slides containing type and paratype of a nematode (169116).

DOUGLAS, JAMES STUART, WALTER DOUGLAS, and Mrs. ARCHIBALD DOUGLAS, New York, N. Y.: The Dr. James Douglas collection of copper minerals from Bisbee, Ariz., and the T. Sterry Hunt collection of minerals (168003).

DRAKE, Prof. CARL J., Ames, Iowa: 3 bugs (166778, exchange); 10 bugs (169685); 6 bugs representing 4 species and including 2 paratypes of 1 species and 1 paratype each of 2 other species (169901).

DRELESKY, Capt. E. A., A. P. O., New York, N. Y.: 2 plants from Assam (170174).

DROUET, Dr. FRANCIS, Chicago, Ill.: 15 plants from Plummers Island, Md., and the adjacent area (170431).

DRYANDER, Mrs. EDITH, Cali, Colombia: 76 plants from Colombia (169785).

DUCHANOIS, F. ROBERT, Corpus Christi, Tex.: 2 western coral snakes, from Corpus Christi (168441).

DUCKWORTH, A. S., Cape Girardeau, Mo.: 1 slide of Foraminifera (169588).

DUKE UNIVERSITY, Durham, N. C.: 19 ferns from Puerto Rico (169669, exchange).

DYAS, ROBERT JOHN (deceased), Bellevue, Iowa: Stone ax found on October 12, 1912, north of the town limits of Bellevue, Jackson County, Iowa, by the donor (168726).

EAGLE-OTTAWA LEATHER Co., Grand Haven, Mich.: 47 swatches, 12 by 18 inches, of full topgrain leathers of various weights, colors, and finishes (169088).

EATON, ALLEN, New York, N. Y.: Copy of an old hand-operated roller cotton gin that is still being used by Mrs. William Martin, who lives near Murphy, N. C. (169142).

EDISON, THOMAS A., INC., West Orange, N. J.: "Ediphone" Dictating and Transcription Machine Unit consisting of: 1 Edison Miracle Model Executive Dictating Machine and accessories, Serial No. D–533670, 1 Edison Miracle Model Secretarial Transcribing Machine and accessories, Serial No. T–533949 (170053).

EDNER, ORVILLE R., Campbell, Minn.: (Through Robert Teeters) Molar tooth of fossil elephant and fragmentary human skull, lower jaws and 2 long bones of more than one individual (168001).

EDWARDS, Lt. WILLARD E., A. P. O., San Francisco, Calif.: 1 egg of the Laysan albatross (170038).

EHRLICH, OSCAR, New York, N. Y.: A Wynne Infallible exposure meter (168863).

EISENHOWER, Gen. DWIGHT D., New York, N. Y.: Chair and desk used by General Eisenhower in the war zone (168675, deposit); baby girl doll dressed in Breton costume presented to General Eisenhower by the people of Brittany as a token of appreciation to the children of America for the assistance of the United States during World War II, and an illustrated pamphlet entitled "Les Poupées de Bretagne" (168860).

ELLIS, T. K., Orangeburg, S. C.: 59 marine invertebrates, 60 mollusks, 3 fishes, and 50 insects (169073).

EMMONS, Dr. C. W. (See under Federal Security Agency, Public Health Service, National Institute of Health.)

ENGINEERING & RESEARCH CORPORATION, Riverdale, Md.: 1 "Compreg" airplane propeller blade (169090); sample of "Compreg," a high density plywood (169228).

ENGLISH, G. H., Philadelphia, Pa.: Ammeter (Ampermemeter), Queen & Co., Philadelphia, Pa., Serial No. 67G, taken from Niagara Falls Steam Plant (169945).

ESCUELA SUPERIOR DE AGRICULTURA TROPICAL, Cali, Colombia: 44 plants from Colombia (168835, exchange).

EUREKA MICA MINING Co., Albuquerque, N. Mex.: (Through N. W. Sides) Several cleavage pieces of

muscovite from Eureka mica mines, 4 miles from Petaca, Rio Arriba County, N. Mex. (170187).

EWY, ETHEL E., Whittier, Calif.: 197 crustaceans from California (167520).

FAIRCHILD, Capt. GRAHAM, Ancon, Canal Zone: (Through Dr. J. P. E. Morrison) 3 land shells from Panama (168824).

FALKENAU, JANET S., Pelham, N. Y.: About 4,000 marine shells from Clearwater, Fla. (167870).

FARGO, WILLIAM B., Pass-a-Grille Beach, Fla.: 38 marine mollusks from Pass-a-Grille Beach (169882).

FAULL, Prof. J. H. (See under Harvard University, Arnold Aboretum.)

FEDERAL SECURITY AGENCY:

Public Health Service, National Institute of Health, Bethesda, Md.: (Through Dr. Eloise B. Cram) 191 mollusks (168582, 168601); 64 freshwater snails (169082); 84 freshwater snails (169968); (through Dr. C. W. Emmons) 1 plant from Montana (169045).

Public Health Service, Hamilton, Mont.: (Through Maj. William L. Jellison) small collections of insects including material from Assam, western Montana, and California (168050, 168620, 169848); (through Maj. William L. Jellison and Dr. H. B. Mills) 2 bugs, infesting bats, and 4 land snails from Birch Creek, Mont. (168871); (through Dr. R. A. Cooley) 7 ticks, including paratypes of 6 new species (169058, 170156, 170299); 29 flies reared in Montana (169397); 4 bugs from a bat-infested cabin at Lakeside, Flathead Lake, Flathead County, Mont. (169791); (through Maj. Glen M. Kohls) 7 frogs, 1 lizard, 1 snake from New Guinea, collected by Major Kohls (170256); 1 coypu trapped in the wild near Corvallis, Ravalli County, Mont. (170260); 1 abnormally colored muskrat trapped in small pond near Charlo, Lake County, Mont., in winter of 1943–44 (170369).

Public Health Service, New Orleans, La.: (Through D. G. Denning) 4 specimens of mosquito material comprising female, male and male slide, and larva (170110).

Public Health Service, San Francisco, Calif.: A collection of approximately 400 specimens of fresh-water oligochaetes, in part studied by the late Gustav Eisen (167888, deposit); (through F. M. Prince) 5 slides of insects, all paratypes (170086).

Public Health Service, San Juan, P. R.: (Through Harry D. Pratt) A small collection of insects taken by Mr. Pratt and J. Maldonado on El Yunque, P. R., at elevation of 2,000 feet (168222); (through Jenaro M. Capriles (19 fleas collected in Puerto Rico (168321); (through Harry D. Pratt) collection of miscellaneous insects from Puerto Rico (169398).

Public Health Service, Washington, D. C.: 1 rodent from Egypt collected by Dr. Barlow (168761); (through Dr. Newell E. Good) 130 mosquitoes from the District of Columbia (169418).

FEIS, Mrs. HERBERT. (See under Mrs. Joseph Stanley-Brown.)

FENNAH, R. G., Castries, St. Lucia, B. W. I.: 3 vials of insects collected in the British West Indies (167921); 1 insect (holotype) (169044).

FERNALD, Prof. H. T., Winter Park, Fla.: 311 identified sphecoid wasps including 29 types of various grades (169813).

FIELD, T/4 WILLIAM D., A. P. O., San Francisco, Calif.: A collection of miscellaneous insects, including 1 cigar-boxful of butterflies, from the Hawaiian Islands, mostly from Oahu (170297).

FIERCE, MAUDE M., Washington, D. C.: Embroidered linen splasher worked in crewel or outline stitch with Turkey red cotton, about 1880 in Hamden, Ohio, by Mrs. Naomi C. Wilson, aunt of the donor (170257).

FIGGINS, Dr. J. D. (deceased), Lexington, Ky.: (Through Dr. F. H. H. Roberts, Jr.) Skull and a few fragments of bone found near Folsom, N. Mex., about 1935 (169681).

FINCHER, J. A., Jackson, Miss.: 5 groups of the hydroid stage and 8 medusae of fresh-water jellyfish (168625).

FINN, Mrs. KATHLEEN MACY, Ardsley-on-Hudson, N. Y.: 33 aquatints for special exhibition from January 15 through February 11, 1945, the work of Mrs. Finn (169320, loan); 4 prints, made by the donor, as follows: "Yellow Head" and "Siskins," aquatints in color, "Saguenay Shore," soft-ground etching, and "Woolly Head," lift-ground etching (169798).

FISH, Mrs. HAMILTON, Jr., Washington, D. C.: Cape owned and worn by the Honorable Hamilton Fish, statesman, during the early part of the nineteenth century (169021).

FISHER, Dr. A. K., Washington, D. C.: 72 photographs of naturalists (170580).

FISHER, GEORGE L., Houston, Tex.: 63 plants from Mexico (168443).

FLEETWOOD, RAYMOND J., Round Oak, Ga.: 1 Bachman shrew (168339).

FLEMING, Mrs. ROGER, Refugio, Tex.: 1 beetle (firefly) collected in Texas (170503).

FLORIDA, UNIVERSITY OF, Gainesville, Fla.: (Through Dr. A. N. Tissot) 1 beetle (169841).

FLORIDA AGRICULTURAL EXPERIMENT STATION, Gainesville, Fla.: (Through Dr. A. N. Tissot) 11 slides of aphids, including holotype and morphotype slides of 2 species (168239); 3 specimens of insects comprising 2 moths and 1 hymenopterous parasite of the moth (168366).

FLOWER, Dr. ROUSSEAU H., Albany, N. Y.: 1 Upper Ordovician mollusk (167814).

FOREIGN ECONOMIC ADMINISTRATION, Washington, D. C.: (Through James S. Baker) 5 specimens of cassiterite, tantalite, zinc, and muscovite from Madagascar and Brazil (168803); (through Arthur T. Semple) 87 plants, mostly grasses from Ethiopia (168903); 50 plants from Ethiopia (170196).

FORSBERG, G. W., Washington, D. C.: A single-cylinder, vertical-piston valve steam engine, ca. 1900 (168843).

FOSHAG, Dr. W. F., Washington, D. C.: 18 shells from Michoacán and Guerrero, Mexico (168093); 8 recently woven decorative pouches from the Otomi Indians of four ranchos or villages in the State of Hidalgo, Mexico (168808).

FOSTER, MARK M., Denio, Oreg.: Fossil hazelnut and 58 specimens of fossil woods from Virgin Basin, Nev. (168357).

FOWLER, HARLAN D., Whittier, Calif.: A model of a Lockheed airplane, "Constellation" (1944), equipped with movable Fowler flaps (169861).

FRANKLIN, J. MORTON, West Falls Church, Va.: 2 plants from vicinity of Washington, D. C. (170178).

FRASCHE, DEAN, Washington, D. C.: A collection of chromite crystals from the Sierra Chrome Mines, Ltd., Sierra Leone, Africa (170294).

FRENCH, FRANKLIN C., Camp Swift, Tex.: A small collection of invertebrates, comprising barnacles, amphipods, isopods, hermit crabs, a polychaete worm, and mollusks collected at Kiska, Alaska, September 1943 (168548).

FREY, Dr. DAVID G. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

FROST, Prof. S. W., Arendtsville, Pa.: 3 flies representing 2 species, 1 by the type and the other by 2 paratypes (169581).

FULLER & D'ALBERT, Washington, D. C.: Collection of lenses and cameras, accumulation of past 20 years (168404); 2 viewing lenses for Motuscope (169908).

FULLING, Lt. JOHN H. (See under Smithsonian Institution, National Zoological Park.)

GALLEGO, F. LUIS, Medellín, Colombia: A small collection of miscellaneous insects from Colombia (166604).

GALVAO, Dr. A. L. A., São Paulo, Brazil: 3 slides of mosquitoes (167922).

GAMEWELL Co., Newton Upper Falls, Mass.: Original fire alarm in street box installed in Boston, Mass., in 1851 (169789).

GARCÍA Y BARRIGA, Dr. HERNANDO. (See under Instituto de Ciencias Naturales.)

GATES, PHILIP W., Rockville, Md.; 8 specimens of muscovite mica from New Hampshire (168005); 24 specimens of muscovite from various localities in New Hampshire (168628).

GIBBS, ROBERT, Chevy Chase, Md.: 1 black-billed cuckoo (170573).

GILBERT, NEAL, F. P. O., San Francisco, Calif.: 33 plants from Oahu, T. H. (169388).

GILMORE, Dr. RAYMOND, Washington, D. C.: (Through the Pan American Sanitary Bureau) 12 rats, 5 guinea-pigs, and 2 frogs (168754).

GINSBURG, ISAAC. (See under Department of the Interior, Fish and Wildlife Service.)

GIVLER, Prof. JOHN PAUL, Greensboro, N. C.: 1 bookplate designed by Dr. Clyde E. Keeler and printed by halftone letterpress (168202).

GODDARD, ARCHIBALD N., Detroit, Mich.: 1 gold crystal, locality unknown, and 1 specimen of opal in the matrix from Carbanera mine, Guerrero, Mexico (168745).

GOERGENS, GEORGE R., Washington, D. C.: 1 speeding-up mechanism for motion-picture photography, patented April 1, 1919, 1 tripod head geared for making panorama pictures with an ordinary Kodak, 1915, and 1 photostat description of the donor's time-lapse or interval motion-picture camera from *Motion Picture World*, January 24, 1920 (170487).

GOFF, DEAN S., Elgin, Ill.: Bowl of tripod effigy vessel and obsidian flakes found by donor in 1899 in State of Puebla, Mexico (170173).

GOLDBERG, LOUIS, Norwich, Conn.: 4 pairs of ice skates (168402).

GOLDMAN, Maj. E. A., Washington, D. C.: 4 land shells from Dijon, France (168620).

GOOD, Dr. NEWELL E. (See under Federal Security Agency, Public Health Service, Washington, D. C.)

GOODYEAR TIRE & RUBBER CO., INC., Akron, Ohio: 2 pneumatic life rafts of synthetic rubber, with the contractor's emergency equipment usually supplied therewith (169089, loan).

GORDON, HAYNER H. (See under Civilian Defense, Sector Post I, Zone E, Area 47.)

GOTTSCHALK, CARL W., Salem, Va.: 1 butterfly from Virginia (168613).

GOUDEY, HATFIELD, Yerington, Nev.: 1 specimen of thulite (168390).

GOULD, Prof. FRANK W., Tucson, Ariz.: 332 plants from the western United States (168308, exchange); 193 plants (169280, exhcange).

GOULD, HARRIS P., Washington, D. C.: 1 pair of steel spectacles, period of 1800, and 1 pair of silver spectacles, period of 1850 (168566).

GRAF, J. E. (See under Elizabeth O. Cullen.)

GRAFF, Col. THEODORE Q., Ada, Ohio: Camel bell (170202).

GRAHAM, Capt. OWEN H., A. P. O., San Francisco, Calif.: 74 specimens of insects from New Guinea (168851).

GRANGER, G. G., Lansing, Mich.: 50 pictorial photographs exhibited during June 1945 (170433, loan).

GRANT, Corp. NORMAN F., A. P. O., San Francisco, Calif.: Small collection of insects from southwest Pacific Islands (168336).

GREEN, IVAN J., St. John's, Newfoundland: 1 grass (168996, exchange).

GREEN, J. W., Easton, Pa.: 25 beetles, including 17 representing 2 species, probably new (169716, 169995). (See also under G. Stace Smith.)

GREENE, GEORGE M., Harrisburg, Pa.: 2 flies, 1 weevil, and 3 beetles (168297).

GREENFIELD, RAY, Washington, D. C.: 9 amphipods (169810).

GREGG, Dr. ROBERT E., Boulder, Colo.: 409 ants (167385, exchange).

GREGG, Dr. WENDELL O., Los Angeles, Calif.: 9 mollusks from California and Baja California (168827).

GRETHER, Lt. (jg) D. F., F. P. O., San Francisco, Calif.: 94 butterflies and a few other insects from the Marshall and Marianas Islands (169519).

GREY, Rev. JOHN H., Jr., Charlottesville, Va.: 1 sharp-tailed sparrow (168286).

GRIFFITH, L. O., Nashville, Ind.: 35 prints, including 11 color prints by L. O. Griffith, for special exhibition from May 7 through June 3, 1945 (170115, loan).

GRUNER, JOHN W., Minneapolis, Minn.: 1 specimen of groutite from Cuyana Range, Minn. (169057).

GUGGENHEIM, Capt. PAUL, Los Angeles, Calif.: Stone and bone artifacts and skeletal material from sites on Amchitka Island, Aleutians (168967).

GUIBERSON DIESEL ENGINE CO., Dallas, Tex.: A radial Diesel engine for Army M3 light tank, series 5, T–1020 model, ca. 1943 (168256).

GUNTHER, LLOYD F., and RICHARD CROSS, A. P. O., San Francisco, Calif.: 177 insects, mostly beetles (168969)

GURNEY, Maj. A. B., A. P. O., San Francisco, Calif., Collection of miscellaneous insects collected on Bougainville Island by donor (168611); 500 miscellaneous insects including 11 vials of flies, 6 vials of termites, and 2 vials of termite guests, also 7 mollusks, all from Bougainville except 1 vial collected on Guadalcanal in 1933 (169059).

GUTIÉRREZ A., RAMÓN, Santiago, Chile: 201 beetles (170043, exchange).

HADLEY, Corp. J. E., A. P. O., San Francisco, Calif.: 2 hermit crabs, 10+ crabs, 17 mollusks, 1 coral (169556); 23 marine invertebrates, 1 beetle, mollusks, and echinoderms from New Guinea (169912).

HAEGER, S/Sgt. JAMES S., A. P. O., San Francisco, Calif.: A small collection of miscellaneous insects from New Guinea (169677).

HAHN, Mrs. E. MAY. (See under American War Mothers.)

HAINES, A. L., Vermillion, S. Dak.: Approximately 640 invertebrate fossils from the Devonian of Iowa and 10 fossil snails from the Cretaceous of South Dakota (168368).

HALL, Capt. DAVID G., A. P. O., San Francisco, Calif.: A small collection of miscellaneous insects from New Guinea and adjacent islands (169109). (See also under Dr. C. H. T. Townsend.)

HAMEL, C. C., Amherst, Ohio: 18 septaria of marcasite from the Devonian of Ohio (168231).

HANSON, Capt. JOHN J., Indiantown Gap Military Reservation, Pa.: 3 model gasoline aircraft engines—"Brown" Model E, "Brown" Model D, and "Hurleman Aristocrat" (168734, loan); 2 model gasoline aircraft engines, "OK Super 60" and "Brat" (170170, loan).

HARDY, Maj. D. ELMO, A. P. O., New York, N. Y.: 326 pinned specimens of miscellaneous insects (168540); a collection of miscellaneous insects, collected at various points in India (168612).

HARPER, DOROTHY CAROLYN, Stillwater, Okla.: 1 plant from Oklahoma (169419).

HARPER, Dr. FRANCIS, Swarthmore, Pa.: A signal horn and an alligator

gig, or pick, collected from natives of the Okefinokee Swamp area (168397).

HARPER, Dr. ROLAND M., University, Ala.: 45 plants from Alabama (167806).

HARRINGTON, A. M., Philadelphia, Pa.: An umbrella frame constructed with ribs of whalebone and used between 1835 and 1865 at Barre, Mass., by G. Hobbs, grandfather of the donor (169283).

HARRINGTON, Prof. H. D. (See under Colorado State College.)

HARRINGTON, Lt. (jg) WILLIAM C., Palo Alto, Calif.: 81 mollusks and 2 starfishes from the South Pacific (169359).

HARRIS, B. K., F. P. O., San Francisco, Calif.: 31 butterflies (169352).

HARRISON, Prof. BERTRAM F. (See under Brigham Young University.)

HARRY, HAROLD WILLIAM, F. P. O., San Francisco, Calif.: 5 mollusks from Saipan (170428).

HARVARD UNIVERSITY:

Arnold Arboretum: Jamaica Plain, Mass.: 294 plants from Cuba (167931); (through Prof. J. H. Faull) 4 ferns from Jamaica (168587, exchange); 3 grasses from the Fiji Islands (168790); 2 grasses from the West Indies (169387); 282 plants (170364); 10 grasses from Panama (170507).

Gray Herbarium, Cambridge, Mass.: 70 plants from British Columbia (168309); 18 plants from Colombia (168401); 71 plants from Grand Manan, New Brunswick (168783); 31 grasses from Panama (169332); 8 photographs of plants (169679); (through C. A. Weatherby) 2 photographs of plants (168943, exchange).

Museum of Comparative Zoology, Cambridge, Mass.: (Through William C. Schroeder) paratype of a fish from Cuba (167863, exchange); 10 cotypes, 5 specimens each, of 2 species of fishes (168158, exchange); (through Prof. Nathan Banks) 7 flies (168282); 10 cotypes of catfishes and 3 paratypes of sharks (168905, exchange); 5 beetles (169291); 1 mollusk (169468, exchange); 134 reptiles including cotypes or paratypes of 22 species, also 8 turtles from Acapulco, Mexico (169815, gift, exchange); 7 beetles (170177, exchange).

HASBROUCK, Dr. E. M., Washington, D. C.: 1 surf scoter (169486).

HASLER, Prof. ARTHUR D. (See under Frits Johansen and Prof. Chancey Juday.)

HATCH, Prof. MELVILLE H., Seattle, Wash.: 3 beetles (169342).

HAUGHT, OSCAR L., Bogota, Colombia: 1 fern from Colombia (168955); 1,319 plants from Colombia (169222).

HAVILAND, JOHN G., Washington, D. C.: Walrus tusk engraved by Onno, a native of Chukchee Peninsula, Siberia (169759).

HAYES, Prof. ALBERT O., New Brunswick, N. J.: 2 brachiopods from the Silurian of New Brunswick, Canada.

HEAD, HENRY R., Ithaca, N. Y.: 1 fluted folsomoid blade of green jasper said to have been found on a bench above Willseyville Creek, 1 mile west of Willseyville, Tioga County, N. Y., about 1881 (160827).

HENDERSON, CHARLES B. (See under Department of Commerce, Metals Reserve Co.)

HENRY, N. E., Jersey Shore, Pa.: 1 wheel bug (168349).

HERALD, Lt. EARL S. (See under War Department, Army Air Forces Tactical Center.)

HERMANN, Dr. FREDERICK J., Greenbelt, Md.: A small collection of insects from Colombia, Peru, and Brazil, taken in 1944 (168240); 36 grasses from Colombia and Peru (168937); 6 plants from Maryland and Virginia (169046); 132 plants from Colombia (168935, 168939, 169614); 1 cultivated plant from Puerto Rico (169793).

HERTLEIN, Dr. L. G. (See under California Academy of Sciences.)

HESS, FRANK L., College Park, Md.: 2 specimens of uranium minerals from Ruggles mine, Grafton Center, N. H., and 1 granite from the dike at Hogden Hill, southwest of Buckfield, Maine (168610); 1 specimen of goldfieldite from Mohawk Lease, Goldfield, Nev. (168627).

HESS, J. W., Washington, D. C.: 30 plants from Australia (169896).

HESTER, J. PINCKNEY, Fredonia, Ariz.: 7 plants from southwestern United States (168711); fruit of cactus (168750).

HEWES, Dr. L. I., San Francisco, Calif.: (Through Austin H. Clark) 14 Lepidoptera (170219).

HIBBARD, RAYMOND R., Buffalo, N. Y.: 3 samples of washings with Ostracoda and Bryozoa from the Middle Devonian rocks of western New York (168195, exchange).

HIGHAM, H. W., Springfield, Va.: Gold medal and silver belt presented to H. W. Higham in 1883 and 1880, respectively, in recognition of his achievements as long-distance champion bicycle rider of the world and a photograph of him in bicycle costume (168449).

HIGLEY, Dean L. ALLEN, Delaware City, Del.: 13 iron concretions with

regularly arranged surface markings, from the northern area of the Black Hills, near Buffalo, S. Dak. (168219).

HILDEBRAND, Dr. S. F. (See under Department of the Interior, Fish and Wildlife Service.)

HINCKLEY, L. C., Marfa, Tex.: 23 plants from Texas (167844); 30 grasses from Texas (168998).

HITCHCOCK, Prof. C. LEO. (See under University of Washington.)

HOBBS, Dr. HORTON H., Gainesville, Fla.: 4 isopods from Florida (155587); 1 blind amphipod (167707); 12 crayfishes including types of 2 new species and paratypes of one of them (169597)

HOFFMAN, RICHARD L., Charlottesville, Va.: 9 salamanders from near Charlottesville (170048).

HOLDRIDGE, L. R., Port-au-Prince, Haiti: 205 plants from Haiti (168027, 170204).

HOLLAND, Maj. THOMAS C. (See under Mrs. Clarissa Humphreys.)

HOLZBERG, Mrs. T. J., Washington, D. C.: 3 miniature cameras and 3 plate holders (168506).

HONESS, Capt. RALPH F., A. P. O., San Francisco, Calif.: 72 fresh-water snails from Zambales Province, Luzon, Philippine Islands (170070).

HOOVER, Hon. HERBERT, Palo Alto, Calif.: (Through Mrs. Gertrude L. Bowman.) Dress and pair of shoes owned by Mrs. Herbert Hoover (167821); silver metal thread dress and pair of black and silver evening slippers worn by Mrs. Herbert Hoover during the administration of her husband as President of the United States (169444).

HORNBY, LESTER G., Rockport, Mass.: 52 prints (46 etchings and 6 lithographs) by Lester G. Hornby, for special exhibition from March 12 through April 8, 1945, under the title "Etchings and Lithographs of Paris and Rural France" (169799, loan).

HORNEY, ODUS C. (See under Mrs Andrew Summers Rowan.)

HOTCHKISS, NEIL. (See under Department of the Interior, Fish and Wildlife Service.)

HOWE, Mrs. EMERSON, Washington, D. C.: French and Spanish swords and a Peruvian diplomatic uniform (24 specimens) (169237); 10 prehistoric Peruvian vessels (169339).

HRDLIČKA, Dr. ALEŠ (deceased): 2 feathered ponchos from Peru collected by the donor and presented to the Museum in 1912 (169866).

HUBBARD, Prof. C. ANDRESEN, Forest Grove, Oreg.: 12 fleas representing 8 species, all types and allotypes (168420).

HUBBS, Dr. CARL L., La Jolla, Calif.: 2 copepods (167879). (See also under Prof. Loye Miller.)

HUCKEL, EARLE W., Sudbury, Mass.: 12 examples of graphic art as follows: 7 lithographs, 1 Woodburytype, 1 highlight halftone, 1 offset lithograph, 1 line-engraving, and 1 invitation card used by Thomas Sully (169232).

HUFFMAN, EARL C., Pasadena, Calif.: 144 marine mollusks from the Gulf of California (168432).

HUGHES, Prof. R. CHESTER. (See under Helen Edith Davis.)

HULL, DENNISON B., Chicago, Ill.: 1 Ontarion hearing set in lucite case (169867).

HUMES, Dr. ARTHUR G., A. P. O., San Francisco, Calif.: 1 bat collected on Mios Woendi, Padaido Islands, near Biak, Dutch New Guinea (168999).

HUMPHREY, FRED L., Reno, Nev.: About 60 Middle and Lower Cambrian trilobites from the Groom district, Nevada (169646).

HUMPHREYS, Mrs. CLARISSA, Crosbyton, Tex.: (Through Maj. Thomas C. Holland) Silicified interior of a septarium from Montague County, Tex. (168163).

HUNGERFORD, Prof. H. B., (See under University of Kansas.)

HUNT, T. STERRY. (See under James Stuart Douglas.)

HUNTER, Maj. GEORGE W., III, Washington, D. C.: 40 mollusks from Palo, Leyte, Philippine Islands (169725); 12 mollusks from Saipan (169990).

HUNZIKER, ARMANDO T., Buenos Aires, Argentina: 3 plants from Argentina (168941).

HUTCHINS, JAMES, Windon, N. C.: 1 nest of the red-eyed vireo (167897).

HUTZEL, Lt. (jg) J. N., F. P. O., San Francisco, Calif.: (Through Dr. Alan Stone) A small collection of insects and Crustacea, containing several species of unusual interest, collected on Iwo Jima (170194).

HYMAN, Dr. LIBBIE H., New York, N. Y.: 1 flatworm slide representing a new species recently described by Dr. Hyman (167933).

ILLINOIS STATE NATURAL HISTORY SURVEY DIVISION, Urbana, Ill.: (Through Dr. H. H. Ross) 2 beetles (169255).

ILLINOIS, UNIVERSITY OF, Urbana, Ill.: (Through Prof. John T. Buchholz) 7 photographs of plants (167930, exchange).

ILTIS, T/5 HUGH H., A. P. O., New York, N. Y.: 1 plant from Oklahoma (169152); 63 plants from France (170505).

ILTIS, Prof. HUGO, Fredericksburg, Va.: 6 parasitic copepods (161576).

ILTIS, Pfc. WILFRED G., A. P. O., San Francisco, Calif.: 5 mollusks, 5 corals, 8 echinoderms, 3 snakes, 1 lizard, 7 frogs, and a few crustaceans (168794): a collection of insects, crustaceans, and mollusks (168945).

INGLIS, FRED B. (See under St. Clair Brooks.)

INSTITUTE OF TROPICAL AGRICULTURE, Mayagüez, Puerto Rico: 9 plants from Puerto Rico (170441).

INSTITUTO AGRONÓMICO DO NORTE, Belma, Pará, Brazil: (Through Dr. Felisberto Camargo) 14 plants from Brazil (168619).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: (Through Dr. Hernando García y Barriga) 155 plants from Colombia (167946); (through Francisco J. Otoya) 51 beetles from Colombia (168172); 342 plants from Colombia (168330, 168623 168648, exchange).

INSTITUTO DE EXPERIMENTAL AGRICOLA, Rio de Janeiro, Brazil: (Through Dr. Petr Wygodzinsky) 7 Hemiptera, representing 5 genera and 5 species (169412, exchange).

INSTITUTO EXPERIMENTAL DE INVESTIGACIÓN Y FOMENTO AGRICOLA-GANADERO, Santa Fe, Argentina: (Through Arturo E. Rangonese) 84 plants from Argentina (156573).

INSTITUTO GAMMON, Lavras, Minas Gerais, Brazil: 300 grasses from Brazil (170272, exchange).

INTERIOR, U. S. DEPARTMENT OF THE:

Bureau of Mines, Pittsburgh, Pa.: 8 photographs of mining scenes illustrating sources of mineral drugs (168423).

Fish and Wildlife Service, Chicago, Ill.: (Through Neil Hotchkiss) 12 plants from Alaska (167932), 12 grasses from Hudson Bay region, Canada (168969); 9 plants from Canada (169002), 156 plants from Mexico and Guatemala (169969); (through Isaac Ginsburg) 3 fishes from Dominican Republic collected in 1933 by John C. Armstrong (168056); (through A. L. Nelson) 22 specimens of gastropods from Massachusetts (169103); 1 skeleton of a longhorn steer (169463); 1 South American gull (169487); (through Dr. D. G. Frey) 76 marine mollusks from Chesapeake Bay, Md. (169847); (through Lyle Anderson) 57 marine invertebrates, 10 mollusks, 2 echinoderms, and 15 fishes (169897); 11 feathered headdresses and other ornaments from the Jivaro Indians of Ecuador (169953); (through Dr. John W. Aldrich) 13 partial skeletons of wild and domestic turkeys, 1 partial skeleton of a trumpeter swan (170302); skeleton of porpoise picked up by otter trawler *Mars* (170373); 1 Italian green woodpecker (170466); (through Dr. S. F. Hildebrand) 4 fishes (representing 4 species) from Punta San Diego, Fajardo, Puerto Rico, collected by Donald S. Erdman on March 8, 1945, and in May 1945 (170488).

Geological Survey, Washington, D. C.: 4 Pennsylvanian brachiopods from New Mexico (167811); about 3,500 Paleozoic and Mesozoic fossils received from the Chief of Engineers, U. S. Army, from the Canol Project, Canada (168127); 20 brachiopods from the Eocene and Cretaceous rocks in well core samples from Florida (168242); 100 Devonian fossils from northeastern Arizona collected by Dr. J. W. Huddle (168288); 6 specimens of high-iron high-alumina clay from Haneyville, Clinton County, Pa. (168327); approximately 1,000 Ordovician trilobites from the Levis boulders of Quebec (168736); 1 specimen of siderophyllite from Brooks Mountain, Seward Peninsula, Alaska (168893); 1 specimen of calomel (mercury ore) from Mariposa mine, Brewster County, Tex. (169373); 3 collections of vertebrate fossils, viz, 30 specimens from Flatiron, Elk Creek, near Newcastle, Colo., 50 Silurian and Devonian specimens from Arkansas and 25 Ordovician specimens from Wisconsin (169580); about 10,000 specimens of Paleozoic fossils from the Appalachian region and from other eastern States, collected by Dr. Charles Butts and resulting largely from cooperative work with State organizations (169690); a specimen of lead-zinc ore from Kimberly mine, Kokomo district, Summit County, Colo. (169754); 34 specimens of manganiferous and ferruginous chert from Perry and Lewis Counties, Tenn. (170034); approximately 200 specimens of fossils, ranging in age from Ordovician to Devonian, from Virginia and West Virginia (170362); approximately 500 invertebrate fossils, ranging in age from Cambrian to Silurian, from the Rose Hill area, southwestern Virginia (170363); 1 specimen of fluorite from San Juan area, Ouray County, Colo., presented by Mrs. Mary E. McClellan (170455).

National Park Service, Chicago, Ill.: (Through Erik K. Reed) Turkey bones from archeological sites at Mancos Canyon, Colo. (163335);

(through Thomas Boles) 2 cave insects collected in Carlsbad Caverns (167872); 46 plants from Grand Canyon National Park, Ariz. (168185).

INTERNATIONAL BUSINESS MACHINES CORPORATION, New York, N. Y.: (Through T. J. Watson) 2 original completely power-operated typewriters, the first of their kind produced for commercial service—(1) "Electromatic" all electric typewriter, Serial No. P–144 and (2) "International Proportional Spacing Machine," Serial No. 27559 (169125).

IOWA STATE COLLEGE, Ames, Iowa: 61 grasses from Iowa (167990); (through Dr. L. D. Tuthill) 6 specimens of insects, 2 paratypes of each (166824, exchange).

JACKSON, PROF. W. H., Blacksburg, Va.: 7 lots of mollusks, 1 lot of annelid worms, and 5 lots of crustaceans (169862).

JACOBSON, MORRIS K., Rockaway, N. Y.: 156 mollusks from Brank Lake, Warren County, N. Y. (169473); 16 mollusks (169585).

JAMES, ANITA. (See under Eleanor R. Binger.)

JELLISON, Maj. W. L., Hamilton, Mont.: 15 snakes, 1 frog, and 2 bats from near Dibrugarb, Likhampur, India (168043); 1,472 insects, including beetles, from Montana and Idaho (168392, 168475); 3 insects, paratypes of 2 species (170371). (See also under Federal Security Agency, Public Health Service, Hamilton, Mont.)

JENNINGS, C. C. (See under Rhode Island Department of Agriculture and Conservation.)

JOHANSEN, FRITS, Ottawa, Ontario: (Through Dr. Arthur Hasler) Approximately 5,000 identified fresh-water Crustacea and about 100 unidentified fresh-water Crustacea (168550).

JOHNS HOPKINS UNIVERSITY, Baltimore, Md.: (Through Dr. E. W. Berry) 1 lot of bird bones from Venezuela (168026).

JOHNSON, ALVIN, New York, N. Y.: A twinned calcite rhomb from New Mexico (168162).

JOHNSON, ARTHUR F., Minneapolis, Minn.: 4 specimens of old motion-picture film, cut from 50-foot reels and with bound edges entitled: "Annabel," "Train," "Circus Parade," and "Comedy" (168954).

JOHNSON, Prof. HELGI, New Brunswick, N. J.: 350 Ordovician fossils from the St. George and Table Head formations of Newfoundland (169811).

JOHNSON, Lt. MURRAY L., Baltimore, Md.: A collection of reptiles, amphibians, fishes, crustaceans, and insects from Sierra Leone, Ireland, Trinidad, St. Thomas, and Brazil (168299).

JOHNSON, PAUL E., Washington, D. C.: Gold finger ring worn by Lt. W. V. Riley, U. S. Army, when killed at the battle of the Little Big Horn, June 25, 1876 (168777).

JOHNSON, Lt. RAYMOND E., Lincoln, Nebr.: 1,048 fishes collected by donor and wife at St. Simons Island and vicinity, Ga., together with crustaceans, tadpoles, and a mollusk (160-888).

JOHNSTON, MRS. DOROTHY ELLIOTT MITCHELL, Washington, D. C.: 16 bird skins from Central America (170112).

JOHNSTON, Dr. W. D., Jr., Pelican Lake, Wis.: 1 aquamarine from Brazil, weight 124.94 carats (170403, deposit).

JONES, CHARLES F., Blanchester, Ohio; W. N. COLLINS, Paris, Tex.; and ROBERT CARDER, Lost Creek, W. Va.: 1 deer (169086).

JOYNER, Mr. and Mrs. CALVIN, Washington, D. C.: 16 jade Chinese rings, collected in Chungking, China, during present war (168537).

JUDAY, Prof. CHANCEY, Madison, Wis.: (Through Dr. Arthur D. Hasler) 6 lots of plankton from South Dakota and Manitoba collected in 1939 (168549).

JUDD, NEIL M., Washington, D. C.: 1 mole collected at Silver Spring, Md. (170158).

JUSSEN, VIRGINIA, Washington, D. C.: Dental plate of extinct fish (Miocene, Calvert) collected half a mile south of Chesapeake Beach, Calvert County, Md., 1942 (169516).

JUSTICE, U. S. DEPARTMENT OF, *Federal Bureau of Investigation*, Washington, D. C.: Incomplete skeleton of adult male Negro from South Carolina (169682).

KAINEN, JACOB, Washington, D. C.: Wood-engraving printed from 4 color-blocks depicting a Jewish altar of incense (169233).

KALTENBERGER, L. H., and L. C. VERDUIN, Washington, D. C.: Skull of beaked whale (168396).

KANSAS, UNIVERSITY OF, Lawrence, Kans.: (Through Prof. H. B. Hungerford) 1 bug (168887, exchange).

KARTMAN, Sgt. LEO, A. P. O., Miami, Fla.: 150 mosquitoes from Iran and Senegal (168165).

KAY, MAIRE WEIR, Columbus, Ohio: 2 types of trematodes (168522, 168878).

KEARNEY, Dr. T. H., San Francisco, Calif.: 2 plants from Arizona (168353).

KEENAN, JAMES E., Wichita, Kans.: 808 specimens (30 species) of Maquoketa Ostracoda from Castlewood Station, Mo. (168419).

KELLOGG, Dr. REMINGTON, Washington, D. C.: 1 pine mouse (168303).

KEMP, Corp. JAMES C. (See under Sgt. Henry E. Allanson, Jr.)

KENK, Prof. ROMAN, Ann Arbor, Mich.: Approximately 10 amphipods from Michigan (168846).

KENTUCKY, UNIVERSITY OF, Lexington, Ky.: 80 plants from Kentucky (169479, exchange).

KERNODLE, GEORGE H., Washington, D. C.: An Eli Terry shelf clock, ca. 1818 (168725, loan); early 19th-century surveyor's compass marked "S. Kern, inventor" and "J. A. Danner, Maker, Middleton, Va." (170227, loan).

KERR, Prof. PAUL F., New York, N. Y.: A specimen each of tungstite and hydrotungstite from Calacalani, Bolivia (168094).

KIBBE, EUGENE, Elsah, Ill.: 10 pictorial photographs sent for exhibition during the month of November 1944 (168909, loan); 4 pictorial photographs (169572).

KIENER, Dr. WALTER, Lincoln, Nebr.: 68 grasses from Colorado (169748).

KILLIP, ELLSWORTH P., Washington, D. C.: Specimen of bark cloth made from inner bark of the fig tree and collected in Peru by Guillermo Klug in 1931 (168765); 44 plants collected in Venezuela by F. Cardona, purchased from Dr. H. Pittier by Mr. Killip (169144); 60 plants from Maryland and Virginia (169616). (See also under Smithsonian Institution, National Museum.)

KILPATRICK, NORMAN L., Arlington, Va.: A late 18th-century "patriotic" hempen quilt, combining pieced and appliqued work in 9-patch blocks and a large center square showing an eagle and stars motif, which came from the Brown-Francis family homestead at Canterbury, Conn. (168993).

KIM, YONGJEUNG, Washington, D. C.: Korean national flag (*gook-gi*) (169781).

KINCAID, Prof. TREVOR. (See under University of Washington.)

KING, ROBERT C., Washington, D. C.: Child's 4-wheeled vehicle (hand-car) ca. 1900, used by the donor as a child (170052).

KING, Dr. ROBERT E., Denver, Colo.: 19 Permian brachiopods from the San Andres limestone of New Mexico (168474).

KING, Dr. W. V., Fort MacPherson, Ga.: 72 adults and pupae of mosquitoes from New Guinea and Australia (169104).

KINZER, CHARLES WILLIAM, Greenbelt, Md.: A model of Simplex car couplers (pair) and a model of a Dunn car coupler (169717, loan).

KIPLINGER WASHINGTON AGENCY, Washington, D. C.: (Through W. M. Kiplinger) Group of bronze statuettes (48 specimens) of notable public men, entitled "The Living Hall of Washington, 1944" (167812).

KIRK, Dr. EDWIN, Washington, D. C.: 12 etchings by various artists (169298)

KLEPPER, Mrs. LEON, Lock Haven, Pa.: A walking staff of Dr. A. T. Still, founder of osteopathy, owned by the late Dr. Harry M. Vastine, Harrisburg, Pa., uncle of the donor (169907). (See also under Estate of Dr. Harry M. Vastine.)

KLOSS, Mrs. GENE, Oakland, Calif.: 34 etchings by Gene Kloss, for special exhibition from February 12 through March 11, 1945 (169541, loan); 1 aquatint with drypoint combination, "Church of the Storm Country," by Gene Kloss (170056).

KNIGHT, Dr. J. BROOKES, Washington, D. C.: 5 specimens of a Pennsylvanian gastropod from the vicinity of St. Louis including 1 figured specimen (169900).

KNIGHT, Lt. KENNETH L., A. P. O., San Francisco, Calif.: A small collection of miscellaneous insects from Guadalcanal, including holotype, allotype, and 10 paratypes of 1 species of mosquito (169433); 17 specimens of mosquito material; 6 pinned adults including 2 holotypes, 1 allotype, 3 paratypes, 10 slides larval and pupal skins, 1 slide of genitalia (170504).

KOCH, WALTER H., Salt Lake City, Utah: 1 specimen of kermesite on stibnite from Triumph mine near Hailey, Idaho (169549, exchange).

KOHLS, Maj. GLEN M. (See under Federal Security Agency, Public Health Service, Hamilton, Mont., and under United States of America Typhus Commission.)

KOMP, Lt. Col. W. H. W., Ancon, Canal Zone: (Through Dr. J. P. E. Morrison) 35 land and fresh-water snails from Venezuela (168823); 4 ants from Canal Zone and 1 antlike spider from Colombia, collected by donor (170374).

KORFF, SERGE A., New York, N. Y.: 6 postage stamps of Peru and the United States (169812).

KOSCO, Comdr. GEORGE F., Tooele, Utah: 9 earthenware figurine heads from a site on the Orinoco River at Ciudad Bolivar, Venezuela (168542).

KOVARIK, ANTHONY, Circle, Mont.: (Through Joseph J. Cerny) A Bohe-

mian silver coin struck about A. D. 1300 (169609).

KRAUSS, N. L., Honolulu, Hawaii: 59 isopods, 5 amphipods, 2 earthworms, and 1 scorpion (167781).

KRIMKE, JEROME P., South Orange, N. J.: 40 pictorial photographs for special exhibition during October 1944 (168672, loan).

KUMM, Dr. HENRY W., New York, N. Y.: 95 mosquitoes, representing 11 species and including type and allotype of 2 species (167923).

KUNTZ, Lt. (jg) ROBERT E., F. P. O., San Francisco, Calif.: 84 fishes and 1 crustacean (168310)

KUSCHEL, P. GUILLERMO, Santiago, Chile: 122 beetles (170046).

KUSTER, Prof. K. C., Bloomsburg, Pa.: 5 weevils collected in Pennsylvania (167688).

LAMBROS, AGELCA, Washington, D. C.: 1 fish collected in 1937 on White Cloud Mountain near Canton, China (168840).

LAMM, DONALD W., A. P. O., Miami, Fla.: 62 bird skins from Brazil (168729, 169338, 170224).

LANDO, Ensign ROBERT ELLIS, F. P. O., San Francisco, Calif.: 83 marine shells, 4 starfishes, crabs, and insects (168218); 75 shells and some insects from southwest Pacific (169180); about 200 mollusks from the east New Guinea area, 1 coral, and a starfish (169318).

LARERY, ALICE M., Washington, D. C.: 1 plant from District of Columbia (168669).

LARRABEE, D. M. (See under A. Renato Semola.)

LARRABEE, HARVEY H., Jackson, Mich.: Model of a Seagrave fire engine, ca. 1942 (167307).

LEGRAND, Dr. DIEGO. (See under Museo de Historia Natural.)

LÉON, Rev. Brother, Habana, Cuba: 96 orchids from Cuba (167947, exchange); 134 plants from Cuba (168583, 168717, 168979); 20 grasses from Cuba (169475).

LEONARD, E. C., Washington, D. C.: 125 plants, mostly from Maryland (169182).

LEVI-CASTILLO, Dr. ROBERTO, Guayaquil, Ecuador: 5 specimens of mosquito material, comprising male and female types, 2 larval and 1 pupal skin of a new species (169996); 2 vials of mosquito eggs from Ecuador (170296).

LEWIS, Mrs. W. LEE, Evanston, Ill.: A mahogany case containing specimens of lewisite (American mustard gas, or "blister gas") and derivatives, prepared by Maj. H. W. Stiegler for use by Col. W. Lee Lewis, who first isolated and developed lewisite (170140).

LEWTON, Mrs. BLANCHE C., Takoma Park, Md.: 31 study samples of representative rayon fabrics, made for the spring and summer of 1943, identified as to name, weave, material, use, and source (168224).

LEWTON, Dr. F. L. (See under J. D. Beggs.)

LEYVA, CARLOS J., Pluma Hidalgo, Mexico: 6 specimens and 1 box of seeds of plants from Mexico (168338, 170226); 5 photographs of a plant (169797).

LINDSEY, Prof. ALTON A., Albuquerque, N. Mex.: 1 wood rat and 2 white-footed mice from New Mexico (169936); 4 ferns from New Mexico (169937).

LISLE CORPORATION, Clarinda, Iowa: 14 magnetic crankcase drain plugs (170506).

LLOYD, ROBERT H. (See under American Numismatic Association.)

LOCKLIN, CHARLES R., Detroit, Mich.: 39 fresh-water shells from Union Lake, near Pontiac, Mich. (168472); 8 fossil oystershells (170522).

LOUISIANA STATE UNIVERSITY, Baton Rouge, La.: Alga from Louisiana (168713).

LOUTTIT, W. EASTON, Jr., Providence, R. I.: A monocycle (incomplete) of period of 1869 (161728).

LOVELAND, JOHN WINTHROP (deceased), Washington, D. C.: Built-up scale model of the yacht *Ariel* (168987, bequest).

LUCAS, PAUL, Sanford, N. C.: 12 models comprising a set of miniature flour mill machinery, also 11 pairs of elevator boots and head and 500 elevator cups all made to the same scale as the models (168971, loan).

LYNCH, Prof. JAMES E., Seattle, Wash.: Approximately 330 amphipods (167-957).

LYONNET, Prof. PIERRE, Saltillo, Mexico: 576 plants from Mexico (167846).

MACCREARY, Lt. Comdr. DONALD. (See under Navy Department, National Naval Medical School.)

MAHAN, JOHN G. (See under University of Virginia, Miller School of Biology.)

MAHIEUX, PIERRE, Santa Rosalia, Baja California: (Through Ivan F. Wilson) 8 specimens of minerals and copper ores from Santa Rosalia (166526).

MAINE, UNIVERSITY OF, Orono, Maine: 63 plants from Maine (169763, exchange).

MALKIN, Pfc. BORYS, A. P. O., San Francisco, Calif.: A collection of miscellaneous insects, centipedes, frogs, lizards, from Dutch New Guinea and Australia (169703); a collection of

miscellaneous insects from Australia by the donor (170082); a collection of miscellaneous insects from Dutch New Guinea (170460).

MALKIN, SOLOMON, Washington, D. C.: An Edison Amberola (phonograph), Serial No. 20, and 1 cylindrical blue wax record No. 3130, "Who" (168263).

MALLERY, Capt. A. H., Columbus, Ohio: Ethnological specimens from the Melanesian village of Kala on Hood Bay, New Guinea (169816).

MANIFOLD, C. B., Washington, D. C.: (Through Department of Agriculture, Bureau of Entomology and Plant Quarantine) 1 beetle from the Bayano region in Panama (168539).

MANN, Dr. WILLIAM M., Washington, D. C.: 2 ceremonial staffs and 1 wooden club from Rennel Island, Solomon Archipelago, collected by the donor (168616).

MARIE, Rev. Father LOUIS, Quebec, Quebec: 75 grasses from Canada (169496).

MARSHALL, ERNEST, Laurel Md.: 2 woodchucks, 1 gray fox, 1 skunk, 1 mink, and 17 muskrats (168773).

MARSHALL, Prof. NELSON, Storrs, Conn.: 14 amphipods (169286).

MARSHALL, WILLIAM B., Washington, D. C.: Specimen of 4-lobed sassafras leaves (167877); 32 plants from New Jersey (168077, 168125); 4 plants from Washington, D. C. (168668).

MARTIN, GLENN J., Washington, D. C.: 1 photomechanical reproduction of a painting by George Hitchcock, produced by the Detroit Photographic Co in 1902 by a special process (168631).

MARTÍNEZ, Prof. MAXIMO, Mexico, D. F.: 108 plants from Mexico (170114, 170420).

MARTÍNEZ A., JUAN, Montevideo, Uruguay: 16 fishes from Uruguay (168960).

MARVIN, KATHERINE M., Lancaster, Mass.: A collection of matting, basketry, fish nets, and personal ornaments and a small collection of shells made by the donor's sister, Mary Marvin, in Micronesia (167619).

MAXON, Dr. WILLIAM R., Washington, D. C.: 13 plants from Washington, D. C. (168305, 168618).

MAYER, JAMES, Baltimore, Md.: (Through John Coyle) Steam-operated working model of mine hoisting engine and working model of coal-fired vertical steam boiler (170012).

MAYFIELD, Rev. WALKER, Bethesda, Md.: 2 specimens of ante-bellum homespun and a linen sheet and a cotton and wool blanket handwoven by Mrs. Susan (Moody) Hewett, Green Hill, Warren County, Ky., mother of Mrs. Walker Mayfield (170380).

MCALESTER, R. F., Columbus, Ohio: 1 specimen of marcasite from south of Stratford, Delaware County, Ohio (168901).

MCCANN, T. F., Denver, Colo.: 353 mollusks from the canyon of the Yampa River, Colo. (168759).

MCCLAY, ARTHUR, Sacramento, Calif.: 5 beetles (169292).

MCCLURE, Dr. F. A., Washington, D. C.: 4 plants from Washington, D. C. (167989); approximately 60 miscellaneous insects collected from bamboo (168394). (See also under Standard Brush & Broom Co. and U. S. Department of Agriculture.)

MCCRARY, O. F., Raleigh, N. C.: 1 cultivated plant from North Carolina (168604).

MCDONALD, Pfc. EDWARD D., Cleveland, Ohio: 5 plants from the Aleutian Islands (167890); 35 plants from Italy (169805).

MCGINTY, THOMAS L., Boynton, Fla.: 70 marine shells from Florida (168065); 8 mollusks and 1 crustacean (168608, 170184).

MCGUFFIN, FRANK L., Washington, D. C.: 8 specimens illustrating printing and processing of photographs on Ansco color paper (168203, loan); 6 Ansco Printon enlargements from 4 by 5 Kodachromes (169910).

MCGUSTY, Dr. V. W. T., Suva, Fiji: Model of a sea-going outrigger canoe, *baurau*, complete with mast, mat sail, and gear, made about 1940 by a Gilbertese man of Tarawa Island (168569).

MCMILLEN, Pfc. JACK R., A. P. O., New York, N. Y.: 38 insects (169611); 126 plants from Burma (169917, 170264).

MCVAUGH, Dr. ROGERS. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

MEAD, Hon. JAMES M. (See under Mrs. Helen Slater Ramsay.)

MEARNS, Estate of EDGAR A.: 1 Pocket Poco camera, 1 metal plate holder, 1 leather carrying case (167990).

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA, Washington, D. C.: (Through Theodore Wiprud) Portrait of Robert Morris, 1734–1806 (169467).

MENZEL, R. WINSTON, Yorktown, Va.: 2 fishes taken in the Chickahominy River (168603); 6 catfishes from the James River, Va. (168982).

MERRIMAN, Dr. DANIEL. (See under Yale University, Bingham Oceanographic Laboratory.)

MESSIC, BEN, Los Angeles, Calif.: 2 lithographs, "The Pitchman" and "Two Laborers," by the donor (168058).

METROPOLITAN CAMERA CLUB COUNCIL, Forest Hills, N. Y.: 87 salon

prints from special exhibition from January 9 to 31, 1945, inclusive (169321, loan).

MEYER, Maj. Gen. GEORGE R., A. P. O., New Orleans, La.: Nest of a swift from Panama (169569).

MEYER, Capt. M. C., F. P. O., San Francisco, Calif.: 90 marine invertebrates, 37 echinoderms, 89 mollusks, 1 coral, 13 parasitic worms, 14 insects, 1 calcareous alga, 1 reptile, and 30 fishes (169081).

MICHAEL, ARTHUR. (See under Smithsonian Institution.)

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.: 1 plant from Kiska Island, Alaska (167896); 430 mosses from Puerto Rico (169297); 564 plants from Hongkong (169571); 245 plants from Arizona (170040, exchange).

Botanical Garden: 95 ferns collected in Mexico by Jose V. Santos (169889); 272 grasses collected by Jose V. Santos in Mexico (169942).

Museum of Zoology: 21 fishes from Mexico and Minnesota (169998, exchange).

MICKEL, Dr. CLARENCE E. (See under University of Minnesota.)

MILES, CECIL, Mariquita, Colombia: 4 fishes from Colombia (168484, 169122).

MILLER, Prof. ALDEN H. (See under University of California, Museum of Vertebrate Zoology.)

MILLER, Lt. EDWIN V., A. P. O., San Francisco, Calif.: 1 beetle (169784).

MILLER, GERRIT S., Jr., Washington, D. C.: 2 box turtles, 1 bird, 8 mammals, 10 reptiles, 12 amphibians, and 214 plants from the vicinity of Gatlinburg, Tenn. (168805, 168952); 1 flying squirrel and 1 chipmunk (170547).

MILLER, Prof. LOYE HOLMES, Los Angeles, Calif.: (Through Dr. Carl L. Hubbs) 22 minnows from Sycamore Canyon, southern Arizona (168907).

MILLER, RALPH G., Los Angeles, Calif.: 763 experimentally raised fishes from Salton Sea and Death Valley region, reared in Los Angeles, Calif. (168671).

MILLER, Lt. RICHARD G., Los Angeles, Calif.: 3 young lizards and some unhatched lizard eggs from Makin Atoll, Gilbert Islands, collected by the donor (168535).

MILLER, WALTER S., Altoona, Pa.: 7 snakes, 2 lizards, 5 lots of tadpoles, 2 frogs and a small lot of insects from Oaxaca, Mexico (167195).

MILLS, Dr. H. B. (See under Federal Security Agency, Public Health Service, Hamilton, Mont.)

MINNESOTA, UNIVERSITY OF, St. Paul, Minn.: (Through Dr. Clarence E. Mickel) 6 beetles (169293).

MINOGUE, Lt. JAMES A., Alexandria, Va.: Stone ax found at Fish Lake about 25 miles northwest of Duluth, Minn. (168748).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 48 grasses (168621, exchange).

MITMAN, CARL W., Washington, D. C.: 1 camera shutter and 1 camera lens (168110).

MOLDENKE, Dr. HAROLD N., New York, N. Y.: 10 plants from Pennsylvania (168123, 168590).

MONTAGUE, JEFFRY, G. A., Gloucester, Va.: Quartzite blade taken from an oyster bed in the Ware River, near Ware Neck, Gloucester County, Va. (168880).

MONTE, Dr. OSCAR, São Paulo, Brazil: 25 miscellaneous insects (169753).

MONTGOMERY, JOHN D., A. P. O., San Francisco, Calif.: 1 beetle (169591).

MOORE, Dr. RILEY D. (See under Estate of Dr. Harry M. Vastine.)

MOORE, ROBERT T., Pasadena, Calif.: 1 bird skin (168524).

MOREELL, Admiral G. (See under Navy Department.)

MOREHOUSE, Pvt. ROBERT C., A. P. O., Seattle, Wash.: 98 plants from the Aleutian Islands (168520, 168859).

MORIN, Prof. CLAUDIO V. PAVETTI, Ann Arbor, Mich.: 9 grasses from Paraguay (169918).

MORRISON, Dr. J. P. E., Washington, D. C.: 6,357 American mollusks collected in Indiana, Michigan, Illinois, Wisconsin, Kentucky, etc., during the years 1921 to 1934 (169355); 2 bats from near Fairfax, Va. (170050). (See also under Capt. Graham Fairchild; Col. W. H. W. Komp; Smithsonian Institution; Kay L. Thurman; and Dr. James Zetek.)

MORRISON, MICHAEL P. E., Falls Church, Va.: 5 fishes and 2 crustaceans from near Falls Church (169938).

MORRISON, Lt. RAY E., Washington, D. C.: 3,370 marine shells from the Gilbert, Ellice, Phoenix, and Hawaiian Islands, as well as from Florida, and a few echinoderms and other marine invertebrates (170136); 6 recent shells and 20 fossil (Miocene) shells from 1 mile south of Chesapeake Beach, Md. (170424).

MORSE, Mrs. D. C., Solomons, Md.: 8 bottles of diatom plankton (170565).

MOUNTS, W. W., Washington, D. C.: An automobile duster (coat) (169060).

MULLIGAN, W. F., Berwyn, Md.: 1 nest of a parula warbler (170452).

MUNRO, J. A., Okanagan Landing, British Columbia: 148 fresh-water mollusks from British Columbia (168497); 8 amphipods (169027).

MUNROE, KATHERINE, Washington, D. C.: A chief's ceremonial fan from the Marquesas Islands and a feather ornament from northern South America, collected by Thomas Adamson, grandfather of the donor, about 1900 (168807).

MURRAY, S/Sgt. E. K., A. P. O., New York, N. Y.: 32 insects (168973).

MURRAY, Rev. J. J., Lexington, Va.: 3 birds (168249); 1 skin of a shrike (168755).

MUSEO DE HISTORIA NATURAL, Montevideo, Uruguay: (Through Dr. Diego LeGrand) 19 plants from Uruguay (160496).

MUSEO DE LA PLATA, La Plata, Argentina: (Through Dr. Ángel L. Cabrera) 100 grasses from Argentina (168348), 100 photographs of types of plants in the Herbario Apegazzini (168400, exchange).

MYERS, E. A., & SONS, Mount Lebanon, Pa.: 2 radioear vacuum-tube hearing sets, Nos. 16354 and 13664 (168425).

MYERS, Prof. GEORGE S. (See under Stanford University.)

NASIF, Sgt. ED. B., A. P. O., San Francisco, Calif.: A Philippine "Victory" stamp on cover and a Philippine "Victory" postcard, also 21 pieces of Japanese paper currency printed for circulation in the Philippine Islands (169865); U. S. airmail envelope, cover bearing 7 Philippine stamps and 25 Japanese 5-centavo stamps issued for use in the Philippine Islands during Japanese occupation (33 specimens) (170462).

NATIONAL ASSOCIATION OF WOMEN ARTISTS, INC., New York, N. Y.: 31 drawings and prints constituting the Association's traveling exhibition of blacks and whites (168200, loan).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: (Through the Carnegie Museum) 83 amphibians and reptiles from Venezuela collected by the National Geographic Society–Carnegie Museum Venezuelan Expedition, 1928–29 (170220).

NATIONAL MUSEUM OF CANADA, *Department of Mines and Resources*, Ottawa, Ontario: 2 grasses from Yukon (170001, exchange).

NATIONAL PHOTOGRAPHIC SOCIETY, Washington, D. C.: 92 pictorial photographs, Third Annual Salon, September 1–30, 1944 (168632, loan).

NATIONAL RESEARCH COUNCIL, Washington, D. C.: (Through Dr. W. Mansfield Clark) 1 plant from China (170228).

NATIONAL SPELEOLOGICAL SOCIETY, Washington, D. C.: (Through J. S. Petrie) 1 dog skull, some insects, and 1 plant (168442).

NAVY DEPARTMENT, Washington, D. C.: (Through Admiral G. Moreell) 99 original illustrations, published in "Native Woods for Construction Purposes in the Western Pacific Region," revised edition, 1944 (169700, deposit); 4 rats, forwarded by Ensign C. D. Tolman from the Marianas (170352); 11 albino rats and mice (170518).

Bureau of Ships, Washington, D. C.: 12 United States ensigns and 1 pennant flown on United States naval vessels during battles in the southwest Pacific Ocean and the Mediterranean Sea, 1942–43 (169300, deposit).

National Naval Medical School, Bethesda, Md.: 5 rats from the Marshall Islands (168000); (through Lt. Comdr. Donald MacCreary) 20 insects, 3 lizards, and 1 bat (168238); 10 balanoglossids and 149 fishes from Saipan, Marianas Islands (168515); 114 skins and 137 skulls of rats and mice (168596); 104 skins and skulls of rats and mice (168651); 1 squilla, 32 mammals, 4 birds (2 skins and 2 skulls), 90 rats, 44 lizards, 18 snakes, 25 frogs, and 11 mice (168733, 169039, 169502, 169604, 169806, 170059); 7 mollusks from Tinian, Marianas Islands (168822); 15 rats, forwarded by Officer-in-Charge, Rodent Control, Navy 140, Base Hospital No. 6 (168837); 54 mollusks from Tinian, Marianas Islands (169128, exchange); 110 mollusks from Samar, Philippine Islands (169491); 1 rat collected on island of Moesi, in Padaido Islands, Shouten Island group near Biak, Dutch New Guinea, November 2, 1944 (169606); 30 fresh-water snails and 11 rats from the Philippines (169921, 170543); about 285 mollusks from Okinawa (170568).

Naval Medical Research Unit #2: 89 mollusks and 9 reptiles from Saipan (168516); 85 crustaceans, 5 holothurians, 1 ophiuran, 42 fishes, 8 marine shells, 47 mammals, 167 reptiles and batrachians, and 9 insects from Solomon Islands (168638); 29 bird skins, 1 nest, and 1 set of eggs; 26 skins and 28 skulls of mammals (168753); 12 shrimps, 2 crabs, 1 sponge, 2 birds, 1 fish, 326 reptiles and amphibians, 48 mollusks, fragment of cestode, 7 mammals in alcohol, 4 sea-urchins, 45 insects, from Bougainville, Solomon Islands (168766); 99 mam-

mals, consisting of 74 skins, 1 skeleton, and 23 in alcohol; 107 bird skins, 1 bird skeleton, 1 bird in alcohol; 100 reptiles, 1 amphibian, and 2 plants from Bougainville Island (168946).

Office of Naval Operations, Washington, D. C.: Photostatic copies of U. S. Military Government Proclamations Nos. 1–5 and notices on firearms and curfew for the Marshall Islands, printed in English and Japanese (7 specimens) (167864).

U. S. Naval Air Station, Pensacola, Fla.: (Through Lt. (jg) Frank Craighead) 1 pelican (167777).

NEAL, G. MORELY, Toronto, Ontario: 11 slides of a rotifer (163699).

NEBRASKA, UNIVERSITY OF, Lincoln, Nebr.: (Through Dr. H. D. Tate) paratype of insect (168747, exchange).

NEBRASKA STATE HISTORICAL SOCIETY. (See under Work Projects Administration.)

NEIMAN, JACK, Jr., Gatlinburg, Tenn.: 1 model gasoline aircraft engine, "Atom" (168842).

NELSON, A. L. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

NELSON, Prof. CHARLES D., Grand Rapids, Mich.: 4 fresh-water shells from Lower Brower Lake, Mich. (169922).

NELSON, Lt. Comdr. CHARLES M., F. P. O., San Francisco, Calif.: 83 marine shells from the Marianas (169932).

NESBITT, Dr. H. H. J. (See under Canadian Government, Department of Agriculture.)

NEUROHR, Corp. GILBERT. (See under Corp. Frederick M. Bayer.)

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 10 photographs of type specimens of plants (168307); 141 plants from British Guiana and Surinam (169261, 170120, 170200); 497 plants from the western United States (169762, exchange).

NICHOLSON, T 5 A. H., A. P. O., San Francisco, Calif. (See under War Department, Army Medical Museum.)

NICKEL, FRANK F., Maplewood, N. J.: (Through Henry W. Nickel) Thatcher slide rule of about 1883 (169701).

NICKEL, HENRY W. (See under Frank F. Nickel.)

NOEL, ETHEL V., Indianapolis, Ind.: Blue and white, cotton and wool, double-weave jacquard coverlet in modified "Lilies and Stars" pattern, handwoven in 1838 at Bethany, Genesee County, N. Y., for B. Vaneps (168536).

NORTH DAKOTA, UNIVERSITY OF, Grand Forks, N. Dak.: (Through Prof. Neal A. Weber) 5 insects, comprising 4 larvae and 1 pupa (169028).

NORTHROP, Prof. STUART A., Albuquerque, N. Mex.: 4 type specimens of nautiloid cephalopods from the lower Permian, Chupadera formation of New Mexico (170377).

NYLAND, VINCENT, Patuxent, Va.: A Perkins kite, modification of the original Conyne design employed during World War I for elevating the radio aerials (169061).

OELMAN, P. H., Cincinnati, Ohio: 30 pictorial photographs for special exhibition during March 1945 (169818, loan).

OFFICE OF WAR INFORMATION, Washington, D. C.: 19 war posters, 15 duplicates (167949).

OFICINA FITOSANITARIA, Martínez de la Terre, Veracruz: 31 leaf bugs of the family Miridae (169836).

OLMSTED, Dr. A. J., Washington, D.C.: 1 folding dark-room lamp made for travelers and designed to burn candles, 1890 (168555).

OLSON, Pvt. HUGO L., A. P. O., New York, N. Y.: 2 praying mantes (168728).

OLSSON, Dr. A. A., Gloversville, N. Y.: Tertiary larger Foraminifera from Panama, Colombia, Peru, and Ecuador (168931).

O'NEILL, Rev. HUGH. (See under Catholic University of America.)

ORCHARD, C. O., San Antonio, Tex.: 6 marine shells and a collection of beetles from New Guinea (170024).

ORCUTT, C. R., San Diego, Calif.: 179 mosses from Jamaica (112574); 275 plants from Jamaica (112575).

OREGON STATE COLLEGE, Talent, Oreg.: 3 beetles (169294).

ORR, Dr. ROBERT T. (See under California Academy of Sciences.)

OSBORN, BEN, Glen Rose, Tex.: 162 plants from Oklahoma, Kansas, Nebraska, and adjacent States (158387, 169224).

OSBORN, MARY, Park Ridge, Ill.: Pharyngeal bone of a drumfish from Chesapeake Beach, Md. (168096).

OTOYA, FRANCISCO J. (See under Instituto de Ciencias Naturales.)

OWEN, Capt. WILLIAM B., A. P. O., San Francisco, Calif.: 73 mosquitoes comprising 1 holotype, 72 paratypes (170037).

OWENS, E. F., Yoakum, Tex.: 171 grasses from Texas (168718, 168978, exchange).

PAN AMERICAN SANITARY BUREAU, Washington, D. C.: 6 rats collected in Antioquia, Colombia, by Dr. J. A. Montoya (168237). (See also under Dr. Raymond Gilmore.)

PARIODI, Dr. LORENZO R., Buenos Aires, Argentina: 30 grasses from Argentina (168192, 169358, exchange).

PARRY, ALYCE, Washington, D. C.: 1 scarlet tanager (170345).

PASKOW, H. M. (See under William V. Schmidt Co.)

PAULLUS, Lt. J. H., F. P. O., San Francisco, Calif.: 611 insects, comprising 531 adults, 66 larvae, and 1 pupal skin of mosquitoes, and 12 camel crickets collected in the Philippine Islands (170545).

PAYNE, HELEN R., Washington, D. C.: Woolen quilt, pieced in a star and diamond pattern of 1A-inch hexagon patches ornamented with wool-embroidered rose and grape designs, made between 1825 and 1830 at Independence, Mo., by Mrs. Mary Modie (168994, loan).

PEABODY, THOMAS A., deceased, Fort Wayne, Ind.: An Oldsmobile automobile, 1902 (167743, bequest).

PEARSE, Dr. A. S. (See under A. M. Proctor.)

PELAEZ, Dr. D., Mexico, D. F.: 6 bugs (167942).

PENHALLOW, Dr. DUNLAP PEARCE, Washington, D. C.: A mounted moose head from New Brunswick, collected 1890–1900 (168302).

PENN, Lt. GEORGE H., F. P. O., San Francisco, Calif.: 8 crabs, 1 shrimp, 28 hermit crabs, 1 sipunculid, reptiles, mollusks, centipede, and insects, 1 fish (168213); 7 crustaceans, 5 reptiles, 2 frogs, 28 fishes, 2 insects, and 28 mollusks collected at Milne Bay, New Guinea (168551); a collection of natural-history material comprising crustaceans, worms, insects, 45 marine shells, echinoderms, 4 lizards, 4 snakes, 1 frog, and 23 fishes (168813); miscellaneous natural-history specimens (168977); 290 marine invertebrates, 100 insects, 600 mollusks, 14 reptiles, and 1 fish from the Philippines (169655).

PENNSYLVANIA STATE COLLEGE, State College, Pa.: 4 grasses from Pennsylvania (169664, exchange).

PERRY, Dr. STUART H., Adrian, Mich.: 1 specimen of the Odessa, Ector County, Tex., meteorite (168698).

PERRYGO, W. M., Washington, D. C.: 13 birds (warblers, thrushes, starlings, and woodpeckers) (170189).

PETERSON, ALICE V., Washington, D. C.: 1 white-throated sparrow (170300)

PETRIE, J. S. (See under National Speleological Society.)

PFOHL, LOUIS. (See under Design Center, Inc.)

PHAIR, A. W. A., Lillooet, British Columbia: Small collection of insects (167784).

PHELPS, Capt. ALLAN W., A. P. O., San Francisco, Calif.: Basalt adz collected from a shell hole on Saipan (168818).

PHELPS, CHARLES BLANCHARD, Jr., Grosse Point, Mich.: 40 pictorial photographs for exhibition in May 1945 (170142).

PHELPS, WILLIAM H., New York, N. Y.: 8 bird skins (167927, 168258, 168426, exchange).

PHILLIPS, Prof. WALTER S. (See under University of Arizona.)

PHOTOGRAPHIC SOCIETY OF AMERICA, Buffalo, N. Y.: 106 salon prints for special exhibition during August 1944 (168201, loan).

PICKENS, Prof. A. L., Clinton, S. C.: 1 plant (fungus) (168186).

PICKERELL, Capt. D. A., A. P. O., San Francisco, Calif.: 1 moth collected in Dutch New Guinea (170065); 28 insects and spiders (170254).

PICKFORD, Dr. GRACE E., New Haven, Conn.: 21 beetles, representing 11 species (170563, exchange).

PIEL, WALTER, Rehoboth Beach, Del.: Mollusk from Delaware (169166).

PIELTAIN, Dr. C. BOLIVAR, Mexico, D. F.: 3 cave beetles from Mexico (167943).

PITTA, ELPIDIO. (See under A. Renato Semola.)

PITTIER, Dr. H., Caracas, Venezuela: 137 plants collected in Venezuela by T. Lasser (169143).

PLUMMER, Dr. C. C., Mexico, D. F.: 10 specimens of Homoptera, including holotypes of 3 species (166765).

PODTIAGUIN, Dr. B., Asunción, Paraguay: 46 beetles (168105, exchange); 3 birds (168198).

POOLE, Mrs. MARGUERITE, Washington, D. C.: 1 cultivated plant (168950).

POST, JOHN C., Takoma Park, Md.: 1 sharp-shinned hawk (169678).

POST OFFICE DEPARTMENT, Washington, D. C.: 919 postage stamps received from the International Bureau of the Universal Postal Union and described in the bulletins of the Bureau (167857, 168143, 169443, 170030, 170072, 170207); 61 postage stamps and 4 post cards received from the Postal Administration of Great Britain (167857, 168503, 168948, 169077, 170030, 170396); 9 postage stamps from the Royal Netherlands Government at London (167857); Spanish double-barreled pistol made about 1850 (168082); 48 postage stamps of the U. S. S. R. received from the Soviet Postal Union (169077); 2 booklets (180 specimens) of postage stamps issued by the Allied Military Government for use in Italy and Germany, received by the Post

Office Department from the Treasury Department (169443); 3 copies of United States 8-cent airmail stamp (169849); 24 United States postage stamps issued in 1944 (169159); 3 3-cent Florida Commemorative postage stamps (170031); 3 copies of the United States 5-cent United Nations Conference Commemorative stamp (170459).

POTTER, Prof. DAVID, Worcester, Mass.: 1 grass from Massachusetts (169943).

POTZGER, Dr. J. E., Indianapolis, Ind.: 5 plants from Indiana (168193). (See also under Butler University.)

POWERS, Prof. EDWIN B., Knoxville, Tenn.: Approximately 50 parasitic copepods (167671).

PRATT, HARRY D. (See under Federal Security Agency, Public Health Service, San Juan, Puerto Rico.)

PRATT, HELEN S., Eagle Rock, Calif.: 54 plants from California (169955).

PRATT, Dr. IVAN, Wilson Dam, Ala.: 3 phyllopods from Limestone County, Ala. (168206).

PRICE, Sgt. DONALD H., Fort Miles, Del.: 1 leopard frog from Fort Miles, (170255).

PRINCE, F. M. (See under Federal Security Agency, Public Health Service, San Francisco, Calif.)

PROCTOR, A. M., Durham, N. C.: (Through Dr. A. S. Pearse) 1 crab (163881).

QUICK, Sgt. HORACE F., Camp Patrick Henry, Va.: 2 birds from Unalaska (169281).

RABKIN, Dr. SAMUEL, Cincinnati, Ohio: Embryological collection consisting of 32 cleared embryos and fetuses (from about 3 weeks to 6 months), 2 right halves of fetuses sectioned along the midline, 1 maniotic sac, and a set of 4 sections through adult maxillae showing the relation of a molar tooth to the antrum (168841).

RADIO CORPORATION OF AMERICA, *RCA Victor Division*, Camden, N. J.: D-Day Album containing 4 double-faced records bearing portions of the program broadcast by National Broadcasting Company on D-Day, June 6, 1944 (169952).

RAMSAY, Mrs. HELEN SLATER, Dalton, N. Y.: (Through Hon. James M. Mead) Silhouette of Nathaniel Boothe Nichols made about 1875 (169446).

RANGONESE, ARTURO E. (See under Instituto Experimental de Investigación y Fomento Agricola-Ganadero.)

RAPP, Ensign FLOYD A., Brooklyn, N. Y.: An australite found 75 miles east of Perth, Southwest Australia (168296).

RAPP, WILLIAM F., Jr., Urbana, Ill.: Ill.: 1 amphipod, 6 isopods, 2 parasitic worms, 8 mollusks (168501, (169262, 169427, 169773); 2 isopods from Reelfoot Lake, Tenn. (170197); 4 amphipods from Staten Island, N. Y. (170360).

RAPPAPORT, Capt. IRVING, A. P. O., San Francisco, Calif.: 21 fresh-water snails from Leyte, Philippines (170201).

RAWSON, Prof. D. S., Saskatoon, Saskatchewan: 25 amphipods, 5 mysids (170209).

RAY, Dr. CYRUS N., Abilene, Tex.: Incomplete skeleton with fragmentary skull (known as the J. C. Putnam skeleton) found along Clear Fork of Brazos River, 1943 (169699).

REED, CLYDE F., Baltimore, Md.: Fern from Maryland (169242).

REED, Dr. EDWYN P., Valparaiso, Chile: 96 insects (170044).

REED, ERIK K. (See under Department of the Interior, National Park Service.)

REED, FRED, Christchurch, New Zealand: 10 samples of diatomaceous earth from Oamaru, New Zealand (various deposits) (168477).

REED, Mrs. MARY STAFFORD, Washington, D. C.: 10 sample books of cotton and wool prints with recipes for dyeing and printing, used in England and in Dover and Manchester, N. H., by an English dyer, Thomas Stafford, uncle and father by adoption of the donor, and a printed copy of the "Defendant's Record on Final Hearing" of a suit in equity title John Bracewell vs. Passaic Print Works," wherein Thomas Stafford is the principal witness (167988).

REEDER, JOHN, Oak Park, Ill.: 108 grasses from California (169565).

REEDER, Sgt. JOHN R., A. P. O., San Francisco, Calif.: 8 grasses (168032).

REESIDE, Dr. JOHN B., Jr., Washington, D. C.: 436 mollusks from Montana and Wyoming (170600). (See also under Burton J. Westman.)

REEVES, Col. DACHE M., Alexandria, Va.: Photographs, engravings, and an etching of Stonehenge near Salisbury, Wiltshire, England (167938); 4 prehistoric stone implements from England presented to the donor during his 1944 sojourn in England (170049).

REGAN, S. D., Fort Lauderdale, Fla.: 2 specimens of hardwoods from tropical America (169158).

REHDER, Dr. HARALD A., Washington, D. C.: 9 mollusks from Roland Park, Center Ossipee, N. H. (168217).

REIMANN, IRVING G., Buffalo, N. Y.: About 250 Silurian and Devonian corals from western New York (167631).

REINHARD, Dr. E. G., Washington, D. C.: 10 cotypes of a parasitic crustacean (169821).

REINHARD, H. J., College Station, Tex.: 38 flies (170163).

RESNER, ERNEST, F. P. O., San Francisco, Calif.: 2 crabs (169157).

RHOADES, Dr. RENDELL, Blanchester, Ohio: 3 cotypes of crayfish (168054); 17 marine invertebrates, 10 mollusks, 1 starfish, 1 fish collected by the late Corporal Howard in Italy (169080).

RHODE ISLAND DEPARTMENT OF AGRICULTURE AND CONSERVATION, Kingston, R. I.: (Through C. C. Jennings) A small collection of mites taken from tomato plants in Rhode Island (166684).

RHODES, CHARLES E., Shrewsbury, Mo.: 9 crinoids from Missouri, all of Mississippian age (169534, exchange).

RICE, HAROLD B., Shoemaker, Calif.: 61 specimens of Japanese medical-military objects taken at Tarawa, Guadalcanal, and Tulagi (168283, loan).

RICE, WILLIAM S., Oakland, Calif.: 40 block prints for special exhibition from October 23 through November 19, 1944 (168815, loan).

RICHARDS, Dr. HORACE G., Philadelphia, Pa.: 3 specimens of Tertiary Bryozoa from Virginia and North Carolina (169171).

RICKER, P. L., Washington, D. C.: 2 photographs of plants (168811); 10 plants from the George Washington National Forest (168836).

RIKER, VILLION E., F. P. O., San Francisco, Calif.: 1 bird egg from Tinian Island, Marianas (169527).

RIKER, WILLIAM A., Norwich, Conn.: 1 pair of ice skates, ca. 1880 (168403).

RIPLEY, S. DILLON, Washington, D. C.: 354 bird skins and 1 skeleton from Ceylon (164398, 170221).

RITCHER, Dr. PAUL O., Lexington, Ky.: 3 vials of scarab larvae (164697, exchange); 25 beetles and larval skins of certain species, representing 4 species (168025); 14 beetles (168090); 14 beetles (12 third-stage larvae and 2 reared adults) (168476); 33 beetle larvae representing 8 species (169695; exchange); 2 beetle larvae (170494).

RIVAS, LUIS RENÉ, Habana, Cuba: 58 fishes, including 43 paratypes, and 2 crayfishes from Cuba and Mexico (168055).

ROBERTS, Dr. F. H. H., Jr. (See under Dr. J. D. Figgins.)

ROBERTS, Mrs. NORMAN L., Topeka, Kans.: Archeological specimens collected near Manhattan, Kans., by the late Dr. Norman L. Roberts (168543).

ROBINSON, Mrs. CLARENCE J., Alexandria, Va.: 4 pieces of brocaded silk dress fabrics, 1 brocaded moiré ribbon, 3 examples of needlework, and 1 piece of pen-and-ink work on cotton muslin, representing the periods of 1821, 1846, and 1866, all owned by the donor's grandmother, Mrs. William F. Haines, Corondelet, St. Louis, Mo. (170225).

ROCKEFELLER FOUNDATION, *Divisão Sanitaria Internationa*l, Rio de Janeiro, Brazil: 13 specimens of mosquito material representing 7 specimens, 6 of them by paratypes (169610).

ROEBLING FUND, Smithsonian Institution: A collection of 8 minerals from Mexico, comprising 2 argentites from Guanajuato, 2 native silvers from Batopilas, 1 legrandite from Coahuila, 1 argularite from Taxco and 1 stephanite and 1 pyrargyrite each from Zacetecas (168220); a sapphire weighing 9.46 carats from Ceylon (168159); 1 specimen of the Drum Mountains, Millard County, Utah, meteorite, weighing 1,164 pounds (168531); a set of 8 Chinese jades (168626); 1 green beryl, Wray mine, Yancey County, N. C., 39,157 carats (168781); a collection of calcite crystals from La Aurora mine, Areponapuchic, Chihuahua La Fe Mine, Rodeo, Durango, Mexico (169466): 1 cat's-eye chrysoberyl from Ceylon (169608); 1 natrolite from Livington, Mont. (169718); 1 phenacite weighing 9.94 carats and 1 diopside weighing 11.34 carats (169899); 2 specimens of quartz from Pacu, Minas Gerais, Brazil (170561).

ROESEN, OSCAR C., New York, N. Y.: Marconi coherer, 1906 (169267); an aircraft wireless transmitter, designed, built, and successfully tested by donor in 1911 (168821).

ROGERSON, T/Sgt. CLARK T., A. P. O. San Francisco, Calif.: 10 moths and butterflies (167915); 29 butterflies representing 16 species, of which 8 are new to the collections (168324); a small collection of Lepidoptera from the South Pacific (168629); 1 small collection of beetles from Bougainville (?) (168951); 153 butterflies (169495); 17 specimens of Lepidoptera from the Philippines (170527).

ROJAS, TEODORO, Jardin Botánico, Paraguay: 76 grasses from Paraguay (168069).

ROLLER, JANE H., Washington, D. C.: A white-throated sparrow (168829); 60 land snails from the District of Columbia (169863).

ROLLER, P. S., College Park, Md.: A specimen of kaolin from Ringgold,

Tenn., and 1 each of kaolin and bauxite from McIntyre, Ga. (168762).

ROOS, ALFRED, Washington, D. C.: Specimen of native copper pseudomorph after azurite from Copper Rose mine, Grant County, N. Mex. (168780).

ROOSEVELT, MRS. FRANKLIN D., Hyde Park, N. Y.: Mauve crepe dress worn by the donor at the afternoon reception given at the White House, January 20, 1945, on the occasion of the fourth inauguration of President Franklin D. Roosevelt (170349); dress and accessories worn by donor at the inaugural ceremonies on the morning of March 4, 1933 (170497).

ROSENBLATT, MARTIN S., San Francisco, Calif.: A collection of miscellaneous Chinese jades (168666).

ROSENGURTT, Dr. BERNARDO, Estación Juan Jackson, Uruguay: 55 plants from Uruguay (168317, 168873); 98 plants and 11 grasses from Uruguay (167998, 169665, 169997, 170098, 170354, exchange).

ROSS, Dr. H. H., Urbana, Ill.: 1 lepidopterous larva (169653). (See also under Illinois State Natural History Survey Division.)

ROTH, Lt. LOUIS M., Fort McPherson, Ga.: 167 slides of mosquito material from the southeastern United States (167904); 176 specimens of mosquito material comprising specimens from the southern United States and from New Guinea (168883). (See also under War Department, 4th Service Command Medical Laboratory.)

ROWAN, MRS. ANDREW SUMMERS, San Mateo, Calif.: (Through Odus C. Horney) Medal of the Cuban Order Carlos Manuel de Sespedes, awarded by the Cuban Government to Col. Andrew Summers Rowan, U. S. Army, in recognition of services during the Spanish-American War, 3 documents relating to the medal and services for which it was awarded, and Col. Rowan's military saber (168116).

ROWAN, EDWARD, Falls Church, Va.: 1 hybrid black-hooded red siskin × canary (170476).

RUNDLETT, EDWIN, Staten Island, N. Y.: A small collection of lepidopterous larvae, wood-feeders (168986).

RUNYON, ROBERT, Brownsville, Tex.: 8 plants from Texas (169964).

RUSK, LOU BABB, Campbell, Calif.: A blue-and-white, cotton-and-wool, overshot weave coverlet, "Pinebloom," probably made in Virginia by the donor's great-grandmother, Mrs. Johnston; also a sash-length of satin-striped grosgrain ribbon which was worn by the donor in 1880 (168187).

RUSSELL, AGNES, Washington, D. C.: 1 ovenbird (169032).

SAALFRANK, WILLIAM, Takoma Park, Md.: Approximately 75 specimens of Mississippian invetebrate fossils from the west edge of St. Louis, Mo. (169120).

SALISBURY, Dr. E. J. (See under British Government, Royal Botanic Gardens.)

SALTER, W. E., Washington, D. C.: Fragment of sea-turtle shell from Parkers Creek, Calvert County, Md. (168215).

SAMPSON, A. H. (See under White & Wyckoff Manufacturing Co.)

SAMPSON, Prof. ARTHUR W., Berkeley, Calif.: 27 plants and 25 grasses from Pacific Islands (168066, 168369 169326); 24 plants from the Russell Islands, Melanesia (169999).

SÁNCHES, JOSÉ, Mexico City, Mexico: 64 ferns from Mexico (168047, 168658)

SANDERS, J. G., Tingo María, Peru: 12 snakes and 1 caecilian from Fundo Sinchona, Peru (168207); 7 specimens of fancy woods from Peru (168749).

SAUNDERS, Capt. H. E., Washington, D. C.: 1 shrike (169855).

SCATTERGOOD, LESLIE W., Boothbay Harbor, Maine: 1 crab (168526).

SCHAEFFER, Prof. ASA A., Phildadelphia, Pa.: 1 shrimp (169062).

SCHENTHAL, Capt. JOSEPH E. (See under War Department, Army Service Forces Training Center.)

SCHIEFER, Dr. HELEN, Bogotá, Colombia: 1 plant from Colombia (169920).

SCHMIDT Co., WILLIAM V., New York, N. Y.: (Through H. M. Paskow) 1 opal weighing 10.62 carats from Querétaro, Mexico (170451); 1 purple fluorite, weighing 9.55 carats(170562).

SCHNEIDER, C. H., New York, N. Y. 22 specimens of nickel ores from New Caledonia (168355).

SCHOLS, I. H., Paramaribo, Surinam: Specimen of gibbsite (168514).

SCHROEDER, WILLIAM C. (See under Harvard University, Museum of Comparative Zoology.)

SCHULTZ, JAMES B., Takoma Park, Md.: Dental plate of a fossil ray from near Scientists Cliff, Md. (169727).

SCHWENGEL, Dr. JEANNE S., Scarsdale, N. Y.: 10 marine shells from Florida and Australia (169850).

SCOTT, J. H., San Francisco, Calif.: 1 scheelite specimen from Riverside Tungsten mine at Hyder, Alaska (168418).

SCRIPPS INSTITUTION OF OCEANOGRAPHY. (See under California Division of Fish and Game.)

SCULLEN, Prof. H. A., Corvallis, Oreg.: 1 insect (168710, exchange).

SEGHETTI, Dr. LEE, Bozeman, Mont.: 13 fresh-water snails from Montana (168791).

SELF, Dr. J. TEAGUE, Norman, Okla.: Type and 4 paratypes of helminths from Wichita Mountains Wildlife Refuge (170427).

SEMOLA, A. RENATO, and ELPIDIO PITTA, Espera Feliz, Brazil. (Through D. M. Larrabee) A crystal of muscovite from Urubu mica mine (169864).

SEMPLE, ARTHUR T. (See under Foreign Economic Administration.)

SENN, Dr. ALFRED, Barbados, British West Indies: Tertiary larger Foraminifera from Morocco, North Africa (168933).

SEVERIN, Prof. H. C., Brookings, S. Dak.: 4 mollusks from South Dakota (169636).

SHARER, Pfc. A. W., Cleveland, Ohio: 46 amphibians and reptiles from Camp Crowder, Mo., and Vint Hill Farms Station, Va. (168372).

SHENEFELT, Dr. ROY D., Pullman, Wash.: 2 paratypes of Hymenoptera (168164).

SHOPE, Comdr. R., Princeton, N. J.: 12 fresh-water shells from New Jersey (168323).

SIBLEY, CHARLES L., F. P. O., San Francisco, Calif.: (Through Dr. A. Wetmore) 12 specimens of Japanese paper currency of the period of World War II (169992); 9 specimens of Japanese paper currency of the period of World War II (170477).

SIDES, N. W. (See under Eureka Mica Mining Co.)

SILBAUGH, R. A., Washington, D. C.: 1 red-eyed vireo (170393).

SIMON, Lt. JAMES R., A. P. O., San Francisco, Calif.: 27 fishes collected in New Guinea by Capt. Ralph F. Honess (168124); 145 fishes from the Hawaiian Islands (169884).

SIMPSON, Mrs. ROXIE COLLIE, Washington, D. C.: 5 eggs of boat-tailed grackle (170574).

SINCLAIR, CHARLES C., Washington, D. C.: 1 blackpoll warbler (168541).

SKINNER & SONS, WILLIAM, New York, N. Y.: A series of specimens showing the screen printing process of ornamenting a jacquard-figured rayon crepe with a 3-colored war-inspired motif, and the actual screens used for the application of each successive color, also a specimen of nylon camouflage cloth (170051). (See also under Spool Cotton Co.)

SLATER, LYDIA R. (See under Georgia Slater Bartlett.)

SMITH, ALLYN G., Berkeley, Calif.: 1 mollusk from China (Cabrillo) Point, near Pacific Grove, Calif. (170425).

SMITH, G. STACE, Creston, British Columbia: 8 beetles (169279); (through J. W. Green) 4 beetles (169994).

SMITH, Mrs. HUGH M., Washington, D. C.: Palm leaf fan used by Burmese Buddhist priest (168678).

SMITH, Dr. M. R. (See under Prof. Kenneth W. Cooper.)

SMITH, OLIVE COLE, Mount Pleasant, Iowa: 1 paint box containing bladders, tins, and packets of pigment used by Deborah Goldsmith Throop about 1830 (168997).

SMITH, Dr. RALPH H. (See under University of California.)

SMITH, Prof. ROGER C., Manhattan, Kans.: 112 insects, representing 43 species, 6 of which are represented by 14 paratypes (170139, exchange).

SMITHSONIAN INSTITUTION, Washington, D. C.: The Arthur Michael collection of early American silver (162866); royal Hawaiian feather cape (*ahuula*) (169696); 1 line engraving, "The Flight into Egypt," by Carl M. Schultheiss, A. N. A., the annual associate member's print of the Society of American Etchers (170258); 1 portrait of George Eastman, framed (170532); 7 etchings by C. W. Sherborn (170549); 76 copper plates containing work in etching, aquatint, and drypoint by Charles W. Dahlgreen (170550). Deposit.

Bureau of American Ethnology: 8 ethnological specimens collected by J. N. B. Hewitt from the Iroquois Indians of the Six Nations Reserve, Grand River, Ontario, Canada, and by James Mooney from the Cherokee of North Carolina (168929); a collection of spoons and fishhooks from the Indians of the Northwest Pacific Coast of British Columbia and southeast Alaska and a bone skin scraper from the Alaskan Eskimo, all from the estate of David I. Bushnell, Jr. (168052); a collection of arrows, skin quivers, and headdresses from the Hupa Indians, Humboldt County, Calif., collected by E. G. Johnson (168260); 1 #3–A autographic, folding pocket kodak of 1914 (168552).

National Museum, collected by members of the staff: Chapin, Dr. Edward A.: A small collection of insects, mollusks, and crustaceans from Chile (169993); Conger, Paul S.: 12 bottles of diatom material from Chesapeake Bay (170566); Cooper, Dr. G. Arthur: Approximately 1,000 Middle Ordovician

invertebrate fossils collected in Virginia and Tennessee during October 1944 (169118), collection of Cambrian, Devonian, Mississippian, and Permian fossils from Sonora, Mexico (167698), 350 invertebrate fossils from the Middle Ordovician Chambersburg limestone of southern Pennsylvania, Maryland, and northern Virginia (168196); Killip, E. P.: 2,400 plants and 1 piece of wood collected in Colombia in 1944 (166783); Taxidermist Shop: 3 sparrows and 1 starling (169034); Watkins, William N.: Trade samples of the woods of sugar pine, ponderosa pine, and sycamore (170303); Wedel, Dr. Waldo R.: 5,677 specimens of archeological and skeletal material from Indian village and burial sites in Scott and Lane Counties, Kans., and surface collections from Buffalo and Sully Counties, S. Dak. (168615); archeological materials from a large rock shelter on the east rim of the Purgatoire River canyon about 20 miles east of Model, Las Animas County, Colo., 1938 (168676); Wetmore, A., and J. P. E. Morrison: 587 birds, 76 mammals, 25,000 mollusks, 99 helminths, 900 crustaceans, 347 reptiles and batrachians, 1,180 fishes, 24 echinoderms, 3,000 insects, 12 archeological specimens, and 1 specimen of wood (168826).

National Museum, made in Museum laboratories: Casts of type specimens of fossil bird bones from originals in Harold Cook collection, Agate Springs, Nebr. (164735).

National Museum, obtained by purchase: 314 plants from Venezuela (168546); a brass sewing bird or hemming clamp (169319); 4,838 photographs of type specimens of plants (169583); seamless, single weave, jacquard type coverlet, having cotton tabby foundation overlaid by pattern wefts of colored 2-ply wool yarns bound into the fabric by every fourth warp which give a small "bird-eye" effect to the ground, woven in 1845 by C. Fehr, in Emaus, Lehigh County, Pa. (169760); 3,162 photographs of type specimens of plants in European herbaria (170434).

National Zoological Park: 37 mammals (168300, 169630, 170546); 2 bird skins and 29 bird skeletons (168478, 169852, 170223); 5 ethnological specimens from the Kiriwina, Mormanby, and Woodlark Islands, Eastern New Guinea, collected by Lt. John H. Fulling (168617); 1 South American lungfish (168906); 33 specimens of fishes, from the East Indies, Africa, and South America (170237).

Smyth, S/Sgt. A. V., A. P. O., San Francisco, Calif.: 26 plants from New Guinea (170317).

Snow, W. E., Urbana, Ill.: 5 beetles from Illinois (169235).

Sonotone Corporation, Elmsford, N. Y.: 2 sets of Sonotone hearing aids (168424); 17 sets of hearing aids which illustrate steps in the evolution of this type of apparatus (169582).

Sorensen, A., Pacific Grove, Calif.: 1 mollusk and 1 alcyonarian (170154).

Soukup, S. S., Dr. J., Lima, Peru: 136 plants from Peru (168940).

Southworth, Charles, Thedford, Ontario: Approximately 500 specimens of Devonian brachiopods from southwestern Ontario (169132).

Soxman, G. M., Dallas, Tex.: 1 fern from Texas (169017).

Sperry, Dr. Omer E., Alpine, Tex.: 2 plants from Texas (169288).

Spool Cotton Co., and Crown Fastener Corporation, New York, N. Y.: (Through William Skinner & Sons) A machine-gun turret-slot installation for Bendix turret, having a carrier through which the gun barrel protrudes, and with tackle twill extending the tape of the double-acting slide fastener (168291).

Springer, Stewart, Fort Myers, Fla.: 1 fish taken from mouth of tiger shark (169503).

Springer Fund, Smithsonian Institution: 10 crinoids from the Mississippian rocks on the west edge of the city of St. Louis, Mo. (169119); 7 Devonian crinoids (169618).

Spurlock, Rev. W. Randall, Warner Robins, Ga.: Sioux Indian moccasins, beaded charm, and beaded bags, collected on the Rosebud Indian Reservation, S. Dak., 1905 (169986).

Standard Brush & Broom Co., Portland, Ind.: (Through Dr. F. A. McClure) 5 specimens of broom fibers—bass, bassine, bahia, palmyra, and palmyra stalks (169731).

Stanford University, *Natural History Museum*, Stanford University, Calif.: (Through Prof. George S. Myers) 12 fishes (paratypes) from Venezuela (164121).

Stanley-Brown, Mrs. Joseph, Kew Gardens, N. Y.: (Through Mrs. Herbert Feis) Collection of wooden masks and miniature totem poles from Indians of the Northwest Pacific Coast, collected by the late Joseph Stanley-Brown (168051).

Stauber, Dr. Leslie A., New Brunswick, N. J.: 10 crabs, representing various stages in the life cycle (170231).

STEARNS, J. L., Laurel, Md.: 1 wood specimen each of the chinaberry tree and the poison-ivy vine, collected by the donor (170548, exchange).

STEBBINS, Dr. G. LEDYARD, Jr., Berkeley, Calif.: 10 grasses from western United States (168956).

STEHLÉ, Dr. H., Fort-de-France, Martinique: 295 plants from Martinique and Guadeloupe (168329, 169629, 170171); collection of insects, 26 frogs and 4 lizards from Martinque (168525, 169566, 169860); 3 Lepidoptera from Tivoli, Martinique (169149); 2 ferns from the West Indies (169570).

STEIGLEMAN, FORREST E., Baltimore, Md.: 1 miniature dental articulator, complete with miniature upper and lower dentures, for addition to dental collection (168480).

STEPHENSON, Dr. L. W., Washington, D. C.: 7 mollusks from Texas (167919).

STERNER, ALBERT, Richmond, Mass.: 29 prints for special exhibition from September 25 through October 22, 1944 (168486, loan).

STERNFELT, Comdr. CARL W., Washington, D. C.: 39 reproductions of historic flags (168221).

STEVENS, EVERETT MELLEN, EVERETT MELLEN STEVENS, Jr., CHARLES WILLIAM STEVENS, and MARY ELIZABETH STEVENS, Nashua, N. H.: A pictorial linen damask tablecloth with medallion portrait of George Washington, used at Butterfield Tavern in Westford, Mass., during the 1830's (168261).

STEVENS & Co., INC., J. P., New York, N. Y.: 9 specimens of dress, shoe, and war fabrics made of various types of rayon yarns in the mills of S. Slater and Sons, Inc., Slater, N. C. (169505).

STEYSKAL, GEORGE, Detroit, Mich.: 9 flies (169498, 169795, 169831).

STICKEL, T/5 WILLIAM H., A. P. O., San Francisco, Calif.: Large collection of reptiles and amphibians from New Guinea (168422).

STIEGLER, Maj. H. W. (See under Mrs. W. Lee Lewis.)

STODDARD, Lt. C. H., St. Paul, Minn.: 20 small wood specimens collected by donor on Bankia Island, Russell Islands, Solomons (169954).

STODDARD, HERBERT L., Thomasville, Ga.: 34 birds from Georgia (167823).

STONE, Dr. ALAN. (See under Lt. (jg) J. N. Hutzel.)

STONE, BENTON, Negritos, Talara, Peru: 3 slides of Peruvian Upper Eocene Foraminifera, consisting of holotype, paratype, and 6 topotypes (170155).

STONE, JOSEPH C., F. P. O., New York, N. Y.: 1 bird spider (168166).

STONER, Mrs. DAYTON, Albany, N. Y.: 9,874 insects, comprising 4,256 Heteroptera, 2,062 Coleoptera, and 56 Homoptera and 3,500 miscellaneous insects, the property of the late Dayton Stoner (167884).

STRAUSS, EDWARD, Washington, D. C.: 1 "Expo" camera, 1904 (a miniature) (168505).

STRONG, E. E., Miami, Fla.: 1 Eastman #1 Pocket Kodak, ca. 1892, 1 Criterion view camera, Gundlach-Manhattan Optical Co., and 3 plate holders (168229).

STULLKEN, Lt. (jg) DONALD D., Pensacola, Fla.: 1 western burrowing owl (170375).

STUNTZ, Lt. STEPHEN, Jr., Washington, D. C.: 1 butterfly (167948).

SUNDAY EXPRESS PUBLISHING Co., Chenty, China: Chinese booklet entitled "Immortal Roosevelt" (170501).

SUSSANNE, Mrs. NATAL, Miami Beach, Fla.: 1 miniature painting on glass (168057).

SWARTZWELDER, Maj. J. C. (See under War Department, Office of the Surgeon General.)

TATE, Dr. H. D. (See under University of Nebraska.)

TAYLOR INSTRUMENT COMPANIES, Rochester, N. Y.: 1 Tycos Aneroid Sphygmomanometer $5090 (168398).

TEETERS, ROBERT. (See under Orville R. Edner.)

TEMPLEMAN, Dr. W., St. John's, Newfoundland: 15 harpacticoid copepods from external surface of lobster, representing a new genus and a new species (158737).

TENNESSEE DEPARTMENT OF CONSERVATION, *Division of Geology*, Nashville, Tenn.: (Through Kendall E. Born) 7 specimens of Middle Devonian Pegram sandstone from west Tennessee, containing invertebrate fossils (168727).

TERRY, ROBERT A., Centerville, Calif.: Tertiary larger Foraminifera from Panama (168932).

TEXAS, UNIVERSITY OF, Austin, Tex.: 239 plants, mostly from Texas (167847, 168854, 169420, gift-exchange); (through Dr. Fred A. Barkley) 48 plants from Texas (168325, exchange).

THIESSEN, Maj. ALFRED E., Arlington, Va.: 63 Philippine woods (170510).

THOMAS, JAMES H., Oneonta, N. Y.: 50 pictorial photographs for special exhibition during April 1945 (169903, loan).

THOMAS, Maj. WILLIAM B. S., Washington, D. C.: 1 twin crystal from near Accra, Gold Coast, Africa (169416).

THURBER, GRETCHEN O., Providence, R. I.: 1 Adler typewriter, ca. 1900 (168622).

THURMAN, KAY L., Vernal, Utah: (Through Dr. J. P. E. Morrison) 2 deer (169087).

TIDD, Dr. WILBUR M., and Dr. RALPH V. BANGHAM, Columbus, Ohio: Holotypes of 2 new species of copepods and paratypes of 1 species (169497).

TIMBERLAKE, P. H., Riverside, Calif.: 16 bees representing 9 named species (167971).

TISSOT, Dr. A. N. (See under University of Florida and Florida Agricultural Experiment Station.)

TITTERINGTON, Dr. P. F., St. Louis, Mo.: 1 lot of potsherds from the Andrew Snyder village site (Hoewellian) near Mount Victory School, Richwood Township, Calhoun County Ill. (168259).

TODD, Dr. A. C., Baton Rouge, La.: Holotype and paratype each of 2 new species of nematodes (167965).

TOLLEFSON, Sgt., A. P. O., San Francisco., Calif.: A small collection of Lepidoptera from the Solomon Islands (170526).

TOLMAN, R. P., Washigton, D. C.: 7 portraits engraved about 1850 by A. H. Ritchie in mezzotint combined with mixed methods (168992); 96 Christmas cards by various artists, selected from the donor's collection for special exhibition from December 18, 1944, through January 14, 1945 (169244, loan).

TOWNSEND, Dr. C. H. T., São Paulo, Brazil: (Through Capt. David G. Hall) 1,860 flies, including 4 paratypes of 3 species (170218).

TRANSCONTINENTAL & WESTERN AIR, INC., Washington, D. C.: Display model of a TWA Boeing Stratoliner (33-place transport for substratosphere operations) (168228); display model of Douglas Day-Sleeper Transport DC–3 or DS–T (169683); display model of "Constellation" plane built for TWA by Lockheed (169243).

TREASURY DEPARTMENT, Washington, D. C.:

Bureau of the Mint: United States coins struck at the Denver, Philadelphia, and San Francisco mints in 1944 (30 specimens) (169905).

Bureau of Customs: A collection of 160 semiprecious stones (170319).

TROMBINO, TONY, F. P. O., San Francisco, Calif.: 1 mollusk (170376).

TRUITT, Dr. R. V., College Park, Md.: 2 crabs and 65 oysters (170246).

TUERK, Capt. MILTON, A. P. O., New York, N. Y.: A package of seeds from Burma (170060).

TUTCHINGS, Mrs. EVERETT, New York, N. Y.: 29 portrait miniatures in a single frame, made by Pirie MacDonald, father of the donor, in Albany, N. Y., 1890–1900 (169846).

TUTHILL, Dr. L. D. (See under Iowa State College.)

TUTTLE, Mrs. MACOWIN, South Bristol, Maine: Water lens and stand patented in 1881 by C. J. Dehyle and a magnifying glass (168171).

UNDERWOOD, Mrs. P. O., Detroit, Mich.: 1 mollusk (170413).

UNITED STATES ANTARCTIC SERVICE, Washington, D. C.: 42 bird skins, 18 bird skeletons, and 1 seal skull (169054).

UNITED STATES OF AMERICA TYPHUS COMMISSION, Washington, D. C.: 18 small mammals from Egypt (169603); (through Maj. Glen M. Kohls) 1 kangaroo collected by Major Kohls in New Guinea, March 15, 1944 (169737); 15 small mammals, including 5 squirrels, 2 mice, 7 rats, and 1 shrew, shipped by Capt. Kenneth E. Stager from Burma (170073); 5 rats in alcohol shipped by Lt. Col. Cornelius B. Philip, Philippine Islands (170126); 2 rats forwarded by Lt. Harry Hoogstraal (170128); 83 birds and 22 mammals from Burma (170490).

URIBE, Dr. LORENZO URIBE, Bogotá, Colombia: 20 plants from Colombia (168683, 168667, 170129).

VAIDEN, M. G., Rosedale, Miss.: 2 song sparrows (169596, exchange).

VAIL, Comdr. S. P., Dallas, Tex.: 2 dobsonflies (168421); 4 insects (168763).

VALENTINE, Dr. J. M., McLean, Va.: 13 beetles including 7 holotypes and 6 paratypes (168393).

VALERIO, Prof. MANUEL, San José, Costa Rica: 101 mollusks and 323 insects from Costa Rica and Cuba (167168).

VAN SCHAAK, Lt. G. B., F. P. O., San Francisco, Calif.: 241 plants from the Aleutian Islands (168737, 170408, 170463).

VARGAS, C., Dr. CESAR, Cuzco, Peru: 77 plants from Peru (168184).

VARGAS, JESÚS MENDOZA, Veracruz, Mexico: 10 mollusks from Tapapulum, Misantla, Veracruz, Mexico (169285); 67 land shells from Mexico (170359).

VARGAS, Dr. LUIS, Mexico, D. F.: Small collection of mosquitoes including adults and pupae, representing 5 species (167953).

VARRELMAN, Dr. F. A., Washington, D. C.: 21 plants from Guatemala (170304).

VASTINE, ESTATE OF Dr. HARRY M., Harrisburg, Pa.: (Through Mrs. Leon Klepper and Dr. Riley D. Moore) 12 specimens pretaining to the early history of osteopathy (170381).

VAUGHAN, Dr. T. WAYLAND (See under R. Wright Barker.)

VENEZUELA SERVICIO BOTÁNICO, *Ministerio de Agricultura y Crio*, Caracas, Venezuela: Photograph of plant (169121, exchange).

VERDUIN, L. C. (See under L. H. Kaltenberger.)

VERRILL, A. HYATT, Lake Worth, Fla.: 4 mollusks from Florida (170426).

VIKEN, A. J., Manhasset, N. Y.: 1 Beidler-Viken twin camera, 2 Ilex photoplastic lenses, and 1 Ilex Universal shutter (168169); booklet of panorama views on the estate of Mrs. George D. Pratt, Glen Cove, Long Island, N. Y. (168241, loan).

VIRGINIA, UNIVERSITY OF, *Miller School of Biology*, Charlottesville, Va. (Through John G. Mahan) 1 slide of new species of turbellarian worm (170436).

VISEL, GLADYS, Washington, D. C.: 7 plants from Washington, D. C. (168306, 168782).

VOGTMAN, T/5 DONALD B., A. P. O., San Francisco, Calif.: A collection of miscellaneous insects from Netherlands New Guinea (170429).

VONDELL, JOHN H., Amherst, Mass.: 40 pictorial photographs for exhibition during September 1944 (168405, loan).

WAGNER, Lt. (jg) WARREN H., Jr., F. P. O., San Francisco, Calif.: 60 ferns from Puerto Rico (167845); 32 ferns from Oahu and Guam (169782); 6 ferns from Maryland (167939); 356 butterflies (167944); 74 ferns from Pacific Islands (169346); 115 butterflies from the Marshall and Admiralty Islands, Saipan, and Guam, also a few other insects (169520); (with Lt. (jg) D. F. GRETHER) 182 specimens of Lepidoptera from Hawaii, the Marshall Islands, Los Negros, and Manus, Admiralty Islands, Guadalcanal, and the Philippines (170524).

WALCOTT FUND, Smithsonian Institution: Approximately 3,000 specimens of lower Devonian silicified fossils, 200 middle Devonian fossils from the eastern Catskill region in the vicinity of Saugerties, N. Y. (167820).

WALES, JAMES ALBERT. (See under James A. Wales Jr., Richard Beach Wales, and Nancy Holbrook Wales.)

WALES, JAMES A., Jr., RICHARD BEACH WALES, AND NANCY HOLBROOK WALES, New York, N. Y.: (Through James A. Wales) Original model of Alfred Ely Beach's typewriter for the blind, patented 1856, and 2 McDonough wall-type telephones ca. 1887, donated by the great-grandchildren of Alfred Ely Beach (163196).

WALKER, DR. EGBERT H., Washington, D. C.: 15 plants and 1 fern from District of Columbia, Maryland, Virginia, and Pennsylvania (168006, 168262, 170432).

WALKER, ERNEST P., Washington, D. C.: Parasitic worm from Occoquan, Va. (168098); a collection of stone lamps, a fox trap, lance points and other ethnological specimens of the Eskimo of Kodiak Island, a Russian teakettle of copper, all collected in Alaska by the donor (168304); 1 hamster (168301).

WALKER, Maj. Gen. WALTON H., A. P. O., New York, N. Y.: Bronze bust of Adolf Hitler (169202).

WALLACE, Lt. (jg) CHARLES, Bellevue, Md.: 2 mollusks from Florida (170291)

WALLACE, Hon. HENRY A., Washington, D. C.: 2 painted Neolithic jars presented to him by Gen. Ku Chung-lun, Chairman of the Kansu Provincial Government, Lanchow, China (168114).

WALLACE, MARY BRUCE, Washington, D. C.: Engraving of George Washington, in mezzotint combined with mixed engraving methods, by A. H. Ritchie after the painting by P. F. Rothermel (169234).

WAR DEPARTMENT, Washington, D. C.: (Through Bell Aircraft Corporation Airplane XP 59A (Bell Airacomet), first jet-propelled airplane built and flown in the United States, designed and constructed by the Bell Aircraft Corporation in 1942 for the Army Air Forces (170106).

Army Air Forces, Dayton, Ohio: 1 type C–1 emergency sustenance vest (168687), loan).

Army Air Forces Tactical Center, Orlando, Fla.: (Through Lt. Earl S. Herald) 26 mosquitoes from Florida (170323).

Army Medical Museum: (Through Maj. H. A. Davis) 4 snakes and 4 lizards from New Guinea and India (167858), 3 snakes and 1 frog from New Guinea, collected by Chaplain Anselm W. Keefe (168071) 168751), 16 snakes and 3 lizards and 1 frog collected in New Guinea by Squadron Surgeon, 65th Service Squadron Unit 1 (168752), 1 seasnake, 4 fishes, and 2 insects from Capt. Raymond Roberts, 201st Medical Composite Unit (169084), 19 rats, 1 bandicoot, 1 shrew, 5 nematode worms, and a small collection of insects from New Guinea (168253, 168847, 169170, 169258, 169354, 169445, 169528, 169602), skin and skull of a bandicoot (169071), 3 bats in alcohol (169957), forwarded by Capt. Carl O. Mohr); 41 leeches forwarded by the 249th General Hospital (168985); bronze bust on pedestal of Dr. Horace Wells (169020); 4 bats, 2 rats, 1 gecko, collected by Pfc. Percy A. Chandler at New Delhi, India,

summer of 1944 and March–April 1945 (169227, 170113, 170159); 5 giant rats collected by Capt. Milton H. Buehler (169240); 42 rodents, 1 bandicoot, 16 bats forwarded by 19th Medical Service Detachment General Laboratory (169605, 170127); 2 crabs and 1 octopus (169680); 12 rats from Morotai Island (169704); 9 rats and 2 bats from the Philippine Islands (169801, 170261); 8 rats forwarded by 31st Malaria Survey Detachment (170355); 4 bats collected by T/5 A. J. Nicholson (170448).

Army Service Forces Training Center, New Orleans, La.: (Through Capt. Joseph E. Schenthal) 22 mosquitoes, representing 7 species, from Louisiana (167727).

Fourth Service Command Medical Laboratory, Fort McPherson, Ga.: (Through Maj. Stanley J. Carpenter) 91 mosquitoes of 15 species of southwestern United States (168-197); (through Lt. Louis Roth) 67 mosquitoes (168538).

Malaria Laboratory and Control Unit, A. P. O., Miami, Fla.: 19 mosquitoes from Trinidad (168391).

Office of the Surgeon General, (Through Maj. J. C. Swartzwelder) 300 mollusks from Lake Tali-Fu, Yunnan, China (169726).

WARD'S NATURAL SCIENCE ESTABLISHMENT, Rochester, N. Y.: An andradite garnet from Graham County, Ariz, a cobaltite from Salmon, Idaho, and a uraninite from Cornwall, England (169365, exchange); a specimen each of keramohalite xonotlite (168004, exchange).

WASHINGTON, UNIVERSITY OF, Seattle, Wash.: (Through Prof. Trevor Kincaid) Collection of amphipods from Puget Sound and Alaska, approximately 97 alcoholic specimens and 175 slides (168547); (through Prof. C. Leo Hitchcock) 9 plants from Idaho (169325, exchange).

WATSON, T. J. (See under International Business Machines Corporation.)

WEATHERBY, C. A. (See under Harvard University, Gray Herbarium.)

WEBB, Maj. J. E., A. P. O., San Francisco, Calif.: 1 spider and 3 centipedes (169126).

WEBBER, Dr. J. M., Riverside, Calif.: 2 specimens of yucca (169902).

WEBER, Prof. NEAL A. (See under University of North Dakota.)

WESTMAN, BURTON J., Etna, Calif.: (Through Dr. J. B. Reeside, Jr.) 22 Silurian invertebrate fossils from Siskiyou County, Calif. (169145).

WEST VIRGINIA UNIVERSITY, Morgantown, W. Va.: 34 plants from West Virginia (169526); (through Prof. Earl L. Core) 162 plants from West Virginia (169817, exchange).

WETMORE, Dr. A., Washington, D. C.: 4 skeletons of birds, Colombia snipe (167924); 7 birds from Shenandoah National Park (167925); 1 nestling house sparrow (167926); 27 bird skins (168395, 169035, 169758, 170379); 1 bat from Takoma, Md. (169612); 4 specimens of Philippine postage stamps on cover (169854). (See also under Charles L. Sibley and Smithsonian Institution, U. S. National Museum.)

WETZEL, Mrs. FLORA H., Washington, D. C.: Engraving of the Lord's Prayer, by H. Heath with pencil note from Everhard Snyder, of the period about 1862–64 (168485).

WHITE, Mrs. ELEANOR C., Washington, D. C.: 130 plants, mostly mosses, from eastern United States (168076).

WHITE & WYCKOFF MANUFACTURING Co., Holyoke, Mass: (Through A. H. Sampson) Art calendar for 1945 (168957).

WHITEHEAD & HOAG Co., Newark, N. J.: Silver token commemorating the airplane flight of Amelia Earhart across the Atlantic Ocean in 1928 (170581).

WHITTEN, HORACE L., Chauvin, La.: 26+ marine invertebrates, 4 crabs, 173 echinoderms, mollusks, 2 frogs, 1 insect, and 60 fishes (169078, 169460, exchange); 4 fishes from south of Timbalier Island (169742, exchange); 10 fishes from near Wine Island, La. (169972, 170107, exchange).

WILKE, Ensign C. FORD, Brooklyn, N.Y.: 2 skins of European linnet (169282).

WILKE, Ensign HOWARD T., F. P. O., San Francisco, Calif.: 1 leaf-insect (169188).

WILLARD, Dr. BRADFORD, Bethlehem, Pa.: Fossil starfish (type) from the Upper Ordovician (Martinsburg formation), Cumberland County, Pa. (168048).

WILLCOX, Capt. FRED P., Arlington, Va.: 41 pictorial photographs for special exhibition during July (167951, loan); 4 pictorial photographs (168908).

WILLETT, GEORGE, Los Angeles, Calif.: 3 paratypes of mollusks (169324).

WILLIAMS, Dr. FRANCIS X., Honolulu, Hawaii: 6 flies (170047). (See also under Lt. Sherwin F. Wood.)

WILLIAMS, Dr. J. STEWART, Logan Utah: 3 cotypes of a Mississippian blastoid from Utah (169715).

WILSON, Lt. CHARLES S. Takoma Park, Md.: 1 vial of copepods from Guadalcanal (170199).

WILSON, IVAN F. (See under Pierre Mahieux.)

WILSON, L. WAYNE, Moorefield, W. Va.: 3 amphipods and 6 mollusks (166985); 20 parasitic worms (169167) 1 vial of parasites collected from a turtle (170061).

WIPRUD, THEODORE. (See under Medical Society of District of Columbia.)

WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY, Madison, Wis.: 3 copepods, approximately 50 cladocerans, and 20 ostracods (168812).

WITCHEN, ELSIE, Washington, D. C.: Infant girl doll of period 1881 (169619).

WOLF, HARRY J., Washington, D. C.: 1 specimen of sphalerite from Big Four mine, Kremmling, Colo. (168802).

WOOD, T/5 CARROLL E., Jr., Fort George Meade, Md.: 6 butterflies from Virginia, representing 4 species (168544).

WOOD, Lt. SHERWIN F., F. P. O., San Francisco, Calif.: (Through Francis X. Williams) 437 mosquito larvae (169114); 304 mosquitoes and other flies from Saipan and Tinian, Marianas Islands (169417).

WORK PROJECTS ADMINISTRATION, Washington, D. C.: (Through Nebraska State Historical Society) skeletal remains from sites Nh 4 (Whitten site, Nemaha County) and Do 4b (Havlicek farm, Douglas County) in Nebraska, collected through joint operations of the Society and W. P. A. (168168).

WYGODZINSKY, Dr. PETR. (See under Instituto de Experimental Agricola.)

WYOMING, UNIVERSITY OF, Laramie, Wyo.: 194 plants from Wyoming, Texas, and Mexico (169529, exchange).

YALE UNIVERSITY, *Bingham Oceanographic Laboratory*, New Haven, Conn.: (Through Dr. Daniel Merriman) 1 fish taken by the *Pawnee* at Cat Island in the Bahamas, 1927 (169429, exchange).

School of Forestry, New Haven, Conn.: Small sample of ciruelillo wood from Cuba (169488, exchange).

YOLLES, Lt. STANLEY F., A. P. O., Miami, Fla.: 25 mollusks from Cayenne, French Guiana (168674); 27 specimens of fresh-water mollusks and 47 specimens of fishes from French Guiana and the French Antilles (169192).

YOUNG, EDWARD L., F. P. O., San Francisco, Calif.: 13 mosses from the Aleutian Islands (169770).

YOUNG, JAMES B., Louisville, Ky.: 1 white-eyed vireo (167973, exchange).

ZELIFF, Prof. C. COURSON, State College, Pa.: 1 slide of parasitic worm (169289).

ZETEK, JAMES, Balboa, Canal Zone.: (Through Dr. J. P. E. Morrison) 385 fresh-water shells from Panama (168825); 178 isopods and about 200 shipworms, including the type of a new species, from Canal Zone (167866); 14 specimens of *Peripatus* collected on Barro Colorado Island from leaf mold (170062).

ZIMMER, Dr. JOHN T. (See under American Museum of Natural History.)

ZODAK, PETER, Peekskill, N. Y.: A specimen each of stilbite, basalt, and heulandite with amethystine quartz and 2 specimens of altered cacholong from the Consolidated Quarry, Great Notch, N. J. (168024).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1944–45

BULLETINS

Bulletin 185, part 3. Checklist of the coleopterous insects of Mexico, Central America, the West Indies, and South America. Compiled by Richard E. Blackwelder. 8vo, pp. i–iv, 343–550. May 21, 1945.

PAPERS PUBLISHED IN SEPARATE FORM

FROM VOLUME 29, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Part 2. Mexican phanerogams described by M. E. Jones. By C. V. Morton. Pp. 87–116. Asteraceae described from Mexico and the Southwestern United States by M. E. Jones, 1908–1935. By S. F. Blake. Pp. 117–137. May 21, 1945.

FROM VOLUME 94 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i–vi, 583–598. December 1, 1944.

No. 3177. Parasitic copepods in the United States National Museum. By Charles Branch Wilson. Pp. 529–582, pls. 20–34. July 10, 1944.

FROM VOLUME 95 OF THE PROCEEDINGS

No. 3179. A collection of birds from northern Guanacaste, Costa Rica. By Alexander Wetmore. Pp. 25–80, pls. 3–6. July 7, 1944.

No. 3180. Studies in Neotropical Mallophaga (III) [Tinamidae No. 2]. By M. A. Carriker, Jr. Pp. 81–233, figs. 1–29. October 10, 1944.

No. 3181. The fishes of the family Characinidae from Venezuela, with descriptions of seventeen new forms. By Leonard P. Schultz. Pp. 235–367, figs. 30–56. September 6, 1944.

No. 3182. New genera and species of oriental and Australian plant bugs in the United States National Museum. By Tsai-Yu Hsiao. Pp. 369–396, fig. 57. August 5, 1944.

No. 3183. New species of buprestid beetles from Trinidad. By W. S. Fisher. Pp. 397–409. July 22, 1944.

No. 3184. The Fulgoroidea, or lanternflies, of Trinidad and adjacent parts of South America. By R. G. Fennah. Pp. 411–520, pls. 7–17. May 24, 1945.

No. 3185. Summary of the collections of amphibians made in Mexico under the Walter Rathbone Bacon traveling scholarship. By Edward H. Taylor and Hobart M. Smith. Pp. 521–613, figs. 58–61, pls. 18–32. January 30, 1945.

FROM VOLUME 96 OF THE PROCEEDINGS

No. 3186. Review of the spider monkeys. By Remington Kellogg and E. A. Goldman. Pp. 1–45, figs. 1–2. November 2, 1944.

No. 3187. A revision of the American clingfishes, family Gobiesocidae, with descriptions of new genera and forms. By Leonard P. Schultz. Pp. 47–77, pl. 1. December 30, 1944.

No. 3188. New beetles of the family Eucnemididae from Central America and the West Indies. By W. S. Fisher. Pp. 79–93. May 8, 1945.

No. 3189. New lanternflies (Fulgoroidea) from South America. By R. G. Fennah. Pp. 95–104, pls. 2–3. May 9, 1945.

No. 3190. The genus *Fundella* Zeller: A contribution toward a revision of the American pyralidoid moths of the family Phycitidae. By Carl Heinrich. Pp. 105–114, pls. 4–6. May 18, 1945.

No. 3191. A new genus and two new species of percoid fishes from New Guinea, family Centropomidae. By Leonard P. Schultz. Pp. 115–121, figs. 3–4. March 6, 1945.

No. 3192. Three new sciaenid fishes of the genus *Ophioscion* from the Atlantic coasts of Central and South America. By Leonard P. Schultz. Pp. 123–137, figs. 5–8. April 25, 1945.

No. 3193. The ichneumon-flies of the genus *Cryptanura* Brullé, mainly Tropical American. By R. A. Cushman. Pp. 139–176. May 23, 1945.

No. 3194. Neotropical lanternflies of the genus *Phrictus* in the United States National Museum, with descriptions of four new species. By John S. Caldwell. Pp. 177–184, pls. 7–10. May 16, 1945.