standards. In addition, the correlation of the work of the federal specifications boards with commercial practice, and liaison duties with other branches of the Department of Commerce and with other departments in questions relating to commercial standards will be included in this group.

Dr. Briggs will act as executive head of the bureau when the director is absent in the management and supervision of the administration, scientific and technical work. He will also continue as liaison officer on matters of aeronautics between the Bureau of Standards, the aeronautics branch of the Department of Commerce and other branches of the government.

DIVISION CHAIRMEN OF THE NATIONAL RESEARCH COUNCIL

THE following chairmen of divisions of the National Research Council have been appointed for the current academic year:

- Division of Federal Relations, George Otis Smith, director, U. S. Geological Survey.
- Division of Foreign Relations, R. A. Millikan, director, Norman Bridge laboratory of physics, California Institute of Technology, Pasadena.
- Division of States Relations, Raymond A. Pearson, president, University of Maryland.
- Division of Educational Relations, Vernon Kellogg, permanent secretary, National Research Council.
- Division of Physical Sciences, Dayton C. Miller, professor of physics, Case School of Applied Science.
- Division of Engineering and Industrial Research, Elmer A. Sperry, president, Sperry Gyroscope Company, Brooklyn, New York.
- Division of Chemistry and Chemical Technology, Frank C. Whitmore, professor of chemistry, Northwestern University.
- Division of Geology and Geography, Waldemar Lindgren, professor of economic geology, Massachusetts Institute of Technology.
- Division of Medical Sciences, Howard T. Karsner, professor of pathology, Western Reserve University.
- Division of Biology and Agriculture, William Crocker, director, Boyce Thompson Institute for Plant Research, Yonkers, New York.
- Division of Anthropology and Psychology, Knight Dunlap, professor of experimental psychology, the Johns Hopkins University.

SCIENTIFIC NOTES AND NEWS

THE Harben gold medal of the Royal Institute of Public Health for 1928 has been awarded to Sir Ronald Ross in recognition of his eminent services to public health.

THE Morris Liebmann memorial prize of \$500, for 1927, has been awarded to Dr. A. Hoyt Taylor, of the Naval Research Laboratory, in Washington, according to an announcement by Dr. Ralph Bown, president of the Institute of Radio Engineeers, at a meeting of the institute held in the Engineering Societies' Building, New York, on October 4.

THE Helen Culver gold medal of the Geographic Society of Chicago has been awarded to Dr. Gilbert H. Grosvenor, president of the National Geographic Society and editor of its magazine. The medal is for eminent accomplishments in the promotion of geography.

IN recognition of his scientific work in the domain of pathology, Dr. Louis B. Wilson, of the Mayo Clinic, has been elected an honorary member of the Czech Medical Society of Prague. This society was founded by the famous physiologist, J. E. Purkinje, who was its president until his death in 1869.

DR. EDWARD R. WEIDLEIN, director of the Mellon Institute of Industrial Research, University of Pittsburgh, has been elected an honorary member of the Chemical, Metallurgical and Mining Society of South Africa.

Nature states that in the course of the Congress of the Institut International d'Anthropologie, which was held at Amsterdam from September 20 to 27, it was announced that the Prix Hollandais of the institut had been awarded to Miss Dorothy A. E. Garrod in recognition of her work in prehistoric archeology, and especially for her excavation of the cave at the Devil's Tower, Gibraltar.

PROFESSOR VITTORIO ASCOLI, director of the Clinica Medica of Rome, has received from the University of Edinburgh the degree of doctor *honoris causa*.

PROFESSOR FOREST RAY MOULTON, director of the department of astronomy of the University of Chicago, has resigned to become associated in an executive capacity with the Utilities Power and Light Corporation of Chicago.

DR. MONTROSE T. BURROWS has resigned as head of the research department of the Barnard Free Skin and Cancer Hospital.

C. F. MARBUT, in charge of soil survey work, U. S. Bureau of Chemistry and Soils, has been appointed a member of the interbureau corn-borer committee by Dr. A. F. Woods, director of scientific work. This committee, whose object it is to determine what aid the various bureaus of the department may give in the corn-borer control work, includes representatives of the Bureaus of Plant Industry, Public Roads, Animal Industry, Agricultural Economics, Dairy Industry, Extension Service, Chemistry and Soils and Entomology. AT Yale University, Professor Richard S. Lull, professor of paleontology and director of the Peabody Museum, has been appointed to fill the new Sterling professorship in paleontology, and Professor Ross G. Harrison, Bronson professor of comparative anatomy and director of the Osborn zoological laboratory, has been appointed to the Sterling professorship in biology. These appointments fill the new Sterling chairs given to the university recently by the trustees of Mr. Sterling's estate. Dr. Francis G. Blake, the John Slade Ely professor of medicine, becomes Sterling professor of medicine, succeeding Dr. Edward A. Park, who recently resigned.

DR. RUFUS COLE, director of the hospital of the Rockefeller Institute for Medical Research, has been appointed to membership on the New York Commission on Ventilation, of which Dr. C.-E. A. Winslow, professor of public health in Yale University, is chairman.

DR. CARL TEN BROECK, professor of bacteriology at the Peking Union Medical College, China, has been elected a member of the board of scientific directors of the Rockefeller Institute for Medical Research.

DR. JOHN A. HARTWELL has been chosen a trustee of the New York Academy of Medicine for the unexpired term of the late Dr. Walter B. James.

DR. H. E. BARNARD, president of the American Institute of Baking, has resigned. Mr. Henry Stude, president of the American Bakers' Association, has been asked by the chairman of the board of directors to serve as temporary head.

DR. ALBERT R. MERZ has been elected president of the Washington, D. C., chapter of the American Institute of Chemists, to fill the unexpired term of Professor Paul H. Brattain, resigned.

DR. HENRY G. KNIGHT, dean of the college of agriculture and director of the experiment station of the University of West Virginia, Morgantown, who was recently appointed by Secretary Jardine as chief of the new Bureau of Chemistry and Soils, was formerly inducted into office on October 1.

RAYMOND T. PARKHURST, head of the poultry department of the University of Idaho Experiment Station, has been appointed director of the National Institute of Poultry Husbandry at the Harper Adams Agricultural College, Newport, England, rendered vacant by the resignation of Professor Willard C. Thompson in 1926.

GEO. HUME SMITH has recently resigned his instructorship in botany at the University of Illinois to become a member of the staff of *Biological Abstracts*, the headquarters of which are at the University of Pennsylvania. CHARLES J. STUCKEY, who held the Porter fellowship of the American Physiological Society for the year 1926–1927, has accepted a position as research chemist at the research laboratories of Scott and Bowne, Bloomfield, N. J.

DR. JOHN BOSWELL WHITEHEAD, professor of electrical engineering and dean of the school of engineering at the Johns Hopkins University, has returned from France, where he was serving as exchange professor in engineering and applied science during the past academic year. He visited the universities of Aix-Marseille, Grenoble, Lyon, Bordeaux, Toulouse, Caen, Lille, Strasbourg, Nancy and Paris, in each of which he delivered a series of lectures on dielectric theory and insulation. In Paris the lectures were delivered at the Sorbonne and at the Ecole Supérieure d'Electricité. The University of Nancy conferred on Dr. Whitehead its medal of honor.

PROFESSOR CHARLES E. DECKER, paleontologist of the University of Oklahoma; Professor Leslie Spier, head of the department of anthropology, and Dr. Chas. N. Gould, director of the Oklahoma Geological Survey, recently visited the gravel beds near Frederick, in southwestern Oklahoma, which have recently yielded human artifacts found in connection with mammalian bones of early Pleistocene or late Pliocene age. The party was successful in discovering a section about three by five feet in size of the top part of the carapace of the ground sloth, Glyptotherium.

DR. W. F. FOSHAG, of the division of mineralogy, U. S. National Museum, has returned after four months spent in the mining regions of Mexico, particularly in the states of Guanaguato, Zacatecas, Chihuahua, Durango and Sonora. Some thirty-five boxes of specimens, the result of the trip, have been received at the museum.

PROFESSOR HARRY N. EATON, of the department of geology, of Syracuse University, has returned after a year's leave of absence spent studying the structure of the smaller mountain ranges of the desert west of the Rocky Mountains.

COMMANDER GEORGE MILLER DYOTT, who returned last spring from a trip of exploration along the River of Doubt in Central Brazil, is forming a new expedition to start in a few weeks for the unexplored jungle south of the Amazon.

PROFESSOR HANS CLOOS, head of the department of geology of the University of Bonn, has been spending several weeks in America studying North American mountains. After having spent some weeks in the mountains of California and Nevada, studying especially the granite masses of the Yosemite valley, Dr. Cloos visited Oklahoma in order to familiarize himself with the type of folding in the Arbuckle and Wichita Mountains.

In the last few weeks a number of eminent poultry authorities from various parts of the world, who attended the recent world poultry congress at Ottawa, Canada, have visited the United States, according to the Official Record of the U. S. Department of Agriculture, including Professor Salvator Castello, head of poultry work in Spain; Professor H. Ogiware, expert, Imperial Zootechnical Experiment Station, Chiba-shi, Japan; Professor E. T. Halnan, in charge poultry nutrition work, University of Cambridge, England; Dr. Fritz Pfenningstorff, Berlin, Germany; Dr. C. H. Van Gink, Voorburg, Holland; Professor Hugo Medina, Chilean Experiment Station, Santiago, Chile, and Captain Washington, England.

MISS M. BLACKETT, an investigator of the National Institute of Industrial Psychology of Great Britain, has been awarded a Laura Spelman Rockefeller Memorial Fellowship, and plans to spend a year in the study of psychology in the United States.

DR. H. C. SAMPSON, of the Royal Botanical Gardens at Kew, London, is visiting Jamaica, under the auspices of the British Empire Marketing Board, in connection with plans to improve the products of the region.

DR. EDWARD FRANCIS, surgeon, of the Hygienic Laboratory of the United States Public Health Service, will deliver the first Harvey Society lecture at the New York Academy of Medicine on November 11. His subject will be "Tularemia."

DR. ALONZO TAYLOR, director of food research at Stanford University, gave the Carpenter lecture at the New York Academy of Medicine on October 20. Dr. Taylor spoke on "The Present and Future Food Supply of the United States."

DR. RICHARD B. MOORE, dean of science at Purdue University, will address the regular meeting of the Chicago section of the American Chemical Society on October 21 on "The Story of Helium."

DR. EVARTS A. GRAHAM, professor of surgery at the Washington University School of Medicine, St. Louis, has been selected to deliver the Shattuck lecture before the Massachusetts State Medical Society at Boston in 1928.

SIR WILLIAM BRAGG will deliver a lecture on "Crystallization" at the opening meeting of the 1927–28 session of the Institution of Chemical Engineers on October 28.

THE Huxley lecture will be delivered at Charing Cross Hospital Medical School on November 24 by Sir Archibald Garrod, Regius professor of medicine in the University of Oxford, on "Diathesis." A COMMITTEE has been formed to prepare a memorial to Dr. Thomas W. Salmon, professor of psychiatry at Columbia University, and the first medical director of the National Committee for Mental Hygiene, who in August drowned while sailing on Long Island Sound.

THE Institute of Tropical and Preventive Medicine, Chicago, has issued an appeal for funds to establish a Gorgas Memorial as a tribute to William Crawford Gorgas. President Coolidge has approved of the memorial plan and is honorary president of the proposed institute in memory of Mr. Gorgas. It is proposed to raise an endowment fund of at least \$5,000,000.

WALTER REED MEMORIAL COMMISSION of the Medical Society of Virginia for the Encouragement of Research will dedicate as a national shrine at Belroi, Gloucester County, Virginia, the birthplace of Walter Reed.

A MEMORIAL window in memory of Dr. Francis D. Kelsey, professor of botany at Oberlin College from 1893 to 1897, has been placed in the First Congregational church, in Toledo.

As already noted in SCIENCE, a committee has been formed for the purpose of raising funds and erecting a monument to the late Dr. Fritz Müller, the wellknown Brazilian naturalist. The monument is to be executed by the sculptor, F. W. Lobe, and will be placed at Blumenau, State of Sta. Catarina, Brazil, where Dr. Müller spent the greater part of his life. Members of the committee are: Dr. Victor Konder, minister of public roads; Dr. J. Boiteux, honorary president; Kurt Hering, president; Dr. Amadeu Luz; Otto Rothkohl, German consul; August Zittlow; Hans Lorenz and Conrado Balsini. Contributions are desired from American scientific men. These may be sent to Banco Germanico, São Paulo, Brazil, or to Dr. Waldo L. Schmitt, Smithsonian Institution, who will be glad to acknowledge and forward them.

DR. FRANCIS WELD PEABODY, professor of medicine at Harvard University, died on October 13, aged fortyfive years.

DR. FREDERICK LEONARD WASHBURN, professor of economic vertebrate zoology at the University of Minnesota, and state geologist from 1902 to 1918, died on October 15, aged sixty-seven years.

PROFESSOR A. LIVERSIDGE, F.R.S., emeritus professor of chemistry in the University of Sydney, died on September 26, aged seventy-nine years.

M. EMILE HAUG, membre titulaire of the section of mineralogy of the Paris Academy of Sciences, professor of geology at the Sorbonne and a past-presiOCTOBER 21, 1927]

dent of the Geological Society of France, died on August 28. aged sixty-six years.

THE one hundred and forty-seventh regular meeting of the American Physical Society will be held in Chicago, at the Ryerson Physical Laboratory, on Friday and Saturday, November 25 and 26.

THE American Psychological Association will hold its annual meeting at the Ohio State University, from Wednesday to Friday, December 28, 29 and 30, under the presidency of Dr. Harry L. Hollingworth, of Barnard College, Columbia University.

THE twenty-third annual meeting of the American Society of Tropical Medicine will be held in Boston, on October 21 and 22, in the amphitheater of building E, Harvard Medical School. Dr. George C. Shattuck, of the Harvard Medical School, is the president of the society.

WITH the opening of the 1927–28 session, the British Institute of Metals takes possession of its new headquarters, which include an additional library and reading room, at 36 Victoria Street, London.

At its recent annual meeting in Edinburgh, the representative body of the British Medical Association approved the recommendation of the council to hold the annual meeting in 1930 in Winnipeg, Canada. The annual meeting in 1929 will be in Manchester, England. At the Edinburgh meeting, Sir Robert W. Philip, professor of tuberculosis, University of Edinburgh, and honorary physician to the king at Scotland, was inducted into office as president of the association for 1927–28. Sir Ewen McLean, gynecologist at the Cardiff Infirmary, was made president-elect; Dr. Charles O. Hawthorne, chairman of the representative body, and Mr. Bishop Harman, treasurer.

THE Australasian Association for the Advancement of Science will meet at Hobart, Tasmania, in January, 1928.

AT the meeting of the International Horticultural Congress, which recently closed its sessions in Vienna, it was decided to refer the question of the creation of an independent bureau for congresses to the International Institute for Agriculture at Rome. Great Britain's invitation to hold the 1930 congress in London was unanimously adopted.

THE Kaiser-Wilhelm Institute for Anthropology was inaugurated in Berlin-Dahlem on September 15 by Herr von Harnack, the president of the Kaiser-Wilhelm Gesellschaft. Professor Eugen Fisher, the director of the new institute, outlined the program. In addition to the anthropological department, there are others devoted to heredity and eugenics.

ACCORDING to *Museum News*, the North Sea aquarium of the State Biological Institute on the island of Helgoland has recently been opened to the public. The aquarium has about fifty large tanks and shows the complete fauna and flora of the North Sea.

OPENING exercises of the second session of the school of tropical medicine of the University of Porto Rico, under the auspices of Columbia University, were held on October 3 in the assembly room of the school. Dr. Henry J. Doerman, acting chancellor of the University of Porto Rico, spoke on the rôle of the school as a graduate department of the university. The director, Dr. R. A. Lambert, gave an address on "Modern Tendencies in Medical Education." Dr. Pedro N. Ortiz, commissioner of health and professor of hygiene and transmissible diseases, presided.

LOUIS B. KUPPENHEIMER has contributed the sum of \$250,000 to the University of Chicago to establish "The Louis B. and Emma M. Kuppenheimer Foundation." The income derived from this fund is to be devoted to the study of the structure, functions and diseases of the eye, and to the support of the clinical, research and teaching activities of its department of ophthalmology.

DR. G. A. TALBERT, head of the department of physiology at the University of North Dakota Medical School, was a recipient of a grant of \$300 the past year from the American Medical Association Research Fund. With this aid Dr. Talbert and his students were able to further pursue their research on the study of the constituents of the sweat, urine and blood, also gastric acidity and other manifestations resulting from sweating.

ACCORDING to the Italian correspondent of the *Journal* of the American Medical Association, the institute of general pathology of the University of Genoa recently received a legacy of several million liras from the estate of Dr. Mangiamarchi, who died at Pretoria, Transvaal. By testamentary provision, the bequest must be devoted to the development of the new institute that was opened last year.

ON September 24 the R. R. S. *Discovery* anchored in Falmouth Harbor, England, having completed a two years' cruise to Cape Town, South Georgia and the Falkland Islands; she was expected to arrive in the Thames on October 1. The primary object in fitting out the *Discovery* expedition was the investigation of the southern whaling fisheries. It is expected that the scientific staff will spend some months ashore working up the results of the expedition, and that these will prove of great value to science and to the whaling industry.

DR. LUDLOW J. WEEKS, of the Canadian Geological Survey, Department of Mines, and an assistant, Mr. Maurice H. Haycock, of Wolfville, Nova Scotia, accompanied the 1926 Canadian Arctic expedition as far as Baffin Island and returned on this year's patrol ship. After establishing headquarters at Pangnirtung in 1926 several trips were made around the head of Cumberland Gulf and a plane-table map of Pangnirtung fiord was completed before the 1926-27 winter set in. During the winter and the following spring approximately 2,300 miles were covered by sled and dog team. By this means the party was able to map the northern part of Cumberland Gulf, and in the spring, to investigate the geology and mineral possibilities of the region. Early in May the party moved to Nettilling fiord and, after the break-up in July, a start was made on the journey by water to Nettilling Lake. The party succeeded in carrying a traverse from Nettilling fiord through a chain of small lakes to Nettilling Lake and along the south shore of the latter.

UNIVERSITY AND EDUCATIONAL NOTES

By the will of the late Annie Downing Willson, of Cambridge, the sum of \$150,000 is left in trust to Harvard University, the income of which is to be used to maintain a professorship of applied astronomy in the university.

THE will of Robert Forsyth, consulting engineer of Chicago, bequeaths \$100,000 to the Rensselaer Polytechnic Institute of Troy, N. Y.

THE University of Rochester will receive from the estate of James M. Cutler, former mayor, property valued at \$2,407,151, to be used as a permanent endowment. \$55,486.41 was set aside by Mr. Cutler for the College of William and Mary at Williamsburg, Va.

DR. G. CARL HUBER, professor of anatomy and histology in the University of Michigan since 1892, has been made dean of the graduate school of the University of Michigan, succeeding the late Professor Alfred H. Lloyd, who died last spring.

DR. A. W. STEARNS has been appointed dean and associate professor of neurology at the Tufts Medical School.

DR. CHARLES ALLEN PORTER, John Homans professor of surgery at the Harvard Medical School, has resigned. Dr. Porter's successor will be Dr. Edward Peirson Richardson, now assistant professor of surgery in the school.

PROFESSOR J. R. DUPRIEST, head of the department

of mechanical engineering at Oregon State College, recently accepted a similar position at the University of Minnesota.

DR. L. B. NICE has resigned as professor of physiology at the University of Oklahoma, in order to accept an appointment as professor of physiology at Ohio State University.

PROFESSOR I. M. KOLTHOFF, of the University of Utrecht, Holland, has been appointed professor of analytical chemistry at the University of Minnesota for the coming year. He is to replace Professor P. H. M. P. Brinton, who recently resigned to do private work.

DR. LEON H. STRONG, formerly assistant professor of anatomy at the University of Indiana, has been appointed associate professor of anatomy at the University of Utah School of Medicine. Dr. O. A. Ogilvie (M.D., Penn. '27) has been appointed assistant professor of anatomy and pathology in the same school.

DR. NOEL F. SHAMBAUGH, former fellow in medicine of the National Research Council, upon his return from Berne, Switzerland, was appointed assistant professor of clinical investigation in the department of internal medicine of the University of Michigan.

DR. WILLIAM A. P. GRAHAM, instructor in geology at the University of Iowa, has been made associate professor of geology at Texas Technological College. Dr. M. A. Stainbrook, instructor in the University of Tennessee, has been made assistant professor of geology in the college.

DR. WILLIAM H. ADOLPH, formerly of Chee-Loo University, China, last year at Yale University, has been appointed to an associate professorship of chemistry in the University of Nebraska.

DISCUSSION AND CORRESPONDENCE

A SUGGESTION OR HYPOTHESIS CONCERN-ING THE ZODIACAL LIGHT

THE nature or origin of the zodiacal light is regarded as more or less of a mystery. Some have thought that the phenomenon may indicate the existence of a diffused ring of small particles in equilibrium and in nature somewhat like those of Saturn's rings, though more scattered and existing in very small amount compared thereto.

This hypothesis assumes a stability which it is difficult to accord to such a ring.

If we assume, however, that the coronal streamers from the sun which apparently extend without limit of distance into space, as partly composed of or accompanied by fine particles propelled by the pressure of light, or even of fine solids from condensation