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.