Joseph Bevan Braithwaite.

J. B. Braithwaite, who died at the age of 79 on 1934 November 30, was the eldest son of a well-known member of the Society of Friends of the same name. He attended the Friends School at Kendal (at which Sir A. S. Eddington was many years later a pupil) and also the famous Quaker School at Grove House, Tottenham. He was at first intended for the legal profession, but later became a partner in a firm of stock-brokers, of which his uncle, Isaac Braithwaite, was senior member, and which had much to do with the promotion of electric light undertakings in this country and abroad, our late member having been among the first to foresee the great developments to be expected in the electric light and power industry. He was deeply concerned with religious work under the auspices of the Society of Friends. Among his interests were model yacht building, local history, and astronomy. His astronomical equipment included a fine 5-inch refractor, the object glass of which was by Grubb, and the mounting by Messrs. Beck, installed in a specially built tower observatory,

started in 1939 and the equipment was modified in early 1946 to cater for the photography of flare spectra. He had a fine feeling for the significance of the observations he was making.

The observations at Sherborne set the pattern for his life's work. In the following years his studies were to expand and improve until he became a leading international figure on flares and their effects.

He went to the Royal Observatory Edinburgh in 1947 as Principal Scientific Officer. Here he was quickly able to re-establish his spectroheliographic equipment and begin a series of flare and prominence experiments. In 1955 he took charge of a project of placing a Lyot Hα Heliograph at the Cape of Good Hope. The instrument was delivered to the Cape in 1958, was quickly brought into use and films from it were sent to Dr. Ellison in Edinburgh for examination. Later the same year he accepted the Directorship of the Dunsink Observatory and the study of the Lyot Heliograph records was transferred to Dunsink.

Professor Ellison was able to draw on his long experience of spectroheliographic study to assemble the essential characteristics of the major flares that had produced outstanding events. As an example I might summarize his description of the great cosmic ray flares. These start with a sudden widening of the Hα line which Ellison called the 'flash' phase. The flares develop in the form of two roughly parallel emission filaments each of which overlies a large sunspot and the channel between them separates the N and S polarities of the magnetic field. During the flare development there are important changes in the Hα striation patterns for which the name 'flare nimbus' was introduced. These discoveries have given us a much better picture of the physical development within a flare than we had previously. He also made many detailed studies of the time development of flares comparing the changes of line width and intensity with the corresponding terrestrial effects—the fade-outs, corchets, phase anomalies, and enhancements of atmospherics.

Other work of importance with which Ellison's name will be remembered are his studies of prominence spectra, blow-off prominences, and atmospheric scintillation.

In later years there have been many calls on his time and energy for cooperative activities on an international scale. He acted as Reporter for Solar Activity both for the I.G.Y. and later for the Year of the Quiet Sun. He was chairman of the I.A.U. Working Group on the Classification of Flares, and has acted as secretary for several Commissions at I.A.U. Meetings. He spoke clearly and was a most useful committee man.

He is survived by his wife, a son, and two daughters.

C. W. ALLEN