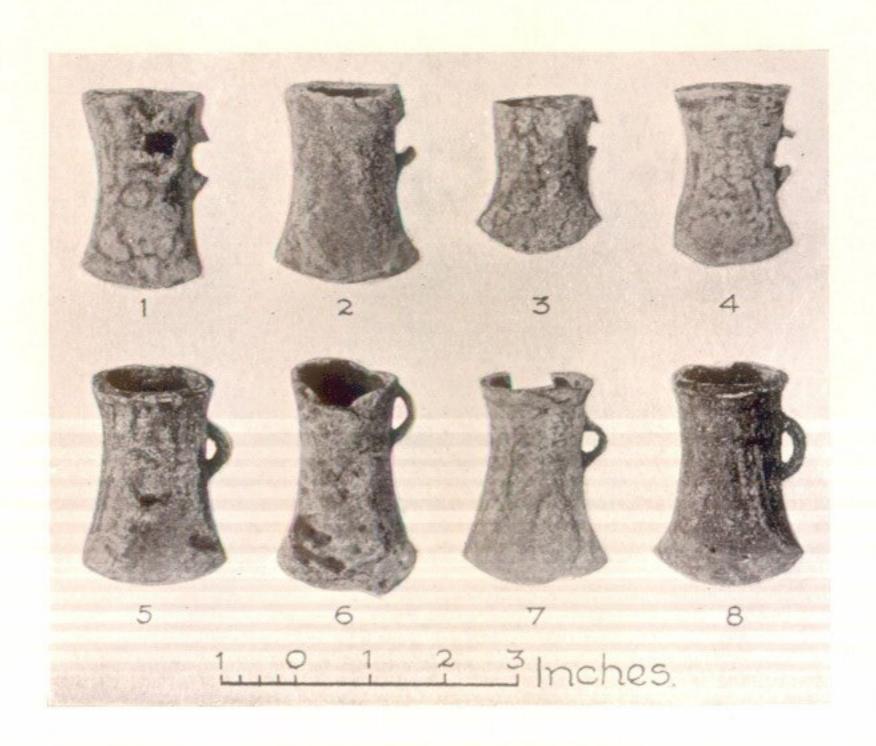
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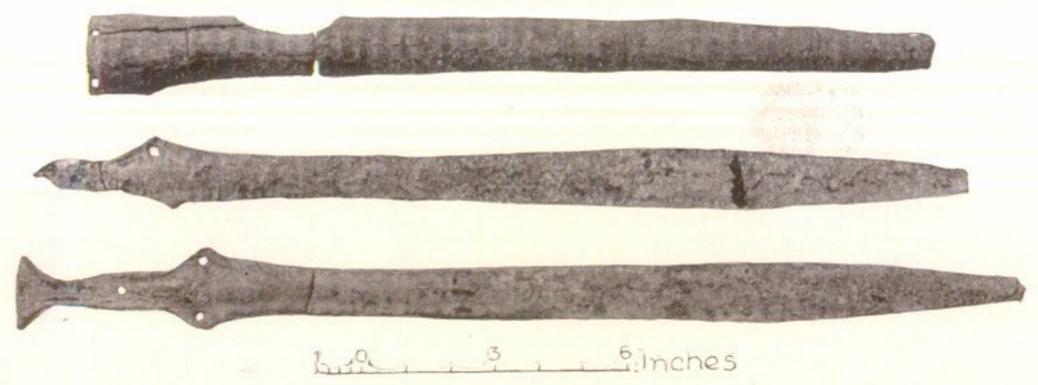
1. A HOARD OF BRONZES FROM BALLYMORE, COWAL, ARGYLL.

Just below Ballymore House, about a mile south of Otter Ferry, a small stream flows out across the shelving beach into Loch Fyne. In excavating an ornamental pond in the house garden a number of bronzes came to light. They were preserved in a case in the drawing-room of the House. When I was visiting the district in 1942 in connection with the work of the Royal Commission on Ancient and Historical Monuments, Scotland, Capt. MacRae, proprietor of Ballymore, kindly drew my attention to the find. Seeing that the relics were suffering badly from corrosion, I suggested that I should take the objects to the National Museum for treatment and incidentally for recording and publication. To this Capt. MacRae courteously agreed.

The hoard consists of eight socketed celts, two leaf-shaped swords, seven spear-heads, and a corrugated bronze tube. All the objects were covered with a beautiful patina, but they were deeply corroded and broken. Some of the spear-heads have been deformed and split lengthwise. The explanation of this distortion was revealed when Mr M. Y. Orr of the Royal Botanic Garden recognised a piece of "wood" extracted from spear-head 4 as a bracken rhizone that had forced its way up the socket. Nevertheless it seems almost certain that all the objects, save perhaps the swords, were already damaged before their deposition in the earth; the hoard in fact belongs to the class, so common in the

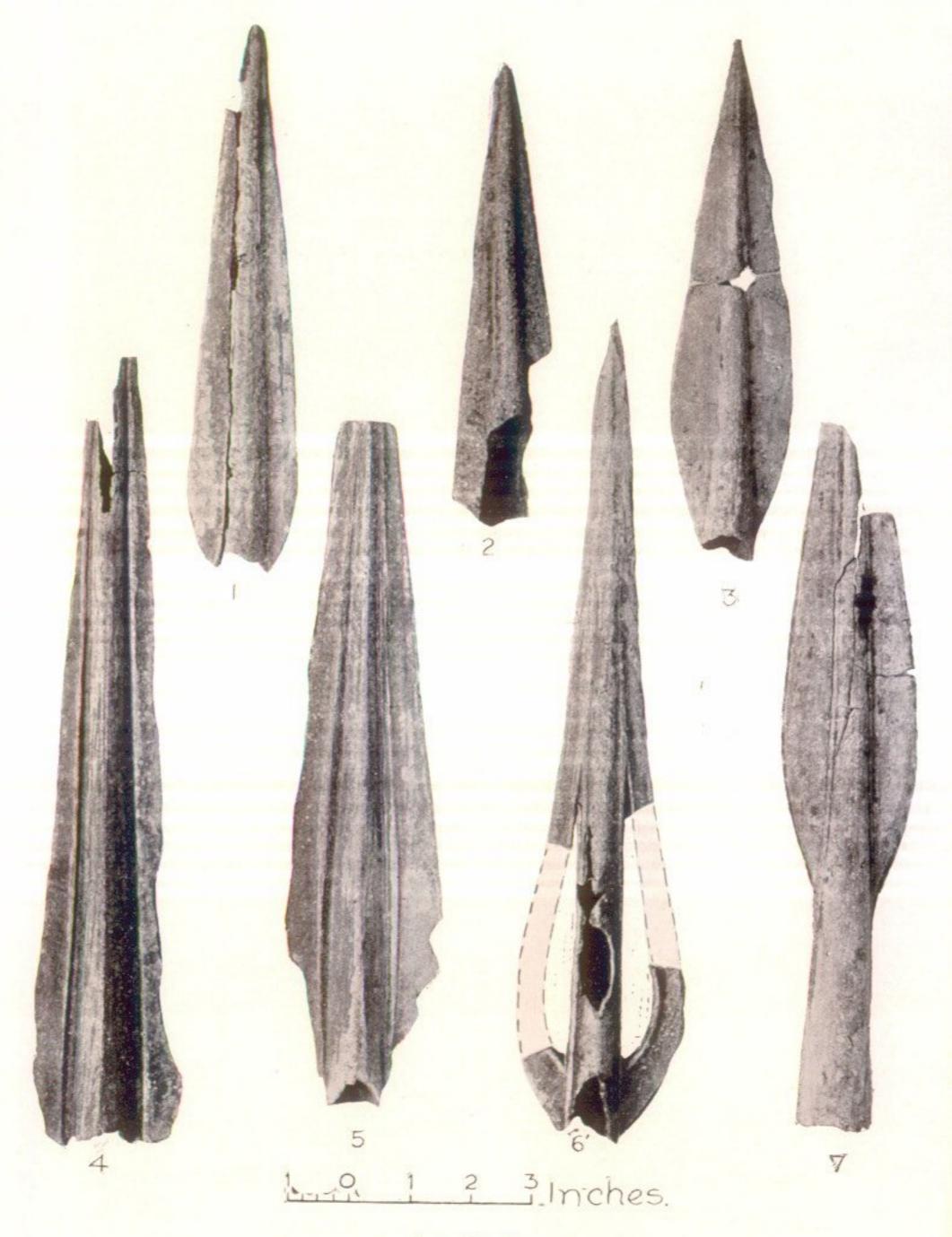
Late Bronze Age, known as founders' hoards.





Axes, Tube and Swords.

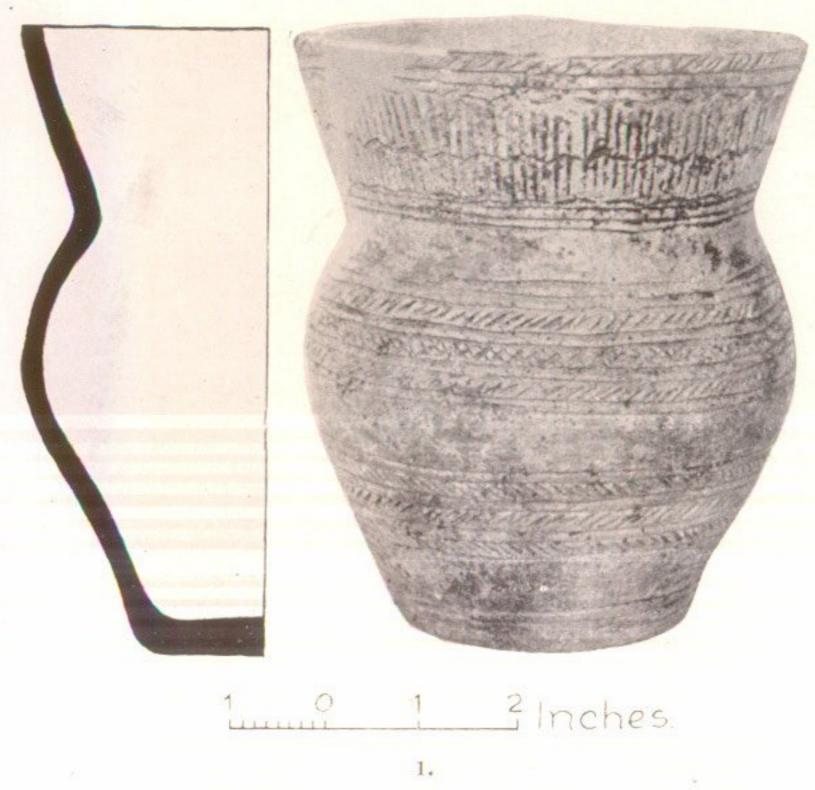
V. GORDON CHILDE.



Spear-heads.

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HOARD FROM COWAL.



BEAKER FROM BOGHEAD FARM, PITSLIGO.

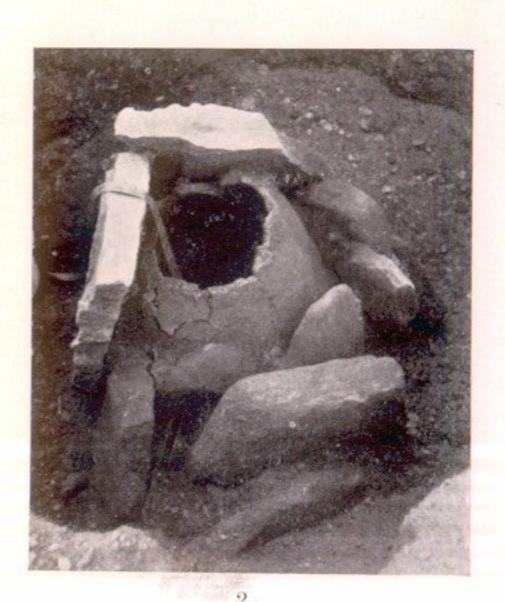


ARROWHEAD FROM LINLITHGOW.

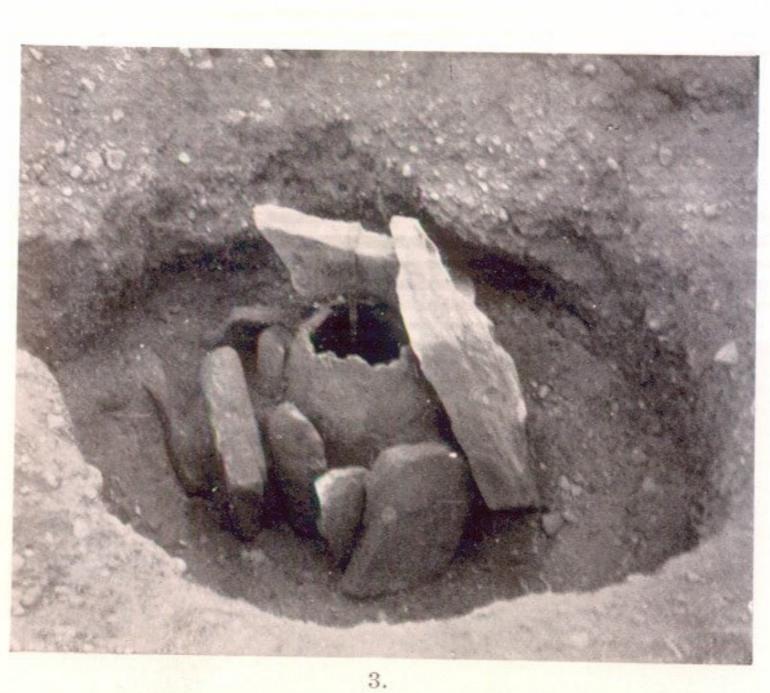


IRON SPEAR-HEAD FROM NORTH UIST.





1.

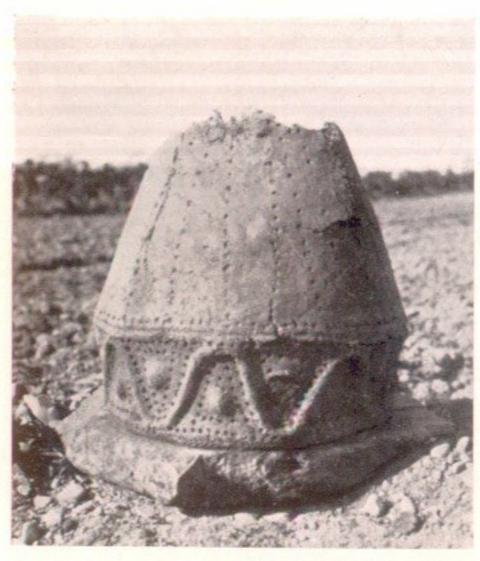


The cist in course of excavation.

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URN FROM ABERLEMNO.





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2.

The axes (Pl. XXV) are all of distinctly Irish type and clearly show a seam along the small side due presumably to casting in a valve mould. All but one are plain. No. 8 (fig. 1) shows a sort of funnel-like collar with a flattened oval cross-section extending for $\frac{3}{4}$ inch below the rim and terminating in a distinct shoulder. Below this the section is faceted and almost octagonal. This too is an Irish form, as Henderson 1 points out, but is not uncommon in Scotland where it is well illustrated in the small hoard from Traprain Law. 2 The dimensions of the axes, as far as they can be determined, are as follows:—

| No. | Length. | External Diameters at Mouth. | Maximum Width of Blade. | Thickness at Rim. | Thickness of Body. |
|--------------------------------------|--|--|--|--------------------------------|--------------------------|
| 1 2 3 3 5 6 7 8 | $\begin{array}{c} \text{Inches.} \\ 2\frac{7}{8} \\ 2\frac{13}{16} \\ 2\frac{1}{4} \\ 2\frac{1}{2} \\ 3 \\ 3\frac{13}{16} \\ 3\frac{3}{16} \\ 3\frac{3}{16} \end{array}$ | Inches. $1\frac{9}{16} \times 1\frac{3}{8}$ $1\frac{5}{16} \times 1\frac{3}{16}$ $1\frac{1}{2} \times 1\frac{1}{4}$ $1\frac{1}{2} \times 1\frac{3}{8}$ $1\frac{9}{16} \times 1\frac{3}{3}$ $1\frac{9}{16} \times 1\frac{3}{3}$ | Inches. $1\frac{5}{6}$ $1\frac{7}{8}$ $1\frac{7}{8}$ $1\frac{7}{8}$ $1\frac{7}{16}$ $1\frac{15}{16}$ 2 2 | Inches 3 16 5 32 3 10 4 4 7 32 | Inches 18 18 18 18 25 |

In both the swords the edges have been eaten away by corrosion and all trace of a ricasso has disappeared. No. 1 is complete save for the point, where

The total surperhaps an inch is missing. viving length is $22\frac{1}{4}$ inches; the blade measures 17 inch at the widest point and $\frac{5}{16}$ inch thick, tapering to $\frac{1}{8}$ inch at the break. The hilt, bordered by very low flanges, is pierced by three rivet-holes, and has a total length of $4\frac{1}{8}$ inches, of which $2\frac{7}{16}$ inches represent the grip that varies in width from 1 inch to 5 inch. In No. 2 about an inch at the point and perhaps $1\frac{1}{2}$ inch at the hilt The surviving length is $20\frac{1}{4}$ are missing. inches, and the thickness of the blade $\frac{1}{4}$ inch, tapering to \(\frac{1}{8}\) inch. Despite differences due to wear, the two weapons when superimposed fit so closely that they might be

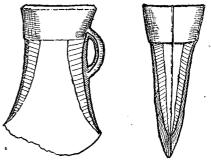


Fig. 1. Socketed axe, No. 8.

thought to be made from the same pattern. The type again is common in Ireland and seems to be a very late version of the V-type sword.

The spear-heads, all regrettably broken, include both long and moderately sized blades. No. 6 (Pl. XXVI) must have been a fine example of the type with lunate openings in the blade. The blade is 13½ inches long and must have been 3½ inches wide across the loops. The socket, that is carried far up the blade, is

¹ Proc. Soc. Ant. Scot., 1937-8, p. 155.

² Childe, Prehistory of Scotland, fig. 40. Rather similar celts occur in Scandinavia, cf. Montelius, Om Tidesbestämning, No. 130.

 $\frac{3}{4}$ inch in diameter at its lower end. It is adorned with four east ribs, from between which the loops emerge below but which above fuse with the flanges reinforcing the inner margins of the loops. Between them within the loops a distinct but irregular seam is visible, showing that the weapon had been cast, like the celts, in a valve-mould. The loops were $\frac{9}{16}$ inch wide and $\frac{1}{4}$ inch thick along the inner margins. No. 5 (on same plate) must also have been a very large blade, but it has been broken roughly at both ends so that only 111 inches remain, and the edge is nowhere clearly defined. The socket is $\frac{13}{16}$ inch in diameter at its lower end and $\frac{5}{16}$ inch at its upper. Externally the socket tube is nearly quadrangular in section and is bordered on either side by a groove, some $\frac{3}{16}$ inch wide, in the blade which reduces the latter's thickness to $\frac{1}{8}$ inch as against \(\frac{1}{4} \) inch at the rib outside the groove. No. 4 (Pl. XXVI, 4) must have been very similar to No. 6, with a blade at least $13\frac{1}{3}$ inches long, of which only 11 inches survive. The internal diameter of the socket at its lower end is 11/2 inch; at its upper end it has been reduced to a solid midrib 3/2 inch thick.

No. 7 is a simpler leaf-shaped spear-head with a total length of 13½ inches, of which 2 inches near the point are missing, so that the blade alone would have been only 10 inches long. The socket is I inch in diameter at its mouth. At a distance of $1\frac{5}{8}$ inch therefrom it is pierced with a pair of peg-holes, $\frac{3}{15}$ inch in diameter. From these start on each side three ribs in relief, of which the central one merges with the edge of the blade while the other two follow the junction between blade and socket-tube on either face. No. 3 (Pl. XXVI, 3) must have been a rather similar though less ornate weapon. Only the blade, 81 inches long and $2\frac{1}{3}$ inches wide, survives. The socket at the base of the blade has an internal diameter of 5 inch. In No. 1 (Pl. XXVI, 1) the blade is about 83 inches long and probably some $1\frac{3}{4}$ inch wide at its widest point. A pair of quite shallow grooves run parallel to the socket tube on either face, on both sides of the socket.

No. 2 only a fragment $7\frac{1}{2}$ inches long survives.

These spear-heads are all distinctively Britannico-Hibernian types of the Late Bronze Age. Though at least the form with lunate openings in the blade must go back nearly to the beginning of that typological period, all appear to

have enjoyed a long currency.

The cast tube of bronze, $\frac{1}{16}$ inch to $\frac{3}{32}$ inch thick and now $18\frac{1}{4}$ inches long, but very fragmentary, is shown in Pl. XXV. One end alone is complete. Here the tube is roughly circular and $1\frac{5}{8}$ inch in diameter. Just below the rim are four large peg-holes, ½ inch in diameter but not quite symmetrically opposite one another. From this mouth the tube seems to have tapered gradually till after 18 inches the diameter seems to have been reduced to $1\frac{3}{3}$ inch—less than half the tube's circumference is preserved here. The tube is, moreover, very slightly curved or bent so that a straight rod set tangentially to the smooth inner surface is $\frac{1}{2}$ inch out of contact therewith after $13\frac{1}{2}$ inches. Externally the tube is embellished with cast corrugations $\frac{3}{8}$ inch to $\frac{7}{16}$ inch wide that maintain the same average width throughout the whole preserved length.

The smallness of the curvature, if it be deliberate at all, makes it difficult to fit the tube into the profile of a trumpet or even a lurer, nor are the peg-holes appropriate to either of these instruments. If it had been the ferrule for a spearbutt, the shaft must have been quite exceptionally stout since "the diameter of the mouth is always less than that of the socket of the heads found associated with ferrules." In fact the known ferrules have mouths of $\frac{3}{4}$ inch or less

¹ Childe, Prehistoric Communities of the British Isles, p. 171.

² Greenwell and Brewis, Archæologia, xli. p. 467.

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diameter and lengths varying from 16 inches to 8 inches according to Greenwell and Brewis. They generally taper at first, but then expand to a flat or globular butt. A specimen in the National Museum that tapers to a point is even smaller. The use of the tube must therefore be declared unknown.

The find just described represents the first hoard, in fact the first accurately located Late Bronze Age objects, to be reported from the eastern shore of Loch Fyne. The location of this group of Irish bronzes is, however, by no means surprising. It is almost opposite Loch Gilp, one terminus of a well-known trade route from Crinan and the Sound of Jura and not far from Tarbert, where the dangerous peninsula could also be crossed, so that westward it could be linked up with the Islay hoard. At the same time Otter Ferry is the terminus of a natural but rather difficult route, still followed by a road, across the Cowal peninsula to Holy Loch and the Clyde estuary.

V. GORDON CHILDE.