

MR. FREDERICK WILLIAM KITSON was born at Leeds on the 29th of June, 1829. He was the eldest son of Mr. James Kitson, J.P., of Elmete Hall, Leeds, the founder of the firm of Kitson and Company, of the Airedale Foundry, where the subject of this memoir first qualified himself as an engineer, and where he became the head of the drawing office and principal designer of locomotive engines. In the year 1854 he joined his father and brother, Mr. James Kitson, junior, in the establishment of the Monk Bridge Iron and Steel Works, which concern in busy times employs upwards of seven hundred hands. These works, which are devoted chiefly to the manufacture of railway material, such as boiler-plates, tires, and axles, are fitted up with all the most approved modern appliances, and in their construction the particular talent of Mr. F. W. Kitson found ample room for its exercise. He was a patentee of several inventions which have had successful practical application. The solid weldless iron tires, a hydraulic friction clutch for rolling mills, and an improvement in the manufacture of tires for railway wheels, are amongst these.

Mr. F. W. Kitson was elected a Member of the Institution of Civil Engineers on the 12th of January, 1869. He was a Vice-President of the Iron and Steel Institute, an association in the promotion of which he took an active part, and always manifested a warm interest in its subsequent success. When the Institute visited Leeds in 1876, he was chairman of the reception committee. He was also a Member of the Council of the Institution of Mechanical Engineers.

The infirm state of his health latterly prevented his taking any active part in public affairs, but in business circles he was esteemed for eminent ability as a practical engineer, while, in social life, he was most genial, open-hearted, and generous. He died on the 25th of November, 1877.

MR. BRYCE McMASTER, the son of Brigadier-General McMaster, was born in the year 1832. He became a pupil of Mr. T. H. Bertram in 1848, and was employed on railway works for the late Mr. I. K. Brunel, V.-P. Inst. C.E., in 1852 and 1853. In August of the latter year he entered the service of the Madras Railway Company as an Assistant Engineer, and carried out with great credit, and very cheaply, some extensive cuttings and earthworks, as well as two large stone bridges, on the third district of the