in lightening his load of official duties he has deemed it best to relinquish his fruitful connections with the arboretum. With his retirement as supervisor there is now brought to a close a second notable chapter in the history of the arboretum.

## Professor Jack

After having been connected with the Arnold Arboretum for nearly fifty years, Professor J. G. Jack retired on October 1, 1935. On this occasion the staff of the Arnold Arboretum wishes to express its great appreciation of the efficient services he rendered to the institution during this long time. Coming to the arboretum in 1886, he saw it grow from modest beginnings to its present size and importance; in this development he played no small part and did his full share in the work. One of his chief duties was the keeping of the exact records of all the plants introduced into the ever-growing collections to which he himself added considerably. He was the first to introduce, during a voyage to the Far East in 1905, plants of the then little known flora of Korea, among them the handsome Korean azalea; he also brought back from collecting tours in the Rocky Mountains and the Pacific Coast many interesting trees and shrubs new to the garden. As teacher, consultant and lecturer, he succeeded in interesting a wide circle of men and women in the work of the arboretum and gained for it many friends who, in turn, were of great help to the institution financially and in other ways. More recently he played an important part in the development of the tropical branch of the Arnold Arboretum, the Atkins Institution of the Arnold Arboretum in Cuba; for a number of years he spent several months each winter in Cuba, collecting plants and seeds for the garden and creating an herbarium representing the flora of the surrounding country, which is of great help to the students of the university working there. The herbarium of the arboretum itself also profited greatly from his activity in Cuba and from his travels abroad and in this country.

We rejoice in his long term of fruitful and honorable connection with the arboretum and express our deep regard for him personally and for what he has meant to the institution. The members of the staff are pleased to see that after his retirement he has not lost interest in the arboretum but continues to help in its work, and they hope they will have the pleasure of seeing him here for many years to come.

## SCIENTIFIC NOTES AND NEWS

The presentation of the Catherine Wolfe Bruce Gold Medal of the Astronomical Society of the Pacific to Professor Armin O. Leusehner, of the University of California, was made on the evening of February 24. Dr. Seth B. Nicholson, of the Mount Wilson Observatory, made the presentation. Dr. Leusehner delivered an address entitled "The Story of Andromache—An Unruly Planet."

The Lamme Medal of the American Institute of Electrical Engineers has been awarded to Dr. Vannevar Bush, vice-president of the Massachusetts Institute of Technology and dean of the School of Engineering, "for his development of methods and devices for application of mathematical analysis to problems of electrical engineering." The medal and certificate will be presented to him at the annual summer convention of the institute, which is to be held in Pasadena from June 22 to 26.

Dr. Peter H. Buck (Te Rangi Hiroa), who was recently elected to succeed Professor Herbert E. Gregory as director of the Bernice P. Bishop Museum, Honolulu, has been awarded the Rivers Memorial Medal for 1936. The award is for "meritorious field work in physical and cultural anthropology."

THE Moulton Gold Medal of the London Institution of Chemical Engineers has been awarded to R. W. Powell and Dr. Ezer Griffiths for their paper on "The Evaporation of Water from Plane and Cylindrical Surfaces."

On the occasion of the celebration of the sixtieth anniversary of the founding of the Johns Hopkins University on February 22, Dr. Isaiah Bowman made his first address as president of the university. There were no formal installation ceremonies. The honorary degree of LLD was conferred on Dr. Irving Langmuir, associate director of the Research Laboratory of the General Electric Company; on Dr. Westel W. Willoughby, professor emeritus of political science at the Johns Hopkins University, and on Dr. William Holland Wilmer, until his retirement last year director of the Wilmer Institute of Ophthalmology.

Dr. John A. Fleming, director of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, was elected on January 21 a corresponding member of the Chr. Michelsen Institute of Science and Intellectual Freedom of Bergen, Norway.

Dr. Stephen Timoshenko, of the University of Michigan, has been appointed professor of theoretical and applied mechanics at Stanford University.

Dr. E. V. APPLETON, Wheatstone professor of physics in the University of London and formerly fellow of St. John's College, Cambridge, has been elected to the Jacksonian professorship of natural philosophy at the University of Cambridge from October 1, 1936.

Dr. Wilbert J. Huff, head of the department of gas engineering of the Johns Hopkins University, has

been appointed chief chemist of the Explosives Division of the U. S. Bureau of Mines.

Bryan Patterson has been made assistant curator of fossil mammals in the department of geology of the Field Museum of Natural History, Chicago.

WARD SHEPARD, formerly of the U. S. Government Forest Service and special adviser on Indian affairs, land policy and soil erosion in the Federal Departments of Interior and Agriculture, has been appointed director of the Harvard Forest for one year from May 1. The forest over which he will have charge consists of 2,300 acres of woodland in Petersham, about seventy miles from Cambridge.

W. K. Bailey, recently a graduate student at the University of Maryland, has been appointed associate plant physiologist in charge of truck-crop investigations at the Puerto Rico Experiment Station of the U. S. Department of Agriculture. Charles Pennington, of the Colonial Technical Institute, Paris, has been appointed specialist in vanilla production and processing investigations at the Puerto Rico station.

Dr. D. EWEN CAMERON, previously director of the outpatient department of the Provincial Mental Hospital, Manitoba, Canada, has joined the staff of the Research Service of the Worcester State Hospital.

Professor Baldwin M. Woods, head of the department of mechanical engineering of the University of California, has been appointed chairman of the tenth district, National Resources Committee, to coordinate the activities of planning boards in five western states.

LORD RUTHERFORD, Cavendish professor of experimental physics at the University of Cambridge, has been appointed director of the Royal Society Mond Laboratory until January 24, 1940.

Dr. E. V. Jones, head of the department of chemistry at Birmingham-Southern College, is spending his sabbatical leave during the year 1935–36 as a visiting professor of chemistry for the first semester at Socchow University, China. The second semester he is spending in travel through India, Palestine and the principal countries of Europe. Before going to Birmingham-Southern College he had been for several years professor of chemistry at Soochow University.

Dr. L. Slaucitals, associate professor of geophysics, University of Riga, Latvia, arrived in Washington, D. C., on February 15, where he will be engaged during the spring and summer in the study of geophysical subjects at the Department of Terrestrial Magnetism of the Carnegie Institution of Washington.

DR. C. I. Bliss, formerly entomologist in the Bureau of Entomology of the U. S. Department of Agriculture, after two years of study with Professor R. A.

Fisher in London, has been appointed for a three-year period as a specialist in Leningrad, where his work will deal with insect toxicology and the application of modern statistical procedures to the problems of applied entomology.

Dr. Edwin P. Hubble, astronomer of the Mount Wilson Observatory, has been appointed to deliver the Rhodes Memorial Lectures at the University of Oxford for the year 1936–37.

THE annual Alpha Omega Alpha lecture of the Jefferson Medical College was given on February 14 by Professor Walter Bradford Cannon, of the Harvard Medical School. His lecture was entitled "Serendipity."

The sixth Harvey Society lecture will be given at the New York Academy of Medicine on March 10, by Dr. Richard E. Shope, associate member of the Department of Animal and Plant Pathology of the Rockefeller Institute, Princeton. He will speak on "The Influenzas of Swine and Man."

Dr. Francis G. Benedict, director of the Nutrition Laboratory of the Carnegie Institution of Washington, Boston, delivered an illustrated lecture on "The Physiology of the Elephant," before the Harvard Medical Society at the Peter Bent Brigham Hospital, on January 14, at the Department of Genetics of the Carnegie Institution of Washington, Cold Spring Harbor, N. Y., on February 10, and at the University of New Hampshire, on February 13.

The third Harry Burr Ferris Lecture in anatomy at Yale University was given by Dr. Davenport Hooker, professor of anatomy at the University of Pittsburgh, on the evening of February 19. His subject was "Early Foetal Movements in Mammals." The lecture was illustrated by moving-picture sequences of the earliest reactions of embryos and young foetuses.

The Columbia University Chapter of the Society of Sigma Xi will hold a meeting in Havemeyer Hall at 8 p. m. on March 3, when Dr. Leroy L. Hartman, professor of dentistry, Columbia University, will deliver a lecture on "Treating Sensitive Dentin of Teeth."

The fifth lecture in the Smith-Reed-Russell series for this year at the School of Medicine, the George Washington University, was given on February 18 by Dr. Esmond R. Long, of the Henry Phipps Institute in Philadelphia. The subject of his address was "Types of Pulmonary Tuberculosis in Relation to Spread of the Disease."

DR. THORNTON C. FRY, mathematician of the Bell Telephone Laboratories, New York City, addressed the University of Cincinnati Chapter of Sigma Xi on February 14 on "A Mathematical Theory of Rational Inference."

The annual meeting of the American Ceramic Society will be held in Columbus, Ohio, from March 29 to April 4. More than a thousand people are expected to attend. The society was organized by the late Edward Orton, Jr., in 1899 and, with the exception of three years, has maintained its national headquarters in Columbus since that time.

FORMULATION of detailed plans for the joint fiftieth anniversary exercises and sixth quinquennial alumni reunion of the Michigan College of Mining and Technology, Houghton, began on February 1 with the appointment, by the college board of control, of an executive committee consisting of the board and President Grover C. Dillman; a general committee chairman, Dr. James Fisher, head of the mathematics and physics staff and director of geophysical research; a general committee secretary, Treasurer N. F. Kaiser, and twenty-two committees headed by alumni, faculty members, Copper Country citizens and the student council president. The anniversary and reunion ceremonies will be held on August 5, 6 and 7.

Museum News states that a Historic Sites Advisory Board of eleven members, to assist the National Park Service in developing its program for preservation of historic sites and buildings under legislation recently enacted, has been appointed by the Secretary of the Interior as follows: Edmund H. Abrahams, head of the Joint Committee of Memorials of Savannah, Georgia, and of the Savannah Commission for the Preservation of Landmarks; Herbert E. Bolton, chairman of the department of history, University of California; Hermon Carey Bumpus, Duxbury, Mass., vicepresident of the American Association of Museums and chairman of the committee on museums of the National Park Service; Mrs. Reau Folk, Nashville, Tenn., regent of the Ladies Hermitage Association; George de Benneville Keim, Edgewater Park, N. J., chairman of the State Commission on Historic Sites of New Jersey; Alfred V. Kidder, Andover, Mass., chairman of the Division of Historical Research, Carnegie Institution of Washington; Fiske Kimball, director of the Pennsylvania Museum of Art, Philadelphia; Waldo G. Leland, Washington, general secretary, American Council of Learned Societies; Archibald M. McCrea, Williamsburg, Va.; F. R. Oastler, New York; Clark Wissler, curator of ethnology, American Museum of Natural History.

In addition to awards already recorded, the Committee on Scientific Research of the American Medical Association has made grants as follows: Lloyd H.

Ziegler and Arthur Knudson, Albany Medical College, effect of rickets on the activity of rats: Charles Huggins, University of Chicago, bone marrow in relation to hematopoiesis; Samuel Soskin, Michael Reese Hospital, Chicago, laboratory tests for endocrine dysfunctions; Valy Menkin, Harvard Medical School, iron metabolism and effect of ferric chloride on tuberculosis; Peter Heinbecker, Washington University, St. Louis, mechanism of altered sensitivity of smooth musculature to epinephrine; R. F. Hanzal, Western Reserve University, the source of endogenous uric acid and the effects of methylated xanthines on its secretion; George A. Emerson, West Virginia University, metabolic products of sympathomimetic amines; Felix Saunders, University of Chicago, essential growth factor for bacteria; C. H. Thienes, University of Southern California, carbohydrate metabolism as influenced by the hypophysis; John Field, Stanford University, effect of dinitrophenol on the lens; Ralph I. Dorfman, Louisiana State University, estrogenic substance in human urine and other estrogenics compounds; W. T. Dawson, University of Texas, Galveston, toxicity of cardiac glucosides.

The U.S. Civil Service Commission announces open competitive examinations for the positions of associate public health engineer, at a salary of \$3,200 a year, and assistant public health engineer at \$2,600 a year. Applications must be on file with the U.S. Civil Service Commission at Washington, D.C., not later than March 16, 1936. Competitors will not be required to report for examination at any place, but will be rated on education, experience and publications.

Short-wave radio sets of the Forest Service type will probably be used to link the scattered units of the Puerto Rico National Forests where other methods of communication are impractical or costly because of frequent hurricanes, rains and the jungle country, according to the Forest Service. The Forest Service's radio system now includes about 1,200 stations on the National Forests of continental United States and Alaska. A. Gael Simson, technical expert in charge of radio for the Forest Service, reports that "the use of radio in the Caribbean National Forest in Puerto Rico is feasible, and from the point of view of emergency communication, it is necessary. Under the present plan for the system, there would be a medium-power main station on each National Forest unit in Puerto Rico in contact with small, light-weight portable sets carried by forest officers or crews of the various Puerto Rican Civilian Conservation Corps camps working in the forests. The National Forest units would also be in touch by radio with U.S. Forest Service headquarters near San Juan.