

JOSEPH HAYWOOD WATSON BUCK, son of Mr. George Watson Buck, Civil Engineer, was born at Manchester on the 22nd November, 1839, and was educated at King William's College, Castletown, Isle of Man. In 1856 he was for a time in the Engineer's Office of the London, Brighton and South Coast Railway, and subsequently he entered the office of Sir Charles Fox. In 1860 he became a pupil of Mr. William Baker, then Chief Engineer of the London and North Western Railway, who had formerly been a pupil of his father. Three years later he was entrusted with the construction of a section of the Manchester, Tyldesley and Wigan Railway, and of the Kirkburton branch near Huddersfield.

On the completion of the latter Mr. Buck was engaged as Resident Engineer on the construction of a single line tunnel at Standedge, 5,300 yards in length, after which he was drafted to Watford as Resident Engineer of the widening works between London and King's Langley, a distance of 28 miles, and including the Colne Viaduct and new tunnels at Watford and Primrose Hill, of the respective lengths of 2,000 yards and 1,150 yards, the latter containing three curves and passing under the St. John's Wood branch of the Metropolitan Railway. His next work was the construction in 1877-78 of about 11 miles of the new line between Northampton and Rugby, embracing many heavy works. He was then entrusted with the construction of the Staleybridge and Saddleworth Railway. He next went to Stockport, but after a short residence there was appointed, in 1886, Divisional Engineer of the Crewe district, where he remained until March, 1898, when failing health compelled him to send in his resignation, after thirty-eight years in the service of the London and North Western Railway Company.

Mr. Buck died at Crewe on the 9th July, 1898. He contributed to the Institution, of which he was elected a Member on the 2nd February, 1869, three Papers entitled respectively:—"Weights of framed Girders and Roofs,"¹ "Weights of Structures estimated graphically,"² and "A Super-Elevation Tape."³

¹ Minutes of Proceedings Inst. C.E., vol. lxxvii. p. 331.

² *Ibid.*, vol. lxxii. p. 190.

³ *Ibid.*, vol. cxxvi. p. 375.