

OBITUARY.

SIR WILLIAM H. WHITE, K.C.B., F.R.S., D.Sc., died on February 27th, 1913. He was President of the Institute in 1893-94. Born in 1845, at Devonport, he was entered as an apprentice at the Royal Dockyard when fourteen years of age. In 1870 he entered the service of the Admiralty, and was appointed instructor at the School of Naval Architecture. In 1875 he became assistant constructor to the Royal Navy, and a year later secretary to the Council of Construction. In 1881 he was made a chief constructor, and in 1885, after having spent two years with Messrs. Armstrong and Co., at Elswick, he came back to the public service as Director of Naval Construction and assistant controller of the Navy. He was one of the greatest designers of warships the world has ever known, and when he left the service in 1902 on failure of health, he had been responsible for the design of no less than 245 warships at a cost of upwards of 100 million pounds. After his retirement, when a special grant was made to him by Parliament, he was consulted in regard to the design of hull and machinery by the Cunard Company, and by the builders of the great Cunarders. He became a director of Messrs. Swan, Hunter and Wigham Richardson, Ltd., and was also in practice as a consulting naval architect in his London office. He was associated with numerous scientific societies, and always took a warm interest in the work of this Institute since his election as a Life Member in 1893.

SIR DAVID GILL, K.C.B., F.R.S., D.Sc., died on January 24th, 1914. He was President of the of the Institute during session 1910-1911. He was born in Blairythan, in Aberdeenshire, in 1843, and was educated at Dollar Academy, Clackmannanshire, and at Marischal College, Aberdeen. After studying astronomy at a private observatory at Aberdeen for five years, he organised Lord Lindsay's expedition of 1873-6 to Mauritius for the purpose of observing the transit of Venus in approximating the distance to the sun. Eight years later he again organised expeditions for this purpose to South Africa. This country was the scene of his labours for twenty-nine years, from 1879 to 1907 during which time he held the position of Royal Astronomer at the Cape of Good Hope. He was successful in his observations of the distances of various stars and planets, and in addition to his astronomical work, pure and simple, he gained distinction in survey work. In 1877 he measured the base line for the geodetic survey of Egypt, carried out the survey of Natal and Cape

Colony during the years 1885 to 1896, and in the following year organised the geodetic survey of Rhodesia. He was largely responsible for the introduction of the use of photography into astronomical science. He was the recipient of many honours, both in this country and abroad.

Mr. HUGH PATTERSON ARTHUR was born in Greenock and was educated in Hunter's Academy in that town. After serving his apprenticeship with Messrs. Caird and Co., he left Greenock for Liverpool and, afterwards, London, where he was engaged for about two years with Messrs. John Penn and Sons and Messrs. Humphreys, Tennant and Co. In 1849 he went to Southampton, entering the service of the Royal Mail Steam Packet Company, and during the Crimean war he was on several of the Company's ships employed in carrying troops. He was chief engineer successively on the *Atrato*, *Magdalena*, *La Plata*, *Tagus*, *Douro*, and *Avon*, and was on the last-named vessel when she was wrecked. After acting as inspector during the building of several of the Company's vessels, he received the appointment of Assistant Superintendent, and, later, Superintendent Engineer. Among the vessels which were added to the Company's fleet during the time he occupied this position were the *Nile*, *Danube*, *Tagus* and *Trent*. Mr. Arthur retired in 1901 after an honourable career of over 50 years in the Royal Mail Company's service. He was a strict disciplinarian, but was always ready to assist and advise in any worthy object. He was elected a member of the Institute in 1894.

His death took place in July, 1913, at his residence at Hill Lane, Southampton, in his 89th year. His remains were laid to rest in Southampton Cemetery and were followed by a large number of townsmen, among whom were representatives of the Royal Mail Company.

Mr. HERBERT ALFRED BISHOP was born in Bradford, Yorks, in 1876. He was educated at Leeds Central Higher Grade School, and was afterwards apprenticed to Mr. James Best, Camp Field Engine Works, Leeds, finishing as an "improver" with Messrs. Vickers, Sons and Maxim at their works at Barrow. At the age of twenty-one he joined the firm of Messrs. Thos. Wilson, Sons and Co., Ltd., of Hull, first sailing in their England-New York service, and then in the Grimsby-Gothenberg service until May, 1900, when he joined the British India Steam Navigation Co. Mr. Bishop served some

years in the Indian coast service of the Company, and also in the home service. In 1911 he sailed from Greenock as second engineer in the Company's new mail steamer *Ellora* for a three years' term on the coast service, leaving this steamer early in 1913 on account of fever. At the time of his death on September 24th, 1913, at Busrah, he was second engineer of the s.s. *Muttra*. He was elected a member of the Institute in 1908. Mr. Bishop was a member of a staunch Quaker family.

Mr. E. BOWEN was associated with the Institute from its earliest years, having been elected a member in August, 1892, at which time he was the Locomotive Superintendent of the Porto Alegre and New Hamburg Railway Co., at Rio Grande do Sul, Brazil. His apprenticeship was served at the L.B. and S.C.R. Works at Brighton, and the greater part of his business career was in connection with railway work, although he had experience as a sea-going engineer for a period of two years. He died in April, 1913.

Mr. PETER BOYD, R.N.R., R.D., was born in Midlothian about the year 1845. He spent his early years in Edinburgh, where he was educated, and he also served his engineering apprenticeship in that city. In 1868 he joined the service of the British India Steam Navigation Co. as a junior engineer in the s.s. *Ethiopia*. He proceeded with her to India, where he remained for some years on the Indian coast service of the company, being promoted through the various grades to chief engineer. He was subsequently transferred to the home line service about 1879, in which he sailed as chief engineer till 1907, when he retired on a pension allowance. His total active service in the British India Company was about 39 years. He was a member of the Royal Naval Reserve, and for a period of about twelve years he served as chief engineer of steamers occupied in the Admiralty transport service, during which he earned the distinction of R.D. He was one of the original members of the Institute, in which he took a warm interest, and was present at the last annual meeting. He was a vice-president of the Institute in session 1906-07, as a representative sea-going engineer.

Professor A. C. ELLIOTT, D.Sc. died on April 21st, 1913, at Porthcawl, Glamorgan. He was for many years resident at Cardiff as Professor of Engineering at the South Wales University College. He was born at Glasgow in 1861, and was

educated at Glasgow and Edinburgh, attending the universities of both cities and obtaining the degree of D.Sc. at Edinburgh. While at Glasgow he was a student under Sir Wm. Thomson (Lord Kelvin), and gave promise of high attainments. He entered upon practical work in the engineering department of the Glasgow and South Western Railway, and was afterwards assistant to the engineer-in-chief. A few years later he was associated with Sir Wm. Thomson and Professor Fleeming Jenkin as assistant in connection with their consulting works. Previous to being appointed to the chair of engineering at Cardiff, he was assistant Professor of Engineering at Edinburgh University. He was a member of the Institution of Civil Engineers, President of the South Wales Institute of Engineers, and a Vice-President of this Institute, of which he was elected a member in 1890. He contributed to the transactions and in other ways advanced the aims of the Institute. When Lord Kelvin was elected President, his former pupil, Prof. Elliott, was President of the Bristol Channel Centre of the Institute.

MR. EDWARD T. LLOYD, was born at Liverpool in 1862, and when seven years old was taken to India to join his father, who was chief accountant to the East Indian Railway Company. He attended private schools and was afterwards apprenticed at the East Indian Railway Co.'s works at Allahabad as an engineer. In 1883 he joined the British India Steam Navigation Co.'s s.s. *Madura*, as fourth engineer. Returning to England in 1885, he joined the firm of Messrs. D. and C. McIver, sailing in their s.s. *Niagara* and s.s. *China*. He was promoted to chief engineer in 1890, sailing for some time as chief engineer of the s.s. *Etolia*, and when Messrs. Elder Dempster and Co. took over the vessels, he passed into the employ of that firm. He superintended at Jarrow the machinery being erected in the s.s. *Monterey*, afterwards sailing as chief engineer of that vessel, and, subsequently, of the s.s. *Mounteagle*. In 1903, when the Canadian Pacific Railway Company bought the fleet, Mr. Lloyd was appointed superintendent engineer at Bristol, and in 1910 he took charge of the department in London also. In June, 1912, he was sent by the Company to represent his department at the Shipping Conference held at Bremen. In the following September he caught a severe chill, and was laid up for several months with kidney and heart trouble, passing away on March 23rd, 1913. His remains were interred at Liverpool. He was elected a member of the Institute in 1910.

Mr. JAMES NEILSON, died in January, 1914. He served his apprenticeship with Messrs. Jas. Aitken & Co., Cranstonhill Foundry, Glasgow. He afterwards went to sea, and at length attained the position of Chief Engineer in the Elder Dempster Line, sailing to the West Coast of Africa. This Company he left to start in business with a partner in Glasgow, but shortly afterwards he gave up the business and joined the British India Steam Navigation Co. about the year 1878, going out to the shore staff in Calcutta, where he rose to the position of Superintendent Engineer. He retired about the end of 1908, and died of heart failure on January 9th, 1914, aged 68 years. He was elected a member of the Institute in November, 1904.

Mr. DAVID ROBERTS, who was associated with the Institute since March, 1900, died at Cardiff in November, 1913. He spent the greater part of his life in that town, his early training being received with Messrs. Parfitt & Jenkins, Tubal Cain Works, Cardiff, and for many years he held a shore appointment as superintendent foreman engineer. He only made two voyages, as third engineer and second engineer respectively.

Mr. GEORGE D. SMITH was elected a member of the Institute in September, 1899. Born in Anstruther, Fifeshire, at the U.P. Manse, his first school days were spent in that town. Later he studied at the High School, Stirling, where he stayed until old enough to begin his apprenticeship, which he served with Messrs. W. Simons & Co., Engineers, Renfrew. In 1890, he joined the British India Steam Navigation Co., all his sea service being spent with that Company. He was appointed as chief engineer of the *Malda* and was superintending the erection of the machinery in that vessel when he died in April, 1913.

Mr. ROBERT STEELE died on May 2nd, 1913, at the age of 54. He was the eldest son of the late Mr. Robert Steele, of Greenock, and great-grandson of the founder of the firm of Messrs. Robert Steele & Co., Greenock, which firm, established in 1786, became famous for the China sailing clippers built by them, and also as pioneers in steamship building. Mr. Steele was born at Greenock, and received his education at Mostyn House, Cheshire, and at Merchiston Castle School, Edinburgh. He served his apprenticeship with Messrs. R. Steele & Co., at Greenock, and after working through the various practical departments, and engaging in the supervision of construction work, he went abroad for some time. In 1887 he was appointed manager to Messrs. A. McMillan & Son, Dumbarton, where he

remained for about two years. In 1889 he began practice on his own account in London, as consulting naval architect and engineer, and soon became known very widely in shipping and ship-insurance circles as an expert in cases coming before the Admiralty, commercial and arbitration courts. He was consulting engineer to the South-Eastern and Chatham Railway. He only became associated with the Institute as a member a few months before his death.

Mr. JAMES WALKER, died at his home in Leytonstone, Essex on May 8th, 1913, at the age of 73. He was born in Edinburgh, and at the age of 23 or 24 he went out to Australia, where he spent 13 years in different engineering enterprises. In the year 1882 he returned to England, and about the same time he introduced the "Lion" packings with which his name has since been associated, founding the firm of Messrs. James Walker & Co., at Garford Street, Poplar, of which Company he was chairman up to the time of his death. He was elected a Companion of the Institute in February, 1898.

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- American Society of Civil Engineers.
- American Society of Mechanical Engineers.
- Association of Engineers in Charge.
- L'Association Technique Maritime.
- Barrow and District Association of Engineers.
- Incorporated Institution of Automobile Engineers.
- Institute of Metals.
- Institution of Electrical Engineers.
- Institution of Engineers and Shipbuilders, Hong-Kong.
- Institution of Engineers and Shipbuilders in Scotland.
- Institution of Mechanical Engineers.
- Institution of Naval Architects.
- Liverpool Engineering Society.
- North East Coast Institution of Engineers and Shipbuilders.
- Société d'Ingénieurs Civils de France.
- Western Australian Institution of Engineers.

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