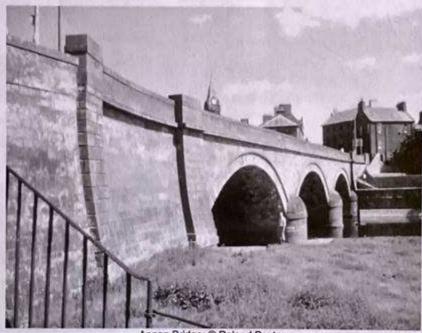
A remarkable Ritson remembered on the bicentenary of his birth

by Professor Roland Paxton, Heriot-Watt University

¶Few civil engineers lose their lives in the course of their duty but James Ritson, a 30 year old protégé of the eminent Robert Stevenson (1772-1850), did. A review of his brilliant but short career indicates that he was destined for greater things had he lived longer.

Ritson was born in Lamplugh, Cumberland on 26th December 1806 and became apprenticed in c.1822 to G.D. Rome of Heathfield, near Annan, a land and road surveyor and civil engineer who acted as resident engineer to Stevenson for building Annan Bridge from 1824-27. It was here working for Rome where Ritson met Alan Stevenson (1807-65), of similar age, later to become famous as the designer and erector of arguably the world's most finely proportioned and elegant rock lighthouse at Skerryvore Reef some 12 miles southwest of Tiree.

Ritson's competence at Annan Bridge came to the notice of Robert Stevenson who employed him on completion of his apprenticeship c.1827. One of his earliest jobs, in 1827, was drawing a plan of the island of Inchkeith. He remained with the Stevenson firm until his untimely death on 20th March 1837.



Annan Bridge @ Roland Paxton

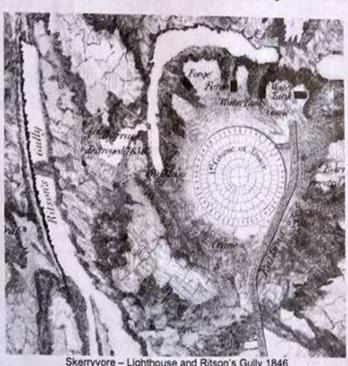
Notable projects on which Ritson worked, essentially as a maritime engineering surveyor included drawing a finely detailed map of Dornoch Firth in 1831 and, in the following year, a chart of the Scottish coast at a scale of 8 miles to 1 inch showing lighthouses and harbours and many soundings.— an outstanding achievement. This chart published in 1832 was based on the firm's and his own work and earlier surveys, and included such detail as the temporary lighthouse at Gullane hill for trials with illumination using lenses and the firm's level line proposal for the Edinburgh & Glasgow Union Canal.

In 1833 Ritson prepared a detailed survey of the River Tay from Perth seawards on which the firm's subsequently executed improvement of the Tay Navigation, involving the removal of fords, was based. In 1834 he surveyed the site for the proposed harbour at Perth which formed a basis for the harbour improvement eventually started by the mid-century.

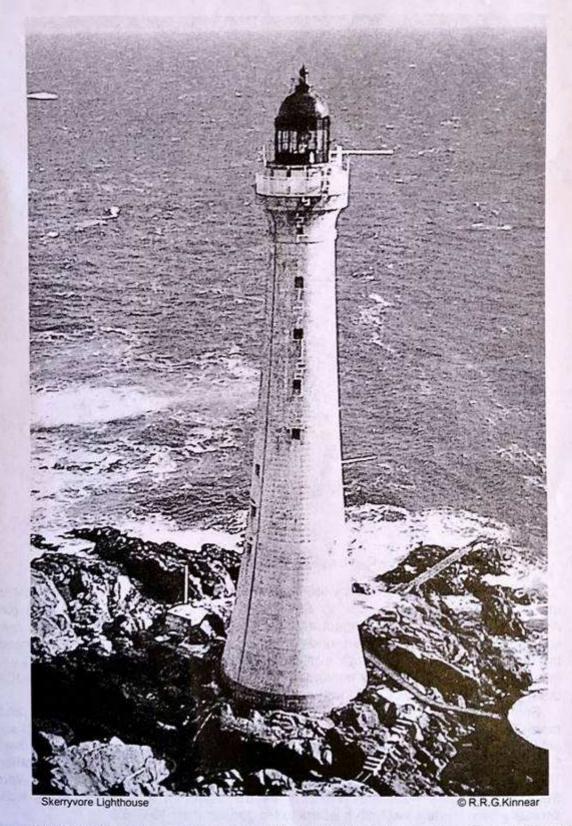


Perth Harbour Survey 1834

The following year he surveyed the often inaccessible and storm-washed rock complex at Skerryvore Reef in preparation for building the lighthouse. His chart which also covered the sea to the south end of Tiree where the shore station was to be sited was published in 1834. An 1846 update, after construction of the lighthouse, was published in Alan Stevenson's classic account of the lighthouse in 1848.



Skerryvore - Lighthouse and Ritson's Gully 1846



In 1834 Ritson prepared a survey of the Firth of Forth coast from Queensferry to Inchkeith, extending inland to Edinburgh, for the firm's Granton Harbour proposals for the Duke of Buccleugh. It was while the central pier of Granton Harbour, destined in 1850 to incorporate the terminus of the world's first 'floating railway' ferry, was being built under David Stevenson's direction in 1836-37 that Ritson met his death. His diligence in finishing some work in wet weather resulted in his being 'thoroughly soaked' for hours without a change of clothes which led to a fever, pleurisy, and, some weeks later, his death.



Part of Ritson's survey in Granton Harbour Report 1834

Ritson was highly esteemed by the Stevensons and was described by Alan as his friend. Alan referred to him in his Skerryvore Lighthouse book as the 'Principal Assistant Surveyor' for this project and recorded that it was due to his 'zeal and intelligence' on this work that 'so much of the accuracy can be attributed'. He named the deep gully crossing the rock from northeast to southwest 'Ritson's Gully' as a memorial to his 'activity and perseverance', after one day Ritson had jumped the 12ft or so across it 'while it was filled with a breaking wave.'

Soon after Ritson came to Edinburgh to work for Robert Stevenson he met and married Catherine Ruthven of 3 Salisbury Square, Edinburgh, by whom he had six children, three of whom died in infancy. The fourth child whom he named Robert Stevenson Ritson was adopted raised and educated by James's elder brother Thomas (1802-62) who was employed by the Northern Lighthouse Board. Alan Stevenson became Robert Stevenson Ritson's godfather a duty he clearly took seriously from morally instructive letters to his godson from 1847-62.

By 1862 Robert Stevenson Ritson was at Nosshead and evidently a competent photographer as David Stevenson, then Engineer to the Northern Lighthouse Board, was much taken with his 'excellent photographs' of Nosshead Lighthouse (Alan Stevenson 1849) and used a wood engraving from one to illustrate 'an ordinary first-class station' in his article on lighthouses published in 'Good Words' in 1864.

Edinburgh: School of the Built Environment, Heriot-Watt University, EH14 4AS, Scotland 7/ 2006 (copies available from R.A.Paxton@hw.ac.uk)