

apprenticeship at the Greenwich Ironworks, he obtained employment with Messrs. Penn, of Greenwich, and subsequently pursued a course of study at University College, London.

In 1854 he left this country for Australia, and in the following year, obtained an appointment in the Victorian Railway Department, being employed on the construction of various lines until 1865, when he was transferred to the Water-supply Department. As District Engineer he was engaged for several years on the construction of reservoirs and aqueducts in connection with the supply of water to Bendigo, Castlemaine and other mining districts. In 1870, being again placed in the Railway Department, he was given charge of the construction of a section of the Melbourne and Sydney main line; after completing which, he left the Government service to engage in practice as a consulting engineer for railway and water-supply work. In 1889 he rejoined the Water-Supply Department, and superintended the construction of the Loddon River Reservoir. After his retirement he undertook a sea-voyage to benefit his failing health, and visited England, but died shortly after his return to Victoria. Throughout his career, the energy with which he applied himself to the discharge of his professional duties was coupled with unvarying geniality and courtesy in his dealings with colleagues and subordinates.

He was elected an Associate Member of the Institution on the 21st May, 1889, and was transferred to the class of Members on the 8th December, 1891.

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ALFRED MORCOM, born in the Isle of Man on the 4th June, 1848, was descended from an old Cornish family. His father, Mr. James Morcom, was an engineer of some note in his day, and among other works erected the big pumping-engines to drain the Haarlem Meer in Holland, for the historic firm of Harvey and Company, of Hayle. The subject of this notice received his early education at Tavistock Grammar School, and in 1863 passed into Keyham Dockyard as an engineer student. In 1867 he gained a scholarship at the Royal School of Naval Architecture and Marine Engineering, South Kensington, now merged in the Royal Naval College. On completing the course of 4 years at South Kensington he passed out first of his year with a first-class fellowship and honours in mathematics and several other subjects. He was then appointed by the Admiralty first assistant engineer on the "Bellerophon" of the Channel fleet, and subsequently on the troopship "Jumna."

Later, when the famous "Challenger" expedition was fitting out, Mr. Morcom was nominated by the Admiralty to the scientific staff, but in the event did not join the expedition.

In 1877, on the termination of his service afloat, Mr. Morcom was appointed instructor and lecturer on marine-engine design to the Royal Naval College, Greenwich, and at the same time he assisted in the office of the Engineer-in-chief of the Navy. In 1879 he was posted to Portsmouth Dockyard, where he served as assistant to the Chief Engineer, until the latter's death, when Mr. Morcom became acting Chief Engineer of the Dockyard, relinquishing the appointment in 1883 for that of Chief Engineer of Sheerness Dockyard. It was during this period that some of his most important work in the service was accomplished. The torpedo-boat had been recently introduced into the Navy and was undergoing rapid development as a factor of naval warfare. To Mr. Morcom at Portsmouth fell the conduct of the long series of trials and experiments to which these craft were subjected, and he entered into the work with enthusiasm and energy, bringing to the task practical mechanical ability and scientific attainments of no mean order.

Whilst carrying out trials of steam-pinnaces and cutters at Portsmouth, Mr. Morcom met Mr. G. E. Belliss, by whom the boats had been engined. Mr. Belliss, being greatly impressed by Mr. Morcom's ability and resourcefulness, made him an offer of partnership, which Mr. Morcom eventually accepted, leaving the service in 1884. Together they undertook the construction of machinery for torpedo-gunboats and destroyers, and later took up the adaptation and manufacture of high-speed engines for electrical work. The record of the firm was one of steady and successful development, and in 1893 it was turned into a limited company under the style of G. E. Belliss and Company, Limited, which was changed in 1899 to Belliss and Morcom, Limited, Mr. Morcom becoming chairman in 1904, on the retirement of Mr. Belliss. Mr. Morcom died after a short illness at his residence, Trelawne, Edgbaston, Birmingham, on the 16th October, 1905, in his fifty-eighth year.

He was a member of the Institution of Mechanical Engineers and of the Institution of Naval Architects. To the Proceedings of the former body he made some valuable contributions and served on the council from 1898 until his death.

He was elected a Member of this Institution on the 10th January, 1888.

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