

Engineering Section of the British Association in 1908, of the Institution of Gas Engineers in 1920, and of the Institution of Automobile Engineers in 1908-9; and Vice-President of the Institution of Mechanical Engineers in 1917-19. In 1915-17 he was Chairman of the Council, and in 1923 he became a Vice-President, of the Royal Society of Arts, which awarded him in 1922 the Albert Medal for his work in connection with the development of the internal-combustion engine. In 1906 he delivered before the society a course of Cantor lectures on that subject, and in 1917 the first Trueman Wood lecture on Discovery and Invention. He was Chairman of the Delegacy of the City and Guilds (Engineering) College from 1918 to 1920, and a member of the Court of the Goldsmiths Company, of which he was Prime Warden in 1926-7. His election in 1913 to the Athenæum Club took place under the rule which empowers the Committee to elect annually a number of distinguished men; and he was a member also of the Reform and other clubs.

Sir Dugald Clerk was elected into The Institution as an Associate Member on the 8th January, 1889, and was transferred to the class of Members on the 12th December, 1899. In 1913 he became a Member of Council, and in 1928 a Vice-President, and he was elected President for the year 1932-33 at the Annual General Meeting in May, 1932. In the following September, however, he intimated to the Council that the state of his health would not permit of his taking office, and, as already stated, he died on the 12th November.

He bequeathed to The Institution a legacy of £3,000 and a share (about one-tenth) of his residuary estate.

He married, in 1883, Margaret, daughter of Mr. Alexander Hannay, of Helensburgh; she died in 1930.

JOHN HENRY JOHNS, who died at Bordighera, Italy, on the 23rd November, 1932, was the second son of James Johns, Mining Engineer, of Camborne, and was born at St. Hilary, Cornwall, on the 5th December, 1857.

He was educated at the Camborne School of Mines and the Royal School of Mines, London, and obtained practical mining experience at the Wheal Bassett and other mines in Cornwall. In 1881 he went to India as Engineer and Manager of the Nine Reefs gold mine and was engaged in that capacity for 7 years. In 1889 he went to South Africa, where the remainder of his active engineering career was spent. His first work there (1889-93) was the management of the works of the Ferreira Gold Mining Company, and from 1893 to 1901 he was General Manager of that company, and of the Wemmer Gold Mining Company, as well as Consulting Engineer to the Worcester Gold Mining Company.

In 1901 he was appointed Consulting Engineer to the important group of gold mines controlled by Messrs. Barnato Bros. and the

Johannesburg Consolidated Investment Corporation, and he continued to hold that position until 1910.

He was President of the South African Association of Engineers, 1892-1902, and was a member of the Mine Managers Examining Board in South Africa. From 1913 until 1924 he was the representative of The Institution on the Board of Governors of the School of Metalliferous Mining (Cornwall). In 1881 he was awarded the medal of the Miners' Association of Cornwall and Devon.

Mr. Johns was elected as an Associate Member of The Institution on the 5th December, 1893, and was transferred to the class of Members on the 19th April, 1904. From 1906 to 1908 he served as the Member of Council resident in South Africa.

He married, in 1884, the eldest daughter of Mr. H. Trembath, J.P., of Penzance, who survived him, and by whom he had one son and two daughters.

DAVID ERNEST LLOYD-DAVIES, third son of David Lloyd-Davies, of Liverpool, was born there on the 1st April, 1875. He was educated at Bewdley and at the University of Birmingham, and served a pupilage under the Borough Engineer of Wolverhampton from 1893 to 1896. During the ensuing five years he was engaged as Chief Assistant to Mr. R. E. W. Berrington, M. Inst. C.E., Consulting Engineer, of Wolverhampton and Westminster, and was engaged on large schemes for sewerage and sewage-disposal, water-supply, etc.

In 1901 he became Chief Assistant Engineer to the Corporation of Birmingham, in charge of special works, which included the Rea Valley flood-relief works, duplication of the Rea main sewer, a diversion of the river Rea and the Rea main outfall sewer, Hockley Brook improvement, and tramways, road improvements, etc. While engaged on these works he contributed to The Institution a Paper¹ on "The Elimination of Storm-Water from Sewerage Systems," for which he was awarded a Manby Premium.

In 1906, on the nomination of Sir Evan Spicer, Chairman of the London County Council, he was appointed Chief Engineer to the Municipality of Alexandria. He completed the promenade quay-wall and main sewage collector at the Eastern harbour, extended the promenade to Ras-el-tin Palace, designed the main drainage and breakwaters to protect the Eastern harbour, and carried out various bridges, road works, and buildings.

In 1914 he was appointed the first City Engineer of Greater Capetown, and he continued to hold that office until the end of 1931, when he resigned owing to ill-health. He died suddenly in London on the 31st May, 1932.

His chief works at Capetown were the main drainage of the Southern Suburbs, the construction of the Steenbras waterworks at a cost of

¹ Minutes of Proceedings Inst. C.E., vol. clxiv (1906), p. 41.