

JOHN JAMES COWLEY, born on the 4th September, 1863, was the elder son of the late Mr. John Cowley, of the Grange, Kilsby. He was educated at Milton College and at King's College, London. During the years 1879-1884 he served articles with Messrs. Andrew Handyside and Co., engineers, Derby, and was trained in the works and drawing office of that firm. From 1884 to 1886 he was employed in London by Messrs. Matheson and Grant, and during 1886-87 by Messrs. John Lysaght and Co. From 1887 to 1889 he was engaged for various firms on the construction of Croxley Paper Mills, flood-works and bridges at Canterbury, an iron screw-pile pier on Loch Creran, and bridges on the Lancashire and Yorkshire Railway.

From 1889 to 1892 Mr. Cowley was on the staff of the Thames Ironworks and Shipbuilding Company, and was engaged in designing marine work, dock gates, caissons, pontoons, hydraulic and electrical machinery, pumping plant, bridges and buildings. From 1892 to 1894 he was on the engineering staff of the London and North-Western Railway Company at Crewe, engaged on the testing and renewal of bridges, on a survey of the River Mersey up to Garston Dock, and on a survey of Standedge Canal Tunnel. Mr. Cowley's experience of railway work was subsequently extended on his appointment as Assistant Resident Engineer to Mr. Edward Parry on the Leicester section of the Manchester, Sheffield and Lincolnshire Railway (now the Great Central) Extension to London. Desiring to qualify himself for municipal work, Mr. Cowley served for a time in the Borough Engineer's Department at Bournemouth, and subsequently in the Engineer and Surveyor's Department, Egremont, Cheshire, under the Wallasey Urban District Council.

Mr. Cowley died at Liscard, Cheshire, on the 3rd July, 1898, at the age of thirty-four. He was elected an Associate Member on the 4th February, 1896.

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RICHARD OLIVER GARDNER DRUMMOND, born on the 6th January, 1862, obtained his engineering training in the works of Messrs. Mather and Platt, at Salford, where he served his time from 1879 to 1882. He then went out to Cape Colony, and was engaged in the Locomotive Department of the Cape Government Railways. In 1884-1885 he acted as Electrician to the Port Elizabeth Exhibition, which was lighted by Messrs. Heenan and Froude, of

Manchester. In 1885 he went to Kimberley, where he remained for twelve months, as Electrical Engineer to the French Diamond Mining Company. In the following year he was appointed Electrical Engineer to De Beer's Mining Company, and in 1887 Electrical Engineer to De Beer's Consolidated Mining Company. He lighted all the underground workings of that Company, and introduced a system of motors for pumping, hoisting, ventilating, sawing, etc. He remained with the Company until 1893, holding in the meantime the appointments of Borough Electrician for Kimberley, Electrical Engineer to the Kimberley Exhibition, and Consulting Engineer to the Bultfontein Mining Company and to the Anglo-African Diamond Mining Company.

In 1893 Mr. Drummond left De Beer's and joined Messrs. Reunert and Lenz, Consulting Engineers to the principal mining companies in Johannesburg. From that time he was engaged in designing and in carrying out arrangements for pumping, lighting and ventilating numerous mines in the Transvaal. Where possible, pumps, hoists and traction plant were worked by electricity generated on the spot, but in one instance the current was carried 20 miles by the three-phase system at a pressure of 10,000 volts. He also designed and carried out the whole of the plant for the Johannesburg Electric Lighting Station at Park Town.

Mr. Drummond died at Johannesburg on the 23rd June, 1898, at the age of thirty-six. He was elected an Associate Member on the 4th February, 1894.

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HUDSON REAH, born on the 3rd August, 1839, served articles from 1857 to 1862 to Mr. John Johnstone, architect and surveyor, of Newcastle-on-Tyne. In 1863 he became Assistant Engineer to the Corporation of Sunderland, and three years later he was appointed Borough Engineer and Surveyor of Darlington. While holding the latter post he designed and constructed reservoirs, filter-beds, a pumping-station and other works in connection with the water-supply of Darlington, and laid out the sewage-farm of that town.

Mr. Reah remained at Darlington until 1878, when he was appointed Borough Engineer and Surveyor of Preston, to which post were added, in 1881, the duties of Corporation Steward. He held those offices until his death, which took place at Preston on the 16th July, 1898. The chief undertakings upon which he was