on "Science and Industry" in July 1931, and his Messel Memorial Lecture to the same Society at Cardiff three years later on "The Uneven Front of Research" display very fairly his outlook on science and technology.

He was created a baron in 1937 and received honorary degrees from the Universities of Glasgow (1934), Birmingham, Oxford, Durham and St. Andrews. He married in 1903, Jean Boyle Young, of Paisley, who died in 1952, and he is survived by two sons and two daughters, the title passing to his elder son, Harry Wilson McGowan.

R. BRIGHTMAN

Sir Hugh Warren

HENRY WILLIAM HUGH WARREN was born on June 30, 1891, and died on June 18, 1961. He is survived by Lady Warren and a daughter. An only son was killed serving with the R.A.F. in 1939.

Hugh Warren, in 1929, took over the Research Laboratory at the British Thomson-Houston Co., Ltd., Rugby, which, six years previously, he had helped the late R. C. Clinker to start. In 1938 he was appointed to the board of B.T.H. as director of research. He remained in charge of the Laboratory until 1945, becoming managing director of B.T.H. in that year and managing director of A.E.I., Ltd., in 1948, retiring in 1954. He received honorary degrees from the University of Bristol in 1942 and from Birmingham in 1946, and was knighted in 1951.

It is as leader of what is now the A.E.I. Research Laboratory, Rugby, a job he did for sixteen years, that 'H. W.' will be remembered. He was alert and interested in everything, intensely energetic and always desirous of presenting the work of his Laboratory in as impressive a manner as possible. His own subject was insulations. It was in 1916, on the then

vital matter of the insulation of magnetos, that he showed the energy and enthusiasm to engage in, and pursue relentlessly, difficult technological problems that proved to be characteristic of the man. He directed with vigour the pioneer work of his Laboratory on sound reproduction, talking films and discharge lamps. During the War, starting with the VFO ('Valve for Oliphant') klystron, he built up a large effort on centimetric radar, including work on magnetrons and other microwave valves, radar sets and the silicon and germanium crystal valves which were the forerunners of the modern semiconductor devices.

He played a part of considerable significance in bringing about cordial and fruitful co-operation between teams of scientists from industry and those from Government and military establishments that frequently met together at Rugby to attempt to solve some of the problems of the times. Such meetings were memorable and, whether 'H. W.' took the chair or not, his presence with its sense of urgency and promise of achievement helped us all to accomplish things that seemed to border on the impossible. He enjoyed overcoming the difficulties of people as well as those of physics and production.

Hugh Warren was a member of many engineering institutions, councils and committees, and was the author of many technical papers and a comprehensive volume published in 1931 entitled *Electrical Insulating Materials*.

He loved writing, and would spend odd minutes as well as long hours on semi-technical essays, some of which were gathered together in a volume called *ON—Some Irresponsible Jottings, Scientific and Otherwise*, published for private circulation in 1944. He had a great sense of humour and was a pleasant companion and a kindly and courteous leader; he will be remembered with admiration and affection.

L. J. DAVIES

NEWS and VIEWS

Technical Managing Director of Reactor Centrum Nederland : J. Pelser

JOHANNES PELSER has been appointed technical managing director of the Reactor Centrum Nederland foundation in succession to J. J. van Rijsinge. Johannes Pelser was born at Dordrecht on March 21, 1925, and matriculated at the Christian Grammar School at Dordrecht; afterwards he studied at the Technical University at Delft, where he obtained his certificate for physical engineering in 1951. Following this he joined the Foundation for Fundamental Research on Matter, but was transferred to the Reactor Centrum Nederland foundation when it came into existence in 1955. While at the Foundation for Fundamental Research on Matter, he was seconded to the (Netherlands-Norwegian) Joint Establishment for Nuclear Energy Research at Kjeller, Norway. Here he worked for four years and took part in the research work with the nuclear reactor *Jeep*. A short time after the setting up of the Reactor Centrum Nederland, Pelser returned to the Netherlands and took an active part in the preparations for the building of a research centre at Petten. In 1957 he was sent to the United States as a representative of the Reactor Centrum Nederland to supervise the fabrication of the high-flux reactor.

By the end of 1958 he was appointed head of the Reactor Department at Petten, taking charge of the preparation and experiments with, and the operation and maintenance of, not only the low-flux reactor but also the high-flux reactor.

Aircraft Propulsion at the College of Aeronautics, Cranfield : Prof. A. H. Lefebvre

PROF. A. H. LEFEBVRE has been appointed to the chair of aircraft propulsion at the College of Aeronautics, Cranfield, in succession to Prof. A. G. Smith, who is now head of the Mechanical Engineering Department, University of Nottingham (see *Nature*, 187, 743; 1960). After leaving Long Eaton Grammar School, Prof. Lefebvre served an apprenticeship at Ericssons Telephones, Ltd., where he was employed afterwards for several years on engineering production and inspection. He studied electrical engineering at Loughborough College and mechanical engineering at the University of Nottingham. He is a graduate of the University of London and a postgraduate student of the Imperial College of Science and Technology. Since 1952, Prof. Lefebvre has been with the Aero-Engine Division of Rolls-Royce, Ltd., where his main responsibilities have been in combustion research and in the design and performance analysis of gas turbine