

DEAD DOG BASIN BRIDGE

Camden Lock

The bridge which supports the tow path, was built in the 1840s/50s. It was refurbished in the 1970s. Paint samples were taken by Brian Hall of Hall Conservation from five different areas:

- 1 steel cup on wall
- 2 inner edge of arch
- 3 handrail
- 4 support next to canal
- 5 cross-pieces supporting the handrail

Examination. The fragments were examined under low magnification and then a selection of the pieces was mounted in cold-setting polyester resin to be cut and polished as cross-sections. Pigments were identified in dispersion using a polarising light microscope.

RESULTS

Sample 1 had only the most recent paint scheme.

In Samples 2-5, there were early paint layers, though they have become infiltrated with rust, and layers have been lost. As a result, none of the samples had a complete set of layers, but between them it was possible to put together the sequence of paints applied since the 1850s.

Fourteen lots of paint based on lead white were found, and there probably were more. Lead paints cease to be used in the 1940s, so this means that the bridge was being repainted at least once every seven years.

Sample 2, taken from the inner edge of the arch, had the greatest number of early layers, including the original paint scheme.

Original decoration

In Sample 2 we can see that a dark grey primer/undercoat based on carbon black and lead white was applied to the metal followed by a reddish-brown top coat of umbers mixed with red and brown iron oxides and a little lead white.

The choice of brown would have been unusual for ironwork in the 1840s/50s, and the colour may have been chosen to blend with the brickwork.

Later decorations

- 2-3 Reddish brown continued to be chosen the next two times that the bridge was painted, the first time over a red lead primer, the second time over dark grey.

- 4 The fourth time that the bridge was painted there was a change. A primer of red lead mixed with lead white was applied and then the iron was painted a mid-grey colour.

This scheme was found in Sample 2 and also in Sample 5.

- 5-7 Three more mid-grey schemes that were only found in Sample 2. The grey paints were applied over grey primer/undercoats mixed from carbon black, lead white and a little red lead.

- 8-9 Two more greys, both applied over primer undercoats consisting of an unusual mixture of ochre, black, lead white and red lead.

These were found in Samples 2 and 4.

- 10-13 Four more greys, only found in Samples 4 and 5,

Two of these greys were applied directly on top of the previous scheme without primer or undercoat, and must have consisted of a quick touch-up of the paint work.

- 14 The final lead-based paint, which was found only in Sample 2, was a dark grey applied over a primer/undercoat of pure red lead. This could have been the last paint applied before the Second World War

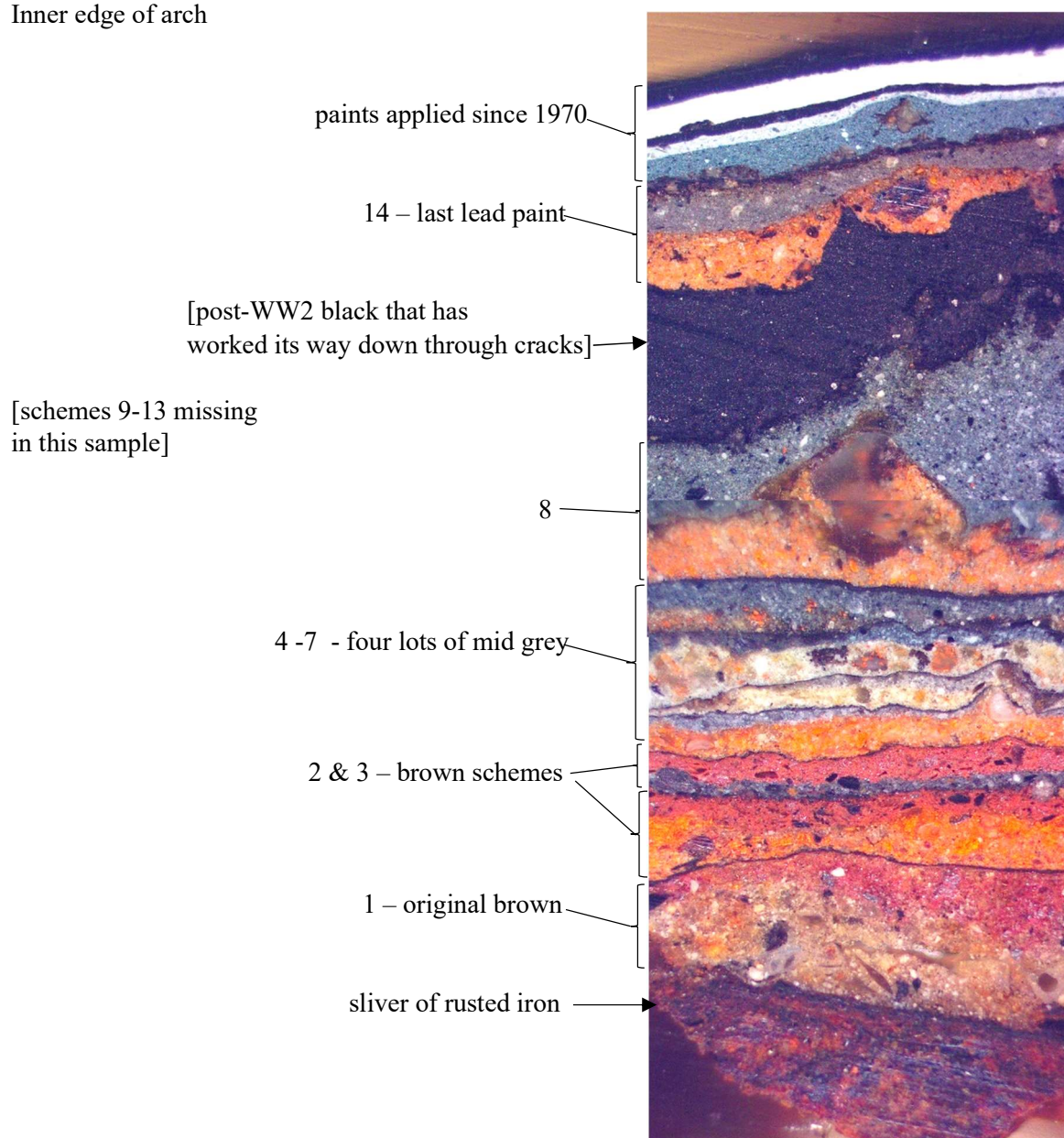
Most recent paints

On top of those early lead-based paints are just three lots of modern alkyd paint all based on titanium dioxide white. These paints are likely to have been applied since the 1970s when it is known that the bridge underwent a refurbishment.

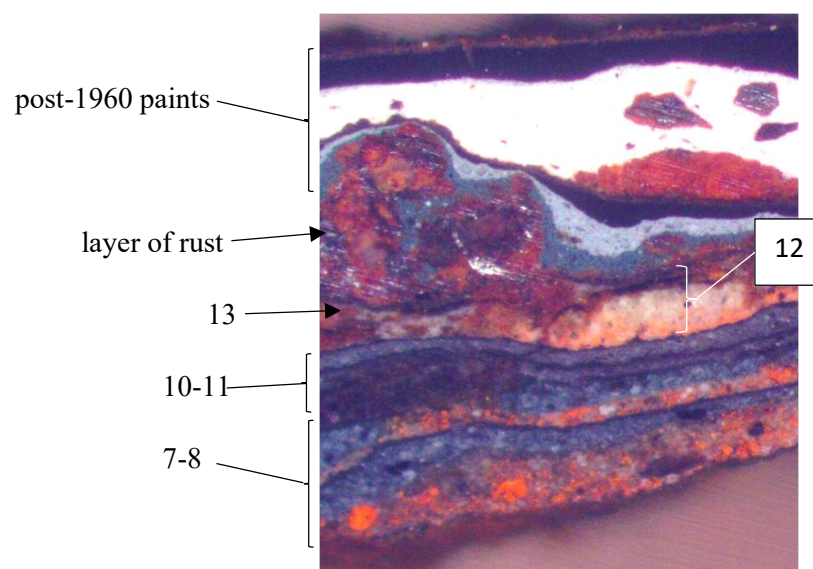
The first was a dark grey, in some areas applied over a red iron oxide primer. The most recent two schemes have involved both black and white paints, as seen today.

SAMPLE 2

Inner edge of arch

**SAMPLE 4**

Support next to canal

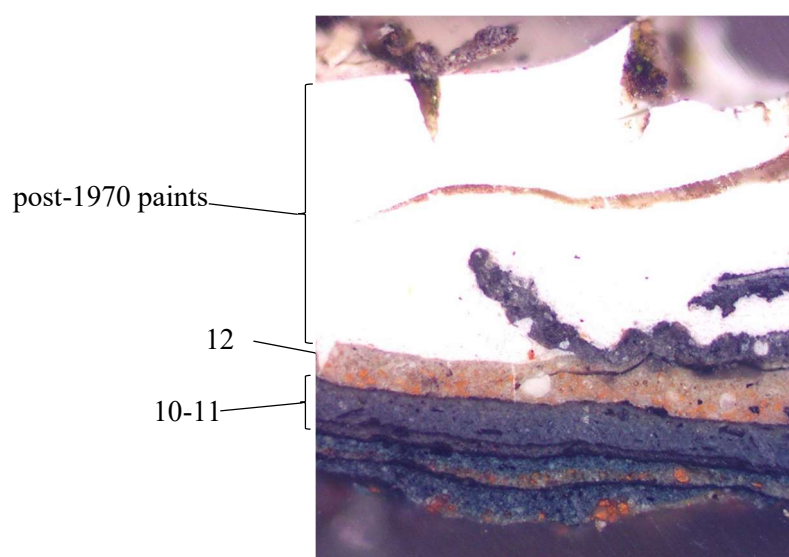


SAMPLE 5

cross-pieces supporting the
handrail

Fragment (i)

Upper layers

Fragment (ii)

Lower layers

