sive manner and mode of dress made him a striking figure. Men who were his students still talk of his attractive personality, the great clarity and interest of his lectures and the minute detail with which his practical classes were organised. As a popular lecturer he was in great demand and through this became widely known. This stimulation of interest in biological science in the latter part of last century was probably of great value in gaining support for the scientific departments of the university colleges of the north of England in their earlier days.

In 1904 Stirling received the honorary degree of LL.D. from the University of Glasgow and in 1906 he was Fullerian professor of physiology at the Royal Institution, London. H. S. R.

## Dr. F. H. HATCH

The death of Dr. Frederick Henry Hatch on September 22, at sixty-eight years of age, will be regretted by numerous friends in mining and metallurgical circles. Dr. Hatch was born in London, and after studying at University College, proceeded to the University of Bonn, where he took the degree of Ph.D. He spent six years as a member of H.M. Geological Survey, when his work was largely petrological, dealing especially with the igneous rocks of Scotland.

Dr. Hatch recognised, however, that there was a great opportunity for a geologist in the then newly discovered goldfield of the Witwatersrand, and in 1892 he resigned his appointment and went to the Transvaal, where he soon achieved a high reputation as a mining engineer and consulting geologist. He undertook exploration work of the highest importance for various gold mining interests, his most significant work in Africa being that in connexion with the development of the eastern extension of the Rand goldfield, in the region where the reefs disappear below a great thickness of newer rocks.

In 1895 Dr. Hatch became associated with Cecil Rhodes and John Hayes Hammond in the development of Rhodesia, but the Jameson Raid and the Boer War caused such a general disturbance of this and all his other work that he left Africa for some time, visiting the United States, Canada, British Columbia, and Abyssinia. He also spent a year in India, investigating the gold resources of that country for the Government. His report on the Kolar goldfield may be regarded as a classic in mining literature. At the close of the Boer War he returned to Johannesburg. An intensive boring campaign under his advice finally revealed the structure of the East Rand, which is now the most important producing area, and rendered its development practicable. About 1906 Dr. Hatch left Africa for England, where he established a large practice as a consulting mining engineer, visiting Siberia and other countries. In 1909 he undertook on behalf of the Government an investigation of the mineral resources of Natal.

From 1910 to 1913 Dr. Hatch resided in Cambridge, where he lectured on economic geology and presented to the University a very fine collection of specimens of metalliferous ores collected during the course of his professional work. In 1914 he was president of the Institution of Mining and Metallurgy.

After the outbreak of the War, during which he lost his two elder sons, Dr. Hatch was engaged in the Ministry of Munitions and played a prominent part in the organisation of home supplies of iron ores, a piece of work which was of immense service in the organisation of victory. After the War he reported on the condition of the iron and steel works in Lorraine, in the occupied areas of Germany, in Belgium and in France, and then became director of the Mineral Resources Development Branch of the Board of Trade and technical adviser to the Mines Department.

In addition to all this, however, Dr. Hatch was a man of high attainments on the side of pure science. He was the author of books on mineralogy, petrology, and ore deposits which did much to render these subjects intelligible to the average student. The number of editions is evidence of their success and usefulness. In the last few years petrology has become infinitely and perhaps unnecessarily complicated, but nevertheless many of the existing classifications of rocks bear a strong imprint of the common-sense system of the editions of Hatch's "Petrology" of 1907 and later years.

R. H. R.

SIR EVERARD IM THURN, K.C.M.G., K.B.E.

THE death of Sir Everard Ferdinand im Thurn, colonial administrator, anthropologist and naturalist, at eighty years of age, took place on October 8 at his residence, Cockenzie House, Prestonpans. The son of John Conrad im Thurn, merchant-banker, he was educated at Marlborough and at Exeter College, Oxford. Before going to Oxford he had already in 1869 published a book on the birds of Marlborough. In 1877 he went to British Guiana as curator of the museum. He there took up the scientific study of the country and its peoples, being the first to ascend Roraima, and publishing a work on the botanical results of that expedition. In 1882 he was appointed judge in the Pomerun District and in 1890 was made Government Agent in the North-Western District. He joined the staff of the Colonial Office in 1899, having been made C.M.G. in 1892, and was made C.B. in 1900. He was appointed Colonial Secretary and Lieutenant-Governor of Ceylon in 1901 and Governor of Fiji and High Commissioner of the Pacific in 1904. In the following year he was promoted to K.C.M.G. and in 1910 he retired. In 1918 he was made a K.B.E. From 1919 until 1921 he was president of the Royal Anthropological Institute, and on taking up his residence in Scotland shortly after he had held that office, he helped to organise and became the first local president of the Edinburgh branch of the Institute.