

and received an honorary degree of doctor of science from the University of London in 1953.

Lady Angwin was an ideal support to him throughout his career. With their family they made their home in Welwyn Garden City, where his charming house and garden must have been a welcome haven in the midst of his exacting duties.

His friends will remember his quiet and seemingly casual manner, his kindly disposition and yet the confidence he could inspire and the force of his leadership.

GORDON RADLEY

Mr. L. E. Harris

MR. LAWRENCE ERNEST HARRIS, a leading authority on fen drainage, died on April 5 at Cambridge, aged sixty-six. The Newcomen Society for the Study of the History of Engineering and Technology has suffered a very severe loss by his unexpected death during his second year as president.

After leaving Mercers School, London, Harris studied at the City and Guilds Engineering College, South Kensington, during 1910-12 and won a Mitchell scholarship. He obtained his practical training with C. Isler and Co., London, artesian well engineers. During the First World War he served in the Royal Fusiliers and the Machine Gun Corps and, as a lieutenant, was invalided out due to war wounds. Having taken a refresher course at King's College, London, Harris joined Sulzer Bros., Ltd., as an estimating engineer in their London office. After three months at their Winterthur Works, he went to India in 1923 as the firm's manager, and for thirteen years was responsible for the sale and installation of many Sulzer steam and diesel engines, pumps and

electrical machines in pumping and power stations. Returning to England, he was appointed district manager and engineer for the Sulzer organization in the Fen area in 1937, specializing in fen drainage and pumping machinery. He also installed Sulzer pumps for the Somerset River Board's drainage schemes. He lived in Leeds until 1947, and then in Histon, Cambridge, holding the same appointment until his death.

Harris was intensely interested in the history of his subject, and his authoritative book, "Vermuyden and the Fens", was published in 1953. He wrote the chapter, "Land Drainage and Reclamation" in Vol. 3 of "A History of Technology", published in 1957, and contributed to the Newcomen Society "Sir Cornelis Vermuyden, an Evaluation and an Appreciation" and "Some Factors in the Early Development of the Centrifugal Pump, 1689-1851". In his presidential address, "A Neglected Genius of Seventeenth Century Technology", he paid honour to the inventor, Cornelius Drebbel (1572-1633), of Alkmaar. One of Harris's last interests was to ensure that the beam engine and scoop-wheel installed in 1831 at Stretham, near Ely, by the Butterley Company, should be permanently preserved, as it is the last surviving example of the introduction of steam power for fen drainage. The formation of the Stretham Engine Preservation Trust in 1958 was due to him; he was elected the first chairman of the Trustees and wrote the appeal this year for an endowment fund. His many friends hope the appeal will succeed in its object and that it will be a permanent tribute to his memory. He is survived by his widow, Mrs. Kathleen Harris, and his two sons, Michael and John, both engineers.

A. STOWERS

NEWS and VIEWS

Special Assistant for Science and Technology to the U.S. President: Prof. G. B. Kistiakowsky

PROF. GEORGE B. KISTIAKOWSKY, a distinguished physical chemist, who succeeds Dr. James R. Killian (*Nature*, 181, 384; 1957) as special assistant for science and technology to the President of the United States, spent four years at Princeton University after receiving the Dr.Phil. in Berlin in 1925. He went to Harvard University in 1930, progressing quickly to a professorship in 1937, which he has held ever since. Following early researches on the ultraviolet spectra of polyatomic molecules, and on thermodynamics, after the Second World War he applied shock and detonation waves to the study of chemical problems, determining the heat of dissociation of nitrogen; and employed soft X-rays and mass spectrometers to investigate the phenomena occurring in shock fronts. His most recent studies have been in classical chemical kinetics. Honours that have been accorded to him include the American Medal for Merit (1946), the British Medal for Service in the Cause of Freedom (1948), and the Nichols Medal of the American Chemical Society (1947).

As a civilian scientist during the war years, Prof. Kistiakowsky headed the explosives division of the Manhattan Project, was consultant to the Office of Scientific Research and Development, and adviser to the United States Army on scientific problems of a military character. His wide experience and ability have been recognized by his election to membership

in the Philosophical Society and the National Academy of Sciences. In recent years, as a member of the President's Scientific Advisory Committee, his activities and interests have been focused on national scientific policy and on science as a force and a balance in international affairs.

Metallurgy at Manchester: Prof. F. C. Thompson

PROF. FRANK CHARLES THOMPSON, who is to retire from the chair of metallurgy and directorship of the Metallurgical Laboratories of the University of Manchester on September 30, will then have served on the Senate of the University for thirty-eight years. Prof. Thompson graduated in the University of Sheffield in 1911 and was awarded the Mappin Medal; he then served on the staff of the University of Sheffield until 1919, after which he held the Royal Society Sorby Research Fellowship at Sheffield for one year before being called to the chair at Manchester.

At Manchester, Prof. Thompson rapidly established himself as a bold leader of research in his own special subject of the plastic deformation of metals and gave detailed consideration to the atomistics of plastic flow at a time when few physicists realized that a meaningful problem existed in this field of study. He also, and perhaps in the long run this is more important, established himself as a wise academic statesman and a truly sympathetic 'father' to his department. It was a paternity which protected and encouraged the younger members of his staff while