fred Fisher, Jacque C. Morrell and Gustav Egloff, Universal Oil Products Company, Chicago; Dr. Warren K. Lewis, Massachusetts Institute of Technology; Charles Allen Thomas and William H. Carmody, Thomas and Hochwalt Laboratories, Inc., Dayton, Ohio; J. B. Maxwell, Standard Oil Development Company, New York; S. N. Obryadchikoff and W. A. Peters, Jr., E. B. Badger & Sons Company, New York. Other speakers include representatives of the University of Michigan, the Standard Oil Company of Louisiana, Humble Oil and Refining Company, the Kellogg Company, the Standard Oil Company of Indiana and Aleo Products.

Other sessions will deal with the progress of chemistry in the upbuilding of industry, with the problems of medicine and public health, and with developments in pure science, in agriculture and food, in chemical education, in gas and fuel, and in water, sewage and sanitation.

The opening event is a meeting of the council on Monday morning, March 28, President Redman presiding. On Monday afternoon there will be a general meeting, at which a group of special papers will be presented by men prominent in various fields. These include Mr. H. A. Gardner, president of the H. A. Gardner Laboratory, Washington, D. C., who will discuss "Tung Oil and its Production in the South" and Mr. Thomas Midgley, Jr., of the General Motors research staff, internationally known as the inventor of ethyl gasoline, will speak on "Fluorination."

Technical sessions will be held on Tuesday and Wednesday. The Division of Biological Chemistry, headed by Professor L. A. Maynard, of Cornell University, plans to hold a joint meeting on Tuesday afternoon with the Division of Agricultural and Food Chemistry, of which Professor Henry A. Schuette, of the University of Wisconsin, is chairman, and a symposium on "Pre-Medical Chemical Education" with the Division of Chemical Education, of which Professor O. L. Shinn, University of Pennsylvania, chairman, and the Division of Medicinal Chemistry, with Dr. Oliver Kamm, director of research, Parke, Davis and Co., Detroit, chairman. The Division of Biological Chemistry will also hold two general sessions.

The Division of Chemical Education, in addition to the joint meeting with the Division of Medicinal Chemistry and the Division of Biological Chemistry, has scheduled three half-day sessions, one being the meeting of the senate and standing committees. On Tuesday local teachers of chemistry will be invited to attend the meetings of the division and to be present at the luncheon.

The Division of Industrial and Engineering Chem-

istry, of which Professor D. B. Keyes, of the University of Illinois, is chairman, is sponsoring the oil symposium, in which the Division of Petroleum Chemistry, of which Cary R. Wagner, chief chemist of the Pure Oil Company, Chicago, is chairman, and the Division of Gas and Fuel Chemistry, of which J. D. Davis, research chemist of the United States Bureau of Mines, Pittsburgh, Pennsylvania, is chairman, will collaborate.

The Division of Petroleum Chemistry will also hold two half-day sessions for papers on other petroleum chemistry subjects. The Division of Medicinal Chemistry, besides its joint session with the Divisions of Biological Chemistry and Chemical Education, will hold one or more half-day sessions. The Division of Physical and Inorganic Chemistry, under the chairmanship of Professor H. H. Willard, of the University of Michigan, in addition to a joint symposium on "Adsorption" with the Division of Colloid Chemistry, headed by Dr. E. O. Kraemer, research chemist of the du Pont Co., Wilmington, Delaware, will hold two half-day sessions.

Other professional divisions of the society which have arranged programs for Tuesday and Wednesday and their chairmen include: Cellulose, Fred Olsen, director of research, Western Cartridge Company, East Alton, Ill.; History of Chemistry, Professor Lyman C. Newell, Boston University; Organic Chemistry, Professor Homer B. Adkins, University of Wisconsin; Paint and Varnish, Harley A. Nelson, research chemist, New Jersey Zinc Company, Palmerton, Pennsylvania; Sugar, W. L. Howell, chief chemist, Custom House, U. S. Treasury Department, New Orleans; Water, Sewage and Sanitation, A. S. Behrman, chief chemist, International Filter Company, Chicago.

Group dinners and luncheons, inspection trips to Louisiana industries and to points of historic interest, including the Vieux Carré, and a public address and a musical entertainment at the Roosevelt Hotel, where registration will be carried on beginning on Sunday, March 27, are among many features arranged by the General Convention Committee, of which Dr. C. E. Coates, of Louisiana State University, is honorary chairman.

## NATIONAL RESEARCH FELLOWSHIPS IN THE BIOLOGICAL SCIENCES

THE Board of National Research Fellowships in the Biological Sciences, which includes within its scope the fields of anthropology, psychology, botany, zoology, agriculture and forestry, held its first meeting in 1932 on February 5 and 6, and made eleven reappointments and twelve new appointments for the academic year 1932–33, as follows:

#### REAPPOINTMENTS

For domestic study

S. H. Bartley-Psychology

G. W. Beadle-Agriculture

Wm. F. Hahnert-Zoology

E. W. Hopkins-Agriculture

T. L. Jahn-Zoology

M. L. Lohman-Botany

F. E. Meier-Botany

B. H. Schneider-Agriculture

B. F. Skinner-Zoology

For study abroad

H. H. Jasper-Psychology

F. K. Sparrow-Botany

#### NEW APPOINTMENTS

For domestic study

W. C. Bramble-Forestry

R. T. Hill-Zoology

I. T. Kelly-Anthropology

D. G. Marquis-Psychology

O. H. Mowrer-Psychology

M. M. Rhoades-Botany

G. B. Saunders-Zoology

G. L. Walls-Zoology

R. E. Zirkle-Botany

For study abroad

F. S. Howlett-Agriculture

M. J. Johnson-Agriculture

Albert Tyler—Zoology

A second meeting for further appointments for 1932-33 is planned for about April 28 and 29, and applications for consideration at this meeting should be filed not later than March 15. Information and application forms may be obtained from the Secretary, Board of National Research Fellowships in the Biological Sciences, National Research Council, Washington, D. C.

WILLIAM J. ROBBINS, Chairman, Board of National Research Fellowships in the Biological Sciences

# HONORARY DEGREES CONFERRED AT THE BICENTENNIAL OF THE GEORGE WASHINGTON UNIVERSITY

TWENTY-THREE alumni of the George Washington University received honorary degrees at the Bicentennial Convocation on the evening of February 22. The doctorate of science was conferred on the following:

RAY SMITH BASSLER, M.S. 1903, Ph.D. 1905 (George Washington), A.B. 1902 (Cincinnati). Head curator of geology of the U.S. National Museum and professor of geology in The George Washington University, president of the Paleontological Society of America and vice-president of the Geological Society of America.

ALEXANDER WETMORE, M.S. 1916, Ph.D. 1920 (George Washington), A.B. 1912 (Kansas). Assistant secretary of the Smithsonian Institution in charge of the U.S. National Museum; biologist and author of scientific papers.

Daniel Kerfoot Shute, A.B. 1879, M.D. 1883 (George Washington). Professor emeritus of clinical ophthalmology and formerly professor of anatomy, George Washington; author of articles and texts on anatomy and ophthalmology.

STERLING RUFFIN, M.D. 1890 (George Washington). Professor emeritus of medicine and consulting physician of the hospital of George Washington University.

CHARLES NAPOLEON MOORE, M.S. 1905 (George Washington), A.B. 1903 (Cincinnati), Ph.D. 1908 (Harvard). Professor of mathematics, University of Cincinnati.

JOSEPH FELS RITT, A.B. 1913 (George Washington), Ph.D. 1917 (Columbia). Professor of mathematics, Columbia University.

JOHN HOWARD DELLINGER, A.B. 1908 (George Washington), Ph.D. 1913 (Princeton). Physicist; chief of the Radio Section, U.S. Bureau of Standards since 1918; chief engineer, Federal Radio Commission in 1928.

The degree of doctor of engineering was conferred on:

DAVID ALBERT MOLITOR, B.S. in C.E. 1908, C.E. 1908 (George Washington). Structural engineer; designing engineer on Panama Canal; works connected with Saulte Ste. Marie Falls Canal and the channels through the Great Lakes, and other engineering projects; professor of civil engineering, Cornell University, 1908-11.

PHILANDER BETTS, E.E. 1903, Ph.D. 1914 (George Washington), B.S.-E.E. 1891, M.S. 1895 (Rutgers). Chief engineer, Public Utilities Commission of New Jersey; consulting engineer in electric light and power projects, directing the construction of some of the earliest electric lines.

### AWARDS OF THE AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS

The annual dinner and award of the medals and prizes of the American Institute of Mining and Metallurgical Engineers took place on February 17 at the Commodore Hotel, New York City. The scientific sessions were held at the Engineering Society's Building. Mr. Robert E. Talley, retiring president, delivered the presidential address.

The William Lawrence Saunders Gold Medal, given for distinguished achievement in mining, was presented to Mr. F. W. Bradley, president of the Alaska Juneau Gold Mining Company, "for his skill and success in the creation of new wealth in the face of almost insuperable obstacles" in the operation of a gold mine on the coast of Alaska, which he made "a profitable enterprise although the ore carries less than a dollar per ton in gold."