

DAVID CUNNINGHAM, born in Dundee on the 14th of July, 1838, was the son of the late Mr. John Cunningham, who for many years carried on the business of a wine merchant in that town. He was educated first at the Dundee High School and subsequently at the Queen Street Institute, Edinburgh, after which he served an apprenticeship of five years to Messrs. B. H. & E. Blyth,¹ of Edinburgh. That firm was at the time engaged in railway work of a varied and extensive character, and Mr. Cunningham did not fail to take advantage of the opportunities thus put in his way of obtaining a practical knowledge of that branch of the profession. So energetic and intelligent did he show himself that eight months before the expiration of his articles he was appointed Assistant Resident Engineer on the construction of the Portpatrick Railway, on which he was occupied for nearly four years. He then acted until July, 1866, as Resident Engineer on the Galashiels and Peebles line, now part of the North British system.

Railway enterprise in Scotland becoming at that time somewhat stagnant, Mr. Cunningham found himself thrown out of employment. He made, however, good use of this enforced leisure by visiting France, Switzerland and Italy, where he considerably extended his professional knowledge. He returned to Dundee in 1867 and commenced to practise on his own account. Two years later Mr. Cunningham was appointed Engineer to the Dundee Harbour Trust, which post he held for the remainder of his life. One of his first duties was in connection with the question of dredging the river in front of the entrance to the docks. His recommendations being adopted by the Trustees, he succeeded in a few years in lowering the bed of the river 10 feet opposite the harbour walls. He next constructed a large graving dock, built extensive sheds and laid the system of rails. Other improvements followed, including the introduction of hydraulic machinery and the construction of wharves to enable vessels of deep draught partly to discharge their cargoes and enter the docks without delay. He also constructed the Cattle Dépôt and wharves at Carolina Port, and took great interest in the management and working of the Tay Ferries. He invented a floating caisson for use at dock entrances, made various improvements in the construction and working of swing bridges, and devised an automatic tramway system for unloading ships' cargoes.

¹ Minutes of Proceedings Inst. C.E., vol. xxvi. p. 556.

In addition to his duties at Dundee, he superintended the construction of the harbour of Buckie, Banffshire, and he found time to make several contributions to engineering literature. In 1884 he presented to the Institution an "Account of Shifting one of the Lighthouses at Buddonness, near Dundee Harbour"¹; and ten years later a Paper entitled "The Estuary of the Tay,"² in which he embodied the results of an elaborate survey of the currents and sandbanks in that estuary. For the latter he was awarded a Telford Premium. Mr. Cunningham was also the author of a volume of "Tables for Facilitating the Calculation of Earthwork"; and of an inquiry into the material and moral position of the populations of Europe and America under the title "Conditions of Social Well-being."³ He took much interest in the progress of technical education, and encouraged the study of science and art in Dundee by the offer of medals and prizes for competition. He was elected Member on the 1st of February, 1876, besides which he was connected with the Royal Society of Edinburgh, the Royal Meteorological Society and the Statistical Society.

Mr. Cunningham died at his residence in Newport, near Dundee, on the 13th of June, 1896. For some time he had been suffering from an incurable malady, and for several months it had been apparent that his strength was rapidly failing. By his death, at the comparatively early age of fifty-seven, has been removed an engineer who was well known throughout the east of Scotland and who was identified with the extensive growth of Dundee Harbour during the past quarter of a century.

JOHN HENRY DAVIS, born on the 24th of December, 1837, was the son of the late Mr. John Griffin Davis, of Clapham. He commenced his engineering career at the age of fifteen, when he entered the locomotive works of the London and North Western Railway Company at Crewe. There he remained four years, after which he was engaged for twelve months in the Locomotive Department of the London and South Western Railway. He then entered the drawing office of Messrs. Neilson & Co., of Glasgow, and after spending eighteen months there passed into the employment of Messrs. Sharp, Stewart & Co. in 1859. Mr.

¹ Minutes of Proceedings Inst. C.E., vol. lxxix. p. 347.

² *Ibid*, vol. cxx. p. 299.

³ These works are in the Library of the Institution.