

'Ports and harbours' to a conference held jointly by the Institution, the Institution of Mechanical Engineers and the Institution of Electrical Engineers in 1951. (Jt Conf. 1951, 93).

Elected an Associate Member in 1910, he became a Member in 1930. He is survived by two brothers and a sister.

ALEXANDER GRANT, who was born on 21 March, 1870, died on 2 June, 1964.

Educated at Advie School and Elgin Academy, he received ten years' practical training in the office and works of Messrs Gordon & Macbey, civil engineers, of Inverness and Elgin (the beginning of a lasting association), and in 1897 joined the firm in Inverness. As one of three partners, he was jointly responsible for waterworks and sewerage in several parts of Scotland, including Lossiemouth; for two bridges built for Ross-shire County Council; for the extension of Inverness Harbour quays; and for an 8-mile survey of the River Spey and estimates for two light railways (Kinloss and Findhorn, Inverness and Lochend). From 1910 onwards Mr Grant was in sole charge of the firm, then known as George Gordon & Company, and responsible for estimating for the working plans for Nairn Harbour, new waterworks for Invergordon, the reconstruction of roads to the naval base, and new sewerage works for the town.

During World War I he supervised highways in Inverness-shire, reconstructed Dalmore Mining Base after occupation by the United States' Navy, and carried out many ambitious drainage and water extension schemes. He acquired an intimate knowledge of the main water supply systems in the northern counties of Scotland from Lossiemouth to Thurso and wide experience of harbour works, land surveying, road engineering, and sewerage. During World War II he continued as senior partner of Messrs George Gordon & Company.

In his later years he was consulting engineer to the Northern Town and County Councils, Engineer to the Inverness Harbour Trust and Consulting Engineer to the North of Scotland Hydro-Electric Board in certain northern areas.

Mr Grant was a member of the Institution of Water Engineers and of the Association of Consulting Engineers, a Licentiate of the Royal Institute of British Architects and a Fellow of the Royal Incorporation of Architects in Scotland.

He was elected a Member in 1927.

He is survived by his widow, a son—Mr A. M. Grant, *O.B.E.*—and a daughter.

SIR IVOR RICHARD COX, *D.S.O.*, *D.Sc.*, who was born on 28 March 1891, died in June 1964.

He studied engineering at University College, Cardiff, and received the degree of *B.Sc.* in 1911. After graduating he joined the British Westinghouse Company as an assistant turbine engineer.

In World War I he served in France, Palestine, and Salonika with the Royal Garrison Artillery, and ultimately commanded a brigade, retiring with the rank of Major in 1919. He was twice mentioned in despatches and was awarded the *D.S.O.* and *Croix de Guerre*, with palms.