

## LECTURES

### Introduction and Lecture SMEATON IN SCOTLAND

by ROLAND PAXTON, Heriot-Watt University

#### Edinburgh

21st Oct. 1992 6 p.m.  
(Tea 5.30 p.m.)

The Royal Society of  
Edinburgh,

22/24 George Street

Contact: Dr. Alan Sibbald  
(031-455 2472)

#### Glasgow

12th Nov. 1992 6.15p.m.  
(Coffee 5.30 p.m.)

The Royal Scottish  
Automobile Club,

Blythswood Square,

Contact: Professor Alec Coull  
(041-339 8855, ext. 5200)

### THE LIFE-LONG LEARNING OF JOHN SMEATON

by TED RUDDOCK, Edinburgh University

#### Glasgow

25th Feb. 1993 6.15p.m.  
(Coffee 5.30 p.m.)

The Mitchell Library,  
Level 5, Conference Suite

Contact: Professor Alec Coull  
(041-339 8855, ext. 5200)

#### Edinburgh

3rd March 1993 6 p.m.  
(Tea 5.30 p.m.)

The Royal Society of  
Edinburgh, 22/24 George St

Contact: Dr. Alan Sibbald  
(031-455 2472)

## EXHIBITION

### JOHN SMEATON—CIVIL ENGINEER

#### Edinburgh

5th Oct. to 6th Nov. 1992  
Mon. to Fri. 10am - 4pm.

The Scottish Record Office,  
West Register House,  
Charlotte Square

Contact:  
Dr Margaret H. B. Sanderson  
(031-556 6585, ext. 2139)

#### Glasgow

10th Nov. to 31st Dec. 1992,  
Mon. to Sat. 10am - 5pm

Sunday 11am - 5pm  
Museum of Transport,  
Kelvin Hall,

Contact:  
Gordon Masterton  
(041-204 2511)

## VISIT

Saturday, 5th JUNE 1993

### FORTH & CLYDE CANAL

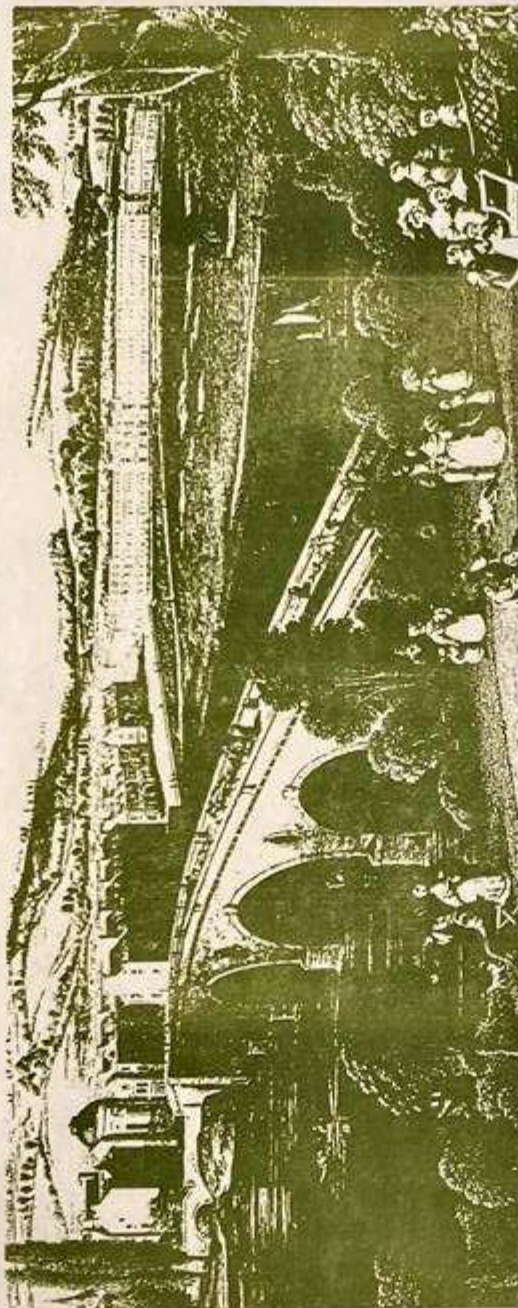
including boat trip and  
inspection of Luggie  
Aqueduct, Kirkintilloch and  
PERTH BRIDGE

including an inspection

with the Engineer respon-  
sible for its maintenance.  
Numbers limited. For  
places, from 5th January,  
contact Mrs. Sandra Purves  
(031-556 9242, ext. 295).  
Approx. cost £10

Admission to all events is free except for the Visit.

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*PERTH BRIDGE 1765-71 - The largest bridge built by Smeaton. It has nine arches, cost nearly £27,000 and now carries 5m vehicles per annum. The bridge has concealed cavities running parallel to the roadway and not in the direction of the roundels between the arches as is often thought. This practice of weight reduction and strengthening was later adopted by Telford and others.*



THE INSTITUTION  
OF  
CIVIL ENGINEERS



JOHN  
SMEATON  
F.R.S.  
(1724 - 1792)

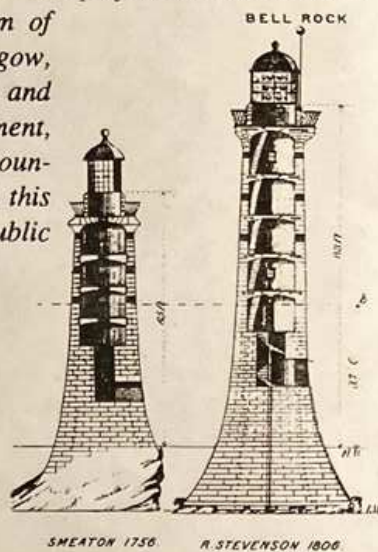
PROGRAMME OF BICENTENARY  
EVENTS IN SCOTLAND



It is little known that John Smeaton, builder of Eddystone Lighthouse, distinguished engineering scientist, and the English speaking world's first 'Civil Engineer', made a fundamental contribution to the well-being of Scotland during the Industrial Revolution through his harbour, bridge, power, mill-work, canal and river improvements. Of more than fifty such schemes in Scotland, including the Forth & Clyde Ship Canal and Perth Bridge, at least 12 are still making a useful contribution to society after more than two centuries and many are now of outstanding historical and environmental significance. None more so than the Forth & Clyde, Smeaton's largest canal project.

The Institution has taken the opportunity of the bicentenary of Smeaton's death on 28th October to commemorate his life and work, and in Scotland, with the valued partnership of the Scottish Record Office, the Museum of Transport, Glasgow, British Waterways, and the Roads Department, Tayside Regional Council, has organised this programme of public events.

Smeaton's Eddystone Lighthouse design profoundly influenced that of the Bell Rock Lighthouse which is now the world's oldest isolated rock lighthouse still in use

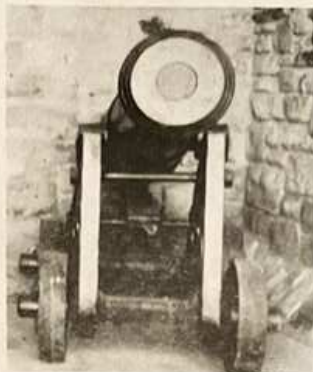


Organised by the Institution's Panel for Historical Engineering Works in association with the Institution's Archives Panel and Scottish Local Associations.

Contact: Roland Paxton 031-449 5111 (ext. 4422)

**CARRON CANNON** fired at the battle of Waterloo in 1815.

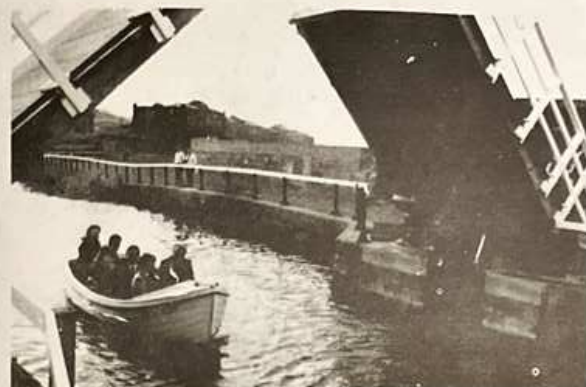
Smeaton advised on Carron Ironworks mills and millwork from 1764-83 and his work included the weir, power source and machinery for boring cannon and cylinders.



**COLDSTREAM BRIDGE** 1762-7. Smeaton's first major bridge construction. The base of the left-hand pier, supporting two arches, was built below water level in an open-topped sunken timber box called a caisson. The bridge, sensitively widened in 1960, now carries almost 2m vehicles per annum.



**PERTH BRIDGE** - Rubble stone sterling protecting a pier base. The stone was packed within the timber cofferdam used to keep out water during construction below water level.



**FORTH & CLYDE CANAL - GLASGOW BRANCH** - Opening of replacement Bridge, at Old Basin Works, Glasgow 1988. Since then a £3m regeneration of the canal has been carried out by British Waterways with Local Authority support including the replacement of three obstructions to navigation by attractive new bridges to the design of Scott, Wilson, Kirkpatrick, Glasgow.



**PETERHEAD HARBOUR** from the South Pier, which was rebuilt under Smeaton's directions 1775-81.

**EYEMOUTH PIER** 1767-70

Smeaton's earliest Scottish harbour construction. The steeply inclined courses, which can still be seen, facilitated building and this technique was often used in later harbour work

