

act as messengers and keep the rooms and grounds in order.

Messrs. A. W. Long and J. F. Skjellerup, two voluntary observers, have undertaken a program of observations of variable stars, and an equatorial (either the 6-inch or the 7-inch) has been placed at their disposal as required for this purpose. The regular meridian observers during the year have been Messrs. Cheeseman, Wilkin, Peirce, Mullis, Duncan and Davis. The heliometer observations have been made by Messrs. Hough and Halm. The observations with the Victoria telescope have been made by Messrs. Lunt, Jackson and Baines, those with the astrographic telescope by Mr. Woodgate. Occasional observations of occultations, etc., have also been made by Messrs. Cox, Power and Pead.

#### THE INTERNATIONAL COMMISSION ON ILLUMINATION

THE first technical session of the International Commission on Illumination, the successor of the International Photometric Commission, was held in Paris on July 4-8. According to the report of the meeting in *Nature* those interested in illumination problems in Belgium, France, Great Britain, Italy, Spain, Switzerland and the United States of America were represented at the session, which was opened by the Minister of Public Works, who welcomed the delegates in the name of the French Republic. The British delegates, nominated by the National Illumination Committee of Great Britain, were: Major K. Edgcumbe (Institution of Electrical Engineers, chairman of the National Committee), Mr. C. C. Paterson (hon. secretary and treasurer of the International Commission), Mr. A. P. Trotter (Illuminating Engineering Society), Dr. E. H. Rayner (National Physical Laboratory), Mr. L. Gaster (Illuminating Engineering Society), Mr. R. Watson (Institution of Gas Engineers), and Mr. J. W. T. Walsh (National Physical Laboratory, assistant secretary of the International Commission). The subjects dealt with by the commission were as follows: (1) The unit of candle-power at present in use in this country and

in France and the United States was adopted for international purposes, and is to be known as the "international candle." It is maintained by means of electric incandescent lamps at the National Laboratories of the three countries named. (2) The definitions of the terms "luminous flux," "luminous intensity," and "illumination," and the units of these quantities, viz. the lumen, the candle, and the lux (meter-candle), were agreed upon. (3) The subjects of heterochromatic photometry (including physical photometry and the characteristics of the "normal eye"), factory lighting, and automobile head-lighting were also discussed at the meetings, and sub-committees were appointed to study the questions from the international point of view during the next three years. The new president of the commission is Dr. E. P. Hyde, director of the Nela Research Laboratories of America, and Major Edgcumbe is one of the three vice-presidents. The next meeting of the commission was provisionally arranged to be held in New York in 1924.

#### CHEMISTRY AND CIVILIZATION

THE American Chemical Society, meeting this week in New York City, held on September 8 a session devoted to "Chemistry and Civilization." According to the announcement Dr. Edgar F. Smith, provost emeritus, University of Pennsylvania, would be in the chair, and the speakers were:

*The rôle of chemistry*, Dr. CHAS. BASKERVILLE, director of the Laboratories, College of the City of New York; chairman of the International Committee.

*Energy; its sources and future possibilities*, Dr. ARTHUR D. LITTLE, chemical engineer and technologist, Boston.

*The engineer; human and superior direction of power*, Dr. LEO H. BAEKELAND, honorary professor of chemical engineering, Columbia University.

*Chemistry and life*, SIR WILLIAM J. POPE, professor of chemistry, Cambridge University.

*Theories*, Dr. WILLIS R. WHITNEY, head of research department, General Electric Company. *Research applied to the world's work*, Dr. C. E.

K. MEES, head of the research department, Eastman Kodak Company.

*Problem of diffusion and its bearing on civilization*, PROFESSOR ERNST COHEN, professor of chemistry, University of Utrecht.

*Catalysis: the new economic factor*, PROFESSOR WILDER D. BANCROFT, professor of physical chemistry, Cornell University.

#### SCIENTIFIC NOTES AND NEWS

DR. JOEL ASAPH ALLEN, curator of the Department of Birds and Mammals at the American Museum of Natural History since 1885, died at Cornwall-on-Hudson on August 29, aged eighty-three years.

As has already been noted in SCIENCE the Second International Congress of Eugenics, which will meet at the American Museum of Natural History, New York City, from September 22 to 28, will hold four sections. The opening addresses before the sections are announced as follows: The address before Section I, Human and Comparative Heredity, will be given by M. Lucien Cuénot, professor of zoology and physiology in the University at Nancy, France, on "Adaptation and Modern Genetic Conception"; before Section II., Eugenics and the Human Family, by Dr. Herman Lundborg, professor of psychiatry and neurology in the University of Upsala, Sweden, on "Eugenics and the Human Family." The address before Section III, Human Racial Differences, will be given by Georges Vacher de Lapouge, Poitiers, France, the title of whose address is still to be announced. The address before Section IV, Eugenics and the State, will be given by Major Leonard Darwin, of London, on "The Aims and Methods of Eugenical Societies."

THE annual summer meeting of the American Phytopathological Society was held in conjunction with the Conference of Cereal Pathologists at St. Paul, Minnesota and Fargo, North Dakota on July 19 to 22 inclusive. The following scientific men were present as invited guests of the society: Dr. E. J. Butler, Imperial Bureau of Mycology, London; Dr. Kingo Miyabe, professor of botany and director of the Botanic Garden, Hokkaido

Imperial University, Sapporo, Japan; Mr. R. J. Noble, and Mr. James P. Shelton, Department of Agriculture, New South Wales, Australia. Members of the society were present from Philippine Islands, from three provinces of Canada and from ten states. The meeting really constituted an international conference on cereal diseases. Drs. Butler and Miyabe will visit a number of institutions before returning home, and Mr. Noble and Mr. Shelton expect to remain for at least a year to engage in research. Professor A. Jacewski, director of the Institute of Mycology and Phytopathology, Petrograd, Russia, and Professor N. I. Vavilov, Bureau of Applied Botany and Plant Breeding, Petrograd, Russia, arrived too late to attend the conference. They will make an extended tour of the United States and Canada before returning to Russia.

THE following honorary degrees were conferred upon members of the British Medical Association by the University of Durham on the occasion of the recent meeting of the association in that city:—*Doctor of Civil Laws*: Sir William MacEwen, Sir Thomas Oliver, and Sir Humphry D. Rolleston. *Doctor of Hygiene*: Dr. T. E. Hill and Dr. J. W. Smith. *Doctor of Science*: Sir Arthur Keith. *Doctor of Literature*: Sir Dawson Williams, editor of the *British Medical Journal*. *M.A.*: Dr. Alfred Cox, medical secretary of the association.

A MARBLE bust of Professor E. Fuchs, the Vienna ophthalmologist, was unveiled at the University of Vienna on June 14, the occasion being his seventieth birthday. He retired in 1915.

F. J. W. ROUGHTON, of Trinity College, Cambridge has been elected to the Michael Foster research studentship in physiology. The Raymond Horton Smith prize in medicine has been awarded to Dr. R. L. M. Wallis of Downing College.

DR. CHARLES-EDWARD AMORY WINSLOW, of Yale University, medical director of the American Red Cross, is in Geneva attending the meeting of the Health Commission of the