

ciety favoring the plan of holding meetings jointly with the American Association at four-year intervals.

12. *Resolved*, that the publication of the constitution and list of members be postponed until January, 1915.

On motion, it was resolved that the sectional committee of Section C be empowered to elect its vice-president and chairman for the Philadelphia meeting in consultation with the committee on policy.

L. O. HOWARD,
Permanent Secretary

SCIENTIFIC NOTES AND NEWS

DR. GEORGE WILLIAM HILL, distinguished for his contributions to mathematical astronomy, has died at the age of seventy-six years.

DR. CHARLES SANTIAGO SANDERS PEIRCE, known for his work in logic and mathematics, died on April 19, aged seventy-four years.

THE National Academy of Sciences on April 22 presented its "medals for eminence in the application of science to the public welfare," to Colonel George Washington Goethals and Brigadier General William Crawford Gorgas. The presentation was made by Dr. William H. Welch, president of the academy, at a dinner held in honor of the retiring president, Dr. Ira Remsen, and the retiring home secretary, Dr. Arnold Hague.

MEMBERS of the National Academy of Sciences were elected at the annual meeting on April 23 as follows: Ernest Merritt, physicist, Cornell University; Moses Gomberg, chemist, University of Michigan; Edward Curtis Franklin, chemist, Stanford University; Frederick Leslie Ransome, geologist, U. S. Geological Survey; Nathaniel Lord Britton, botanist, New York Botanical Garden; Henry Herbert Donaldson, neurologist, Wistar Institute of Anatomy; Herbert Spencer Jennings, zoologist, The Johns Hopkins University; Francis Gano Benedict, chemist, nutrition laboratory of the Carnegie Institution; Walter Bradford Cannon, physiologist, Harvard University; Jesse Walter Fewkes, ethnologist, Bureau of American Ethnology.

At its annual meeting in Philadelphia on April 25, the American Philosophical Society elected to membership the following residents of the United States: Charles Greeley Abbot, Washington; James Wilson Bright, Baltimore; Bradley Moore Davis, Philadelphia; Thomas McCrae, Philadelphia; William Diller Matthew, New York; Alfred Goldsborough Mayer, Washington; Samuel Jones Meltzer, New York; John Campbell Merriam, Berkeley; Robert Andrews Millikan, Chicago; William Albert Noyes, Urbana; Stewart Paton, Princeton; Richard Mills Pearce, Philadelphia; Palmer Chamberlaine Ricketts, Troy; Harold A. Wilson, Houston; Frederick Eugene Wright, Washington. Foreign residents were elected as follows: Shibasaburo Kitasato, Tokyo; Heike Kamerlingh Onnes, Leyden; Vito Volterra, Rome.

PROFESSOR MOSES GOMBERG, of the University of Michigan, has been given the gold medal of the New York section of the American Chemical Society for his work on the trivalence of carbon.

PRINCE GALITZIN will preside over the fifth meeting of the International Seismological Association, to be held in St. Petersburg in September.

DR. J. D. FALCONER, lecturer in geography in the University of Glasgow, has been appointed by the trustees of the British Museum to the Swiney lectureship in geology, in succession to Dr. T. J. Jehu.

OLIVER BOWLES, of the department of geology and mineralogy, University of Minnesota, has been appointed quarry technologist in the division of mineral technology, Bureau of Mines, Washington, D. C.

DURING the absence abroad of Mr. William H. Fox, director of the museums of the Brooklyn Institute of Arts and Sciences, Mr. Robert Cushman Murphy, curator of mammals, is acting director.

THE German geographer, Dr. Ewald Banse, has started on an expedition for the exploration of the Libyan desert.

B. M. PATTEN, Ph.D., has received an appointment from the United States Fisheries

Department to go on the *Seneca*, a government patrol vessel, and make a study of the temperature, salinity and other qualities of the water of the ocean at various depths.

DRS. S. MARKS WHITE and Jennings C. Litzenberg, of the medical faculty at the University of Minnesota, are absent on leave the current semester. Dr. Frederick H. Scott, of the department of physiology, has been granted leave for the first semester of 1914-1915, and Professor Harold E. Robertson, of the department of pathology, has been granted a year's leave of absence during 1914-1915.

PROFESSOR B. SHIMEK, of the department of botany of the State University of Iowa, will carry on research work in Europe during the remainder of the year. He has been invited to deliver a series of twelve lectures, chiefly on the subjects of the plant ecology of the American desert and prairie, and the loess, at the University of Prague during the summer semester, 1914. He will also present two papers, by request, before the meeting of biologists and physicians to be held at Prague from May 31 to June 3.

PROFESSOR A. N. WINCHELL, of the University of Wisconsin, has returned from a visit to the Missouri School of Mines, the University of Kansas, the Agricultural College of Iowa and the University of Illinois. At each institution he delivered two lectures, one upon the "Mining Geology of the Butte District," and the other upon the "Origin of the Butte Ore Deposit."

THE Syracuse Chapter of Sigma Xi has held two open meetings during the past winter. At the first, on February 20, Professor M. I. Pupin, of Columbia University, gave an address upon the topic, "Wave Conductors," with especial reference to the so-called Pupin conductors which have made present-day long-distance telephony possible. At the second open meeting, March 6, Dr. Robert Almer Harper, professor of botany at Columbia University, gave an address upon the topic, "Studies in Morphogenesis." A large audience consisting of both university and city people, greeted each lecturer.

PROFESSOR E. HEYN, of Berlin, is this year to deliver the annual May lectures before the Institute of Metals, London, upon the subject, "Internal Strains in Cold Wrought Metals."

THE Friday evening meetings of the Royal Institution were resumed on April 24 when Dr. F. W. Dyson, the astronomer royal, lectured on the stars around the north pole. On May 8, Professor Karl Pearson will give an address on albinism in men and dogs; and on May 15 Professor Keeble will speak on "Plant Animals: A Study in Symbiosis."

THE department of anatomy at the University of Minnesota has issued two volumes of reprints of anatomical literature, by the following members of the department: J. B. Johnston, R. E. Scammon, W. F. Allen, W. A. Hilton, E. T. Bell, T. G. Lee, W. S. Nickerson, Robert Retzgar. Volume I. covers 1909-11 and Volume II., 1912-13.

THE University of Michigan has begun the publication of scientific papers of the museum of zoology, under the general title "Occasional Papers of the Museum of Zoology, University of Michigan." The papers are to be published separately, at irregular intervals, and will be numbered consecutively. The whole series will be sent through the university library to libraries and scientific institutions of a zoological nature, and the museum will distribute copies of each number to students interested in the subjects discussed.

THE twenty-third session of the Marine Biological Laboratory, of Stanford University, will begin on Monday, May 25. The regular course of instruction will continue six weeks, closing July 4. Investigators and students working without instruction may make arrangements to continue their work through the summer. The laboratory will be under the general supervision of Professor G. C. Price, instructor in charge. The laboratory provides for three classes of students: (1) Teachers and students who have not had the advantages of laboratory courses in zoology. (2) Advanced students in zoology and physiology who wish to continue their studies. (3)

Investigators who are prepared to carry on researches in morphology or physiology.

A SERIES of water-color plant studies painted by the late traveler and artist, Miss Adelia Gates, and presented to the Smithsonian Institution by her niece, Miss Eleanor Lewis, of Yellow Springs, Ohio, is now exhibited in the new building of the U. S. National Museum. The subjects treated embrace a wide range of foreign and domestic plants painted by the artist in this country and abroad. Some additions have recently been made to the original deposit by the donor who has endeavored to bring together all the flower studies made by Miss Gates, many of which were widely distributed by her prior to her death. With these additions, the collection now numbers some 600 paintings.

WE learn from *Nature* that a collection of rock specimens of considerable historic interest has been presented to the department of minerals of the British Natural History Museum. The specimens in question were collected in Arctic North America by Sir John Richardson, who accompanied Sir John Franklin's Arctic expeditions of 1819-1827. They have since that time been kept in the museum of the Royal Naval Hospital at Haslar, but inasmuch as the fossils collected in the same Arctic expeditions are in the National Museum at South Kensington, it was felt to be in the fitness of things that the rocks should be also preserved there. An application was accordingly made to the Lords of the Admiralty to sanction the transfer of the specimens.

FROM June 23 to 30 there will be held in London, as we learn from the London *Times*, the third annual International Congress on Tropical Agriculture, promoted by l'Association Scientifique Internationale d'Agronomie Coloniale et Tropicale. This society was formed with the idea of helping associations formed in tropical colonies for the development of their agriculture to study in common fundamental problems connected with the successful growing of important natural tropical products, such as rubber, tea, coffee, cocoa,

tobacco, cocoanut oil, cotton, jute, sisal hemp and cinchona. The value of the results expected from the congress may be gauged by the fact that on the organizing committee practically every tropical colony in the British Empire is represented by its principal agricultural officer. Official notifications are being sent out by the British Foreign Office and the Ministère des Affaires Etrangères in Paris to the governments of all countries possessing tropical colonies inviting them to appoint official delegates. The congress is to meet at the Imperial Institute, South Kensington, and among the subjects suggested for papers and discussion are: Technical education and research, labor organization and supply, rubber production, development of cotton-growing, fiber production, agricultural credit banks, agriculture in arid regions, tropical hygiene and preventive medicine, plant diseases and pests, and so forth. Numerous papers on these and kindred subjects have been promised by well-known experts. Professor Wynham R. Dunstan is the chairman of committee, and Dr. T. A. Henry and Mr. H. Brown, of the Imperial Institute, are the honorary secretaries.

Two models which show how the government sells its timber have just been prepared in Washington, for display at the forest products exposition, to be held in Chicago, April 30 to May 9, and in New York, May 20 to 30. These models represent an acre of western yellow pine land in a national forest of the southwest before and after logging. In the model showing the stand before the lumberman goes into it the trees range from those only a few years old to large, overmature, stag-headed individuals more than ready for the axe. In the second model the mature trees and all others larger than a certain diameter have been cut down and made into logs and cord-wood. In this, as in all government sales, the stumps are cut low to avoid unnecessary waste, logs are taken to a small diameter well up into the tree, and such material as is not fit for lumber is converted into cordwood. Together, the models show the care which the government requires of lumbermen in felling

old trees so that the young growth is not injured. The brush is piled in heaps for burning after the lumber has been removed, in order that the fire menace which foresters say usually follows lumbering may be done away with. The models are on a scale of about one inch to five feet, so that trees approximately 100 feet tall are about 20 inches high in the models. It is the intention of the forest service to have these models set forth certain points in regard to the timber sales conducted by the government. They will demonstrate, in the first place, that the timber on the national forests is for use; placards tell how it is sold to the highest bidder when it is wanted for commercial purposes, and how it may be given away to local settlers and prospectors for developing homesteads or mines. The models themselves indicate that the timber is cut in such a way as to eliminate all avoidable waste of wood and to secure a continuance of the forest crop, not only for timber production but for the protection of the soil. They further show the fundamental principles applicable to many logging operations, that the mature and overmature trees should be removed, that thrifty growing young trees should be left to produce seed and insure a reproduction of the stand, and that the young growth should be protected from damage in lumbering operations. The models are supplemented by a graphic chart, which shows by pictured piles of money and by conventional trees of graded size the increase of timber sales on the national forests from 1905 to 1913, inclusive. In 1905 the timber sold from the national forests aggregated 96,000,000 board feet, which brought the government no more than \$85,000. Three years later the amount of timber sold increased to nearly 390,000,000 board feet, and the money received rose to \$735,000. In 1911 830,000,000 board feet sold for more than \$2,000,000, and in 1913 more than 2,000,000,000 feet brought in contracts amounting to \$4,500,000. Not all this money was received in any one year, because national forest timber is sold on contracts which range from one to twenty-five years, and it is paid for as cut.

UNIVERSITY AND EDUCATIONAL NEWS

THE Catholic University of America, Washington, will receive the greater part of the estate of \$1,000,000 left by Theodore B. Basselin, of Croghan.

MR. JAMES DEERING, in a letter addressed to the trustees of Northwestern University and of Wesley Hospital, announces a gift of \$1,000,000 to the hospital. It is provided that Wesley Hospital shall be a teaching hospital under Northwestern University. The gift is made in honor of the donor's father, the late William Deering, and his sister, Abbie Deering Howe, who died in 1906.

AN anonymous benefactor has given a sum of \$1,200,000 to the municipality of Berlin for the foundation of an open-air school for boys. In the course of instruction special attention will be given to modern languages and natural science.

ARTHUR TABER JONES, Ph.D., has been appointed assistant professor of physics at Smith College.

HENRY LAURENS, Ph.D., has been appointed instructor in biology, and George A. Stetson, instructor in mechanical engineering at Yale University.

AT Harvard University, Dr. W. E. Hocking, professor of philosophy at Yale University, has been appointed professor of philosophy, and Dr. R. F. A. Hoernle, of the University of Durham, assistant professor of philosophy. Dr. E. M. East has been promoted to be professor of experimental plant morphology and H. J. Hughes, to be professor of civil engineering. Dr. S. B. Wolbach has been promoted to be associate professor of bacteriology and Dr. C. L. Bouton to be associate professor of mathematics.

THE executive committee of the Massachusetts Institute of Technology has made the following promotions in the instructing staff: From the grade of associate professor to the grade of professor, Warren K. Lewis, in chemical engineering; George B. Haven, in machine design; Samuel C. Prescott, in industrial biology, and Charles B. Breed, in railroad engineering. The following assistant