

OBITUARY

JOSEPH GEORGE ALEXANDER, who died at his home in Dunedin, New Zealand, on the 20th August, 1954, was born in Aberdeen on the 26th September, 1872. He received his early training in Aberdeen as an articled pupil of Messrs Walker and Duncan, and from 1895 to 1900 served as engineering assistant to the Borough Engineer's Department, Wolverhampton. For the following two years he held a similar appointment in West Ham, and from 1902 to 1913 was the Eastern Division Assistant Surveyor in the City of Westminster Engineer's Department. Early in 1913 he went to India, and after three years as Municipal Engineer in Cawnpore and six years in the Public Health Department, Bihar and Orissa, he moved still farther afield to become Municipal Engineer in Gisborne, New Zealand. In 1923 he was appointed City Engineer, Dunedin, and Engineer to the Dunedin Drainage and Sewerage Board, a post which he held from March 1924 until his retirement in March 1939.

Mr Alexander was elected an Associate Member of the Institution in 1904. He was also an Associate Member of the Institution of Mechanical Engineers, a Member of the New Zealand Branch of the Royal Sanitary Institute, and Past-President of the Institution of Engineers.

He is survived by his wife, one son and two daughters.

THOMAS BELL, E.D., who died in India on the 24th June, 1954, was born at Rock Ferry, Cheshire, on the 6th March, 1902. His technical education commenced at Birkenhead Technical College and Liverpool Central Technical School, and he was later articled to Mr B. P. Wall, who was Chief Engineer to several of the firms in the Unilever combine.

From 1924 to 1950 he served with the Bengal-Nagpur Railway, first as Assistant Engineer, later as District Engineer, Assistant Bridge Engineer, Administration Officer (Vizagapatana), and finally as Deputy General Works Manager. From 1950 until his death, he was Chief Engineer to the Bengal Baroda and Central India Railway—now the Western Railway.

Mr Bell was elected Associate Member of the Institution in 1927, and was transferred to the class of Members in 1946. He was also a Member of the Institution of Engineers (India).

During the 1939-45 war he served for three years as Major in the Indian Engineers (Defence of India), later known as Defence of India Corps (Railways). He was also Captain in the B.N.R. Battalion (A.F.I.) until its disbandment in 1947. He was awarded the Efficiency Decoration in 1953.

Mr Bell is survived by his wife, two sons, and one daughter.

CHARLES AUGUSTUS CARLOW, D.L., LL.D., J.P., F.R.S.E., who died at his home in Kincapple, St. Andrews on the 13th August, 1954, was born at Leven, Fifeshire, on the 30th November, 1878. He received his early education in engineering as a mining student at the Heriot-Watt College and Edinburgh University. He continued his studies and practical training in large collieries in Northern Durham and Lancashire, and at the

Fife Coal Company's collieries. In 1900 he was appointed Assistant Manager of the Fife Coal Company, and from then until 1911 his major responsibilities included the planning and sinking of the Mary Pit, Lochore, and the Kinglassie and Valleyfield collieries, and the establishment of all the ancillary works. From 1908 to 1914 he was responsible for the electrification of a number of collieries. In 1911 he was appointed General Manager of the Company, a post which he occupied until 1923 when he was appointed Managing Director.

In 1939 he succeeded Sir Adam Nimmo as Chairman and acted as Chairman and Managing Director until the Company went into voluntary liquidation in 1952.

Mr Carlow was elected a Member of the Institution in April 1938. He was also a former Chairman of the Scottish Transport Commission, an Honorary Doctor of Laws of St Andrews University, a Deputy Lieutenant of the County of Fife, a Justice of the Peace, an Honorary Colonel of the Royal Engineers, and an Honorary Member of the American Institute of Mining and Metallurgical Engineers. He was a Founder Member of the Institute of Fuel, Past President of the Mining Institute of Scotland, Past President of the Association of Mining Electrical Engineers, Past President of the Institution of Mining Engineers, and a Fellow of the Royal Society of Edinburgh.

DAVID HENDERSON, who died on the 26th August, 1954, as the result of an accident at Hoy Pumping Station, Caithness, was born on the 29th March, 1884.

He was educated at the High School of Glasgow, and at the Royal Technical College, Glasgow. He received his practical training with Robert McAlpine & Sons, and in 1905 was appointed Assistant Engineer to the Caledonian Railway Company.

In 1910 Mr Henderson joined the staff of the Sudan Government Railways as an Assistant Engineer. He was employed initially on a 400-kilometre railway extension, later as Resident Engineer on bridge construction, relaying, and well boring. After being promoted to District Engineer in 1918, and to New Works Engineer in 1927, he subsequently became Chief Engineer to the Sudan Railways in 1931, a position which he held until his retirement in 1934.

Mr Henderson was elected an Associate Member of the Institution in 1910, and was transferred to the class of Members in 1933.

In 1936 Mr Henderson became a Director of John McAdam & Sons Ltd., a position which he held until the time of his death. During this time his firm carried out several large public works schemes.

He is survived by a son who has now taken his father's chair in the firm.

HERBERT ROSS HOOPER, M.A., O.B.E., who died at Chippenham, Wilts, on 6th July, 1954, at the age of 90, was born at Hove on 21st April, 1864, being the 5th son of the Rev. Robert Poole Hooper, M.A.