

BRIGHT LIGHTS



THE STEVENSON ENGINEERS
1752-1971

Bright Lights - The Stevenson Engineers 1752 - 1971 is much more than just another book about the popular Stevenson lighthouses. Its wide ranging coverage consists of fascinating family revelations by Mrs Jean Leslie, grand-daughter of Charles Stevenson, and professional comment on engineering aspects by Professor Roland Paxton covering such diverse achievements as the Bell Rock lighthouse, the elegant Hutcheson Bridge, Glasgow, erecting Edinburgh's Melville Column and deepening the Clyde to allow the *Queen Mary* to go to sea.

The book also includes details of Robert Louis Stevenson's close childhood relationship with his cousins David and Charles, and a chapter on his life as a reluctant trainee civil engineer. This is enlivened by his own account of the night stage-coach journey south after his uncongenial experiences working at Wick breakwater.

The book contains a great deal of information never published before and 128 illustrations, of which 36 are in full colour. Its appendices contain, a check-list with notes on more than 200 Stevenson publications, an updated list of lighthouses and a family tree.

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Mrs Jean Leslie was born in 1916 at the house of her grandfather Charles Stevenson in Edinburgh. She was educated in Scotland, England and Germany and subsequently obtained a diploma in Social Sciences at Edinburgh University. During the war she served with the First Aid Nursing Yeomanry and was an Almoner at Brompton Hospital. In 1945 she married K.A.S. Leslie, W.S. and now has three sons and six grandchildren. She is also a professional artist.



Professor Roland Paxton MBE FRSE is a Fellow of the Institution of Civil Engineers, Chairman of its Panel for Historical Engineering Works and a Commissioner on the Royal Commission on the Ancient and Historical Monuments of



Scotland. He was educated at Manchester College of Science and Technology and Heriot-Watt University where he now teaches and researches in civil engineering history as an Honorary Professor. For 30 years he has written and lectured extensively as far afield as Japan and the U.S.A. He is Chairman of the Forth Bridges Visitor Centre Trust; Secretary/Director of Laigh Milton Viaduct Conservation Trust and a Trustee of the James Clerk Maxwell Foundation.

Professor Paxton's interest in the Stevensons began in the 1960s when he had several meetings with D. Alan. In 1993 he delivered the Institution of Structural Engineers *Star History Lecture* in London on Robert Stevenson's *Structural Highlights*. In the following year he organised, and presented the opening lecture at the Edinburgh International Science Festival *Stevenson Family of Engineers Symposium* which attracted 300 participants.



CHARLES & DAVID STEVENSON

BRIGHT LIGHTS

The Stevenson Engineers
1752-1971



[1] Robert Stevenson (1772-1850), Civil Engineer and his wife Jean (1779-1846).

BRIGHT LIGHTS

The Stevenson Engineers 1752-1971

Comprising:
FAMILY RECOLLECTIONS
by JEAN LESLIE
and
A SERIES OF PROFESSIONAL ASPECTS
by ROLAND PAXTON

'... In the afternoon of time
A strenuous family dusted from its hands
The sand of granite, and beholding far
Along the sounding coast its pyramids
And tall memorials catch the dying sun,
Smiled well content ...'

R.L.S., Underwoods, XXXVIII.

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1 inch	2.54cm
1 foot	30.48cm
1 yard	91.44cm
1 mile	1.61km
1mph	1.61km/h
1 ton/in ²	15.44 MPa
1 lb/ft ²	0.05kN/m ²

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Introduction

This book, stems from the *Stevenson Family of Engineers Symposium* in 1994 held at the Royal Museum of Scotland in Edinburgh. It is the result of a collaboration by Mrs Jean Leslie, a direct descendant of the Stevenson family, and myself. From our completely different aspects and knowledge came the idea to produce a work based largely on family records which sheds new light on one of the world's most remarkable engineering families - the Stevensons, no less than seven of whom achieved fellowship of the Royal Society of Edinburgh.

The book covers their lives and work over a period of more than two centuries, from the birth in 1752 of Thomas Smith, first Engineer to the Commissioners of Northern Lighthouses, to the death in 1971 of D. Alan Stevenson, the last in the continuous succession of civil engineers. Particular attention has been given to the foundation of the Stevenson firm of civil engineers by Robert Stevenson which, with changes of partners from time to time, continued in service for over 140 years. Collectively the contribution of the Stevenson engineers to the infrastructure of the nation was extraordinary.

Our book is arranged chronologically in chapters, taking each member of the family involved in engineering work in turn, and with reference to such less obvious participants as Robert's daughter Jane, who took down at dictation his classic

Account of the Bell Rock Lighthouse, and R.L. Stevenson, the famous writer, known as Louis (pronounced Lewis). Within each chapter are two sections. The first written by Mrs Leslie is a compilation of family recollections and is based on her great interest in the family and extensive knowledge of its activities as Charles's grand-daughter. The second section entitled 'A professional aspect' and the appendices are by myself and consist of information and historical engineering comment to provide an indication of the style, scope and activities of each engineer from his own writings and work.

The verse on the title is taken from R.L.S's 'Underwoods', a poem which at once reveals Louis's awe and wonder at the engineering feats of his family and yet his own sense of guilt on turning away from their achievements to his own lesser talents!

We are pleased to acknowledge the valuable help received from Ronald Birse, Adele Paxton Mierzejewski, Ann Paxton, Quentin Stevenson, John Peplow, Pamela Godfrey, Rosemary Swallow, Willie Johnston and the many contributors mentioned in the list of illustrations and source notes. It is hoped that the book will make the fascinating lives and achievements of the Stevenson family of engineers better known and understood.

Roland Paxton

The Stevenson Family of Engineers



'The flashes of amateur ingenuity have paled their fires before the steady luster of brighter lights and surer guides. The voice of a commercial people demanded aid for daring enterprise and grand designs. Men like Smeaton and Brindley answered the call'. To these names can surely be added those of Watt, Telford, Rennie and Robert Stevenson.

[From Francis Egerton (Earl of Ellesmere, 1800-1857)'s *Essays on history, biography, geography, &c.* contributed to the *Quarterly Review*, 1857. For this most apt quotation the authors are indebted to Professor Sydney Ross of Rensselaer Polytechnic Institute, Troy N.Y., U.S.A., Chairman of the James Clerk Maxwell Foundation].

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