

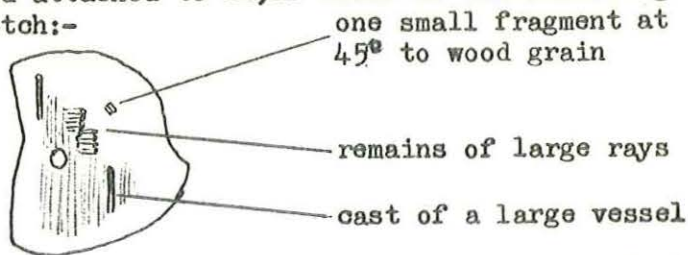
MATERIAL Cu-repl'd wood

BROUGH
 SITE:..... (DATE:21/2/77)
 1
 SHEET:

AM No	X-Ray No	Photo No	Description and Report	Ref No
-------	----------	----------	------------------------	--------

600307

This fragment of a 'copper' rivet* has remains of wood attached to it, as shown in the following sketch:-



The presence of large vessels and rays suggests that the wood was probably oak (Quercus sp.). The wide rays have a misleading superficial resemblance to plywood. There was however one fragment a few mm long at approximately 45° to the grain of the wood. This was removed and examined in the scanning electron microscope. It was found to display structures resembling wood. This might therefore be taken as evidence for 'ply'. However, the fragment was so small that it might represent an accidental inclusion.

A fragment of the oak wood was also examined in the S.E.M. This was completely replaced by copper corrosion products in a similar way to that described for iron¹. Secondary deposition seemed to have occurred over much of the sample, filling the spaces left by the decayed cell walls after the primary internal cell casts had been formed.

S.E.M. micrograph reference nos:-
 P143-148, SEM 23 (5).

¹ Keepax, C.A. 1975 Scanning electron microscopy of wood replaced by iron corrosion products. J. of Archaeological Science Vol 2 No 2 145-151

* Previously described by Mr. h. Biek, in Excavations at Brough-on-Humber 1958-1961, by J.S. Wacher (The Society of Antiquaries, 1969) p91, plate XVII

Carole A Keepax