

III. NOTICES OF THE POTTERY, BRONZE AND OTHER ARTICLES DISCOVERED DURING THE EXCAVATIONS. BY JOSEPH ANDERSON, LL.D., ASSISTANT SECRETARY AND KEEPER OF THE MUSEUM.

The relics found at Ardoch are generally of the same nature as those from other sites of Roman occupation, consisting chiefly of articles of pottery and glass, bronze, iron and lead, with a few fragments of sculptured or inscribed tablets or portions of architectural decorations.

The following is a detailed list of the objects found :—

Glass Vessels, etc.—A very small fragment of a vessel of thin opalescent glass ornamented with incised lines.

About thirty small fragments of a vessel of clear crystalline glass of considerable thickness ornamented externally with incuse ovals, similar to the portion of a beaker or drinking-cup found at Birrens.

Fragments of square-shaped bottles of thick bluish green glass.

Portion of flat window-glass of a greenish hue, with one face rough

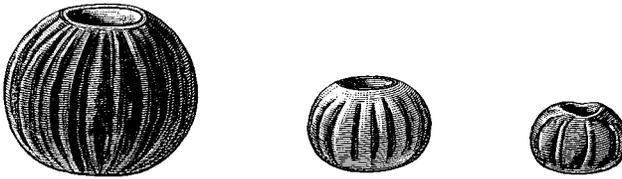


Fig. 1. Three Melon-Shaped Beads. (†.)

and the other smooth, and having at one side the rounded edge of the melted cake of glass.

Three ribbed melon-shaped beads (fig. 1) of a vitreous, or rather of a kind of porcellanic paste, 1 inch, $\frac{1}{2}$ inch, and $\frac{3}{8}$ inch in diameter respectively.

A small bead of amber nearly $\frac{3}{8}$ inch in diameter.

Pottery.—Portion of the lower part of the side of a bowl of the red

lustrous ware commonly called "Samian," ornamented with human figures in rectilinear compartments and animals below (fig. 2).

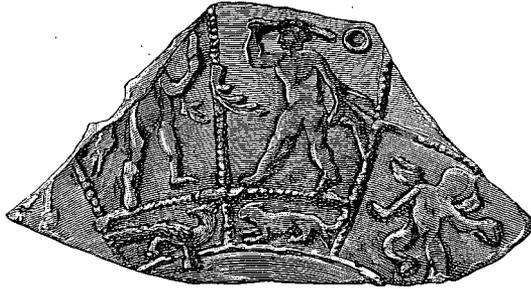


Fig. 2. Portion of Bowl of "Samian" Ware. (†.)

Portion of the side of a smaller bowl of the same ware, also ornamented with figures in rectilinear compartments.

Portion of the side of a large bowl of the same ware, ornamented

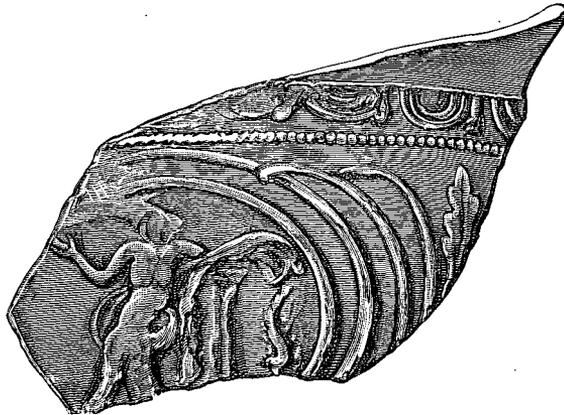


Fig. 3. Portion of Bowl of "Samian" Ware. (†.)

with figures in circular compartments surrounded by a scroll of foliage, under a band of the usual festooned ornament (fig. 3).

Portion of the side of a smaller bowl of the same ware ornamented in zones with foliage and ivy leaves.

Portion of the side of a bowl of the same ware, ornamented with scrolls and figures of animals in circular compartments.

Portion of the side of a bowl of the same ware with ornamentation of bunches of leaves in rectilinear compartments.

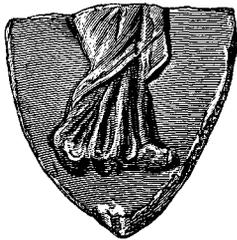


Fig. 4. Fragment of
"Samian" Bowl. ($\frac{1}{4}$.)

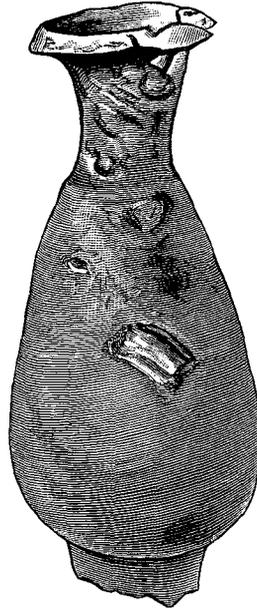


Fig. 5. Amphora of Whitish
Earthenware. ($1\frac{1}{2}$.)

Portion of a shallow saucer-shaped dish of "Samian" ware, with a turned-over rim ornamented with a wavy scroll of foliage.

Small fragment of the side of a bowl of "Samian" ware, with the lower part of the drapery of a figure in exceptionally high relief (fig. 4).

Portions of the bottoms and lips of several vessels of the same ware, showing no ornament.

Large two-handled amphora of white earthenware (fig. 5) elongated in shape, with conical bottom, and the lip turned over a cylindrical neck. It measures 3 feet 6 inches in height, 12 inches in greatest diameter, and 8 inches in diameter at the mouth. The handles are gone.

Under-part (reconstructed) of a large jar (*dolium*) of reddish earthenware (fig. 6), measuring 21 inches in diameter and 13 inches in depth. The part pieced together does not rise to the turn of the shoulder, but shows that the shape of the lower part of the vessel was spheroidal. No part of the shoulder or the neck was recognisable.

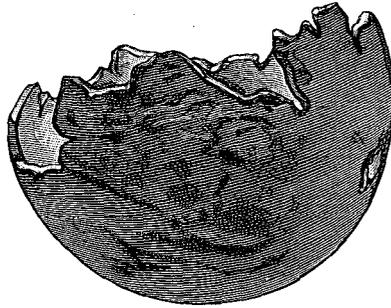


Fig. 6. Lower Part of large Jar of Earthenware. ($\frac{1}{17}$.)

Upper part of a large amphora of brownish earthenware, comprising the mouth, neck, and part of the shoulder with one of the handles. The mouth, which wants the lip, measures $4\frac{1}{2}$ inches in diameter, the neck is 6 inches in length, and the loop handle 2 inches in thickness, making a loop 6 inches in length by $2\frac{1}{2}$ inches in width.

Portion (reconstructed) of a jar of reddish earthenware (fig. 7), showing one side from the bottom to the lip. It stands 7 inches in height, is 4 inches in diameter at the bottom, swelling to a diameter of about 6 inches at the shoulder, and narrowing to a neck of about $4\frac{1}{2}$ inches diameter, above which is a slightly everted lip.

Portion (reconstructed) of the upper part of a deep basin-shaped

vessel of reddish earthenware, which has been about 10 inches in diameter, and more than $4\frac{1}{2}$ inches in depth, with a flattened brim projecting slightly on the outside. The exterior is ornamented with slightly scraped parallel lines about half an inch apart, crossing each other and slanting in opposite directions.

Portion (reconstructed) of the upper part of a large jar of dark-grey

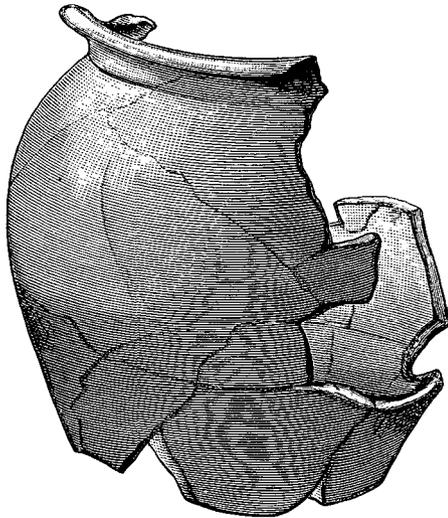


Fig. 7. Jar of Reddish Earthenware. ($\frac{1}{3}$.)

ware, which must have been between 11 and 12 inches in diameter at the shoulder, with a short narrow neck, and everted lip.

Portion (reconstructed) of a small bowl-shaped vessel of reddish earthenware, about 4 inches diameter at the mouth and $2\frac{1}{2}$ inches high, with a flat rim having a slight moulding on the outside. The side of the vessel rises in two curves from a bottom with a slight cylindrical pedestal $1\frac{3}{4}$ inches in diameter and $\frac{1}{2}$ inch in height.

Portion of a reddish coloured vessel with straight sides pierced with

holes $\frac{3}{8}$ inch in diameter, and portion of the flat bottom of a similar vessel pierced with similar holes.

Portion of a whitish coloured jar, ornamented with parallel ribs and intervening depressions about $\frac{1}{8}$ inch in width running round the external surface horizontally.

Portion of a small vessel of reddish coloured clay, extremely thin and ornamented externally with a granular surface coloured black.

Mortarium (reconstructed), with an internal diameter of 9 inches and internal depth of 3 inches, greyish white, the interior surface studded with pounded fragments of a very dark stone like crystals of hornblende mixed with very small quartz pebbles (fig. 8).

There are also about forty fragments of pottery of mediæval character, chiefly portions of water jars with loop handles, coated outside and

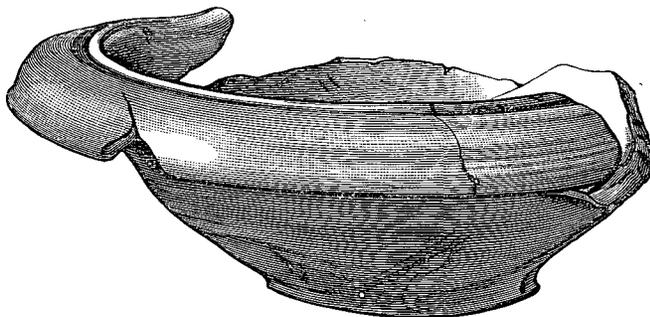


Fig. 8. Mortarium of Greyish Earthenware. ($\frac{1}{3}$.)

inside with a greenish or a yellowish glaze. Glazed vessels have been found by General Pitt Rivers in association with Romano-British pottery at Rotherley, Wiltshire, and also in London.

About 75 oval pellets of burnt clay, two of which are shown in fig. 9. They are made in the shape of the leaden sling-bolts, and vary from $1\frac{3}{4}$ inches in length and $1\frac{1}{4}$ inches in greatest diameter to $1\frac{1}{4}$ inches in length and $\frac{3}{4}$ inch in diameter. The weight of the heaviest does not much exceed $1\frac{1}{4}$ ounces and that of the lightest $\frac{3}{4}$ of an ounce. The bulk of them were found chiefly at the south side of the Prætorium in

the length of about 4 to 6 feet of a trench cut through it diagonally, but others were also found scattered over the general area. Clay sling-bullets made red hot were used by the Nervii in their attack upon Cicero's camp¹ to fire the straw-thatched roofs of the Romans, and a quantity of ovoid balls made of baked clay have been found at Breteuil (Oise). Several similar ones are in Salisbury Museum, having been found in the pits at Highfield. Speaking of one found in one of the pits at Mount Caburn Camp near Lewes, which he considered to be a late-Celtic and pre-Roman intrenchment, General Pitt Rivers says:²—"The sling-bullet of clay is worthy of attention. That this was its use there can be little

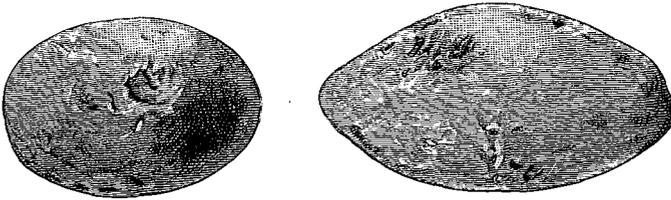


Fig. 9. Pellets or Sling-bolts of Burnt Clay. (†.)

doubt from its exact resemblance to the Greek and Roman leaden pellets of the same form. In size it naturally exceeds the Roman model, otherwise it would not have been heavy enough to serve as an effective missile; its weight, 263 grains, is the least that would be desirable for such a purpose; the pointed oval form adapts it to lie evenly in the broad bend of the sling and to receive the rotatory motion imparted to it by the release of one of the thongs."

The following is a list of the potter's marks observed at Ardoch:—

DAZCOL on the handle of an amphora
 I·N·S on the handle of an amphora
 DOM on the handle of an amphora
 . . . VX on the lip of a mortarium

¹ Caesar, *de Bello Gallico*, v. c. 35.

² *Archæologia*, vol. xlv. p. 467.

EN on the lip of a mortarium

FTV on the lip of a mortarium

VF on the lip of a mortarium

II on the lip of a mortarium

IOL on the lip of a mortarium

AVITI·MA (for *manu*) on the inside of the bottom of a small cup of Samian ware.

Several of the mortaria have the stamp of a palm branch on the lip instead of lettering.

Tiles and Concrete.—One portion of a floor-tile of red clay 6 by 6 inches and $1\frac{1}{2}$ inches in thickness. This is the largest portion of a tile found. Several other, but smaller, fragments of the same description were found here and there.

Portion of a small tile, 3 by 3 inches, and $\frac{1}{2}$ an inch in thickness, with slightly bevelled borders ornamented with oblique and slightly irregular crimping, as if done by hand.

A number of irregular portions of concrete flooring, some of which were more than a foot square, were also found. The concrete is made of lime mixed with pounded tiles and small gravel, in a layer of about the same thickness as a tile, the upper surface being composed of a thin layer of small gravel closely imbedded in the mass.

Objects of Bronze.—The bronze objects found are few in number, but one or two are interesting on account of their character as relics of what we are accustomed to regard as pre-Roman culture:—

(1.) A bronze socketed axe (fig. 10). This axe is of the usual variety attributed to the latest phase of the Bronze Age: the socket an oval with slightly compressed ends, a loop on one side $\frac{5}{8}$ inch below the rim. The rim has a slight moulding of about $\frac{1}{8}$ inch in width, and a quarter of an inch under it there is a flat moulding or ridge of about the same width. The whole length of the implement is $2\frac{3}{4}$ inches, the width across the cutting face (which is a segment of a large circle) is $2\frac{1}{4}$ inches, and the width across the socket $1\frac{5}{8}$ inches. It differs in no respect from the usual Bronze Age type of socketed implement frequently found in Scotland, but never heretofore in association with Roman remains. It was found

at the west side of the Prætorian buildings, a few feet within the western wall, and 2 feet 6 inches under the present surface.

(2.) A portion of a bronze harness ring of late-Celtic form (fig. 11).



Fig. 10. Bronze Socketed Axe found in the Prætorium. ($\frac{1}{2}$.)

This bronze ring or harness-mounting is unfortunately broken, but enough remains to show the character of the object. It belongs to the

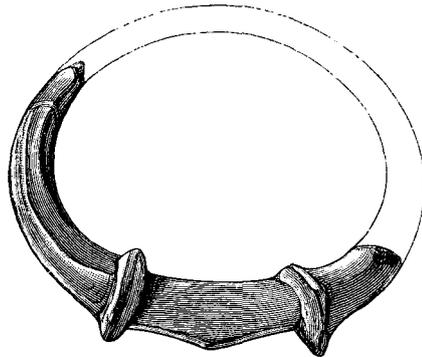


Fig. 11. Bronze Harness Ring. ($\frac{1}{2}$.)

class of horse-trappings in the shape of a penannular ring, with a flattened space between the two projecting ends. They have been repeatedly found in connection with other articles of late-Celtic type, as

at Polden Hill, Stanwick and Westall. A smaller sized one, not quite of the same form but of similar character, was found on the site of the Roman station at Bremenium, near High Rochester, in Northumberland.¹

(3.) Part of the flat handle of a bronze patella, $2\frac{1}{2}$ inches in length by $\frac{7}{8}$ inch in width at the narrowest part, widening to $1\frac{1}{2}$ inches at the widest part.

(4.) Bronze mounting of the end of a belt or strap (fig. 12) $3\frac{1}{2}$ inches in length by $\frac{1}{2}$ inch in width, with a bolt-like termination. One side of the part which received the strap-end is gone, but two rivets remain, with a small portion of the leather enclosed.



Fig. 12. Bronze Belt-Mounting. (4.)

(5.) Portion of a bronze mounting (fig. 13), 2 inches in length, with rounded termination pierced with a small hole in the centre. The straight part is ornamented with an incised equilateral triangle having small circles at the apices.

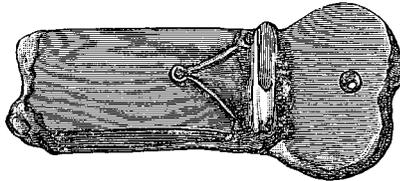


Fig. 13. Bronze Belt-Mounting. (4.)

(6.) Bronze stud, of conical shape, half an inch in height, and a $\frac{1}{4}$ of an inch in diameter. It has been attached to a flat base-plate of which only a small portion now remains.

¹ It is figured in the Catalogue of Antiquities at Alnwick Castle, privately printed by the Duke of Northumberland (1880), p. 145.

(7.) Circular disc of bronze with broken sides, as if it had been the terminal portion of a hollow cylinder $\frac{7}{8}$ inch in diameter. The interior is covered with oxide of iron, and the exterior ornamented with incised lines arranged in a circle round the projecting central part.

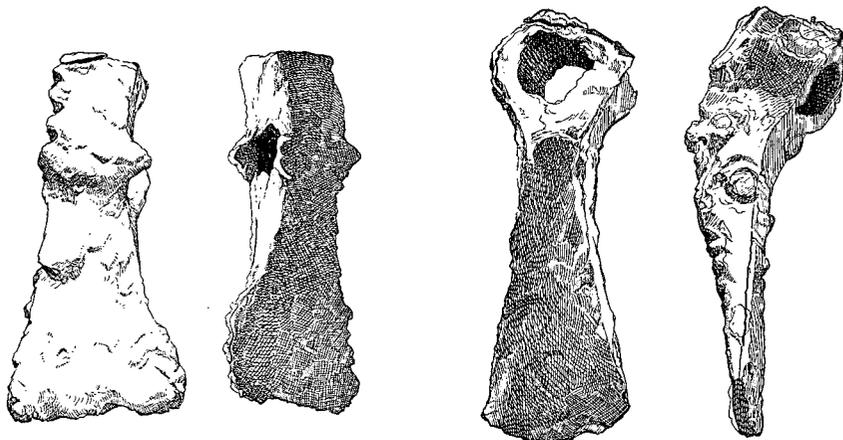
(8.) Broken portion of a bronze loop or hook $\frac{5}{8}$ inch in diameter.

(9.) Broken portion of a bronze hinge $1\frac{1}{2}$ inches in length, with a rivet in one end and two hinge loops in the other.

(10.) Portion of a rod of bronze about $\frac{1}{4}$ inch in diameter and 3 inches in length, having at one end a conical termination like a nail-head, the other end broken.

(11.) Two bronze rings, 2 inches and 1 inch in diameter.

Objects of Iron.—Axe-head of iron (fig. 14), $5\frac{3}{4}$ inches in length by $2\frac{1}{2}$ inches across the cutting face. The hole for the handle is an oval of



Figs. 14, 15. Axe-head and Mattock-head of Iron. ($\frac{1}{3}$.)

about $\frac{7}{8}$ by $\frac{3}{4}$ inch, and is placed an inch from the butt end of the axe-head which is hammer-shaped and about an inch square on the end.

Mattock-head of iron (fig. 15), 6 inches in length by $2\frac{1}{4}$ inches across

the face of the blade. The hole for the handle is circular and an inch in diameter, the width of the collar being $1\frac{1}{2}$ inches.

Socketed gouge of iron, $6\frac{1}{2}$ inches in length, $1\frac{1}{2}$ inches in diameter across the socket, tapering to $\frac{3}{4}$ inch across the cutting face of the gouge. Similar socketed gouges have been found in the Romano-British town of Silchester.¹

Key of iron, $5\frac{3}{4}$ inches in length, of the usual Roman form, with a bent portion at the end carrying two teeth for raising the pins of a two-tumbler lock.

Pair of pincers of iron, 6 inches in length.

Spear-head of iron, $5\frac{1}{2}$ inches in length, the socket being $2\frac{1}{4}$ inches in length and $\frac{3}{4}$ inches in diameter at the butt, tapering to a shank of $\frac{1}{2}$ inch in diameter; the blade is leaf-shaped, expanding quickly from the shank to $1\frac{1}{4}$ inches in width and tapering thence to the point, the whole length of the blade being $3\frac{1}{4}$ inches.

Spear-head of iron (broken), the socket $2\frac{1}{2}$ inches in length by 1 inch in diameter at the butt, tapering to a shank of $\frac{3}{4}$ inch in diameter, the blade leaf-shaped, widening to $1\frac{1}{2}$ inches in breadth at $2\frac{1}{2}$ inches above the shank, where it is broken off.

Spear-head of iron, the blade only, broken off by the shank, the socket gone, the shank about $\frac{3}{4}$ of an inch in diameter, the blade leaf-shaped and widening quickly to $1\frac{7}{8}$ inches in width, and tapering thence to the point, the whole length of the blade being 6 inches.

Hasp of iron, 6 inches in length by 1 inch in breadth, with a projection 1 inch in length bent at right angles at the end.

Iron ring, $2\frac{1}{2}$ inches in diameter and $\frac{1}{2}$ inch in thickness.

A quantity of iron nails and bolts, from 4 inches to 2 inches in length.

Lead.—Several pieces of much oxidised masses of lead were found, for the most part so shapeless as to afford no clue to their use. Two had evidently socketed the ends of iron bolts, and portions of a flat horse-shoe shape were pierced by iron nails with broad flat heads set round in a circle.

Sculptured and Inscribed Tablets.—The monument to Ammonius, a

¹ *Archæologia*, vol. liv. p. 150.

soldier in the first cohort of the Spanish Auxiliaries (fig. 16), has long been known as having been found at Ardoch sometime towards the end of the 17th century,¹ and is now preserved in the Hunterian Museum, Glasgow. Sibbald states that it was taken up out of the *Prætorium*. It is a sepulchral tablet of sandstone, 24 by 22½ inches, bearing the inscription:—

DIS MANIBVS
 AMMONIVS . DA
 MIONIS) COH
 I HISPANORVM
 STIPENDIORVM
 XXVII HEREDES
 F . C



Fig. 16. Sepulchral Tablet. (r^o.)

which Dr Macdonald translates as follows:—“(Sacred) to the Divine Manes. Ammonius (son) of Damio, (centurion?) of the First Cohort of Spanish Auxiliaries, (a soldier of) twenty-seven (years’ service). His heirs caused (this) to be erected.”

The first cohort of the Spanish Auxiliaries was for some time stationed in Cumberland, but is not otherwise known to have been in Scotland.

Portion of the lower right-hand corner of an inscribed tablet of dark coarse-grained sandstone (fig. 17), 7 by 7 inches, showing the angle of the mouldings and the letters AVG.

¹ See *An Account of the Roman Stones in the Hunterian Museum*, by James Macdonald, LL.D., F.S.A. Scot., Glasgow, 1897, p. 81.

Portion of an inscribed slab of coarse-grained sandstone (fig. 18), 6 by 4 inches, with projecting rope-moulding and remains of the upright stroke of one letter at the side and the letter "I" well cut and $2\frac{3}{4}$ inches in height.

Portion of an inscribed slab of coarse-grained sandstone, 3 by $2\frac{1}{2}$ inches, with part of the upright bar of a letter.

Portion of a sculptured and inscribed slab of coarse-grained sand-

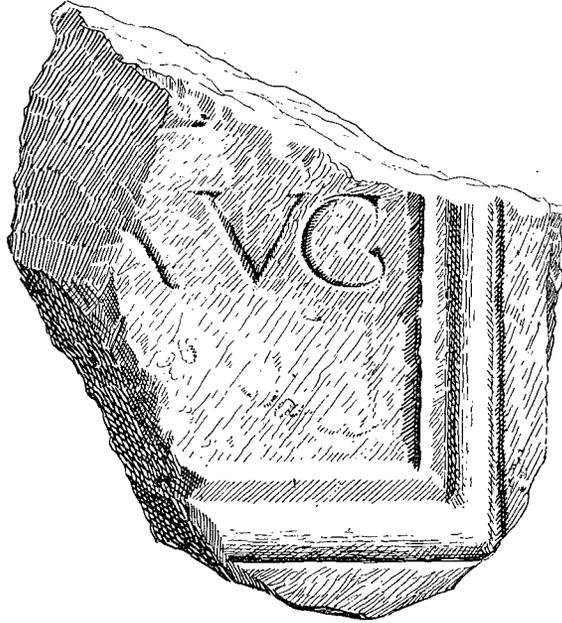


Fig. 17. Part of an Inscribed Tablet. ($\frac{1}{2}$.)

stone, 4 inches by 3 inches, showing part of a scroll of foliage with an included cluster of fruit and underneath it a portion of the upright bar of a single letter.

Portion of a similar slab of coarse-grained sandstone, 6 inches by 3 inches, showing a portion of a scroll with fruit partly defaced.

Triangular portion of a slab of coarse-grained sandstone, 6 by $4\frac{1}{2}$

inches, with a chamfered edge, and a wide moulding on which is part of a scroll with a leaf.

Portion of a sculptured slab of coarse-grained sandstone, 4 inches by 3 inches, showing part of a stem giving off leafage on both sides.

Portion of a sculptured slab of coarse-grained sandstone, 7 inches by 5 inches, with part of a zigzag ornament.

Portion of a sculptured slab of coarse-grained sandstone, 4 by 3 inches, with remains of sculpture resembling a limb of a human figure in relief.

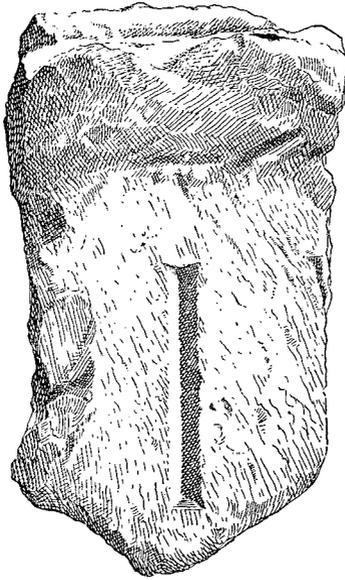


Fig. 18. Part of an Inscribed Tablet. ($\frac{1}{2}$.)

Portion of coarse-grained sandstone, $4\frac{1}{2}$ inches by $2\frac{1}{2}$ inches, with the rude outlines of a human face incised.

Coins.—The coins found were few and in very bad condition. All those that could be identified were denarii of Nero, Vespasian, Domitian, and Hadrian. A few third brass were also found, but so decayed as to be quite incapable of being identified. The only point that can be

established by the occurrence of the coins is the occupation of the site at least as late as the time of Hadrian, A.D. 117-138.

In comparing the results of the partial excavation of the enclosed area at Ardoch with those of the more complete examination of the similar area at Birrens, it has to be borne in mind that if the examination of Ardoch had been extended to the whole area the dissimilarity of the resulting finds might have been less strongly marked. As it is, the most noticeable difference between the collections from the two sites is the almost total absence in the collections from Ardoch of the sculptured tablets, altars, and architectural fragments that were such a prominent feature from Birrens. The next most noticeable difference is that the general quantity of relics of every kind was less at Ardoch than at Birrens, though the varieties of the things found were much of the same kind. The proportions of the different varieties to one another, however, were distinctly different in the two places. For instance, while nearly all the kinds of glass vessels found at Birrens were represented at Ardoch, the proportion of window glass found at Birrens was so much greater as to imply a very considerable difference in the constructive conditions of the buildings on the two sites. While Birrens had much window glass and many glass vessels of various kinds, Ardoch had exceedingly little window glass and but few glass vessels.

As to pottery, the large coarse varieties of earthenware vessels, such as amphoræ, dolia, and mortaria are much more abundantly represented on both sites than the smaller classes of vessels of the finer kinds of ware, but this was much more marked in the case of Ardoch, where the proportion of the finer ware to the large-sized coarser vessels was extremely small. This means of course that while at Birrens there was a settled occupancy and a somewhat luxurious table-service, the occupation of Ardoch was more distant from the base of supplies, probably less permanent, and certainly deficient in the materials for a similarly luxurious table-service. Hence, the remains of the finer ware so common at Birrens are scanty here; the Samian ware dishes are few, and the black and slate-coloured ware comparatively scarce, while the bulk of the pottery recovered consists not of vessels for table service

but of the larger vessels like amphoræ and dolia which were used for transport and storage of provisions and liquids, and of mortaria and various kinds of jars for kitchen service.

The occurrence at Ardoch of a quantity of fragments of pottery of a dark-coloured, slate-coloured or reddish paste, and coated externally and often also internally with a greenish-yellow or brownish-yellow glaze, is more suggestive of its occupancy in mediæval times, probably in connection with the chapel, which then stood near the centre of the area; but the question of the use of glazed pottery in the Roman period in Britain is by no means easy of settlement on the evidence at present available, and I must pass it by.

One rather interesting feature of Ardoch has been the occurrence of such a large quantity of the doubly conical pellets of terra-cotta which have been called sling-bolts from their precise resemblance in form to the leaden objects of smaller size known to have been used for this purpose. They occurred chiefly in the central part of the area occupied by the principal or prætorian buildings, and taking this fact along with the other facts disclosed by the excavations—that most if not all of the buildings were of wood, and as no roofing tiles were found, that they were in all probability covered with highly inflammable roofs of some species of thatching—it is not difficult to regard these missiles as relics of the persecution which the occupants of the camp must have suffered from the “sniping” of the tribesmen intent on setting fire to the station buildings. Cæsar, describing the attack of the Nervii upon the camp of his commander Quintus Cicero, mentions that taking advantage of a high wind arising they began to throw red-hot sling bullets of clay upon the barracks of the Romans which were thatched with straw, and so set the roofs on fire, and the wind speedily spread the conflagration over the whole camp. The use of these sling-bullets of clay appears also to have been a native custom, so far as it has been noticed in Britain. A large number of them have been found in the lake village of Gladstonbury,¹ where all the relics found have been late-Celtic and pre-Roman. They have also been found in the pit-

¹ *Proceedings* of the Somersetshire Archæological Association, vol. xl. (1894) p. 148.

dwellings in the "British Camp" at Mount Caburn in Sussex and at Highfield near Salisbury, as previously noticed.

Among the bronze objects there are two which are specially interesting on account of their obvious relationship to the native rather than to the Roman culture. One is a portion of a bronze ring or horse-trapping of the well-known late-Celtic type, of which examples have been found both in England and in Scotland unassociated with Roman remains and apparently belonging to pre-Roman times, while in the Broch of Torwoodlee and in the Roman station of Bremenium in the Cheviots they have been found associated with objects of the time of the Roman occupation, thus adding to the force of the evidence for the survival of the late-Celtic culture in Scotland through the period of the Roman occupation.

But a still more unexpected survival is indicated by the second of the bronze articles found in Ardoch. It is a socketed axe of bronze of the common Scottish form, with a loop at the side, which is characteristic of the latter part of the Bronze Age. Of this variety of bronze implement Sir John Evans says:—"The use of socketed celts would, from their abundance, seem to have extended over a considerable period; and from their having apparently been found with objects belonging to the late-Celtic period, they must have been among the last of the bronze tools and weapons to be superseded by those of iron." Here we find the bronze axe and the iron axe both occurring in the same site and both apparently associated with remains of the period of the Roman occupation. There is no reason to doubt that the association is a genuine case of contemporary occurrence, and the inference would be that in this part of Scotland the late-Celtic period and the last surviving implements of the Bronze Age both overlapped the period of the Romano-British civilisation. I am not aware that any socketed axe of bronze has been previously found in such association with a Roman station or camp, although there are recorded instances of their supposed association with Roman coins of even later date than those found at Ardoch.¹ The coins found at Ardoch range from the reign of Nero A.D. 54-68 to that of Hadrian A.D. 117-138.

¹ Evans's *Ancient Bronze Implements of Britain*, p. 115.

With respect to the iron relics it is to be noticed that while no war-like weapons were found at Birrens, Ardoch has supplied three heads of spears or javelins. The iron tools or implements include an axe-head, a mattock or adze head, a gouge, and a large key of the usual Roman form, all of which are similar to those found at Silchester, and on other Roman sites in Britain.