

ERNEST FREDERICK DAWSON was a native of Canada, having been born at Charlottetown, Prince Edward Island, on the 10th May, 1858. After receiving part of his education in Canada, he came to London to complete his studies, and in 1875 passed into the Royal Indian Engineering College, Coopers Hill. On completing the three years' course at the College he served for a short period under Mr. (now Sir Alexander) Binnie, at Bradford, in order to gain practical experience.

In 1879 he received an appointment in the Bombay Public Works Department, and, proceeding to India, he commenced his professional career there as an assistant engineer in the Sholapore district of the Presidency, where, under Mr. C. T. Burke, he constructed the Sholapore Waterworks for a town of 60,000 inhabitants. On their completion in 1881 he was transferred to the Belgaum and Dharwar district, and placed in charge of the irrigation works of the Kaladge sub-division, where his principal task was the construction of the Muchkundi Dam. In the following year he completed a large irrigation weir in the Gokak district, and was busily engaged during 1883 and 1884 in making surveys and estimates, and preparing alternative schemes for large storage reservoirs in the Ghauts. During 1885 he had charge of the irrigation tanks in the Dharwar district, and in 1886 he succeeded Mr. R. B. Joyner as executive engineer in charge of the Belgaum and Dharwar division. In this position, which he held until 1891, Mr. Dawson was responsible for the following, among other works: the design and construction of large storage works at Gokak; the design of the Hubli Waterworks, subsequently carried out by Mr. W. L. Strange; and the control and maintenance during part of the time of roads and civil and military works in Dharwar Roads district and Belgaum roads and military district. After a well-earned furlough spent in Canada, he returned to India in December 1892, to be placed in charge of Karachi district, embracing many hundred miles of canals and river embankments requiring constant supervision, besides the maintenance and inspection of buildings and roads, harbour and municipal works. While in charge of the district he carried out many improvements; but in 1897 he was obliged to go home again on furlough, to recruit his health.

The attention of the Government of Bombay having been directed to the great importance of obtaining more effective control of the River Indus, Mr. Dawson, on returning to India in 1898, was deputed to visit America to investigate and report on

the Mississippi regime. He was absent for six months and on his return in 1899 presented a careful and exhaustive report, for which he received the thanks of the Government. His "Notes on Engineering Works of the Mississippi" published in 1900 bear witness to the careful and painstaking manner in which he carried out the investigation entrusted to him, and form a useful addition to professional knowledge in this important branch of engineering.

After his return from America, Mr. Dawson was appointed Under Secretary of Public Works to the Bombay Government, ably exercising the important functions of this office during trying visitations of famine and plague.

In the early part of 1901, Mr. Dawson designed and carried out for the Punjab Government extensive protection works of the "hurdle dyke" type at Dera Ghazi Khan, which was threatened with destruction by the River Indus; but owing to the very limited time available and to severe floods, the works could not be successfully completed. The river, however, afterwards ceased its erosive action in that direction.

In his report to the Government of Bombay, Mr. Dawson had strongly urged the creation of an Indus River Commission in Sind. After careful consideration, this proposal was accepted, and Mr. Dawson was appointed Engineer and Secretary to the Commission, in which capacity he did yeoman service in organizing the work of the newly constituted authority. He also acted for a time as Superintending Engineer, left bank of the Indus, whilst continuing to discharge his own heavy duties. But these constant and unremitting labours told severely upon his health, which broke down under the strain, obliging him in March, 1902, to go home to Canada on long leave of absence. After a year and a half, however, he was on his way back to India, unable any longer to endure his enforced idleness, and in September, 1903, he took up his old appointment on the Indus Commission; but although his indomitable spirit sustained him for a time, his work was done. In March, 1904, he was ordered home, but died in London on the 7th April, 1904. His death at the comparatively early age of 46, removes from the ranks of the profession in India an engineer of marked ability and great promise. In Mr. Dawson's personality, an attractive disposition and engaging manners were combined with great force of character which inspired with confidence all who came in contact with him. His knowledge of several Indian languages served him usefully in his relations with native subordinates. He took a keen interest in sport of all kinds, and was himself an enthusiastic sportsman

and athlete, having played for England in International football. Mr. Dawson married in 1882 Alison, daughter of the late Mr. John Steell.

He was elected an Associate Member of the Institution on the 27th May, 1884, and was transferred to the class of Members on the 2nd April, 1901.

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JOSHUA FIELD, who died on the 29th April, 1904, at Hove, Sussex, was the eldest son of the late Mr. Joshua Field, F.R.S., Past-President, one of the founders of the Institution. Born on the 29th December, 1829, the subject of this notice was educated at Mill Hill and at King's College, London. Subsequently he entered the works of Messrs. Maudslay, Sons and Field, marine engineers, of Lambeth and Greenwich, and on the death of his father became a partner, acquiring jointly with his brother, Mr. Telford Field, a large interest in the firm. For a period of over twenty-five years he assisted, in conjunction with Mr. Walter Maudslay and the Hon. George Duncan, in the successful conduct of the firm's business, which included the design and construction of marine engines and other machinery for the British and foreign Governments, as well as for the large steam navigation companies. On the retirement of the Hon. George Duncan in 1887, the firm was turned into a limited company, the late Mr. R. Sennett, M. Inst. C.E., then chief engineer to the Navy, resigning his post at the Admiralty to join the board. After a time, however, the new company became financially involved, and a further loss was sustained in the premature death of Mr. Sennett. In 1898 Mr. Field was compelled by ill-health to resign his directorship, but not until, in his efforts to retrieve the position of the company, he had sacrificed a large private fortune.

Mr. Field, who resided for many years at Latchmere House, Ham, Surrey, was a Justice of the Peace and Deputy-Lieutenant for that county, and a Justice of the Peace for the county of London. He was also a Knight of the Crown of Italy. He married in 1855 Emma Jessie, the eldest daughter of Mr. Robert Mindham Evans, of Watlington, Kent, who survives him.

Mr. Field was elected an Associate of the Institution on the 3rd March, 1857, and was transferred to the class of Members on the 20th May, 1862.

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