

# Hawken, Roger William Hercules (1878–1947)

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Roger William Hercules Hawken (1878-1947), civil engineer, was born on 12 May 1878 at Darlington, Sydney, son of Nicholas Hawken, merchant, later a member of parliament, and his wife Mary Jane, née Vance. Educated at Newington College and the University of Sydney (B.C.E., 1900; B.A., 1902), he worked as an engineering assistant, first on the Tamworth-Manilla railway and in 1901-03 on an early abortive design for a Sydney harbour bridge.

A short term as acting professor at the Ballarat School of Mines, Victoria, preceded appointment in 1905 as director of public works for the Federated Malay States; there he developed an interest in hydrology and earth pressures which led later to major research. Returning to Australia in 1909, Hawken was successively engineer to the shires of Ashford, New South Wales, and Yalleroi, Queensland. After a brief period as locum tenens for Professor W. H. Warren at the University of Sydney, he became in October 1912 the first lecturer in civil engineering in the new University of Queensland. When his professor A. J. Gibson was called for service as a reserve officer in World War I, Hawken became professor of engineering *de facto* in 1916 and *de jure* in 1919 when Gibson resigned.

Hawken's academic bent was evident by 1903 in a remarkably advanced paper to the Sydney University Engineering Society on the structural analysis of bridges. He graduated M.C.E. from Sydney in 1918 after submitting a thesis on column design, a frontier topic of the period, and appears to have had slightly the better of a lively argument with the eminent English engineer, E. H. Salmon, who had written an authoritative text on the subject. In the 1920s he turned again to earth pressures and the stability of slopes; he thus was one of the pioneers of the study of soil mechanics, a subject generally neglected until the 1950s. In later work on rainfall runoff and flooding potential and the economic appraisal of engineering schemes, his ideas were well ahead of his time.

Hawken was reserved and excessively formal, with a wry, sometimes biting sense of humour; engineering and the university made up his life. He saw the complete engineer as a combination of wide experience and wide culture, encouraged originality in his students, called himself 'the senior student', and was known as 'Hanks'. A founder of the Institution of Engineers, Australia, in 1919, he was its president in 1923 and a councillor until his death. In 1931 he was awarded the (Sir) Peter Nicol Russell memorial medal. At his suggestion in 1928, Queensland became the first State to legislate for compulsory registration of consulting engineers. Hawken was commissioned by the government in a number of investigations.

On 18 October 1947, fifteen days after his retirement was announced, Hawken died of cerebro-vascular disease at his home, and was cremated. He was survived by his wife Adelaide Margrette, née Mott, whom he had married at Black Mountain, New South Wales, on 17 January 1912, and by five daughters. The main engineering building on the St Lucia campus of the University of Queensland is named after him and contains a portrait by Dorothy Coleman. The annual Hawken address, presented by the Queensland division of the Institution of Engineers, is usually held in its Hawken Auditorium.

## Select Bibliography

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