After a few years spent in the business world, Woodworth entered the Lawrence Scientific School, to begin his technical training. His worth was speedily recognized by Nathaniel S. Shaler, who appointed him his personal assistant in a prolonged study of the geology of the New England coast, and in 1890 secured Woodworth's appointment as assistant in geology. Three years later Woodworth was promoted to an independent instructorship. He received the degree of S.B. cum laude in 1894. He became assistant professor in 1901, and associate professor in 1912. Throughout much of the time since 1890 he was connected with the United States Geological Survey; the results of this national service have been published in a series of memoirs, but one of the most important of these is now awaiting publication at Washington.

Woodworth's researches were largely concerned with glacial geology, in which he became the recognized authority for New England. As a labor of love, he undertook the rather arduous task of organizing and continuously administering the Harvard Seismographic Station, which has been in uninterrupted operation since 1908. Woodworth was one of the American pioneers in the scientific study of earthquakes; the records from his station are among those most prized by the seismologists of the whole world. A special feature of his records is their accurate timing, for which he secured the vital cooperation of the Harvard Astronomical Observatory. As our leading expert on seismology, Woodworth's opinion that neither human history nor the relevant facts of geology indicate serious danger for the city of Boston from earthquakes is significant.

Another of his leading contributions to science was a prolonged exploration in the geology of Brazil and other parts of South America. This expedition was financed by the Shaler Memorial Fund, which is controlled by the division of geology. It is appropriate that Woodworth was the first investigator to be aided by this fund, for he was the trusted friend of his master, Shaler, who organized the present department of geology and geography at the university. The outstanding result of the South American expedition was addition to our knowledge of the remarkable glaciation of Argentina and Southern Brazil near the close of the Paleozoic Era. Other results refer to the structure of the earth's crust in the southern continent. Woodworth had already done much work on the structural geology of New England.

So much for his service to the university, the place of research. Perhaps even more valuable was his service to the college, the place of training in the elements of thinking. For nearly thirty-five years he gave his time and energy unstintedly to the hundreds of undergraduates who each year have thronged the geological laboratories. Others enjoyed the privilege of his leadership during many years when the summer course of field geology was held in Montana. It is impossible to describe adequately the benefit to the college of Woodworth's unceasing humanness, patience and abiding interest in the host of his students.

Woodworth was a member of the National Research Council, his most important contribution to the work of the council being perhaps his service as chairman of the committee on the use of seismographs in war, 1917–18. He was active in the American Association for the Advancement of Science and in the administration of the Geological Society of America, of which he was long a fellow. He was a member of the American Academy of Arts and Sciences; past president of the Seismological Society of America; a member of the Washington Academy of Sciences, of the American Geophysical Union, the Meteorological Society of America, Boston Society of Natural History and other societies.

Woodworth's colleagues in the division of geology knew best his full worth and specially mourn the loss of a valued friend and a many-sided worker, whose place no one man can fill.

> REGINALD A. DALY, CHARLES PALACHE, KIRTLEY F. MATHER, Committee.

## SCIENTIFIC EVENTS

## THE INSTITUTE FOR THE STUDY OF THE HISTORY OF CIVILIZATION

AT Oslo, Norway, the Institutet for Sammenlignende Kulturforskning (Institute for the Study of the History of Civilization) completed the following courses on October 21, 1925:

- Boas (New York): Primitive art.
- Karlgren (Göteborg): Sprokvetenskapen och det gamla China.
- Mauss (Paris): La notion de civilisation primitive.
- Meinhof (Hamburg): Die Religionen der afrikanischen Völker.
- Starbuck (Iowa, U. S. A.): Introduction to the science of religion.
- A. W. Brogger (Oslo): Den norske oldtidskultur.

The institute announces the following purpose: The Institute for Comparative Research in Human Culture shall be a free and independent institution having as its object the promotion of research within the fields denoted by its title: comparative study of languages, the comparative study of folk-lore, the comparative study of religion, the comparative (ethnology) study of law, ethnology, the comparative study of archeology and the comparative study of society. To these may be added other comparative studies of civilization in so far as the board shall deem

advisable. The board shall: (a) Arrange for lectures to be given at the institute by Norwegian or foreign men of science. (b) Publish scientific literature. (c) Offer prizes to be competed for. (d) Appoint Norwegian or foreign men of science to be members of the institute. (e) Award prizes for scientific work done by Norwegian men of science or by foreigners associated with the institute. (f) Give scholarships and other forms of assistance to Norwegian men of science or to foreigners associated with the institute.

The institute publishes two series of volumes: Series A, Lectures, and Series B, Monographs. Two volumes in each series have appeared to date.

P. E. GODDARD

## THE PEKING SOCIETY OF NATURAL HISTORY

IN response to a call for a meeting of those interested in the formation of an organization for encouraging the study of the natural history of China, a large number gathered in the lecture room of the department of anatomy of the Peking Medical School, September 21. Dr. A. W. Grabau, who was the enthusiastic promoter of the plan, called the meeting to order at 5:10 p. m. In his opening remarks Dr. Grabau enumerated the existing scientific organizations in China at present and stated that he felt that there was a need for the Peking Society of Natural History. The chairman then called upon Dr. W. H. Wong, Mr. R. Chapman Andrews and Mr. Walter Granger, all of whom spoke in hearty approval of the organization of the proposed society.

Following a brief discussion of the name of the organization, it was voted to adopt the name first proposed, "The Peking Society of Natural History"; the proposed constitution was read and was finally adopted.

The society then proceeded to the election of officers for the coming year and the following were chosen:

President, Dr. G. D. Wilder.

1st Vice-president, Dr. W. H. Wong.

2nd Vice-president, Mr. Sohtsu G. King.

Secretary-Treasurer, Mr. N. Gist Gee.

The following councillors were also elected: Dr. A. W. Grabau, Professor S. C. Lee, to serve three years; Dr. R. K. S. Lim, Dr. H. H. Tan, to serve two years; Dr. Davidson Black, Mr. K. K. Chung, to serve one year.

Upon the completion of the organization of the society, Dr. Wilder addressed the meeting upon the subject "Some common birds of Peking." Dr. Wilder had a number of mounted specimens of the Chinese birds and colored plates of a number of closely related American birds. An interesting feature of the illustrations was some copies by Mr. Kungpah King of ancient Chinese paintings of birds. These were so accurate that in many instances the birds can now actually be identified from them. At the conclusion of the meeting a vote of thanks was extended to Dr. Wilder for his interesting address.

> N. GIST GEE, Secretary-Treasurer

CHINA MEDICAL BOARD, PEKING

## FIELD MEETING OF THE ASSOCIATION OF AMERICAN STATE GEOLOGISTS

THE annual fall field meeting of the Association of American State Geologists was held from October 12 to 16 in eastern Pennsylvania, the Pennsylvania Geological Survey acting as host. Early arrivals were entertained on Sunday evening at the homes of Dr. George H. Ashley and Mr. R. W. Stone. Four days were spent in the vicinity of Harrisburg, Hummelstown, Cornwall, Port Clinton, Pottsville, Mahanoy City, Hazeltown, Mauch Chunk, Lehigh Gap, Slatedale, Northampton and Nazareth in observing the excellent exposures of the stratigraphy and structure and the remarkable peneplain remnants and in reviewing the mineral resources of that part of the state, including the southern anthracite field, the slate area, brownstone quarries, cement plants and the Cornwall magnetite mine. The evenings were devoted to discussions of matters pertaining to state survey policies and activities and to discussions of the geological problems of the areas covered. The state geologists were accompanied by a number of guests, including Dr. W. C. Mendenhall, chief; Messrs. E. O. Ulrich, Charles H. Butts, G. W. Stose and Miss Jonas, all of the U.S. Geological Survey; Dr. David White, chairman of the division of geology and geography, and Dr. Albert L. Barrows, chairman of the division of states relations of the National Research Council; Professor W. H. Bucher, of the University of Cincinnati; Professor B. L. Miller, of Lehigh University; Judge James R. Mac-Farlane, of the Court of Common Pleas, Pittsburgh, and M. W. Twitchell, of the Pennsylvania Geological Survey. The following state geologists represented their respective surveys: George H. Ashley, Herman Gunter, H. B. Kummel, M. M. Leighton, Raymond Moore, Wilbur A. Nelson and David Reger (representing I. C. White). The meeting closed at Bethlehem, Pa., with a dinner at Hotel Bethlehem, at which