

# THE ELMS

Fitzroy Park, Highgate

The original house was built around 1840, but has been enlarged several times since. The nineteenth-century sash windows have all been taken out and stored.

A selection of the original windows was examined on behalf of Luard Conservation Ltd, to find out how they were painted when the house was first built. The list of windows from which samples were taken, and the examination procedure that was carried out, are given at the end of this report.

## RESULTS

The windows must have been decorated very regularly between the 1840s and the Second World War, because at least twenty two lots of lead-based paint were counted in some samples. This means that re-painting will have been taking place approximately every four years.

### Original decoration

The window frames were painted a stone colour [see Sample 16, p.6]. The same stone colour was also used for the wooden sun blinds. One can speculate that the same paint was also used for the render on the walls

The window sashes, and the curved Library door [0303], were treated with a kind of graining. Graining is a technique whereby softwood is painted and glazed to imitate the appearance of a hardwood such as mahogany, oak or walnut. It has been practiced since the seventeenth-century for prestigious decorative schemes, but only became a standard procedure after circa 1800. In the nineteenth century the graining of exterior doors was very common; windows were grained much less often, though examples have been found on both domestic and public buildings.

The method used on this house was not the standard technique for nineteenth-century oak graining: the layers involved an orange/brown ground [see Sample 8, p.4] rather than the usual ochre ground, and it may have been a mahogany graining. Alternatively the effect may have simply been a glossy, glazed brown, giving the general impression of varnished hardwood. The only way to find out for certain would be to reveal a small area on site.

The glazed doors with metal edges [0305] were oak grained in the traditional manner. The layers involved an ochre-coloured ground, a thin brown glaze and clear varnish [see Sample 13, p.5]. The technique was typical of nineteenth-century graining, imitating oak.

The fact that slightly different layers were used for one of the sets of doors is surprising, but it may merely mean that different painters were at work. The general effect will have been the same: dark coloured doors and sashes, and light-coloured window frames and sun blinds.

## Later decorations

- 2-4 The window sashes and doors were grained three more times, which must have taken the house through to the end of the 1850s. The window frames and blinds continued a stone colour.
- 5-16 There was a change: instead of being grained, the sashes and doors were painted plain black. The black layers were sometimes painted over grey undercoats, and sometimes over white. Not all the black layers are present in all samples, but twelve black schemes were counted in some of the best fragments.
- The black period must have taken the house through to circa 1900. It was quite common in the latter part of the nineteenth century to paint the sashes a light colour and paint the sashes a contrasting dark colour. Black was sometimes used, but dark brown and dark green were more commonly chosen.
- The frames and the window blinds continued to be painted a stone-colour or off-white. There was just one exception to this formula. Half way through the black period, perhaps in the 1870s, the window blinds were painted a dull pink, or putty colour [see Sample 17, p.6].
- 17 Following the long sequence of blacks, there was one occasion when the window sashes were painted brown.
- 18 After the brown the windows were painted white. This was probably at the beginning of the Edwardian period when there was a move away from the dark tones favoured by the Victorians.
- 19-22 In the early years of the twentieth century there was another change, and the windows were four times painted green.
- There was no longer any distinction between frames and sashes: both were painted the same green. The pigments in the green were Prussian blue and chrome yellow, and the paint was quite bright in tone. The last of the green schemes was still based on lead white, and so the green period probably lasted through the inter-war period.
- Towards the end of the green phase some work must have been carried out on the house, because at least one sash window [no.0573] was replaced. The new sash has glazing bars with a square profile, unlike the pointed shape of the original sashes.
- 22 Following the greens, the windows and the glazed doors were painted white. The paint involved an undercoat based on lead white, and a top coat based on zinc oxide white. This

combination was commonly used in the years before the Second World War, so the white was probably applied in the later 1930s.

The white scheme appears to have remained in place throughout the War, as it had become degraded and dirty by the time it was finally painted over using post-1950s paint based on titanium dioxide white.

- 23-31 Since the Second World War, and the introduction of paints based on titanium dioxide white, the window frames and window sashes have always been painted white.

At some point during the second half of the twentieth century, the sun blinds were partly stripped. Some of them were painted pink just once [e.g. the blinds for windows 4 and 11]. Others were painted pale blue on four occasions [see Sample 18, p.7]. Presumably these blinds came from different sides of the house. In recent years the blinds were returned to white

### **Sun blinds**

Some of the blinds have a different profile from the others, with the 'fretwork' more deeply cut. An attempt was made to compare them, and work out if some were later than others, but the paint stripping which took place in the later twentieth century has disturbed the layers and made close comparison difficult.

The impression from the samples was that there were more layers on sun blinds which have less deeply cut fretwork, but more investigation would be needed to be sure of this.

**SAMPLE 8**

Narrow, rectangular sash [0601]  
[x200]

A good example of the layers  
found on all the sashes.

1930s? zinc oxide white →

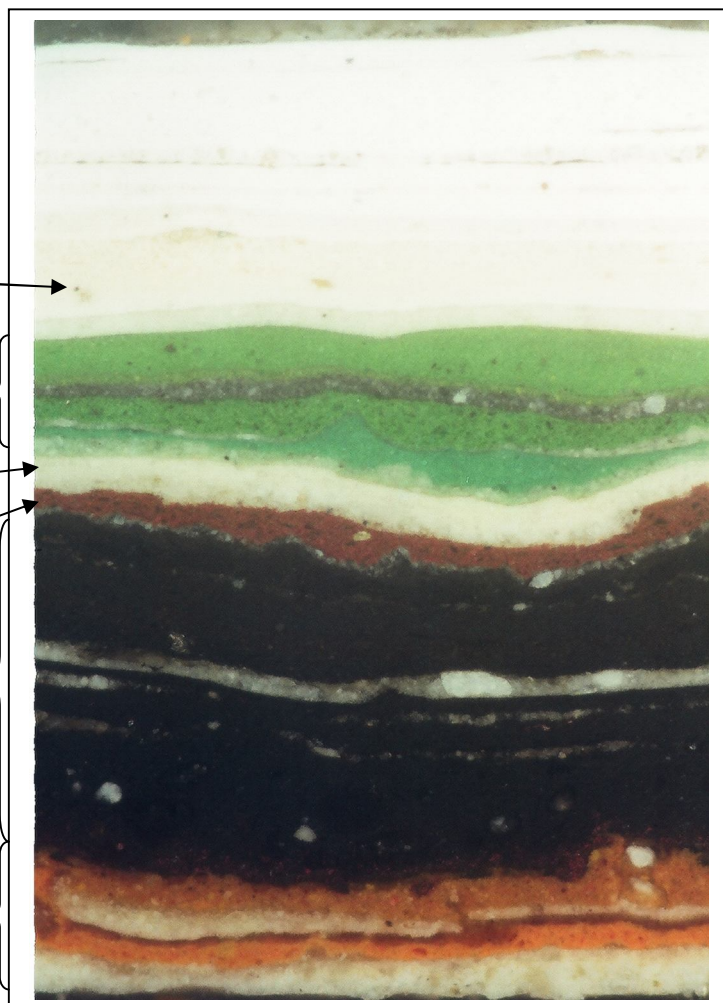
early C20th greens {

white →

end of C19th dark brown →

later C19th blacks {

mid C19th grainings {

**Detail of the first scheme**

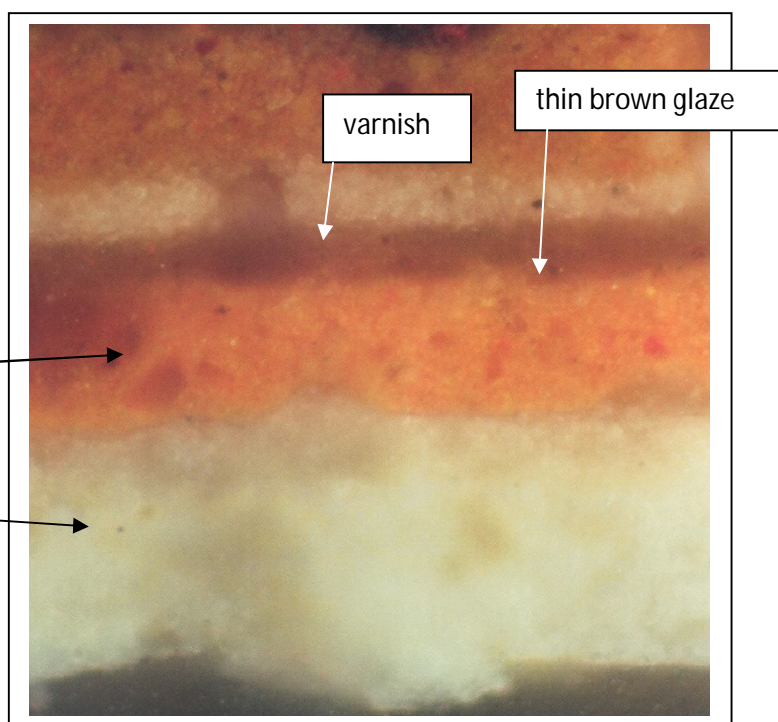
[x500]

varnish

thin brown glaze

orange/brown undercoat →

lead white primer →



### SAMPLE 13

Glazed door with iron frame

[x200]



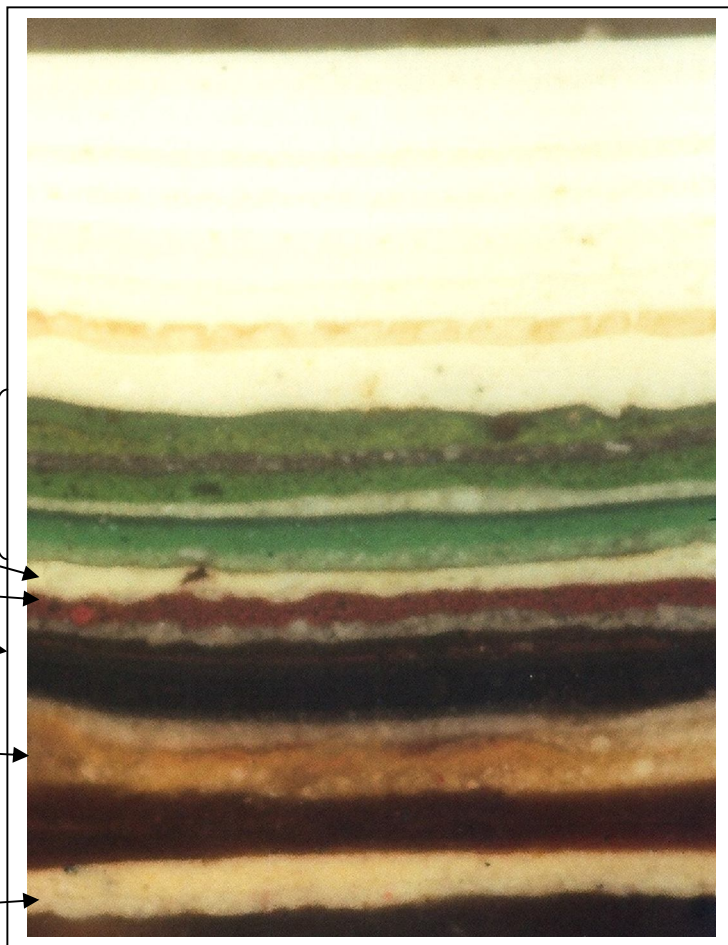
white

dark brown

blacks

2<sup>nd</sup> graining

1846 graining



### Detail of the earliest layers

[x500]

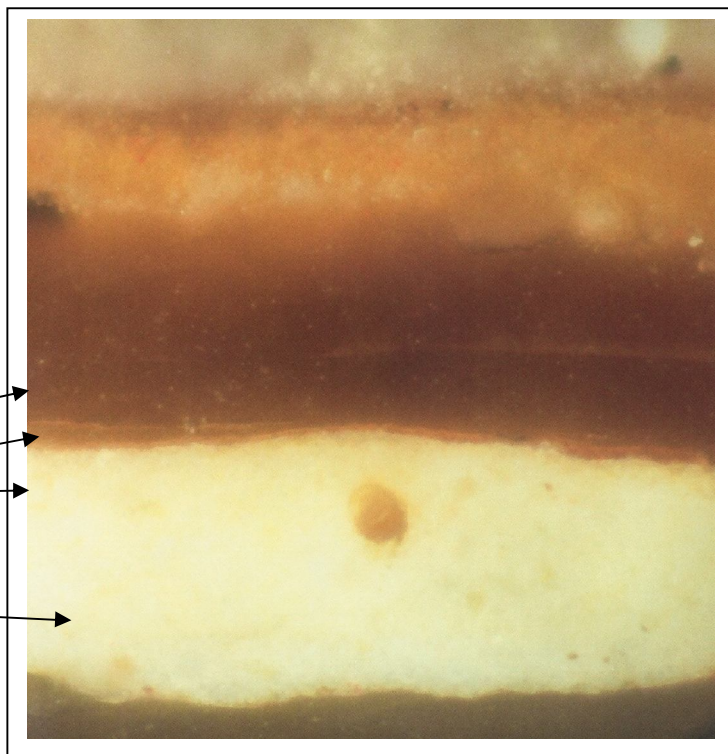
These layers are typical of C19th oak graining

varnish

thin brown glaze

ochre undercoat

lead white primer





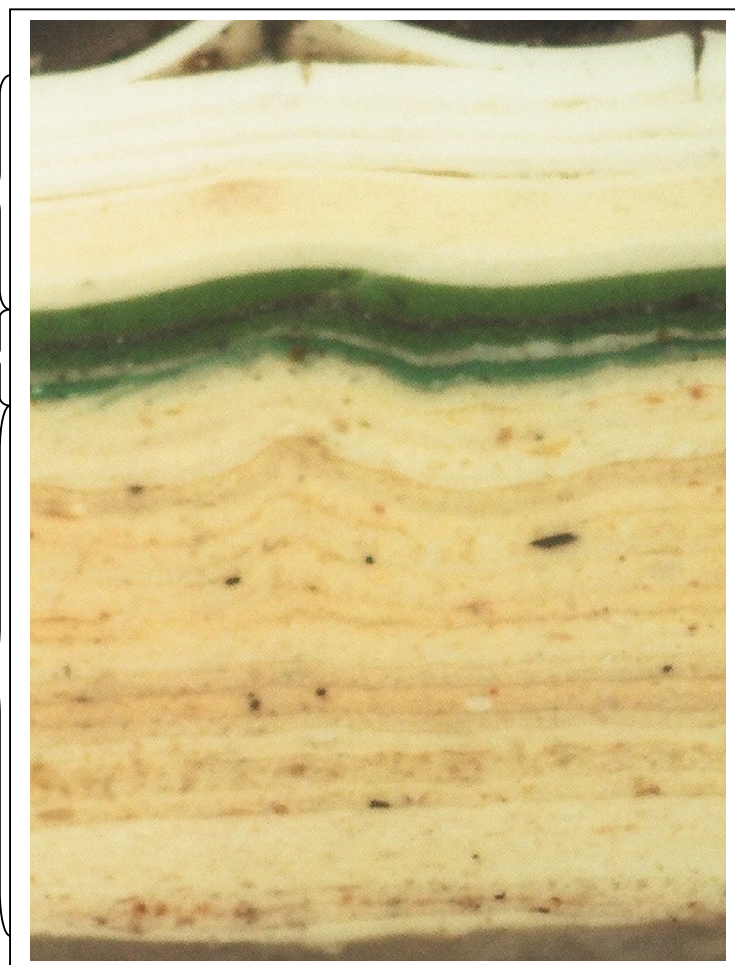
**SAMPLE 16**

Sash frame for window  
with arched top  
[x200]

late C20th whites

early C20th greens

from 1846 until the last years  
of the C19th, the frames  
were painted a stone colour

**SAMPLE 17**

Sun blind with pink paint showing  
[0397]

The pink seen today is  
this late C20th scheme

circa 1870s pink

pink paint over  
broken earlier  
layers



This cross-section shows how the layers  
were mostly stripped off in the later  
C20th and the blind painted pink.  
Old paint only survives at the edges  
where this fragment was taken

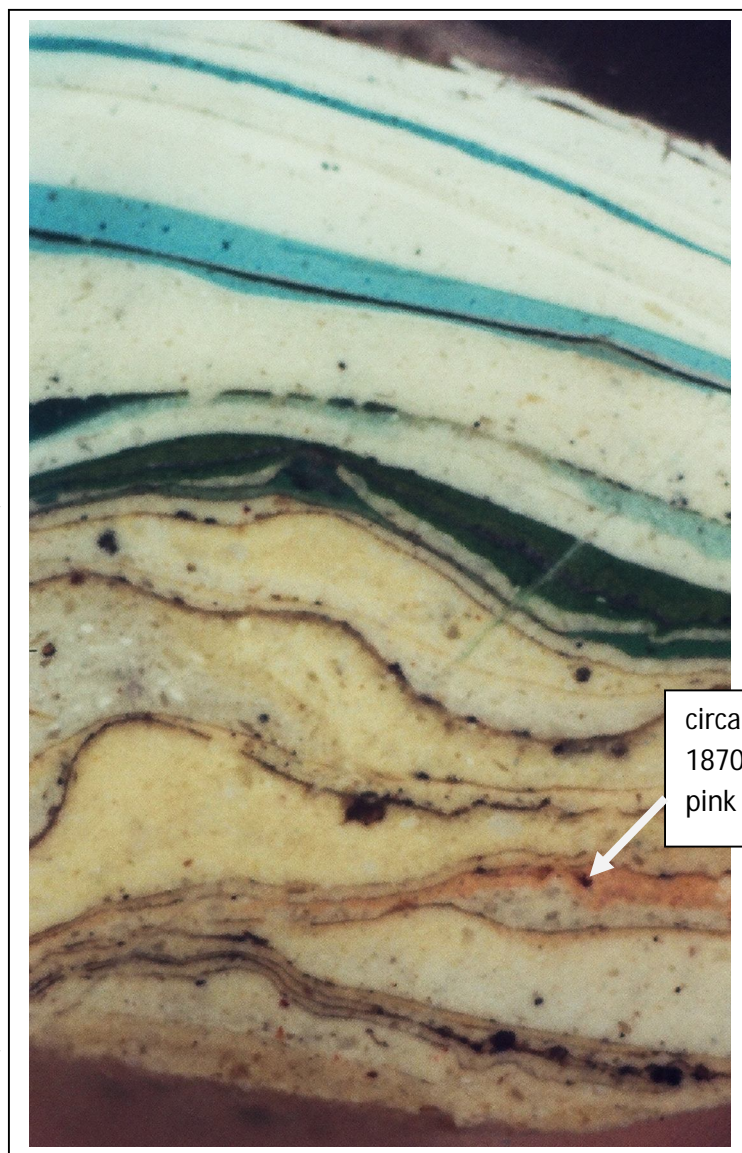
**SAMPLE 18**

Sun blind, with blue paint showing  
[0400] for window 11

This was painted blue four times  
over the second half of the C20th

end of C19th/early  
C20th greens

stone colours, with  
just one pink  
scheme

**SAMPLE 14**

Sash with different profile  
[0573]

The glazing bars of this sash have a  
square shape, instead of pointed.  
It is clearly later, as all the pre-green  
layers are missing

wood

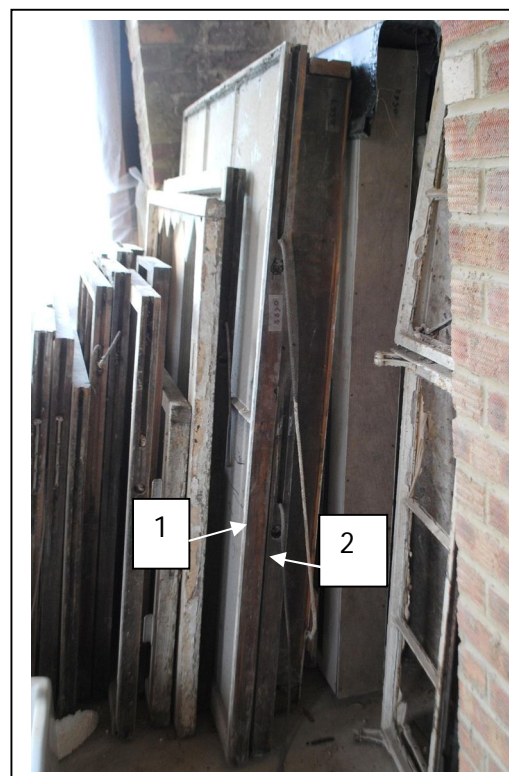




## WINDOWS EXAMINED

### Window with arched top

- 1 lower sash [0588]
- 2 upper sash [0588]



### Four examples of large square sashes -

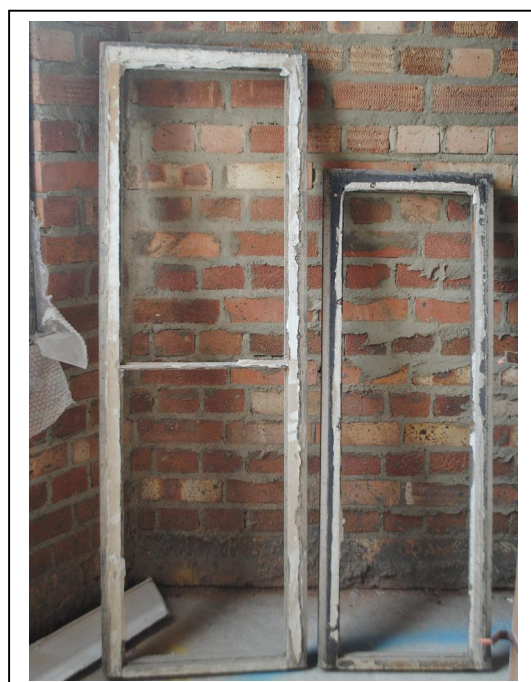
All with narrow profile to glazing bars

- 3 square sash [0577]
- 4 square sash [0576]
- 5 square sash [0578]
- 6 square sash [0575]



### Two examples of narrow rectangular sashes

- 8 rectangular sash [0601]
- 9 rectangular sash [0565]





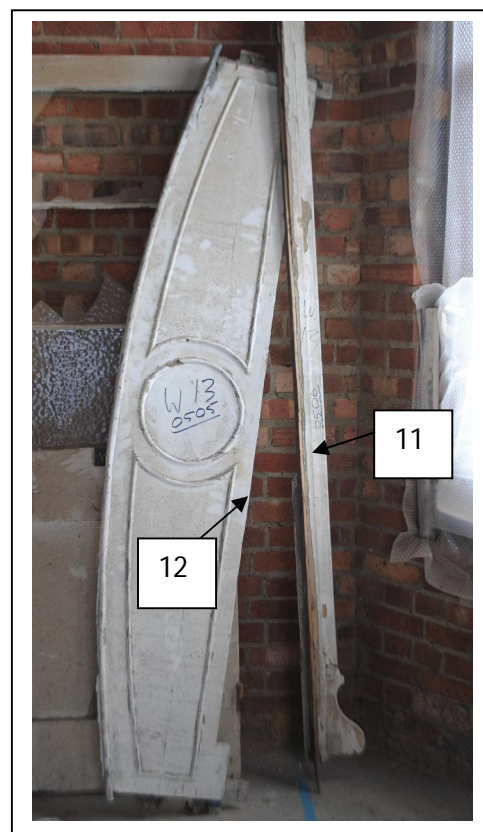
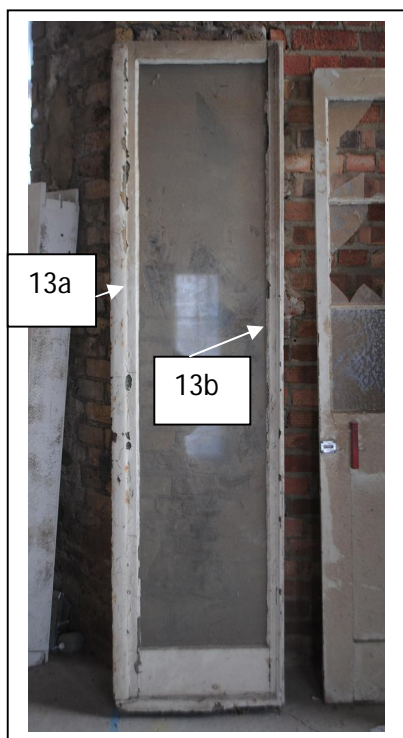
- 10 curved library door [0303] [not photographed]

**Border of arched window**

- 11 architrave supporting sun blind for window 13 [0506]  
12 top of window 13 [0505]

**Glazed door**

- 13a glazed door – metal edge [0305]  
13b glazed door – wooden frame [0305]

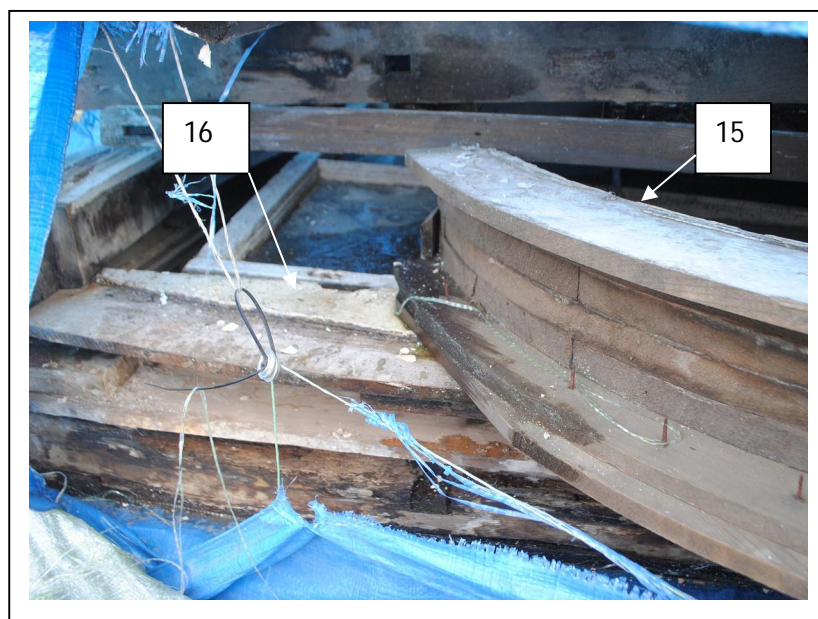


- 14 square sash with different shaped glazing bar [0573]



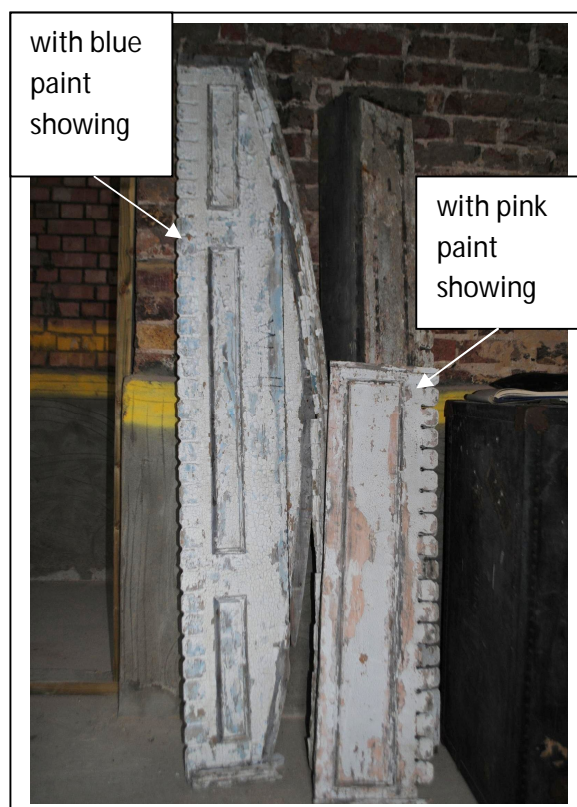
### Sash box and window frame

- 15 arched top of window sash box
- 16 sash box with shape for arched top



- Four examples of **wooden sun blinds**
- 17 With pink showing, [0397]
- 18 With blue showing [0400]
- 19 With pink showing, for window 7, [0399]
- 20 With pink showing, for window 4, [0500]

[These boards have been stripped, but old paint survives at the edges]



**Examination** The samples were examined under low magnification and then mounted in cold-setting polyester resin, to be cut as cross-sections. The sections were viewed at high magnification in halogen and in UV fluorescent light, and the layers compared. The coloured pigments were identified by polarised light microscopy. A chemical test for lead was carried out on representative cross-sections.