

ART. IV.—*Wooden objects uncovered at Branthwaite, Workington, in 1956 and 1971.* By J. E. WARD, M.A., B.Litt.

Read at Kendal, April 27th, 1974.

THE present village of Branthwaite lies for the most part on a steep slope rising from the west bank of the River Marron. The geology of the area is shale and sandstone covered by a drift of boulder clay above the alluvium of the valley. Ice activity is probably indicated by an ice-contact slope between Branthwaite and Calva Hall, and deltas in the Marron valley caused by ice damming.¹ Coal mining took place over the area from the 18th century and relics of this may be noted in old levels to the south of the village, while an extensive quarry existed in the village itself, exploiting the white freestone which reaches a depth of 110 ft. The village has considerable historic interest, with the name "Bramtweit" — bramble place — appearing in 1212 on the Curia Regis Rolls.²

The Site

The site lies to the south of the old, filled-in freestone quarry, behind High House Farm at O.S. Grid Ref. NY 056247. A curious dip in the field seems to have been caused by a sharp differentiation in the drift geology, with boulder clay overlying the rim alone and no drift covering the area on which the excavation took place. The site is marshy and drained by a small stream, while an adit of recent antiquity directed water to the old quarry. Ill drainage was revealed again recently during the operation of filling in the quarry. No provision was at first made for a culvert drain,

causing a swift build up of water on the fields to the rear.³

It is possible that the area was a temporary marsh at some period as traces of hazel nuts and birch branches occur in the outwash clay. Waterlogged oak also grew fairly extensively around the margin of the clay and sandstone junction.

During the clearance of the stream to aid drainage in 1956, the farmer, Mr B. Lewthwaite, discovered a log partially jutting out into the water and, on cleaning it out, found it to be a hollowed trunk of oak with a peculiar carved section in the rear. A few pieces of squared timber and the remains of a worked backboard were lying in the interior (Plate I). A sample of wood was taken from the backboard for possible dating and the object was re-interred. In 1971, a new investigation of the site was undertaken on behalf of the Society in order to ascertain exactly what the object was and to note any associated structures.⁴

The area to be excavated was extremely restricted due to the presence of tile drains which ran at spaced intervals parallel to the stream, but these were not efficient enough to prevent seepage into the trenches. A trench 10 ft. by 14 ft. was dug around the area of the object and one of identical size 2 ft. to the north. Flooding was prevented by damming the stream above the excavation and maintaining a constant pump bypass of the area. The trench containing the wood (Fig. 1) was excavated down to the sandstone which had assumed a gravelly nature. The remaining section of the trunk was 7 ft. long and 2 ft. broad at its widest part and it lay directly on the mud above the sandstone. Unfortunately, the end which had protruded into the stream had been damaged, thus preventing an estimate of the original length, and the adit had been cut over this area probably causing further disturbance.

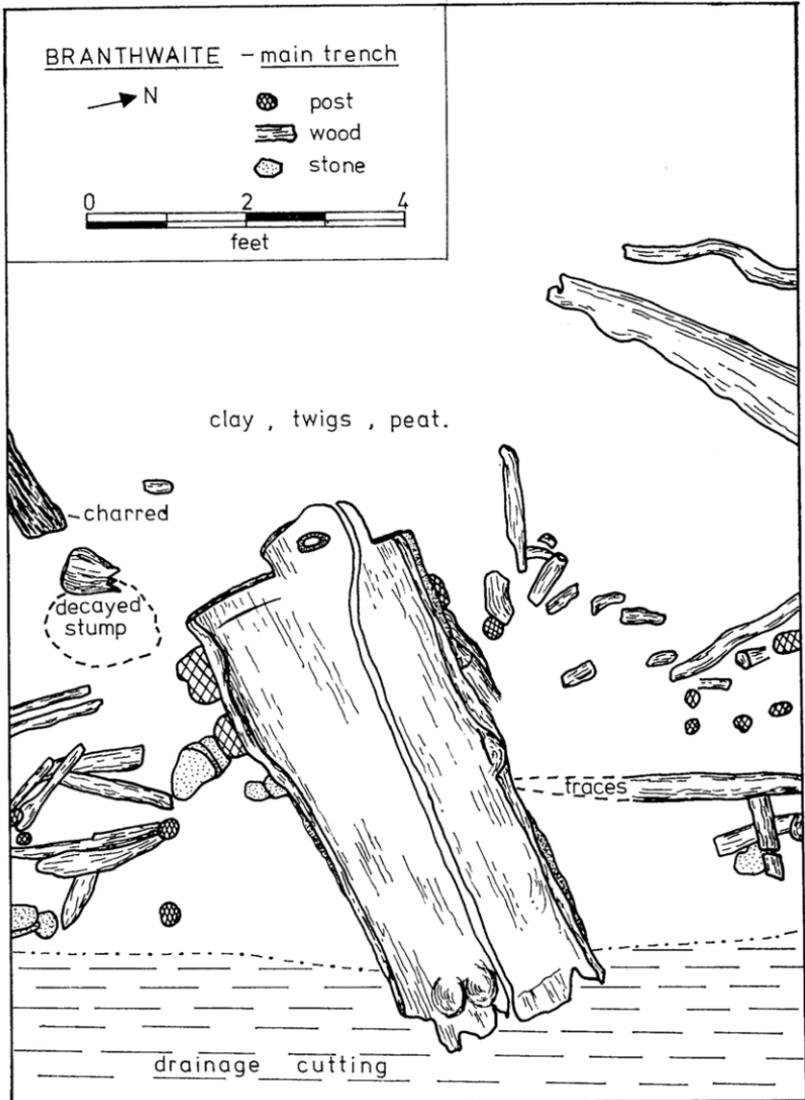


FIG. 1.

The rear section had been carefully cut in a straight edge, leaving a tenon of 8 in. projecting out beyond this point from the bottom. The latter was perforated by a D-shaped hole (Plate II) displaying no traces of abrasion, while the backboard had fitted into a clearly cut groove on the inner curve of the trunk. It appears, therefore, that the log was a hollowed canoe with a carefully inset backboard. The tenon may have been used as a rudimentary rudder, or more likely, a means by which the boat could be dragged overland to other watery tracts.

The exterior of the boat still retained a quantity of bark which would have increased the buoyancy of a cumbersome craft, but it had been rendered totally useless due to a crack which had split the entire boat longitudinally. It seems to have sunk at its mooring as two posts were found at each side, each with deliberately sharpened points and driven in semi-upright (Fig. 2). The splitting apart of the two halves had tightly wedged the boat between them.

Despite the 1956 disturbance, the remainder of the

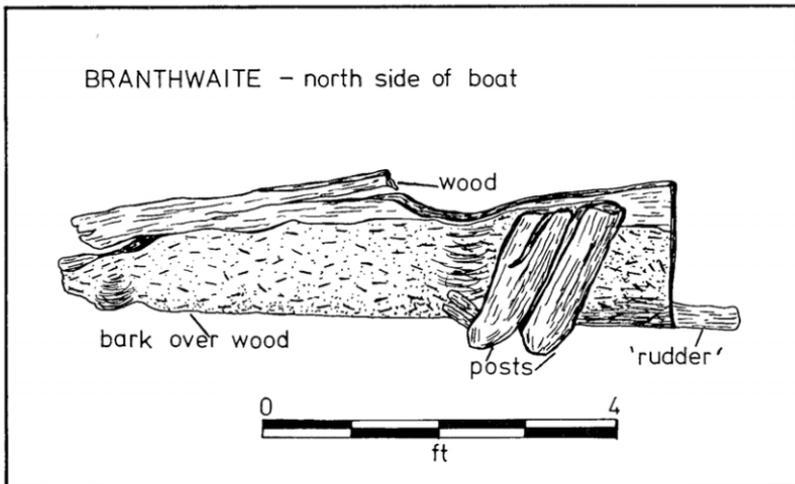


FIG. 2.

area adjacent to the boat was investigated. To the west of the boat lay a confusion of birch poles and oak beams in a clay soil. This was overlain by a band of sandstone fragments which had been shattered by fire, traces of which were obvious in the black, greasy soil. The birch poles were in no arrangement, but none were naturally rooted and some showed traces of deliberate sharpening (Plate III). Several horizontal oak beams were squared off and one stump had been sawn. No finds came from this area, but it seems possible that there had been a small artificial platform lying to the west of the boat. It seems to have been severely burnt in the upper layers, and the only remaining wood comes from the waterlogged sections. The failure of the canoe due to splitting ensured its survival, as it must have been sunk at its mooring before fire swept the associated structure. When the trench was fully excavated, the boat was moved and reburied nearby to dry out slowly. This was necessitated by the possibility of new drainage cuts being made and lack of a museum willing to accept the object to prevent its destruction.

The second trench to the north revealed a very restricted area of burning, but farm work to the south of the boat indicated further burning in that zone. Trench 2 also had a confusion of birch and oak wood, but its limited burning had spared an interesting feature, partially sunk into the platform. This was a rectangular box manufactured from carefully cut birch poles (Plate IV), 4 ft. 6 in. long, 2 ft. 3 in. wide and 2 ft. deep, splaying out towards the north end. The ends of the poles were cut and they were stacked horizontally to form the sides of the box with the cracks caulked by moss. The longer sides had differing timber in the bottom sections, but birch placed on top of this. When uncovered, the box was filled with small pieces of burnt sandstone which had

evidently been thrown in with haste, as they had smashed one end of box. No trace of a lid was found, but on removal of the stones, the floor of the box was seen to be of a corduroy construction, still in birch poles. No metal or lashings held the box together, but the moss and vertical posts hammered on the inner and outer side of each corner (Fig. 3)

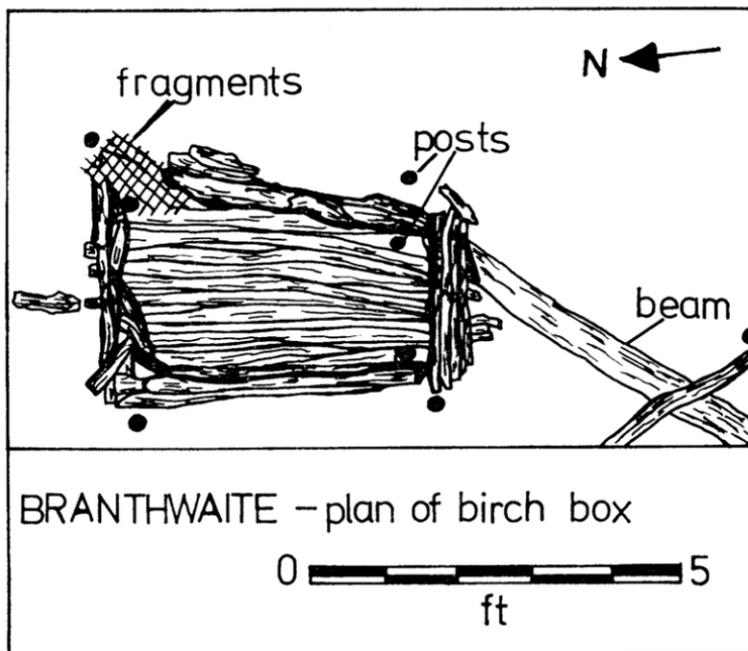


FIG. 3.

would have held it intact. Below the box, a squared oak beam ran into the trench with the boat, so both objects were in loose association. Extensive flooding in this trench prevented clearance down to the bedrock.

The site, therefore, appears to have been a small artificial platform in a marshy fen area. Subjected to fire at one period, an already sunken canoe was undamaged by burning, as was a small box on the

northern side of the boat. No occupation traces were found, which may indicate its possible use as a temporary landing point only.

Discussion

1) The Platform.

Artificial platforms on areas of swamp or tarn are very common in Britain and Europe and they have a chronological span of Mesolithic to post-Medieval. Constructed from a wide variety of materials and with a multiplicity of function, they may vary from crude piers of brushwood and stone to most elaborate islands of piles and beams strengthened by internal fillings of vegetable matter, clay and gravel. The latter variety, known as crannogs in North Britain, are often associated with canoes, testifying to the inhabitants' requirements for lacustrine transport or fishing or even defence.⁵ In Scotland, associations of canoes and platforms can be seen at Loch Buston,⁶ Lochlee Crannog⁷ and Friars' Carse.⁸ The Branthwaite platform cannot claim to be in a high category of construction, but sharpened posts and squared beams have created a dry platform above the surrounding marsh.

2) The Boat.

Dugout canoes had an extremely long life-span in the Forest Zone of Europe. They were generally used on inland waters to facilitate movement through difficult areas of marsh and dense vegetation, but their shapes would have rendered them useless on sea voyages. The actual construction varies enormously, and early forms persist for centuries. Solid dugouts were used in the Mesolithic period, but some areas of Europe used them still into the 20th century A.D.⁹ Laborious hollowing out by fire or adze led to differing shapes and lengths, much dictated by the nature of the wood, although oak was widely used. Several types can be

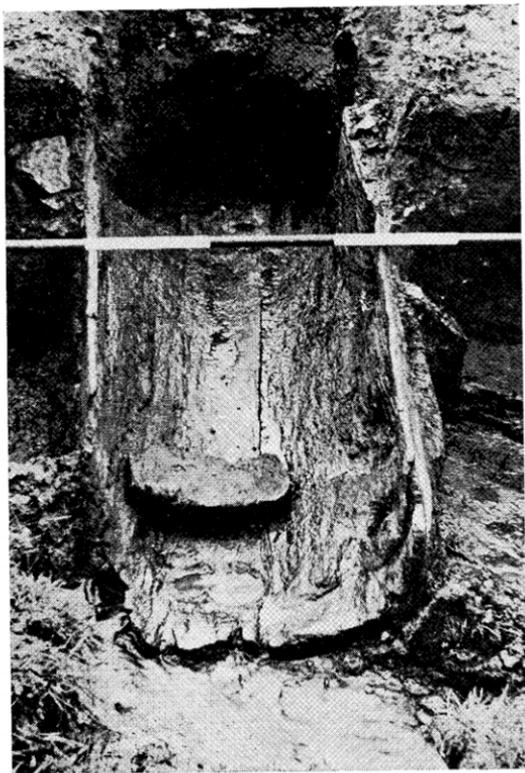


PLATE I.—1956 excavation (B. Blake).



PLATE II.—Rear tenon.

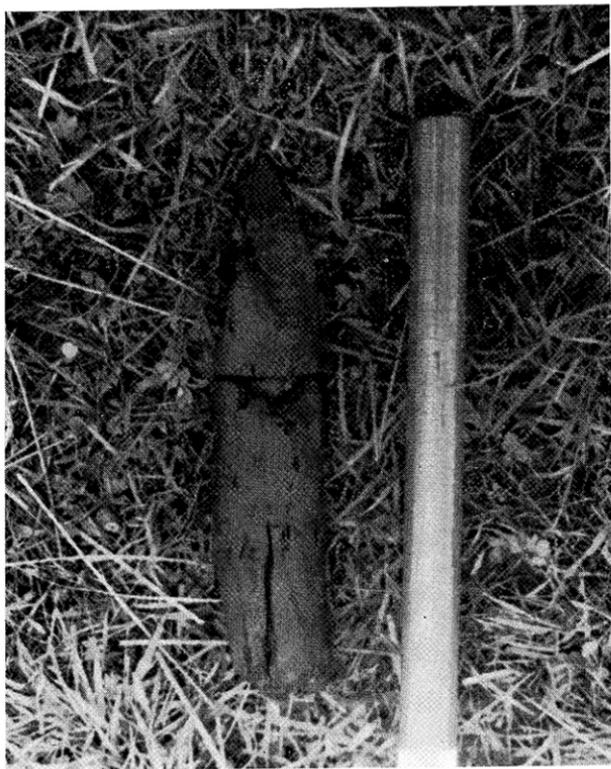


PLATE III.—Post with cut tip.



PLATE IV.—Interior of box.

distinguished, from the simple hollow log to ones with single and double pointed ends and even keels and ribs carved for extra strength. In the Late Bronze Age, a separate stern board was set in a groove at the rear of the hull. This would enable the interior of the boat to be quickly hewn out, but would reduce watertight efficiency and encourage cracking. The Branthwaite boat has an inset backboard and its nearest geographical parallel came from Whinfell Tarn, Westmorland.¹⁰ This was a 10-ft. long canoe with a squared stern, but it seems to have been in use in the 19th century according to local information. Inset backboards can be seen in the canoes from Loch Buston, Lochlee, Friars' Carse¹¹ and Loch Arthur¹² in Scotland. England has produced some fine examples from Clifton on the River Trent¹³ and a very large specimen from Brigg, Lincolnshire.¹⁴ The latter is 48 ft. long, 4-5 ft. wide and has a thick stern board manufactured from two pieces of wood inserted at the rear. Hollowing of this example appears to have been assisted by natural decay.

The Branthwaite projecting tenon with D-shaped perforation is not present on any other example yet found. Other boats, however, have developed singular attachments for dragging them overland. Ireland had canoes with projecting handles for carrying¹⁵ while others have perforations at front or rear, often showing traces of wear, e.g., Barton on Irwell,¹⁶ Ribble Docks, Preston¹⁷ and Lochlee.¹⁸ Even a bar set at the rear of the Brigg boat may have been used for haulage. No pattern emerges, however, and individual workmen seem to have produced their own variations.

The dating of the Branthwaite boat could be assigned to the Late Bronze Age on the basis of the inset backboard alone, but a sample taken to Cambridge University produced a Carbon-14 date of 2993 B.P. \pm 110, testifying to its definite antiquity.¹⁹

3) The Box.

This construction of birch poles seems to be problematic in both type and functional parallels. The actual construction is similar to that found on the bases of houses of the Bronze Age at Wasserburg Buchau, Federseemoor, Germany, but there it was a definite building technique. The Branthwaite box stands in isolation and is too small to perform a similar function. Its nearest parallel comes from Cumberland. In 1878, an oak trough was found on Lorton Moss,²⁰ 6 ft. 6 in. long and constructed in a rectangular shape from oak planks. The bottom planks projected irregularly beyond the sides, as in the Branthwaite example, and when found, it had no lid, was filled with burnt stones and quartz and there had been an attempt to caulk the joints with moss. No note was taken of any associated structure, and the box was held to be a peat sledge, coffin or boat. Moss caulking of the Branthwaite and Lorton types can also be found on the boats from Brigg and Ferriby.²¹

Both the boxes have strong similarities, but are constructed of differing materials. The caulking may have been an attempt to keep the box watertight as well as providing structural stability. Burial use seems unlikely at Branthwaite, as it lay very close to a possible occupation area and in wet ground, when dry ground would have been available nearby. Its use may be that of a small reservoir, acting as a temporary container for a live fish catch, but no real parallels are apparent from other areas. Its use as a drinking trough for animals must be discounted, due to the flimsy nature of its construction.

The Carbon-14 date and the nature of the canoe place this find firmly within the Bronze Age context of Cumbria. The surrounding area has already produced finds of this period, from cup-and-ring marked stone at Dean, stone circle on Dean Moor²² to Urns found

in 1876 (O.S. map) when a railway was built south of Branthwaite village. The associated platform must be contemporary with the boat, but the box being slightly removed from the dated object may have a later period of construction. The site, therefore, appears to be an artificial platform with a sunken canoe on its edge. Possibly never used as a habitation spot, it appears to have had some use for transport or fishing in the formerly damp environs, the latter probably supplementing a diet provided by marginal agriculture.

Acknowledgements.

Miss C. Fell and Mr B. Blake provided information about the activities in 1956. Equipment for shelter and drainage was kindly donated by Mr C. Bowes, and labour provided by Adult Education students and senior pupils of Workington Grammar School. The excavation would not have been possible without the permission and kind encouragement of the late Mr Birker Lewthwaite, owner of High House Farm, Branthwaite.

References.

- ¹ Memoirs of the Geological Survey of England and Wales, 1931 — Whitehaven and Workington District, 245, 250.
- ² English Place-Name Society, vol. xxi (Cumberland), pt. ii, 366.
- ³ Information from Mr B. Lewthwaite.
- ⁴ I am indebted to the Cumberland and Westmorland Antiquarian and Archaeological Society for a grant towards this work.
- ⁵ R. Munro, *Lake Dwellings of Europe* (1890).
- ⁶ *Ibid.*, 428-429, fig. 159.
- ⁷ R. Munro, *Ancient Scottish Lake Dwellings* (1882), 122, fig. 125.
- ⁸ *Ibid.*, 156.
- ⁹ J. G. D. Clark, *Prehistoric Europe* (1952), 286.
- ¹⁰ *Antiquaries Journal*, vi (1926) 128.
- ¹¹ See notes 6, 7, 8.
- ¹² PSAScot., xi (1871-2) 21.
- ¹³ *Antiquaries Journal*, xxi (1941) 133-143.
- ¹⁴ *Trans. E. Riding Antiquarian Society*, xvii (1910).
- ¹⁵ Catalogue of the Royal Irish Academy, i (1861) 202.
- ¹⁶ *Trans. Manchester Geological Society.*, xx 295.
- ¹⁷ *VCH Lancashire*, i (1906) 250.
- ¹⁸ See note 6.

¹⁹ Cambridge Q-288. I am indebted to Dr V. R. Switsur for this. The sample was taken in 1956 by Dr D. Walker, but the date did not emerge from Cambridge until 1973, i.e. after the completion of the excavation and most of this paper.

²⁰ CWI iv (1878-9) 344-346. My attention was directed to this by Mr W. Bowes.

²¹ Clark, *ibid.*, 290.

²² CWI xxiii (1897-8) 34-36.