cultural Society at Wisley, where he was chairman of the Scientific Committee. He was a member of the Council of the Society for two periods between 1935 and 1946 and served on its Library and its Scientific Committees, as well as on its Examinations Board. His service to horticulture was recognized by the award of the Victoria Medal of Honour in 1947. He also devoted much time to the Linnean Society, serving as its president during 1931–34. In 1937 he was president of the South Eastern Union of Scientific Societies.

Weiss was a man of exceptional charm and kindness, combining wisdom and experience with modesty and tact; he was loved and respected by all who had the privilege of knowing him. He had wide interests, not only in science and education, but also in social betterment and in the improvement of Manchester and its surroundings. He took and maintained an unfailing interest in the welfare of his students and younger colleagues; he was always ready to give them help and advice. In all his many interests and projects he was helped by his wife Evelyn, third daughter of the Right Hon. Dr. Robert Spence Watson, whom he married in 1898, and who, with their three daughters, survives him.

H. HAMSHAW THOMAS

Sir James French

We regret to record the death of Sir James Weir French, which occurred at his residence in Glasgow on January 14, at the age of seventy-six. James Weir French was born in Glasgow in April 1876 and was educated at Bearsden Academy and the University of Glasgow, where he graduated as B.Sc. in 1898; the degree of doctor of science was conferred on him some years later. While still at the University he entered the firm of Barr and Stroud and was appointed a director when the firm became a limited company in 1913. He was chairman of the firm from 1938 until he retired in 1949.

Sir James French had travelled widely and had gained considerable technical experience abroad. After the First World War, he was attached as an expert to the Inter-Allied Control Commission in Germany. He was knighted in 1941 in recognition of his contribution to the equipment of the Fighting Services.

Among important offices held by Sir James French in academic and scientific institutions and societies, he had been chairman of the governors of the Royal Technical College, Glasgow, president of the Royal Philosophical Society of Glasgow and lay chairman of the Glasgow Art Club.

Sir James's main energy was devoted to the design and development not only of the scientific instruments manufactured by Barr and Stroud, but also to the special optical machinery and materials necessary for their manufacture. During the First World War, when supplies of optical glass became critical, he was associated with the late Prof. Barr in the development and production of optical glass suitable for the highest standard of optical instruments. The subsequent large-scale production for the firm's instruments was largely due to his energy and initiative in devising the manufacturing processes and designing and constructing the necessary plant and equipment. Sir James French published many scientific papers, chiefly on optical subjects; but his wide and detailed knowledge of the history of glass and porcelain, including those of ancient Egypt, made his papers on this subject of particularly wide interest.

Prof. J. S. S. Brame, C.B.E.

JOHN SAMUEL STAFFORD BRAME, who died on December 10 at the age of eight-one years, was an authority on fuels and lubricating oils. He was educated at St. Thomas Rich's School, Gloucester, and commenced his scientific studies and training at the Royal College of Science. In 1897 he joined the staff of the Royal Naval College, Greenwich, as an assistant to Prof. V. B. Lewis, who held the chair of chemistry. The latter so greatly influenced Brame that under his guidance he specialized in oil technology and combustion, especially that of oils in furnaces; Brame here laid the foundation for his life's work. This association with Prof. Lewis, a founder member of the Institute of Petroleum Technology, finally brought him to the highest position in this field, namely, president of the Institute.

When Prof. Lewis resigned from the chair of chemistry in the Royal Naval College in 1914, Brame was appointed as the first professor of chemistry and metallurgy, a position which he held until his retirement from the College in 1932. During the whole of this period he lectured upon petroleum in all its aspects, and carried out investigations connected with lubrication, combustion, etc. When it was proposed to use oil as a fuel for the Royal Navy, Prof. Brame took a keen interest in this proposition ; he carried out experiments on the numerous oil-burning locomotives of the (then) Great Eastern Railway, and from this experience was able to indicate certain conditions for the burning of oil on ships.

On leaving the Royal Naval College, he was appointed a director of Messrs. Alexander Duckham and Co., Ltd., lubrication oil specialists, and held the position of technical adviser until 1939.

For many years Prof. Brame lectured at the Sir John Cass College, London, on oil technology. These lectures were considered a very important part of the educational system devised and financed by various oil companies for the training of their staffs.

During his activities at the Royal Naval College and at the Sir John Cass College, Prof. Brame held many important posts, including the chairmanship of the Standardization Committee of the Institute of Petroleum Technologists, a subject in which he was always interested. He was a Fellow of the Royal Institute of Chemistry, and of the Chemical Society. He was made a Commander of the Order of the British Empire in the New Year's Honours, 1930.

F. A. RUDDOCK

WE regret to announce the following deaths :

Prof. Paul Niggli, professor of mineralogy and petrology in the University of Zurich and in the Swiss Federal Institute of Technology, Zurich, and also *correspondant* for the Mineralogical Section of the Paris Academy of Sciences, aged sixty-four.

Paris Academy of Sciences, aged sixty-four. Lieut.-Colonel J. S. Vorley, C.B.E., director of national parks, Southern Rhodesia, and formerly of the Indian Forest Service, on January 2, aged fifty-four.