

Panel for Historical Engineering Works Newsletter

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Editor's Note

John Hemingway Portrait to be Cleaned and Restored by Bob Diamond

John Hemingway (1795-1872) was the contractor responsible for construction of the masonry towers and abutments at Britannia Bridge built to carry Robert Stephenson's Chester & Holyhead Railway across the Menai Strait.

Menai Bridge Community Heritage Trust were given the portrait of John Hemingway by his descendants two years ago, after it had been in storage in a packing case for more than 30 years. The condition of the painting was poor and the Trust has been working towards getting it cleaned and conserved since taking possession. It has been hanging in the Menai Heritage Exhibition since it arrived at the Thomas Telford centre and some donations have been received amounting to about half of the cost of the restoration work.

Hemingway, his brothers and partners had worked with both George and Robert Stephenson on various railway projects prior to Britannia Bridge. As Nowell, Hemingway and Pearson they undertook the considerable task of the stonework for the



The picture shows the portrait on its arrival at Menai Bridge with (l to r) Julie Stone, historian; Bob Diamond, Chair MBCHT; Mark Johnson and Stuart Phillips – great-great-great grandsons of John Hemingway

project in 1846. More than 20,000 tonnes of masonry including Penmon limestone, Runcorn sandstone and over a million bricks manufactured on site were used to construct the three towers and two abutments to support the dual wrought iron tubes. The bridge opened in March 1850.

Born in Dewsbury, Yorkshire, John Hemingway moved to Menai Bridge to supervise the work at Britannia and remained living in Craig Owen (now Oriel Tegfryn Art Gallery) in the town for the rest of his life. He is buried on Church Island (Ynys Tysilio) on the Anglesey shore of the strait in view of his most significant achievement – which is also shown in the background of his portrait.

The portrait was donated to the Trust following intensive research by Julie Stone a local historian and trust volunteer into the people who worked on the construction of Britannia Bridge. Members of the Hemingway family made contact with Julie on the internet and eventually the portrait was brought to the Thomas Telford centre in Menai Bridge in October 2010.

The Trust recently applied for a grant from the Preservation of Industrial and Scientific Material (PRISM) fund towards the cost of the restoration project and has now been informed that a grant of 50% is to be awarded. The portrait will shortly leave to travel to south Wales to be restored and it is anticipated that it will return to the exhibition in time for the Easter 2013 opening. We also hope that the cleaning process will assist in identifying the artist who painted it.

For more information visit www.menaibridges.co.uk or email mbcht@btconnect.com. Better still, come and visit the Menai Heritage exhibition next year to view the portrait in all its glory surrounded by the other artefacts and displays concerning the bridges and associated history.

PHEW Visit to Kings Lynn August 2012

by The Editor

The annual PHEW meeting was held this year at Kings Lynn from Wednesday 29 to Friday 31 August and was ably organised and coordinated by Peter Cross Rudkin.

The meeting commenced on the Wednesday with two well attended evening talks delivered at a local river / estuary-side location in Kings Lynn where the Panel joined with local ICE members and others. Peter Cross-Rudkin spoke on 'Some Old Fenland Drainage Engineers' and Dan Pollard spoke about his role 'Managing the Denver Sluice Complex'. The after dinner talk on the Thursday evening was given by Kings Lynn's former Mayor, Paul Richards who spoke about 'Kings Lynn and the Hanseatic League'. All three talks combined to give fascinating insights into the Kings Lynn area and its engineering heritage.



A brief respite?
whilst observing Houghton Hall Water House

A full programme of visits were undertaken. Unfortunately the weather proved to be most inclement at times which resulted in a rather 'soggy' walk for intrepid attendees in the grounds of Houghton Hall to see its water house which dates from c.1732 and also inhibited the visit to the Fakenham Town Gasworks site. This relatively small town gasworks has been kept in very good condition and facilitates the display of the gas production process and houses numerous artefacts collected from elsewhere illustrating aspects of the gas industry. As is common with such museums the enthusiasm and knowledge of the guides / curators was very clear to see.

Amongst the Friday visits was time spent at the Denver Sluice complex which the area's key water control centre. There was a wide range of control techniques on display and it was good to realise that the site was accessible to the public with a series of well sited interpretation / information boards



Part of the Denver Sluice Control complex

On Friday afternoon the party had two options at Ely Cathedral. Either to ascend the cathedral tower or explore the unique 'octagon' structure. Both parties were given interesting insights into the cathedral's history and some of its unique construction features and were treated to some stunning views across the surrounding and by then drying countryside.

Recent Scottish Plaques Information from Roland Paxton

Two additional plaques have been placed in Scotland to commemorate engineering achievement.



John Miller Plaque

The first was back in the Spring when a plaque was unveiled at Ayr Station relating to the eminent Scottish civil engineer John Miller FRSE (1805-1883). This complemented a plaque commemorating his life which was unveiled at Haymarket railway station on 26 July 2005, the 200th anniversary of his birth. He was born in Ayr and in addition to his engineering career was a Liberal Party politician. His partnership with fellow engineer Thomas Grainger, formed in 1825, was responsible a number of Scotland's significant railway projects and is credited with depositing plans for over 1500 miles of railway. Miller's work included the Edinburgh and Glasgow Railway and its extension to Berwick. He designed many viaducts, including the Lugar Viaduct, which he considered his greatest work. Miller made two unsuccessful attempts to be elected to Parliament, in the 1852 and 1865 general elections. Eventually he was elected unopposed as one of two Members of Parliament for Edinburgh at the 1868 general election, but lost his seat at the 1874 election.



Bell Rock Lighthouse Commemoration Plaque

The second plaque was presented to the Provost of Angus, Mrs Helen Oswald, of Cnourastie, on 16 September 2012, at the Signal Tower Museum, Arbroath, Angus, Scotland and commemorated the landmark construction of the Bell Rock Lighthouse of 1811. Along with other details of the project the plaque identifies a number of the key individuals associated with the project. John Rennie heads the list as chief engineer in overall charge of the project followed by Robert Stevenson, his resident engineer. Their relationship on this project is discussed in Roland Paxton's volume *Dynasty of Engineers – The Stevensons and the Bell Rock*. David Logan was draughtsman and clerk of works and can claim credit for detailing the complex masonry construction. Francis Watt, the millwright, has become well known for the balance crane which is now considered to be the forerunner of the high-rise crane commonly seen on construction sites. Captain David Taylor ensured that all stores, supplies, provisions and construction materials were delivered – quite a notable achievement given the exposed offshore location of the lighthouse. At various times he commanded the "Sir Joseph

Banks" (which housed the artificers until the beacon house was built) and the "Smeaton", which was the tender vessel used for the supply of stores and relief of the lightkeepers during the first 10 years of the lighthouse's existence.

ICE Wales Cymru / PHEW / MBCHT Visit to North East Wales By Bob Diamond

The second annual PHEW visit to North Wales took place from 5 to 7 October 2012. Based at the Hand Hotel in Chirk, the event was again arranged with the assistance of Menai Bridge Community Heritage Trust (www.menaidbridges.com). This year we were honoured with the attendance of the President and Mrs Coackley for the bulk of Saturday's activities, which may account for the marvellous weather we enjoyed!

The first day included a visit to the Bersham Heritage Centre and Ironworks, where our guide Mark Hodgson summarised the history of the Wilkinson business at Bersham (including the revolutionary one-piece casting and boring of canons which made them much safer and more accurate) before they moved to Brymbo, and explained the archaeological work that has been carried out on the site. At the Minera lead mine site, Karen Teasdale, also from Wrexham CBC Museum service, explained the basic processes of sorting the mined ores that were carried out on the site prior to transport for further treatment elsewhere. After lunch at the Coed Llandegla visitor centre, the party moved on to the canalised section of the River Dee, visiting Queensferry bascule bridge and walking along the riverside leisure route to Hawarden railway swing bridge. Neither of these bridges are now capable of being opened, but some of the mechanism can still be seen. Following a detour to cross the Flintshire (New Dee) cable stayed bridge, the return trip to Chirk included a visit to Henry Robertson's impressive 21 arch, 45 m high, Cefn railway viaduct over the river Dee.

Saturday started early with the President at Horseshoe Falls / Weir and a guided tour by Roger Howard of the Canal and River Trust of the take-off arrangements and venturi building at the commencement of the Llangollen canal. After coffee and a briefing at the Chainbridge Hotel, the party embarked on the steam hauled service at Berwyn on the standard gauge Llangollen Railway to the current terminus at Carrog. The railway have begun the work to extend the line a further 4Km along the old trackbed to Corwen. A short walk took us to the attractive 1661 five arch stone bridge over the Dee followed by return to the station for a leisurely, alfresco, lunch in beautiful sunshine! Unfortunately, Richard and Ella Coackley had to leave us at Berwyn on the return train journey to Llangollen. The rest of the afternoon was spent travelling up the Dee valley to view bridges at Corwen, Cynwyd (Pont Dyfrdwy), Llandrillo (Pont Cilan), Llandderfel and Rûg, with a diversion to Glyn Diffwys on Telford's original Holyhead Road. Following a presentation by Stephen Jones on the Web of Iron Exhibition which had been on display in the hotel for the last month, the evening meal was enjoyed at the Chainbridge Hotel.