No account of Mills's life would be complete without a reference to his extensive knowledge of the British flora and ornithology. He also had a long memory and a good knowledge of Cambridge history, and his excellence as a raconteur made him always entertaining company in the combination room of the College of which he was for nearly fifty years a Fellow, and during 1940-48 President. A. G. SHARPE

The Rev. H. H. Symonds

The Rev. H. H. Symonds died on December 28, after a long and painful illness; by his death, the Council for the Preservation of Rural England, the corresponding body in Wales and the rural preservation movement as a whole have sustained an irreparable loss. He was a firm believer in the value and possibilities of national parks for the good of the community, and made this province especially his own. He was largely responsible for the establishment in 1935 of the Standing Committee on National Parks of the Councils for the Preservation of Rural England and Wales under the chairmanship of Mr. Norman (now Lord) Birkett. This became his absorbing interest and together with the late John Dower he took on the work of honorary drafting secretary which he carried out until 1952, when he asked to be relieved of the duties so as to enable him to devote his time to other urgent work in connexion with the North Wales (Hydro-Electricity) Protection Committee, of which he was chairman. To his labours in the field of national parks to rouse and sustain public interest may justly be ascribed the introduction of the National Parks Act and the establishment of the National Parks Commission. It was a great disappointment to him that his tenure of office as a National Parks commissioner—an appointment long overdue when it at last came—was ended so quickly and abruptly by the illness which caused his death.

Symonds was no sentimentalist. He was a very able, hard-hitting protagonist, respected by his critics and opponents and admired by his friends and supporters. He was possessed of ability and intellect of the highest order; he had the gift of making the obscure transparent and the difficult plain. We must esteem him for his unswerving fidelity to his principles and his fearless propagation of his views. It would have been a great reproach to Britain if national parks did not exist as an enduring and appropriate memorial to one who was so entirely HERBERT GRIFFIN devoted to their service.

Mr. Augustine Courtauld

MR. AUGUSTINE COURTAULD, son of Samuel Courtauld, of Courtaulds, Ltd., died after a long illness on March 3. From his Cambridge days he had been interested in exploration and had travelled in Greenland with J. M. Wordie, of St. John's College, now Sir James Wordie, and in the Sahara with Francis Rodd, later Lord Rennell of Rodd. During 1930-31 he was in Greenland as a member of Watkins's British Arctic Air Route Expedition, and during the winter manned alone the meteorological station near the centre of the ice cap. The difficulties of travel on the ice cap in the autumn had made it impossible to stock the station with sufficient food and fuel for two men, and Courtauld, at his own request, stayed there alone—a feat of personal heroism and endurance, quietly undertaken, which equals any in polar exploration.

Courtauld was not a scientist; his interests were literary, but he equipped himself as a surveyor to make himself useful on expeditions. He shared the leadership of a successful expedition in 1935 to the Watkins Mountains of East Greenland. The party climbed the highest mountain in the Arctic, since named by the Danes, Gunnbjørns Fjæld, 3,700 m.

L. R. WAGER

NEWS VIEWS a n d

Department of Scientific and Industrial Research . Wolfe Award: Dr. L. Essen, O.B.E.

Dr. L. Essen was recently presented by Lord Hailsham, Lord President of the Council, with the Wolfe Award of the Department of Scientific and Industrial Research, in the form of a cheque for £500. This is the first of ten annual Awards to be made, under the terms of a will, to the scientist who has made an outstanding contribution to the research work of the Department during the previous twelve months.

Dr. Essen, a senior principal scientific officer at the National Physical Laboratory, received the Award for his work on the establishment of an atomic frequency standard as a basis for the future standard of time. Although the first attempts to employ molecular and atomic frequencies as 'clocks' were made in the United States, Dr. Essen was the first to appreciate the vital importance of this earlier work as a possible basis for a new physical standard of time. The cæsium frequency standard that he designed is used to calibrate the quartz clocks at the National Physical Laboratory and to monitor the M.S.F. standard frequency transmissions. Valuable information has been obtained on the performance of

quartz clocks, the propagation of radio signals, the periodic and irregular variations of the rate of rotation of the Earth, and the value of the present international standard of time in terms of a particular frequency of the cæsium atom. The unit of time provided by the present atomic frequency standard can be determined in a few minutes to an accuracy of 2 parts in 10,000 million. This figure of merit is ten times better than that recently announced from measurements, extending over three years, of the astronomical unit based on the period of the Earth's revolution around the Sun. The National Physical Laboratory standard has, in effect, been the time standard of the world for the past three years.

Iron and Steel Institute: Medals and Prizes

THE Council of the Iron and Steel Institute has awarded the following medals and prizes: Bessemer Gold Medal for 1959 to Prof. Bo Kalling, until recently director of research, Stora Kopparbergs Bergslags Aktiebolag, Sweden; Sir Robert Hadfield Medal for 1959 to Mr. Albert Jackson, technical adviser on steelmaking to the United Steel Companies, Ltd.; Andrew Carnegie Silver Medal for 1958 to Dr. P. Vasudevan. Department of Metallurgy, University of Manchester,