

family. His decease, after a long and painful illness, occurred on the 11th February, 1864, in the sixty-sixth year of his age; and his memory will long live among all those Members of the profession who came in contact with him.

Mr. GEORGE HURWOOD was the son of Mr. William Hurwood, a millwright resident at Bullingdon, near Sudbury. At an early age he was apprenticed to his uncle, Mr. Samuel Wright, a millwright having extensive practice at Ipswich, under whose tuition he became a very skilful workman, and was employed on some of the most important works in the district. He was so devoted to the mechanical art, that the chief portions of his leisure hours were occupied in constructing models of machines of great accuracy and beauty, one of which—that of a steam-engine—held for some years a prominent position at the Polytechnic Institution, London. In due time his recognized skill and industry had their reward, and in 1837 he was established at Ipswich, by some gentlemen of capital, in a foundry, as managing partner of the firm of Bond, Turner, and Hurwood, where there were constructed some good steam-engines, and the machinery for many corn and paper mills, &c.

At the period of the construction of the Ipswich Docks, he took much interest in the progress of the work, and was entrusted with the contract for the dock-gates, which he executed very satisfactorily. About the year 1850 his connection with the foundry ceased, and he established himself as a Consulting Engineer at Ipswich, and eventually he became, on the resignation of Mr. James Jones, the Resident Engineer of the Docks at that place, which post he held with great credit to himself and advantage to the port, until his decease, which occurred on the 26th of February, 1864.

He was at one period frequently employed by the Admiralty to conduct investigations on the probable effect upon tidal waters of projected railway and other works, and his judgment was highly respected.

He invented and patented several ingenious and useful mechanical contrivances, which have been extensively employed. He joined the Institution of Civil Engineers as an Associate April 5th, 1842, and was transferred to the class of Members February 27th, 1854. He was a frequent attendant at the Meetings, taking a useful part in the discussions, and he contributed two Papers entitled respectively "Description of a plan adopted for carrying off an Accumulation of Water, from the Warehouses, Cellars, &c. near the Wet Dock at Ipswich,"¹ and "On the

¹ *Vide Minutes of Proceedings Inst. C.E., vol. ii. (1843), p. 183.*
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River Orwell and the Port of Ipswich,"¹ for the latter of which he received a Council Premium of books, Session 1860-61.

Mr. Hurwood was a quiet unobtrusive man; he was not only a skillful mechanic and a good Engineer, but he possessed clear judgment, and he had by study and extensive reading well stored his mind. He was highly respected by his employers and by his fellow townsmen, by whom he was much regretted as a useful member of society.

MR. JAMES JONES was born in London April 6th, 1790, and was, during the early part of his career, in business as a copper and tin worker, having an establishment near the London Docks, the engineering department of which was at that time under the direction of Mr. Telford, as Engineer-in-chief, represented by the late Mr. H. R. Palmer, V. P., by whom he was employed to execute some models of machines. These were completed in such a satisfactory manner as to induce a considerable intimacy between the two, then, young men, and led to Mr. Jones being eventually offered a position under Mr. Palmer, whose principal assistant he ultimately became; assisting him in several ingenious inventions, particularly in the introduction of corrugated iron, for which Mr. Palmer took out a patent. He also became the contractor for the maintenance of the machinery at the Docks, which he continued for a considerable period, only leaving that position to take the appointment, in 1831, of 'Resident Mechanist and Engineer' at the St. Katherine's Docks, for which he was highly recommended by Mr. Telford and Mr. Palmer, and which he held until the year 1836.

When Mr. Palmer undertook, in 1838-39, the construction of the dock at Ipswich, Mr. Jones was appointed the chief Assistant-Engineer, and he executed all the details with such skill and ingenuity, that on the completion of the works, in 1842, he was appointed manager of a part of the engineering establishment of Messrs. Ransomes and Co., of Ipswich, and he held that post until the year 1852, rendering efficient aid in developing the process of manufacturing compressed wood fastenings for railways, patented by the late Mr. Charles May (M. Inst. C.E.), a member of the firm, as also in the ordinary proceedings of the engine-building department of the works. The details of the construction of the Altazimuth instrument, designed in 1845 by the Astronomer Royal, were also mainly under his charge.

In 1852-53, Mr. Jones quitted Ipswich for the appointment of Engineer of the Oxford Waterworks, with which he combined other duties in connection with the local improvements of that city, a

¹ *Vide* Minutes of Proceedings Inst. C.E., vol. xx., p. 4.