

commission; subsequently he joined the Engineers' Corps. Besides the communications presented to The Institution, he was the author of several works on engineering subjects, of which the best known is probably his work entitled "Pioneer Engineering," embodying the results of his own versatile experience. He held several offices in connection with local institutions in New Zealand, and was well-known and generally respected for his integrity of character and professional ability throughout the colony.

Mr. Dobson was elected an Associate of The Institution on the 1st March, 1842, was subsequently placed in the class of Associate Members, and was transferred to the class of Members on the 29th March, 1881. He was thus attached to The Institution upwards of 60 years and was one of its oldest members.

SIR GEORGE THOMAS LIVESSEY,¹ whose lifelong connection with the gas industry of this country, both in a professional and administrative capacity, made him a notable figure in engineering and industrial circles, died at his residence, Shagbrook, Reigate, on the 4th October, 1908, aged 74. Born in 1834, at Islington, he was the eldest son of the late Mr. Thomas Livesey, then secretary of the South Metropolitan Gas Company. After a brief education at private schools he was apprenticed, under his father, at the age of 14, and after a thorough practical training in all the departments of a gas undertaking, he became assistant engineer in 1855. Between 1855 and 1862 he gradually took over the management of the works, until in the latter year he was appointed engineer to the company, his father retaining the positions of secretary and general manager. In this capacity he was responsible for the enlargement of the Old Kent Road works, which were doubled in capacity, the older parts at the time being re-built. This work was all carried out to Mr. Livesey's designs and under his personal direction, contractors not being employed in the undertaking. He later acted as engineer for new works of the Tynemouth Gas Company, at which he was responsible for the design and erection of plant costing about £20,000. As consulting engineer, he acted as adviser to the Coventry Gas Company, the Aldershot Gas Company, and many other undertakings.

¹ This notice is based upon the memoir published in *Engineering*, 9 October, 1908.

In 1871, on the death of his father, Mr. Livesey was appointed secretary to the South Metropolitan Company, holding the two positions of secretary and engineer until 1882, when, on the amalgamation of that company with the Surrey and Phœnix Companies, he was elected a director of the enlarged concern. In 1885 he became Chairman, retaining the position until his death. During his management of the works, he patented several inventions concerned with the improvement of gas machinery and appliances; and he was also responsible for the introduction into the gas-making industry of the sliding scale, whereby, with a reduction in charges for gas an increase in dividend is allowed. At the time Mr. Livesey took charge of the works as engineer, the annual output of gas amounted to about 350 million cubic feet. At the time of his death the output of the company was over 12,520 million cubic feet. The South Metropolitan Gas Company, in the process of time, absorbed other enterprises until it came to supply nearly the whole of that part of the Administrative County of London south of the Thames, while the capacity of its works was increased by the erection of a large plant at Blackwall Point.

Apart from his work as an engineer and administrator, Sir George Livesey will always be remembered for his efforts to encourage thrift and to improve the condition of the employees of his company. Chief among these improvements was the introduction by him, in 1889, of a profit-sharing scheme, which later developed into, and is now known as, the co-partnership system. The object of this scheme was at once to combine the interests of the public, the employees, and the shareholders, and was calculated to lessen the risk of strikes and lock-outs by giving the workmen an interest in the economical conduct of the business. It was not adopted without a struggle, being opposed at first by the National Union of Gas Workers, but the men were ultimately reconciled, and with their co-operation, the system, amended and improved in various directions, gave highly satisfactory results.

Sir George Livesey was prominently identified with many enterprises and institutions connected with the gas industry. He was a director of the Crystal Palace District (now the South Suburban) Gas Company, and served as chairman for several years, during which time the co-partnership system was adopted by the company. His connection with the Commercial Gas Company as a director was also followed by the introduction into that business of the co-partnership principle. He was president of the Gas Companies' Protection Association, of the British Association of Gas Managers, and of the Southern District Association of Gas Engineers and Managers, and

honorary member of council of the Institution of Gas Engineers. He was also a Member of the Institution of Mechanical Engineers. Owing to his pioneer work in the industrial world and his knowledge of labour questions, he was selected as a member of the Royal Commission on Labour of 1891; and he also served on the Royal Commission for the St. Louis Exhibition of 1904, and on the Committee appointed to report on employment of ex-soldiers. The honour of knighthood was conferred upon him in 1902.

A man of strong individuality, excellent judgment, and exceptional organizing ability, Sir George Livesey possessed qualities which would have led him to make his mark in any walk of life; but the factors which most ensured the success of the great industrial revolution which he brought about were undoubtedly his thorough honesty of purpose and his earnest desire to do all he could to secure the moral and social advancement of those with whom he had to deal.

Sir George Livesey was elected a Member of The Institution on the 5th March, 1872. He became a Member of Council in 1906, and served on that body until his death.

CORNELIUS LUNDIE, who died at Cardiff on the 12th February, 1908, in his ninety-third year, was probably the oldest railway director living. For over 40 years general manager and engineer of the Rhymney Railway, he was, a few years prior to his death, appointed consulting director to the Company, and actively discharged the duties of that office until the end. The descendant of an old Scottish family, he was born at Kelso in May, 1815, and was educated privately, subsequently attending science classes at Glasgow and Edinburgh Universities. On the death of his father, in 1832, he took service under Mr. Charles Atherton on the works of the Broomielaw Bridge over the Clyde; and in 1836 he removed to Durham and took charge of the Clarence Railway in that county, a line which now forms part of the North-Eastern system. Three years later, a period of depression occurring, he went out to New South Wales, whence, after 8 years' diversified experience, he returned to England in 1847. He was next employed under the late Mr. Brassey on various railway works in this country, and from 1855 to 1861 he acted as manager of the Blyth and Tyne Railway, since absorbed by the North-Eastern Railway Company.

In 1861 his long connection with the Rhymney Railway enter-