

David Alan Stevenson, B.Sc., M.Inst.C.E.

DAVID ALAN STEVENSON, eldest son of David Stevenson, B.Sc., M.Inst.C.E. (1815–86), was born in Edinburgh on July 21, 1854. He was educated at the Edinburgh Academy and the University of Edinburgh, where he graduated B.Sc. in Engineering in 1875. A fellow-student was the late Principal Sir James Alfred Ewing. It was while staying at North Berwick in his boyhood days that he and his cousin, Robert Louis Stevenson, rambled over the “Bents” as far as Archerfield Summer House, the venue of *The Pavilion on the Links* which “R. L. S.” inscribed to him “in memory of days near Fidra.” It was here also, in Mr Stevenson’s own words, that “in dark evenings we wandered about with lanterns, burning our fingers and polluting the atmosphere with the smell of burnt oil and hot metal,” which episodes are described in *The Lantern Bearers*.

He was initiated into practical engineering by visiting various works in progress, including Anstruther Harbour and Dhu Heartach Lighthouse. His pupilage was served in the office of his father and his uncle Thomas Stevenson. In 1877 he visited the United States and Canada for the purpose of studying the principal engineering works of these countries.

In 1885 Mr Stevenson was appointed joint Engineer to the Commissioners of Northern Lighthouses with his uncle, and on the death of the latter in 1887 he was appointed sole Engineer to the Commissioners. During his tenure of office he was responsible for the design and construction of 24 lighthouses, 48 fog-signal installations, 33 of which were powerful sirens, one manned light-vessel, 4 unmanned light-vessels, 75 unattended minor lights and numerous beacons and buoys on and around the coasts of Scotland and the Isle of Man. There have also been established 7 radio beacons, and 16 isolated lighthouse stations have been equipped with wireless telephones. Among the lighthouses, special mention may be made of Sule Skerry, Flannan Islands, Bass Rock, Oigh Sgeir, Stroma, and Rattray Head, all works presenting difficulties requiring the exercise of sound judgment and engineering skill. The two fog-signals on Ailsa Craig (1886) were the first to be operated at long distances from the power source and the attendants,

and Rattray Head (1896) was the first instance of a first-class siren fog-signal being installed in a rock lighthouse. As far back as 1898, when Flannan Islands Lighthouse was being built, he gave serious thought to the possibility of maintaining communication with the shore by means of wireless telegraphy, and in 1904 he was considering the possibility of employing wireless for warning shipping during fog.

In 1883 Mr Joseph Chamberlain, then President of the Board of Trade, was interested in a discussion that was going on as to whether oil, gas, or electricity was the best illuminant for lighthouses, and he had an interview on this subject with Mr Stevenson, acting for Mr Thomas Stevenson. An electric light was subsequently installed at the Isle of May. To the Institution of Mechanical Engineers he, in 1887, read a paper giving an account of this electric light installation.

The firm of D. & C. Stevenson, of which Mr Stevenson was senior partner, was founded by his grandfather, Robert Stevenson, in 1785. Their advice was much sought in connection with River Improvement and Harbour Works in this and other countries. They acted as Engineers to the Clyde Lighthouses Trustees and were Consulting Engineers to several Colonial and Foreign Lighthouse Authorities. Mr Stevenson, in conjunction with his brother, introduced many important improvements into the lighting and fog-signalling of our coasts.

His firm was employed in connection with a project to connect the Forth and the Clyde by a ship-canal. They recommended the route by Loch Lomond, and Parliamentary plans were prepared, but the promoters felt they could not proceed without Government assistance. It was this scheme which the Government of the day (1909) and the Defence Committee considered was the only one that they might assist financially. Among the many notable works carried out by his firm, mention may be made of an unattended lighthouse with a powerful siren fog-signal on a low-lying rock named Platte Fougère near the entrance to St Peter Port, Guernsey, completed in 1910. The air compressors on the rock tower are operated by electric motors, the current being supplied from the shore station at Doyle Fort, distant $1\frac{1}{4}$ mile, by means of a submarine cable.

Mr Stevenson was extra-mural examiner in Engineering at the University of Edinburgh for the period 1894–97. He was elected a corporate Member of the Institution of Civil Engineers in 1884. He was also a member of the Royal Scottish Society of Arts, the Highland and Agricultural Society and the Royal Meteorological Society. He contributed papers on engineering and scientific subjects to numerous Societies and Congresses, and for one on the building of Dhu Heartach Lighthouse, read before the Institution of Civil Engineers in 1876, he was

awarded the Manby Premium. In 1886 he, in conjunction with his brother, revised and edited the 3rd edition of David Stevenson's *Canal and River Engineering*.

He gave evidence on several important engineering matters before Royal Commissions, Parliamentary Committees, and in the Law Courts, and took part in various investigations in connection with optical and acoustical problems.

On Mr Stevenson's retirement on March 31, 1938, the Commissioners of Northern Lighthouses put on record their appreciation of the invaluable services rendered by him during his long term of office as their Engineer, and the Trinity House, London, wrote expressing their thanks for his ready help and co-operation in solving the many lighthouse problems which had arisen in his day, and congratulated him on the advances he made and helped to make in lighthouse technique. A letter of appreciation was also received by him from the Board of Trade.

For fifty-four years he was a Director of the Scottish Equitable Life Assurance Society. A keen golfer, he was a member of several golf clubs, including the "Honourable Company of Edinburgh Golfers," the "Royal and Ancient," and the "New Club," North Berwick, of which last he was Captain for a period of three years. He was also a Member of the Royal Company of Archers, having joined in 1876, and was present on many of the occasions when they acted as Bodyguard in Scotland to Queen Victoria, King Edward VII, and King George V.

In 1882 he married a daughter of the late Mr William Roberts of Beckenham, a cousin of Lord Roberts.

He died at his residence "Troqueer," Kingsknowe, Edinburgh, on April 11, 1938, and is survived by his wife and two daughters, Mrs Peploe (D. E. Stevenson) and Mrs Chambers. During the last year of his life he had been in indifferent health, but only became confined to his room a few days after his retirement from business. Mr Stevenson was held in high respect by all with whom he had business relations.

He was elected a Fellow of the Society in 1884 and served on the Council from 1928-31.

J. D. G.