

and at his request Dr. Kellogg and Mr. Davis explained the organization and work of the American Science Service and Sir Richard Gregory opened a general discussion of the possibility and desirability of developing a similar British undertaking.

At the end of the discussion it was agreed that a later conference would be arranged to be attended by selected representatives of various British scientific bodies interested in the establishment of a Science News Service at which definite steps towards establishing such a service could be taken if it was agreed that such an undertaking was desirable. The general feeling as expressed at this first conference was that such an undertaking was both desirable and feasible.

OBSERVATIONS ON THE 1926 TOTAL SOLAR ECLIPSE

THE expedition sent by Swarthmore College from the Sproul Observatory to observe the total solar eclipse of January 14, 1926, plans to erect its instruments on the west coast of Sumatra in the vicinity of Benkoelen. The eclipse equipment was shipped from New York on the Dollar Steamship Liner *President Garfield* early in September and will reach Singapore on the third of November. The equipment will be reshipped from this port to Palembang, Sumatra, and then taken overland by rail and motor truck to its destination.

Totality occurs at Benkoelen about 2 hours 25 minutes P.M. local civil time, and lasts 3 minutes and 10 seconds. The altitude of the sun at mid-totality is approximately $52\frac{1}{2}$ degrees.

The observers of the party are Professor John A. Miller (director of the expedition); Professor Ross W. Marriott, Dr. Dean B. McLaughlin, all of Sproul Observatory, Swarthmore College; Professor Heber D. Curtis, of Allegheny Observatory, University of Pittsburgh; and Mr. Adrian Rubel, Mr. Wilson M. Powell, Jr., and Mr. Lamont Dominick, of New York. In addition to the above observers, Mrs. John A. Miller, Mrs. Heber D. Curtis, H. D. Curtis, Jr., and Mrs. Celia B. McLaughlin will accompany the expedition. Various members of the expedition have been leaving America since July, and it is expected that they all will reach Sumatra in time to get the erection of instruments under way by December 1.

Photographs of the corona will be made with cameras ranging in focal length from 30 inches to 62.5 feet. The largest of these cameras, which is of a stationary type, will have a lense 9 inches aperture mounted on a tower 50 feet high. This camera will be so constructed that it is directed to that point in the sky which marks the center of the sun at the time of mid-totality. The apparent motion of the sun

will be counteracted by a moving plate holder driven by clockwork mechanism.

A large structural iron camera carrying twin lens $6\frac{3}{4}$ inches aperture and 15 feet focal length will be mounted equatorially in a heavy structural iron polar axis whose bearings rest on heavy concrete piers. This instrument is a powerful one, and with it it is planned to photograph the corona together with the star field surrounding the sun. The camera will be controlled by a large driving clock. It will have a guiding telescope mounted on it, and will be guided on the stars by means of slow motion screws. It is further planned to make photographs with this camera in an attempt to find out whether there is any deflection of light caused by refraction due to the passage of light rays through the cooling atmosphere of the shadow cone.

Two large concave gratings will be mounted to photograph the flash spectrum. One of the gratings has coarse rulings and is of short focal length—Professor Curtis will use this to continue his work in the infra-red part of the spectrum. The other grating is ruled 20,000 lines to the inch and has a radius of curvature of 15 feet. This will be used to photograph that visual part of the spectrum between 4,500 Å and 6,500 Å.

Two etalon interferometers will be used in an attempt to detect motion in the corona. The instruments have different plate separations, but both are designed for the green coronium line $\lambda = 5,303$. Each instrument is fitted with an objective prism and a color screen to weaken the background for the interference fringes.

In addition to the above instruments a one prism slit spectrograph will be used to photograph the *Fraunhofer* lines in the corona, and an objective prism spectrograph will be mounted to search for gas clouds in the corona. Mr. Wilson Powell, Jr., will make color photographs of the corona during totality. Moving pictures will be made during the partial and total phases of the eclipse.

ROSS W. MARRIOTT

SCIENTIFIC NOTES AND NEWS

PROFESSOR EDWARD DE MILLE CAMPBELL, professor of chemistry and metallurgy at the University of Michigan, died on September 18, aged sixty-two years.

HENRY C. LORD, professor of astronomy and since 1895 director of the observatory at the Ohio State University, died on September 15, at the age of fifty-nine years.

At the opening sessions of the meeting of the Roentgen Ray Society in Washington on September