

atmosphere. Cave's offer of his services was welcomed and he set to work at once. Originally he used large kites flown on lengths of strong wire, but he soon adopted the more satisfactory method of measuring, by means of special theodolites sited at either end of a two-mile baseline, the angular altitude and azimuth of hydrogen-filled pilot balloons from minute to minute. In his first book, *The Structure of the Atmosphere in Clear Weather*, published through the Cambridge University Press in 1912, he presented an exhaustive summary of these investigations, which added materially to existing meteorological knowledge. During the 1914-18 war he served in England and France as instructor, experimenter and forecaster with the Meteorological Section of the Royal Engineers, holding the rank of captain. In 1915 he installed at the branch Meteorological Office near Aldershot a coherer lightning recorder of the Fenyi type, with the aim of warning aircraft pilots of approaching thunderstorms. This instrument, supplemented at Dr R. Whiddington's suggestion by a radiogoniometer, gave Britain the lead over all other nations in the field of meteorological study concerned with the location of atmospheric electrical disturbances at a distance—a field now known in official parlance by the unfortunate name of "sferics".

Cave joined the Royal Meteorological Society in 1899 and was twice (1913-15 and 1924-26) its president. From youth he had shown himself to be a skilled technician and artist with the camera. As his interest in meteorology grew, he put this aptitude to such good use that his reputation as a photographer of clouds soon extended far beyond his native land. He contributed a number of the finest prints reproduced in the most recent (1932) issue of the *International Cloud Atlas*. Incidentally, he was responsible for rendering into English the original French text of this work.

Although his enthusiasm for meteorology never lapsed, Cave in later life became increasingly engrossed in antiquarian matters. Here too his prowess with the camera stood him in good stead. For many years he concentrated on the recording by telephotography of the hitherto little-studied roof carvings in medieval English cathedrals and churches—a subject on which he came to be regarded as a leading authority. In the course of this work he took over 8000 photographs.

Astronomy first claimed Cave's attention on its navigational side, for he was a keen and roving yachtsman. Subsequently the science drew him more and more for its own sake, as must almost inevitably happen to any constant watcher of the clouds, and on 1918 January 11 he was elected a Fellow of the Society. His published writings include a set of useful hints to pictorial artists for avoiding elementary astronomical blunders. One of his last major pieces of work was to measure the orientation of 642 churches: only 103 of these, he found, were positioned approximately on the true east-west line, while several lay fully 40° wide of the mark. Cave's report on this study, with a suggested explanation for the vagaries observed, appears in the 1950 January-April issue of the *Antiquaries Journal*.

E. L. HAWKE.

HENRY REGINALD FRY was elected a Fellow of the Society on 1919 April 11. By his death the Society has lost a Fellow who, through his interest in observing the heavens and his great generosity, has helped to provide the means