tana and Wyoming by Dr. Charles W. Gilmore, curator of vertebrate paleontology. Dr. Charles E. Resser, curator of invertebrate paleontology, made studies of the Cambrian formation of the southern Appalachians. Fossils were gathered from Devonian rocks in the Midwest by Dr. G. Arthur Cooper, paleontologist of the National Museum.

Minerals and meteorites were collected for the institution and for Harvard University by Mark C. Bandy during a four-month field expedition in Chile. His work included a visit to the sulphur mine on the summit of Mount Auncanquilcha, more than 20,000 feet above sea-level, in search of sulphur crystals.

Gerrit S. Miller, Jr., curator of mammals, made a study of the mammals peculiar to the Florida Keys, extending from Miami to Key West. Dr. Doris M. Cochran, assistant curator of reptiles and batrachians, reports on a frog-collecting expedition in Brazil, during which she obtained specimens for the U. S. National Museum. Dr. Waldo L. Schmitt, curator of marine invertebrates, visited the Peruvian "bird islands" and the Galapagos. He was a member of the Hancock expedition of the winter of 1934–35.

Captain Robert A. Bartlett, Arctic explorer, describes the results of an expedition made last summer under the joint auspices of the Smithsonian Institution and the Field Museum of Natural History of Chicago. On this expedition he renewed acquaintances among the Eskimos living in a native village on the south side of Cape York Bay, who took part in the Peary expedition. Collections of Arctic plankton were made for the Smithsonian collections.

The Reverend David C. Graham continued his explorations in the province of Szechwan, China. In the face of troubled political conditions he found it possible to make collections on the slopes and summit of Mount Omei, one of the sacred mountains of China.

Dr. Aleš Hrdlička conducted excavations for the fourth summer on Kodiak Island, Alaska. Neil M. Judd, curator of archeology, visited San Juan Teotihuacan in Mexico, the Toltec religious center, and its massive pyramids. He also visited other Aztec and Toltec religious centers in Mexico, including Monte Alban. Herbert W. Krieger, curator of ethnology, visited the Potomac shores of Maryland and Virginia locating the old village sites of the Powhatan Confederacy and the settlements of the surviving Indians. Matthew W. Stirling, chief of the Bureau of American Ethnology, conducted an anthropological reconnaissance in Guatemala, Honduras and Yucatan. Frank H. H. Roberts, Jr., of the bureau, continued his excavations in northern Colorado at the earliest known inhabited site in North America. Basic Indian language studies were conducted by Dr. Truman

Michelson among the Indians and Eskimos who inhabit the desolate shores of James and Hudson's Bays.

## THE ATLANTIC CITY MEETING OF THE AMERICAN SOCIETY FOR TESTING MATERIALS

The annual meeting of the American Society for Testing Materials will be held in Atlantic City at Chalfonte-Haddon Hall, from June 29 to July 3, inclusive. In order to provide ample time for the presentation of the papers and for discussion, some twenty sessions are being arranged.

There will be several symposia, the most extensive of which is on "X-ray Crystallography and Radiography," which are being arranged by the committee on metallography through its subcommittee on x-ray methods. The symposium on "Limitations of Laboratory and Service Tests in Evaluating Rubber Products." sponsored by the committee on rubber products. is expected to be of unusual interest. Several papers dealing with various phases of spectrographic analysis are on the program and one session will be devoted entirely to the subject of water, which is being sponsored by the joint research committee on boiler feed-water studies and the committee on water for industrial uses. Other technical contributions will cover non-ferrous metals, wire, soils, corrosion, fatigue and effect of temperature on metals, and cement and concrete, separate sessions being devoted to each of these subjects.

Monday, June 29, is being reserved for meetings of committees, and the first session is scheduled for Tuesday morning, when there will be an address on "Chemical Engineering and its Relationship to the Work of the American Society for Testing Materials," by H. C. Parmelee, McGraw-Hill Book Company, and the president's annual address, to be given by H. S. Vassar.

The 1936 Edgar Marburg lecture, the tenth in the series, is to be presented on Wednesday afternoon by Dr. Arthur L. Day, director of the Geophysical Laboratory, Carnegie Institution of Washington, on "Developing American Glass," in which work Dr. Day has taken a leading part.

The symposium on "X-ray Crystallography and Radiography," which is being directed by Dr. R. F. Mehl, director, Metals Research Laboratory, and head, department of metallurgy, Carnegie Institute of Technology, will comprise twelve papers, six on radiography and six on diffraction. Preliminary sessions were held at the 1935 meeting in Detroit, at which many technologists in this field presented material which is to be the basis of the formal symposium. The primary objects of the symposium are stated as follows:

(a) To describe modern methods and equipment in an elementary way in order to assist industries in the ap-

plication of x-rays to their work. (b) To present as many case histories of successful applications as possible. (c) To compare the usefulness of x-ray methods with the usefulness of other methods which may be used alternatively. (d) To include the application of radiographic and diffraction methods to both metallics and non-metallics.

In the section for radiography the papers will cover such subjects as elements of radiography, foundry applications, applications to the welding art, gammaray radiography and its relation to x-ray radiography and the problems of specifications. The diffraction section comprises papers on equipment and methods, constitution of alloys, chemical analysis and particlesize determinations, non-metallic applications, and cold-work, recrystallization and preferred orientations. It is expected that four sessions of the meeting will be devoted to this symposium, which it is expected will be the most extensive of any that have been sponsored by the society.

### THE AMERICAN ACADEMY OF ARTS AND SCIENCES

At the annual meeting of the American Academy of Arts and Sciences, held on May 13, at its house, 28 Newbury Street, Boston, thirty-four new fellows and six foreign honorary members were elected. The fellows in the exact and natural sciences are:

#### Mathematical and Physical Sciences

Harold S. Booth, Western Reserve University.

Albert B. Hastings, Harvard University.
Murray P. Horwood, Massachusetts Institute of Technology.

Ernest H. Huntress, Massachusetts Institute of Technology.

Avery A. Morton, Massachusetts Institute of Technology.

#### Natural and Physiological Sciences

Oswald T. Avery, Rockefeller Institute. Charles S. Burwell, Harvard University. Frederick L. Hisaw, Harvard University.

The following officers were elected for the ensuing year:

President	Roscoe Pound
Vice-president for Class I	James Flack Norris
Vice-president for Class II	Walter Bradford Cannon
Vice-president for Class III	Edwin Francis Gay
Vice-president for Class IV	Arthur Stanley Pease
Corresponding Secretary	Tenney Lombard Davis
Recording Secretary	Walter Eugene Clark
Treasurer	Ingersoll Bowditch
Librarian	Hervey Woodburn Shimer
Editor	William Chase Greene

The meeting was addressed by Professor Julius

Seelye Bixler, of Harvard University, who spoke on "The Skeptical Revolt."

# THE SEATTLE MEETING OF THE PACIFIC DIVISION OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

ARRANGEMENTS for the twentieth meeting of the Pacific Division of the American Association for the Advancement of Science, to be held at Seattle from June 16 to 20, are now complete. The final program, which is in press, announces the meetings of twentyfour affiliated and associated societies and the titles of some three hundred and eighty papers. The sessions of general interest to members and guests which have been organized under divisional auspices comprise a symposium on oceanography and reports on the progress of research in four selected fields. The symposium on oceanography will consist of four addresses as follows: Marine Biology, C. McLean Fraser; Chemical Oceanography, Erik G. Moberg; Fisheries, W. F. Thompson; Hydrographic Survey, O. W. Swainson. The session devoted to surveys of current research will focus attention upon a few of the most noteworthy achievements and will outline the problems of commanding interest. The subjects and speakers follow: Stellar Spectroscopy, W. E. Harper; Plant Nutrition, D. R. Hoagland; Chemistry of Growth Principles, Roger J. Williams; Paleontology, E. L. Packard. Addresses of general interest will be given on the evenings of Tuesday, Wednesday and Thursday. At the first of these, Dr. F. K. Kirsten, professor of aeronautical engineering at the University of Washington, will speak on "Lux Sit," an exposition of researches in the field of illumination with rare gases and metallic vapors under electrical stimulation. On Wednesday evening, Dr. Richard C. Tolman, professor of physical chemistry and mathematical physics at the California Institute of Technology and president of the Pacific Division, will deliver an address on "The Present Status of Cosmology." The Thursday evening address will be delivered by Dr. F. C. Mann, professor of experimental surgery in the University of Minnesota and director of the Institute of Experimental Medicine of the Mayo Foundation. The subject of Dr. Mann's address will be "Methods of Medical Progress."

The chairman of the local committee in charge of arrangements is Professor A. F. Carpenter, of the department of mathematics, University of Washington, to whom any inquiries regarding local facilities may be addressed.

All members of the American Association for the Advancement of Science resident in the territory of the Pacific Division will receive a copy of the program by mail in advance of the meeting.