Dr. Hobart A. Hare represented the board. Responses were made by Sir Joseph Thomson, by Mr. H. C. Chilton on behalf of the British Ambassador for Professor Aston, by the Minister from the Netherlands for Professor Eijkman, and by Dr. Day.

The awards are made annually by the City of Philadelphia from the income of the John Scott fund upon recommendation of an advisory committee of five, consisting of representatives from the National Academy of Science, The American Philosophical Society and the University of Pennsylvania. The former body is represented by William B. Scott, of Princeton; Theobald Smith, of Princeton, and Henry H. Donaldson, of the Wistar Institute, Philadelphia; the American Philosophical Society by Samuel M. Vauclain, of Philadelphia, and the University of Pennsylvania by Arthur W. Goodspeed, of Philadelphia.

SCIENTIFIC NOTES AND NEWS

GEORGE LINCOLN GOODALE, professor of botany at Harvard University from 1873 until his retirement as professor emeritus in 1909, president of the American Association for the Advancement of Science, died on April 12, in his eighty-fourth year.

ALICE CUNNINGHAM FLETCHER, assistant ethnologist of the Peabody Museum, Harvard University since 1882 and the holder of the Thaw fellowship of the museum since 1891, has died, aged seventy-seven years.

THE University of Pennsylvania, at a special convocation on April 11, conferred the honorary degree of Doctor of Science on Sir Joseph Thomson, master of Trinity College. Sir Joseph, after concluding his lectures before the Franklin Institute, returned to Engand on April 14 on the *Homeric*.

In the Paris Academy of Sciences M. Louis Gentil, professor of physical geography at the Sorbonne, has been elected to succeed the late M. Favé. M. Gabriel Bertrand, professor of biological chemistry at the Sorbonne and the Pasteur Institute, has been elected to succeed the late Georges Lemoine.

IT is stated in *Nature* that the Mueller medal and fund have been awarded to Mr. J. H. Maiden, government botanist of New South Wales and director of the Botanic Gardens, Sydney, in recognition of his botanical work. The medal was founded in memory of the late Baron von Mueller, government botanist of Victoria, and is awarded at each meeting of the Australasian Association for the Advancement of Science which this year met at Wellington, New Zealand.

FOUNDERS' Medal of the Royal Geographical Society has been awarded to Knud Rasmussen, the Danish explorer, for his explorations and research in the Arctic in the last twenty-five years.

THE University of Manchester will confer its honorary doctorate of science on Professor Niels Bohr, Copenhagen; Professor F. G. Hopkins, Cambridge; and Mr. W. B. Worthington, president of the Institution of Civil Engineers, 1921-1922.

DR. W. A. MURRILL, supervisor of public instruction at the New York Botanical Garden, with which he has been connected for 20 years, has been awarded a gold medal by the Holland Society of New York, for his distinguished service in the science of mycology. The presentation took place at the meeting of the society in the Hotel Astor on April 6, and was followed by an address by Dr. Murrill on "Fungi and their relation to forestry."

AT the annual meeting of the Chemical Society of Great Britain Professor W. P. Wynne, Firth professor of chemistry in the University of Sheffield and dean of the faculty of pure science, was elected president for the ensuing two years to succeed Sir James Walker, who addressed the meeting on "Symbols and formulae." There were present Professor Henri Le Chatelier, representing la Société Chemique de France, and M. Paul Kestner, representing la Société de Chimie Industrielle.

A NUMBER of chemists of the Northeastern Section of the American Chemical Society entertained at dinner on April 7, at the University Club, Boston, J. C. Irvine, principal and vicechancellor, University of St. Andrews; F. G. Donnan, professor of physical chemistry, University College, London; Th'e Svedberg, professor of physical chemistry, University of Upssala, and Professor E. C. Franklin, of Stanford University, president of the American Chemical Society. DR. ALICE HAMILTON, assistant professor of industrial medicine at Harvard University Medical School, Boston, was the principal speaker at the annual meeting and banquet of the Chicago Tuberculosis Institute held in Chicago on March 26.

GRANTS from the Gordon Wigan fund of the University of Cambridge have been made to Professor Punnett for plant-breeding experiments, to the Museum of Zoology for cases, to Professor Gardiner for a centrifuge and incubator, to Mr. Harker for sections of rocks, and to Professor Seward for sections of fossil plants.

THE British Secretary for Mines has appointed Sir Frederick L. Nathan, Mr. J. D. Morgan, Mr. W. Rintoul and Professor R. V. Wheeler to be a sub-committee of the Explosives in Mines Research Committee to carry out investigations on the means employed for firing explosives.

COLONEL P. KOZLOFF, the Russian explorer of Inner Asia and holder of the Founder's Medal of the Royal Geographical Society, is about to start on a three years' expedition to Tibet and adjacent regions.

MR. G. H. WILKINS, the naturalist of the Quest, arrived in Melbourne in the middle of March to lead the British Museum exploration expedition which is to visit Northeast Australia and then New Guinea to study the flora and fauna.

MR. NEIL M. JUDD, curator of American archeology in the U.S. National Museum, will leave Washington May 1 to resume direction of the National Geographic Society's expedition for the exploration of Pueblo Bonito, one of the largest and best preserved prehistoric ruins in the southwestern United States. This exploration is now in its third year; it is expected that the investigations will have been concluded late in 1925. Mr. Judd's staff this year will include assistants, and, as heretofore, experts will participate in the annual symposium to be called at the close of the excavating A force of twenty Indians, both season. Navaho and Zuñi, will be employed in the operations.

DR. ELLSWORTH HUNTINGTON, president of

the Association of American Geographers and research associate in geography at Yale, has been granted a leave of absence from the university for the first term next year. He is leaving New Haven on May 22 for Japan and China, and will later go to northern Australia, where he will study tropical conditions. He will attend the Pan-Pacific Scientific Congress which will be held in Sydney and Melbourne, beginning August 13, and will then carry on his investigations in the deserts of Australia. Before returning to the United States at the end of the year for the meetings of the Association of American Geographers, Dr. Huntington will visit the East Indies and will study the ruins in Indo-China, comparing them with those in Guatemala.

DEAN HENRY P. TALEOT of the Massachusetts Institute of Technology has been granted a leave of absence until next September. During his leave he expects to visit a number of colleges including Princeton, University of Pennsylvania, Johns Hopkins, University of Virginia, Tulane University, Georgia School of Technology, Rice Institute, California Institute of Technology, University of California, Leland Stanford, University of Oregon, Reed College and University of Washington. Mrs. Talbot will accompany him. During his absence Harold E. Lobdell, assistant dean, will act in his stead.

FOLLOWING the meeting of the American Chemical Society at New Haven Professor G. Bruni, of the University of Milan, lectured on April 9 at Columbia University on "Theoretical and practical rubber chemistry"; on April 12, before the Pittsburgh Section of the American Chemical Society, on "Italy's part in chemical scientific development," and on April 13, at Ohio State University on the same subject.

LAFAYETTE B. MENDEL, professor of physiological chemistry at Yale, left New Haven on April 6 for the Pacific Coast. As has already been reported in SCIENCE, he will deliver lectures at the University of California on the Hitchcock Foundation, his general subject being "Nutrition", and will also lecture at other places. He has leave of absence from Yale for the balance of the college year. DR. W. D. MATTHEW, F. R. S., eurator of the department of paleontology, American Museum of Natural History, delivered an address on March 10 at Toronto to the Royal Canadian Institute on the subject, "Ancestry of the horse and other geological records of evolution."

DR. MILTON J. ROSENAU, professor of preventive medicine and hygiene at Harvard University, gave a lecture on March 12 before the Wisconsin Branch of the Society of American Bacteriologists on "Food poisoning." This was followed by a dinner at which Dr. Rosenau spoke about his experiences in the famine distriet of Russia.

DR. A. J. DEMPSTER lectured at the University of Iowa on March twenty-sixth on the subjects "Light emission in canal rays" and "Isotopes.".

DR. LOUIS A. BAUER, director of the Department of Terrestrial Magnetism, gave on March 31 an illustrated talk at the General Electric Company, Schenectady, N. Y., on "The present status of our knowledge regarding the constitution and causes of the earth's magnetic field." He also gave a talk on "The earth's magnetism" at the General Electric Company, West Lynn, Massachusetts, on March 30.

Ar the February meeting of the Research Club of the University of Vermont, Dr. M. B. Cummings, of the department of horticulture, addressed the club on "Sterility in plants."

PROFESSOR WALTER B. PILLSBURY, who has leave of absence as head of the department of psychology in the University of Michigan, has been lecturing at Montpelier, France, where he delivers a series of eighteen lectures. Professor Pillsbury expects to lecture in Paris the latter part of May. From Paris he will go to England. He will probably return to the university in time for the opening of the first semester next fall.

DR. SVEN HEDIN lectured on "The great desert of Asia" at Clark University on March 26. He has also been lecturing in Boston and other New England cities.

T. ALEXANDER BARNS, explorer and author of "The Wonderland of the Eastern Congo," has arrived in the United States to lecture on his experiences in the Congo and on the opportu-

nities offered by that country. His first lecture was before the National Geographic Society in Washington.

Dr. A. H. COMPTON, head of the department of physics, Washington University, St. Louis, lectured before the graduate students in physics at the University of Iowa on April 4 and 5 on "Some problems in the study of X-rays" and "A quantum theory of X-ray scattering".

Dr. DAVID MARINE, of the Montefiore Hospital, New York city, will deliver the eighth Mellon lecture entitled "The importance of our knowledge of thyroid physiology in the control of thyroid diseases", before an open meeting of the Society for Biological Research of the Medical School, University of Pittsburgh, on the evening of May 10, 1923.

DR. JOHN MERLE COULTER, of the University of Chicago, was the guest of the Scientific Club of the College of Wooster on April 4. He gave a public lecture under the auspices of the club on "Evolution and religion". He also addressed the students of the botany department, giving them an interesting account of his experiences as botanist of the Hayden expedition in 1872, when it explored and mapped the geyser region of the Yellowstone. He also appeared before the staff of the Ohio Agricultural Experiment Station, speaking on "The botanical opportunity".

THE following public lectures are being given this spring at the Brooklyn Botanic Garden: April 13, "Trees in nature and art," Dr. A. F. Blakeslee, resident investigator in plant genetics, Station for Experimental Evolution, Cold Spring Harbor, L. I. April 20, "Forestry in the United States," Professor Henry Solon Graves, dean, School of Forestry, Yale University. April 27, "What's new in the garden," Mr. Edward I. Farrington, editor of Horticulture, Boston, Mass.

THE death is announced on March 18 of Sir William Thorburn, emeritus professor of clinical surgery in the University of Manchester.

DR. JAMES Gow, formerly headmaster of Westminster School, London, and author of "A short history of Greek mathematics" and of texts on the classics, died on February 16.

Nature records the deaths of the Rev. Wil-

liam Wilks, formerly vicar of Shirley, Croydon, known to scientific men for his work in horticulture, and of Sir Ernest Clarke, long secretary of the Royal Agricultural Society of England.

By his will Professor Edward Emerson Barnard, for more than twenty-five years on the staff of the Yerkes Observatory, has bequeathed to the University of Chicago his astronomical books and to the observatory the medals that have been given him for astronomical work, as well as the small astronomical instruments now on exhibition in the observatory. To the university Professor Barnard has given his home and the grounds which belong to it which adjoin the grounds of the Yerkes Observatory, to honor the memory of his wife, Rhoda Calvert Barnard. Among the medals awarded to Professor Barnard for his work in practical astronomy are the Lalande, the Arago, and the Janssen gold medals from the French Academy of Sciences; the gold medal of the Royal Astronomical Society of Great Britain; and the Bruce gold medal of the Astronomical Society of the Pacific.

THE tricentenary of the birth of Blaise Pascal occurs on June 19, and according to Nature preparations have been made for celebrations in France on July 8-9. The President of the French Republic will attend the meetings, the chief of which will be a commemoration gathering, to be addressed by the Minister of Public Instruction and other members of the French Academy. There will also be a meeting at the summit of the Puy de Dôme, when a member of the Academy of Sciences will speak on the famous experiment carried out there, at Pascal's suggestion, of observing the barometric height at the summit and comparing it with that at the base of the mountain. A difference of three inches in the height of the mercury column was observed, giving Pascal justification for his conclusion that the column of mercury in the barometer is supported by the pressure of the atmosphere.

THE Paris Academy of Sciences has received a bequest of 750,000 francs from the late M. Massin, to establish a fund the income of which is to be used for the advancement of science.

For the observation of the solar eclipse on Catalina Island, California, September 10, 1923, a fund of \$5,000 has been provided by Mr. William Wrigley, Jr., of Chicago, to finance the expedition, which will be under the supervision of Director Edwin B. Frost, of the Yerkes Observatory.

THE forty-third semi-annual meeting of the American Electrochemical Society will be held at the Hotel Commodore, New York City, from May 3 to 5. The technical program will include a whole-day session on the general topic "The production and application of the rarer metals." The arrangements for this session are in charge of Dr. F. M. Becket, of the Electrometallurgical Corporation, New York City. Another session will be devoted to a discussion of "Electrode potentials," led by Dr. William G. Horsch of the Chile Exploration Company, New York.

AT an adjourned meeting held in the rooms of the Royal Society in March, the Conjoint Board of Scientific Societies was formally dissolved. In view of this step, which became inevitable towards the end of last year, when the Royal Society withdrew its support, the work done by the various committees of the board has been terminated, and the World List of Scientific Periodicals had been vested in Dr. Chalmers Mitchell, Sir Robert Mond and Sir Arthur Schuster, as trustees.

SIGMA XI fellowships of a minimum value of \$1,200 for the coming academic year are to be awarded on May 18. The fellowships are available for workers in other fields than physics, chemistry and the medical sciences. Preference will be given to candidates who have already taken their doctor's degree. Men and women Applications should be accomare eligible. panied by reprints of publications, letters from those competent to pronounce upon the ability of the candidate, a statement of the work the candidate proposes to do on this award and where such work is to be done. The fellowships carry no restrictions as to university or country. Applications must be made before May 15 and should be addressed to Dean Edward Ellery, Union College, Schenectady, N. Y.

THE Committee on Therapeutic Research of the Council on Pharmacy and Chemistry of the American Medical Association will consider applications for grants to assist research in subjects which, in the opinion of the committee, are of practical therapeutic interest to the medical profession, and which research might not otherwise be carried out because of lack of funds. Requests should state the specific problem which is to be studied, the qualifications of the investigator, the facilities available to him, and, if work is to be undertaken in an established research institution, the name of the individual who will have general supervision. The committee will also appreciate offers from research workers to undertake investigations of questions which may be suggested by the coun-Applications should be addressed to: cil. Chairman, Therapeutic Research Committee, Council on Pharmacy and Chemistry, 535 North Dearborn Street, Chicago, Illinois.

THE American Pharmaceutical Association has available a sum amounting to \$400 which will be expended after October 1, 1923, for the encouragement of research. Investigators desiring financial aid in their work should communicate before June 1 with H. V. Arny, chairman of the research committee, 115 West 68th St., New York, giving their past record and outlining the particular line of work for which the grant is desired.

WE learn from *Nature* that the Geological Department of the British Museum (Natural History) has acquired the paleobotanical collection of Dr. Dukinfield H. Scott. It comprises more than 3,000 microscopic slides, chiefly of British Carboniferous plants, on which most of Dr. Scott's own researches have been based. It is a direct continuation of the Williamson collection which was acquired by the museum in 1896.

THROUGH the kindness of Miss Ellen B. Scripps, Pomona College of Claremont, California, has purchased the herbarium of Marcus E. Jones of Salt Lake City, Utah. This collection is one of the most complete herbaria ever made for the arid regions of western North America and represents the accumulation of forty-five years of botanical activity on the part of Professor Jones. It contains about 200,000 sheets. In making his collection, Professor Jones has had the ecological point of view and has taken material so as to show the range of variation of the species included, in a very satisfactory way. Professor Jones accompanies the herbarium to its new destination. This herbarium, coupled with the C. F. Baker herbarium of about the same size, gives Pomona College one of the most important western collections. Botanists desiring to con-

sult material should communicate with Dr.

Philip A. Munz, Claremont, California.

A CORRESPONDENT writes: "While in Japan last October and November, Dr. David Starr Jordan made again a large collection-the third in his travels-of the fishes of Japan. The Imperial Universities took great interest in this collection and the Imperial University of Tokyo sent Professor Shigeho Tanaka to the extreme north of Japan and Dr. Yoshiro Wakiya to the south of Japan, while the veteran collector, Kuma Aoki, was directed to secure again everything possible from Sagami Bay, a sheet of water, which, thus far, has yielded more species of fishes and particularly of sharks than any other bay whatsoever. The Imperial University of Kyoto empowered Professors Kawamura and Yamamoto to be of all assistance possible, while the Imperial University of Sapporo in the far north sent out Messrs. Majima and Takayasu to examine the markets of the northwest and the northeast of the island of Hokkaido. Professor Ishikawa of the Imperial University of Tokyo also selected series of duplicates from the different universities. In all, four or five hundred species were obtained, some thirty-five of them new to science."

THE new motion picture film, "Evolution, from the birth of planets to the age of man," was shown on Friday, April 6, and again on Sunday, April 8, at the Brooklyn Botanic Garden. In addition to the public presentations, a special showing for biology students of the Brooklyn high schools was held on Friday, April 6. The film has been produced by Dr. Raymond L. Ditmars, of the New York Zoological Garden and edited by Dr. Benjamin C. Gruenberg.

A BILL introduced in the Arkansas legislature prohibiting the teaching of Darwinism, or any other form of evolution, in the public and state supported schools passed the house with practically no opposition but failed in the senate.