

## **CAST-IRON CRESTS ON THE BRIDGE FACES OF THE ENGLISH & SCOTTISH PYLONS**

### **DATE OF MANUFACTURE**

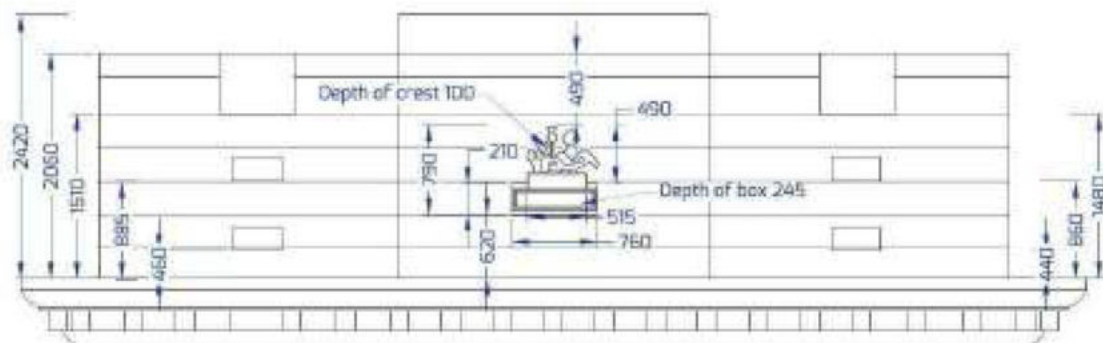
1819-1821

### **DESCRIPTION OF THEIR DESIGN & CONSTRUCTION**

A two-piece cast-iron box with circular holes in each end, with a moulded cast-iron crest attached to the rear of the top, painted in white, red, dark blue and green, in the form of roses, intertwined with thistles and oak leaves with embraced hands and arms with dark blue sleeves. To the front is welded a cast-iron plate with raised dark blue lettering in Latin, 'VIS UNITA FORTIOR', which roughly translates as '*UNION IS STRENGTH*' dated beneath, '1820'.



Current location: English Pylon



Dimensions: English Pylon

## DISCUSSION

Although their current locations and purpose are understandable, their actual design, sizes and construction are not logical, as per the following questions:

- 1) Why is the support to the crest in the form of a 245 mm deep hollow box?
- 2) Why is it constructed in two separate interlocking halves?
- 3) Why are the two sections bolted together rather than welded?
- 4) Why are there large holes at either end of the box; a semi-circle formed in each section?
- 5) Was it designed to also be a bird nesting box?

## RECORDED DATEABLE EVIDENCE

### 1) The Berwick Advertiser 1820

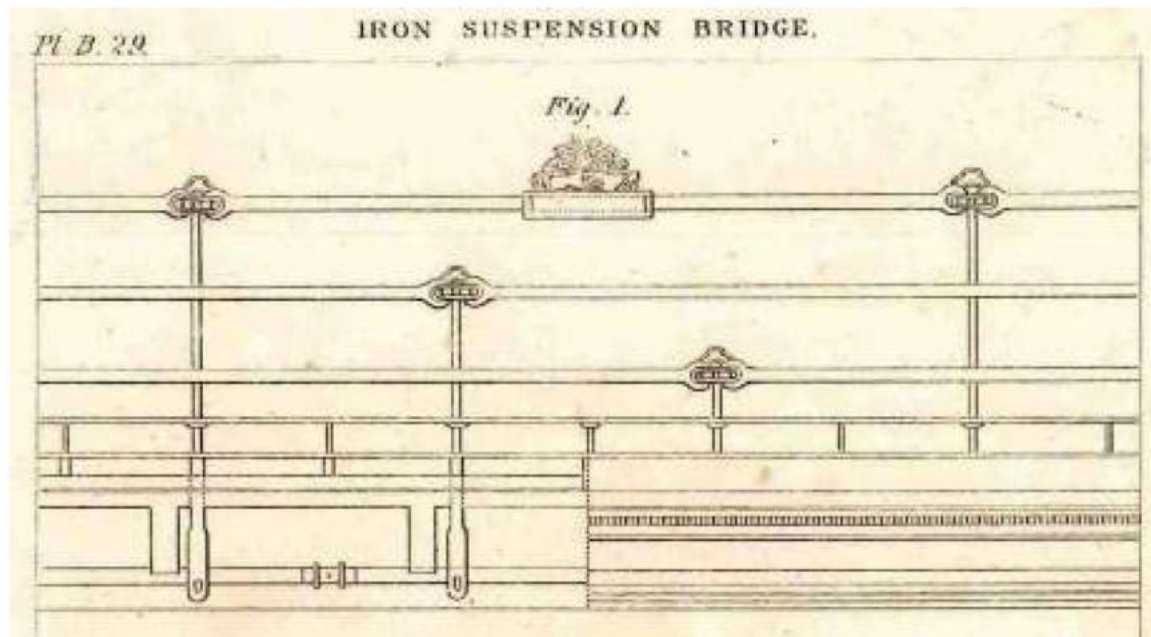
The *Berwick Advertiser* recorded the opening ceremony of the Union Chain Bridge, three days later in the July 29th 1820 edition, stating that....

*'The opening of this curious and elegant structure, the first of the kind in the Island, took place on Wednesday. At an early hour of the day..... when the crowd was excessive and anxious to see so great a novelty, no serious accident occurred. In the centre of the bridge on each side is the following inscription:*

***VIS UNITA FORTIOR***

### 2) A Dictionary of Architecture 1830

In his '*A Dictionary of Architecture*', published in 1830, R. Stuart includes engravings of Samuel Brown's 1819 designs for the 'Iron Suspension Bridge over the Tweed', with details of the deck, clearly showing a crest attached to the top chain at the mid-point of the bridge – the actual border between England and Scotland.



1830 '*A Dictionary of Architecture*', by R. Stuart (Private Collection)



### 3) Photograph 1890's

A glass plate photograph of the English Pylon and Cottage, dating from the 1890s, is the first evidence of one of the Crests' current location after removal from the centre of the Bridge.



c1890 The Toll House Keeper Mr E. Roxburgh and family [source unknown]

### 4) Historic Paint Research & Analysis, Union Chain Bridge: Report by Crick Smith Ltd, October 2018

This detailed survey and analysis have found that the 1819/20 base colour scheme for all of the metalwork on the Bridge was black, but the base coat on the Crests was dark green, which was also the 1821 top coat on the Chains, suggesting that the Crests were not attached to the Chains until 1821.

### DEDUCTIONS & CONCLUSIONS

The 1830 engraving showing the Crests attached to the top of the central chain would account for the hollow box construction in the form of two halves, each with a central semi-circular hole. These would have attached around the chain and then be bolted together to enable them to be removed when painting the chains.

This is supported by the diameter size of the holes in the boxes and the diameter of the central chains:

The average diameter of the top chains is  $\varnothing$  51.75 mm

The diameter of the hole in the ends of the cast-iron box is  $\varnothing$  52.55 mm

Possibly, they were relocated in 1871, when we know that major work was carried out on the Bridge, including replacing all of the hangers, the deck and its support timbers. Cross-bracing was introduced and all of the metalwork repainted.

However, we have no archival evidence to inform us when and why they were removed from the Chains in the centre of the Bridge to the masonry Pylons.

In 1871, they may have been considered as 'wind-catchers' as well as adding weight to the Bridge along with the full-length rows of cast-iron cart rails, hoof grips, kerbs and deck cornice, which were all removed that year.



Current location; English Pylon





Current location; Scottish Pylon



(All photographs by Spence & Dower)