



Panel for Historical Engineering Works

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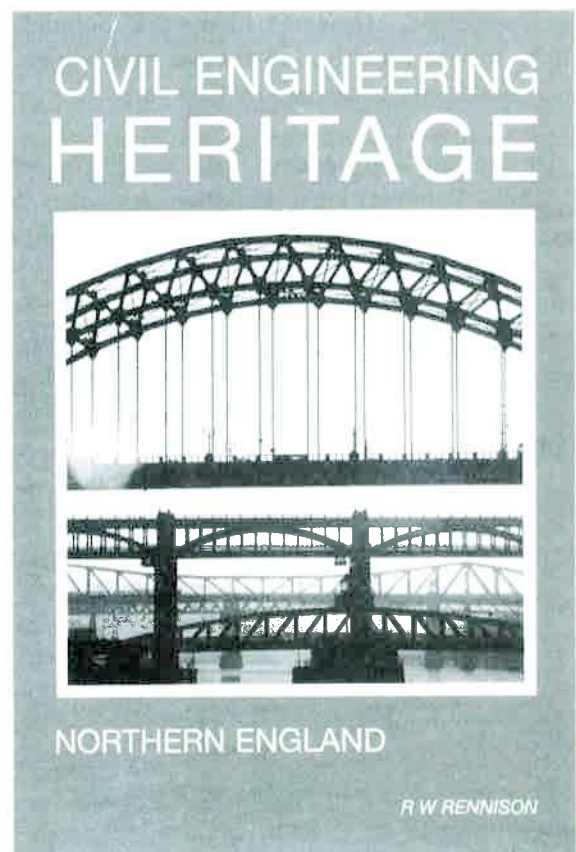
CIVIL ENGINEERING HERITAGE: NORTHERN ENGLAND, 2ND REV ED.

by R W Rennison

April saw the publication of a new edition of the Panel's first volume in its *Civil Engineering Heritage* series. It was originally published in 1981 and was largely instigated, and then edited by the late Maurice Barbey, who held the post of Technical Secretary to the Panel. Other volumes in the series followed in 1986 and 1994. As a result of their success it was decided to revise the first volume which has been undertaken by Panel member Dr Bob Rennison ably assisted by a large number of contributors. The changes have been substantial both in respect of the spread and depth of coverage but also regarding the volume's presentation which is more copiously illustrated and now closely conforms to the format of the recently published volumes.

The book covers Northern England from the Scottish border to South Yorkshire and also includes the Isle of Man. Its eight chapters, generally covering county areas, describe well over 200 historical works, many of which played a major role in their regions' development.

PHEW continues to regard the *Civil Engineering Heritage* series as a very important means of bringing the results of its work to a broad spectrum of interests. At a recent meeting it was reported that the current edition for *Wales and Western England* was rapidly running out of stock. This volume originally published in 1986 is being revised by Mr Roger Cragg and colleagues. Continued steady sales of the volumes for *Southern and Eastern and Central England* suggest that further printing with appropriate revisions will be necessary within a year or so. Good progress was reported towards the publication of the three outstanding volumes relating to *Ireland, Scotland and London and the Thames Valley*.



Civil Engineering Heritage: Northern England edited by R W Rennison is published by Thomas Telford and is priced at £12.50. Along with other volumes in the series, it is available from the Bookshop at the ICE, One Great George Street - telephone: 0171 222 7722 ext 9947; email: maddox_j@ice.org.uk.

Poor Rowland may outstretch himself in striding cross the Wear

A Patent quickly issue out, lest some more bold than he

Should put on larger boots and stride across the Sea!

Then let us pray for speedy peace, lest Frenchmen should come over,

And, following Burdon's iron plan, from Calais stride to Dover.²

After suffering repairs, disposal by lottery and further repairs in 1859, the bridge remained in use until 1929, when it was replaced by the present structure.

References

1. *Tracts relative to Sunderland Bridge, 1791-1816* [Newcastle Central Library: L 624. S 958]
2. The Bishoprick Garland, collected by Sir Cuthbert Sharp, 1834; from *Victoria County History, Durham, 1905*

THE CHAIRMAN'S COLUMN

by Roland Paxton

An important event in the Panel's progress since last writing was the publication of the second edition of *Civil Engineering Heritage: Northern England*. Congratulations to Dr Bob Rennison and his helpers on an excellent effort. This work is not merely a re-issue of Maurice Barbey's forerunner of 1981, but a major updated revision, including increased coverage of water engineering. It constitutes a valuable addition to the Panel's publications.

A recent conservation-related development of particular interest to the Panel was the address at its Spring Meeting of Mr Ian Hume, (Chief Engineer, Conservation Engineering Branch of English Heritage) on the work of his section and the useful exchange of views which followed. It is hoped that this contact will develop to the mutual benefit of both organisations and, in order to encourage this, a representative from English Heritage will be invited to future Spring Meetings of the Panel.

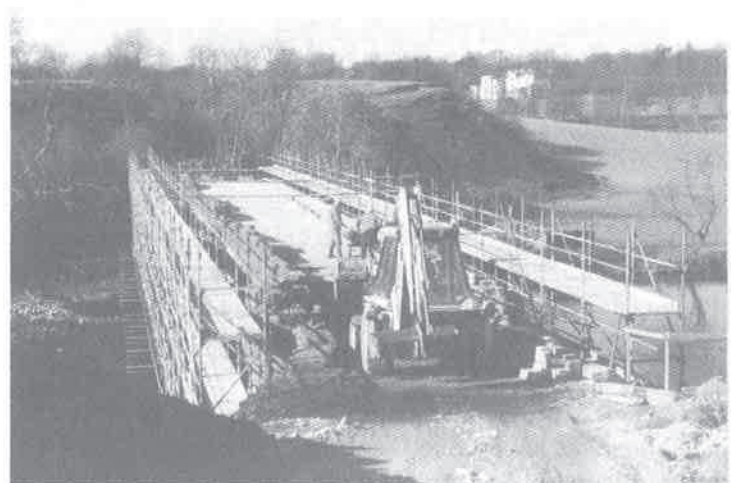
Work has now begun on the Thames Tunnel Project. The Tunnel is to have a new reinforced concrete lining (not shotcrete) to the original Brunel shape. As mentioned previously, several bays of the original structure are to be preserved. Whilst this outcome is not ideal it is a good deal better than London Underground Limited's original proposal.

Recently, I wrote to Mrs Virginia Bottomley MP, Chairman of the Millennium Commission, expressing the Panel's qualified support to a funding request from Huddersfield Canal Society for the restoration of the Huddersfield Narrow Canal. Stronger support was expressed in respect of the preservation of Standedge Tunnel, which is the longest and highest level canal

tunnel in Britain and is associated with eminent engineers Outram and Telford. The tunnel is over 3 miles in length and took 16 years to construct. Professor Schofield's fascinating account of the tunnel's construction and primitive setting out, refers to the tunnel being a maximum of 26ft off line! (Newcomen Society *Transactions*, 53, 1981-1982). The Millennium Commission has replied that the Project has been selected to progress to the next stage of consideration, 'detailed analysis via the long list', which is encouraging for its promoters.

Dr Emory Kemp has written in West Virginia University Institute for the History of Technology and Industrial Technology's *Annual Review*, VI, 1, 1996 that the Institute now has access not only to the University's library holdings at the 'click of a mouse', but also to leading collections around the world through the HABS/HAER database of over 30,000 documented sites and structures. Soon this information will be available internationally through Internet on World Wide Web. It will be a while yet before the Panel's HEW's are so available, but we are working at it!

Barr Limited are continuing to make good progress at Laigh Milton Viaduct and about £650,000 of work has now been completed. With the dissolution of Strathclyde Regional Council and the two District Council's associated with the Project under local government reorganisation, the Project had become concerned because of uncertainty about future arrangements for supervision of Barr's contract and the eventual take-over of the viaduct. These matters have now been satisfactorily resolved with the new South and East Ayrshire Councils and the latter has now become the Project's agent and will take over the viaduct in due course. All the piers and arches have now been permanently secured. Stone replacement where necessary and lime-mortar pointing of external masonry are continuing. Some deck railing is now in place. It is anchored into the continuous deck slab beneath (see photograph) and should be reasonably vandal proof. Jim Bowie and Sandra Purves have arrangements well in hand for the Panel-organised ICE Scottish Local Associations visit on 6 July.



Laigh Milton Viaduct on 26 February 1996
general view looking west

Faxes have been flying between Edinburgh and Tokyo in connection with my forthcoming lectures and visit to Japan from 1-13 June. Through the good offices of Dr Hiroshi Isohata and Mr Shigeru Onoda of JSCE's HSCE Committee a very interesting itinerary has been arranged, of which I feel sure you will hear more! My acquaintanceship with chop-sticks and a Japanese guide book are gradually improving. I am looking forward to a new experience. *Sayonara!*

**SAVING THE GREAT NORTHERN
WAREHOUSE, DEANSGATE, MANCHESTER**
by Paul Dunkerley

The Central Manchester Development Corporation was due to be wound up on 31 March 1996, but in 1995 there was still one area of the city centre which it had failed to redevelop - the area off Deansgate around the Great Northern Warehouse.

Standing alongside Deansgate, the city's main shopping street, the 1895-1899 warehouse represented the final phase in the development of Liverpool Road Station - the 1830 terminus of the world's first inter-city railway - The Liverpool & Manchester Railway. The massive Grade II Listed Building comprised a fire-proof five storey brick warehouse, 250 feet long and 120 feet wide, which had ceased to be used for its original function several years ago. The railway viaduct which allowed 500 wagons at a time inside the building has been removed. The structure had then been used for many years as a car park, since a carriage ramp gave access to the first floor. Canal access into the basement of the building allowed the three-way transshipment of goods, which were handled by hydraulic apparatus inside the building. The complex had been designed by W T Foxlee of the Great Northern Railway, and built by Robert Neill and Sons of Manchester, with hydraulic machinery by Armstrong Whitworth and Company. The Great Northern Warehouse lies within a Conservation Area around Liverpool Road Station.

Recent development proposals submitted involved substantial alterations to the building, including the loss of its carriage ramp to the first floor, and the construction of a large new office tower.

The development proposals were strongly opposed by many, and the 'Friends of the Great Northern' were formed, meeting in a local pub to plan tactics. Neil Morton, Honorary Secretary of the Historical Engineering Group, represented the Institution at meetings of the 'Friends', and wrote letters on behalf of the Group opposing the development proposals. More structured opposition was led by Sue Dawson, Conservation Officer of the Victorian Society, strongly supported by Steve Little of the Manchester and Region Industrial

Archaeology Society, with technical support from PHEW Panel member Paul Dunkerley.

As far as can be determined from the PHEW research, towards which Malcolm Tucker of the Institution of Structural Engineers History Group provided invaluable technical detailed information, the Great Northern is one of the only three remaining three-way road/rail/canal transit warehouses in the British Isles. It is the largest and most complete of the trio. The other two structures are both in London, but one has lost its canal access (the 1850-1852 Granary at Kings Cross), and the other has been converted to offices (the 1905 Interchange Warehouse at Camden Town).

The 'Friends' and helpers wrote many letters of objection - to Manchester City Council, English Heritage, the Secretary of State for National Heritage, the Secretary of State for the Environment, and the Government Office for the North West. The strength of the arguments in favour of re-grading the Listed Building status of the Great Northern may have won a partial stay of execution, as the building has been re-graded up to Grade II*. However, the development proposals have been approved, and the battle is now on to have the applications called in for re-appraisal.

CORRESPONDENCE ...

Dear Editor

Another fascinating issue of PHEW! I was interested to see the note on the Adur viaduct at Shoreham - I visited this last year as it is a successor to a bridge by J U Rastrick. Readers may like to note that there is a fine photograph of the original, wooden trestle structure, in John Minnis' *E J Bedford of Lewes: photographer of the London Brighton and South Coast Railway*, Wild Swan Publications, Didcot, 1989. ISBN 0906867754. This mainly comprises photographs of William Stroudley's exquisite locomotives but includes some good views of Brighton engineering works in an early state. The Shoreham bridge view, on page 69, shows 'Gladstone' class 0-4-2 No.186 'De La Warr' hauling the last train across the old bridge at 4.30pm on 8 June 1892.

Peter D Hingley

Dear Editor

Torksey Viaduct

The viaduct was built by John Fowler for the Manchester, Sheffield & Lincolnshire Railway and is probably the earliest Fairbairn patent bridge left since the recent destruction of its partner at Gainsborough. When completed in 1849, Captain Simmons of the Board of Trade refused to pass it for traffic. Virtually the whole of the Civil Engineering Establishment united in protest, and the debate takes up fifty pages or so of the ICE *Proceedings*. The Great