

subsequent years a series of valuable experiments at the old works in Chapel Street.

Mr. Tomlinson retired from the service of the Metropolitan Railway Company in April, 1885, and started in practice in London as a consulting engineer. For the National Telephone Company he designed and superintended the erection of the network of telephone wires over the metropolis. Meanwhile the affairs of his old line, the Taff Vale railway, had fallen into such a condition that in 1890 an investigation into the management and working became necessary. Mr. Tomlinson and Mr. Samuel Swarbrick were asked to conduct the inquiry. In the result great changes were effected in the management of the line, Mr. Tomlinson being requested in the following year to take a seat on the board of directors. Unfortunately, however, his health was affected by exposure during this investigation, which was mainly carried out in the severe weather of the winter of 1890-91. Two years later internal complication arose and he became seriously ill. He gradually lost strength and passed away at his residence in West Hampstead on the 22nd of April, 1894. He owed his success in life not only to his ability as an engineer, but to the energy and perseverance of his character as a man. He possessed considerable powers of organization and every work he took in hand was thoroughly and efficiently carried out.

Mr. Tomlinson was elected an Associate of the Institution on the 7th of February, 1871, and was transferred to the class of Member on the 17th of February, 1874. He was also a Member of the Institution of Mechanical Engineers, of which he served the office of President in the years 1890 and 1891. His inaugural address, delivered on the 1st of May, 1890, contained an interesting account of the development of locomotion on railways.

JOHN FORBES CLOSE, eldest son of the late Rev. J. F. Close, Rector of Morne, co. Down, was born at Morne Rectory on the 27th of February, 1857, and was educated at Cheltenham College. Having decided to follow the profession of engineering, he was articled in May, 1876, to Messrs. Easton and Anderson of Erith, for three years. From January to October, 1881, he carried out some electric lighting experiments for Mr. Edward Easton, and in the following December he was appointed Assistant Engineer to the British Electric Light Company. During the five years of his

connection with that company he took charge of its installation at the Crystal Palace Electrical Exhibition in 1882, put down machinery at the shops in Turnmill Street and acted as superintendent of all out-door work.

In January, 1887, Mr. Close went to Cairo as Chief Assistant to the Egyptian Dredging Company, which was engaged mainly in cleaning, widening and deepening the irrigation and drainage-canals of the Delta of the Nile. On the death of the managing director, Mr. H. J. C. Anderson,¹ in March, 1891, Mr. Close was appointed manager to the Company. He held that post until the 22nd of February, 1894, when he died suddenly from a stroke of apoplexy at the early age of 37.

Mr. Close was a promising engineer, of typically sturdy character, just and reliable, and would without doubt have made his mark in the profession. He was much respected by the officials of the Government with whom he had dealings as the representative of the Egyptian Dredging Company, and his subordinates, both European and Arab, were devoted to him and placed implicit confidence in his judgment. Conscientious and ardent in his work and of a sanguine temperament, difficulties never ruffled his good temper nor caused him to despond. He was elected an Associate Member of the Institution on the 1st of May, 1883.

GEORGE ERAUT, junior, was born at Wimpole in the county of Cambridge on the 3rd of June, 1861. He was educated at a private school and subsequently at the Whitgift Grammar School, Croydon, where he obtained several prizes. In May, 1879, he was articled to Mr. Jabez Church for three years, during which time he assisted in the preparation of plans and specifications for new waterworks at Godalming, Clacton-on-Sea and Henley-on-Thames; and gasworks at Saffron Walden and Ponder's End. On the expiration of his articles in May, 1882, he remained in the service of Mr. Church, becoming chief assistant to that gentleman in June, 1884.

During the ten years of his service with Mr. Church, Mr. Eraft was engaged on the design and construction of gasworks extensions at Braintree, Ilford, Dublin, Brentwood, Colney Hatch, Enfield (Ponder's End), Clacton-on-Sea and Cromer; of new gasworks at

¹ Minutes of Proceedings Inst. C.E., vol. cvi. p. 318.