

Mr. Mead died at his residence, Elm Lea, Sutton, Surrey, on the 4th April, 1897, from peritonitis. In character he was painstaking and high principled, kind-hearted and unostentatious, and his genial manner and sociability made him universally liked. He was ever ready to assist, quite in a simple way, which rendered his aid doubly welcome. He was a promoter and constant supporter of the Sutton Scientific Society, before which he read several Papers, and he took great interest in the University Extension movement. He was also a skilled musician, and for some years gave his services as organist at Christ Church, Sutton. Mr. Mead was elected an Associate Member on the 7th December, 1886.

CLAUD MONCKTON, born at Spratton, Northamptonshire, on the 26th July, 1844, was the second son of the late Mr. E. H. C. Monckton, of Fineshade Abbey in that county. After serving articles to Major Lamorock Flower, now Engineer to the River Lea Conservancy, he was appointed, in 1863, an Assistant Engineer to the Madras Irrigation and Canal Company. Two years later, however, he was compelled, by an attack of cholera, to resign that post and return to England. Having regained health he went out to Bombay in 1867, and for seven years was engaged as Engineer to the Thakoor of Bhownuggur. During that period he constructed many miles of roads, bridges, public buildings, water-works, canals, lighthouses and harbours. On the occasion of an outbreak among the prisoners in the State gaol, during which the guards were overpowered, Mr. Monckton—the only European there—suppressed the revolt at the risk of his life. The climate, however, proved too trying, and fever and ague drove him home again.

From 1874 Mr. Monckton lived and worked in and near London. Amongst other things he carried out some interesting experiments in boring for water in the neighbourhood of Harefield and Uxbridge, with the object of testing a source of increased supply for the Metropolis. Latterly he was engaged in reporting on various mining claims in the Transvaal and in Northern Canada. In Canada he endured great hardships—bad food, constant exposure to wet, and sleeping on sodden land; and although on his return to England he seemed well, there is no doubt his health was seriously affected. He died at his residence, Croxley Green, Rickmansworth, on the 11th October, 1897. Mr. Monckton was a

man of high principles and of great simplicity of life, and these qualities were united to an attractive manner and unselfishness of character which greatly endeared him to all who knew him. He was elected an Associate Member on the 6th May, 1890.

JAMES ANDREWS was born in Dumfries on the 10th October, 1827. When still a youth he emigrated to the United States, where his first employment was as a bricklayer and stonemason. So far back as 1846, though not twenty years of age, he secured the contract for the erection of the old post office building at Pittsburgh, and the bold and successful manner in which he carried out the work at once established his reputation as a contractor. In early life he constructed many of the tunnels on the Pittsburgh and St. Louis Railway, as well as the masonry for the bridge over the Ohio river at Steubenville on the line of that railway. His skill in carrying out large undertakings led to his association with the work of building the great bridge over the Mississippi at St. Louis, of which Mr. James B. Eads¹ was the Chief Engineer. As the contractor of all the masonry of the bridge, its approaches, and nearly all the work on the tunnel, Mr. Andrews justified the great confidence reposed in him by Mr. Eads.² The tunnel in question is about a mile in length under the most populous part of the City of St. Louis, and is used by several different lines of railway. The sudden changes in the river bed at St. Louis made it necessary to go to the bed rock for the foundations of the piers of the bridge. The base of one pier is 136 feet below high water, and it was sunk through 90 feet of sand and gravel; another is 130 feet below high water, and it went through 80 feet of sand. The piers are massive structures, one of them weighing 45,000 tons.³

The St. Louis Bridge was scarcely completed when Mr. Andrews undertook, for Mr. Eads, a still more important work—the construction of the jetties at the mouth of the Mississippi. Mr. Eads had long urged, in the face of great opposition, the improvement of rivers, and particularly the opening of the mouth of the

¹ Minutes of Proceedings Inst. C.E., vol. xc. p. 425.

² See C. M. Woodward's "A History of the St. Louis Bridge," p. 60. St. Louis, 1881.

³ Minutes of Proceedings Inst. C.E., vol. xc. p. 429.