

JOHN FERNIE was born on the 24th February, 1824, at Cupar, Fife, where he served an apprenticeship to his father, Mr. James Fernie. In 1849, he obtained employment on the North Staffordshire Railway, and 3 years later, was appointed Manager of the Britannia Foundry, Derby, for Messrs. Handyside and Company. Relinquishing this post in 1855, Mr. Fernie became locomotive superintendent to the Midland Railway at Derby, remaining in charge of the department for nearly 8 years. Whilst there, he introduced methods of fine measurement of work and established a system of duplicating engines, whereby parts were made readily interchangeable. These methods were described in the Paper on the "Manufacture of Duplicate Machines and Engines,"¹ which he communicated to the Institution in 1862, and for which he was awarded a Watt medal and Manby premium.

In 1863, Mr. Fernie became part proprietor of the Clarence Ironworks, Leeds, and had charge of the engineering work of that establishment until he retired 6 years later. After his retirement, he travelled extensively in Europe and America. In 1883 he contributed to the "Proceedings" a Paper on the use of mild steel in the fire-boxes of American locomotives,² for which he received a Telford Premium. He invented, among other mechanical devices, a hoist for foundry purposes, a flanging-machine for boiler-plates, and, in 1863, a system of ventilation, which was installed in Wanamaker's stores in Philadelphia, and is still in use. Mr. Fernie served on the Mechanical Committee of the Exhibition of 1862, and was a member of the Institution of Mechanical Engineers. He died at Weybridge, Surrey, on the 12th December, 1904, in his eighty-first year.

He was elected an Associate of the Institution on the 2nd December, 1862, and was transferred to the class of Members on the 23rd February, 1869.

WILLIAM GEE, eldest son of the late Mr. William Gee, of Southwell, was born on the 1st April, 1852. After studying in the engineering school of the Hartley Institution, Southampton, he served a pupilage of 3 years to the late Mr. James Bolton, in St. Helen's Ironworks, Swansea.

In 1878 Mr. Gee joined the engineering staff of the Natal Government Railways as an assistant engineer, and 3 years later was appointed Chief Assistant on the surveys for extensions of the line through the difficult country of the Drakensberg

¹ Minutes of Proceedings Inst. C.E., vol. xxii. p. 604. ² *Ibid*, vol. lxxii. p. 8.