

A wooden ard-share from Dundarg, Aberdeenshire, with a note on other wooden plough pieces

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SUMMARY

A wooden ard-share, recently discovered amongst the finds from W D Simpson's excavations at the promontory fort of Dundarg, Aberdeenshire, is described and discussed in relation to other wooden plough pieces, such as the Virdifield, Shetland, ard-head and stilts and the Lochmaben, Dumfries, ard-beam.

INTRODUCTION

During W D Simpson's excavations at Dundarg Castle, Aberdeenshire, carried out in 1950 and 1951, a wooden arrow-shaped artefact was found in one of the ditches which cut off the promontory on the SW side. The exact position and context of the find-spot are unknown, and Simpson himself seems to have regarded the find as probably of no great antiquity (Simpson 1954, 64). As the artefact is of bog oak, no radiocarbon dating is possible; the history of the site, however, is complex, and there is good evidence to suggest that a promontory fort existed previous to the medieval castle (Fojut & Love, this volume). Hence the object could be, at the earliest, Iron Age in date, but of course may well be considerably later. Prior to his recent excavations on the site, Dr Fojut, while examining material found on Simpson's excavations, rediscovered the wooden piece, and, suspecting that it was an ard-share, brought it to my attention. I am most grateful both to him and to Mr Charles Hunt, the curator of the Anthropological Museum, Marischal College, University of Aberdeen, for arranging for the object to be sent to me. It was thought worthwhile to publish a description of the artefact and to take this opportunity to describe other wooden plough pieces from Britain, drawings and descriptions of which are not readily accessible.

THE DUNDARG ARD-SHARE (pl 29)

The piece of oak is 394 mm in length from the pointed tip or working end, to the broken end of the shaft; originally the tool would have been somewhat longer. At its greatest width it is 188 mm, and its maximum thickness is 42 mm. The point of greatest width and thickness is at the centre of the blade at the junction between blade and shaft, and from this point the blade diminishes in width towards the tip, and in thickness both towards the tip and laterally to each edge. The blade is triangular in shape; one face is roughly flat, the other rounded, giving the blade a plano-convex cross-section. The shaft has a square cross-section and is broken jaggedly across at the end, giving little indication of its original length. It is not quite straight, and curves to one side, a feature which is certainly due to irregular shrinkage during drying. Two of the four surfaces of the shaft are fairly flat, but two are irregular and the side at least (the right side of the shaft as viewed on face 1c, fig 1) would appear to have sustained considerable damage. The

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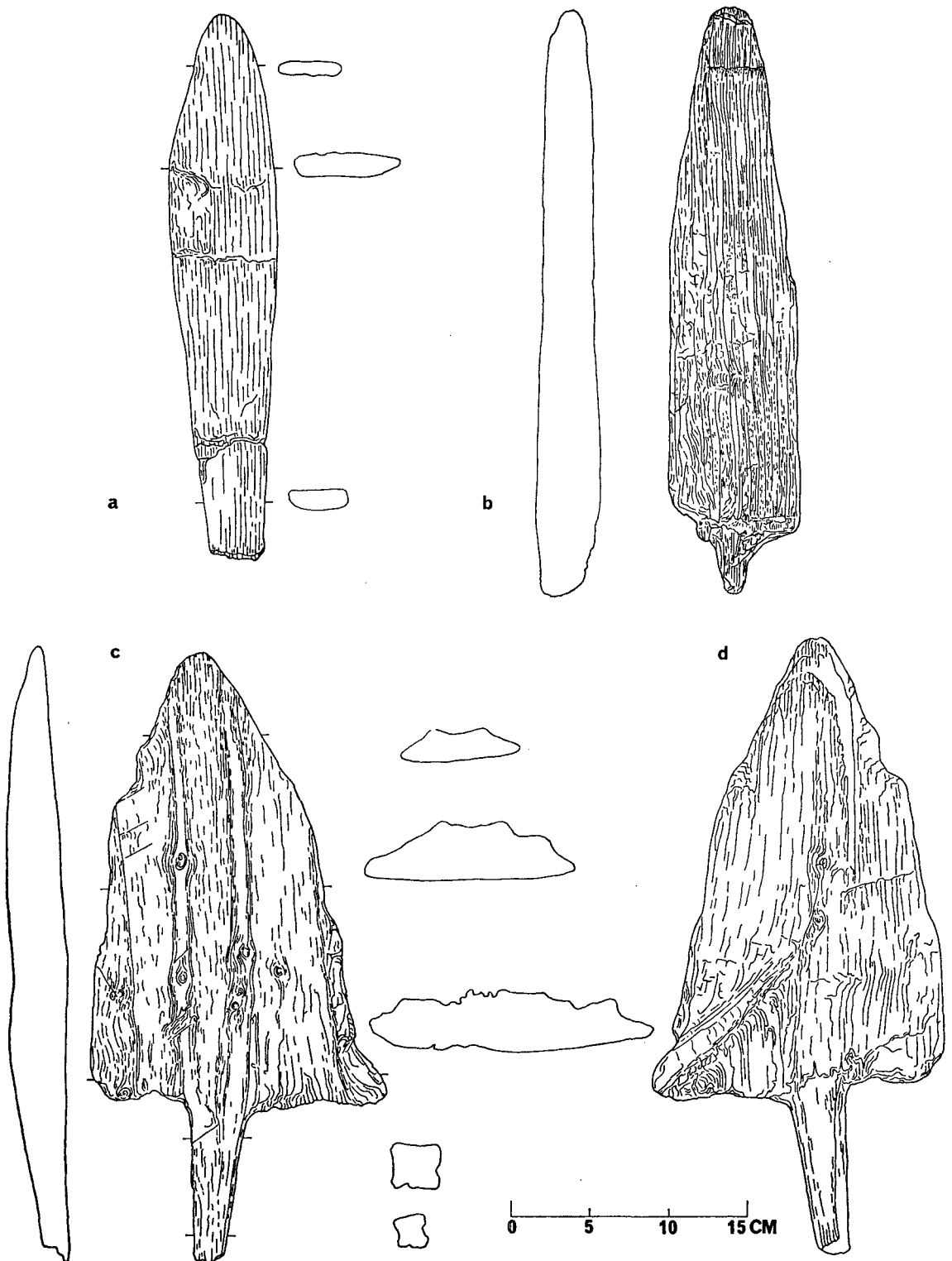


FIG 1 Wooden ard-shares from prehistoric and Roman Britain: a Walesland Rath, b Abingdon (after Oxford Archaeological Unit), c Dundarg; upper face d Dundarg; lower face

shrinkage and consequent distortion of the tool mean that all measurements have been subjected possibly to a high level of distortion, and features such as wear traces, scars of ancient damage or pressure, or even tooling and fashioning are either difficult to detect at all, or to differentiate from later damage or effects of distortion.

The upper (fig 1c) and lower (fig 1d) faces of the shaft are on the same plane as those of the blade, but while the upper face has a curved cross-section as the wings or sides of the blade taper in thickness from that plane, the lower surface is flat, save for the tip where the thickness of the wood diminishes. This lower surface (fig 1d) is now very irregular due to distortion in drying, and, at its widest point, is excessively damaged. There has also been considerable damage to the shaft end of the wings. The upper surface of the blade (fig 1c) is again irregular, but its dominant feature is a central rib which runs along the entire length of the tool in the same plane as the surface of the shaft. This rib, 25 mm wide, is defined by two raised ridges, both c 10 mm wide and 5 mm high. From these ridges, the surface tapers towards the edges of the tool. There are five cut marks, almost certainly of recent origin, on the surface, and the implement responsible for these marks has actually removed a piece of wood, c 35 by 12 mm, from the left hand side of the tool, 90 mm from the tip. Both sides of the blade have sustained damage, the left side (as viewed on face 1c) at the scar mentioned above and with several irregularities above and below it, and the right side has suffered considerable distortion for about half its length towards the shaft. It is noticeable that there is a definite alteration in the direction of the sides of the blade at a point c 90 mm from the tip. At this point, the sides form a more acute angle towards the tip and the cross-section alters also from being fairly sharp-sided to having more blunted sides. On the right side (as viewed on face 1c) there is a slight step here, and it is unfortunate that the left side is so damaged that it is impossible to know whether this step is illusory due to damage or drying distortion, or whether it might be a scar created perhaps by an iron sheath which might originally have protected the tip of the tool. There is on the lower surface (fig 1d) a slight scar running along the right hand side of the tip for a length of c 100 mm, but I was unable to convince myself that this was really anything other than a distortion in the wood, and there is certainly no sign of any sheathing scar on the upper surface. The tip on the upper surface, at least, does appear to be worn smooth and the ridges also have a smoothness not found on other parts of the surface.

INTERPRETATION

It seems probable that this artefact was an ard-share, an arrow-shaped main share from a plough, or an ard possibly of the Donneruplund bow ard type.

TABLE 1
To show comparative dimensions of the blades of main shares of bow ards

	Length (mm)	Width (mm)	Thickness of blade (mm)
Dundarg	295	190	42
Abingdon	340	85	42
Donneruplund	350	160	55
Lund-skaeret	290	90	55
Norre-smedeby 111	240	95	30
Trollerup	400	140	40

As may be seen from the comparative figures above, the Dundarg tool is intermediate in length compared with a number of other bow ard-shares from NW European contexts, and is also average in the thickness of the blade. It is, however, wider than other known ard-shares, and this comparatively great width relative to its length and thickness is one reason for exercising some caution in interpreting this artefact as a share. It is, however, only 30 mm wider than the share from the Donneruplund ard. One of the main reasons for suggesting that the tool is a share is the presence of the central groove and ridges which presumably could have served to hold a foreshare. Other shares, such as those from Donneruplund and Trollerup, have devices for securing a foreshare (in the case of the former, two wooden tenons, in the latter, two raised ribs), as indeed do the ard-heads illustrated in fig 2, which would presumably have served as ard-head and main share in one. The Milton Loch ard-head has raised ribs, the Viridifield ones have grooves. A phenomenon

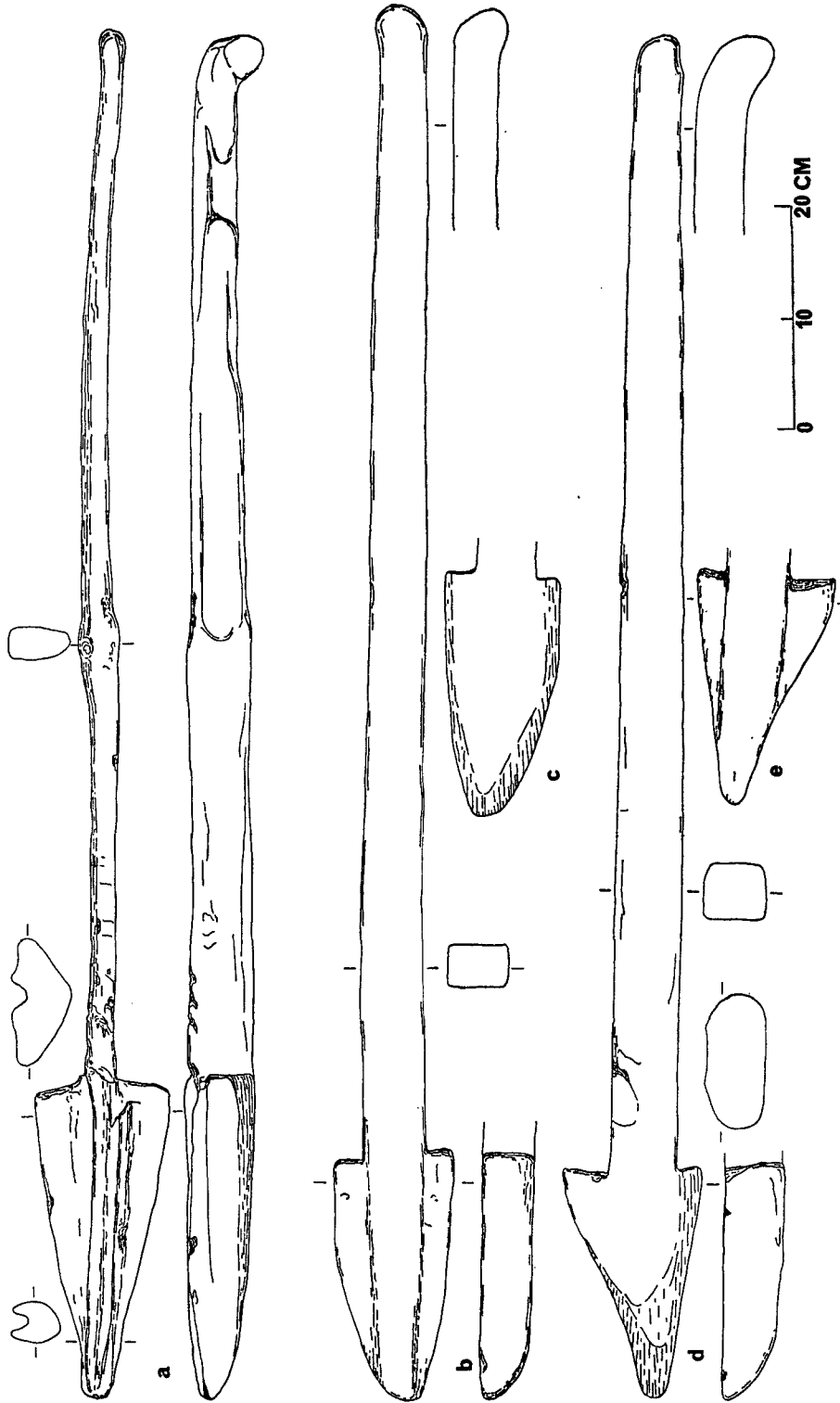


Fig 2 Wooden ard-head and stilt from prehistoric and Roman Britain: a Milton Loch, Dumfries and Galloway, b-e Virdfield, Shetland (b and e show upper faces of blades, c and d, lower faces)

noticed on the Trollerup share (Glob 1945, 98), where the wear between the ribs was considerably less than the wear on the sides of the share causing a dramatically uneven cross-section, can perhaps also be noted on the upper face of the Dundarg blade. Wear is not evident along the central groove between the ridges certainly, though such wear traces as are detectable are along the tip and on the ridges.

Alternative interpretations of the artefact should also be considered. Firstly there is the possibility that instead of a main share, the Dundarg object is part of an ard-head; three examples of ard-head and stilts are known from Scotland (Fenton 1968, 151; Rees 1979, 43), but as may be seen from their illustration in fig 2, the Dundarg tool is not especially similar to these, the most obvious difference being in the dimensions of the shaft. The ard-head and stilts, with their heavier function in the plough, have stalwart shafts and however shrunk or damaged the Dundarg shaft is, it is unlikely to have been as stout as these. A more likely alternative is that the tool is in fact a spade, but it would, in that case, be difficult to understand the function of the groove and ribs. It is of course possible that the groove and ribs are illusory, caused by a distortion in drying along the area of maximum wood thickness where there also are, coincidentally, a number of knots in the wood. If this is so, the case for identifying the tool as a share is significantly weakened. However, the groove and ribs are too prominent a feature to the blade for it to be likely that they are due merely to distortion, and this added to the fact that the ribs exhibit more severe wear than the groove between them, does suggest that they were deliberately fashioned rather than accidental features.

If it is reasonable to suggest that the Dundarg artefact is indeed a share, the change in shape and cross-section 90 mm from the tip may presumably be ascribed to severe wear at this point due to the penetration of the earth to this depth. The share would presumably have held a foreshare in the groove in its upper surface, and the two shares and supporting ard-head would have passed through the mortise in the plough beam. It is particularly unfortunate that it is impossible to ascertain the date of the artefact, as so few ard-shares are known from Britain. Two foreshares have been found at Walesland Rath, Dyfed (fig 1a), one from Usk, Gwent, and what is probably an arrow-shaped main share has been discovered at a site near Abingdon, Oxon (fig 1b) (Fowler 1978), all dating from the first few centuries AD. All these finds and the beam from Lochmaben (see below) tend to confirm the view that the bow ard was the most common ard type used in prehistoric and Roman Britain. Fowler (1981, 212) and Reynolds (1980, 3) have recently suggested that a heavier ard, a type of rip ard, may have been in use alongside the bow ard, and used for breaking a fallow; the evidence for the existence of this is slight and mostly confined to negative evidence – the fact the experiments with modern reconstructions of bow ards have shown that it is very difficult to break fallow land with this type of ard. Of course, we should not close our eyes to the fact that other types of ards, particularly the crook ard for which there is evidence from prehistoric contexts from other NW European countries though not convincingly from Britain as yet, may well have also been used, perhaps for specialized functions.

THE LOCHMABEN ARD BEAM

In 1872, an ard beam was found during ditching operations at Whitereed Moss, Elshieshields, Annandale, near Lochmaben (Dumfries Museum registration number DUMFM: 49.51). It is made of a single piece of alder as is the similar ard beam from Dostrup, Jutland, while the beams of the Donneruplund and Hendriksmose bow ards, both also from Jutland, Denmark, are of birch and oak respectively. The Lochmaben beam is 248 cm in length, and the forepart of the beam is perforated by a rectangular opening 55 by 20 mm for the attachment of the yoke. In this respect it is less sophisticated than the Hendriksmose ard (Hansen 1969, 68) which provided for alternative positions in its forepart for the yoke

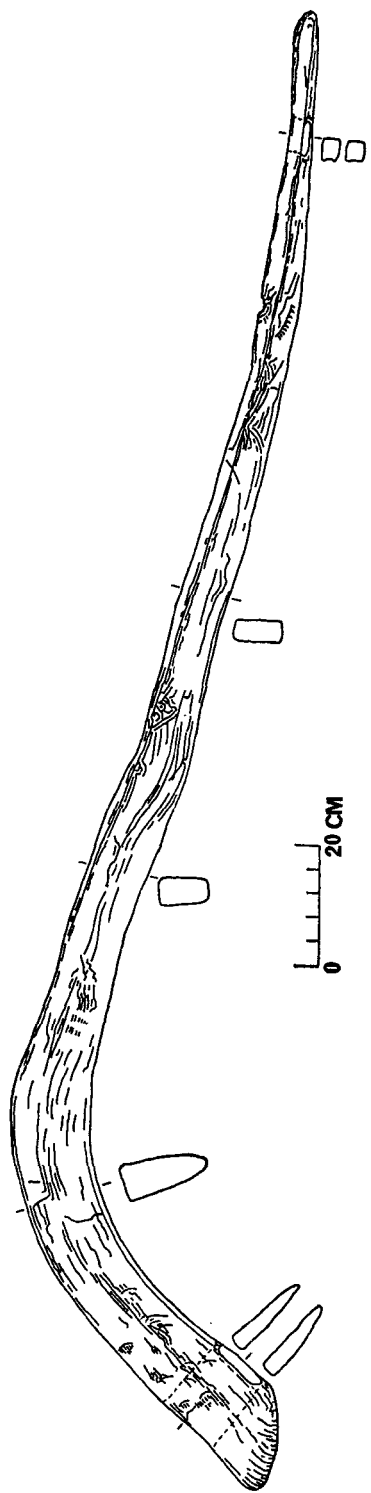


FIG 3 The Lochmaben ard beam

attachment; this would have allowed the ploughman to alter the depth of ploughing. The rear part of the Lochmaben beam has a rectangular mortise, 100 by 45 mm shaped to hold shares at the acute angle to the soil (fig 3) characteristic of the bow ard. In length, the beam lies between the Hendriksmose ard (c 2 m) and the Dostrup beam (c 3 m) and is much longer than the Donneruplund beam (1.7 m) (Glob 1951, 31). The Lochmaben beam has been considerably warped and twisted through uneven drying, and the description and dimensions given above may well be somewhat different from those of the original beam. The drawing of the beam in fig 3 is published with the permission of David Lockwood of the Dumfries Museum; I am most grateful to him for granting this permission and for providing facilities for me for the drawing of the beam.

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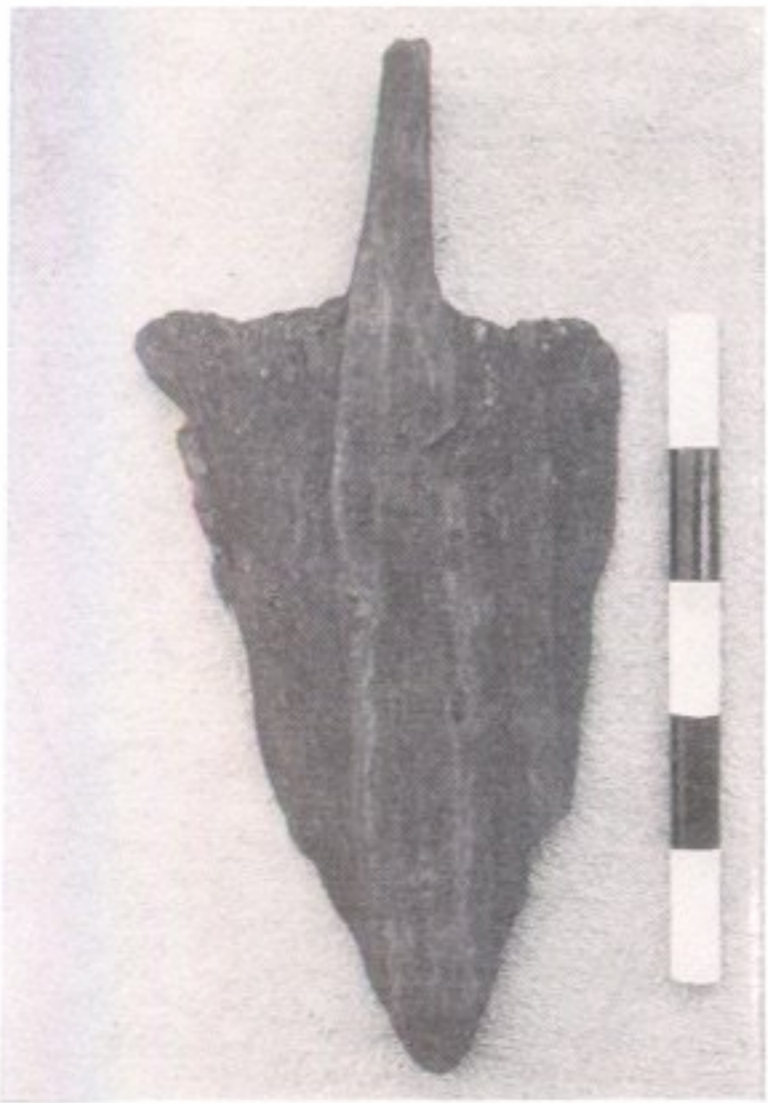
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2 lower face



4 side view of tip



1 upper face



3 tip of upper face