

Food and Drug Administration, \$70,000 for repairs, painting and reconstruction of physical equipment. Bureau of Plant Industry, \$648,806, for repairing, renovating and reconstruction work. Bureau of Plant Quarantine, \$63,050 for repairs and improvements, largely to protect the Mexican border from invasion by plant and animal plagues. Weather Bureau, \$20,000, for repair work on its stations.

*Department of Commerce:* Bureau of Aeronautics, \$443,000, for relocating and improving air beacons and airway radio facilities. Bureau of Fisheries, \$150,000, for reconditioning and repairing hatcheries, buildings and vessels.

*Department of the Interior:* Geological Survey, \$1,200,000, mostly for gauging stream levels. Office of Indian Affairs, \$2,820,000, for schools, hospitals and equipment on reservations. National Park Service, \$1,250,000, for all parks. Bureau of Reclamation, \$44,460,000, for reclamation projects; of this \$38,000,000 will go for the Boulder Dam project. Virgin Islands, \$114,500, for reconstruction, repair, construction and the building of a leper asylum at St. Croix.

*Department of Labor:* Bureau of Immigration, \$1,344,480, for repairing, altering and improving immigration stations.

*State Department:* International Boundary Commissions, \$1,528,000. This covers work on the northern and Alaskan boundaries, but most is for international flood control works in the lower Rio Grande Valley, contingent on Mexican expenditure.

*Treasury Department:* Public Health Service, \$102,438, largely for reconditioning vessels used for quarantine purposes.

*Independent Offices:* National Advisory Committee on Aeronautics, \$200,000, for experimental work and equipment at Langley Field.

### THE INTERNATIONAL GEOLOGICAL CONGRESS

THE sixteenth session of the International Geological Congress meets in Washington from July 22 to July 29. Professor Waldemar Lindgren, of the Massachusetts Institute of Technology, is chairman, and Dr. W. C. Mendenhall, of the U. S. Geological Survey, is secretary of the committee on organization.

A detailed account of the arrangements for the congress will be found in the issue of *SCIENCE* for March 10. A reception under the auspices of the Geological Society of America is given in New York City on July 21, on which day the American Museum of Natural History gives a luncheon in honor of the foreign guests.

A series of excursions, mostly in the east, has been planned prior to the congress, a series of short excursions is offered during the sessions, and after adjourn-

ment there will be extensive excursions to the central and western states. The nature of some of these is indicated by the following summary descriptions of them:

Eastern New York and western New England.  
Mining districts of Southeastern and Central States.  
Appalachian Valley in Virginia.  
Paleozoic stratigraphy of New York.  
Coastal plain of the Chesapeake Bay region.  
Oil fields of Oklahoma and Texas.  
Geomorphology of the central Appalachians.  
Mineral deposits of New Jersey and eastern Pennsylvania.  
Transcontinental excursion starting from San Francisco.

The following topics have been chosen for consideration:

Measurement of geologic time by any method.  
Batholiths and related intrusives.  
Zonal relations of metalliferous deposits.  
Major divisions of the Paleozoic era.  
Geomorphogenic processes in arid regions and their resulting forms and products.  
Fossil man and contemporary faunas.  
Orogenesis.  
Geology of petroleum.  
Copper resources of the world.

Papers relating to the topics listed above and others which may be of general interest will be presented at sectional meetings during the session. Owing to the large number of papers already offered, it will be necessary to hold technical sessions on those days for which excursions are planned. In addition to the regular technical program, the centenary of the publication of Lyell's "Principles of Geology" will be observed by an address by Dr. Frank Dawson Adams, of the University of Montreal.

The Geological Society of Washington offers a reception to members of the congress on the evening of July 22. Afternoon tea will be served daily at the Chamber of Commerce Building.

### OBITUARY

DR. WILLIAM LEWIS ELKIN, professor emeritus of astronomy at Yale University, where he was director of the observatory from 1896 to 1910, has died at the age of seventy-eight years.

DR. HAROLD DE FOREST ARNOLD, director of research of the Bell Telephone Laboratories, died on July 9. He was forty-nine years old.

FREDERICK WORTHEN BRADLEY, in 1929 president of the Institute of Mining Engineers, died on July 6 at the age of seventy years.

PROFESSOR F. ERIC MILLEN, provincial apiarist and

head of the department of apiculture at the Ontario Agricultural College at Guelph, died on July 14 at the age of fifty years. Dr. Millen was from 1916 to 1919 associate professor of apiculture at the Michigan State College.

*Nature* reports the deaths of Dr. E. E. Fournier d'Albe, known for his work on the properties of

selenium, on June 29, aged sixty-five years; of H. R. A. Mallock, F.R.S., consulting engineer, on June 26, aged eighty-two years, and of Ralph Richardson, formerly president of the Edinburgh Geological Society and secretary of the Royal Scottish Geographical Society, on June 26, aged eighty-eight years.

## SCIENTIFIC NOTES AND NEWS

At a Special Congregation of the University of British Columbia in honor of the Fifth Pacific Science Congress on June 13, the honorary degree of LL.D. was conferred on members as follows: Dr. Charles Gravier, Natural History Museum of Paris; Dr. Geoffrey Ingram Taylor, Yarrow research professor of the Royal Society; Dr. Shinkishi Hatai, professor of zoology, Tohoku Imperial University; Dr. Wen Hao Wong, director of the Geological Survey, Peiping; Dr. Gerrit van Itersen, Jr., professor of microscopical anatomy and director of the Laboratory for Technical Botany, Technical University, Delft; Dr. T. Wayland Vaughan, professor of oceanography and director of the Scripps Institution of Oceanography of the University of California, and Dr. Henry Marshall Tory, president of the National Research Council of Canada and president of the Fifth Pacific Science Congress.

THE University of Michigan at its commencement on June 19 conferred the honorary degree of doctor of science on Dean J. B. Johnston, of the University of Minnesota, in recognition of his contributions to neurology and his work in the field of education.

THE National University of Ireland, Dublin, has conferred the honorary degree of doctor of science on Dr. Dean DeWitt Lewis, professor of surgery, Johns Hopkins University School of Medicine.

THE Philadelphia College of Pharmacy and Science at its one hundred and eleventh commencement conferred the honorary degree of master in pharmacy on Henry K. Mulford, director of biological and research laboratories of the National Drug Company, Philadelphia. Mr. Mulford was the founder and for many years directing head of the H. K. Mulford Company and is now president of the Mulford Colloid Laboratories in addition to his connection with the National Drug Company.

At the annual meeting of the Board of Trustees of Norwich University, Porter Adams, of Thetford, Vermont, formerly president and now chairman of the Executive Committee of the National Aeronautic Association, was elected vice-president of the university, and at commencement was given the honorary degree of master of science.

DR. WILLIAM J. MAYO, of the Mayo Foundation, Rochester, Minnesota, has been elected a foreign associate member of the faculty of medicine of the University of Paris.

PROFESSOR H. J. MULLER, of the University of Texas, has been elected a foreign member of the Academy of Sciences of the Union of Soviet Socialist Republics at Leningrad.

DR. ALEŠ HRDLÍČKA, of the U. S. National Museum, and Dr. Herbert I. Priestley, of the University of California, have been made honorary professors of the National Museum of Mexico.

DR. ROBERT E. COKER, professor of zoology at the University of North Carolina, has been elected president of the university chapter of Sigma Xi.

W. E. WRATHER, consulting geologist, of Dallas, Texas, was elected president of the American Society of Economic Geologists, meeting at Princeton on July 7 and 8. Professor Per Adolf Geijer, of the Swedish Geological Survey, Stockholm, was elected vice-president. Dr. Donald H. McLaughlin, professor of mining engineering at Harvard University, was chosen secretary. The society also elected the following councilors: D. H. Newland, New York state geologist, Albany; Benj. L. Miller, professor of geology at Lehigh University, and Frank W. DeWolf, head of the department of geology of the University of Illinois.

AMONG scientific men from German institutions invited by the Universities Bureau of the British Empire to lecture in the colleges and universities of Great Britain are Dr. Friedrich von Müller, professor of internal medicine, Dr. Jonathan A. W. Zenneck, professor of experimental physics, Dr. Arnold Sommerfeld, professor of theoretical physics, and Dr. Hans Fischer, professor of organic chemistry, all of the University of Munich.

DR. ARTHUR POWELL DAVIS, past president of the American Society of Civil Engineers, has been appointed consulting engineer in the field service of the Bureau of Reclamation, and particularly upon the problems of the Boulder Dam project. Dr. Davis was for years closely associated with the studies and