

HENRY MARC BRUNEL—second son of Isambard Kingdom Brunel and grandson of Sir Marc Isambard Brunel—who died at his residence, 21 Abingdon Street, Westminster, on the 7th October, 1903, in the sixty-second year of his age, was the last male representative of that illustrious family, and with his death ceased also its long connection with this Institution, of which his father was a Vice-President and his grandfather was elected a Member in 1823.

The subject of this notice, although only 17 when his father died in 1859, had taken part in some of the later engineering works with which Isambard Kingdom Brunel was associated, notably in the launch of the well-known steamship "Great Eastern;" and the details he subsequently contributed to the "Life of I. K. Brunel," published in 1870, in the compilation of which he was engaged for some years in conjunction with his elder brother, the late Dr. Isambard Brunel, Chancellor of the Diocese of Ely, were furnished in some measure from personal experience and recollection.

Born in 1842, Henry Brunel, after being educated at Harrow and at King's College, London, was apprenticed in 1861 for three years to the firm of Sir William Armstrong and Company at Elswick. He subsequently served a pupilage to Mr. (afterwards Sir John) Hawkshaw, Past-President, with whom he remained as an Assistant until 1870. During the period of his connection with Sir John Hawkshaw he was engaged on the construction of Penarth Dock, near Cardiff, and of the Albert Dock at Hull, and also in an elaborate examination into the condition of the Caledonian Railway system, and in an important series of soundings in the English Channel, undertaken with a view to the selection of the best route for the Channel tunnel proposed by Sir John Hawkshaw.

Between 1870 and 1878 the subject of this notice was closely associated with the late Mr. William Froude, F.R.S., formerly a member of his father's engineering staff, and well known in connection with scientific researches bearing on naval architecture. In these researches and in the experiments on the resistance of ships, and on the cognate subject of their propulsion, carried out by Mr. Froude for the Government in the Admiralty establishment at Torquay, Henry Brunel took keen interest, placing his services unreservedly at the disposal of Mr. Froude. During that period he was also engaged on the construction of a large reservoir for the water-supply of Torquay and on a comprehensive

investigation of methods for the prevention of waste. In 1874 he visited Brazil in order to examine and report on the large public hydraulic hoists for passengers between the lower and upper towns at Bahia, and was also occupied in connection with a variety of parliamentary proposals.

In 1878 Henry Brunel entered into partnership with Mr. (now Sir John) Wolfe Barry, Past-President, to whom he was united to the day of his death by the closest and most intimate ties of friendship, and his subsequent professional career was bound up with that of Sir John. Among the various works with which he was thus intimately connected may be mentioned the important Barry Dock in South Wales, Blackfriars railway bridge over the Thames and St. Paul's Station, The Tower Bridge and the bridge recently erected at Connel Ferry, near Oban, for the extension to Ballachulish of the Callander and Oban Railway. Bearing in mind the substitution of machinery for manual labour in the making of ships' blocks, introduced by his grandfather in 1806, the construction of the Thames Tunnel carried out by his grandfather and father in the face of difficulties of the most serious nature, and Hungerford Suspension Bridge, now spanning the Avon at Clifton, the Great Western Railway, and the steamships "Great Western," "Great Britain" and "Great Eastern," designed by his father, it may well be said that the name of Brunel will ever remain peculiarly associated with the progress of engineering during the nineteenth century.

Henry Brunel's personal character endeared him deeply to all his friends. His keen and singularly whimsical humour, which, with some reserve of manner with strangers, at first sight perhaps seemed his chief characteristic, was thrown into the shade for his intimates by his rigid principle, high purpose, sympathy and warmth of heart. In the autumn of 1901 he had a slight apoplectic stroke, resulting from the bursting of a blood-vessel in the brain, from the effects of which he never fully recovered. He was a Member of the Institution of Mechanical Engineers and of the Institution of Naval Architects.

He was elected a Member of this Institution on the 6th March, 1877, and was for many years a frequent attendant at its meetings.

---