

## I.

### NOTICE OF A BRONZE BUCKET-SHAPED VESSEL OR CALDRON, EXHIBITED BY H. D. ERSKINE, ESQ. OF CARDROSS. BY JOSEPH ANDERSON, LL.D., ASSISTANT SECRETARY AND KEEPER OF THE MUSEUM.

The bronze vessel, now exhibited by Mr H. D. Erskine of Cardross, is the only one of its kind known to me in Scotland, although it belongs to a well-known class of bronze vessels, of which there are a number of examples recorded in England and Ireland. An allied class of bronze vessels closely similar in character, though differing in certain features, is pretty widely distributed on the Continent.

The caldron now exhibited (fig. 1) is a deep conical or bucket-shaped vessel, measuring 19 inches in height, 10 inches in diameter across the bottom, and 14 inches across the mouth, widening to 16 inches at the shoulder, which is about 2 inches below the brim. The brim, which is about an inch in depth, is slightly everted. The vessel is made of three plates or sheets of bronze hammered very thin, almost as thin as a stout sheet of packing paper. One plate or sheet forms the bottom, and part of the lower circumference to a height of 6 inches above the bottom, the other two, each of which forms one-half of the upper part of the vessel, are joined to each other and to the bottom part by rivets. Round the brim is a stout rod or wire of bronze, over which the upper margin of the sheets forming the sides of the vessel are folded. The rivets which hold the plates together are placed about an inch apart from centre to centre, and have "washers" under their heads on the outside. A number of fractures in the sides of the vessel have been patched up by bringing the edges together, and driving a row of closely-set rivets along the line of the fracture. The remarkable thinness of the

plates makes this method of patching easy and effective. The hammered angle or bend of the lower plate to form the bottom of the vessel is



Fig. 1. Bronze Caldron found at Cardross, and bottom of same  
(19 inches in height).

strengthened by a flat ring and cross-spokes of bronze cast in one piece,

and fastened to the exterior of the bottom by one rivet through the centre and four in the circumference, one being driven through each extremity of the cross-spokes. On the circumference of the ring, which is  $1\frac{1}{2}$  inches in width, a flange rises 1 inch in height to protect the weak part of the plate at the angle formed by the bottom with the side. The cross-spokes on the bottom are 1 inch in width. They are ornamented with a pattern of four raised parallel lines meeting a square in the centre of intersection, while the ring is ornamented by a pattern of four depressed lines parallel to the circumference, meeting a group of short incised lines placed radially to the circumference at the junctions of the four spokes. The two rings for suspension are peculiarly placed on the inside of the lip, passing through ornamental flattened loops, the broad ends of which are clamped over the outside and inside of the lip. The rings, which are  $3\frac{3}{4}$  inches in diameter, are four-sided in section, and when lying free in their loops hang towards the inside of the vessel.

Mr Erskine informs me that this interesting caldron was found in his grandfather's time in what had always been considered to be a Roman Camp on the north-west corner of the Flanders Moss, on the estate of Cardross. This so-called Roman Camp is noticed by Rev. W. Macgregor Stirling, in his *Notes on the Priory of Inchmahome*, published in 1815 :—"On the north side of Moss Flanders, on the estate of Cardross, is the remains, very entire, of a Roman castellum, about 50 paces in diameter, and irregularly square." From the sketch-plan of it, a rough copy of which has been sent me by Mr Erskine, it is apparently a military work, of irregularly rhomboidal form, with unequal sides, composed of a double rampart, with a ditch between the ramparts, and a small outwork at one corner. The longest side of the exterior is but 56 paces, and the next longest 49 paces. The space enclosed within the inner rampart is only 29 paces by 25 paces. It is therefore quite a small fortalice, and its Roman attribution remains to be investigated.

Formerly all these riveted caldrons of bronze, which we now know to be of much earlier origin and of native manufacture, were assigned as camp-kettles to the Roman legions. They are of two varieties of shape, one large and spheroidal and the other bucket-shaped or conical. The large spheroidal shape has been found only in the British Isles, and

most abundantly in Ireland, where the Romans never were. The conical shape is found not only in the British Isles, but extending over the Continent to Italy, and in circumstances which assign it to a stage of civilisation considerably earlier than the Roman Empire.

We have in the Museum a splendid specimen of the spheroidal caldron from the Moss of Kincardine, in the same valley of the Forth, and another from the west of Scotland, the workmanship of which is surprisingly fine, and even beautiful.<sup>1</sup> It was in a similar caldron that the great hoard of bronze weapons dredged up in Duddingstone Loch had been deposited. The body of the caldron is gone, but its massive ring-handles remain to bear witness to its presence with the hoard. It was in one such also that the hoard of bronze weapons found at Kilkerran, in Ayrshire, had been deposited, as similarly testified by the handles. In the great Dowris hoard of bronze implements found near Parsonstown, King's county, Ireland, before 1830, there were several spheroidal caldrons, and one of the conical form 16 inches high. A summary of the contents of the hoard, which was probably stowed in the caldrons, is given by Mr Evans as follows:—"It comprised, besides trumpets and socketed celts, a casting for a hammer-head, a socketed knife, tanged knives, razors, a broad rapier-shaped dagger-blade, broken swords, a dagger formed from part of a sword, spear-heads leaf-shaped and with openings in the blade, vessels of thin bronze, rough metal, some rattles or crotals, and rubbing stones for grinding and polishing."<sup>2</sup>

This hoard discloses the fact (which we might have inferred from the similarity of the workmanship) that the spheroidal and the conical caldrons with these peculiar ring-handles are contemporary forms, and of native workmanship. Though the conical shape appears on the Continent it differs in outline, in ornament, and specially in this, that the handles are never like those of the British and Irish caldrons—rings affixed to the brim by flat ornamented loops.

I only know of one French example of the conical bronze vessel.

<sup>1</sup> See "Notice of a Bronze Caldron, found with several small Kegs of Butter, in a Moss near Kyleakin, Skye; with Notes of other Caldrons of Bronze found in Scotland," in the *Proceedings* (Second Series), vol. vii. pp. 309, 315, for figures of these caldrons.

<sup>2</sup> Evans, *Bronze Implements of Great Britain*, p. 361 and p. 412.

It is much smaller than our caldrons, and is in fact a cinerary urn, found in a tumulus in Brittany,<sup>1</sup> filled with burnt bones, and covered by a shallow round-bottomed vessel, also of bronze. It has a simple bucket shape without neck or shoulder, and a pair of outside ears or loops for a bow-handle.

Conical vessels of bronze, also of smaller size than our caldrons, though, like them, formed of thin plates riveted together, have been occasionally found in the grave-mounds of Switzerland. One such from a grave-mound at Russikon in Canton, Zurich,<sup>2</sup> is  $9\frac{1}{2}$  inches in height by  $7\frac{1}{2}$  inches across the mouth, and has two pairs of rivet-holes on opposite sides near the brim, but the attachments of the handle no longer exist.

Two, measuring respectively  $11\frac{5}{8}$  inches high by  $11\frac{3}{8}$  inches diameter at the mouth, and  $10\frac{5}{8}$  inches high by  $11\frac{5}{8}$  across the mouth, having fixed projecting side handles, attached by rivets beneath the shoulder, and ornamented on the side by an incised wheel pattern flanked by birds' heads, were found in a moss at Siem, in Oalberg, Jylland, and are in the Copenhagen Museum.<sup>3</sup> A third, which is more of a doubly conical shape, with the shoulder near the middle of its height, and tapering both to the top and bottom, was found in 1862 in a peat-moss at Lavindsgaard, Ronninge, Denmark. It stands 13 inches high, and is  $8\frac{1}{2}$  inches diameter at the mouth, but widens to 12 inches at the middle, and has a couple of fixed projecting side handles at the shoulder. When found there were in it eleven vases of fine gold, all of one size and form, but differently ornamented with patterns of concentric rings in repousse work. They measured  $4\frac{3}{4}$  inches diameter and  $2\frac{1}{2}$  inches deep, and were shaped like the bowl of a ladle, having long handles ending in birds' heads.<sup>4</sup> The core of the handles was of bronze, bound round with gold wire. The gold was almost pure, and the aggregate weight was 74 ounces. The find, which is now in the Copenhagen Museum, was made

<sup>1</sup> *Revue Archæologique*, 1873, p. 326.

<sup>2</sup> *Mittheilungen der Antiquarischen Gesellschaft*, Zurich, vol. ii. Taf. 2, fig. 7, and p. 34.

<sup>3</sup> Madsen's *Afbildninger*, vol. ii. pl. xxiv., and Lindenschmidt's *Allerthumer*, vol. iii. p. 9.

<sup>4</sup> Madsen's *Afbildninger*, vol. ii. pls. xxv.-xxvii.

by a man who had obtained leave from a neighbouring proprietor to dig some peats for himself as a favour.

A number of these conical vessels were found in the great cemetery of Hallstadt, in Austria.<sup>1</sup> Some had covers, and were used as cinerary urns. Some had single or double bow-handles of brass and sometimes of iron, swung in ears or loops attached to the outside of the brim. Others had two or sometimes three broad loop-handles fixed from the shoulder to the brim, and others had no handles of any kind. They ranged from about 9 inches in height by  $7\frac{1}{2}$  inches in diameter at the mouth, to about 20 inches in height by 15 inches in diameter at the mouth.

But, as I have said, all these foreign examples differ from the Scottish and Irish caldrons, in having fixed side handles like the terra-cotta vases implanted on the sides, often at a considerable distance beneath the brim, whereas the native method of handling is by rings loosely held in a broad ornamental loop, projecting on the inner side of the brim over the concavity of the vessel.

As to the uses of these great caldrons, there is no doubt that the legendary literature is right when it assigns to them a culinary purpose. They are often referred to as heir-looms in families, and as forming part of the royal property of the early kings. For instance, in the ancient historical tale called the Banquet of Dun Na-n-Gedh and the causes of the Battle of Magh Rath, events assigned to the seventh century, there is an account of the regal caldron which belonged to Eoghan Buidhe, king of Dalriada in Scotland, and was kept in his palace at Dan Monaidh. It is described as "the cauldron which used to give his proper share to each, and no party went away from it unsatisfied, for whatever quantity was put into it, there was never boiled of it but what was sufficient for the company according to their grade and rank"; and it is added that it was a similar caldron to six others which are separately enumerated as historical caldrons kept in the royal palaces of Ireland, the fame of which is supposed to have been familiar to the reader of the story. In the account of the Boromean tribute preserved in the *Book of Leinster*, we read of bronze caldrons for brewing the ale of the various chiefs, of which some were so large that a couple of sheep

<sup>1</sup> Von Sacken, *Das Grabfeld von Hallstadt*, Taf. xx.

could be boiled in them at once. It must be remembered that the sheep were smaller then than now. Caldrons are also mentioned in the Book of Rights as part of the tribute due by one king to another.

Of course, these literary references are long after the time to which both forms of these thin bronze caldrons properly belong. The objects found with them at Dowris and in the Heathery Burn Cave show clearly that they must be referred to the latter part of the Bronze Age—that is, to a period before the introduction of iron into Britain, or probably to some centuries before the Christian era. But such serviceable utensils as these, having once become fashionable and historical, would not go readily out of use. We have examples of them, found with hoards of iron objects—tools and weapons of the Iron Age—just as we had the earlier examples found with hoards of the Bronze Age.