

American archeology, particularly in the Mississippi Valley and the Southeastern states. A number of conferences have been held by the committee for the correlation and interpretation of current findings and to promote a realization for the need of careful and well-advised exploratory field work. A series of informational bulletins has been issued from the office of the chairman of the committee. The committee has also been instrumental in arranging for the administration of government relief funds from the Works Progress Administration and the Tennessee Valley Authority for work in the Tennessee Valley for the recovery of archeological remains in regions soon to

be inundated by dams now under construction or projected.

A large number of other undertakings of the Council might be added to this account, but it is not intended in this place to give a statement of all the activities of the Council during the past year. The full report will be published with the Annual Report of the National Academy of Sciences in April, 1937.

Grateful acknowledgment should be made in this place to the Carnegie Corporation and the Rockefeller Foundation for their aid in tiding the administration of the Council over a period of reduced income, in addition to their other large contributions.

SCIENTIFIC EVENTS

THE INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS

ACCORDING to Science Service, the International Union of Geodesy and Geophysics is now meeting in Edinburgh, with representatives from thirty-five countries in attendance. Some thirty-five Americans are present, representing governmental bureaus, colleges and research institutions. Dr. William Bowie, chief of the Division of Geodesy of the U. S. Coast and Geodetic Survey, is president of the conference.

The fields of geodesy, seismology, terrestrial magnetism and electricity, physical oceanography, volcanology, meteorology and scientific hydrology are covered by seven associations of which the International Union of Geodesy and Geophysics is composed.

A few of the subjects to be discussed are: The aurora, the transmission of radio signals, the determination of the figure of the earth, isostasy, the Wegener theory of drifting continents, the variation of latitude, the prediction of weather, the variation of the compass, the making of a world magnetic map to aid navigation by water and air, the location of epicenters of earthquakes and the determination of the times of travel of earthquake waves, the determination of the configuration of ocean basins, the cause of volcanoes both on continents and on islands, the evaporation of water from land and lakes and the growth or retreat of glaciers.

Besides Dr. Bowie, the following representatives of the U. S. Government are delegates: Captain N. H. Heck and Walter D. Lambert, of the U. S. Coast and Geodetic Survey; Dr. Paul R. Heyl, of the National Bureau of Standards; Dr. Oscar E. Meinzer, of the U. S. Geological Survey; R. Hanson Weightman, of the U. S. Weather Bureau; Dr. Oliver R. Wulf, of the U. S. Bureau of Chemistry and Soils; Lieutenant P. W. Thompson, of the U. S. Army.

The Carnegie Institution of Washington is repre-

sented by Dr. Arthur L. Day, Dr. John A. Fleming, Lloyd V. Berkner, Harry D. Harradon and William J. Peters.

Other Americans expected include: Professor Harry Bateman, of the California Institute of Technology; Dr. James E. Church, University of Nevada; Professor Richard M. Field, Princeton University; Frank Goldstone, Shell Petroleum Corporation; Dr. Laurence M. Gould, Carleton College; Professor Beno Gutenberg, California Institute of Technology; Dr. William H. Hobbs, University of Michigan; Columbus Iselin, Woods Hole Oceanographic Institution; the Rev. J. Joseph Lynch, Fordham University; the Rev. James B. Macelwane, St. Louis University; Professor Edwin G. Conklin, Princeton University; Carl Elges, Nevada Agricultural Experiment Station; Roger Revelle, Scripps Institution of Oceanography; Dr. Carl G. Rossby, Massachusetts Institute of Technology; Dr. Harlan T. Stetson, Harvard University; Dr. William T. Thom, Jr., Princeton University; Professors Thomas G. Thompson and Clinton L. Utterback, University of Washington; Dr. T. Wayland Vaughan, Scripps Institution of Oceanography.

THE PITTSBURGH MEETING OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS

THE autumn meeting of the American Society of Civil Engineers will be held in Pittsburgh, Pa., from October 13 to 17. The New England and New York State floods of 1936, as well as those of the Ohio River and its tributaries, their health and sanitation aspects and the problems of flood control in general, will be one of the chief topics on the program.

At the opening session of the technical meetings, on Tuesday morning, James J. Davis, United States Senator from Pennsylvania, will present a paper on "The Flood of 1936 in the Pittsburgh Region." In an afternoon session, the same day, "The Health and Sanitation Aspects of the 1936 Flood" will be discussed

jointly by Abel Wolman, chief engineer of the State Department of Health, Maryland, and Professor Thorndike Saville, dean of the College of Engineering, New York University. They will be followed by a paper on "The Economic Aspects of Flood Control," by Nathan B. Jacobs, president, Morris Knowles, Inc., Pittsburgh.

The first paper to be presented in the Symposium on Flood Control on Wednesday morning will be a discussion of "The New England Floods of 1936," by W. F. Uhl, hydraulic engineer, Chas. T. Main, Inc., Boston, Mass. This will be followed by an examination of the reports of the "New York State Floods of 1936," by A. W. Harrington, district engineer of the U. S. Geological Survey at Albany, N. Y.

Further discussion of the "1936 Flood in the Upper Ohio and Tributaries" will be presented on Wednesday afternoon by E. K. Morse, engineer member, Water and Power Resources Board of Pennsylvania, and Professor Harold A. Thomas, department of civil engineering at the Carnegie Institute of Technology. This will be followed by an address by Lieutenant-Colonel W. E. R. Covell, Corps of Engineers, U. S. A., U. S. district engineer, Pittsburgh, in which he will discuss "Federal Plans for Flood Control." The session then will be thrown open for general discussion of flood problems and methods for flood control.

Other symposiums on the civil engineers' program include "Economic Aspects of Energy Generation"; "Structural Application of Steel and Light Weight Alloys"; "The State System of Plane Coordinates"; "Volume of Traffic and Financial Problems Involved in the Planning of Major Highways"; "Stream Pollution," and "Modern Highway Design and Construction."

It is expected that attendance at the meeting, one of the most extensive in technical discussions in the history of the society, will exceed 1,200. Included in the list of speakers will be civil engineers of prominence from Albany, N. Y.; Baltimore, Md.; Boston, Mass.; Charleston, W. Va.; Cincinnati, Cleveland, Columbus and Massillon, Ohio; Denver, Colo.; Fairmont, W. Va.; Madison, Wis.; Midland, Mich.; New York, N. Y.; Pittsburgh, Pa.; Princeton, N. J., and Washington, D. C.

The American Society of Civil Engineers, of which Dr. Daniel W. Mead, professor emeritus of hydraulic and sanitary engineering of the University of Wisconsin, is president, is the oldest national body of its kind in the United States. Founded in 1852, its present membership of more than 15,000 is divided geographically into 58 local sections, which include all states and possessions. In addition, there are 114 student chapters in engineering colleges throughout the country.

THE SUMMER MEETING OF THE AMERICAN MATHEMATICAL SOCIETY

THE forty-second summer meeting of the American Mathematical Society and the nineteenth colloquium were held at Harvard University, Cambridge, Massachusetts, in connection with the Harvard Tercentenary Conference of Arts and Sciences, from Monday, August 31, to Saturday, September 5. Harvard University, celebrating its Tercentenary, was a gracious host, and hospitality was unbounded. All lectures given during the week under the auspices of the Tercentenary Committee were open to the mathematicians. More than half of those attending were housed without charge in the Yard. All the facilities of the university were at the disposal of the visitors, who were unanimous in praise of the arrangements made for their comfort and convenience.

The Mathematical Association of America, the Institute of Mathematical Statistics, the Association for Symbolic Logic and the American Astronomical Society held sessions during the same week. One thousand persons attended the mathematical meetings, of whom 443 were members of the society.

One of the chief features of the meeting was the series of Harvard Tercentenary Conference Lectures delivered by eminent mathematicians, both foreign and American, whom Harvard University invited as lecturers. These lectures were all broadcast on both long and short wave, and will be published in the journals of the society or elsewhere. Following is a list of the titles:

- I. "Uncertain Inference": Ronald Aylmer Fisher, Sc.D., professor of eugenics, University of London.
- II. "The Indian Mathematician, Ramanujan": Godfrey Harold Hardy, D.Sc., LL.D., D.Phil., professor of mathematics, University of Cambridge.
- III. "Truth in Mathematics and Logic": Rudolf Carnap, D.Phil., professor of philosophy, Deutsche Universität, Prague.
- IV. "L'extension du calcul tensoriel aux géométries non-affines": Élie Joseph Cartan, D.Sc., professor of mathematics, University of Paris.
- V. "Waring's Problem and Its Generalizations": Leonard Eugene Dickson, Ph.D., professor of mathematics, University of Chicago.
- VI. "The Mathematical Work of Ramanujan": Godfrey Harold Hardy, D.Sc., LL.D., D.Phil., professor of mathematics, University of Cambridge.
- VII. "The Relativistic Problem of Several Bodies": Tullio Levi-Civita, D.Math., D.Sc., professor of rational mechanics, University of Rome.
- VIII. "Astronomical Consequences of the Relativistic Two-body Problem": Tullio Levi-Civita,