AML Report 1833

97

**TITLE** Examination of Mineral Preserved Wood on Iron Coffin Fittings from Thwing, North Yorkshire. AML site No. 97.

**AUTHOR** Jacqui Watson

**DATE** 17.12.85

**ABSTRACTS**

Wood identification report and reconstruction of the coffins. 8 pages, including drawings.

**KEYWORDS**

Wood, mineral preserved, iron, coffin, reconstruction, Anglian.

THIS REPORT IS Level III

Coffins from the Anglian Cemetery at Thwing, North Yorkshire.

The iron fittings from 9 coffins were examined, many of which had sufficient wood preserved on them to identify the species, and suggest the thickness and orientation of the original boards.

All the coffins were made of oak (Quercus.sp). The major surfaces were radial sections (RLS), with the grain running horizontally - this suggests that the boards were made from quarter sawn or radially split timbers. The latter is more likely as waterlogged coffins from Barton-on-Humber (unpub) are mostly of radially split planks, and from the excavations at West Stow it has been established that the Anglo-Saxons had a tradition of splitting oak timber rather than sawing it for most construction purposes. The uniformity of thickness of boards in a coffin, within 2-3mm of each other, suggests that the original split planks were carefully trimmed to size. Radially split timbers taper in section towards the centre of the tree, and if used in this state will have quite a wide variation in thicknesses.

The extent of mineral preserved wood on the metal fittings was not sufficient to attempt further reconstruction, with the exception of F15 and F18. For these two coffins there was some evidence for the joints used and how the lid was hinged to the back. There is the possibility of a simple lap joint being used for the sides of coffin F15. In the case of coffin F18, mitred joints have been used for at least two corners - probably the front two. The lid is hinged to the back by means of two loop-ended straps, the loop of the back strap being firmly embedded into the wood. Because of the hinge arrangement, the top of the lid must be the same height as the top of the back ( see Fig.1 ). As the oak lid would have been very heavy, it has been assumed that it would have been supported by the sides rather than the hinges and hasp. The possible reconstruction of coffin F18 can be seen in Fig.2.

There is no evidence from any of the coffin fittings as to how the base was attached to the sides.

Further details on the individual coffin fittings are listed below.

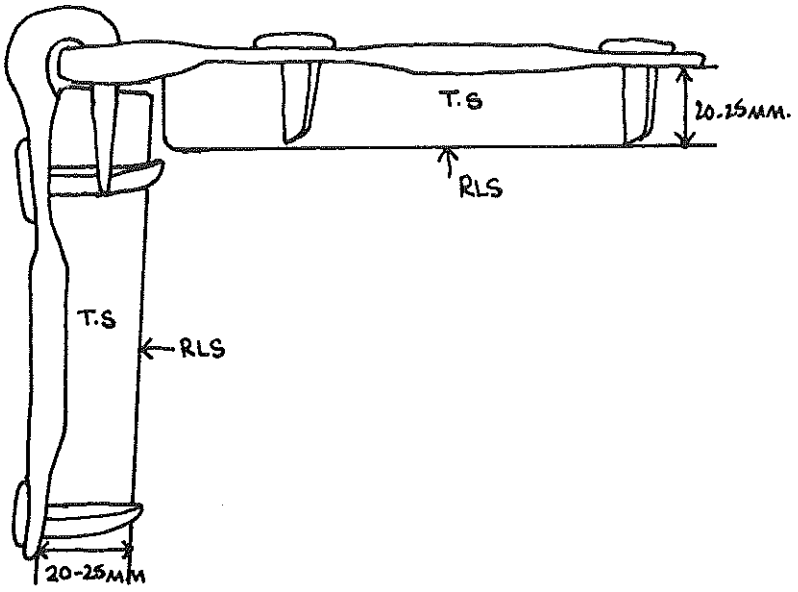



Fig.1. Cross section of back and lid, showing hinge arrangement.

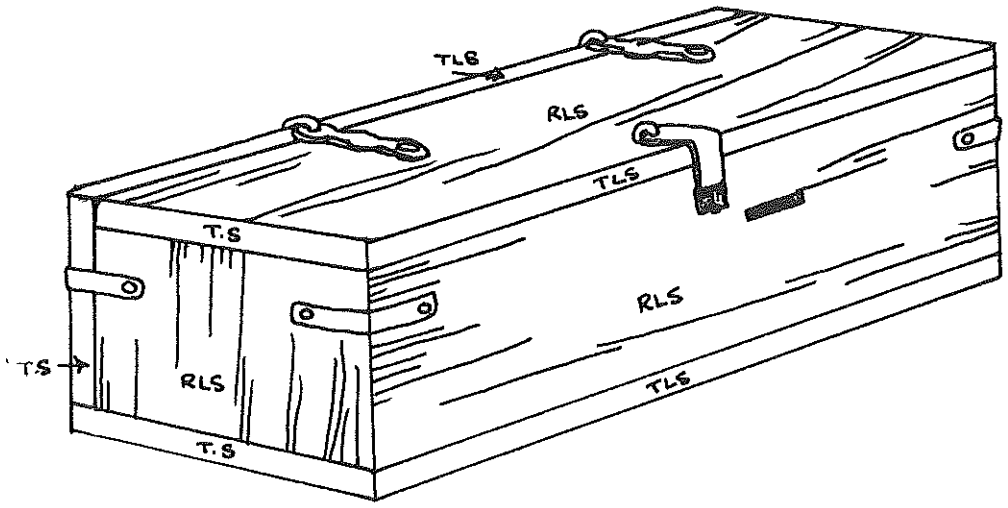



Fig.2. Possible reconstruction of coffin F18.

RLS - radial section

TLS - tangential section

TS - cross section

| AML No. | Description | Exc. Ref. No. |
|---|---|---|
| 858366 | Hinge, with minimum depth of wood representing the back of the coffin being 18mm. The original wood surface had a radial section. Wood: oak. | F1 536 |
| 858367 | Wood: oak. | F2 |
| 858368 | Two hinges with mineral preserved wood, which give the minimum thickness of the back as 18mm, and minimum thickness of the lid as 15mm. Original wood surface had a radial section.<br>Lock bolt and stapled hasp give a minimum thickness of the front of 18mm. Original wood surface had a radial section.<br>Split spiked loop, possibly used to attach stapled hasp to coffin lid, gives a thickness of 15mm.<br>Wood preserved on all fittings: oak. | F3 426 392<br>393<br>364 |
| 858369 | Lock bolt gives a possible depth for the front of 23mm. Wood: oak.<br>Nail with two woods preserved, one with its grain lying along the shank- possibly packing for the nail, and made of willow (Salix.sp) or poplar (Populus.sp). | F5 535 |
| 858370 | Two hinges with mineral preserved wood, giving the thickness of the lid as approximately 22mm, and the back a minimum of 18mm. Wood: oak. Original surface of the lid had a radial section. | F8 150 183 |
| 858371 | Hinge, which gives a minimum thickness for the back as 20mm. The original surface of this board had a radial section. Wood: oak. | F9 161 |
| 858372 | Coffin hasp, original lid was oak with a radial section. | F14 229 |

| AML No. | Description | Exc. Ref. No. |
|---|---|---|
| 858373 | Two hinges with mineral preserved wood, giving the thickness of both the lid and back as 20mm. Both boards are oak with the original surface a radial section. The lid was hinged to the back in the same arrangement as F18, see Fig.1. | F15 308 371 |

The nails have wood with grain along the shanks, and made of oak. As suggested for F5, this was probably a type of packing for the nails. 291

The mineral preserved wood on this corner bracket suggests that a simple lap joint may have been used for the corners, see Fig.3.. To be secure, this joint has to be nailed, pegged or glued. The depth of wood preserved on the nail is 25mm, which indicates the thickness of either the side or back. However, the uneven thicknesses of the boards could be due to one of the boards being narrow at this point, rather than evidence for a joint. 307

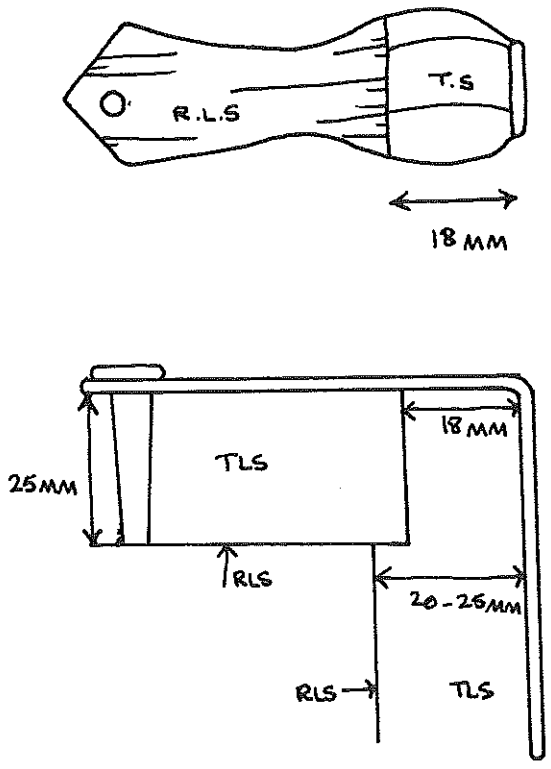



Fig.3. Corner bracket 307 , and construction of simple lap joint.

| AML No. | Description | Exc. Ref. No. |
|---|---|---|
| 858374 | Lockbolt and stapled hasp, wood is preserved on the attaching staples for both these fittings and they give the thickness of the lid as 25mm, and the front as 27mm. | F18 462 |
| | Iron hinges, see Fig.4., wood preserved on one of the nails indicates that the back is 25mm. thick. The relationship of the lid to the back is illustrated in Fig.1.. | 455 457 |
| | Only two of the corner brackets have enough wood preserved in the corners to suggest the use of mitred joints. To be secure these joints need to be glued and possibly keyed, but no evidence for either of these is preserved. All four brackets show that the grain direction of the end boards was vertical rather than horizontal, and this is illustrated in Fig.2.. The thickness of one of the end boards appears to be 23mm. ( See Fig.5..) | 456 461 |
| | The wood preserved on all the fittings was oak. The surfaces of the five boards preserved on the fittings, were radial sections. | |

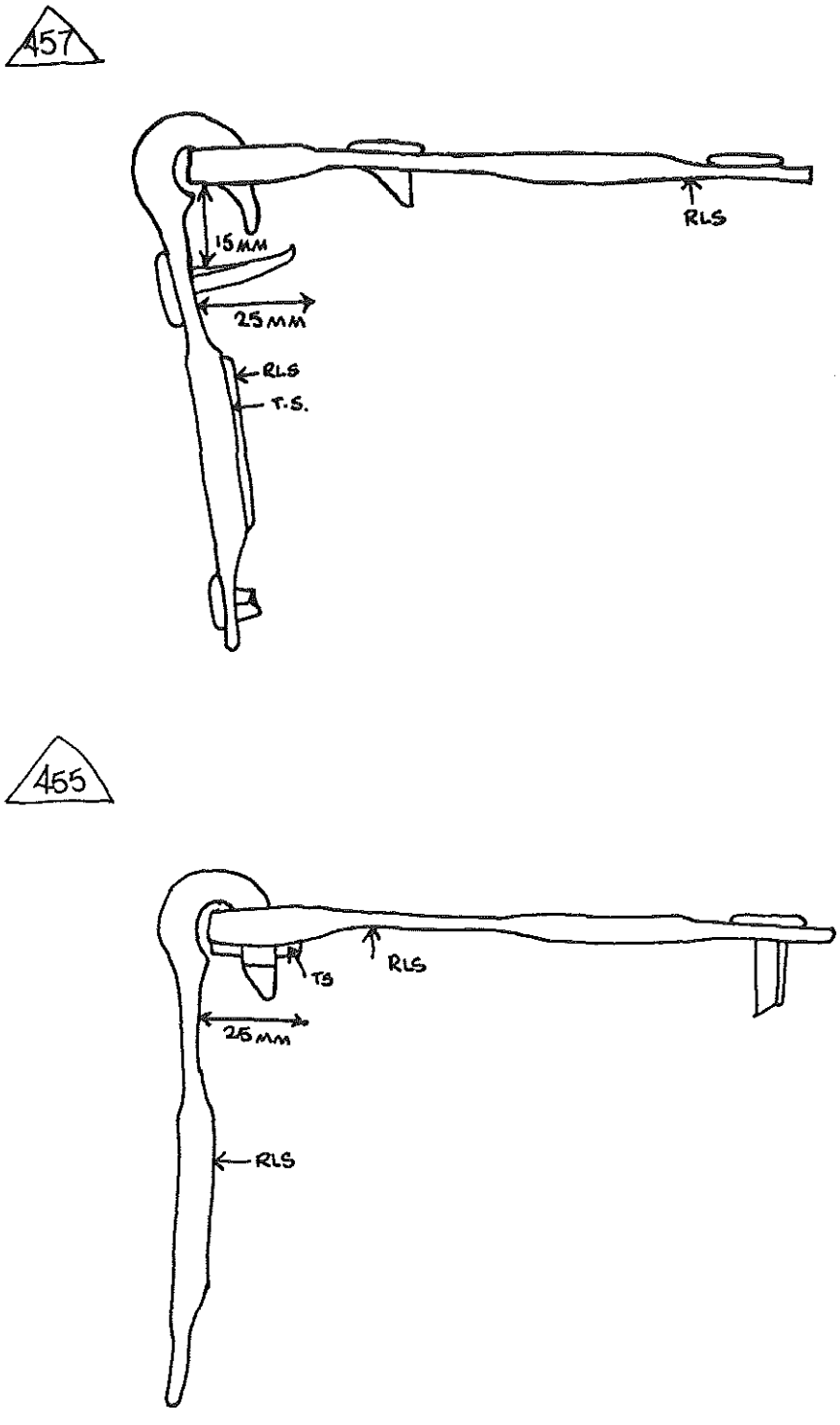
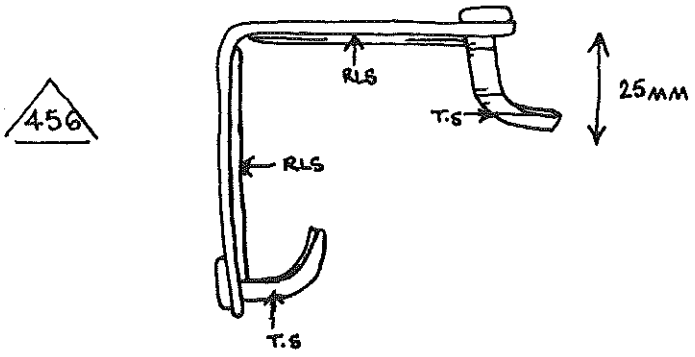



Fig.4. Hinges from coffin F18



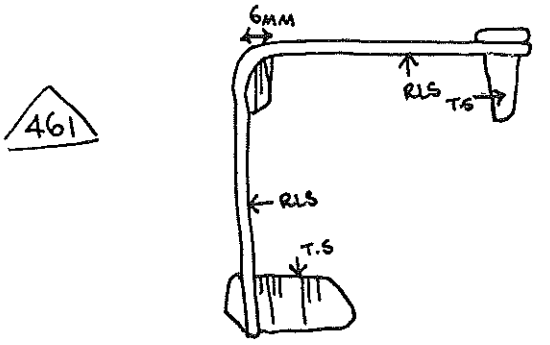




Fig.5. Corner brackets from coffin F18.