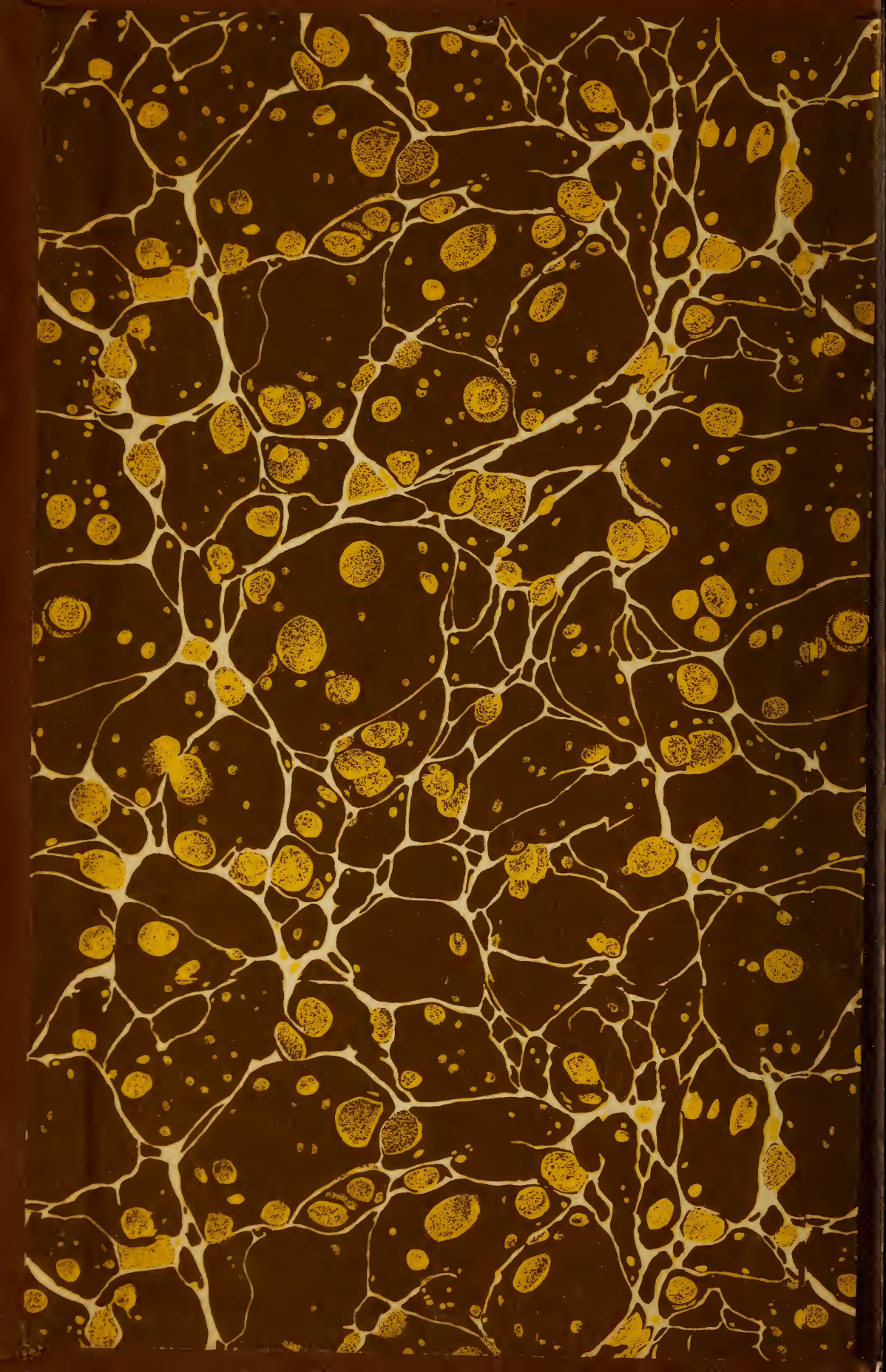
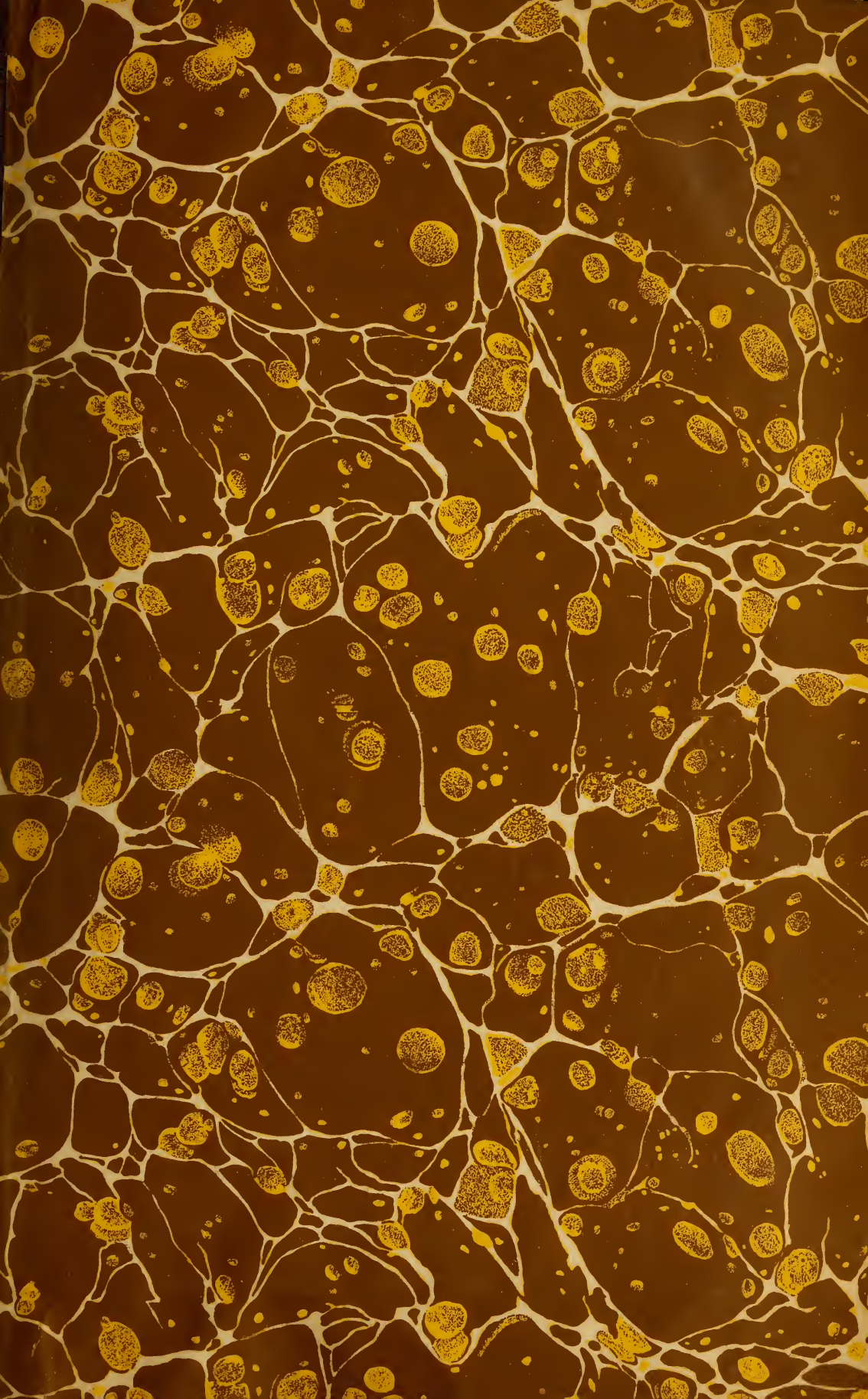
MISCELLANEOUS PUBLICATIONS
OF THE
BUREAU OF STANDARDS

NOS. 91-102

AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO





DEPARTMENT OF COMMERCE
BUREAU OF STANDARDS
George K. Burgess, Director

ORGANIZATIONS COOPERATING WITH THE NATIONAL BUREAU OF STANDARDS

Miscellaneous Publication No. 96

Issued April 26, 1927

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1927

ORGANIZATIONS COOPERATING WITH THE NATIONAL BUREAU OF STANDARDS[1]

Most of the work of the Bureau of Standards is made effective through voluntary cooperation of States, municipalities, scientific and professional societies, trade associations, manufacturers, and individuals who accept the findings of the bureau (often the result of cooperative research) and incorporate them into a State law, a municipal ordinance, a dimensional standard, or a standard of quality, performance, or practice.

All such cooperation is encouraged to promote a better understanding between producer and consumer and between industries to the end that industry shall, as far as practicable, be self-regulatory.

Many national organizations assist the bureau directly in research, standardization, and simplification projects and, in turn, the bureau cooperates officially with numerous national organizations engaged in similar effort, frequently designating members of the staff to serve on committees.

The extent of these relationships is shown in the accompanying list, which gives the cooperating agency and the nature of the cooperative project. This list includes also technical committees on which the bureau is represented.

Organization supporting research associates at the bureau and groups constituting the membership of bureau advisory committees are listed in other publications.

---

[1] Prepared by I. J. Fairchild.

COOPERATING ORGANIZATIONS AS OF DECEMBER 31, 1926

[With projects sponsored by the bureau, or committees on which the bureau is represented]

Name and address of association	Project
Advisory Committee to Bureau of Mines on Warning Agents for Manufactured Gas, A. C. Fieldner, secretary, Bureau of Mines, Pittsburgh, Pa.	Warning agents for manufactured gas.
Allegheny Observatory, Pittsburgh, Pa.	New measurements of solar wave lengths.
American Association for Advancement of Science, B. J. Livingston, secretary, Smithsonian Institution, Washington, D. C.	Committee of 100 on Scientific Research Council.
American Association of State Highway Officials, 638 Munsey Building, Washington, D. C.	Paving brick simplification; steel reinforcing bar simplification.
American Association of Wool Blanket Manufacturers, care of Chatham Manufacturing Co., Winston-Salem, N. C.	Bed blanket simplification.
American Bankers Association, A. Dunbar, president, 110 East Forty-second Street, New York, N. Y.	Bank checks, notes, drafts, and similar instruments simplification.
American Bridge Co., J. H. Edwards, assistant chief engineer, Empire Building, 71 Broadway, New York, N. Y.	Arc-welded plate girder trusses for Stevens Hotel.
American Brush Manufacturers Association, 505 Arch Street, Philadelphia, Pa.	Paint and varnish brush simplification.
American Bureau of Welding, William Spraragen, secretary, 29 West Thirty-ninth Street, New York, N. Y.	Joint Committee on Street Railway Welded Joints (operated through the National Research Council jointly with the American Electric Railway Association); Pressure Vessel Committee; Welding Wire Specifications Committee.
American Ceramic Society, Ohio State University, Columbus, Ohio.	Cafeteria and restaurant chinaware simplification; enamel division, Standards Committee; glass division; hotel chinaware simplification, refractories division; Special Cooperating Committee on Refractories; whiteware division, Committee on Standards.
American Chemical Society, 1709 G Street NW., Washington, D. C.	Board of editors, Journal of the American Chemical Society; Supervisory Committee on Standard Methods of Analysis; Committees on Standard Apparatus, Metric System, Guaranteed Reagents; Council.
American Concrete Institute, 1807 East Grand Boulevard, Detroit, Mich.	Committees C-3, Treatment of Concrete Surfaces C-6. Field Methods; E-1, Reinforced Concrete, Building Design, and Specifications; E-3, Research; E-4, Fire Resistance of Concrete; G-4, Nomenclature; T-1, Crazing. Concrete building unit simplification.
American Construction Council, 28 West Forty-fourth Street, New York, N. Y.	Better Building Committee (executive board).
American Electric Railway Association, 8 West Fortieth Street, New York, N. Y.	Steel-locker simplification.
American Electrochemical Society, Colin G. Fink, secretary, Columbia University, New York, N. Y.	Committee on Primary and Secondary Batteries; Board of Managers; electrothermic division; Monthly Review; Publication Committee.
American Engineering Council, 26 Jackson Place, Washington, D. C.	Simplified practice planning committee.
American Engineering Standards Committee, Dr. P. G. Agnew, secretary, 29 West Thirty-ninth Street, New York, N. Y. NOTE.—American Engineering Standards Committee projects listed here are sponsored by the National Bureau of Standards.	Executive Committee; Electrical Advisory Committee; Safety Code Correlating Committee; Simplified Practice Planning Committee; Special Committee on Form and Arrangement of Published Standards and Specifications; Committee on Preferred Numbers for Size Standardization; Sectional Committees[1] A-2-1919, Specifications for Fire Tests on Materials and Constructions; A-17-1925, Safety Code for Elevators and Escalators; B-13-1924 on Safety Code for Logging and Sawmill Machinery; C-2-1922 on Electrical Safety Code; C-5 on Code on Protection Against Lightning; C-12-1922 on Code for Electricity Meters; C-18 on Dry Cells; D-1-1925 on Aeronautical Safety Code; D-3 on Colors for Traffic Signals; D-4 on Safety Code for Automobile Brakes and Brake Testing; K-2-1925, on Gas Safety Code; X-2-1922 on Safety Code for the Protection of Heads and Eyes of Industrial Workers.

[1] The National Bureau of Standards is officially represented on 56 additional sectional committees functioning under American Engineering Standards Committee procedure.

Cooperating organizations—Continued

Name and address of association	Project
American Face Brick Association, 130 North Wells Street, Chicago, Ill.	Face brick and common brick simplification.
American Foundrymen's Association, R. E. Kennedy, technical secretary, 909 West California Street, Urbana, Ill.	Pouring temperatures of brass; Committee on Corrosion; Committee on Refractories; Joint Committee on Molding Sand Research (with National Research Council).
American Gas Association, 342 Madison Avenue, New York, N. Y.	Chemical Committee; Approval Requirements Committee; Committee on Approval Requirements for Space Heaters; Safety Requirements Committee.
American Geophysical Union (Section of Terrestrial Magnetism and Atmospheric Electricity), J. A. Fleming, secretary, Department of Terrestrial Magnetism, Carnegie Institution, Washington, D. C.	Committee on Earth Currents and Polar Lights.
American Hardware Manufacturers Association, F. D. Mitchel, secretary, 1819 Broadway, N. Y.	Sheet-steel simplification.
American Home Economics Association, Mills Building, Washington, D. C.	Bed-blanket simplification.
American Hospital Association, W. H. Walsh, executive secretary, 18-20 East Division Street, Chicago, Ill.	Hospital-bed simplification; hospital chinaware simplification.
American Hotel Association of the United States and Canada, Auditorium Tower, Chicago, Ill.	Chinaware simplification in general.
American Institute of Architects, 19 West Forty-fourth Street, New York, N. Y.	Simplification of construction materials in general.
American Institute of Electrical Engineers, F. L. Hutchinson, secretary, 33 West Thirty-ninth Street, New York, N. Y.	Meetings and Papers Committee; Standards Committee; Committees on Communication, Electrochemistry and Electrometallurgy, Instruments and Measurements, Protective Devices, Research, Safety Codes.
American Institute of Mining and Metallurgical Engineers, 29 West Thirty-ninth Street, New York, N. Y.	Committees on Iron and Steel; Institute of Metals Division; Committee on Research.
American Iron, Steel, and Heavy Hardware Association, B. R. Sackett, secretary-treasurer, 503 Arch Street, Philadelphia, Pa.	Shovel, spade, and scoop simplification.
American Marine Standards Committee, A. V. Bouillon, secretary, division of simplified practice, Department of Commerce, Washington, D. C.	Marine simplification and standardization in general; Committes 8-6, Marine Joiner Hardware and Skylight Lifting Gears; 9-5, Pipe Flanges, Fittings, etc.; 9-11, on Fire-Brick and Refractory Cement; 10-12 on Chinaware, Glassware, Tableware, etc.; 10-11 on Hose, Fire, Water, Steam and Oil; 10-13 on Blankets, Mattresses, Pillows, Cushions, Linens, and Cottons; 8-15 on Fittings and Cowls for Ventilators.
American Medical Association	Committee for formulating method for determining power of spectacle lenses of the section on ophthalmology.
American Mining Congress, 841 Munsey Building, Washington, D. C.	Sectional Committee on Standards for Wire Rope for Mines; Committee on Outside Coal Handling Equipment.
American Paper and Pulp Association, 18 East Forty-first Street, New York, N. Y.	Paper simplification.
American Petroleum Institute, 250 Park Avenue, New York, N. Y.; C. A. Young, 1508 Kirby Building, Dallas, Tex.	Committee on Standardization; Correlating Committee on Gauges and Gauging Practice.
American Physical Society, Prof. W. E. Webb, secretary, Columbia University, New York, N. Y.	Council; Committee on Standardization of Scientific Instruments.
American Railway Association, 431 South Dearborn Street, Chicago, Ill.	Steel reinforcing bar simplification.
Signal section, H. S. Balliet, secretary, 30 Vesey Street, New York, N. Y.	Committee on Batteries.
American Railway Engineering Association, E. H. Fritch, secretary, 431 South Dearborn Street, Chicago, Ill.	Yards and Terminals Committee.
American Shovel Institute, 909 Oliver Building, Pittsburgh, Pa.	Shovel, spade, and scoop simplification.
American Society for Municipal Improvements, P. O. Box 234, Saint Petersburg, Fla.	Asphalt simplification.
American Society for Steel Treating, 4600 Prospect Avenue, Cleveland, Ohio.	Committee on Hardness Testing; Recommended Practice Committee; Subcommittee on Heat Treatment of Wrought Aluminum Alloys; committee cooperative with War Department.

Cooperating organizations—Continued

Name and address of association	Project
American Society for Testing Materials, C. L. Warwick, secretary-treasurer, 1315 Spruce Street, Philadelphia, Pa.	Committees A-1 on Steel; A-2 on Wrought Iron; A-3 on Cast Iron; A-5, Corrosion of Iron and Steel; A-6, Magnetic Properties; A-8, Magnetic Analysis; A-9 on Ferro-Alloys; B-1 on Copper Wire; B-2 on Nonferrous Metals; B-3 on Corrosion of Nonferrous Metals and Alloys; B-4, Heating Wires; C-1, Cement; C-2, Reinforced Concrete; C-3, Brick; C-5, Fireproofing; C-6, Drain Tile; C-7, Lime; C-8, Subcommittee on Slagging; C-9, Concrete and Concrete Aggregates; C-10, Hollow Masonry Building Units; C-11, Gypsum; D-1, Protective Coatings for Structural Materials; D-2, Petroleum Products and Lubricants; D-5, Coal and Coke; D-8, Bituminous Waterproofing and Roofing Materials; D-9, Electrical Insulating Materials; D-11, Rubber Products; D-13, Textiles; D-14, Screen Wire Cloth; D-15, Thermometers; D-16, Slate; D-17, Naval Stores; E-1, Methods of Testing; E-4, Metallography; E-5, Standing Committees; E-8, Nomenclature and Definitions; E-9, Correlation of Research. Research Committees on Yield Point of Structural Steel; Effect of Tin and Arsenic on High-Speed Tool Steel. Simplification of grinding wheels.
American Society of Civil Engineers, 33 West Thirty-ninth Street, New York, N. Y.	Joint Committee on Standard Specifications for Concrete and Reinforced Concrete.
American Society of Mechanical Engineers, Calvin W. Rice, secretary, 29 West Thirty-ninth Street, New York, N. Y.	Committees on Instruments and Methods, Power Test Codes; Lubrication, Investigation of Underlying Scientific Laws of Lubrication. Special Research Committee on Cutting and Forming of Metals; Refractories Committee; Safety Committee; Special Research Committee on Metal Springs; Committee on Standardization in the Mechanical Industries; survey of opportunities for simplification.
American Society of Refrigerating Engineers, 35 Warren Street, New York, N. Y.	Research Committee, Refrigeration Problems.
American Society of Safety Engineers (engineering section, National Safety Council), W. H. Cameron, general manager, 108 East Ohio Street, Chicago, Ill.	Executive Committee; Committee on Electrical-Hazards; Committee on Research, Standards, and Codes; Committee on Static (electricity) Research.
American Specification Insitute, Frank A. Landall chairman, 160 North La Salle Street, Chicago, Ill.	Metal-lath simplification; sidewalk, floor, and roof light simplification.
American Supply and Machinery Manufacturers Association, F. D. Mitchell secretary-treasurer, 1819 Broadway, New York, N. Y.	File and rasp simplification; die head chaser simplification.
American Vitrified China Manufacturers Association, Wheeling, W. Va.	Chinaware simplification in general.
American Warehousemen's Association, 545 Wabash Building, Pittsburgh, Pa.	Warehouse form simplification.
Asbestos Paper Manufacturers Association, 246 North Seventeenth Street, Philadelphia, Pa.	Asbestos paper and asbestos millboard simplification.
Asphalt Association, The, 25 West Forty-third Street, New York, N. Y.	Asphalt simplification.
Associated General Contractors of America (Inc.), 1038 Munsey Building, Washington, D. C.	Steel reinforcing bars simplification.
Associated Industries of Massachusetts, O. L. Stone, general manager, 950 Park Square Building, Boston, Mass.	Survey of opportunites for simplification.
Associated Metal Lath Manufacturers, care of Berger Manufacturing Co., Canton, Ohio.	Metal-lath simplification.
Association of Educational Buyers, The, Lincoln, Nebr.	Steel-locker simplification.
Association of Manufacturing Bank and Commercial Stationers, C. Conradis, Colorado Building, Washington, D. C.	Bank checks, notes, and similar instruments simplification.
Better Bedding Alliance of America, 440 South Dearborn Street, Chicago, Ill.	Hospital-bed simplification.
Box Board Association, John R. Mauff, general manager, 400 North Michigan Avenue, Chicago, Ill.	Box board thickness semplification.
Bricklayers, Masons, and Plasterers International Union of America, Box 575, Indianapolis, Ind.	Structural slate simplification.
Building Officials' Conference, Frank Burton, president, City Hall, Cambridge, Mass.	Simplification of construction materials in general.
California Manufacturers Association, 805 First National Building, Oakland, Calif.	Survey for simplification opportunities.
Cap Manufacturers Credit Association, Colorado Building, Washington, D. C.	Milk and cream bottle and bottle-cap simplification.
Central Supply Association, 1915 City Hall Square Building, Chicago, Ill.	Brass lavatory and sink trap simplification.

Cooperating organizations—Continued

Name and address of association	Project
Chamber of Commerce of the United States, D. A. Skinner, secretary, Washington, D. C.	National Fire Waste Council; Simplified Practice Planning Committee.
Chemical Society of Washington	Executive Committee.
Chemical Warfare Service, United States Army	Advisory board.
City of New York purchasing department, Municipal Building, New York, N. Y.	Steel reinforcing bar simplification.
Common Brick Manufacturers Association of America, Ralph P. Stoddard, secretary-manager, 2121 Guarantee Title Building, Cleveland, Ohio.	Face brick and common brick simplification, strength of brickwork.
Concrete Block Machinery Association, 530 Dublin Avenue, Columbus, Ohio.	Concrete building unit simplification.
Concrete Products Association, 542 Monadnock Block, 53 West Jackson Boulevard, Chicago, Ill.	Do.
Consolidated Gas Co. of New York, W. Cullen Morris, chief engineer, 130 East Fifteenth Street, New York, N. Y.	Mechanical properties of cast-iron pipe.
Contracting Sheet Metal and Roofers Association, Twelfth and Breckenridge Street, Louisville, Ky.	Sheet-steel simplification.
Copper and Brass Research Association, George A. Sloan, secretary, 25 Broadway, New York, N. Y.	Copper roofing.
The Cordage Institute, J. E. McDaniel, secretary, 350 Madison Avenue, New York, N. Y.	Methods of socketing manila rope.
Cotton Duck Association, 290 Broadway, New York, N. Y.	Cotton-duck simplification.
Department of architecture, State of New York, Albany, N. Y.	Steel-locker simplification.
Department of Commerce Committee on Pan American Standardization.	
Desk Manufacturers Association, J. Arthur Whitworth, manager, 801 Michigan Trust Co. Building, Grand Rapids, Mich.	Cut tacks and small cut nail simplification.
District of Columbia Building Code, Col. John W. Oehmann, chairman, District Building, Washington, D. C.	Advisory Committee on Building Code.
Eastern Association of Electrical Inspectors, E. P. Slack, secretary, 85 John Street, New York, N. Y.	Program Committee.
Eastern Supply Association, 261 Broadway, New York, N. Y.	Range-boiler simplification; hot water storage tank simplification.
Electrical Safety Conference, R. B. Shepard, secretary, 109 Leonard Street, New York, N. Y.	Committee on Inclosed Switches; Committee on Industrial Controllers.
Employing Book Binders Association of America, 141 Broadway, New York, N. Y.	Paper simplification.
Federal Purchasing Board	Federal purchasing policies.
Federal Specifications Board	Federal purchase specifications.
Folding Box Manufacturers National Association, H. A. Dickie, secretary, 19 West Forty-fourth Street, New York, N. Y.	Box board thickness simplification.
Forged Tool Society, Pittsburgh, Pa	Forged-tool simplification.
Gas Products Association, J. M. Cameron, secretary-treasurer, 140 South Dearborn Street, Chicago, Ill	Committee on Screw Threads on Cutting and Welding Torches.
General Federation of Women's Clubs, 1734 N Street NW., Washington, D. C.	Bed-blanket simplification.
Glass Container Association, I. G. Jennings, business manager, 22 East Seventy-fifth Street, New York, N. Y.	Milk and cream bottle and bottle-cap simplification.
Grinding Wheel Manufacturers' Association of United States and Canada, Frank R. Henry, secretary, care of A. A. Simmonds-Dayton Co., North Summit Street and Negley Place, Dayton, Ohio.	Grinding-wheel simplification.
The Gypsum Industries, H. H. McDonald, secretary, 844 Rush Street, Chicago, Ill.	Technical Problems Committee.
Hollow Building Tile Association, J. S. Sleeper, secretary, Conway Building, Chicago, Ill.	Fire tests of hollow tile; hollow building tile simplification; strength of hollow-tile walls.
Hollow Metal Door and Trim Manufacturers Association, 648 Union Trust Building, Cleveland, Ohio.	Builder's hardware simplification.
Hospital Bureau of Standards and Supplies, 171 Madison Avenue, New York, N. Y.	Steel-locker simplification.
Illuminating Engineering Society, L. H. Graves, secretary, 29 West Thirty-ninth Street, New York, N. Y.	Council; Committee on Lighting Legislation; Membership Committee; Committee on Motor Vehicle Lighting; Committee on Nomenclature and Standards; Committee on Papers; Committee on Street Lighting.
Institute of Radio Engineers, A. N. Goldsmith, secretary, 37 West Thirty-ninth Street, New York, N. Y.	Board of Direction Standardization Committee.
Institute of Tack and Nail Manufacturers, H. W. Acton, secretary, 28 West Forty-fourth Street, New York, N. Y.	Cut tack and small cut nail simplification.

Cooperating organizations—Continued

Name and address of association	Project
Interdepartment Radio Advisory Committee, W. A. Downey, secretary, Bureau of Navigation, Department of Commerce.	Advice on radio research.
International Acetylene Association, A. Cressy Morrison, secretary-treasurer, 30 East Forty-second Street, New York, N. Y.	Committee on Screw Threads on Cutting and Welding Torches.
International Annual Tables of Constants and Numerical Data of Physics, Chemistry, and Technology, 7 Rue de Badneux, Paris, France.	
International Association of Master House Painters and Decorators of United States and Canada, 210 East Third Street, Waterloo, Iowa.	Paint and varnish brush simplification.
International Association of Municipal Electricians, Edwin H. Benz, secretary, West New York, N. J.	Committee on Standardization.
International Astronomical Union	Wave Length Commission.
International Commission on Illumination	
United States National Committee, E. C. Crittenden, secretary-treasurer, Bureau of Standards, Washington, D. C.	
International Congress of Photography for 1927	
International Critical Tables, National Research Council, 29 West Thirty-ninth Street, New York, N. Y.	
Editorial Board of International Critical Tables of Numerical Data of Physics, Chemistry, and Technology.	
International Electrotechnical Commission	Advisory Committee of National Committee; lamp sockets and bases; oils; rules and regulations for transmission lines; standard voltages; symbols.
United States National Committee, F. V. Magalhaes, secretary, 708 First Avenue, New York, N. Y.	
International Milk Dealers Association, Room 607, 139 North Clark Street, Chicago, Ill.	Milk and cream bottle and bottle-cap simplification.
International Railway Fuel Association, 702 East Thirty-first Street, Chicago, Ill.	Commerical purchase form simplification; shovel, spade, and scoop simplification.
International Union of Pure and Applied Chemistry, 49 Rue des Mathurins, Paris, France.	Committee on Physico-Chemical Standards.
International Union of Pure and Applied Physics	Executive Committee.
International Union of Scientific Radio Telegraphy, American Section, J. H. Dellinger, technical secretary, Bureau of Standards, Washington, D. C.	Committee on Methods of Measurements and Standards.
Joint Committee of the Interdepartmental Conference on Chemical Lime and the Committee on Lime of the A. S. T. M.	
Joint Committee on Investigation of Sulphur and Phosphorus in Steel.	
Joint Research Committee of American Society of Mechanical Engineers and American Society for Testing Materials.	Committee on Effect of Temperature on the Properties.
Journal of the Franklin Institute, Philadelphia, Pa.	Technical editorial aid.
Journal of the Optical Society of America and Review of Scientific Instruments.	Do.
Linde Air Products Co., G. O. Carter, consulting engineer, 30 East Forty-second Street, New York, N. Y.	Compressive strength of portions of riveted and welded roof trusses.
Lowell Observatory, Flagstaff, Ariz	Radiometric investigation of celestial bodies.
Manufacturers' Association of Washington, Clancey M. Lewis, manager, tenth floor, Arctic Building, Seattle, Wash.	Survey for simplification opportunities.
Metallic Bedstead and Supply Manufacturers Alliance, 41 Park Row, New York, N. Y.	Bed, spring, and mattress simplification.
Millinery Jobbers' Association, 308 North Michigan Avenue, Chicago, Ill.	Box board thickness simplification.
Mount Wilson Observatory, Pasadena, Calif	Temperature classification of spectral lines.
National Academy of Sciences, Washington, D. C	
National Advisory Committee for Aeronautics	Materials Committee.
National Aeronautic Association, Donald Douglas, secretary, 1623 H Street, NW., Washington, D. C.	Contest Committee.
National Association of Book Publishers, 334 Fifth Avenue, New York, N. Y.	Paper simplification.
National Association of Builders Exchanges, Earl F. Stokes, executive secretary, 15 East Fayette Street, Baltimore, Md.	Building material simplification in general.
National Association of Building Trades Employers, A. W. Dickson, executive secretary, 4900 Euclid Avenue Cleveland, Ohio.	Do.

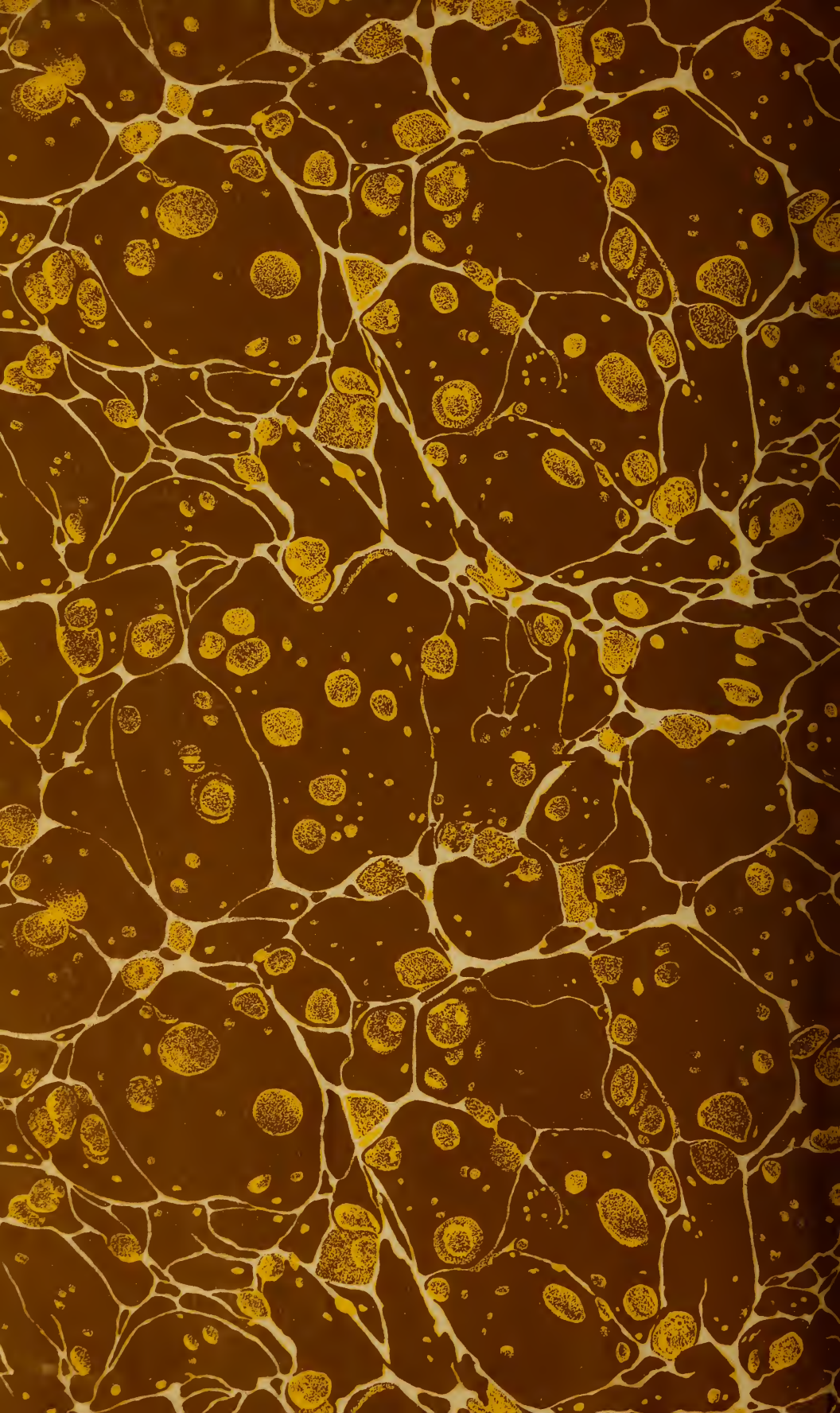
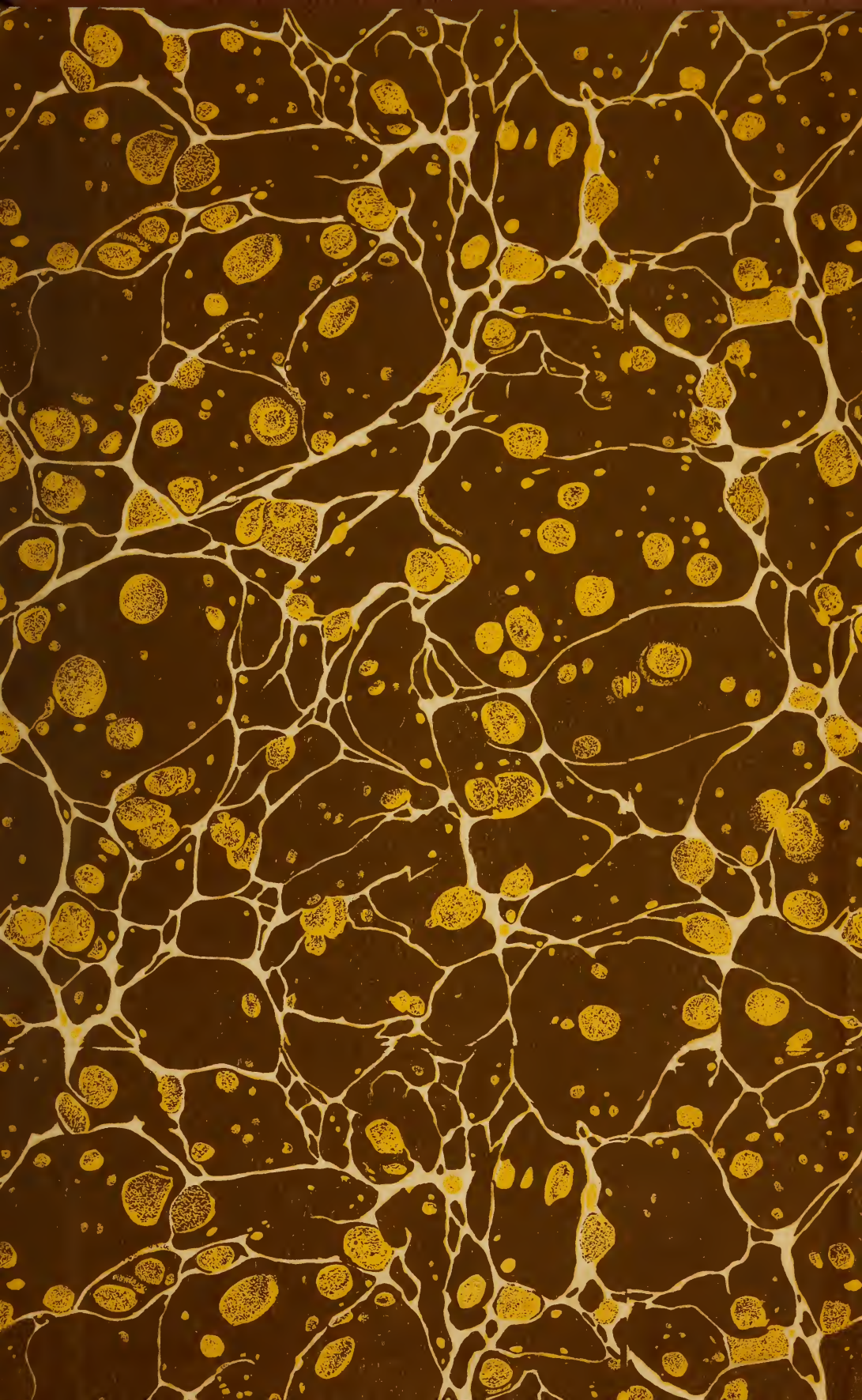
Cooperating organizations—Continued

Name and address of association	Project
National Association of Certified Public Accountants, 945 Pennsylvania Avenue, Washington, D. C.	Commercial purchase form simplification.
National Association of Cotton Manufacturers, 80 Federal Street, Boston, Mass.	Bed blanket simplification; cotton-duck simplification.
National Association of Credit Men, 41 Park Row, New York, N. Y.	Commercial purchase-form simplification.
National Association of Employing Lithographers, 104 Fifth Avenue, New York, N. Y.	Paper simplification.
National Association of Farm Equipment Manufacturers, 608 South Dearborn Street, Chicago, Ill.	Plow-bolt simplification.
National Association of Master Plumbers of the United States, 1260 Book Building, Detroit, Mich.	Simplification of plumbing supplies in general.
National Association of Purchasing Agents, W. L. Chandler, secretary, 19 Park Place, New York, N. Y.	Simplified Practice Planning Committee; warehouse form simplification; commercial form simplification; classification of iron and steel scrap simplification.
National Association of Real Estate Boards, 1418 Consumers Building, Chicago, Ill.	Face brick and common brick simplification.
National Association of Retail Grocers, H. C. Balsiger, secretary, 601 Bumbel Building, Kansas City, Mo.	Paper grocers' bags, simplification.
National Association of Sheet Metal Contractors, 608 Chestnut Street, Philadelphia, Pa.	Sheet steel simplification; eavestrough, and conductor pipe simplification.
National Association of Sheet and Tin Plate Manufacturers, 421 Oliver Building, Pittsburgh, Pa.	Sheet-steel simplification.
National Association of Steel Office Furniture Manufacturers, J. D. M. Phillips, secretary, Union Trust Building, Cleveland, Ohio.	Intensity and duration of fires; steel-locker simplification.
National Association of Wool Manufacturers, 50 State Street, Boston, Mass.	Bed-blanket simplification.
National Bottle Manufacturers Association of the United States, 19 West Forty-fourth Street, New York, N. Y.	Milk and cream bottle and bottle-cap simplification.
National Builders' Supply Association, 1639 North Meridian Street, Indianapolis, Ind.	Building-material simplification in general.
National Container Association, G. R. Browder, general manager, 608 South Dearborn Street, Chicago, Ill.	Box board thickness simplification.
National Education Association, 1201 Sixteenth Street NW., Washington, D. C.	Blackboard-slate simplification.
National Federation of Implement Dealers Association, Abilene, Kans.	Woven wire fencing simplification; plow-bolt simplification.
National Fence Manufacturers Institute, Oliver Building, Pittsburgh, Pa.	Woven wire fencing simplification.
National Fire Protection Association, F. W. Wentworth, secretary, 40 Central Street, Boston, Mass.	Committee on Gases; Committee on Hydrants, Valves, and Pipe Fittings; Committee on Building Construction and Protection of Records.
National Hardware Association of the United States, 505 Arch Street, Philadelphia, Pa.	Simplification of hardware items in general.
National Lumber Manufacturers Association, Transportation Building, Washington, D. C.	Lumber simplification.
National Machine Tool Builders Association, E. F. Du Brul, general manager, 817 Provident Bank Building, Cincinnati, Ohio.	Die head chaser simplification.
National Paper Box Manufacturers Association, Frank S. Records, executive secretary, 112 North Broad Street, Philadelphia, Pa..	Box board thickness simplification.
National Paper Trade Association, W. C. Ridgway, secretary, 41 Park Row, New York, N. Y.	Paper simplification in general.
National Paving Brick Manufacturers Association, Engineers Building, Cleveland, Ohio.	Paving-brick simplification.
National Pipe and Supplies Association, George D. McIlvaine, secretary, 909 Oliver Building, Pittsburgh, Pa.	Range boiler and expansion tank simplification; hot water storage tank simplification.
National Publishers Association, 15 West Thirty-seventh Street, New York, N. Y.	Paper simplification.
National Research Council, Vernon Kellogg, secretary, 2101 B Street, Washington, D. C.	Committees on Apparatus Makers and Users, Color Standards and Colorimetric Essays, Corrosion, Alloy Research; Executive Committee; Committee on Heat Transmission, Critical Survey of Heat Transfer Data; Committee for Improvement of Methods for Measuring Gravity; Committee on Insulation; Advisory Committee on Fatigue Phenomena of Metals; Committee on Structure of Line Spectra; Highway Research Board, Executive Committee; Division of Chemistry and Chemical Technology.

Cooperating organizations—Continued

Name and address of association	Project
National Restaurant Association, 1115 Walnut Street, Kansas City, Mo.	Cafeteria and restaurant chinaware simplification.
National Retail Dry Goods Association, Edwin A. Gooley, chairman, Supply Control Corner, 225 West Thirty-fourth Street, New York, N. Y.	Bed-blanket simplification.
National Retail Hardware Association, Herbert P. Sheets, secretary-treasurer, 915 Meyer-Kiser Bank Building, Indianapolis, Ind.	Simplification of hardware items in general.
National Retail Lumber Dealers Association, 820 Railway Exchange Building, Chicago, Ill.	Lumber simplification.
National School Supply Association, T. W. Vinson, executive secretary, 53 West Jackson Boulevard, Chicago, Ill.	Blackboard-slate simplification; steel-locker simplification.
National Screw Thread Commission, H. W. Bearce, secretary, Bureau of Standards, Washington, D. C.	Plow-bolt simplification.
National Slate Association, W. S. Hays, secretary, 791 Drexel Building, Philadelphia, Pa.	Structural slate simplification; roofing-slate simplification; blackboard-slate simplification.
National Supply and Machinery Dealers Association, 505 Arch Street, Philadelphia. Pa.	File and rasp simplification; forged-tool simplification.
National Supply and Machinery Distributors Association, George A. Fernley, secretary, 505 Arch Street, Philadelphia, Pa.	Simplified practice planning committee; die head chaser simplification.
National Trade Extension Bureau, 403 Mercantile Bank Building, Evansville, Ind.	Simplification of plumbing materials in general.
National Varnish Manufacturers Association, G. B. Heckel, secretary, 509 The Bourse, Philadelphia, Pa.	Steel barrel and drum simplification.
National Wholesale Dry Goods Association, George A. Fernley, secretary, 505 Arch Street, Philadelphia, Pa.	Bed-blanket simplification.
Natural Gas Association of America, 905 Oliver Building, Pittsburgh, Pa.	Committees on Gas Measurement, Determination of Gasoline in Natural Gas, Measurements.
Operative Plasterers' and Cement Finishers' International Association, 401 Castell Building, Middletown, Ohio.	Metal-lath simplification.
Optical Society of America, Prof. C. C. Bidwell, secretary, Cornell University, Ithaca, N. Y.	Committees on Colorimetry, Photography and Photochemistry, Physical Optics, Physiological Optics, Radiometry and Photometry, Photographic Standard of Intensity; Progress Committee on Optical Glass.
Paint Manufacturers Association of United States, G. B. Heckel, secretary, 509 The Bourse, Philadelphia, Pa.	Steel barrel and drum simplification; paint and varnish brush simplification.
Pennsylvania Railroad System, operating department, Philadelphia, Pa.	Steel-locker simplification.
Physical Review	Editorial board.
Portland Cement Association, 111 West Washington Street, Chicago, Ill.	Concrete building unit simplification.
Presidents Interdepartmental Patents Board	Patents.
Radiological Society of North America	Standardization Committee.
Rail Steel Products Association, Franklin, Pa	Steel reinforcing bars simplification.
Railway Accounting Officers Association, E. R. Woodson, secretary, 1116 Woodward Building, Washington, D. C.	Commercial form simplification; bank checks, notes, drafts, and similar instruments simplification.
Railway Treasury Officers Association, E. L. Rossiter, chairman, Committee on Treasury Department Forms, 466 Lexington Avenue, New York, N. Y.	Bank checks, notes, drafts, and similar instruments simplification.
Sand-Lime Brick Association, J. Morley Zander, Saginaw, Mich.	Committee on Education; sand-lime brick simplification.
Screw Machine Products Association, The Eastern Machine Screw Corporation, Truman and Barclay Streets, Box 1589, New Haven, Conn.	Die head chaser simplification.
Sheet Metal Contractors Association, W. C. Markle, secretary, 336 Fourth Avenue, Pittsburgh, Pa.	Sheet steel simplification; eavestrough, and conductor pipe simplification; terneplate simplification.
Sheet Steel Trade Extension Committee, G. L. Bennett, director, Building Trades Extension, Oliver Building, Pittsburgh, Pa.	Roofing materials, sheet steel garages.
Society of Automotive Engineers, C. F. Clarkson, general manager, 29 West Thirty-ninth Street, New York, N. Y.	Standards Committee, storage and battery division; Committee on Upholstery Leather Substitutes.
Southern Furniture Manufacturers Association, High Point, N. C.	Bed, spring, and mattress simplification.
Southern Hardware Jobbers Association, John Donnan, secretary, American National Bank Building, Richmond, Va.	Simplification of hardware in general.
Southern Pine Association, Shreveport, La	Lumber simplification.

Cooperating organizations—Continued

Name and address of association	Project
Southern Supply and Machinery Dealers Association, Alvin M. Smith, secretary-treasurer, care of Smith-Courtney Co., Richmond, Va.	Steel and machinery supply simplification in general.
Southern Wholesale Dry Goods Association, Richmond, Va.	Bed-blanket simplification.
Steel Barrel Manufacturers Institute, 428 Bulkley Building, Cleveland, Ohio.	Steel barrel and drum simplification.
Structural Service Bureau, 112 South Sixteenth Street, Philadelphia, Pa.	Structural-slate simplification; roofing-slate simplification.
The Tap and Die Institute, Herbert Blake, secretary, 150 Broadway, New York, N. Y.	Threads, taps, and dies.
Technical Association of the Pulp and Paper Industry, 18 East Forty-first Street, New York, N. Y.	Paper Testing Committee.
Tile and Mantel Contractors Association of America, The, 9 Ely Street, Rochester, N. Y.	Structural-slate simplification.
Tissue Paper Manufacturers Association, E. H. Naylor, secretary-treasurer, 44 Vernon Street, Springfield, Mass.	Tissue-paper simplification.
Underwriters' Laboratories, Dana Pierce, president, 207 East Ohio Street, Chicago, Ill.	Fire council.
United Roofing Contractors Association, 102 North Wells Street, Chicago, Ill.	Roofing-slate simplification.
United Slate, Tile, and Composition Roofers, Damp and Waterproof Workers Association, 1235 Monterey Street, N. S., Pittsburgh, Pa.	Do.
United Typothetae of America, William John Eynon, chairman, Standardization Committee, 600 West Jackson Boulevard, Chicago, Ill.	Paper simplification; bank checks, notes, drafts, and similar instruments simplification
University of Illinois, department of mechanical engineering, Urbana, Ill.	Milling-cutter simplification; grinding-wheel simplification.
University of Nebraska, Lincoln, Nebr	Magnetic separation of spectral lines.
University of Nebraska, purchasing department, Omaha, Nebr.	Steel-locker simplification.
Vehicle Wheel Manufacturers Conference of the United States (eastern division), care of Phineas Jones & Co., Newark, N. J.	Plow-bolt simplification.
Washington Academy of Sciences	
Wisconsin Railroad and Industrial Commissions	Advisory Committee on Wisconsin State Electrical Code.
Wood, Wire, and Metal Lathers' International Union, Superior Building, Cleveland, Ohio.	Metal-lath simplification.
Young Men's Christian Association (national council), 347 Madison Avenue, New York, N. Y.	Steel-locker simplification.
Young Women's Christian Association (national board), 600 Lexington Avenue, New York, N. Y.	Do.

○