

CECIL JOSEPH PARKER, *M.C.* (E. 1914, T. 1925).
 JAMES BARCLAY PEAT (E. 1907, T. 1943).
 ERNEST MORGAN STIRLING, *B.A.* (E. 1939).
 WAUDE THOMPSON (E. 1904, T. 1926).
 CHRISTOS VRETTOS, *B.Sc.(Eng.)* (E. 1956, T. 1964).
 ALGERNON GORDON YOUNG (E. 1943).

Associate Members

JOHN CHADWICK ADAM (E. 1957).
 ROBERT BROWNE DUNWOODY, *C.B.E.* (E. 1905).
 GEORGE FORSTER (E. 1935).
 GRAHAM DAVID GILBERT, *Ph.D., B.Sc.(Eng.)* (E. 1958).
 JAMES ROE LEWIS (E. 1919).
 JOHN PRICE, *B.Sc.* (E. 1952).
 ARTHUR JOHN EDWARD RIDLEY (E. 1941).
 HERBERT STRINGER, *T.D.* (E. 1944).
 ALAN CHICHESTER THOMSON, *D.S.O.* (E. 1910).

Students

JOHN RICHARD PHILIP EDMUNDS (A. 1961).
 ROBERT DAVID WYNNE (A. 1957).

OBITUARY

LEOPOLD LEIGHTON, *O.B.E.*, who was born on 23 November, 1884, died on 26 May, 1964.

Educated at Hull Grammar School, he studied engineering at Hull Technical College and Leeds University. In 1910 he passed the Institution's Associate Membership examination.

From 1900–1905 he received practical training in Hull under Messrs Bailey & Leatham Ltd, and Messrs Amos & Smith. After two years' drawing office experience, he joined the North-East Railway Docks Department as an engineering draughtsman, and in 1910 became Engineering Assistant to the Hull Joint Dock Committee, working on the design, construction, and equipment of King George Dock. From 1914–1929, as Assistant Engineer to the Mersey Docks & Harbour Board, Liverpool, he was engaged on the maintenance of the Dock Estate and other special works, including repairs to Canada Entrance Lock, extensions to Liverpool landing stage, electrification of the Southern Docks system, excavations and building works. In 1925 he became directly responsible for repairs and maintenance of all dock gates, operating machinery and landing stages, and for the construction of a new 100-ft dock passage, swing bridge, and three pairs of dock gates. He was appointed Principal Assistant Engineer to the Mersey Docks & Harbour Board in 1929 under the Engineer-in-Chief, Mr T. L. Norfolk (M), with special control of Prince's Dock improvements. On Mr Norfolk's retirement in 1942 he succeeded him as Engineer-in-Chief, only relinquishing this post on his own retirement in 1948.

Mr Leighton was a member of the Institution of Mechanical Engineers and an Associate Member of the Institution of Electrical Engineers. From 1945–1950 he was a member of the Council of the Institution. He was awarded the *O.B.E.* in 1950.

Author of a paper read to the Liverpool Engineering Society in 1917 on 'The equipment of King George Dock, Hull', he also presented a paper on

'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.