

Only recently did his stalwart frame show any indication that all was not well, and he was warned that he must exercise great care. But he continued to work until the day before his death, and then passed away very peacefully in his sleep. His many friends abroad and at home share in the deep loss sustained by St. Andrews—a loss to which expression has been given from many quarters. He is survived by his wife, one son and three daughters.

W. WRIGHT SMITH

Prof. R. Goldschmidt

THE death occurred on October 30 of Prof. Rudolf Goldschmidt, a pioneer of electrical engineering, at the age of seventy-four.

Goldschmidt was born in Mecklenburg on March 19, 1876. Although the first years of his life were spent in modest surroundings, and his parents had intended him for a merchant career, his scientific talents and independence of mind soon asserted themselves. He studied engineering at the technical colleges at Berlin and Darmstadt, where he became lecturer at the age of twenty-one. In 1900 he entered industry, and came to England in 1902, joining Messrs. Crompton-Parkinson, Ltd., Chelmsford; later he went to the Metropolitan-Vickers Electrical Co., Ltd. (then the Westinghouse Co.), in Manchester.

By this time his original technical thinking and inventive genius were already recognized in wider circles, and he had a number of books, papers and patents to his credit, chiefly concerned with alternating current machinery. In 1905 he received an award from the Institution of Electrical Engineers.

Goldschmidt returned to Darmstadt in 1907 as reader, later professor of electrical engineering. He occupied this chair, however, for a few years only, as his most important invention now preoccupied him. This was the high-frequency alternator, a machine which at the time revolutionized wireless telegraphy and entered text-books as the Goldschmidt alternator. It permitted, for the first time, telegraphing without cable from Germany to the United States. He built the large wireless station at Eilvese, near Hanover, and a similar American one at Tuckerton, being director of the former and of the 'Homag' (High Frequency Company) throughout the First World War. A historical exchange of greeting telegrams between President Wilson and the Kaiser (who ceremonially opened his station a fortnight before the War) is still among his souvenirs. This and later work brought him some of the highest public honours in Germany.

After the War many other inventions occupied his mind, in particular an electric hammer which is widely used to-day, the British development being the 'Kango' hammer. His versatility enabled him to contribute to the most diverse scientific fields, the patents ranging from internal combustion engines to telephones and a pulse-recording machine. Among his friends he counted Prof. A. Einstein, with whom he co-operated on one invention.

He lived in Berlin during 1911-34, when he emigrated to England with his family as a refugee from the Nazis, being of Jewish faith. He became a naturalized British subject in 1939. In Britain his inventive activity continued. Among other things he developed a new type of deaf-aid, and in order to test this, he subjected himself to six operations, the last one impairing his hearing.

During the Second World War he pursued, with the support of the Air Ministry, some inventions of special character, putting all his energy into the war effort in his own manner. He lived in London, but in 1940 joined his son in Sheffield. Here he became consultant, later member of the staff, of the B.S.A. Group Research Centre, working chiefly for the B.S.A. Co., Ltd., Birmingham, on several projects, and moved to Birmingham in 1949. During these last years, though more than seventy years of age, he still devoted his whole life to his work with youthful energy, to the admiration of his colleagues and many friends, until his fatal illness in August last.

Dr. Goldschmidt married in 1905. His wife died in 1933; he leaves one daughter and three sons. Despite his technical preoccupation, he was a man of outstanding charm and personality. His sense of humour, generosity and kindness, his love of Nature and of children were his chief qualities. He was a patient teacher who loved nothing better than to pass on his deep knowledge to his students and associates.

Prof. S. J. Truscott

THERE is not a mining field throughout the world where the death on September 26 of Samuel John Truscott will not have been noted with sorrow. By personal contact at the Royal School of Mines, at meetings of the Institution of Mining and Metallurgy and by visits overseas, he was known personally to many, and those who did not have the pleasure of meeting him have derived great benefit from his writings. He was a great teacher, a strict adherent to what is best in his profession and a prolific and stimulating writer.

He was born in 1870, received his scientific training at the Royal School of Mines, and then obtained a wide professional experience over twenty-seven years in overseas mining fields, particularly in the East Indies and in South Africa. He was of Cornish descent and had all the traditional Cornish love of adventure. As a young man he gloried in the life of the mining fields, such as Malaya, 1889-92, and the Witwatersrand, 1894-97.

In 1913 Truscott returned to the Royal School of Mines and in 1919 was elected to the chair of mining, which he held until 1935. His lectures were remarkable for their clarity, illustrated by an astonishing knowledge of modern developments derived from his personal experiences and close study of the technical journals in the English, French and German languages.

Truscott was president of the Institution of Mining and Metallurgy (1920-21), was awarded its Gold Medal in 1937 and made an honorary member in 1948. The University of the Witwatersrand conferred on him an honorary doctorate in the Faculty of Engineering in 1930 and he was elected an honorary fellow of the Imperial College in 1945.

He published a number of treatises on mining subjects, two of which, namely, "Ore Dressing" and "Mining Economics", are the standard works in their respective subjects in the English language.

In manner he appeared to be somewhat austere; but there was an imp of mischief which peeped out unexpectedly to the complete astonishment of his students and his younger friends. His older friends knew him as a generous warm-hearted friend who was always ready to put his great knowledge at their disposal.

J. A. S. RITSON