

HATCH, Frederick Henry (1864–1932)

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Frederick Hatch was born in London on 7 March 1864 and died there on 22 September 1932. His father, Henry, a wealthy merchant of Oxford, married Ann Dobney in 1838 and established a family in Oxford, but from around 1860 he also maintained a second home in London with his common-law wife, Elizabeth Collier. Frederick was the eldest son of the seven children of this family. Educated privately in London and Paris, Hatch entered University College, London in 1879, where his interest in geology was awakened by lectures from Thomas BONNEY, although he did not take a degree. Following a Ph.D. at the University of Bonn (1883–6), he joined the Geological Survey in London as a petrologist (one who studies the origin, structure and composition of rocks). Hatch translated Karl Rosenbusch's diagnostic *Petrographical Tables* (1890) and published *Introduction to the Study of Petrology* (1891) and *Mineralogy* (1892). These encouraged the growth of petrology as a subject in Britain.

In 1890, Hatch married Mary, daughter of William Randall, merchant and shipper of Madeira. Following the birth of the first of their five children in 1892, the family moved to Johannesburg. Here Hatch worked in the Witwatersrand goldfield, mapping its complex geology and showing its potential for deep-level mining. *Gold Mines of the Rand* (1895) was followed by *A Geological Sketch Map of the Southern Transvaal* (1897). Hatch next initiated a drilling campaign to prove the continuance of the gold reefs at depth within the basin.

Returning to England in 1897, Hatch undertook consultancy in North America, India and Ethiopia before returning to Johannesburg after the Anglo-Boer war (1899–1902). His drilling campaign, resumed after the war, proved in 1904 that payable gold existed at depth. Hatch was elected President of the Geological Society of South Africa and published the first comprehensive textbook on its geology in 1905.

Returning to England in 1906, Hatch resumed consultancy. The government of Natal, South Africa, requested he survey their mineral resources (1909), but he dashed their over-optimistic hopes of mineral wealth. Hatch next lectured on economic geology at Cambridge University (1910-13) and published *Petrology of the Sedimentary Rocks*. He was elected President of the Institution of Mining and

Metallurgy (1914-15). During World War II (in which his two eldest sons were killed in action), Hatch was a member of the Advisory Committee on Mineral Resources and worked for the Ministry of Munitions, maintaining iron ore-supplies, vital for iron and steel-making. He was appointed OBE for this work in 1920.

His wife died in 1921 and he married Amie Kerr (née Poole), a divorcee, in 1923; they separated in 1929. His health failing, Hatch published his last book in 1929. He had also published over 150 scientific papers, discussions and book reviews.

In Britain, he did much to promote petrology and economic geology as academic subjects (revised editions of his petrology textbooks were used in the 1960s), but in South Africa he is remembered as one of the pioneers of the Witwatersrand goldfield.

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Other Relevant Works

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