

sist of those materials.”¹ In his Presidential Address,² delivered on the 10th of November, 1891, he endeavoured to trace briefly the advance of engineering work in relation to social progress.

WILLIAM DEMPSEY was born in London on the 3rd of May, 1817, and was educated privately. He and his elder brother, George,³ were early members of the Mechanics Institute founded by Dr. Birkbeck, and eagerly took advantage of the opportunity of self-education thus afforded. In 1840 he obtained an appointment as a draughtsman in the firm of Messrs. Fox, Henderson & Co. of Birmingham, with whom he remained until 1845.

In the latter year—at a time when railway enterprises were springing up all over the kingdom—William Dempsey joined his brother in London, where they worked night and day for some time in preparing plans for several projected lines. Unfortunately, however, the projects upon which they were occupied fell through, and William was glad to obtain an engagement in the works of Messrs. Bramah, Cochrane and Deeley at Tipton. In 1849 he was employed under Robert Stephenson⁴ on the works of the Britannia Bridge. He then returned to Messrs. Fox, Henderson & Co., for whom he was engaged in the construction of the great Exhibition buildings of 1851, and subsequently in their reconstruction at Sydenham as the Crystal Palace.

Some two years later Mr. Dempsey started business on his own account and in 1857 was appointed Consulting Engineer in England to the Railway Department of the Government of South Australia. In that capacity he designed and superintended the manufacture of several iron bridges and roofs, among which may be mentioned the Murray River bridge, the Hamley bridge over the River Light, the Port Adelaide swing-bridge and an iron roof for the goods-shed at Adelaide. He also prepared the requisite drawings and specifications, supervised the manufacture of and tested many thousand tons of permanent-way materials of all kinds. In 1863 he was also appointed Consulting Engineer to the Scottish Australian Mining Company in all matters connected with the providing in England of the machinery and plant required for its extensive coal mines in the Colony. In addition to these offices

¹ Minutes of Proceedings Inst. C.E., vol. xxx. p. 215.

² *Ibid.*, vol. cvii. p. 1.

³ *Ibid.*, vol. i. (1838) p. 38.

⁴ *Ibid.*, vol. xix. p. 176.

he filled for a time that of Consulting Engineer to the Government of Queensland.

For some time before his death, which took place at Kenilworth on the 18th of October, 1893, Mr. Dempsey had lived in retirement. The predominant features of his character were great capacity for work and inflexible uprightness. In his business relations he was just and generous to a degree, but his natural modesty perhaps made him appear diffident and retiring. Socially he was a most amiable and cheerful companion. Mr. Dempsey was elected an Associate of the Institution on the 6th of March, 1866, and was transferred to the class of Member on the 15th of March, 1870.

JOHN BAILEY DENTON was born on the 26th of November, 1814, and was the second son of the late Mr. Samuel Denton, a well-known solicitor of Gray's Inn during the first half of the present century. After a brief period of schooling, the youth, who was destined by his father to become a surveyor, was articled in 1830, when just fifteen years old, to the late Mr. Jackson, agent to the then Lord Dacre at Barkway, near Royston, Herts. There he learnt the practical management of estates, together with field-surveying, and under Mr. Jackson's directions undertook the inclosure of many of the common lands in numerous parishes in the midlands and home counties, and became noted for the accuracy of his work and the neatness of his plotted surveys. Surveying, however, afforded hardly wide enough scope for Mr. Denton's active mind and he determined to become a civil engineer. In 1842 he turned his attention to the railway movement then in full swing, and with the late Mr. Brassey,¹ and under the late Mr. Locke,² M.P., and other eminent engineers, was associated with the construction of the Great Northern, the London and South Western, the Midland, the Oxford and Cambridge, and the Hitchin and Royston Railways.

About this time, too, Mr. Bailey Denton, who had a natural inclination towards agriculture, became one of the earliest and most active promoters of the application of collective capital to the improvement of landed property, and was elected one of the directors of the first drainage company, which was originated with that object, viz., the Yorkshire Land Drainage Company. But as

¹ Minutes of Proceedings Inst. C.E., vol. xxxiii. p. 246.

² *Ibid*, vol. xx. p. 141.