

## TELFORD, THOMAS (1757 - 1834), civil engineer

**Name:** Thomas Telford

**Date of birth:** 1757

**Date of death:** 1834

**Gender:** Male

**Occupation:** civil engineer

**Area of activity:** Business and Industry; Engineering, Construction, Naval Architecture and Surveying

**Author:** William Llewelyn Davies

who started his working life as apprentice to a stonemason; born 9 August 1757 at Westerkirk, a remote village in Dumfriesshire, Scotland, the son of a shepherd. The career of Telford is described in the *D.N.B.* and many other works, a modern work being (Sir) Alexander Gibb, *The Story of Telford: The Rise of Civil Engineering* (London, 1935); this article will be concerned only with Telford's work in Wales and on the Borders. Telford became 'Surveyor of public works' in Salop, and, in 1793, engineer, architect, etc., to the company of the Ellesmere Canal which was intended to link the rivers Mersey, Dee, and Severn. Work on the canal meant that Telford was called upon to construct two things which were somewhat unusual in Britain at the time but which proved his originality as designer and engineer, namely the aqueducts over the river Ceiriog at Chirk and over the Dee at Pontycysylltau - projects which, when they were completed, were described as 'among the boldest efforts of human invention in modern times.' The Pontycysylltau project occupied from 1795 to 1805 and the other from 1796 to 1801. After this Telford was busy elsewhere; e.g. in Scotland - roads, bridges, harbours, and the Caledonian Canal. So expert was he in roadmaking and bridgebuilding that he was asked by the Government to give attention to the road leading from Shrewsbury to Holyhead - the Irish mail route, the 'Holyhead road' as it is still called, and, particularly, to consider the question of erecting a bridge over the Menai Straits to replace the (often) dangerous Bangor Ferry. He designed a bridge over the Menai on the 'suspension' principle - a difficult type of engineering which British engineers had not hitherto attempted on any large scale. After experts (including John Rennie) had expressed an opinion on his design and a select committee of the House of Commons had recommended it, Parliament voted the necessary funds. Work on the bridge was begun in August 1819 and (practically) completed by April 1825. During the years 1822-6 Telford was building a somewhat similar bridge over the river Conway estuary. Besides what he did in North Wales and the English Border, Telford surveyed the south-west Wales roads; see the bibliography (below). His work at Shrewsbury (castle, prison, churches, etc.) and in Shropshire are described by Sir Alexander Gibb (op. cit.). Telford died in London on 2 September 1834, and was buried in Westminster Abbey on the ninth day of that month.

### Author

Sir William Llewelyn Davies, (1887 - 1952)

### Sources

*Oxford Dictionary of National Biography* and the sources therein cited

Sir Alexander Gibb, *The Story of Telford, The Rise of Civil Engineering* (London 1935) is well documented

*Atlas to the Life of Thomas Telford, Civil Engineer, containing eighty-three copper plates illustrative of his professional labours* (1838)

T. G. Cumming, *Description of the Iron Bridges of Suspension now erecting over the Strait of Menai at Bangor and over the River Conway, in North Wales; with two views also some account of the different bridges of suspension in England and Scotland; particularly of Captain S. Brown's iron bar bridge over the River Tweed. With remarks on the proposed suspension bridge over the River Mercy, at Runcorn Gap; and some calculations of the strength of malleable iron, founded on experiments* (London 1824)

W. A. Provis, *An historical and descriptive account of the suspension bridge over the Menai Strait in North Wales, with a brief notice of Conway Bridge. From designs by, and under the direction of T. Telford* (London 1828)

Pring, *Particulars of the Grand Suspension Bridge erected over the Straits of Menai ... designed by, and built under the ... direction of T. Telford* (London 1826)

Thomas Telford, *Report, Plan, and Estimate for building a bridge over the Menai Strait at Bangor Ferry* (1818)

Thomas Telford, *River Dee Navigation*, 1817-?

*Report for Committees on Holyhead Roads, Harbours, etc., in the years 1810, 1811, 1815, 1816, 1817, 1819, 1820, 1822* (some with Appendices containing reports by Telford)

*Reports of Commissioners on the Holyhead Road*, 1821-2, 1824-8

*Report (to the Lords Commissioners of His Majesty's Treasury) on the Mail Road through South Wales, made under the direction of Thomas Telford* (1825)

## Further Reading

Wikipedia Article: [Thomas Telford](#)

## Additional Links

VIAF: [35254198](#)

Wikidata: [Q380875](#)

Published date: 1959

Article Copyright: <http://rightsstatements.org/page/InC-RUU/1.0/>

The Dictionary of Welsh Biography is provided by The National Library of Wales and the University of Wales Centre for Advanced Welsh and Celtic Studies. It is free to use and does not receive grant support. A donation would help us maintain and improve the site so that we can continue to acknowledge Welsh men and women who have made notable contributions to life in Wales and beyond.

Find out more on our [sponsorship page](#).

