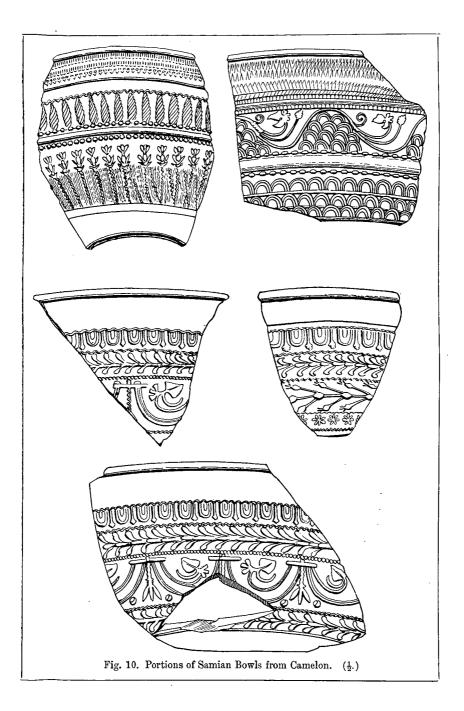
## III.—NOTICE OF THE POTTERY, BRONZE, AND OTHER OBJECTS FOUND AT CAMELON. BY JOSEPH ANDERSON, LL.D., Assistant Secretary AND KEEPER OF THE MUSEUM.

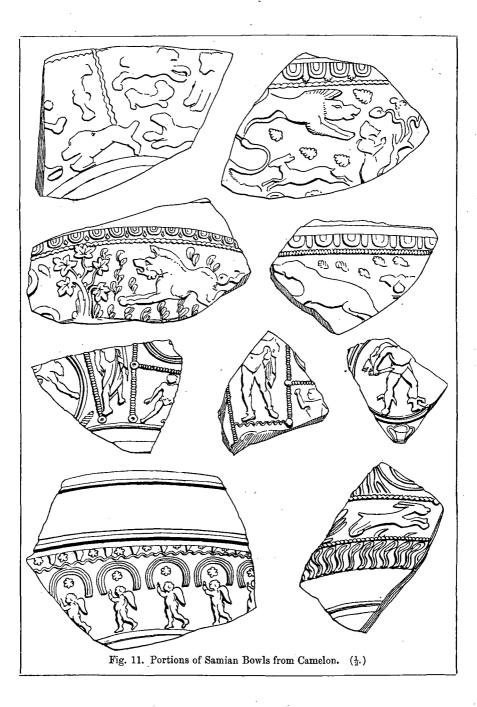
The excavations at Camelon have yielded a large number of relics of special interest, though few are of the definitely historical character of the inscribed and sculptured tablets and slabs occasionally found on Roman sites. The pottery is the most abundant, but bronze objects have been also found more frequently than on any of the sites previously explored, and they are of very special interest, from so many of them being finely enamelled. Although the remains of buildings of considerable extent and variety were met with, it is singular that so few relics of architectural or monumental decoration, or of religious sculpture, have survived.

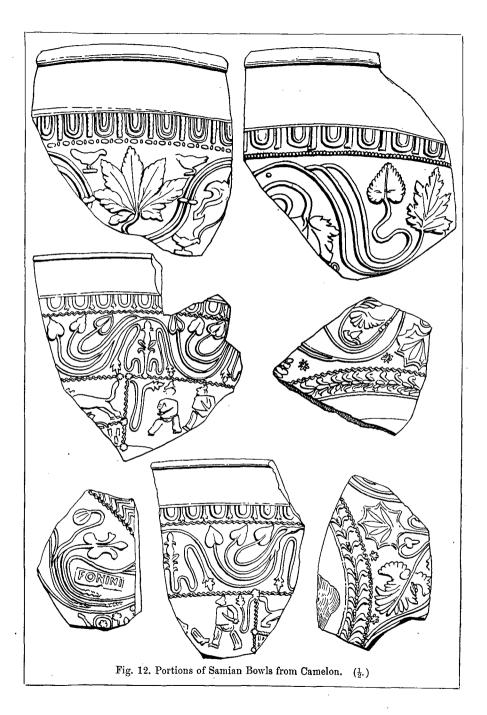
Pottery.—The pottery is generally much of the same character as that from Birrens and Ardoch, with this difference, that the red lustrous ware (commonly called Samian) is larger in quantity and more varied in character. As a rule, it consists merely of broken fragments of vessels, very few of which are capable of being pieced together, though occasionally they show the whole, or nearly the whole, of one side.<sup>1</sup> The decorated vessels are mostly of the bowl-shape. Flat, shallow, platter-like dishes of simple forms and destitute of ornament are not uncommon, and a considerable proportion of the unornamented forms are cup-shaped vessels of smaller size, with sloping or bulging sides.

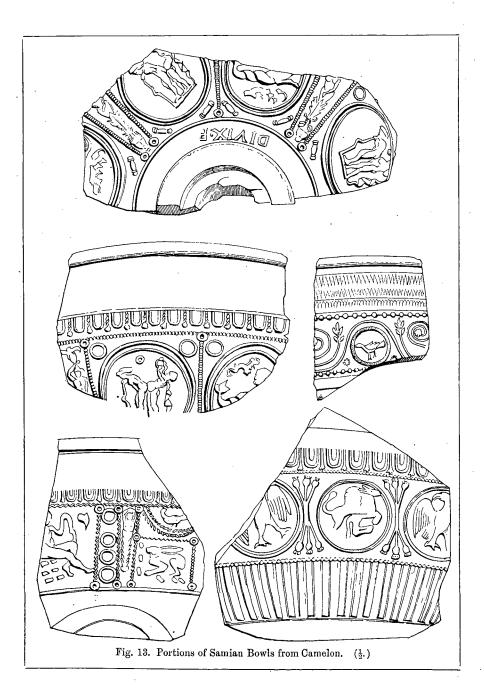
The bowls are mostly ornamented with the horizontal band of festoon and tassel ornament under a plain band of about an inch or an inch and a half below the lip. There is another plain band of more or less width immediately above the ring of the bottom, and the space between that and the upper band is variously filled with ornamentation moulded in

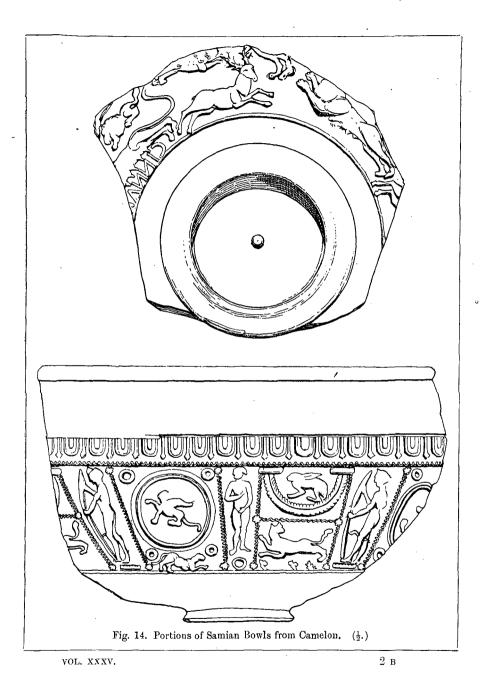
<sup>1</sup> At a conversazione meeting of the Society on 8th March 1852, "a fine small Samian ware bowl in perfect condition, potter's stamp OP.CAL," found at Camelon, was exhibited, but there is no further description of it. An alabaster vase, also from Camelon, was also exhibited. The alabaster vase is now in the Museum, but presents no features which suggest Roman workmanship.











relief. Sometimes the space is divided into circular or oblong panels by moulded or beaded lines, and each panel is filled by a figure; at other times the divisions run horizontally round the bowl, and the bands are filled by wavy scrolls of foliage, or by rows of figures like Cupids, or by conventional ornament of various kinds. Frequently scenes of the chase, with deer and dogs, or wild boars, are introduced, and fighting gladiators also form a favourite theme. In the groups of fragments of these bowls shown in figs. 10 to 14, typical examples of these varieties of ornamentation are given.

The flat, shallow dishes and the smaller cups (figs. 15 and 16), which



Figs. 15 and 16. Small Cups of Samian Ware from Camelon. (1.)

are not ornamented in relief, have occasionally a line or a band of lines turned round them horizontally on the exterior between the rim and the turning in of the bottom; and often also in the inside a circle round the centre of the bottom, within which is the stamp of the maker's name. They all have on the exterior of the bottom a ring-shaped projection or pedestal to stand upon.

The red lustrous or so-called Samian ware found so commonly throughout the area of the Roman occupation in the Rhineland, Gaul, Belgium, and Britain is of provincial manufacture, the bulk of it having been made in Gaul. Its period may be roughly defined as comprised within the first four centuries of the Christian era. But little of it, however, can be assigned with certainty to the first century, in Britain

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at least, where the great bulk of it belongs to the period ranging from about the latter part of the first century to the middle of the third (A.D. 70-80 to A.D. 250). Attempts have been made to work out the chronology of the various types of this pottery in Germany,<sup>1</sup> where it is much more abundant than in this country, and where a large part of the dateable material is derived from burial deposits-a source of information which, so far as we yet know, is not available in Scotland. It is of course uncertain how far the conclusions that have been thus reached for the German stations may be applicable to Britain, and specially to the northern section of the Roman occupancy here; but in the meantime the material at command for comparison in this country is far too scanty for such a purpose, and we must be content to wait until at least the stations on the wall of Antoninus have yielded up their stores of pottery. Mr Haverfield, in his "Notes on Samian Ware" in the Transactions of the Cumberland and Westmorland Archaeological Society, says:-"In these cases the Samian pottery of the [southern] wall shows exclusively second century types (to describe it shortly). On the other hand, the types of larger bowls which occur in Germany along with remains of the first century, before about A.p. 70, do not occur on the wall. Such are the bowls with more or less vertical sides, either cylindrical or cylindrical above and curved below." These, he states, are absent on and near the Wall of Hadrian, but fairly common in the south, as at London and Colchester; and he observes that it is of course credible that this style of Samian lasted longer than A.D. 85, as its varieties are numerous enough to show a development demanding time, "although the fact that no specimens of this type occur further north than York suggests that it vanished from Britain much about the same time that it vanished from Germany, that is, shortly before the end of the first century of our era."

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<sup>1</sup> A large fund of interesting information on this subject is contained in the monographs in the Bonner Jahrbuch, by Dragendorff (B. J., Heft 96, pp. 18-156), Koenen (B. J., Heft 86, pp. 151-198), and Schumacher (B. J., Heft 100, pp. 103-113). See also the work by Koenen, Gefässkunde der Vorrömischen Römischen und Frankischenzeit, in den Rheinlanden, pp. 66-116.

The dark and slate-coloured ware is rather less common at Camelon. The vessels of this ware are chiefly wide, shallow, platter-like dishes of considerable size, bowl-shaped vessels with sloping sides, and jars with rather wide mouths. The ornamentation usually consists of oblique lines crossing each other from lip to bottom on the exterior of the shallow vessels, and zig-zags and wavy lines on the bowls, slightly scraped or burnished into the surface of the clay, and occasionally shallow, concave mouldings turned horizontally underneath the rim.

One small vase of this slate-coloured ware (fig. 17) is entire except for a chip out of the lip.



Figs. 17 and 18. Jars of Dark-coloured Ware from Camelon.  $(\frac{1}{3})$ 

Another very pretty vase of extremely thin fabric in a reddish clay, but slate-coloured on the surface (fig. 18), is pinched inwards in seven indented oval hollows round the bulge. It is also curiously ornamented, with a roughening of the surface by grains of sand or of powdered pottery, sifted to a uniform size, and stuck on with the glaze all over the exterior surface.

A second vase of this rough-cast pottery and of the same form, but slightly larger, is represented by a few fragments showing portions

of two sides. Similarly shaped vases or beakers are not uncommon in England and on the Continent.<sup>1</sup>

Another style was illustrated by two or three fragments of a small vase of a reddish-brown ware, the only ornamentation of which consisted of triplets of tangential circles of about an inch in diameter, formed of white slip, and placed at intervals round the bulge.

A platter-like vessel (fig. 19), perhaps more closely resembling a flower-pot saucer in shape, measures 7 inches in diameter by  $2\frac{1}{2}$  inches in depth, and though considerably broken, shows the entire shape when

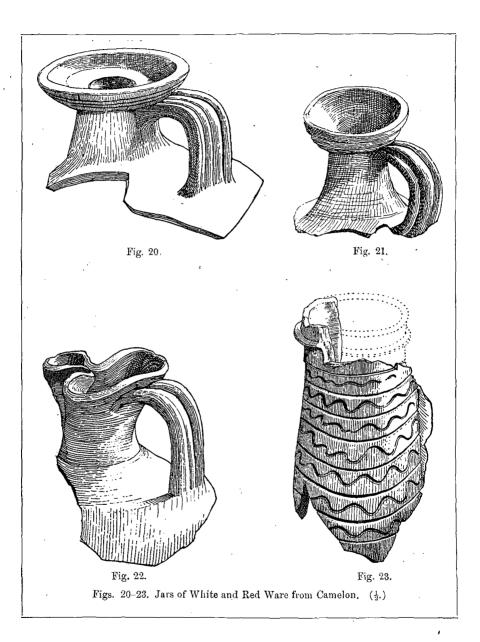


Fig. 19. Platter-like Dish of Dark-coloured Ware.  $(\frac{1}{2})$ 

pieced together. A portion of a large iron nail is attached to the inside of the bottom by the oxide. On the outside is roughly incised the name of the owner of the dish, which seems to read VESTAL[I].

A shallow, saucer-like vessel of very light grey and hard paste,  $7\frac{1}{2}$  inches in diameter and  $\frac{2}{4}$  of an inch in depth, has a potter's stamp CALEN(?) in the centre of the inside of the bottom, but is otherwise perfectly plain. The surface is highly polished. Another large, shallow dish in a coarse reddish ware measures 12 inches in diameter and 2 inches in depth.

<sup>1</sup> Jewitt's Ceramic Art of Great Britain, p. 37; Archaelogical Association's Journal, vol. xxvii. p. 434; Jacobi, Das Römerkastell Saktburg (Homburg, 1897), p. 427.

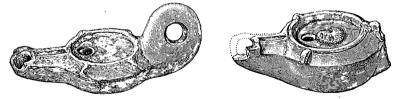


A few pieces of a very thin and fragile ware occurred, which is of a soft, whity-brown or reddish clay, dark-coloured only on the surface, and having ornamentation of running animals in relief.

Of the heavy, whitish and yellowish ware, of coarse soft fabric, there are many remains, chiefly of amphoræ and mortaria, similar to those from Birrens and Ardoch, and indeed from every other Roman site in Britain. Many of the mortaria and some amphoræ show the stamps of the makers' names. There are also a few smaller jars of a finer, soft, whitish ware, with bottle-shaped necks and looped handles (figs. 20, 21), one of which has the expanding mouth pinched into a trilobate form (fig. 22).

Two curious fragments of a red, tile-like ware are unfortunately so imperfect that nothing definite can be suggested as to their purpose. One which has a projecting moulding round the lip (fig. 23) is ornamented in horizontal bands of about an inch wide, separated by boldly impressed or indented parallel lines, and marked along the middle by rudely made wavy lines. The other has a frilled projection round a globular body, on which is boldly scored the letters FIICIT the potter's name being unfortunately broken away.

Two small lamps of clay are interesting. One (fig. 24) measures



Figs. 24 and 25. Lamps of Clay from Camelon.  $(\frac{1}{2})$ 

4 inches in length by  $2\frac{1}{5}$  in greater breadth. It has a loop handle at the back, a small hole over the body of the lamp for pouring in the oil, and is slightly imperfect at the nozzle. The other (fig. 25), which measures  $3\frac{1}{4}$  inches in length by  $2\frac{1}{4}$  inches in breadth, wants the handle and is also imperfect at the nozzle. Adjoining the aperture for pouring in the oil is the representation of a mask of a human face.

 $^{\circ}$ 

Lamps of clay have been but rarely found on Roman sites in North Britain. Bruce only cites one, found at Carlisle.<sup>1</sup>

A third lamp, also of small size, was of bronze, and will be found described among the articles of bronze on page 400.

Potters' Stamps.—The following is a list of the Potters' Stamps found on the pottery vessels from Camelon :—

On Samian Ware—bowls, platter-like dishes, and cups.

[AT]TIANI·M (outside) BAN . . . I.M BORILLI-OFFIC (twice) BVTTVRRI **CALVINI**·M CINNV (outside) CN . . . COSIRV (twice) CHRESIMI CRICIRONIS DIVIX.F (outside) ERICI-M FELICI[S].O FELIX-F FONINI (outside) GEMINI.MA (twice) MALFI-M (twice) MAMMI MVXTVLLI M **O**-VIIRIV OFA.... **OF**·CALVI **OF** FIRMON

OF PAR . . . . **OF**•FRONTINI **OF**·RVFINI OF-SVRII (thrice) PECVLIARIS F PEREGRINI (twice) **PRIMI** MAN **PVGNI**·M QVI . . . . . . **REDITI** M (twice) SINTVR . . (twice) SVO . . . NI-M (thrice) TASCILLI-M VAXI-0 VIRO . . . . . . . . VIS·M . . . . . . NOVSI·M . . . . . VNDVS . . . . . RVS·F . . . . ILLI  $\ldots$  IS·F (twice)  $\dots$   $\dots$   $\dots$   $VI \cdot M$ 

<sup>1</sup> Bruce's Roman Wall (Third Edition, 1867), p. 432.

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On Mortaria.

CIV	Q-VALERIVS VERANIVS
EVNI	SECVNDVS
IBINVS (twice)	AVST·MA
GIIRMA (retrograde)	ME FEC (retrograde)
MICCIOF	M N (twice)
On a Lamp of Clay	On the Handles of Amphoræ
EVCARPI	A· FITAL
	$\mathbf{M} \cdot \mathbf{I} \cdot \mathbf{M}$

Of these Potters' marks, ERICI-M, PECVLIARIS, and COSIRV have been found in the Camp at Saalburg, near Homburg.<sup>1</sup> PECVLIARIS also occurs at London, Paris, and other places in France and Germany. COSIRV also occurs at Clermont Ferrand and London; and ERICI at Leipzig and London. BORILLI occurs in the Allier and at Paris and London. CRICIRO occurs at Heddernheim and several localities in France; DIVIX, at Saalburg, London, and several places in France; PVGNI, at London, Rothweil, Orange, and several other places in France; and RVFINI at London, Colchester, and many places in France and Germany. EVCARPI, which also occurs on a lamp at York, is not uncommon on the Roman sites along the Rhine. All these are assigned by Dragendorff to the period between A.D. 70 and A.D. 250.<sup>2</sup>

Of the others, CINNV appears at Canterbury and London; FELICIS, FIRMONIS, GEMINI, MAMMI, MVXTVLLI, SVRII, TASCILLI, and SECVNDVS are all found in Mr Roach Smith's London list.<sup>3</sup>

Several of the Samian ware vessels have graffiti, probably owners' marks, initials, or names, roughly scratched on the exterior, usually under the bottom, but they are all either fractured or illegible.

There are a number of tiles, some with and others without flanges.

<sup>1</sup> Jacobi, Das Romerkastell Saalburg, pp. 316 and 570.

<sup>2</sup> Dragendorff, Terra Sigillata in the Bonn Jahrbuch (1893), Heft xciv., pp. 141-152, and xcix., pp. 56-103.

<sup>3</sup> Collectanea Antiqua, vol. i. p. 150; vol. vi. p. 71. Hubner, Corpus Inser. Lat., vol. vii. pp. 239-304.

The flanged variety were mostly roofing tiles, the flanges being laid contiguously, and covered by a narrow tile bent round like a modern drain tile. The tiles without flanges were flooring tiles. Two of these are entire. They measure  $8\frac{1}{4}$  inches square, and are nearly 2 inches thick. One has two footmarks of a sheep on it, another a single footmark of a dog, impressed on the clay when it was soft. None of the flanged tiles are entire; they were of much larger size than the flooring tiles, and



Fig. 26. Tile with incised inscription.

not more than about half the thickness. One fragment (fig. 26) has the word NESSIUS scratched upon it when the clay was soft, and in the second line SE . . . followed along the break by what looks like the remainder of the word SECVNDVS, and in a third line SOICI . . . . . the remainder being unfortunately broken away.

At Birrens and Ardoch, as well as at Camelon, there were occasional fragments of pottery of quite different character from the Roman pottery, and closely resembling the pottery of mediæval times both in texture and in its being coated with a brownish, or a yellowish-green, or a greenish glaze. I took these for accidental intermixtures of the pottery of the later centuries, due to the cultivation of the land; but Mr Franks has described some pieces of pottery found in the garden of St Paul's Vicarage, Derby,<sup>1</sup> one of which, a part of the rim of a vase covered with a rich brown glaze, he believed to be unquestionably Roman. "For many years," he says, "it was believed that vitreous glazes were not known to the ancients, and much surprise was felt when the excavations conducted by Dr Diamond in the Roman pits at Ewell in Surrey, brought to light the greater part of a glazed vessel, which on being examined by Dr Faraday proved to be coated with lead glaze. Since that time other specimens have been discovered in England and on the Continent." Dr Diamond describes the Ewell vase as follows :-- "It is of perfect Roman form, composed of thin material, of a bright green colour, with stripes of white or pale yellow laid on it, being perfectly glazed inside and out, apparently the same as a piece of modern pottery." The Ewell vase and an elegant bottle from Colchester, similarly glazed, with a considerable number of specimens from the Continent, are in the British Museum; and a manufactory of glazed pottery is supposed to have existed in the Roman period at Heimersheim, near Wiesbaden. Llewellyn Jewitt also notices the finding of many fragments of a green glazed ware among Roman pottery at Headington, near Oxford.<sup>2</sup> On the other hand, it is confidently stated in most of the authoritative books on pottery, that lead glaze was not known in Europe till about the twelfth century.<sup>3</sup>

<sup>1</sup> Proceedings of Soc. Antiq. Lond., 2nd series, vol. vi. p. 119.

<sup>2</sup> Journal of the British Archaeological Association, vol. vi. p. 65.

<sup>3</sup> M. Brongniart, noticing the statements of M. Grignon of his having found fragments of pottery with lead glaze among the Roman pottery discovered at Châtelet in Champagne, declines to accept his conclusions, and adds that the use of lead glaze can scarcely be older than the tenth century, though it was well known in Italy in the twelfth and thirteenth centuries, and spread thence through Europe— Traité des Arts Céramiques (Paris, 1854), vol. i. pp. 17, 441, 455.

But however this may be, the majority of the pieces of glazed pottery found at Camelon so closely resemble the pottery of the later Middle Ages, both in texture, firing, and glazing, that it seems probable that their presence may be due to such accidental intermixture as was indicated by the occurrence of two silver pennies of Edward I. among the other relics recovered in the course of the excavation.

*Glass.*—A few fragments of window-glass of the usual kind, rough on the one side and smooth on the other, were found.

Of more interest are the fragments of square bottles of bluish-green glass with broad reeded handles looped to the neck and shoulder. Of these, portions of many different bottles were found varying from about 4 inches to about  $2\frac{1}{2}$  inches square.

A portion of a very thick, semi-globular cup of glass has a plain rounded rim  $\frac{3}{8}$  inch in thickness, the thickness of the side of the cup increasing to half an inch at 2 inches in depth.

There is also a portion of the handle of what must have been a large glass jug of darkish colour, and portions of cups or goblets of clear bluish-green glass.

Beads.—Nine globular beads of the ribbed melon shape of a greenish



Figs. 27 and 28. Bead of Stone and Bead of Glass Paste.

or bluish porcellanic paste, and of various sizes up to about  $\frac{3}{4}$  inch in diameter, were found. Similar beads were got in Birrens and Ardoch, and are commonly found on Roman sites. They are also found, however, in many places to which the Roman occupation did not extend, as for instance in Ireland.

A bead of a mottled, reddish-coloured stone, resembling steatite (fig. 27), full of dark specks, 1 inch in diameter and half an inch thick, is shaped somewhat like a whorl, but with a hole through it less than a quarter of an inch in diameter.

A flat, ring-shaped bead of dark blue glass paste (fig. 28),  $\frac{3}{4}$  inch in diameter, the hole through it nearly half an inch in diameter, is ornamented on the outer circumference of the ring with a ring of white round a blue centre placed at each third of the circumference.

Twelve small circular discs of vitreous paste, flat on the under side, convex on the upper, of which six are greyish white and six of various shades of dark blue, suggest the idea of table-men or counters.

There are portions of three bangles, or bracelets, one of dark blue vitreous paste with a white line running along the middle of its convex outer surface, and bending in opposite directions at the junction. Another bracelet is of jet or cannel coal.

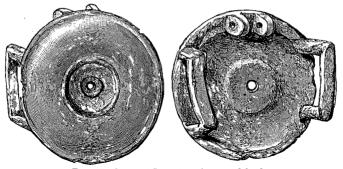


Fig. 29. Bronze Mounting, front and back.

Bronze.—The bronze objects found during the progress of the excavations are mostly small in size, but extremely interesting. They consist chiefly of harness-mountings and fibulæ, some of the latter being richly enamelled.

Of the mountings some are disc-shaped and have loops at the back. The largest of the looped discs (fig. 29) is  $1\frac{1}{2}$  inches in diameter, convex on the exterior, which appears to have been silvered, and has a central

circular depression, with a central pin-hole. The loops at the back project  $\frac{3}{8}$  of an inch, and have an opening  $\frac{5}{8}$  inch in length by  $\frac{1}{4}$  inch in width. They are set on at an angle inclining towards each other, and midway between the ends in the wider space are two small loop-like projections, with a pin-hole through each, as if for the hinge of a pin.

The second (fig. 30) is also  $1\frac{1}{2}$  inches in diameter, has a larger central pin-hole, and the remains of a loop at the upper margin. It is scolloped round the rim and ornamented on the flat surface of the front with an inlay which now shows a dead black on the oxidised surface,

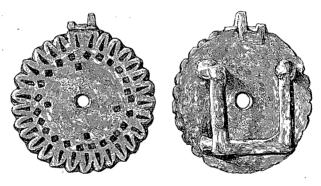


Fig. 30. Bronze Mounting, front and back.

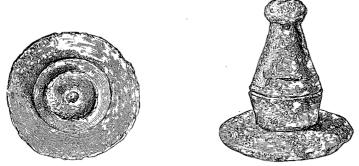
but is as bright as silver when scraped. A series of rays of this inlay are placed round the circumference, a ray in each of the scollops, and within the circle of the rays is placed a circle of squarish dots inserted rather irregularly, and within these again are four dots also irregularly placed at nearly equal distances, as if to form a square. The back of the disc has projecting loops placed so as to form three sides of a square.

A smaller disc (fig. 31) is  $1\frac{3}{8}$  inches in diameter, with a projecting central boss, having a slight hollow in the middle. On the back are the remains of a loop  $\frac{5}{8}$  inch in width.

Another mounting (fig. 32) is somewhat of the shape of the umbo of a shield. The base, which is hollow, is  $1\frac{3}{8}$  inches in diameter, and

the upper projecting part rises to a height of  $1\frac{1}{2}$  inches, and terminates in a knob.

A similar mounting is  $\frac{3}{4}$  inch in diameter at the base, which is flat,



Figs. 31 and 32. Bronze Mountings.

the upper projecting part being  $\frac{3}{8}$  inch in diameter and rising in a rounded cone shape to a height of  $\frac{3}{4}$  inch.

A scroll mounting of bronze open work (fig. 33),  $1\frac{3}{4}$  inches in length, is flat on the under side, and has a projecting rivet  $\frac{1}{8}$  inch in length.



Fig. 33. Bronze Scroll-mounting.

A four-armed mounting of bronze has the arms bent at right angles, and the space in the centre ornamented with two concentric circles round a central dot.

A strap-buckle of bronze, with a tag at right angles, is broken.

A bronze object,  $1\frac{1}{4}$  inches in length, with a rounded tang, and having a slit in the other end, with a pin-hole, is like the projecting part which carries the rowel of a spur.

A short, cylindrical object of coppery bronze,  $\frac{7}{8}$  of an inch in length and  $\frac{3}{4}$  inch in diameter, at one end has an expanding collar, and at the other end widens to 1 inch in diameter.

A portion apparently of the end of a key,  $1\frac{7}{8}$  inches in length, has a projection on one side with four slots, resembling the wards of a key.

A plain ring of bronze,  $1\frac{3}{8}$  inches in diameter, the body of the ring being nearly  $\frac{1}{4}$  of an inch in thickness, and two smaller rings of bronze, each  $\frac{3}{4}$  inch in diameter, were probably harness rings.

A large buckle, 3 inches in length by  $1\frac{1}{2}$  inches in width, has a depression in the middle for the tongue; but both the tongue and the back bar of the buckle are wanting. There is also a very small stud of bronze,  $\frac{1}{2}$  an inch in height and  $\frac{2}{8}$  inch in diameter, and the head of a bronze pin,  $\frac{5}{8}$  inch in diameter, nicked round the circumference.

Lamp of bronze (fig. 34), measuring  $3\frac{1}{4}$  inches in length by 2 inches



Fig. 34. Lamp of Bronze.

in breadth, the nozzle imperfect, and the aperture for pouring in the oil central, and of larger size than in the case of the two clay lamps described on page 391. The loop handle at the back rises above the top of the lamp, and there are three small rings for its suspension by a triple chain. Lamps of bronze seem to have been but rarely found in North Britain. Bruce only cites one, found in a mile-castle on the Southern Wall.<sup>1</sup>

The personal ornaments in bronze include one penannular brooch, <sup>1</sup> Bruce's Roman Wall (Third Edition, 1867), p. 432.

and a number of fibulæ, of types which are commonly found on Roman sites.

The penannular brooch (fig. 35), which is slightly oval in the ring, measures  $1\frac{5}{8}$  inches by  $1\frac{3}{8}$  inches in diameter, the opening between the ends of the ring being less than  $\frac{1}{4}$  of an inch in width. The pin, which is hinged on the ring by a loop, measures  $2\frac{1}{4}$  inches in length, and projects  $\frac{7}{8}$  of an inch beyond the ring. The pin has also a characteristic bend where it crosses the ring, and a flattening of that part of the point which projects beyond the ring. A brooch precisely similar to this was found on Culbin Sands. The form is not distinctively Roman.

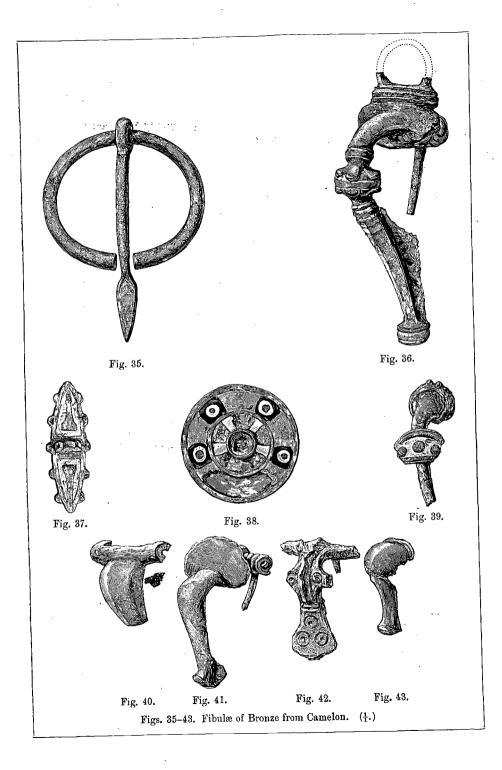
A fibula of bronze of the harp-shaped form (fig. 36),  $2\frac{1}{2}$  inches in length, with a collar on the centre of the bow, and a loop (broken) at the top for a chain. These were generally worn in pairs, with a chain between the loops of the fibulæ.

A fibula (fig. 37) of uncommon but rather elegant shape,  $1\frac{3}{8}$  inches in length, with remains of the hinge and catch for the pin at the back, has remains of enamel in a triangular pattern above and below the central projection in the front.

A circular stud (fig. 38) found in the ditch at the S.W. corner of the south camp,  $1\frac{1}{4}$  inches in diameter, with a broken shank in the centre at the back, is finely enamelled. Round a central circular space of  $\frac{1}{4}$  inch in diameter filled with bright red enamel is a circular band of bluish green,  $\frac{1}{8}$  of an inch in width, crossed at rather irregular intervals by four squares of white, and outside this another circular band of pale green,  $\frac{1}{4}$  of an inch in width, in which are set at rather irregular intervals squarish patches of blue enclosing roundish or oval patches of white, each having a red spot in the centre. It is in the possession of Mr R. Beatson, Camelon.

A fibula (fig. 39), with the upper end expanded in a trumpet shape, and having a disc with remains of red enamel on the bow, measures  $1\frac{1}{4}$  inches in length; the lower part wanting.

Four small fibulæ of bronze are more or less damaged. The first (fig. 40), which has been silvered, has not much exceeded 1 inch in vol. xxxv. 2 c



length. The second (fig. 41), which retains the coiled spring and part of the pin, has an oval expansion at the head. The third (fig. 42), which also retains a part of the pin, has an expansion in the middle of the bow and another at the base, ornamented with small incised circles, having a dot in the centre. The fourth (fig. 43), which has an expansion at the head, seems also to have been silvered.

The lower ends of other two fibulæ of a similar kind are respectively  $\frac{5}{8}$  inch and  $1\frac{1}{4}$  inches in length.

The most interesting of the personal ornaments found at Camelon are the enamelled fibulæ, no two of which are alike either in form or in the design and characteristics of their decoration.

With regard to fibulæ of this period found in Britain, Mr Arthur J. Evans has pointed out in connection with the remarkable examples recently discovered at Æsica or Great Chesters, in Northumberland,<sup>1</sup> that there is a well established British type which prevailed in those parts of provincial Roman Britain in which the Celtic element still retained much of its national characteristics, and of which more or less Romanized forms are common in south-eastern Britain. But the true British examples are to be distinguished from these by their more elaborate decoration in which the Celtic art of enamelling and the triquetral design are special features, as well as by the terminal loop with which they are provided, in order to suspend the two ends of the chain—these looped fibulæ being in fact worn by the native women in pairs connected by a chain hanging down between them.

Both in Britain and in Gaul the Celtic peoples employed different methods of ornamenting their metal work in colour. The earliest method employed was by the application or inlaying of red coral in bosses and studs, a splendid example of which is furnished by the shield found in the river Witham.<sup>2</sup> This process can be traced back to the fourth century B.C. in Gaul, and is expressly mentioned by Pliny

<sup>&</sup>lt;sup>1</sup> "On Two Fibulæ of Celtic Fabric from Æsica," by Arthur J. Evans, in Archaeologia, vol. lv. p. 183.

<sup>&</sup>lt;sup>2</sup> Horae Ferales, plate xiv. and p. 185.

as applied by the Gauls to the decoration of their shields and swords.<sup>1</sup>

This method of adorning their metal work with coral was followed by an easy transition to the process of enamelling, by which the colouring materials were fused into cavities prepared for their reception in the metal. This process of enamelling which is found on objects of bronze from the cemeteries of Marne, in association with other bronzes ornamented with inlaid coral attributed to the third or fourth century B.C., and in Britain chiefly on horse trappings of about the same period, was continued throughout the period of the Roman occupation of both countries; and was adopted and in some respects improved upon by the Romans, there being discernible a distinct difference in technique between the Gaulish enamels of the period of their independence, and those of the Gallo-Roman period, as also between the British enamels and those of the Romano-British period, which betray the influence of Roman art.

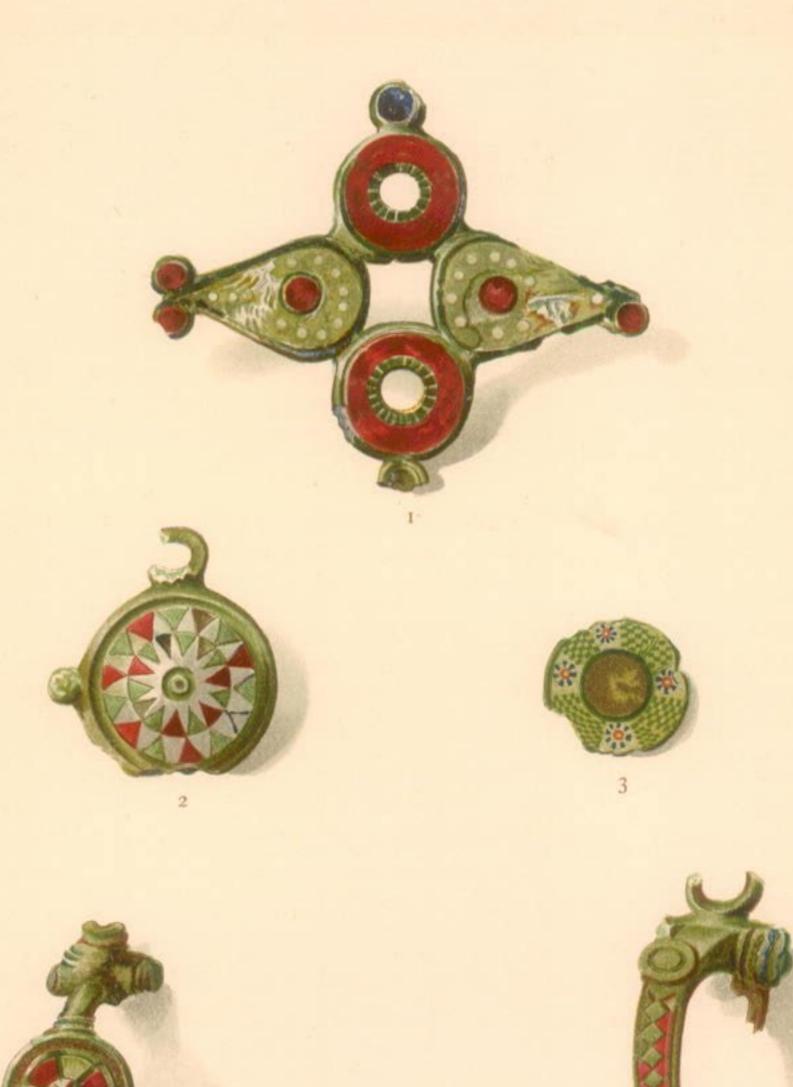
No. 1 (plate A) is a fibula in shape somewhat resembling a quatrefoil, the component parts of the design being grouped around a central open squàre. The two members in the vertical line are leaf-shaped, the bases placed towards the centre, and the points in the opposite direction ending between two small circles. The leaf-shaped spaces have each a small circle in the centre. The circles in the centres of the leaves and the doublets of similar circles at the points of the leaves are filled with red enamel, while the body of the leaf is in each case filled with a white enamel having a faint tinge of green, and spotted with a row of very small circles of almost pearly whiteness, surrounding the central circle. The transverse members of the quatrefoil are circles with open centres, filled with a band of red enamel. On the middle of the outer side of each is a single small circle corresponding to the terminal doublets of the leaf-shaped members, and filled with enamel of a brilliant blue.

The pin at the back of the brooch worked on a hinge made by a small

<sup>1</sup> Salomon Reinach, "Le Corail dans l'industrie Celtique," in the *Revue Celtique*, 1897, and in *L'Anthropologie*, vol. x. p. 677.

Proc. Soc. Antiq. Scot.

VOL. XXXIV. PLATE A.



# ENAMELLED FIBULAE FROM CAMELON.

5

pin passing through two side-rests and through an eye in the head of the pin, and the rest for the point of the pin has also a small pin-hole through it, as if for the catch.

Fibulæ formed of two or more circular connected discs, similarly ornamented with red and yellow enamel, have been found in the Roman sites along the Rhine and in Switzerland.<sup>1</sup>

No. 2 (plate A) is in the shape of a circular disc, 1 inch in diameter, with a moulding surrounding a central convex boss. On the summit of the boss is a small sunk cavity, about  $\frac{1}{16}$  of an inch in diameter, which may have been filled by a setting of some kind. Round it is a concave moulding also about  $\frac{1}{16}$  of an inch in width, and probably less than that in depth. Round this centre the coloured design is arranged in a star-shaped form; the partitions of the metal that have been left between the coloured spaces are brightly silvered, and form the rays of the star, while the triangular spaces between the rays are filled alternately with red and green enamels.

The back of the brooch is concave. It has an arrangement for the pin similar to the last, but the pin itself is gone, and the catch for the point of the pin is broken away. On the side over the hinge of the pin is a loop for a chain, showing that the brooch was probably one of a pair worn with a chain between them, as previously indicated.

No. 3 (plate A) is a thin disc,  $\frac{1}{16}$  of an inch in diameter, and somewhat damaged round the greater part of the circumference, from which it can be seen that the thickness of the metal is not much more than the thickness of the enamel that covers it. The centre of the disc is occupied by a circle of white,  $\frac{1}{4}$  of an inch in diameter. The annular space between the central circle and the circumference of the disc is subdivided into eight spaces, four of which, placed at nearly equal distances round the ring, are filled with a white ground, in the centre of which is a small circle of red surrounded by eight rays of blue. The other eight compartments alternating with these are filled with a pattern of chequers of a bluish tint on a whity-blue ground.

<sup>1</sup> Lindenschmidt's Alterthümer, vol. ii. Heft x., pl. 1.

Enamelled discs with a great variety of fine chequer-work, though none so fine as in the Camelon example, have been found in the camp at Saalburg, and several are figured and described by Jacobi,<sup>1</sup> and by Lindenschmidt.<sup>2</sup> One somewhat similar, but larger, is described as found at Canterbury,<sup>3</sup> and one, considerably larger with similar ornamentation of stars and chequers, which is believed to have been found at Usk, is figured by Mr J. E. Lee in his account of the Roman Antiquities of Caerleon.<sup>4</sup>

No. 4 (plate A) is a bow-shaped fibula with a disc in the centre and lateral expansions at both ends, with a loop over the end that bears the The length of the fibula is  $1\frac{1}{2}$  inches, and the central hinge of the pin. disc is  $\frac{5}{2}$  inch in diameter. This disc is ornamented by a circular boss in the centre, inserted through the disc like a nail-head, and decorated with red radiating lines in the manner of the nail-head bosses of Gaulish manufacture found at Bibracte, the capital of the Edui of Cæsar. The flat of the boss is divided into eight radiating sections, alternately filled with white and red enamel and surrounded by a border of what is now a brownish, earthy-looking material, passing in some parts almost to the colour and appearance of iron rust, but which on close examination is found to retain minute portions of the polished surface, showing it to be a red enamel. The expansion at the end of the fibula opposite to the loop is triangular in shape, and is ornamented by a central triangle of the metal surrounded by three tangential triangles in white enamel.

No. 5 (plate A) is a harp-shaped fibula,  $1\frac{7}{8}$  inches in length, with a loop at the top for a chain. The pin is gone. It has been hinged at one side and caught at the point by a catch, which is also broken away. On the upper part of the front of the bow of the fibula is a circular moulding,  $\frac{1}{4}$  inch in diameter, which has been filled with red enamel surrounding a central boss left in the metal. Below this the whole front of the fibula

<sup>&</sup>lt;sup>1</sup> Jacobi, Das Römerkastell Saalburg (Homburg, 1897), p. 520, and pl. lxviii.

<sup>&</sup>lt;sup>2</sup> Lindenschmidt's Alterthümer, vol. iii. Heft viii., pl. 3.

<sup>&</sup>lt;sup>3</sup> Proc. Soc. Antiq. Lond., 2nd series, vol. vi. p. 378.

<sup>&</sup>lt;sup>4</sup> Isca Silurum or Catalogue of Antiquities at Caerleon, by John Edward Lee (1862), p. 56, pl. 28.

is ornamented with two rows of triangles in red enamel, their bases parallel to the sides of the fibula and their apices impinging on each other along the median line so as to leave a lozenge-shaped space of the metal between each pair of triangles.

Iron.—The number of iron implements is not large, and the different varieties are in the main similar to those from Birrens and Ardoch.

The largest implements are two pick-axes,  $15\frac{3}{4}$  inches and  $11\frac{1}{4}$  inches in length. A hatchet with a hammer-ended butt (fig. 44) measures 12 inches in length and  $3\frac{3}{4}$  inches in breadth across the cutting face.

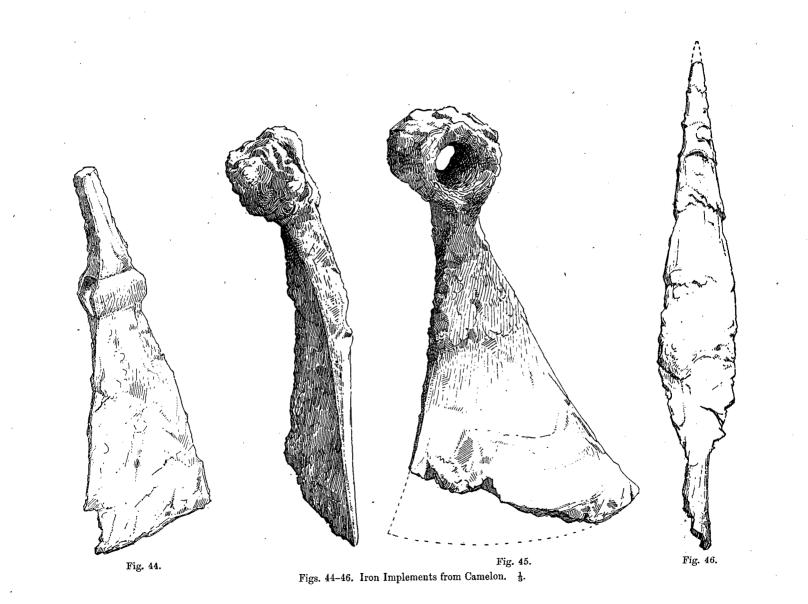
An adze-shaped implement (fig. 45), but more resembling a hoe or a mattock than an adze, measures  $12\frac{1}{2}$  inches in length by  $6\frac{1}{2}$  inches across A similar specimen, but smaller, was found at Ardoch. the face.

There are six spear-heads varying from  $14\frac{1}{4}$  inches to  $5\frac{1}{4}$  inches in length. Of these the largest (fig. 46) is of elongated leaf-shape,  $14\frac{1}{4}$ inches in length, but wanting the base of the socket and part of the point. The blade is 12 inches in length by 2 inches across the widest part, whence it is rounded backwards to the junction with the socket, and tapered with a long and nearly straight curve towards the point.

Another spear-head of more decided leaf shape (fig. 47) is  $7\frac{1}{4}$  inches in length, but wanting part of the butt end of the socket. What remains of the socket is only  $1\frac{1}{4}$  inches in length. The blade is 6 inches in length and  $1\frac{3}{4}$  inches in width at the widest part, about  $2\frac{1}{2}$  inches from the junction with the socket.

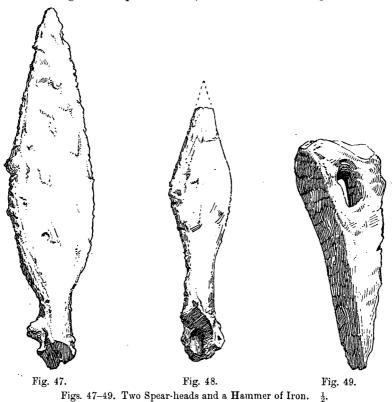
A third spear-head (fig. 48) is  $5\frac{1}{4}$  inches in length, but imperfect at the socket and point. It is also imperfect along the edges, but seems to have been more diamond-shaped than leaf-shaped. What remains of the socket is  $2\frac{1}{4}$  inches in length, and the blade is 3 inches in length by  $1\frac{1}{2}$  inches in greatest breadth, near the middle of its length.

A wedge-shaped tool, presumably a hammer (fig. 49), 31 inches in length by 1 inch in width at the butt, and  $\frac{3}{4}$  inch in thickness, has a small hole of rectangular shape through it near the butt, like the hafthole of a hammer, but the hole is only  $\frac{1}{2}$  inch in length by less than a  $\frac{1}{4}$  inch in width, and could hardly have held a serviceable haft.



# EXCAVATION OF THE ROMAN STATION OF CAMELON. 409

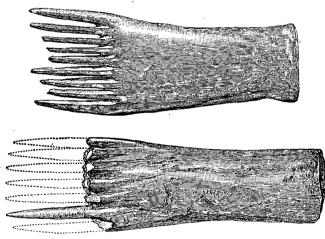
There is also a cylindrical tapering socket, apparently of a very large spear-head, measuring 9 inches in length by  $1\frac{1}{4}$  inches in diameter at the butt end of the socket, and  $\frac{3}{4}$  inch in diameter at the other end, where it is broken off. The other iron objects are chiefly nails from about 6 inches in length with squarish heads, and indeterminate fragments.



Bone.—The bone implements found are few. The most interesting are two long-handled combs of the type so commonly found in Scotland in the brochs, and in England in Late Celtic sites, such as the lake village at Glastonbury, and occasionally in sites of the Romano-British

period. This, however, is the first instance of the occurrence of these long-handled combs on a purely Roman site in Scotland.

The smaller of the two combs (fig. 50) is of deer-horn. It measures  $4\frac{1}{4}$  inches in length by  $1\frac{1}{2}$  inches in breadth, and has all its nine teeth remaining. Its surface is highly polished by use, and completely blackened as if carbonised. When taken into the hand it feels as if saturated with oil or grease.



Figs. 50 and 51. Long-handled Combs of Deer-horn. 3.

The larger comb (fig. 51) is also made of deer-horn, and is 5 inches in length by  $1\frac{1}{2}$  inches in width at the bases of the teeth, tapering to 1 inch at the butt, where it is nearly half an inch in thickness. The teeth are unfortunately all gone but one, which is  $1\frac{1}{2}$  inches in length. The bases of six other teeth remain. They show the saw-marks in the interstices between them.

This form of long-handled comb has been shown to be a variety of the primitive *pecten textoris*,<sup>1</sup> employed by the weaver in the upright loom

<sup>1</sup> In a paper entitled "Notes on the Evidence of Spinning and Weaving in the Brochs, supplied by the Stone Whorls and the Long-handled Combs found in Them," *Proceedings*, vol. ix. p. 548.

to close up the threads of the woven fabric. The method of its use was (and still is, for its use survives in certain countries for certain fabrics), by inserting the teeth between the threads of the warp, and by means of them beating up against the woven part of the web each thread of the weft after it has been passed through between the sheets of the warp by the shuttle—a function now performed in the horizontal loom by the swinging sley.

These long-handled combs, which are most frequently found in the brochs of the north of Scotland, have also been not unfrequently found in England, in association with remains of the Late Celtic and Romano-British periods. Mr Bulleid records them among the objects found in the Late Celtic lake village at Glastonbury.<sup>1</sup> Sir Henry Dryden records seven found in the "Camp" at Hunsbury, Northamptonshire, among Late Celtic remains.<sup>2</sup> They have also been found in similar entrenchments at Stanwick and Spettisbury.<sup>3</sup> General Pitt Rivers records the occurrence of one in Mount Caburn Camp, Sussex, and cites many other instances of their association with Roman or Romano-British remains.<sup>4</sup>

The only other implement of bone is a long pin, the point of which has been broken off. It is a cylindrical rod of bone, neatly tapered from the butt, and highly polished,  $3\frac{3}{4}$  inches of the length remaining.

There are several portions of red-deer antlers which may have been intended to be fashioned into implements, but none of them show signs of being worked.

Stone Implements.—A few implements of types which are classed as belonging to the native civilisation previous, or even long previous, to the advent of the Roman influence have been found on some of the sites of Roman occupation in Scotland. For instance at Ardoch, a bronze socketed axe was found, and at Camelon there was turned up

<sup>&</sup>lt;sup>1</sup> Proceedings of the Somersetshire Archaeological Society, vol. xl. (1894), p. 150.

<sup>&</sup>lt;sup>2</sup> Report of the Associated Architectural Societies, vol. xviii. (1885), p. 57.

<sup>&</sup>lt;sup>3</sup> Archæological Journal, vol. x. p. 218; and Proc. Soc. Antiq. Lond., vol. iv. p. 190.

<sup>&</sup>lt;sup>4</sup> Archæologia, vol. xlvi. p. 430.

a portion of the cutting end of a polished stone axe,<sup>1</sup> and one of those curious circular discs of stone (fig. 52), which are flat, water-worn pebbles of quartzite, apparently selected for their circular shape and flattish faces, and used for some purpose till their edges have been worn flat, and slight indentations have been produced in the centres of their flat faces. There are in the Museum two similar discs of quartzite, one from Kintore, and the other from St Kilda.

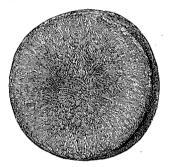


Fig. 52. Disc of Quartzite.

A finely-grained and much used whetstone is  $4\frac{3}{4}$  inches in length by 1 inch in breadth and  $\frac{1}{2}$  inch in thickness.

A small whorl of shale,  $1\frac{1}{2}$  inches in diameter and nearly  $\frac{1}{4}$  inch in thickness, is pierced in the centre by a hole  $\frac{3}{8}$  inch in diameter. A larger whorl of shale,  $1\frac{3}{4}$  inches in diameter, has a hole  $\frac{7}{8}$  inch in diameter cut through it obliquely from both sides and not in the centre, but considerably nearer one edge than the other.

A small disc of shale,  $1\frac{1}{4}$  inches in diameter and  $\frac{1}{4}$  inch in thickness, shows the commencement of a central hole on one side.

A chip from a nodule of brown flint which has been about the size of a hen's egg, shows no secondary working, and may not have been intended for an implement.

<sup>1</sup> Twelve polished stone axes, and two perforated stone hammers, were found in the Roman Camp at Saalburg (see Jacobi, plate xxxii.).

Sculptured and Inscribed Stones.—Considering the size and importance of the place, the absence of important architectural sculpture is very remarkable.

One squared stone (fig. 53) presents upon its dressed face part of a design rudely incised between two palm branches, possibly intended for a vexillum.

Another squared stone, previously noticed by Mr Buchanan, bears upon its dressed surface the inscription XX·V·V·F, equivalent to Legio Vicesima, Valeria, Victrix, fecit. The Twentieth Legion came to Britain

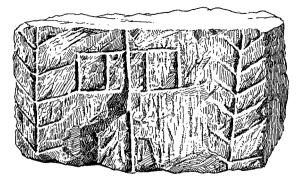


Fig. 53.

with Claudius, who took the title of Britannicus, and gave this Legion the distinction of Valeria Victrix for service in Britain about A.D. 43. With the Second and the Ninth Legions, the Twentieth formed part of the army of invasion which entered Caledonia under Agricola in A.D. 80. It has left many records of its presence in the inscriptions along the wall of Hadrian, as well as in those along the Antonine Wall,<sup>1</sup> so that it seems to have been extensively engaged in the construction of both these barriers. It was subsequently stationed at

<sup>1</sup> Its presence has also been recorded at Cramond, Red Abbeystead, near Melrose, Cappuck, near Jedburgh. Chester, where it remained till the close of the Roman occupation of Britain.

A portion of one side of a large heavy mortar of sandstone (fig. 54), 12 inches in height, is inscribed outside, in a rudely incised label, with T III.



Fig. 54. Mortar of Stone.

A small altar of sandstone,  $12\frac{1}{2}$  inches in height by 7 inches in breadth by  $5\frac{1}{2}$  inches in width, the top having a central *focus*, flanked by two roll mouldings, but no ornament or inscription on either front or sides, has also been noticed by Mr Buchanan.

A fragment of the foot of a small statue in sandstone shows a part of a sandalled foot, 4 inches in length.

Coins.—In the course of the excavations twenty-one coins were found and secured for examination. There is no doubt that more than this

number were found and retained by the finders<sup>1</sup> or parted with to speculative buyers under the mistaken idea that they were of considerable money value. Those secured for examination ranged from the reign of Vespasian (A.D. 69-79) to that of Marcus Aurelius (A.D. 161-180), and consisted of five silver denarii, six first brass and ten second brass coins. Two of the first brass and six of the second brass coins were in such a condition from decay of the metal as to be totally unidentifiable. Indeed, the whole of them are so decayed that they have completely lost their metallic properties, and have been converted into a porous oxide of extreme friability. The following are the descriptions of those that can be identified :—

#### Denarii.

## Denarii.

DOMITIAN (1.) Obv. . . . . . . . GERM P. M. TR. P. Laureated (A.D. 81-96). head to right.

Rev. cos. XIIII. LVD. SAEC. FEC. on a cippus, a priest looking to left, in front of him a candelabrum.

Domitian's fourteenth consulship corresponds with A.D. 88.

<sup>1</sup> I have been favoured by Mr Buchanan with casts of six coins said to have been so found and retained in private hands. Of these, one is unrecognisable, two are second brass of Antoninus Pius with Britannia on reverse, the fourth is a first brass of Vespasian with an eagle displayed on reverse, the fifth is a second brass of Domitian, and the sixth is a denarius of Trajan. Domitian (a.d. 81-96).

(2.) Obv. Laureated head to right. Legend . illegible.

Rev. PRINCEPS JVVENTVTIS. A Throne or seated figure.

Cohen assigns coins with this legend on reverse to A.D. 76-80, before Domitian's succession as sole Emperor.

First Brass.

(1.) Obv. Laureated head to right. Legend illegible.

Rev. Completely effaced.

- (2.) Obv. Laureated head to right. Legend illegible.
  - Rev. Domitian standing, giving his hand to the foremost of three soldiers of whom the first two bear ensigns, a lighted altar between them.
    - This type of reverse is assigned by Cohen to A.D. 85.

Second Brass.

[Two specimens, recognisable by the portrait only, both legends being illegible, and the reverses effaced.]

#### Denarius.

TRAJAN (A.D. 98–117).

- Obv. Laureated head to right. Legend illegible.
- Rev. Arabia standing to left, holding an olive branch, at her feet a camel.
  - This reverse is assigned by Cohen to A.D. 105.

First Brass

HADRIAN Obv. Head to right. Legend partly illegible. A.D. 117-138). Rev. Entirely effaced.

Second Brass.

ANTONINUS PIUS (A.D. 138-161).

(1.) Obv. Laureated Legend head to right. effaced.

- Rev. Brittania to left, seated on a rock in an attitude of dejection with her right hand to her mouth and her left on the rock, before her a shield.
  - This type of reverse is assigned by Cohen to A.D. 155.
- and 3.) Much defaced, but recognisable (2)as coins of Antoninus Pius.

Second Brass.

(1.) Obv. Laureated head to right. MARCUS AURELIUS Legend (A.D. 161–180). partially illegible.

> Rev. cos . . . s c. A nude figure with a spear.

The evidence of the coins as to the period of occupation of the station at Camelon is decisive on one point only, viz., that the occupation lasted at least into the reign of Marcus Aurelius, or some time after A.D. 161. The number of the coins of Domitian may point to the conclusion that the occupation began in his reign; but it has to be remembered that in Britain and other distant parts of the provincial empire, the coins of different Emperors must have been in circulation long after the close of their respective reigns, so that, so far as the evidence goes, there is nothing definite to set against the supposition that the occupation may date only from the reign of Antoninus Pius.

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