his activity in the National Academy of Sciences and especially for his part in the creation of the National Research Council. His conviction that it was important to publish results promptly led to the organization of the *Proceedings* of the National Academy, which have continuously brought out short papers on current researches in many sciences by members of the National Academy and their colleagues. Dr. Hale was instrumental also in the founding of the *Astrophysical Journal*, of which he has been an editor from its beginning.

Dr. Hale's founding of the Mount Wilson Observatory, his building of successively greater telescopes for long-distance and large-scale observations, from the 40-inch refractor to the new 200-inch reflector, and his inspiration and efforts that resulted in the creation and growth of the California Institute of Technology are well known to all scientists. That he has achieved so much administratively and at the same time added such a wealth of knowledge in special fields of astronomy, particularly in solar physics and instrumental design, stands as the mark of a great man and a great scientist.

The program of the Harvard symposium, organized by Dr. Harlow Shapley, is as follows:

Biographical Notes. Dean H. M. Goodwin, Massachusetts Institute of Technology.

Dr. Hale as a Student Assistant at Harvard. Professor W. P. Gerrish, Harvard Observatory.

Kenwood and Yerkes Observatories and the Astrophysical Journal. Dr. G. P. Kuiper, Harvard Observatory.

Mount Wilson Observatory. Dr. Robert B. King, Massachusetts Institute of Technology.

California Institute of Technology. Dr. E. B. Wilson, Jr., Society of Fellows, Harvard University.

National Academy of Sciences and the National Research Council. Dr. Arthur L. Day, Geophysical Laboratory, Carnegie Institution of Washington.

Dr. Hale's Contributions to Solar Physics. Dr. Theodore Dunham, Princeton University and Mount Wilson Observatory. The Manufacture of the 200-inch reflector. Dr. George V. McCauley, Corning Glass Works.

J. Mohr

HARVARD COLLEGE OBSERVATORY

RECENT DEATHS

Professor Edward H. Perkins, head of the department of geology at Colby College and since 1929 assistant state geologist for Maine, died on April 13 at the age of fifty years.

Dr. Charles V. Green, research associate at the Roscoe B. Jackson Memorial Laboratory at Bar Harbor, Me., was drowned on April 18, when the boat from which he was fishing overturned. He was thirty-four years old.

Dr. Harlow Brooks, professor of clinical medicine at New York University, past president of the College of Physicians, died on April 13 at the age of sixty-five years.

DR. WILLIAM BRADLEY COLEY, formerly professor of clinical cancer research at Cornell University Medical College, surgeon-in-chief emeritus of the Hospital for the Ruptured and Crippled, New York City, with which he had been connected for forty-five years, died on April 16, at the age of seventy-four years.

WILLIAM LOUIS ABBOTT, formerly director of the Philadelphia Zoological Gardens and honorary associate zoologist of the Smithsonian Institution, died on April 2 at the age of seventy-six years.

Nature reports the death of James Whitehead, fellow of the Imperial College of Science and Technology, who was a leading authority on patent law, especially in its applications to technology, on April 3, aged fifty-eight years; of Dr. W. A. Parr, president of the British Astronomical Association in 1932–34, on April 2, and of Professor J. Stoklasa, director of the State Institute of Research in Plant Products, Prague, on April 4, aged seventy-six years.

SCIENTIFIC NOTES AND NEWS

The honorary degree of doctor of laws of the University of Wisconsin will be conferred in June on Dr. Isaiah Bowman, president of the Johns Hopkins University.

Nature states that on the occasion of the centenary celebration of the University of London, degrees will be conferred honoris causa on thirteen British and six foreign distinguished men, including Sir William Bragg, S. A. Courtauld, Sir Joseph Larmor, Dr. J. W. Mackail, Sir George Newman, Sir Charles Peers and H. G. Wells; and Professor Albert Einstein, Professor Johan Hjort and Professor Max Planck.

Dr. M. J. Blish, chemist of the Nebraska Agricultural Experiment Station, has been awarded the Thomas Burr Osborne Medal for his work in cereal chemistry. Presentation of the medal will occur at the annual convention of the American Association of Cereal Chemists, at Dallas, Texas, on June 2.

At the recent Kansas City meeting of the American Chemical Society, the Langmuir prize of \$1,000 was awarded to Dr. John Gamble Kirkwood, assistant professor of physical chemistry at Cornell University, for his work in molecular chemistry.

THE Grande Médaille à l'effigie d'Isidore Geoffroy St. Hilaire has been awarded by the Société Nationale d'Acclimatation de France to Sir Arthur Hill, director of the Royal Botanic Gardens, Kew, and to Dr. V. Van Straelen, director of the Royal Museum of Natural History, Brussels.

M. J. DE LAPPARANT, professor of petrography at the University of Strasbourg, has been elected a correspondent of the Paris Academy of Sciences in the section of mineralogy.

THE German Society of the History of Medicine, Science and Technology has elected Dr. Arthur Meiner, J. A. Barth, C. Kabitzsch, H. Meusser and L. Voss to honorary membership in recognition of their services to the history of science.

Henry Balfour, curator of the Pitt-Rivers Museum and fellow of Exeter College, Oxford, has been made a member of the Athenaeum Club, London, under the provision which empowers the annual election by the committee of "a certain number of persons of distinguished eminence in science, literature, the arts or for public service."

At the third annual meeting of the American Institute of Nutrition held in Washington, D. C., on March 25, the following officers were elected: *President*, Eugene F. DuBois; *Vice-president*, Mary Swartz Rose; *Treasurer*, George R. Cowgill; *Secretaries*, C. A. Elvehjem, R. M. Bethke and L. A. Maynard; *Editorial Board*, E. M. Nelson, F. C. Koch, Grace MacLeod and L. H. Newburgh.

At the twenty-ninth annual meeting of the American Association for Cancer Research held in Boston on April 8, the officers elected were: Dr. William H. Woglom, president; Dr. James Ewing, vice-president; Millard C. Marsh, secretary-treasurer. Dr. E. T. Bell was elected a member of the council.

Nature reports that at the annual meeting of the Ray Society, London, the following officers were reelected: President, Sir Sidney Harmer; Treasurer, Sir David Prain; Secretary, Dr. W. T. Calman. Dr. Robert Gurney was elected a vice-president, and Dr. G. P. Bidder, Dr. Malcolm Smith and Captain Cyril Diver were elected new members of the council.

At the recent annual meeting of the Royal Meteorological Society, London, the following officers were elected: President, Dr. F. J. W. Whipple; Vice-presidents, Charles J. P. Cave, Lieut.-Col. Ernest Gold, Capt. W. N. McClean, W. M. Witchell; Treasurer, R. A. Watson Watt; Secretaries, Dr. J. Glasspoole, E. L. Hawke, M. McCullum Fairgrieve; Foreign Secretary, Capt. C. J. P. Cave; New Members of Council, Dr. C. E. P. Brooks, A. H. R. Goldie, W. G. Kendrew, J. F. Shipley.

Professor John A. Hunter, since 1906 head of the department of mechanical engineering at the University of Colorado, and Dr. Severance Burrage, associate professor of bacteriology in the School of Medicine, will retire at the close of the academic year.

Dr. Harold E. Himwich, who joined the faculty of the Albany Medical College, with the rank of associate professor, in October, 1935, has been appointed professor of physiology and pharmacology.

Professor J. G. Semple, professor of mathematics in the Queen's University, Belfast, has been appointed professor of mathematics at King's College, University of London. Dr. C. D. Ellis, lecturer in natural science at Trinity College and lecturer in the department of physics of the University of Cambridge, has been appointed to the Wheatstone chair of physics, also tenable at King's College. Professor H. H. Woollard has been appointed to the university chair of anatomy tenable at University College. Since 1929 he has been professor of anatomy at St. Bartholomew's Hospital Medical College.

Dr. Ralph W. Phillips, instructor in animal husbandry at Massachusetts State College, has left Amherst to become associate animal husbandman with the U. S. Department of Agriculture. He will be stationed at the National Research Center, Beltsville, Md.

Dr. A. E. ALEXANDER, mineralogist at the Buffalo Museum of Science, has been appointed petrographer in the ceramic laboratory of the Electric Auto-Lite Company, of Toledo, Ohio.

SIR PATRICK LAIDLAW has been appointed by the British Medical Research Council to be deputy director of the National Institute for Medical Research, and head of the department of pathology and bacteriology, in succession to the late Captain S. R. Douglas.

MEMBERS of the Research Procedure Committee of the Engineering Foundation for 1936 are: F. F. Colcord, metallurgist, U. S. Smelting, Refining and Mining Company; F. M. Farmer, vice-president and chief engineer, Electrical Testing Laboratories; Thaddeus Merriman, consulting engineer, New York City, and W. H. Fulweiler, consulting chemist, Wallingford, Pa.

PERRY BURGESS, president of the Leonard Wood Memorial Foundation, recently spent some time in Puerto Rico and the Virgin Islands. Mr. Burgess lectured at the School of Tropical Medicine, where he gave an account of his activities as head of the organization.

The Edgar Fahs Smith Memorial Lecture at the University of Pennsylvania will be given on May 22 by Dr. Julius O. Stieglitz, professor emeritus of chemistry at the University of Chicago, on "Chemistry and Progress in Medicine."

Dr. Samuel T. Orton, professor of neurology and neuropathology at the College of Physicians and Surgeons of Columbia University, gave on April 10, 17 and 24 at the New York Academy of Medicine the fourth series of the Thomas William Salmon Memorial Lectures. The general subject of the lectures was "Developmental Disorders of the Language Faculty and their Psychiatric Import."

Dr. Robert A. Millikan, of the California Institute of Technology, delivered the Page-Barbour Lectures at the University of Virginia on April 20, 21 and 22. His subject was recent work on the cosmic rays.

Dr. Max Jakob, formerly in charge of the heat laboratories of the Physikalische-Technische Reichsanstalt, gave six free public lectures at Harvard University and the Massachusetts Institute of Technology during the week of April 7 on "Heat Transfer and the Properties of Steam."

Dr. Leon Asher, director of the Physiological Institute of the University of Berne, Switzerland, lectured before the Biological Society of the University of Maryland on April 15. His subject was "The Nervous System and the Internal Secretions."

The Society for Research on Meteorites, which is associated with the American Association for the Advancement of Science, will hold its fourth annual meeting at the University of California at Los Angeles on June 23 and June 24, under the presidency of Dr. Frederick C. Leonard. There will be two sessions a day for the reading of technical papers. At six o'clock on Tuesday evening there will be a dinner for members and their guests, followed by an excursion to the neighboring Griffith Observatory and Planetarium, at which a lecture demonstration will be given at eight o'clock. The scientific sessions will be open to the public.

The annual Conference for Medical Officers in Industry Oversea will be held on July 16, at the London School of Hygiene and Tropical Medicine, in order that medical officers in industry on leave from the tropics may be able to meet their colleagues for discussion. The main subjects will be the control of malaria and epidemic diseases in the tropics and hygiene.

THE conversaziones of the Royal Society will be held this year on May 28 and June 29 in the rooms of the society in Burlington House, London. A third soirée will be held on July 28 in connection with the Second International Congress for Microbiology.

THE Committee on Scientific Research of the American Medical Association invites applications for grants of money to aid in research on problems bearing more or less directly on clinical medicine. Prefer-

ence is given to requests for moderate amounts to meet specific needs. For application forms and further information, please address the Committee at 535 North Dearborn Street, Chicago, Illinois.

Industrial and Engineering Chemistry states that the American Institute of Mining and Metallurgical Engineers has authorized the appointment of a committee to draw up rules of procedure under which awards can be made to petroleum engineers for outstanding contributions to the art of finding and producing oil and gas. The awards will be sponsored by the Petroleum Division of the institute and are in memory of Anthony F. Lucas, a pioneer in the oil industry. The first medal is to be presented in February, 1937.

Howard University School of Medicine, Washington, has received a grant of \$100,000 from the Rockefeller Foundation, to be used over a period of five years toward the development of the departments of medicine and surgery.

THE Rockefeller Foundation has made an appropriation of \$10,000 to Columbia University, with the provision that \$8,000 is to be used for research on poliomyelitis, and \$2,000 for research on speech disturbances and other neurological problems.

THE following additional awards have been made from the Elizabeth Thompson Science Fund: to Charles J. Fish, Rhode Island State College, \$100.79 for apparatus to be used in an investigation of the annual cycle of the endemic species of Narragansett Bay; to Arthur Jacot, Appalachian Forest Experimental Station, \$60 for traveling expenses to and from southeast Georgia for the purpose of duplicating Thomas Say's collection of mites, said collection to be deposited in the Museum of Comparative Zoology; to Kurt Stern, Department of Physiological Chemistry, Yale University, \$200 for purchase of equipment to be used in an investigation of the chemical constituents of the enzyme catalase. The trustees of the fund meet annually in April. Applications for grants should be sent well in advance of the meeting to the secretary, Dr. Jeffries Wyman, Jr., Biological Laboratories, Harvard University, Cambridge, Mass.

The Toledo, Ohio, Zoological Society has under construction adjacent to the Zoological Park buildings for a Museum of Natural and Social Science, to be erected at a cost of \$900,000; an aquarium, at the cost of \$350,000, and a bird house, at the cost of \$250,000. A botanical garden with a large greenhouse has also been planned. The group includes ten major buildings, and is three miles from the heart of the Toledo business district. The new construction is expected to be complete about July 1.

It is proposed to erect a museum building at the University of Texas. Plans for the first unit have been approved by the Board of Regents, which serves as the executive committee for the museum. The building will cost \$750,000, of which \$300,000 has been appropriated by Congress and \$225,000 by the Texas legislature. The balance will be raised by private donations and by the sale of centennial coins.

CONSTRUCTION of the Rothschild-Hadassah-University Hospital on Mount Scopus, overlooking Jerusalem, according to The New York Sun, probably will begin late this summer. Dr. Jacob J. Golub, director of the Hospital for Joint Diseases, New York City, is consultant to the building committee of the hospital. It will be the first medical center in Palestine and will cost about \$750,000. On a twenty-five-acre plot will be three units of buildings, each three stories high; a 260-bed hospital, a graduate medical school, with complete laboratories and a nurses' training school and residence. The school has been named the Nathan Ratnoff Medical School, in honor of the chairman of the American Jewish Physicians' Committee, which has for a long time sought to add a medical department to the Hebrew University in Palestine. The nurses' school will be the Henrietta Szold School, named in tribute to the founder of Hadassah, the women's Zionist organization which is cooperating with the American Jewish Physicians' Committee in building the medical center. Erich Mendelsohn, architect, who is a refugee from Nazi Germany, designed the buildings.

The establishment of a Tropical Medical Research Committee is announced by the *British Medical Journal*. The decision to appoint this new body has been taken by the Medical Research Council in consultation with the Colonial Office. The new committee will advise and assist in the direction of such investigations as the council may be able to promote, whether at home or abroad, into problems of health and disease in tropical climates, and make suggestions

generally as to research in this field. The committee will be a purely scientific body. It will include representatives of the Colonial Office and of the Liverpool and London Schools of Tropical Medicine, with other members appointed as individual experts in tropical medicine or in different branches of medical science. The following will serve in the first instance: Professor J. C. G. Ledingham, (chairman), Professor A. J. Clark, Dr. N. Hamilton Fairley, Professor W. W. Jameson, Dr. Edward Mellanby, Dr. Muriel Robertson, Major-General Sir Leonard Rogers, Dr. H. Harold Scott, Sir Thomas Stanton, Dr. C. M. Wenyon, Professor Warrington Yorke and Dr. A. Landsborough Thomson, secretary. The Journal writes: "Research in tropical medicine has always been of concern to the Medical Research Council, whose constitutional position under a Committee of the Privy Council leaves its work unrestricted by territorial limitations. The responsibility was explicitly recognized when the Secretary of State for the Colonies was added to this committee of the Privy Council on its reconstitution in 1926. The council has, however, not hitherto been able to assist investigations in the tropics except on isolated occasions, although it has regularly made grants for work at home in relation to tropical problems. The step now announced indicates an intention to take a more active part in work in this field."

THE Carnegie United Kingdom Trustees have allocated £5,000 for grants to museums in Great Britain for reorganization and development during the period 1936–1940. Grants will normally not exceed £500, and may be used only for carrying out definite schemes of bettering exhibition, labeling, etc. Applications for these grants are handled through the Museums Association. The trustees have also set aside funds for establishing two or three experimental schemes for extending museum services to rural areas, and for travel grants to museum curators. Grants for these experiments will be about £1,000 each.

DISCUSSION

ANTARCTIC FOSSIL PLANTS

RECENTLY the Geological Museum of Harvard University obtained the specimens of rocks and fossils collected by the Admiral R. E. Byrd Expedition to Little America. The fossil plants and coal have been transmitted to the writer for study and description.

The material was collected on Mt. Weaver, 10,000 feet above sea-level, south latitude 86° 58′ and west longitude 152° 30′. This occurrence is located more than 20° further south than the only described extensive Antarctic collection. The Swedish South Polar

Expedition of 1901–03 found a luxuriant flora on Grahamland, Hope Bay, south latitude 63° 15′. Grahamland lies south of South America and north of Antarctica. Mount Weaver, scarcely 3° from the South Pole, lies south of New Zealand. The British Antarctic expeditions of 1910–1914 collected a Triassic florule from south latitude 85°.

¹ T. G. Halle, "Mesozoic Flora of Graham Land," Schwed. South Polar Exped., 1901-03, Bd. 3, lief. 14, 1913

² A. C. Seward, British Antarctic Expedition Natural Hist. Rept. Geol. v. 1, No. 1: 1-49, 1914.