

II.

ACCOUNT OF EXCAVATIONS ON TRAPRAIN LAW IN THE PARISH OF PRESTONKIRK, COUNTY OF HADDINGTON, IN 1914. BY A. O. CURLE, F.S.A. SCOT., *Director of the National Museum.*

Traprain Law, or Dumpender Law, lies $1\frac{1}{2}$ mile to the south-south-west of the small town of East Linton in the parish of Prestonkirk, and is conspicuous from the railway as the train passes southward from Drem towards Dunbar. It is situated in an undulating terrain, swelling gradually upwards from the East Lothian seaboard to the Lammermuirs. Its summit—710 feet above sea level and 360 feet above its base—commands a wide prospect ranging from the Pentland Hills round by Gullane Hill and North Berwick to Dunbar, while to the southward the Lammermuirs roll backward to the horizon.

Of the two names which the hill bears, Traprain Law and Dumpender Law, the latter is the more ancient, but the former may claim an antiquity of at least two or three centuries. In the anonymous description of East Lothian published in the Macfarlane Geographical Collections,¹ "Traprain Law" is mentioned as one of the hills of the county, and though that particular article in the collection bears no date, yet, from its having been in Sir Robert Sibbald's possession, one may safely infer that it was written in the seventeenth century. As for the name Dumpender, we first meet it in the form Dumpelder in the *Life of St Kentigern*,² to be referred to hereafter, written by Bishop Josceline probably in 1180.

The etymology of the word, kindly suggested to me by Professor Watson, is *Dun*=a fort, corrupted to *Dum*, and the Cymric *paladyr*=a spear shaft, plural *peledyr*; the meaning might therefore be "the Fort of the Shafts," with possible reference to a palisade which no doubt topped the still existing ramparts. For Traprain the same authority proposes *Tref*=a homestead, and the Cymric *pren*, a tree, supplying for the whole the meaning of "the Tree-stead," *i.e.* the homestead by the tree.

Considerable though the population of Dumpender must have been in past times, and rich too, as the relics found indicate, according to the standard of wealth then prevailing, its houses had probably crumbled to dust and its importance vanished before any page of the authentic history of the neighbourhood opens to us. Tradition, or legend, however, incidentally brings it to view in an interesting connection. The story of St Kentigern, referred to above, narrates how Tenew, daughter of Loth,

¹ *Macfarlane's Geographical Collections* (Scottish History Society), p. 112.

² Forbes, *Kalendars of Scottish Saints*, p. 364.

King of Laudonia, being found to be with child, was, according to the custom of her tribe, cast down from the heights of Dumpender, as a punishment for her supposed crime. From the fate decreed for her she was, however, miraculously preserved, though only to be accused of witchcraft and to be exposed by her father, at the instigation of his heathen subjects, in an open boat on the Forth. How she landed near Culross and gave birth to St Kentigern are matters more intimately connected with the life of the Saint, better known as St Mungo, than with the history of Traprain Law.

With yet another Saint, Modwenna,¹ considered by some to be identical with Medana, the hill is also associated. This holy lady (who died in 517 or 518), though carrying on her mission chiefly in Ireland, is said to have founded seven churches in Alba. Her foundations were for the most part on hills or rocky eminences, which were probably the sites of existing settlements, and such undoubtedly was Dumpender, the site of one of these foundations.

The only reference I have found in history to the hill is a statement to the effect that when the English Fleet was expected in the Forth during May 1547, Patrick, Earl of Bothwell, was appointed to have the care of the bail or beacon on "Dunprender Law."²

The statement contained in the old *Statistical Account* that the name was changed to Traprene Law, "from the two French words *trape* and *reine*," owing to Bothwell having carried off Queen Mary to Hailes Castle in the neighbourhood, may be most conclusively disposed of by stating the fact that the name "Trapren" appears in the *Great Seal Register* as early as 1451. Another piece of information which the author of the foregoing remarkable etymological proposition gives is, however, of more importance to us, as perhaps explaining certain puzzling foundations on the actual summit of the hill. The passage runs: "Several years ago a small plantation of different kinds of trees was made on its summit by way of experiment, and inclosed with a stone dyke or wall six feet high. The trees succeeded very well while they were sheltered by the wall, but since that time they have not made the slightest progress."³

From the earliest time, owing to its commanding position at the edge of a rich champaign and its strong natural defences, the hill must have been periodically under occupation. On plan it is oval, lying with its main axis north-east and south-west, and is somewhat pointed towards the former direction (fig. 1). Along the south-east flank a precipitous

¹ Forbes, *Kalendars of Scottish Saints*, pp. 404, 406.

² Chalmers, *Caledonia*, vol. iii. p. 452.

³ *Stat. Acct.*, Whittingham, vol. ii. p. 349, 1792.

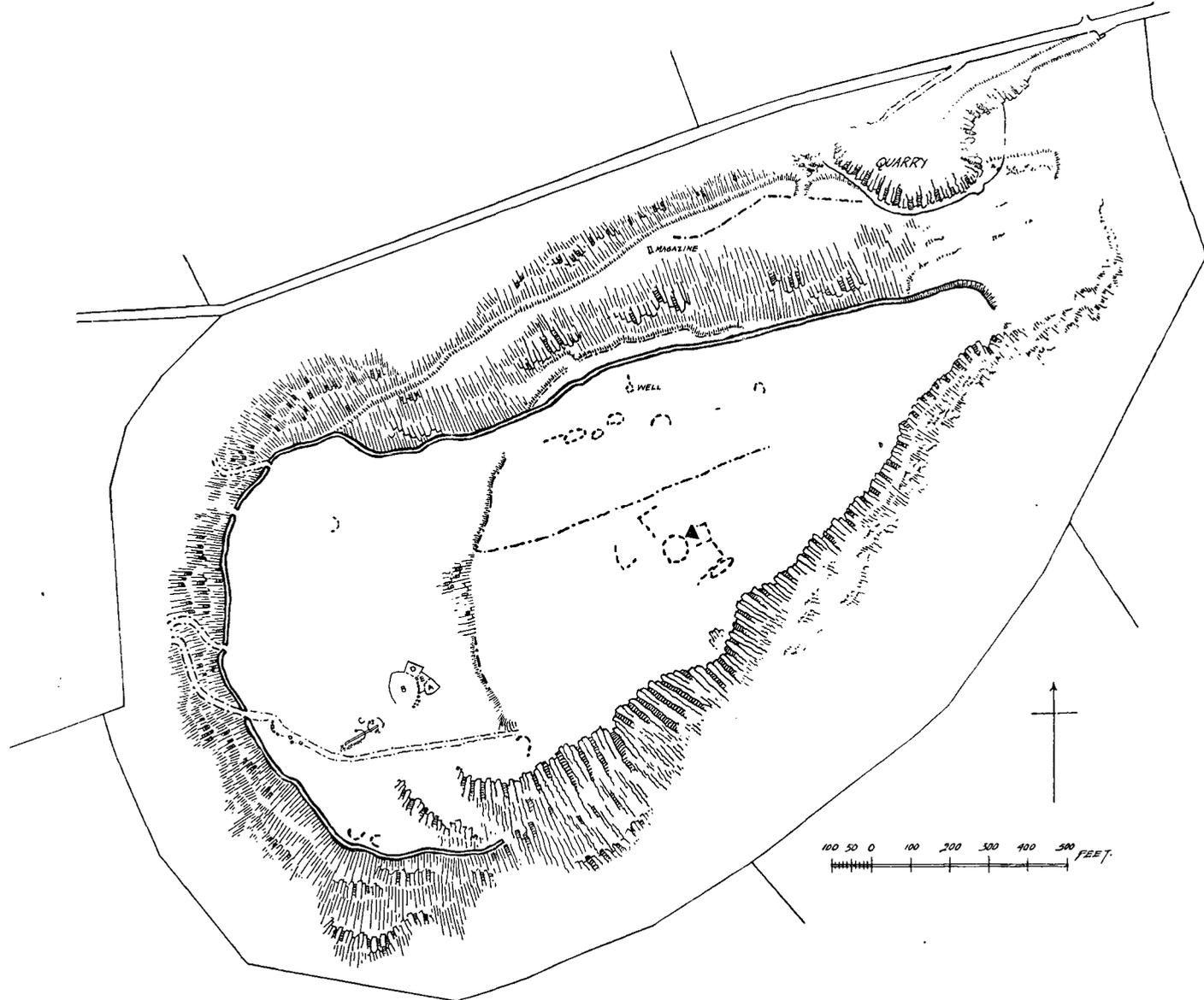


Fig. 1. Plan of Traprain Law showing areas excavated.

wall of rock rises from a steep rock-strewn slope to a height of 200 feet, breaking away as it sinks to a lower level towards the south-west in hardly less precipitous crags. Along the north-west flank the ground rises directly from the base very sharply to a height of some 50 feet, with a broken and rocky surface which in itself constituted a formidable barrier. Above this, on the more southerly half of the north-west exposure, it mounts upwards with a gradually diminishing gradient to the actual summit, which lies at no great distance back from the edge of the precipice on the opposite side.

The fortifications will here be described only in a general way, as it is the intention of the Excavation Committee at some subsequent date to examine them with the help of the spade more thoroughly than it has so far been possible to do. They practically contain the whole hill, following the edge of the steep slope at the base on one side and the crest of the south-eastern precipice on the other, thus including an area approximately half a mile in length by some 330 yards in breadth. Starting from the termination of the precipice towards the southern end of the western side, a rampart with a stone revetment on both faces swings round the broad extremity of the hill, and is thence carried along the edge of the lower escarpment on the north-western flank until it meets an obtruding mass of rock, beyond which the side of the hill becomes steeper and is rough with masses of rock detached and in outcrop. Taking advantage of this change of surface, the rampart is deflected abruptly to the right up the hill, thence with a sharp turn to the left it passes along the upper edge of the steeper slope, eventually turning round the north-east end to meet the precipice on the opposite side. Some distance beyond the rocky outcrop where the first deflection occurs, a terrace breaks across the flank of the hill for a considerable distance. On to this terrace at its north-eastern end, and close to the huge quarry which now disfigures the face of the hill, there leads an approach which appears to have formed at one time an important access to the fort. The road proceeds up a hollow, and where it debouches on the terrace its outer side is demarcated to right and to left by large stones set on end. The lower edge of this terrace has been defended by a wall built, as to its lower courses (which alone remain), against the edge of the bank. Along the terrace, proceeding to the south-west, a road may have led, crossing the obtruding rocks by a rough track and entering the main enceinte by a gap in the rampart just where it has been deflected up the hill; but as there are indications of blasting on the line of the track, and as the gap through the rampart is so inconspicuous, it is possible that both the track and the break in the rampart are

secondary. Fig. 2 shows the northern flank with its lines of fortification, so far as still visible from a distance.

At certain places there may be picked out indications, often vague and indefinite, of another system, which, to judge from the worn and attenuated appearance of the remains, is possibly a more ancient one. The summit-area of the hill lies parallel to the edge of the south-eastern precipice, with no very marked alteration in gradient from end to end. Towards the south-western extremity, facing the north, this area is bounded by an escarpment broken up with masses of rock of sufficient importance to be treated as a factor in a scheme of fortification. At

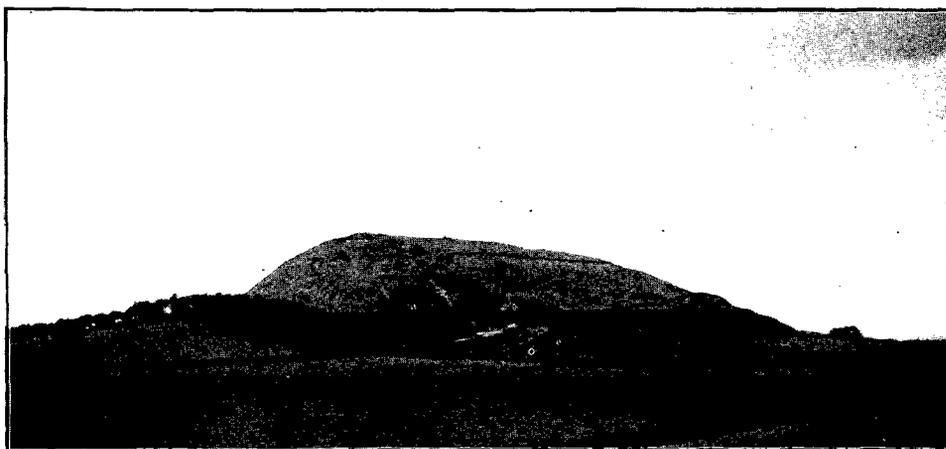


Fig. 2. Traprain Law from the North, showing lines of fortification.

the southern extremity of the escarpment, just where a roadway enters the summit-plateau, traces of an ancient wall or rampart may be observed, sometimes marked by upright stones and sometimes by the débris, partially covered by turf, forming excrescences on the surface. It may be traced meandering along the edge of the escarpment for a considerable distance till the rocky surface gives place to grass, when it turns down over the haunch of the hill to intersect the main rampart, coming up from below, just at the point where the latter makes its higher deflection to the left, and proceeds direct towards the north-east end of the hill. On the upper side there is no actual contact with the two lines; but from the lower face of the main rampart, the rampart which I am presuming to be of earlier construction is distinctly visible curving for a short distance farther down the hill and then along the flank north-eastward in a direction roughly parallel to the main defence. At the point where the upper portion of this ancient

wall swerves to proceed down the haunch of the hill, yet another rampart of the primary system may be discerned. Starting here it runs north-eastward towards the extremity of the summit-plateau, roughly parallel to and at a considerably higher level than the main secondary defence, but fades away before it actually attains the end of the hill.

Besides the entrance in the neighbourhood of the quarry, four other gateways give access to the enceinte, seemingly arranged in pairs. Approached from the north-east, the first of the first pair occurs about 175 feet beyond the point of deflection of the main rampart, and has been approached by a well-defined track which winds up the lower escarpment. Through the rampart, with a width of about 10 feet, its course is oblique, pointing eastward, and when it opens on to the interior it is flanked to the westward by a rocky bank, preventing any easy access in that direction. Its neighbour lies 130 feet further on and is somewhat wider.

After an interval of some 340 feet the first of the next pair is met, approached through a deep hollow. The approach is faced on the interior by a traverse of rock which completely commands it from a height of some 10 to 12 feet above the solum of the gateway, and around the ends of which the paths in either direction must have turned. The approach to the other is carried by an easy gradient along the flank of a bluff, from the crest of which it is overlooked, to the entrance in the rampart, about 12 feet in width. Running from it directly into the interior a roadway can be discerned by the slight hollow which marks its surface, as well as by the occasional occurrence of large stones set on end at one side of its course, leading up the broad haunch, which the hill presents at this point, to a dip in the escarpment demarcating the summit-plateau towards the south-west end on the northern side. As this road approaches the dip, a bifurcation may be observed, marked out by occasional stones set on end protruding from the turf, leading in a north-easterly direction towards a fairly extensive plateau that lies just below the hill-top slope.

On the surface of the plateau the indications of disturbance and occupation were considerable: nettles luxuriated in dense clumps, the rabbits found the soil free and attractive to burrow in; large stones stuck up here and there that were never so placed by Nature, and a stick pressed through the turf showed the ground to be loose and deep. Here, accordingly, it was decided to commence excavation, and for guidance in planning, a datum line was laid down from the beacon on the summit to a point on the rampart 210 feet to the south-east of the most southerly of the entrances.

The areas which were cleared out this year are marked on the plan of the fort (fig. 1), under the letters A, B, C, D, and E, and comprise altogether a total superficial area of about one-seventh of an acre. Plots A, B, D, and E all lie contiguous at the south end of the plateau, while C lies to the northward of the roadway about 90 feet further down the hill.

So little do we at present know of the periods to which our native forts belong, or of their internal arrangements, that there are practically no existing data available to guide the excavator in his search for foundations of dwellings or any other erections. The preliminary work of exploration is consequently fraught with considerable difficulty, until at least the stratification of levels of occupation has been ascertained. This, then, was our first task.

Besides the luxuriant growth of nettles which covered the surface of Area A, several large stones protruded like hog-backs through the turf, suggesting that it was the site of a hut circle. On removal of the turf this circle was found to be merely apparent, the form irregular, the stones varying considerably in bulk and not generally contiguous. Within it, and abutting on the east side, there was laid bare what appeared to be a segment of an inner circle, indicated in the same way as the larger circle by large stones irregularly placed and of varying size. No definite floor was exposed, nor were any relics found to throw light on the period of these foundations, if such they may be called. There seemed no doubt, however, that the placing of the large stones was intentional, and that a hut of some sort had occupied the site. It having been ascertained that a bed of forced soil underlay this level, the stones and earth were removed, and, near the centre of the larger circle and directly beneath the larger stones of the inner segment, one end of a well-formed rectangular hearth was laid bare, consisting of three blocks set on edge, while to the *south* of this lay a small paved area; but beyond these features there were no placed stones, which could be definitely taken as foundations, giving any indication of the form of the superstructure. The evidence was, however, sufficient to prove a second occupation. On clearing off the soil to the level of the paving, a number of pieces of Samian ware were found, which at once threw light on the period of this occupation. Digging downward, at a depth of about 3 feet 6 inches from the surface, the natural subsoil was reached, overlying which, and immediately beneath the hearth, a bed of refuse consisting of bones and discoloured soil occurred, supplying evidence of a third occupation, the earliest of all. As on the level above, here also the evidence of

structure was of the vaguest. Several large blocks of stone lay over the floor area, but, though their positions were carefully surveyed, the plan produced on paper failed to disclose any structural arrangement. A hearth, however, was revealed as well by the refuse on it as by a long narrow slab forming one side set on edge and firmly sunk in the ground. The one stone of a rotary quern lay on the floor area. Fig. 3 shows in section the three levels disclosed, the tape measure lying

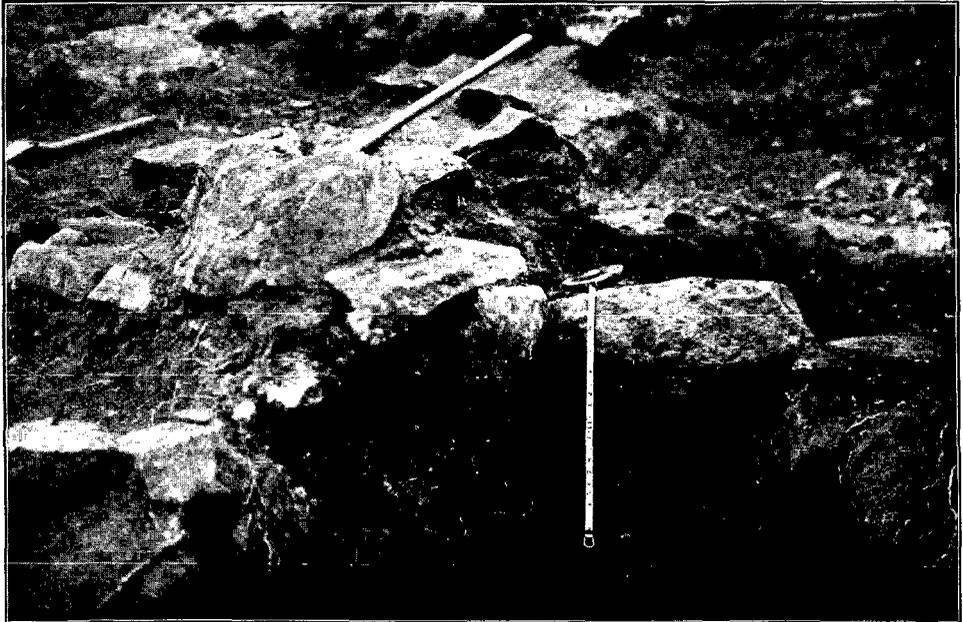


Fig. 3. Showing the relative positions of the three levels in Area A.

on the kerb of the hearth noting the second level, and the end of the tape touching the floor of the earliest inhabitation of the site. Following out the lowest level to the westward, for the strata above showed [no particular features of occupation at this point, a slightly more definite arrangement of stones was laid bare, which was probably the foundation of a clay or turf dwelling (fig. 4). The plan indicates an oval structure lying with its main axis north-east and south-west, measuring some 25 feet by 19 feet and slightly imperfect in form towards the north-east, due probably to a previous removal of stones. Except at this point the oval was surrounded by a more or less definite outline of stones, largest on the western arc, where one of them was an enormous block. In studying the plan, one observes an area amounting

to about one-quarter of the interior space devoid of stones on the south, and three triangular beds of stone with their bases resting on the periphery, two opposite each other with a space between occupying the north-west end, while the third occurs to the south of one of these on the eastern side. Just at the apex of this last triangle two stones set at right angles to each other appear to mark the site of a hearth. An irregular bed of stones occurs at the south-eastern end of the plan, where the outline seems to be incomplete.

Before leaving the description of the features observed in this area

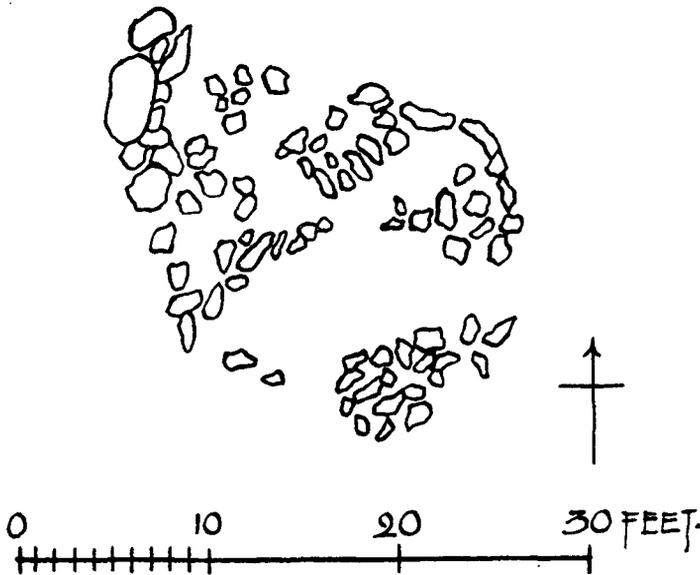


Fig. 4. Foundations exposed on lowest level of Area A.

it may be noted that at more than one place there was evidence in the nature of the soil that the level of the second occupation had been artificially raised by filling in material. Thus occasional deposits were encountered of the pan through and beneath which occurred strata of discoloured soil.

It should also be recorded that adjoining the hearth on the second level there was found a small oblong compartment formed of stones set on edge, measuring some 12 inches in width with a height of 8 inches, and containing clay, in a plastic condition, of several pounds' weight. On the lowest level a small dome-shaped mass of worked clay about 10 lbs. in weight was also discovered.

Having ascertained from this excavation that we had at least three

distinct occupations to deal with, and also something of the revealed nature of each, we proceeded with the exploration of Area B. To it we were also attracted by a line of large outcropping blocks of stones set on edge and contiguous, extending in a northerly direction and lying to the west of Area A. These stones were set on a curve and appeared to bear some relation to the branch road previously noted and marked by similar stones at intervals on its sides. On removal of the turf to the west of this line of stones a singularly confused mass of stones was exposed revealing no structure, and only at one or two points any feature which suggested intentional arrangement. The stones were angular blocks, lying for the most part as if they had been tipped out of carts and spread about anyhow. The ground rises here from south to north, showing in section a depth of about 18 inches of soil above the pan on the south, and of some 4 feet on the north edge of the excavation; and while the setting of stones bounded the area on the east with a depth from subsoil to surface of some 3 feet, the outcropping rock appeared immediately below the turf on the west. The general character of the exposed surface is best seen in the illustration (fig. 5) taken from its north end.

As observed in the lowest level of Area A, there are here also spaces left clear between projecting beds of stones, on two of which occur hearths, as indicated by crosses in fig. 5. It may also be observed from the illustration that the stones forming the triangular bed between these two open spaces present the appearance of having been carefully laid, in distinction to those on the extreme left of the figure which are lying much more unevenly. On one of the hearths lies half of the stone of a rotary quern, while the greater part of another quern-stone stands on edge behind it. The hearth in the foreground had been paved with thin slabs of red sandstone which showed many traces of the influence of heat.

On clearing off the turf to the northward on Area D a more regular circular setting of stones was disclosed, with an interior diameter of some 8 feet, as well as another heap which did not reveal its purpose. Neither over this area nor over the adjoining Area E did there come to light the same inexplicable layer of stones as was seen on the south side of Area B. It is a conjectural explanation of this layer that it represented either the very complete ruins of a dry-built wall, or the cradling on which a turf rampart had been erected; but the latter hypothesis is weakened by the fact that no swelling remained on the surface to indicate the existence of any such rampart.

At the uppermost or north-east side of Area E a number of large

blocks of rock lay confusedly with their bases about 1 foot 4 inches below the present surface, but there was no indication of any floor or hearth connected with them. Relics were by no means plentiful on this upper level in any section.

After the removal of all the stones that lay on the upper surface, and also of about a foot of soil, the second level of occupation was met with as in Area A. Here a completely different condition from what had pre-



Fig. 5. View of uppermost level of occupation on Area B; remains of hearths marked thus, +.

vailed on the level above was revealed. Near the centre (as shown on the plan, fig. 6) lay a well-constructed oblong hearth (fig. 7) some 6 feet in length by 3 feet 6 inches in breadth, formed of slabs set on edge firmly set in the ground, with a paving over the greater part, beneath which the soil was much burned. It lay north and south and was open towards the south end, in front of which extended a farther area of paving. Some seven feet distant from this hearth on the east side and approximately parallel lay a row of boulders (see fig. 7) extending contiguously for a distance of nearly 16 feet, beyond which point their line appeared to continue northward, though irregularly, to the limit of the area. At some 16 feet distant from this hearth in a north-westerly direction and

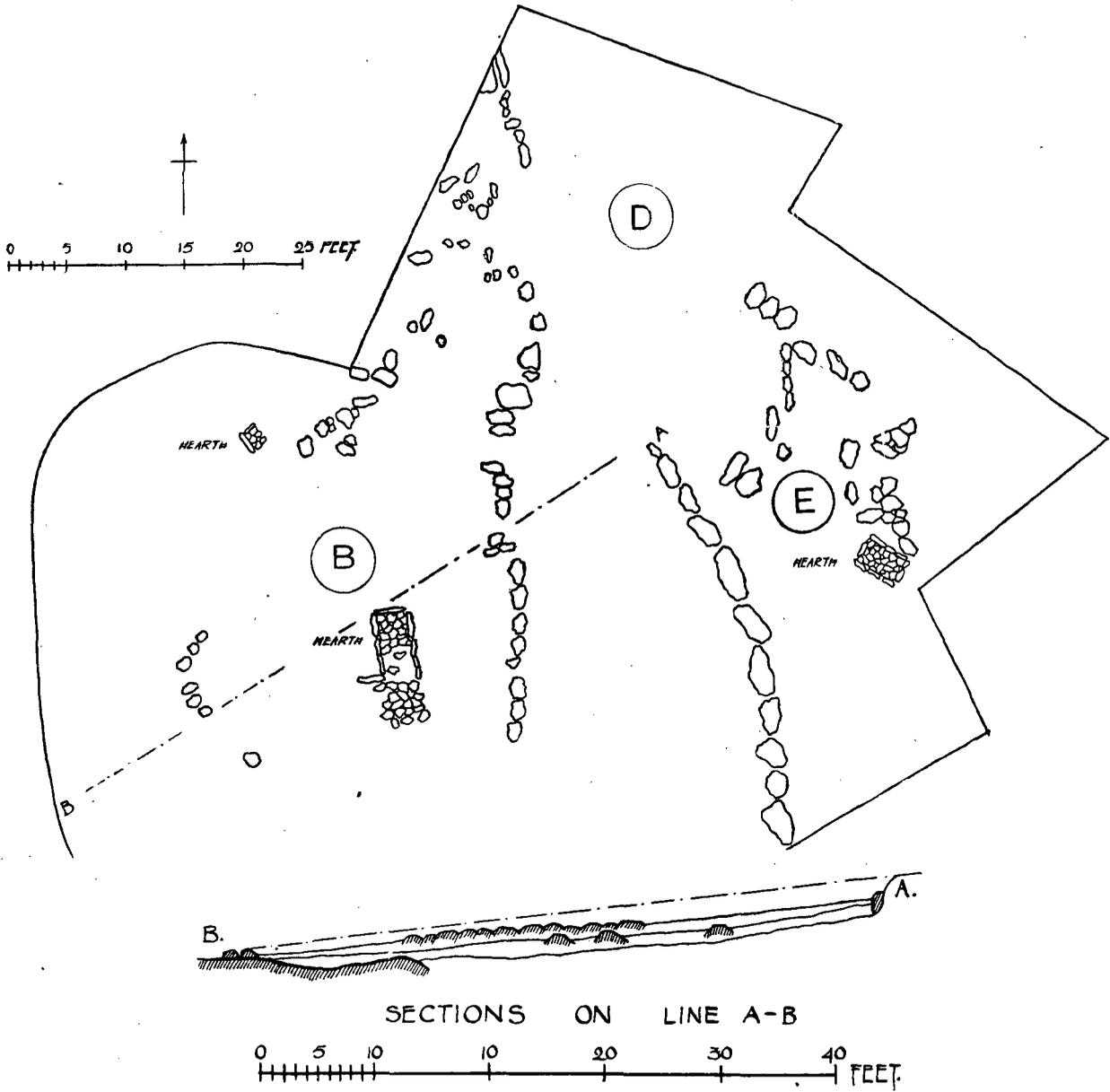


Fig. 6. Plan of the second occupation level in Areas B, D, and E.

lying at an angle to it were the remains, consisting of one corner and some paving, of what appeared to have been a similar hearth. Some large stones, as shown on the plan, lay adjacent but did not reveal any arrangement. Some 16 feet to the westward of the first-mentioned hearth a few boulders seemed to have been placed on a curve and may have had some relation to a superstructure of which no trace remained; there was no indication, however, of a floor connected with them. Over Area D the stones revealed no arrangement except at the north corner of the area,



Fig. 7. Hearth and row of boulders on the second level of Area B.

where a row, which seemed purposely placed, extended for a distance of some 7 feet, terminating with a large stone only partially uncovered. On Area E the various boulders scattered over the surface disclosed no definite plan, but towards the south-east side, another oblong hearth was laid bare, of the same type as those met with at other parts of this level. It measured some 4 feet 3 inches in length by 3 feet in breadth and was paved all over. No post holes were met with at any point, and though here and there the soil was discoloured, it was in no case found to be so to the extent of indicating the limits of a floor. Along the east side of the row of boulders in Area B there lay a bed of clayey soil about 2 feet in breadth and some 6 or 8 inches in depth.

This level of occupation just described lay at an average depth of

about 1 foot below that of the first occupation. At a depth of about 6 inches lower occurred another level, revealed on Area B, and distinguished by two hearths constructed on a much smaller scale; also two small areas of paving which I shall hereafter designate as level 1B. Though in neither case did a hearth of the one level overlie that of the other, they were situated in such proximity as to render the difference in level obvious. Also, a paving to the north of the large hearth of the second occupation dipped at an angle which, if continued, would have carried it beneath the latter. Immediately to the east of this paving, but at a slightly lower level, was yet another paved area measuring some 8 feet by 7 feet, which I shall refer to as 1A. Among the stones of which it was formed lay the upper stone of a rotary quern. Beneath it again the soil was much discoloured, showing a still earlier occupation, which appeared to coincide with a more or less circular setting of stones a little further east which was obviously the first. As on these levels no floors other than the occasional blocks of paving were observed, it can be understood that they were extremely difficult to identify. To sum up the results, evidence was afforded, in a depth of some 4 feet of soil, of five different occupations, the topmost or latest of which occurred about 1 foot 6 inches below the turf where the soil was deepest. Of these occupations the earliest, the latest, and the intermediate one were recognised in each area excavated and appeared to be general, while the others were very partial. The sections on line A—B (fig. 6) show this general group.

On various parts of the hill there are to be seen oblong depressions, with here and there large stones set on edge in the outline, which appear to be the sites of huts. Two such depressions in alignment (fig. 8) lay some 90 feet further down the hill from the western limit of Area B, parallel to and not far distant from the line of the road. The upper one measured in diameter some 32 feet by 24 feet, and the lower—some 8 feet distant from it—33 feet 10 inches in length and some 32 feet 8 inches in breadth. An exploratory trench was dug through the centre of both, from the lower end of the lower depression to the opposite end of the upper. In the lower site this disclosed no trace of occupation, the soil beneath the turf being undisturbed and in its natural condition; nor did that of the upper half of the second site differ from this. It was evident, however, that the lower half of the latter and the greater part of the intermediate area were occupied by disturbed ground.

Over this area, at a depth of about 1 foot below the present surface, a stratum of grey clay was met with nearly a foot in thickness, not discoloured on the surface, as one would have expected it to

be had it been a floor, nor compacted in any way. A very few fragments of coarse native pottery were found in this deposit, also one or two pieces of grey Roman ware. No hearth lay on its surface, and it was difficult to account for on any other ground than that it was the remains of a disintegrated wall of clay which had surrounded the dwelling. Immediately below, at the level corresponding to the intermediate or second level of the other areas, an oblong hearth was laid bare.

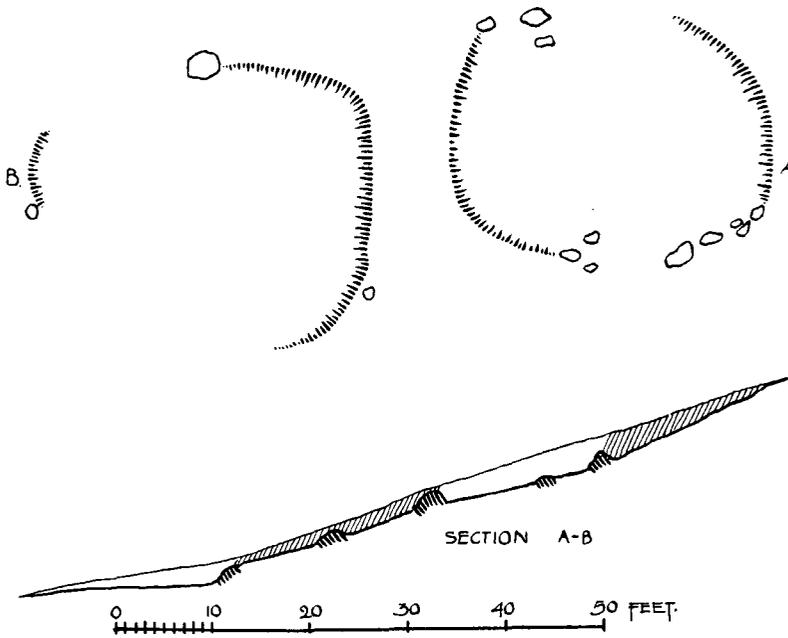


Fig. 8. Plan of surface depressions, Area C, and section through them.

It measured 5 feet by 3 feet and was constructed in exactly the same manner as the others, outlined with long narrow stones set on edge and paved all over. Under the paving the soil was burned red by the action of fire. A few fragments of red pottery of Roman make came from its vicinity. Beneath the hearth the forced soil extended downwards for about 1 foot, much discoloured in places. It contained few relics and little pottery, though included in the latter were fragments of Samian ware and black cooking-pots. The clearance to the bottom showed the original excavation to have been oval, measuring apparently—for its limits were obscure towards the south—some 19 feet by 16 feet, with its longest axis at right angles to that of the sites visible on the surface. On the upper side it was sunk to a depth of about 3 feet,

the depth gradually diminishing with the slope of the hillside. Against the sides, which were sloped back at an angle of about 45° , stones had been placed at intervals, no doubt to keep up the soil; somewhat towards the north side was an irregular arrangement of large stones in which were formed two recesses (fig. 9), one of which rested against the bank on the north-west, and each measured some 6 feet in length by 4 feet in breadth.

Thus far, with the exception of the hearths, very little that was structural has come to light in the excavation, and no plan has been obtained which can really give us a satisfactory idea of what the dwellings of the time were like; but, fortunately, other data were

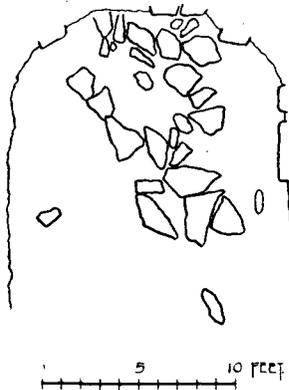


Fig. 9. Arrangement of large stones on bottom of Area C.

obtained which go a long way to explain the absence of any structure. On the lowest level of Area B, towards the east side and in a place where there was much discoloration of the soil, a number of lumps of burned clay were picked up which bore distinctly on one surface the impression of wattle, one portion of which is shown in fig. 10 along with a sketch illustrating the arrangement of the wattles actually impressed on it. Pieces of this material were discovered in the lowest level of Area A, also in the upper level of that area, as well as in the upper level of Area C, though in the two last-mentioned cases the quantity extended only to single pieces. As, however, all the examples found, with one possible exception, appear to have been burned, we may suppose that when not so affected by heat the daub was gradually resolved to earth, and this may account for the bed of clay which lay alongside the line of boulders on the second level of Area A, as well as for the stratum of the same material on the upper level of Area C. It may perhaps also afford an explanation of the unusual accumulation of soil over the

various levels during a comparatively short period of time, as evidenced by the respective relics to be discussed hereafter. In the Romano-British village at Woodcuts, excavated by General Pitt-Rivers,¹ similar evidence of wattle and daub construction was found; and more recently pieces of clay impressed with the marks of wattles have come to light

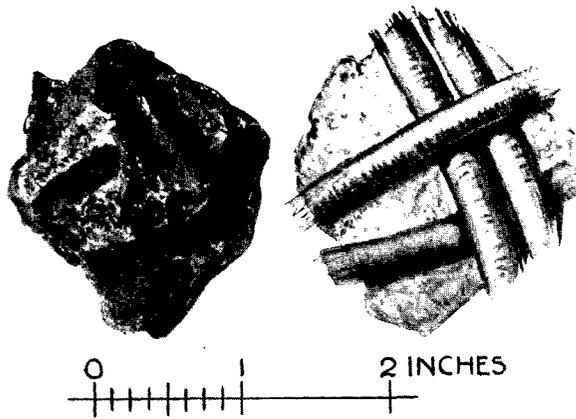


Fig. 10. Piece of burnt clay with impressions of wattle, and sketch showing their arrangement.

in the excavations on the site of the Roman town at Wroxeter²—both, as the relics show, of coeval occupation with Traprain.

Let us now turn to the relics recovered from the various areas excavated, and see what reasonable deductions we may draw.

I. POTTERY.

If we consider in the first place the pottery, we find in the lowest level of all on each area many sherds of native pots, thick hand-made ware, fashioned from material unrefined and mixed with pebbles and grit (fig. 11, Nos. 1-3). In the majority of cases the fragments are those of pots with straight sides thinning away to the lip, which is rounded, though occasionally having a flat or bevelled lip, as shown in the illustration of sections (fig. 12). The sooty incrustation of the walls of almost all these vessels shows that they have been cooking-pots. They are all absolutely devoid of decoration either by applied or incised ornament with one single exception, where a sherd is crossed horizontally

¹ Pitt-Rivers, *Excavations in Cranborne Chase, Woodcuts*, vol. i., pl. lii.

² Bushe-Fox, *Excavations at Wroxeter, Shropshire, in 1912*. Pl. v. fig. 1.

by a broad impressed band. In this respect they differ markedly from the pottery of the kitchen middens on the west of Scotland, and also from that of the brochs. The curvature of the sherds indicates that the vessels were of fairly large dimensions, but not enough pieces of any pot could be put together to show the original size and form; in

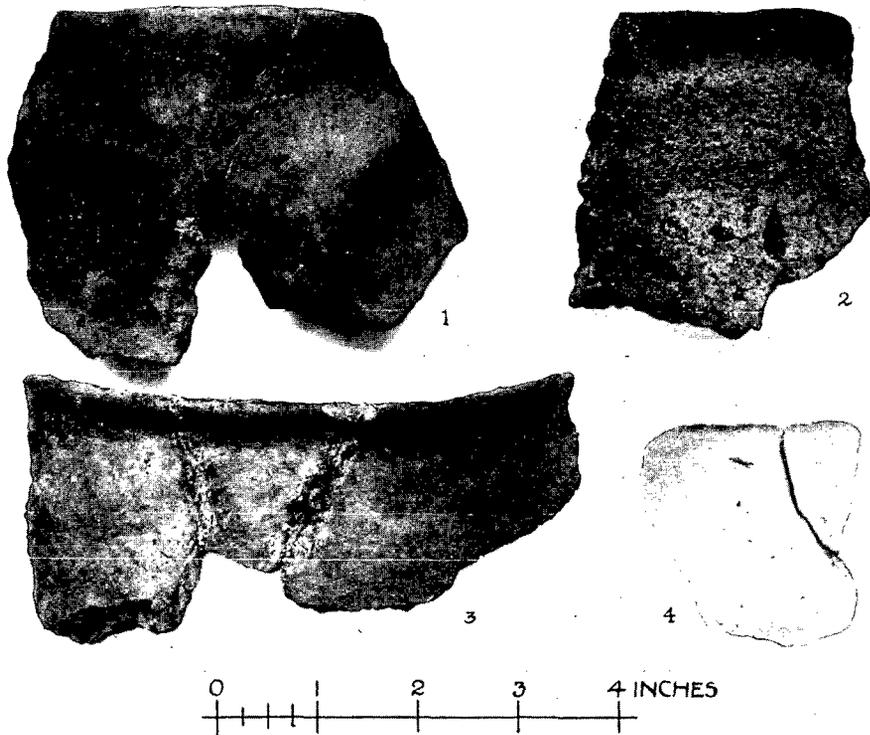


Fig. 11. Specimens of Native Pottery from the various levels.

thickness they average about $\frac{7}{16}$ inch, though some pieces exceed half an inch. In addition to the large coarse cooking-pots there was represented a much finer vessel, presumably a beaker, made of washed or refined clay, smaller in size, with thinner walls not exceeding $\frac{5}{16}$ inch in thickness, and revealing in section in each example a straight side and a simple rounded lip (fig. 11, No. 4). The difference in character is apparent in contrasting the sections, that shown by fig. 14 from the upper level being of the last-mentioned quality. As one rises to the second level, a marked diminution is noticeable in the supply of the native pottery;

and by the time one reaches the uppermost level of all it has practically ceased. Fig. 13 shows the sections of fragments found on the



Fig. 12. Sections of Rims of Native Pottery from lowest levels. ($\frac{1}{2}$.)

second level, and fig. 14 that of the only native sherd found on the uppermost level. On Area C a few fragments came from the bed of

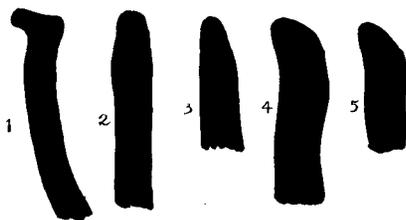


Fig. 13.



Fig. 14.

Sections of Rims of Native Pottery: fig. 13 from second level; fig. 14 from uppermost level. ($\frac{1}{2}$.)

clayey soil which overlay the second level, and on Area B some fragments of one of the more finely made cups alone came from the top.

From all three levels came fragments of Roman pottery: little in

proportion to the native ware from the lowest level, a considerable excess over the native ware from the second level, and a smaller but still an appreciable amount from the top, where native ware was virtually unrepresented. Most of the fragments are small, but a careful collation gives the following results. Of *terra sigillata* there are the remains of twenty-six different vessels. Of these twelve came from the lowest level, ten from the second level, and four from the top. Of vessels of other Roman wares some eighty-four appear to be represented, coming in the proportions of thirty-one from the lowest levels, thirty from the second, and twenty-three from the latest occupation. This gives a total of 110 Roman pots in this small area.

An examination of the *terra sigillata* fragments gives the following results¹:—

1. *Fragments of Vessels of Undecorated Type.*

1. The cup, type Dragendorff 27, occurs three times—twice from the lowest level and once from the second. All three pieces might belong to vessels possibly made before the end of the first century. One piece which came from the earliest occupation of Area B is particularly suggestive of the pottery of an early date from the brilliance of the glaze and the hardness of the body.

2. One fragment from the upper level appears to belong to a large platter, one of the many later developments of type Dragendorff 18, approximately the same as the type No. 10 from the Pudding Pan Rock Collection (*Proc. Soc. Antiq.*, 2nd ser., vol. xxi. p. 279).

3. A small fragment from the lowest level belongs to a vessel which appears to approximate to type Dragendorff 18. There is nothing, however, to suggest for it a first-century origin except that it is on the whole of moderate thickness, and the form of the lip is not exaggerated.

4. A portion of the rim of a large bowl from the upper occupation level might approximate to the Pudding Pan Rock type No. 9 (*ibid.*). It is rather coarse and probably of second-century date.

2. *Fragments of Decorated Vessels.*

1. From the lowest level.

(a) A fragment of the rim of a bowl, type Dragendorff 37. From the narrow rim above, the usual egg and tassel moulding, and general character of the fragment, a first-century origin is strongly suggested.

¹ I am indebted to my brother, Mr James Curle, F.S.A. (Scot.), for notes on the *terra sigillata*.

- (b) (Fig. 15, No. 1.) A small fragment, also of a bowl 37, the design of which suggests a first-century origin.
- (c) (Fig. 15, No. 2.) A fragment of a bowl, also of type 37, with medallion decoration, the subject of which is unidentified.
2. From the second level.
- (d) A fragment of the upper part of a globular vase, type Déchelette 67. This is a first-century type, and the dish of which this is a fragment may have belonged to that period. The example seems to have been of rather larger size than those found at Newstead (*A Roman Frontier*

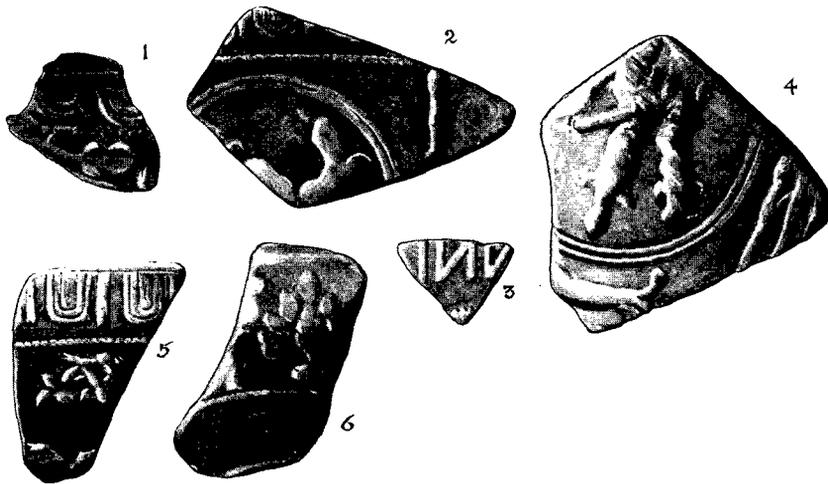


Fig. 15. Fragments of decorated Samian Ware. (3.)

- Post*, plate xxxix. figs. 7 and 8); it shows no part of the decoration.
- (e) (Fig. 15, No. 3.) A small fragment of a bowl by Cinnamus, bearing a portion of the name. It is of second-century Lezoux ware.
- (f) (Fig. 15, No. 4.) A fragment of a bowl, type 37, from Lezoux, showing a figure of a gladiator in a large medallion (Déchelette type 117); of second-century origin.
- (g) (Fig. 15, No. 5.) A fragment of a second-century bowl, type 37, with a floral design.
- (h) A fragment of the rim of a bowl, type 37, coarse and rather late.
- (i) (Fig. 15, No. 6.) A fragment of another bowl, type 37, with what appears to be metope decoration. The floral orna-

ment has not been identified. It has a somewhat Germanic character and may possibly belong to the Trajan-Hadrian period.

3. From the uppermost level.

(j) A fragment of the rim of a large coarse bowl, type 37, showing none of the decoration; of second-century date.

(k) A fragment of the base of a small bowl or globular vase too small for identification.

3. *Fragments of Unglazed Roman Pottery.*

The fragments of unglazed pottery are for the most part small, but all the larger pieces are illustrated in figs. 16 to 18, and sections are given in fig. 19.

(a) *From the Lower Levels.*

Fig. 16, No. 1; sec. fig. 19, No. 4. Portion of the neck and lip, the latter much everted, of what appears to have been a fairly large vessel; the ware is burnt to a red colour, and it seems to have been coated with a yellowish slip on the outer surface.

Fig. 16, No. 2; sec. fig. 19, No. 1. A grey burnished ware ornamented with a series of narrow bands with a matt surface; the lip is considerably everted.

Fig. 16, No. 3. The base and a portion of one side of a small globular vessel of a light brown colour, coated on the exterior and partially on the interior with a buff slip.

Fig. 17, No. 2; sec. fig. 19, No. 2. Cooking-pot of a brownish tint on the sides, which are rough and ornamented with a lattice pattern, while the neck and lip are darker in hue, and polished.

Fig. 16, No. 5. A rather thin red ware covered on the exterior surface with a black slip and decorated with rows of short impressions produced by a roulette. On the shoulder there is formed a slight overhanging ridge, and this, I am informed by Mr Thomas May,¹ is characteristic of a particular type of bulbous beaker ornamented with roulette impressions and of fourth-century date. This being so, it is difficult to account for this late example being found in the bottom level.

Fig. 18, No. 1. Grey ware decorated with lightly impressed and burnished vertical lines.

¹ I am indebted to Mr May for the following references:—May, *Roman Pottery in York Museum*, plate xi. 7; "Roman Camp at Housesteads," *Archæologia Æliana*, xxxv. p. 297, fig. 55. Roach Smith, "Roman Sepulchral Remains found at Stroud, in Kent," *Collectanea Antiqua*, i. p. 17.



Fig. 16. Fragments of unglazed Roman Pottery. ($\frac{1}{3}$.)

Fig. 18, No. 2. Grey ware with lightly impressed lattice ornamentation.

Fig. 18, No. 3. Grey ware with a lightly impressed and burnished scroll ornamentation.

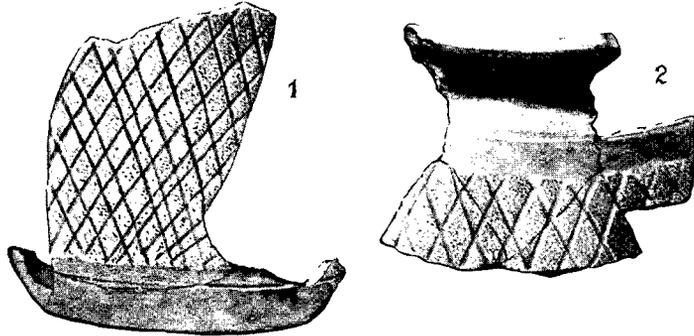


Fig. 17. Fragments of Cooking-pots with lattice ornamentation.

(b) *From the Second Level.*

Fig. 16, No. 4; sec. fig. 19, No. 6. Portions of the mouth and shoulder of a globular vessel of light grey colour, of fine texture, made from well-washed clay; the lattice ornament on the shoulder is lightly im-

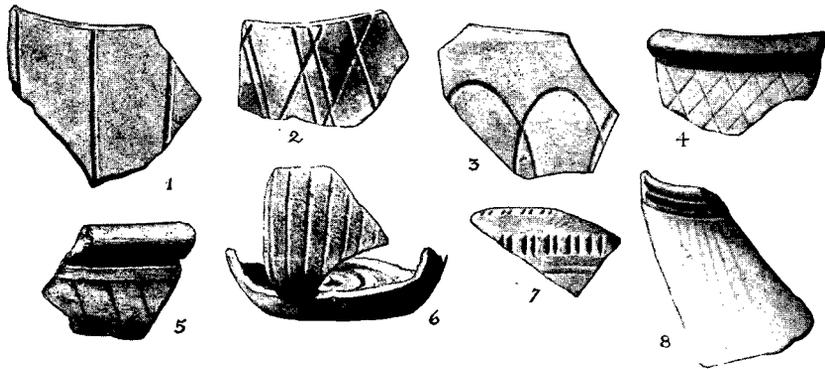


Fig. 18. Fragments of unglazed Roman Pottery. (3.)

pressed; the side of the pot has been slightly pressed inwards in the formation of the loop-like handle.

Fig. 17, No. 1. Portion of the side and the base of a cooking-pot, similar to fig. 17, No. 2.

Fig. 18, No. 6. The base and portion of the side of a small grey vessel which has been decorated with vertical burnished lines.

Fig. 18, No. 4; sec. fig. 19, No. 10. Portions of the lip of a dark grey cooking-pot.

Fig. 18, No. 5; sec. fig. 19, No. 12. Portions of a similar vessel, but of a lighter shade of colour.

Fig. 19, No. 3 (section only). Small fragment of grey ware.

Fig. 19, No. 5 (section only). Fragment of the lip of a vessel of a brownish-grey colour, and of a hard ware showing many particles of mica in the body.

Fig. 19, No. 7 (section only). A small fragment of the mouth of a vessel of light red-coloured ware.

Fig. 19, No. 8 (section only). Portion of the lip of a vessel of a hard ware, grey in colour.

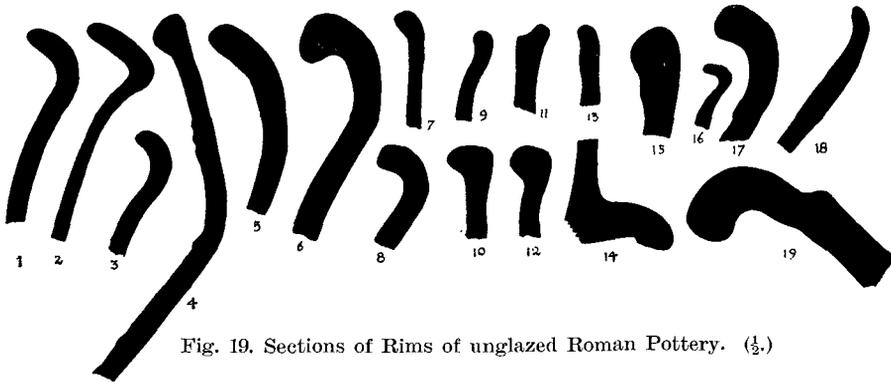


Fig. 19. Sections of Rims of unglazed Roman Pottery. ($\frac{1}{2}$.)

Fig. 19, No. 9 (section only). Fragment of a thicker ware of light-red colour.

Fig. 19, No. 11 (section only). A very small fragment of the lip of what appears to have been a small vessel of light buff ware.

(c) *From the Highest Level.*

Fig. 16, No. 6. One of several fragments of a thick, black, rather coarse ware ornamented around the shoulder with a band of impressed wavy lines.

Fig. 16, No. 7. Loop-like handle, apparently part of the same vessel as the last; the side of the vessel has been pressed in by the formation of the loop.

Fig. 16, No. 8. The greater part of the base of a vessel of buff ware coated with a chocolate-tinted slip; the base is solid and bung-shaped. Mr Thomas May recognises this fragment as the base of a beaker of a ware resembling Castor ware, an example of which was found at

Pevensy¹ and assigned to the fourth century. Similar bases are met with on vases from the New Forest kiln-wastes of the latest Roman period.

Fig. 18, No. 7. A very small portion of a vessel of reddish colour which has been ornamented with parallel lines of roulette impressions.

Fig. 18, No. 8; sec. fig. 19, No. 18. Portion of the shoulder of a vessel of light red colour decorated with burnished vertical lines.

Fig. 19, No. 13 (section only). Fragment of the lip of a vessel of hard buff ware.

Fig. 19, No. 14 (section only). Portion of flange of light tile-red coloured ware on which remain traces of a thin black slip. This appears to be a fragment of a flanged bowl resembling, in imitation of Samian ware, form Dragendorff 38. Two bowls of the type and fragments recovered from potters' kilns in 1879 at Sandford Farm, Littlemoor, near Oxford,

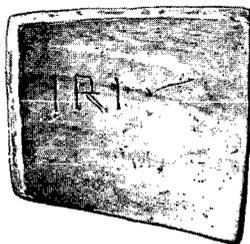


Fig. 20. Inscribed Sherd. (3.)

are preserved in the Ashmolean Museum; and specimens were obtained decorated with conventional patterns in white slip at Pevensy.² A fourth-century date is assigned to the type.³

Fig. 19, No. 15 (section only). Portion of the mouth of a vessel of heavy grey ware, the moulding of the lip somewhat flat.

Fig. 19, No. 16 (section only). Fragment of the lip of a small vessel of red ware; the lip is much everted, and around the neck are two parallel incised lines.

Fig. 19, No. 17 (section only). Fragment of the lip of a vessel of coarse black ware, the surface much weathered off.

Fig. 19, No. 19 (section only). Fragment of the lip of a mortarium. This fragment came from the second level of Area C and appears to be of the Antonine period.

Having an interest greater than that attributable to the pottery itself is a portion of the side of a vessel of grey ware, fig. 20, on the inside

¹ *Sussex Archeological Collections*, vol. li., plate xv. No. 1.

² *Ibid.*, vol. lii., plate ix. Nos. 2 and 5.

³ For the identification of this specimen and for the references to the discovery of the type elsewhere I am indebted to Mr Thomas May.

of which are incised in Roman characters the letters "I R I" and a stop. It came from the second level, and as other pieces presumed to be parts of this vessel were also found there, as well as from the fact that the letters appear on the interior surface, the assumption is justified that the latter were scratched on the hill itself.

II. PERSONAL ORNAMENTS.

Under this head come fibulæ, pins, clasps, and other small objects of bronze. The number of such articles is remarkable considering the

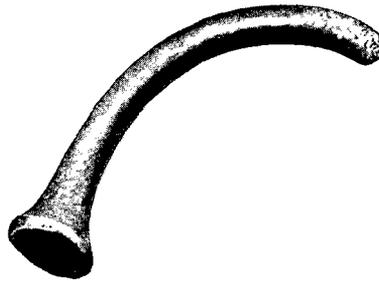


Fig. 21. Portion of a Penannular Armlet of Bronze. (†.)

small area excavated; the majority of them came from the lowest level. At the very bottom of this stratum, almost in the subsoil, there

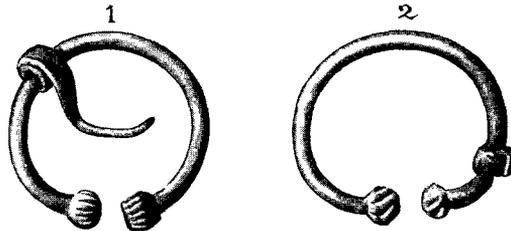


Fig. 22. Penannular Brooches of Bronze. (†.)

was found a portion, about one-third of the whole, of a penannular armlet of bronze (fig. 21), with a flattened expanded termination. This is of a common Bronze Age type.

Two penannular brooches in the collection, with small fluted knob terminals (fig. 22), came, one (No. 2) from the lowest level, and the other (No. 1) from what appeared to be a slightly later occupation at a level only some 6 inches higher. The type is a common one on Roman sites in this country. It was found at Newstead; and an identical specimen to fig. 22, No. 1, and covered with an equally beautiful patina, is

among the relics found in the recently excavated Roman fort at Bemulie, near Glasgow.

A fragment of another penannular fibula, of small size and with a plain knob terminal, came from the second level.

There are seven bow-shaped fibulæ, of which four came from the level of the earliest occupation, one from the stratum immediately superimposed, one from the second level, and one from the top. The four from the earliest occupation (fig. 23, Nos. 1, 3, 4, and 7), include two knee fibulæ (Nos. 3 and 4). The pin of each has worked on a spring which, as usual in the type, is contained in a semi-cylindrical casing. No. 3 is of a form commonly found on Roman sites of the Antonine period, specimens coming from the fort at Newstead,¹ from Camelon,² and from Wroxeter.³ The shape of No. 4 is somewhat slighter than that of the usual knee fibula, and the peculiar characteristic which gives its name to the type is less pronounced; it has also a small ring attached to it at the head. It is further remarkable for the remains of silver plating which may be observed upon it, a small rosette still remaining on one side towards the foot of the fibula, and a short bar above the spring cover.

The third fibula from the same level (No. 7) much resembles, in form and scheme of decoration, a brooch found in the Victoria Cave, Settle.⁴ Along the top of the bow runs a row of lozenge-shaped spaces filled with pale blue enamel, while triangular points of yellow enamel fill the angles between, along both sides. A recess at the head has held a boss, now wanting. A semicircular ridge or crest rises at the back of the head and has a groove running down the centre of it. A somewhat similar crest appears on the fibula shown in fig. 24, No. 3.

The fourth bow-shaped fibula from the lowest level (fig. 23, No. 1) is of a type perhaps best known from the pair of silver-gilt brooches found at Backworth in Northumberland. A number of examples were recovered at Newstead, some of them richly ornamented with enamel and chasing. This brooch is quite devoid of any enrichment, though its lines are graceful, and the floriated knob in the centre of the bow is well executed. It has a spring for the pin, and the axial wire of the spring, caught in by a collar, forms a loop at the back of the head. The example from Newstead which it most nearly resembles is one found in one of the chambers at the rear of the *principia*, a find-spot believed to be not earlier than the middle of the second century.

The fibula (fig. 23, No. 6) from level 1A, just above that of the lowest

¹ James Curle, *A Roman Frontier Post*, plate lxxxvii. figs. 31 and 32.

² *Proceedings*, vol. xxxv. p. 402, fig. 43.

³ Bushe-Fox, *Excavations at Wroxeter, Shropshire*, 1912, p. 25, fig. 9, No. 4.

⁴ Boyd Dawkins, *Cave Hunting*, p. 99, front. fig. 1.

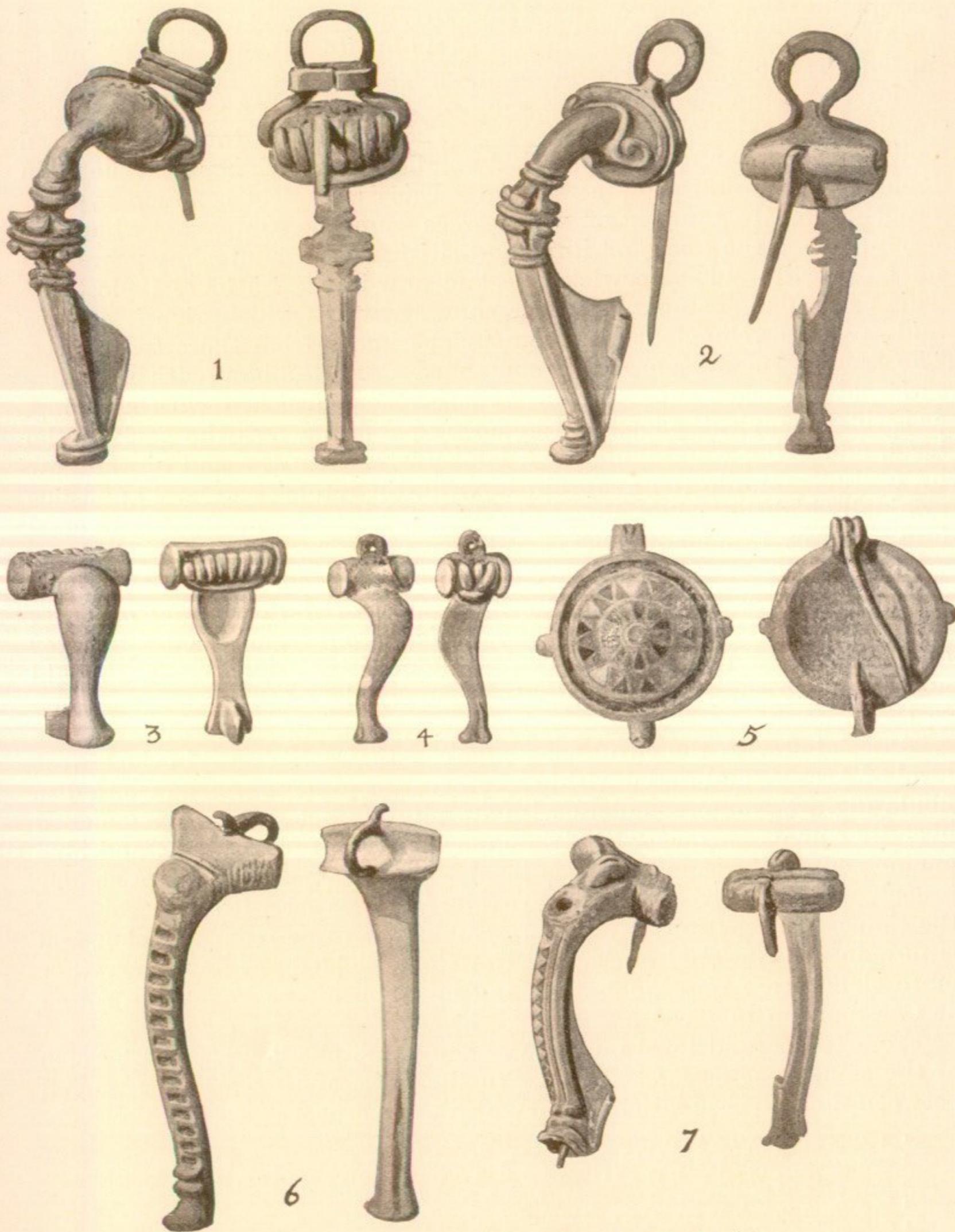


Fig. 23. Fibulae from the lower and second levels. (†.)

occupation, was found on a paving of stones towards the north end of Area B, which probably represented a hut site. It measures $2\frac{1}{4}$ inches in length; the bow, which has a flat curve, has been enriched with a series of rectangular compartments of enamel only one of which now retains the material, red in colour. There is a boss towards the head end of the bow, and at the back a small hook which has held the main loop of the spring, now wanting. This is a fairly common type of brooch, several examples of which were found at Newstead,¹ while one occurs among the hoard of Romano-British relics found many years ago on Lamberton Moor, Berwickshire, and now in the National Collection.² This particular example, however, shows features which give it a place midway in development between the specimens from these two places. The Lamberton Moor brooch is enamelled along the bow with a similar series of oblong compartments; it is further furnished with a spring, as is this example, the loop of the spring passing across the back of the head, and being caught up on a hook fastened to the end of the bow by a stud. While the Traprain brooch still retains the hook, and has originally had the spring, the stud which held the former has developed into a purely ornamental boss. When we turn to the Newstead fibulæ we find that the spring has given place to a hinged pin, and that with the spring the hook has also vanished. Most of the Newstead brooches of this type were found near the surface; one came from an outer ditch of the extended fort, thus affording negative evidence that it could not belong to the first occupation. The majority of them were assigned to the Antonine period.

Associated with the two knee fibulæ (fig. 23, Nos. 3 and 4) in the lowest level of Area A, and found within a few feet of either of them, was a disc fibula (fig. 23, No. 5) complete with its pin. It is beautifully enamelled over its convex surface with triangular spaces of red, white, and blue enamel, now unfortunately much tarnished with copper oxide. A similar brooch was recently found at Wroxeter³ associated with two coins of the Emperor Vespasian; another resembling it came from Camelon, and is now in the National Museum;⁴ Newstead yielded yet another, rather more elaborate, from the baths; and one appears to have been found at Corstopitum in 1908.⁵

From the second level on Area D came another fibula (fig. 23, No. 2) of the same type as fig. 23, No. 1. In the lapse of time which occurred between the two occupations from which these brooches were respectively

¹ *A Roman Frontier Post*, p. 323, plate lxxxvi. figs. 19 to 22.

² *Proceedings*, vol. xxxix. p. 367; illustrated in *A Roman Frontier Post*, p. 320, fig. 46b.

³ *Excavations at Wroxeter, Shropshire*, 1912, p. 26, fig. 10, No. 9.

⁴ *Proceedings*, vol. xxxv. p. 405, plate A, fig. 2.

⁵ *Corstopitum Report*, 1908, p. 100.

recovered, the type has suffered a slight modification; the form is unchanged, but in place of the pin working on a spring, as in the earlier example, a simple hinged pin has been employed, and, as a corollary, the loop at the back previously formed from a wire passing axially through the coils of the spring has, with the loss of the spring, become an integral part of the brooch. On the trumpet-shaped head there is on either side a single volute, the last fading expression of the characteristically late-

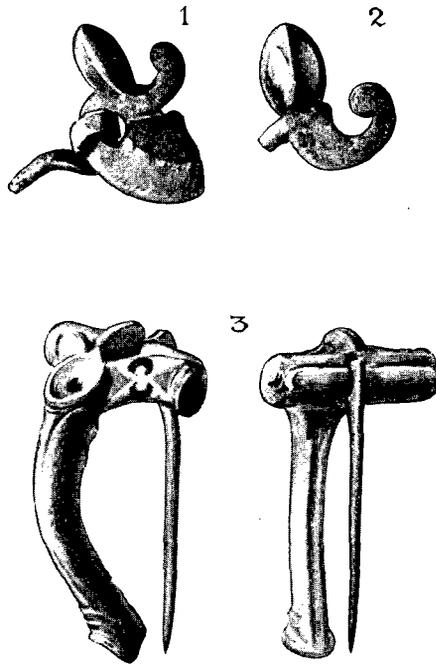


Fig. 24. Fragments of dragonesque Fibulæ from the lowest level, and a bow Fibula from the highest level. (†.)

Celtic enrichment which distinguishes the finer brooches of this class found at Newstead and approximately dated, from their find-spots, to the first half of the second century of our era. Traces of tinning are still to be seen on the bow.

The last of the bow fibulæ (fig. 24, No. 3) is one of the few relics from the upper level of occupation. It appears to be allied in type to fig. 23, No. 7. The bow is rounded and plain; there is a cavity in the head which has contained a boss, and the pin is hinged. On the sides, which form a continuous curve into either end of the head, is a device in enamel consisting of two opposing crescents of deep blue, facing inwards between two triangular compartments, now too much decayed for the

colour to be recognised. The form bears some resemblance to a fibula found at Corstopitum in 1910.¹ On the head end of the bow, between the cavity from which the boss has been removed and the crosspiece, there rises a thin semicircular crest, with a slight groove along the top. This appears to be a rudiment of a loop employed to hold in position the axial wire of the spring in the same manner as the hook referred to above: a somewhat similar feature may be seen on fig. 23, No. 7. Fibulæ illustrating this arrangement were found by General Pitt-Rivers in his excavations at Rotherley and Bokerley Dyke.²

The lowest level further yielded two fragments of the "S" or dragon-esque fibula (fig. 24, Nos. 1 and 2), a characteristically Celtic ornament of Romano-British times, and generally dated to the second century. Each of these fragments is a head or terminal portion. The larger of the two (No. 1) consists of the head, about one-third of the body, and a portion of the pin, which, as in all other specimens of the type, works on the neck of the brooch round which it is bent. The bronze of which the fibula is made is somewhat decayed, but there is no indication that there has been any enamelling on the remaining portion. As, however, these brooches were frequently enamelled on the centre of the curving body, the part amissing may have been so enriched. The metal is thin, and the appearance of the head is less pleasantly artistic than in most specimens of the class; the leaf-shaped, ear-like projection is somewhat narrow; the "snout," ending in a slight knob, has a restricted curve and does not turn back spirally, and the space in the body through which the pin turns is merely large enough to serve its purpose, and has not, as in the generality of examples, been treated as an artistic feature. It is worthy of remark also that no eye appears upon the head. This fibula somewhat resembles one found at Corstopitum in 1910,³ except that the latter is enamelled; it probably comes late in the series. No. 2 is a smaller fragment, consisting merely of the "ear" and the "snout." These features are more in keeping with the type as known to us; the ear has been enamelled, probably in red, though the colour has gone, and the snout is considerably recurved. An enamelled brooch of this type was found at Newstead,⁴ and another is in the collection of objects found on Lambertton Moor.⁵ These appear to be the only recorded previous finds in Scotland, though a

¹ *Corstopitum Report*, 1910, p. 40, fig. 13.

² Pitt-Rivers, *Excavations in Cranborne Chase, etc.*, vol. ii., plate xcvi. fig. 4; vol. iii., plate cxv. fig. 3.

³ *Corstopitum Report*, 1910, p. 45, fig. 28.

⁴ *A Roman Frontier Post*, p. 320, plate lxxxv. fig. 7.

⁵ *Ibid.*, p. 320, fig. 46a.

considerable number have been reported from England, chiefly from the north.¹

A T-shaped fragment of silver, $\frac{3}{8}$ inch in length, from the lowest level may possibly be a part of a very small bow-shaped fibula.

Four complete bronze pins were found, besides fragments of one or two others. Fig. 25, No. 1, measuring $3\frac{3}{4}$ inches in length, came from the lowest level on Area A, and appears to be of a type similar to one found at Newstead,² though the latter is believed to have had a small circular setting of red enamel on the head. The stem has been encircled at intervals with bands of incised rings. A stem only, of bronze, incised with similar rings came likewise from the lowest level, as did also the upper end of another bronze pin with a flattened knob-head of small diameter (fig. 25, No. 4).

From the second level on Site A, associated with a number of pieces of second-century Samian ware, there came a bronze shoulder-pin (fig. 25, No. 3), with a ring head bevelled to the inside. A similar pin was found in the Ness broch at Freswick, Caithness, while others of iron, without the bevel, were discovered respectively in the kitchen-midden at Gallanach, Oban, in the fort at The Laws, Monifieth, Forfarshire, and in the Iron Age burial at Moredun, near Edinburgh.³

On the second level also, but on the adjacent Area B, was found a pin (fig. 25, No. 2) of a type known as the hand-pin, from a fanciful resemblance it presents to a closed hand, the flat lower plate representing the palm, while the pellets, which form the upper segment, denote the knuckle-joints of the folded fingers. Like the last noted, this pin is purely of Celtic character, though I do not think that we have another of identical form in the National Collection. One with four pellets was found at Corstopitum in 1910,⁴ and is figured alongside of a pin of the type of fig. 25, No. 3, found in the same year. The Traprain specimen has been coated with tin, and still retains on its surface a considerable amount of that metal. Its length is $3\frac{1}{16}$ inches.

A long thin pin of bronze wire, $4\frac{7}{8}$ inches in length, tapering to one end, is shown in fig. 25, No. 6. It is much wasted at the head, and its features are barely determinable.

Fig. 25, No. 7, also of bronze, is very suggestive of a swan-neck pin, but the metal is much decayed and the object imperfect at both ends, so that I do not consider that a definite determination is justified. It

¹ In an appendix to the *Corstopitum Report*, 1908, p. 116, Professor Haverfield gives a list of recorded finds up to that date.

² *A Roman Frontier Post*, p. 337, plate xcii. fig. 11.

³ *Proceedings*, vol. xxxviii. 1906, p. 433 *et seq.*, figs. 5, 7, and 8.

⁴ *Corstopitum Report*, 1910, p. 47, fig. 34.

much resembles a pin found in the Happy Valley, Woodendean, near Brighton, along with a small bronze boar.¹ The swan-necked pin, how-

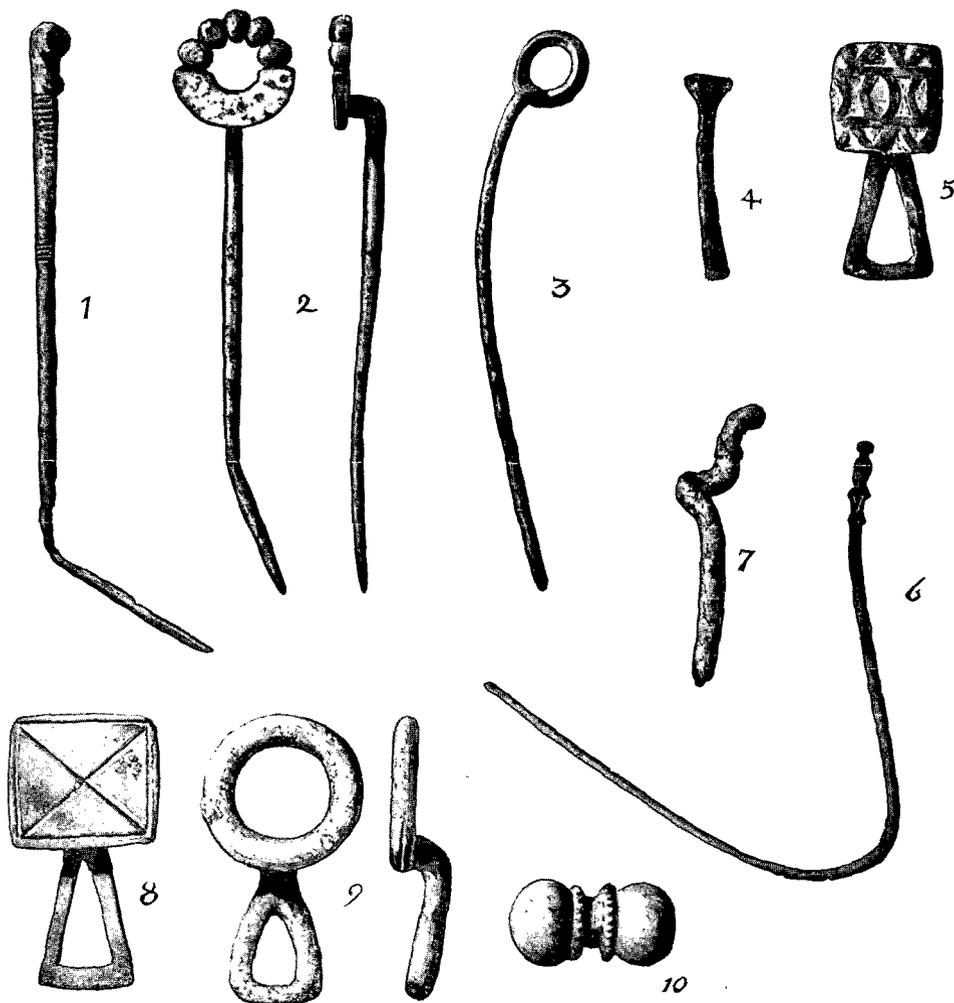


Fig. 25. Bronze Pins and Clasps. (†.)

ever, belongs to an early period of the Iron Age, and this particular object was found on the highest level of occupation.

A dumb-bell-shaped button of bronze (fig. 25, No. 10) came from the lowest level on Area C. Two bronze buttons of this type were found

¹ *Proceedings of the Society of Antiquaries*, Second Series, vol. xxi. p. 489.

at Newstead, one of them very similar to this;¹ another is reported from Wroxeter.²

Fig. 25, Nos. 5, 8, and 9, are clasps, probably for garments, the triangular portion being presumably passed through a slit in one side of a garment and sewn on to the material, while a loop fastened to the other side was passed over the head to complete the fastening. Two of these objects, Nos. 5 and 8, were found on the lowest level, while No. 9 came from the top. No. 5 has been enamelled, the central panel containing oval spaces of blue on a white ground, while the triangular spaces on the two borders have been filled with scarlet. Various examples of these clasps were found at Newstead.

The pin-like object from the second level illustrated in fig. 26, No. 2, must, I think, be an awl for piercing leather. It is of bronze, $2\frac{3}{8}$ inches in length, and has a triangular head folded over at the end. The long flat head would be unsuitable for a pin, as the rapid increase in breadth from the stem would give it a tendency to slip out of any garment it had been thrust into, whereas the broad head could be held comfortably between the finger and thumb if the object was to be used for piercing. A relic of almost identical form and dimensions, but lacking the rolled termination, was found with others in a fort in Ostergötland, Sweden, dated about 400 A.D., and was regarded as an arrow-point,³ but for such an end the rolled head makes the Traprain specimen unsuitable; it would not have assisted the fastening, it is probably broader than an arrow-shaft would have been, and it does not conform to its curve.

Fig. 26, No. 1, from the second level of occupation, is a terminal for a strap, notched at the point so as to be used as a nail-cleaner or perchance, a scratcher; or its uses may be reversed, and as a nail-cleaner it may have been attached to the girdle by a leather strap, a small portion of which still remains in the forked head. Toilet instruments of this nature, found either singly or associated on a ring with an ear-pick and tweezers, are known on the Continent from the later Hallstat or early La Tène periods.⁴ Objects of bronze with somewhat similarly notched ends, described as nail-cleaners, were found by General Pitt-Rivers in his excavations at Rotherley, Bokerley, and on Handley Hill and Handley Down;⁵ and a similar use may conceivably be assigned to a small iron object with a bifurcated termination, found in

¹ *A Roman Frontier Post*, plate lxxxii. figs. 6 and 8.

² Bushe-Fox, *Excavations at Wroxeter, Shropshire, in 1913*, p. 14.

³ "Opuscula Oscari Montelio," *Die Vorgeschichtlichen Burgwälle in Schweden*, p. 342, fig. 20.

⁴ Déchelette, *Manuel d'Archéologie*, "Archéologie Celtique," p. 880.

⁵ *Op. cit.*, vol. ii., plate cii. fig. 7; plate ciii. fig. 8; vol. iii., plate clxxiii. fig. 8; vol. iv., plate 258, fig. 10.

the Buston Crannog, and illustrated by Dr Munro in *Ancient Scottish Lake Dwellings*, p. 227, fig. 240. The dot and circle ornamentation is common on objects of the later Iron Age period, and may be seen in use on a pair of tweezers from Newstead,¹ and on combs of bone from brochs, etc., and it continued to be employed in mediæval times. This is a graceful object, made of bronze which has taken on a fine patina,

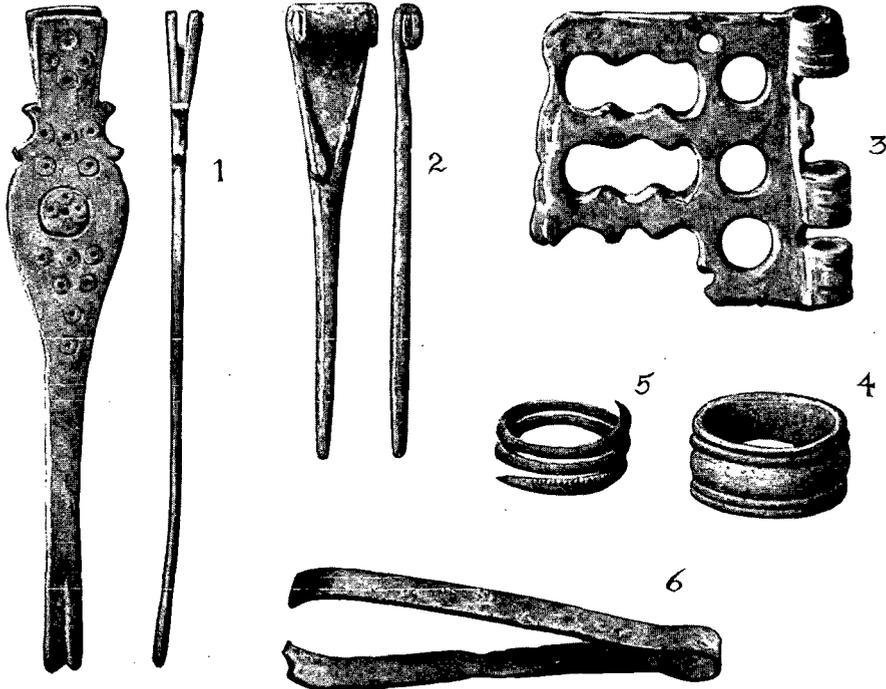


Fig. 26. Strap terminal, Awl, portion of a Clasp, Rings, and Tweezers. (†.)

in this last respect differing from the majority of the bronze articles found on the site.

From the same level as the last came the object represented by fig. 26, No. 3. It is a pierced plate of bronze, and has been one-half of a hinged clasp probably fastened to leather. The design is poor and has been produced by a drill, the longer piercings being made by three overlapping applications. Clasps of this nature are not uncommon on late Roman sites, but as a rule they show more artistic merit than this one does. It may be compared with one found at Kastell Zugmantel on the German Limes.²

¹ *Frontier Post*, plate xcii. fig. 8.

² *Saalburg Jahrbuch*, 1910 (*Kastell Zugmantel*), Taf. viii.

The pair of tweezers of bronze (fig. 26, No. 6) came from the highest level. Such articles are of very common occurrence on Romano-British sites, and were probably employed for depilatory purposes. Two pairs were found at Newstead.¹ They were likewise frequently found by General Pitt-Rivers in his excavations;² they have also been found at Knap Hill and Casterley Camps in Wiltshire,³ and in large numbers in the Glastonbury Lake Dwelling.

Another personal relic of bronze is a spiral finger-ring (fig. 26, No. 5) consisting of two and a half coils of a thin plano-convex strip of metal, tapering markedly to one end where it is notched along the edge. In diameter it measures $\frac{2\frac{3}{8}}{3\frac{3}{8}}$ inch; it came from the lowest level on Area A. Such finger-rings are by no means uncommon on Iron Age sites of this period. One of a like number of coils was found in the fort at Castle Law, Abernethy;⁴ another was found in the Hyndford crannog; and a third in the Iron Age cairn excavated a few years ago at the Black Rocks at Gullane.⁵ Fig. 26, No. 4 is a ring of bronze of a different type, which also came from the lowest level, but on Area B. It measures $\frac{1\frac{1}{8}}$ inch in interior diameter and $\frac{3}{8}$ inch in breadth; it is ornamented at each edge with a plain half-round moulding.

Personal ornaments in material other than bronze consisted of beads, armlets, and rings in jet and glass, or kindred material. Dealing with the former first, we have segments of eleven different armlets, mostly from the lowest level, shown, with one exception, in the accompanying illustration fig. 27. The segment not illustrated has been split; it came from the upper level.

As will be observed, these armlets are plain, with the exception of No. 2, which is ornamented with incised parallel lines following the circumference, and cross cuts. The segments vary considerably in thickness, from the fragile specimen shown as No. 6, which must have been very light when complete, to the rather coarse-looking piece, No. 11.

The complete ring and half of another (fig. 27, Nos. 5 and 8) both came from the upper level; while the small ring (fig. 27, No. 3), with an interior diameter of $\frac{1\frac{9}{32}}$ inch, came from the bottom, as did also the portion of a small bead (fig. 27, No. 1). The segment, amounting to almost one-half of a broad ring of shale (fig. 27, No. 15), came from the lowest level on Area C. Fig. 28, No. 1, is an oblong bead of polished jet, faceted on the upper surface, bevelled slightly at the ends, and pierced with two longi-

¹ *A Roman Frontier Post*, plate xcii. figs. 6 and 8.

² Pitt-Rivers, *op. cit.*, vol. i., plate xvi. figs. 13, 17, 18, and 19; vol. iii., plate clxxxii. fig. 8.

³ *Wiltshire Archaeological and Natural History Magazine*, vol. xxxvii. p. 63, fig. 11; and vol. xxxviii., plate i. fig. 7.

⁴ *Proceedings*, vol. xxxiii. p. 31, fig. 16.

⁵ *Proceedings*, vol. xlii. p. 334, fig. 2.

tudinal perforations to ensure its remaining in a correct position when worn. It measures $\frac{1}{16}$ inch in length by $\frac{3}{8}$ inch in breadth, and came

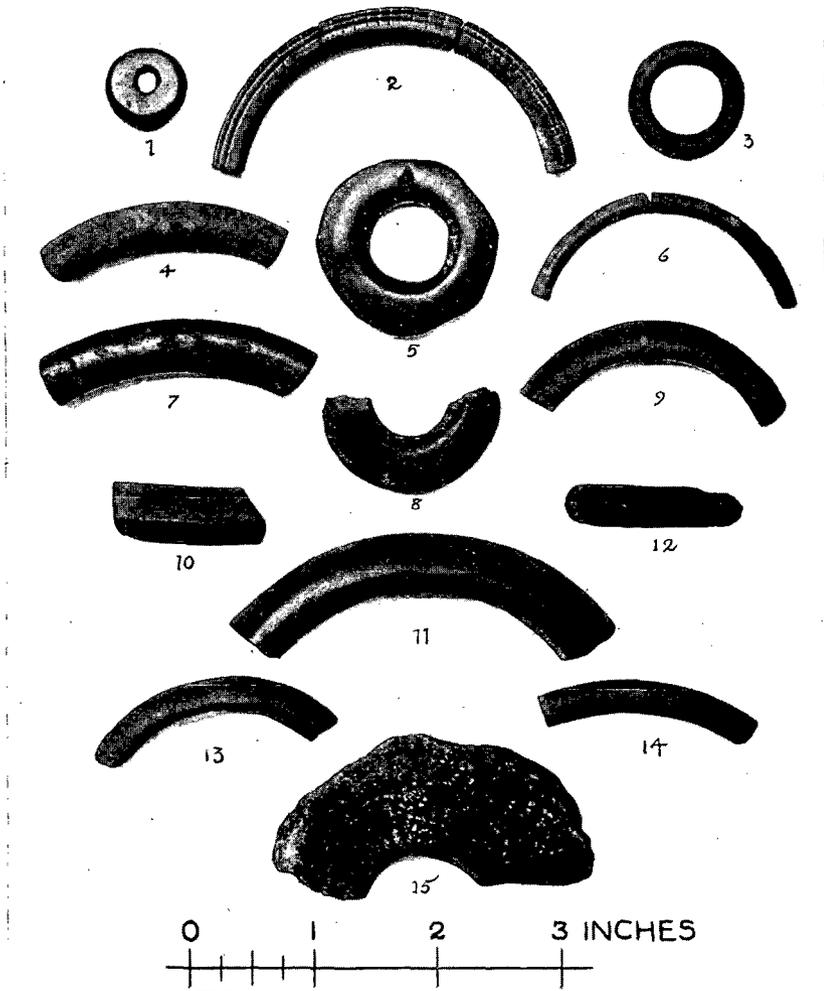


Fig. 27. Segments of Armlets and Rings of Jet.

from the lowest level. The large pin-head of jet (fig. 28, No. 2), shown to natural size, came from the upper level. The pin on which it was set, judging from the size of its socket, was more probably of bone than of metal. A very similar pin-head was found in the excavation of the

Mote of Mark reported by me in last year's *Proceedings*. Such pins were probably worn in the hair, and were the lineal successors of the large spherical-headed pins of Bronze Age times found on the Continent. Owing to the size of the heads they were unsuitable for use in a garment.

There are in the collection fragments of twenty-one different armlets of glass (fig. 29), some of them unfortunately very small. Of these, eleven are self-coloured, six of them yellow and opaque, and five of them opaque white. The yellow pieces, with one exception which came from the second level, were found at the bottom of the excavation. They are rather thicker and more solid than the white bracelets, and in section are triangular: the tint may be described as a canary-yellow. The

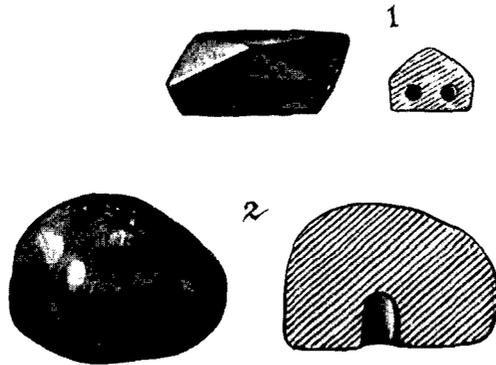


Fig. 28. Faceted Bead and Pin-head of Jet. (†)

white bracelets, for the most part plano-convex in section, came from all three levels. Of the ornamented bracelets the most common type shows a series of attenuated scrolls pointing along the mesial line, of a different colour from the ground, and produced by spots of coloured glass let into the mass of metal and elongated in the formation of the armlet. In No. 2, from the upper level, the body colour is the palest possible tint of green, in which is incorporated a scroll of thin opaque white. In No. 1, also from the upper level, the ground is opaque white and the scroll brown. In No. 4, from the second level, a bluish-tinted body bears pale yellow streaks. The small fragment shown in No. 6 is of a rather intense blue with bright yellow lines, and is also from the second level. No. 9, from the lowest level, has a greenish body decorated with yellow streaks. A segment of greenish-tinted glass, from the second level, is ornamented with white opaque streaks, and a small piece of a white opaque armlet shows the remains of blue lines on the sides. In addition to the foregoing there is, from the second level,

a portion of an armlet (No. 10) of greenish glass with a cord ornament formed of intertwined blue and white strands running along the mesial ridge of its convex surface, and along each side; and a segment of very unusual occurrence (No. 8) of schmelze glass of a general purplish tint

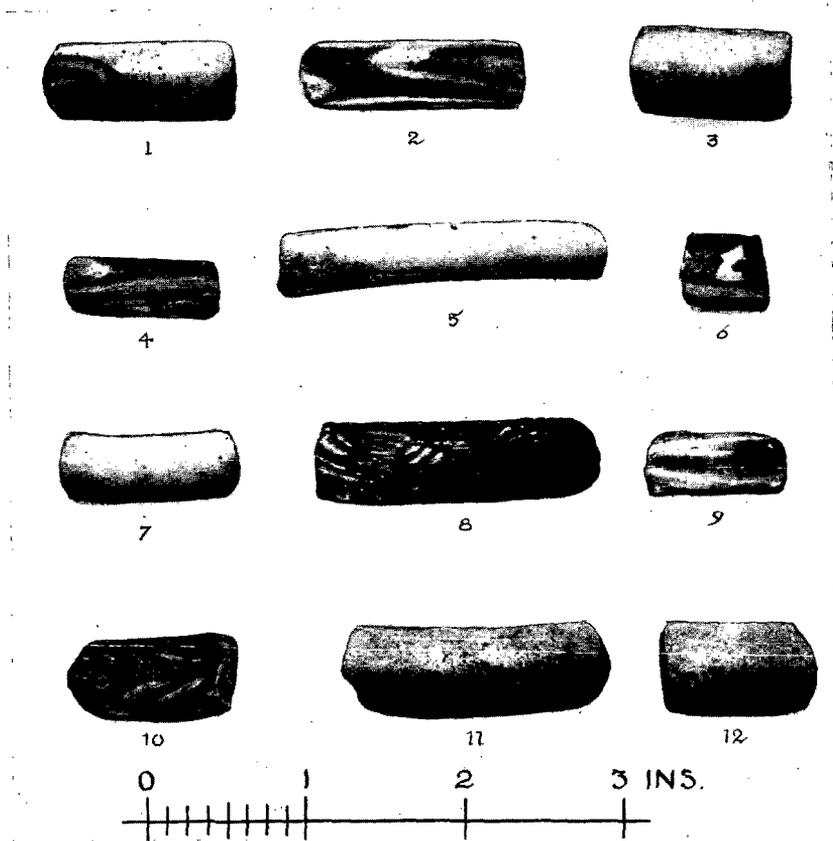


Fig. 29. Segments of Glass Armlets.

found on the lowest level. Portions of armlets such as the foregoing, with the exception of the last, frequently come to light in excavations of Roman and native sites in Scotland. Birrenswark yielded a number, in colour opaque yellow, and white, and also white with scroll pattern. Newstead produced specimens; pieces were found in the crannogs of Hyndford,¹ and Dowalton,² in one of the Archerfield caves near North Berwick,³

¹ *Proceedings*, vol. xxxiii. p. 383.

² Munro, *Ancient Scottish Lake Dwellings*, p. 48.

³ *Proceedings*, vol. xliii. p. 254.

and also in the Borness cave. I have, however, found no record of the finding of a piece of schmelze glass armlet, though certain large beads made somewhat in this fashion have been noted. Portions of two such beads found associated *inter alia* with a Roman onyx intaglio are among the relics from the cairn at Cairnhill, Monquhitter, in Aberdeenshire,¹ now in the National Collection.

Another relic of glass from Traprain, not obviously for personal adornment, likewise finds an analogy among the objects from Monquhitter. This is a small imperforate ball of clear greenish glass (fig. 30), measuring $\frac{1.9}{3.2}$ inch in diameter and ornamented with discs of red and white opaque vitreous paste, six in number. It was found at the highest level. In the Monquhitter cairn² there were found two small balls of green glass about the size of small marbles, measuring in diameter $\frac{1}{2}$ inch and $\frac{5}{8}$ inch respectively, ornamented with rows of



Fig. 30. Imperforate Ball of Glass. (†.)

spirals inlaid in white. From the Bustoñ crannog, from which also came a fragment of Samian ware, there was recovered "a round object of the size of a small marble, made of vitreous paste, variegated with blue and white, and imperforate";³ and in the Mote of Mark, near Dalbeattie, there was found a disc of glass inlaid with spots of opaque glass.⁴

Very few beads have been found thus far. A small bead of opaque yellow glass, discoid in shape, $\frac{1.1}{3.2}$ inch in diameter, came from the lowest level. Another of bright green opaque glass, also flattened on both ends and measuring $\frac{7}{3.2}$ inch in diameter, was found on the upper level. A tiny glass bead of lavender blue colour, only $\frac{2}{3.2}$ inch in diameter, was found on the second level; and a small double or segmented bead of blue glass, $\frac{5}{3.2}$ inch in length, was picked up on the surface. The lowest level yielded in addition a fragment of a large bead of amber.

III. FRAGMENTS OF GLASS VESSELS.

A number of additional objects of glass are portions of glass vessels, presumably Roman. They are small fragments, too small to afford

¹ *Proceedings*, vol. xxxvi. p. 679, fig. 6.

² *Proceedings*, vol. xxxvi. p. 678, figs. 4 and 5.

³ *Ancient Scottish Lake Dwellings*, p. 233.

⁴ *Proceedings*, vol. xlvi. p. 156, fig. 17, No. 13.

any indication of the dimensions or shapes of the vessels to which they have belonged, except in regard to a number of pieces of rather thick transparent greenish glass which have clearly belonged to large square or cylindrical bottles with reeded handles, such as supply fairly plentiful remains on Roman sites. The other fragments show that there were a number of delicately tinted fragile vessels in use during the various periods of occupation, in shades of green, yellow, amber, and blue. One or two pieces are ornamented with zones of finely scratched lines, and one amber-tinted fragment shows an opaque spot of darker colour forming a swelling on the glass. A small triangular fragment which came from the lowest level is an example of Roman painted glass. A band of pale blue runs along the upper edge, while beneath it in short parallel lines extends a group of narrow bands of alternating light orange and dull red. One other piece of glass which came from the lowest level is very puzzling. It is a small segment of the side and bottom of a vase, or bottle, the sides of which have curved rapidly inwards from the bottom. The body of the glass is as bright as crystal, and it is "flashed" or stained on the outer surface with a brilliant ruby colour. The absolute colourlessness of the body causes one to regard the antiquity of this relic with great suspicion, as much as does its ruby-tinted exterior. Especially is this the case since it is authoritatively stated¹ that a transparent red was one of the colours which the Romans were never able to obtain. The invention of ruby glass such as this, is attributed to Johann Kunckel at Potsdam in 1679.² How, if this fragment is really modern, it should have found its way not only half way up Traprain Law, but also down through some 2 or 3 feet of soil, is a mystery.

IV. HARNESS MOUNTINGS.

It is assuredly evidence of the extent to which wheeled vehicles were in use among the native population at the period of the occupation of this site that we should have found, all on the lowest and second levels, no less than five terret rings of bronze for reins, three of which are illustrated (fig. 31, Nos. 1 and 2, fig. 32, No. 1). It is probable that they were used in pairs. One pair from the lowest level appear to have been identical. The others, fig. 31, Nos. 1 and 2, from the second level, and fig. 32, No. 1, from the lowest level, are all slightly different, though the general fashion of the whole five is the same. Fig. 31, No. 2 has an extra boss at the apex, and fig. 31, No. 1 has a double flange at the base, where the terret was presumably inserted into the leather on

¹ Edward Dillon, *Glass*, p. 52.

² *Ibid.*, p. 290.

the pad; fig. 32, No. 1 is small, measuring only $1\frac{3}{8}$ by 1 inch in interior diameter.

Such objects are not infrequently discovered on Celtic sites. The hoard of late Celtic harness mountings from Middlebie in Annandale, preserved in the National Collection, contains five, two of them ornamented with three spherical bosses each, in the same manner as those from Traprain, while a third has four truncated bosses, two of which are near together at the apex though not touching, as in fig. 31, No. 2. The remaining pair are plain. One example was found at Newstead,¹ but in place of bosses it is ornamented with lip ornaments,

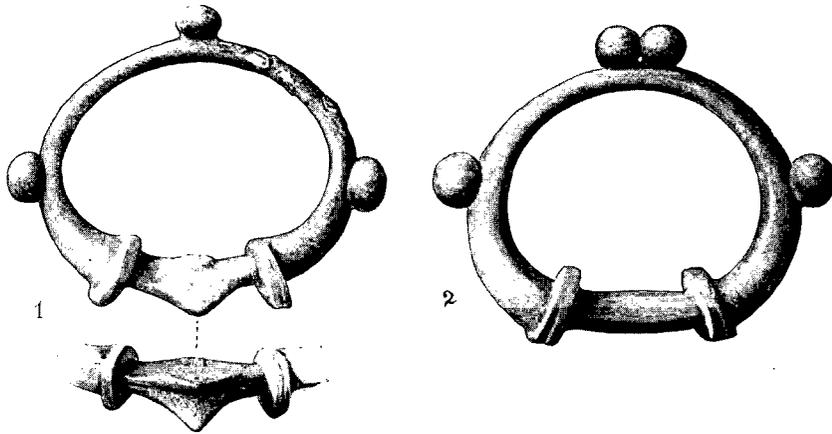


Fig. 31. Terrets of Bronze. ($\frac{3}{8}$.)

as also are the terrets in the rich hoard of Celtic horse trappings found at Stanwick in Yorkshire, and now in the British Museum.

A coin of Trajan found on the second level adjacent to the terret shown in fig. 31, No. 1 gives the form a second-century attribution.

Fig. 32, No. 6, shows an object formed of three fixed rings in alignment, also a horse trapping and apparently a simpler and less ornate variety of two pieces of the Middlebie hoard, in which the rings were oval and crossed each with a small ornamental bar. Several broken rings appear to have belonged to other articles of the same kind.

Fig. 32, No. 2, a quatrefoil of bronze with a boss in the centre and a square loop at the back for the attachment of a strap, is evidently a variety of an object found at Newstead² and elsewhere, in which each leaf of the quatrefoil bears a circular boss in the centre. A slight ridge appears in place of these bosses on each leaf of the Traprain example.

¹ *A Roman Frontier Post*, pl. lxxv. fig. 2.

² *Ibid.*, p. 302, pl. lxxv. fig. 3.

Its find-spot on the lowest level does not indicate that it belongs to a later period than the Newstead specimen.

The small six-petalled rosette of bronze shown in fig. 32, No. 4 is a

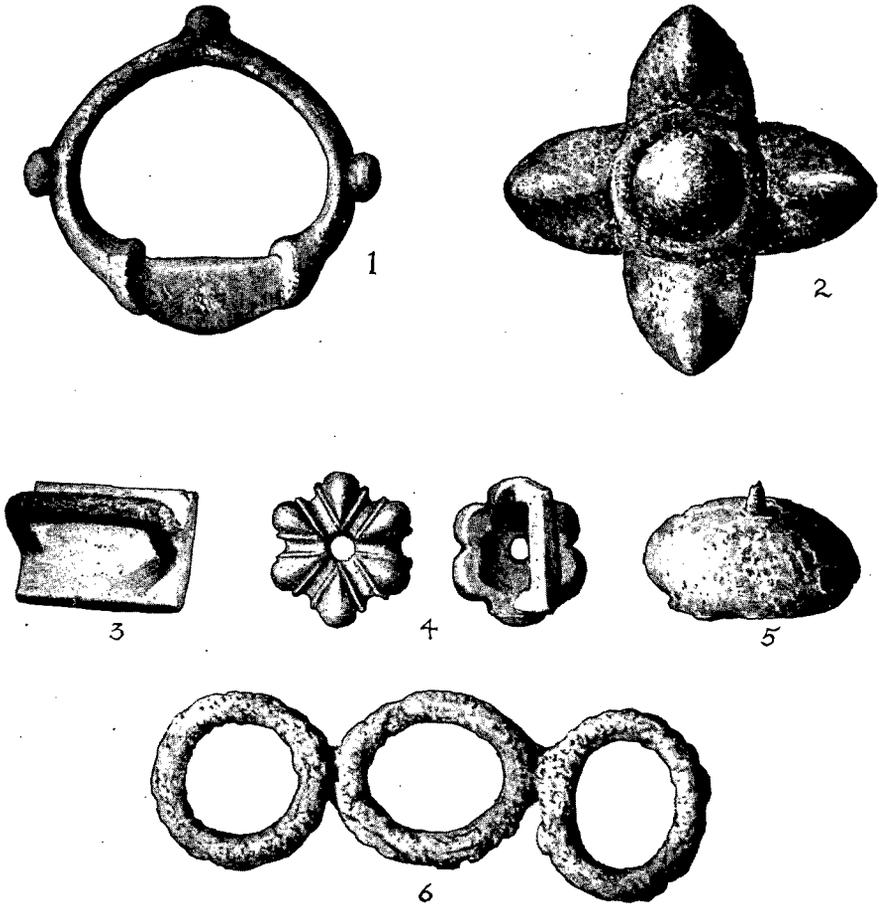


Fig. 32. Harness Mountings of Bronze. (†.)

beautiful piece of workmanship, and came from the level 1A, just above the lowest. It is perforated in the centre, while deep grooves, such as might be intended to hold a thread or light cord, separate the petals.

Another object of bronze (fig. 32, No. 3) from the lowest level is probably also a harness mounting; it is an oblong plate with a rectangular loop at the back suggestive of the dee on a modern saddle.

The large hemispherical stud, fig. 32, No. 5, with a point projecting from the centre, was perhaps also used to ornament harness. It likewise came from the lowest level and from the same area as most of the other harness mountings.

V. WEAPONS.

The only weapons which, so far, have been found are several iron spear-heads, a blade of the same metal which appears to be that of a dagger (fig. 33, Nos. 1-5), and a portion of the blade of a Bronze Age dagger. The spears are of two types—broad leaf-shaped, with closed sockets, as shown in Nos. 1, 2, and 4; and narrow, with split sockets, as No. 3. The former came from the lowest and second levels and represent the native Celtic type; while the latter, found on and adjacent to the highest level, though in bad preservation, seem more to have resembled some of the Roman spear-heads from Newstead, or the later Saxon type. No. 1, measuring 8 inches in length, has a well-defined midrib running the length of the blade, seemingly a Bronze Age tradition, and a feature which frequently characterises the spear- and lance-heads of La Tène.¹ Only a fragment of one such spear-head was found at Newstead,² a surface-find and badly rusted. A corresponding example was found many years ago in the bed of the river Churn, near Cricklade, Wilts, with Roman coins dating from Agrippa to Carausius.³ No. 4, measuring 7 $\frac{3}{4}$ inches in length, shows a spear-head of similar form to the last, but flat and without the midrib. This is doubtless also a native weapon and may be compared with a spear-head found at Hod Hill, Dorsetshire, along with Roman coins, the latest of which was a denarius of Trajan.⁴ Like the Traprain spear-heads, the latter had also a closed socket. One of the type with split socket, of which two were found, is illustrated in No. 3. A second spear-head with a midrib (No. 2) was found, but imperfect and in bad preservation.

From the second level, and adjacent to the spear-head No. 4, came a long, flat, narrow blade (No. 5) 10 $\frac{1}{8}$ inches in length, which seems to have been either a dagger or a lance-head. At the butt end a projection appears to be part of a tang, as it is too thin for the neck which would have connected a socket with the blade. This fact weighs against the suggestion that the object has been a lance-head, but, on the other hand, though as a dagger it would have been a very serviceable weapon, it does not appear to conform to any recognised type. It is double-edged.

¹ Munro, *Lake Dwellings of Europe*, p. 285. Déchelette, *Manuel d'Archéologie*, "Archéologie Celtique ou Protohistorique," p. 1146.

² *A Roman Frontier Post*, pl. xxxvii. fig. 10.

³ *Proceedings of the Society of Antiquaries*, Second Series, iii. p. 67.

⁴ Roach Smith, *Collectanea Antiqua*, vol. vi., pl. xi.

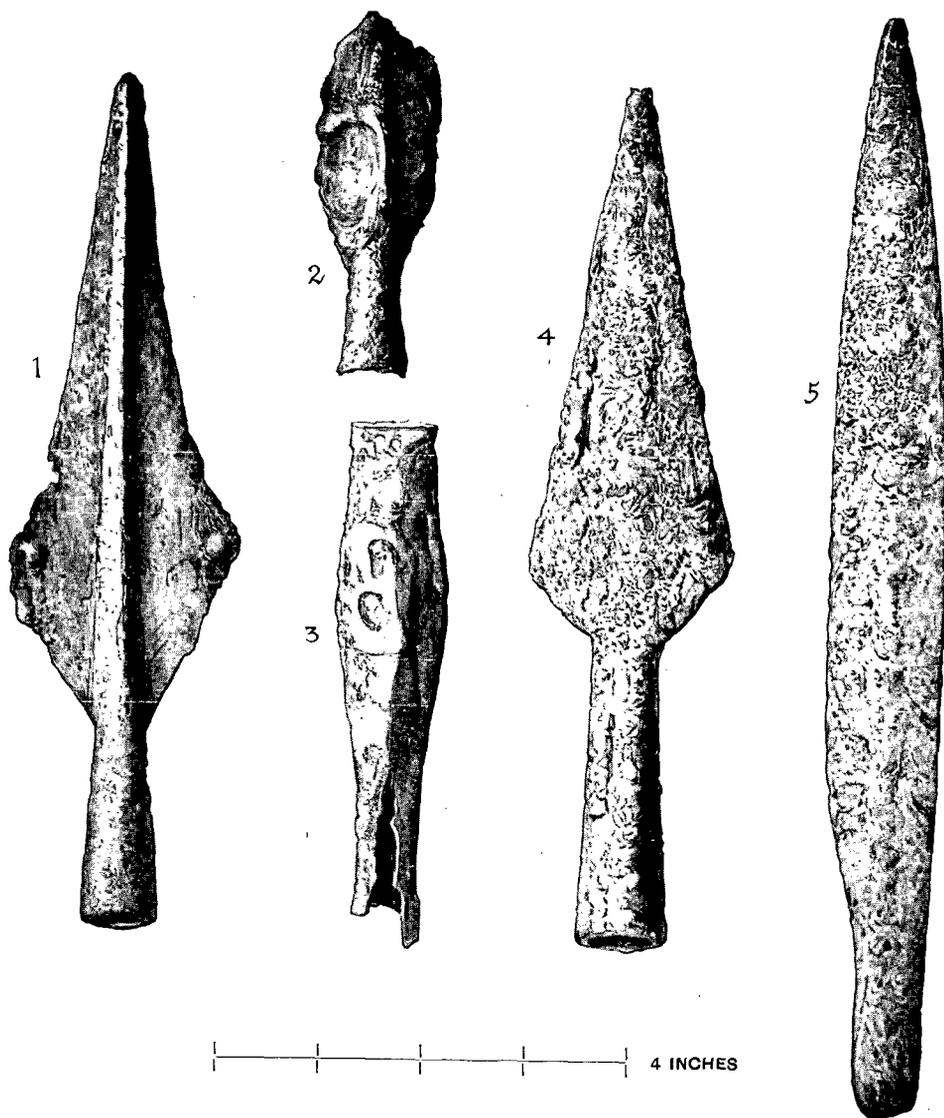


Fig. 33. Spear-heads and a Dagger Blade of Iron.

The portion of a Bronze Age dagger is the point end of a narrow double-edged blade, measuring $4\frac{5}{8}$ inches in length. Like the piece of a bronze penannular armlet, it came from the lowest level in Area B.

From the upper part of the second level came the iron relic illustrated as fig. 34, No. 2, which is evidently a sword chape of a recognised Celtic form; others similar but in bronze were found at Newstead.¹

The curved object of iron, perforated in the centre (fig. 34, No. 1), may also be a sword mounting, and possibly may have formed an upper guard on which a pommel rested; the perforation is too small for any other part of the tang than the end. Fig. 34, Nos. 3 and 4, represent

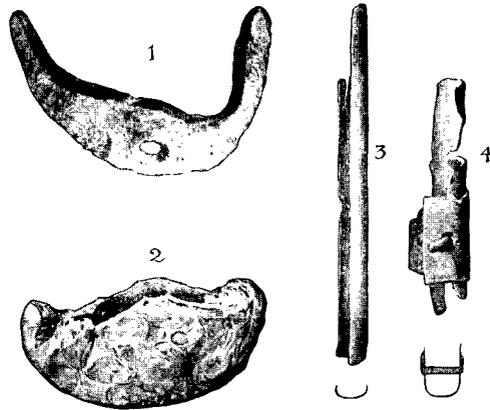


Fig. 34. Object of uncertain use, Sword Chape of Iron, and pieces of Bronze Binding. (3.)

portions of bronze binding, probably for sheaths, of which a number of pieces were found in different areas. Similar binding was found at Newstead.

VI. TOOLS AND IMPLEMENTS.

On the lowest level was found the iron axe-hammer, fig. 35, No. 6, also, like the spear-heads mentioned above, of a La Tène type,² and differing considerably from the Roman axes found at Newstead, which are larger and heavier and have the butt less pronouncedly fashioned as a hammer. Both the cutting edge and the hammer end have been subjected to much use, to judge by their appearance. An oblique perforation from the side of the butt to the socket shows that a nail has been used to fasten the head to the shaft.

The second level yielded a still more assured La Tène type of tool in

¹ *A Roman Frontier Post*, pl. xxxv. figs. 16-18.

² Cf. Déchelette, *Manuel d'Archéologie*, "Archéologie Celtique ou Protohistorique," p. 1358, fig. 594.

the shape of the small axe, fig. 35, No. 3, which in place of a socket is furnished with two corresponding wings on one face only, suggesting, but in the latter respect differing from, the Bronze Age form. The type belongs to the La Tène third period, and, though I know of no specimen

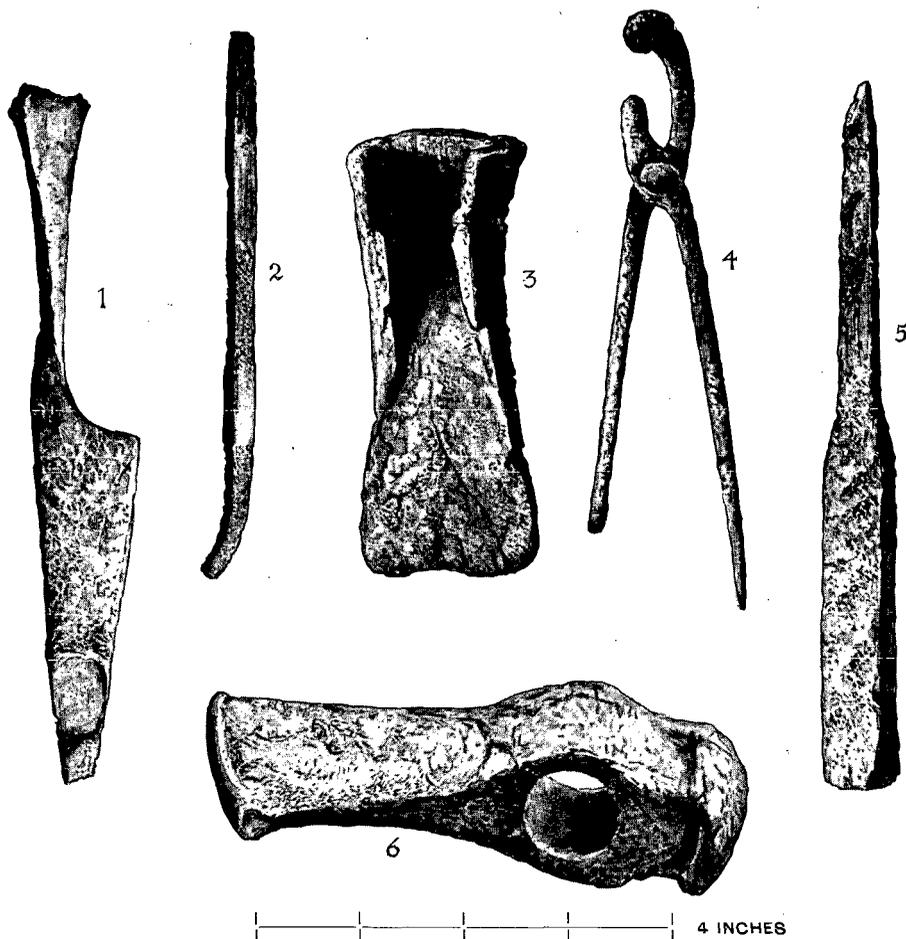


Fig. 35. Tools and Implements of Iron.

previously found in Scotland, examples do not appear to be so uncommon on the Continent.¹

Fig. 35, No. 4 shows an article from the second level, probably a pair of pincers used to hold some small delicate object in the process of

¹ Déchelette (*op. cit.*, p. 1359) illustrates several varieties, of which fig. 595, 2, from Gurina (Carinthia), in form most closely resembles that from Traprain, though in size it is much larger.

manufacture. When found, one leg showed a recent fracture, and a careful search in the vicinity shortly afterwards secured the pointed end shown in the illustration as completing the leg. I am not *absolutely* certain that it is the missing portion, as the metal has been so much corroded at the point of fracture that it is difficult to fit the two parts together satisfactorily, but I incline to the belief that it is. From the sharpness of this point and the slightness of the implement it was at first conjectured that the object was a pair of compasses, but on further consideration the conclusion was reached that such an ornamental head would not be suitable in compasses, and no analogy for such a head could be found. No more, however, have I found any similar pair of pincers. The article shown as fig. 35, No. 1 is one leg of a pair of shears of a well-known type.

Fig. 35, No. 2 shows an iron tool $5\frac{3}{16}$ inches in length, square in section and curving to a point, possibly a burnisher such as is used by silversmiths at the present day. Fig. 35, No. 5 appears also to be a tool, $6\frac{1}{2}$ inches in extreme length, in section square and with a rather heavy tang. The end is perfectly blunt and looks as if the object could only have been used as a large punch. I can find no similar tool recorded. There were found the remains of such another, rather shorter and much corroded.

Three knives (fig. 36) have been found all with blades of the same shape—broad and symmetrically pointed. One of them, No. 1, is supplied with a handle of bronze divided into two longitudinal quasi-cylindrical sections; a double sharp-edged moulding separates the two sections, and a cord moulding forms a border on either edge. In the base of the handle two sockets show that a finial has been affixed with pins. The blade is distinctly spatulate in form and at once suggests a flaying knife; originally it may have had a pointed termination similar to the two other specimens. In the rust and corrosion which cover it are impressions of the straw in which it must have lain when it became rusted and which probably covered the floor of a dwelling. It was found on the second level of Area B immediately adjacent to the large rectangular hearth. The two other examples, Nos. 2 and 3, have handles of iron, continuations of the blade, and neither gives any indication, such as rivet holes would afford, that they were covered by sheathings of bone or wood to facilitate the grip. All three knives have a distinct family resemblance. Their respective lengths are: No. 1, $6\frac{1}{16}$ inches; No. 2, $5\frac{1}{16}$ inches; No. 3, $5\frac{3}{16}$ inches. No. 2 also came from the second level; the find-spot of No. 3 was not recorded. The type does not appear to be common, the usual knife of the period having a curving edge, a blade narrow and rising to a point on the back. A knife of approximately

similar form, though larger, was found in the Gallo-Roman cemeteries of Vermand¹ of a date not earlier than the third century. The shape of the blade is the same, the handle, however, is of bone and circular in section, but is ornamented, in a fashion resembling the bronze handle of the Traprain knife, with incised lines running longitudinally down

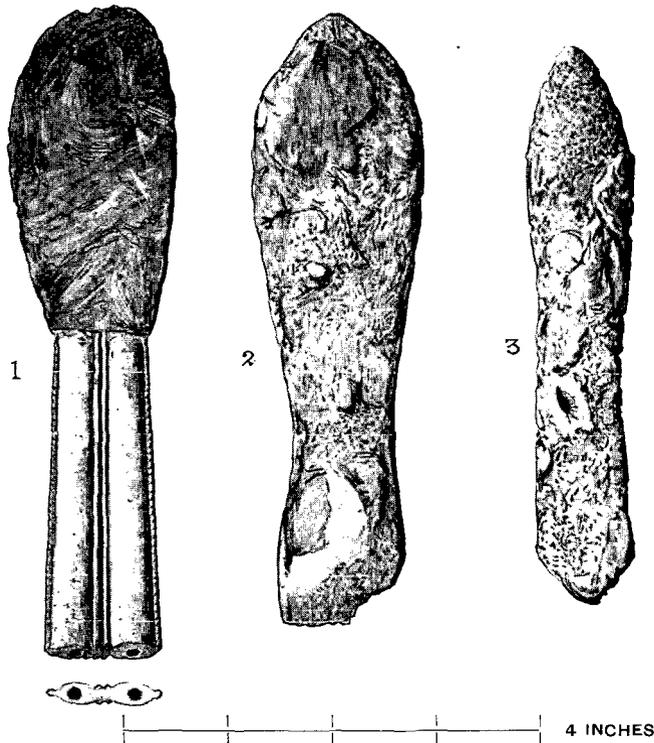


Fig. 36. Knives of Iron—No. 1 with a Bronze Handle.

the centre. Knives of the same form are illustrated in the catalogue of the Niessen Collection of Roman Antiquities at Cologne.²

Another relic (fig. 37, No. 1) is a lancet of bronze. It is a delicate object, too light for a razor; it still has a fine edge and is covered with a beautiful green patina. The tang shows that originally it has been furnished with a handle. It is from the lowest level.

The object which fig. 37, No. 2 illustrates has been formed from a strip of iron twisted spirally to form a socket, and so as to leave a point projecting. A similar article was found at Newstead and is here

¹ Theophil Eck, *Les deux cimetières Gallo-Romains de Vermand*, pl. xii. No. 15, p. 196.

² Niessen, *Beschreibung Römischer Altertümer*, vol. i. p. 229, vol. ii. Taf. cxxx.

illustrated (fig. 37, No. 3) for the first time for comparison. Though no other examples appear to have been recorded from Scotland, they are not uncommon on late Celtic sites, and General Pitt-Rivers, who suggested that they were ox-goads, records the finding of several at Woodcuts, Rotherley, and Woodyates,¹ no less than six having been found at the last-mentioned place. One was discovered in the recent excavation of Casterley Camp, Wilts,² by Mr and Mrs B. H. Cunnington. Nor are they unknown on the Continent. One is illustrated among

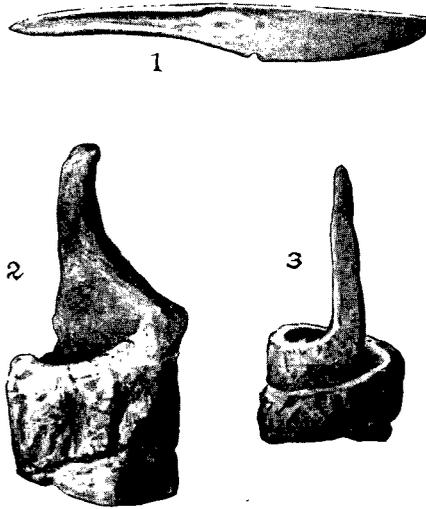


Fig. 37. Lancet of Bronze and Ox-goads (?) of Iron. (4.)

the relics from Kastel Faimingen³ on the German Limes, and is merely described as a ferrule, while Lindenschmit⁴ illustrates similar objects from the Rhine and elsewhere, designating them as arrow-points.

Fig. 39, Nos. 7 and 8 are sharpening stones of sandstone, each $3\frac{1}{2}$ inches in length. One is neatly bevelled at both ends, and the other, which is perforated, is rounded to a suboval form. A portion of another sharpening stone with the end bevelled was also found, as well as the larger half of a heavier whetstone, oblong in section and perforated at one end.

¹ *Excavations in Cranborne Chase*, vol. i., pl. xxix. fig. 10; vol. ii., pl. cv. fig. 10; vol. iii., pl. clxxxiii. figs. 17-19.

² *Wiltshire Archaeological and Natural History Magazine*, vol. xxxviii., pl. ix. fig. 10.

³ *Der Obergermanisch-Raetische Limes, Nr. 66c, Kastell Faimingen*, Taf. ix. fig. 9.

⁴ *Die Alterthümer unserer heidnischen Vorzeit*, vol. iv., Heft viii., Taf. 4.

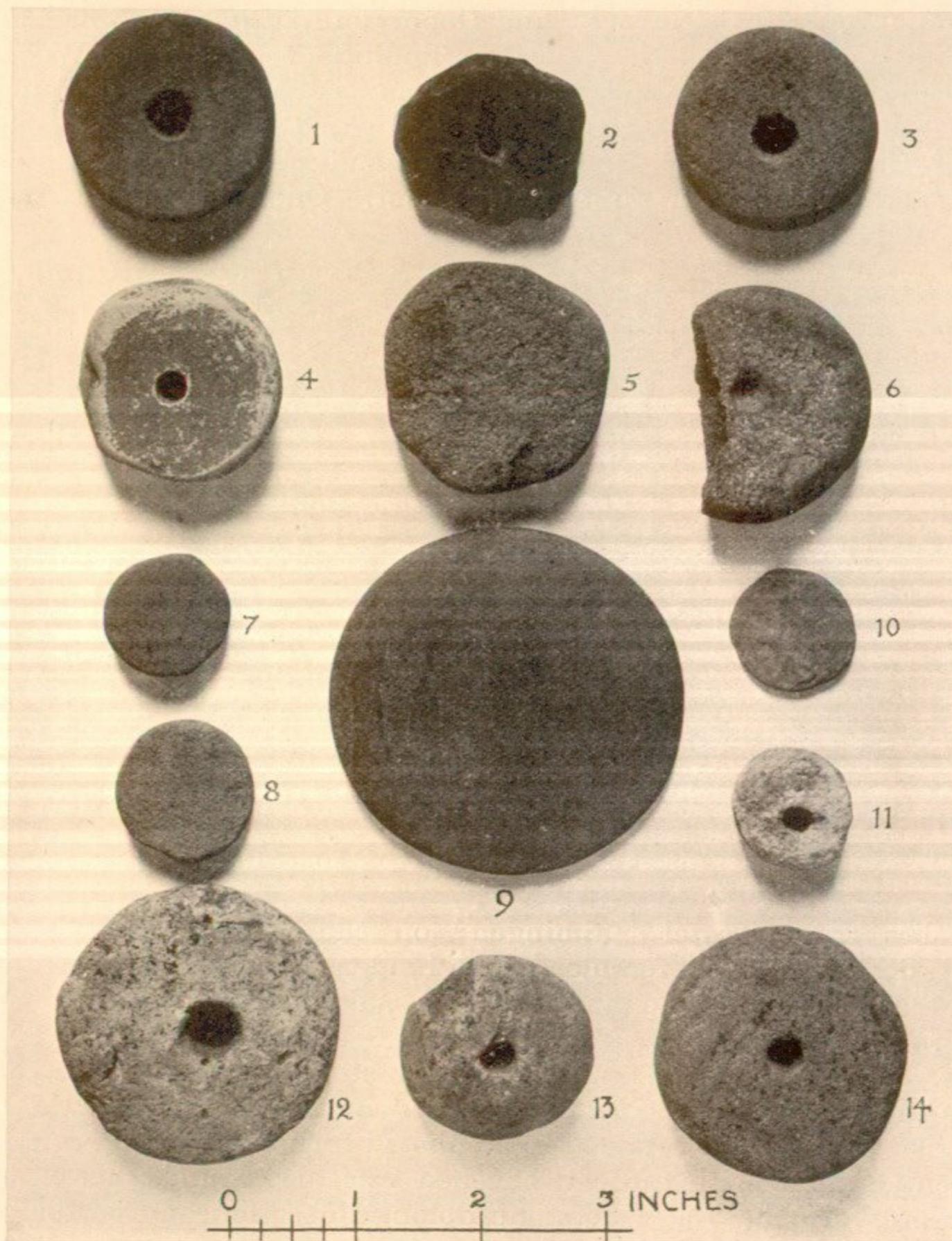


Fig. 38. Whorls and Discs of Stone.

VII. WHORLS AND DISCS OF STONE.

Connected with the industry of the women of the place are whorls to weight the spindle in the spinning of thread; of these there are fourteen, several of which are illustrated in fig. 38. Nos. 12-14 are of baked clay and came from the lowest level. No. 11 is one of two of identical size formed of lead, one of which came from the second and the other from the upper level. No. 4 is fashioned from the base of a Samian ware vase, and was found on the second level. No. 6 shows a fractured specimen, the perforation of which, started from both sides, has never been completed. It came from the second level. A disc of sandstone, a perfect circle and highly polished, is shown in fig. 38, No. 9. Slight ridges near the centre indicate where it has been used as a polisher. Similar thin highly-polished discs were found by Sir Francis Tress Barry in the Skirsa broch and the Road broch at Keiss, and are now in the National Collection.

Fig. 38, Nos. 7 and 8 are small circular discs of sandstone 1 inch and $1\frac{1}{8}$ inches in diameter, probably playing men for some such game as draughts, and resembling in size the numerous discs of coloured glass which were found at Newstead. Fig. 38, No. 10 is a thinner disc of similar size and probably used for the same purpose. The disc, fig. 38, No. 5, with a diameter of $1\frac{3}{4}$ inches, is of nearly double the diameter and thickness of the foregoing; its purpose is not obvious, though it may have been a whorl in the initiatory stage of manufacture.

VIII. OBJECTS OF FLINT.

Three scrapers of flint, two of which (fig. 39, Nos. 1 and 3) are illustrated, were found, and several large flakes which, from the nature of the chipping on their edges, had evidently been used as strike-a-lights, a purpose for which flint was in demand in protohistoric times.

IX. MOULDS AND CRUCIBLES.

A number of moulds for casting objects of bronze were recovered, fashioned of baked clay and of stone. The former were all imperfect. They seem for the most part to have been for pins; fig. 39, Nos. 4 and 6 have been for pins of the hand type; and fig. 39, No. 2, which is very incomplete, seems to have been for a pin like fig. 25, No. 3. Fig. 39, No. 5 has been for some circular ornament, possibly a flat ring. In all there were found twelve pieces of such moulds. With one exception (fig. 39, No. 6), which came from the upper level, they came either from the lowest or second level.

The other moulds, all cut out of sandstone, are six in number,

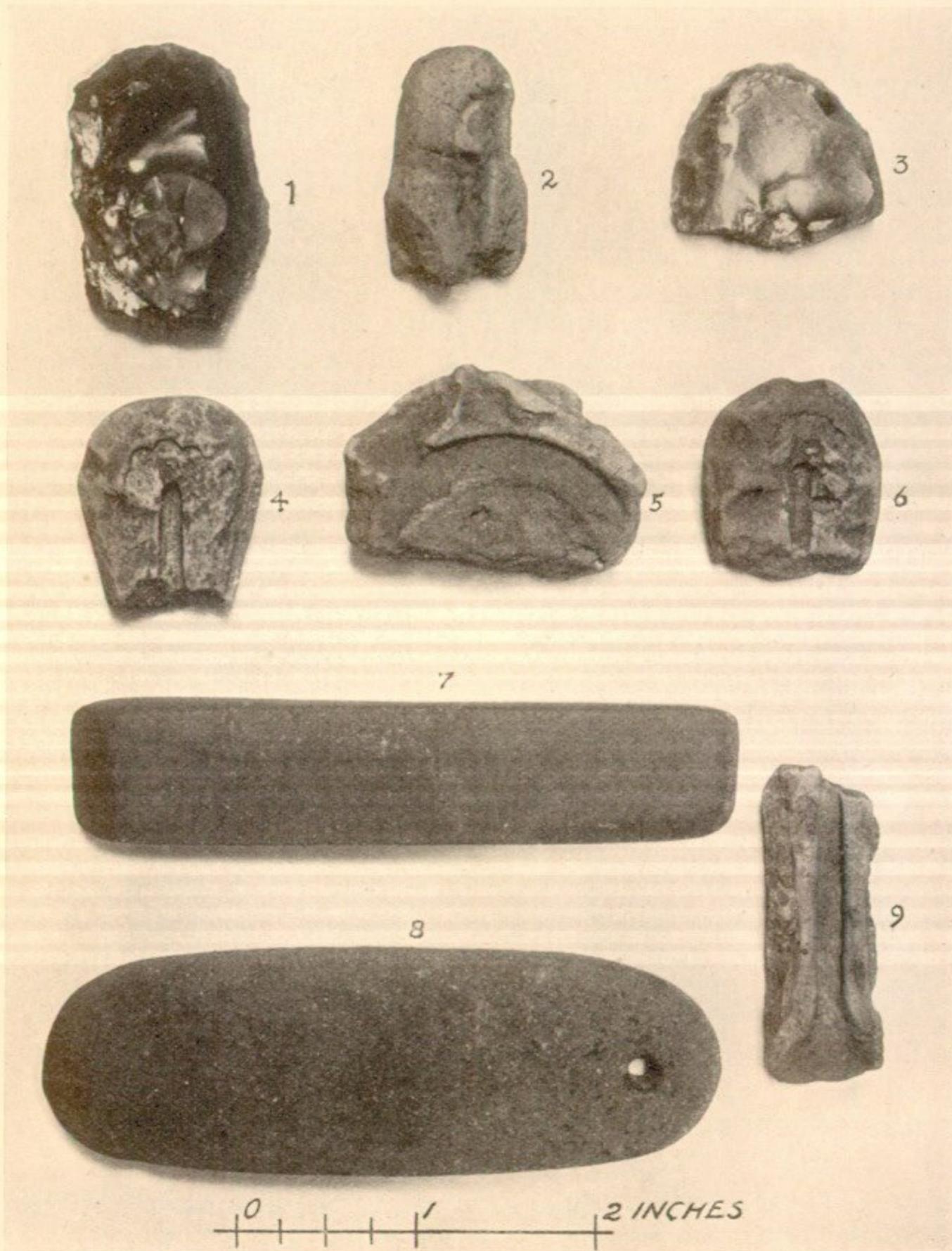


Fig. 39. Flint Scrapers, Portions of Clay Moulds, and Sharpening Stones.

there being in one case two on one block, on the upper and under surface respectively. Not one of the stones came from the lowest level, but two from the upper and three from the second level. Three of the moulds (fig. 40, Nos. 2, 4, and 5) are for casting narrow bars or

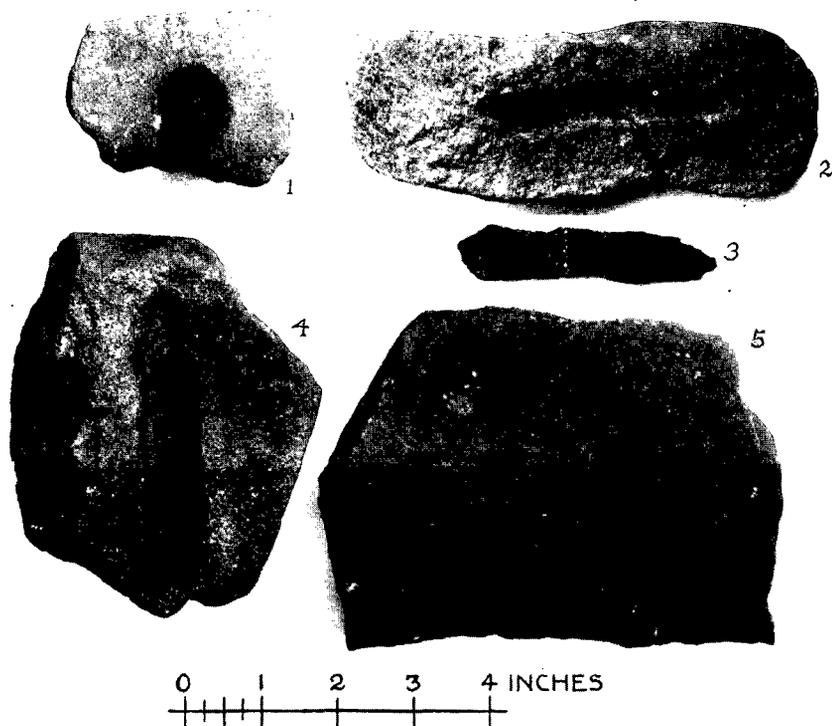


Fig. 40. Moulds of Stone and rough Casting of Bronze.

ingots of bronze, measuring respectively $3\frac{1}{4}$ inches, $3\frac{1}{2}$ inches, and $3\frac{11}{16}$ inches in length. Similar moulds have been found on a number of sites. Several were found in the Society's excavation at Dunadd,¹ others in the Broch of Harray in Orkney, in the Lochlee crannog (an object from the last named, illustrated as a "hone,"² being obviously a mould), and other sources. An object (fig. 40, No. 3) illustrated immediately below No. 2, is a rough casting of bronze which presents a resemblance so close in size and shape to the matrix of the mould

¹ *Proceedings*, vol. xxxix. p. 292.

² Munro, *Ancient Scottish Lake Dwellings*, p. 105, fig. 54.

shown above it as to warrant a conjecture that it actually came out of it. The fact that the ingot came from the lowest level and the mould from the second does not necessarily destroy such a presumption, for there is nothing improbable in such a mould of stone surviving over a number of years.

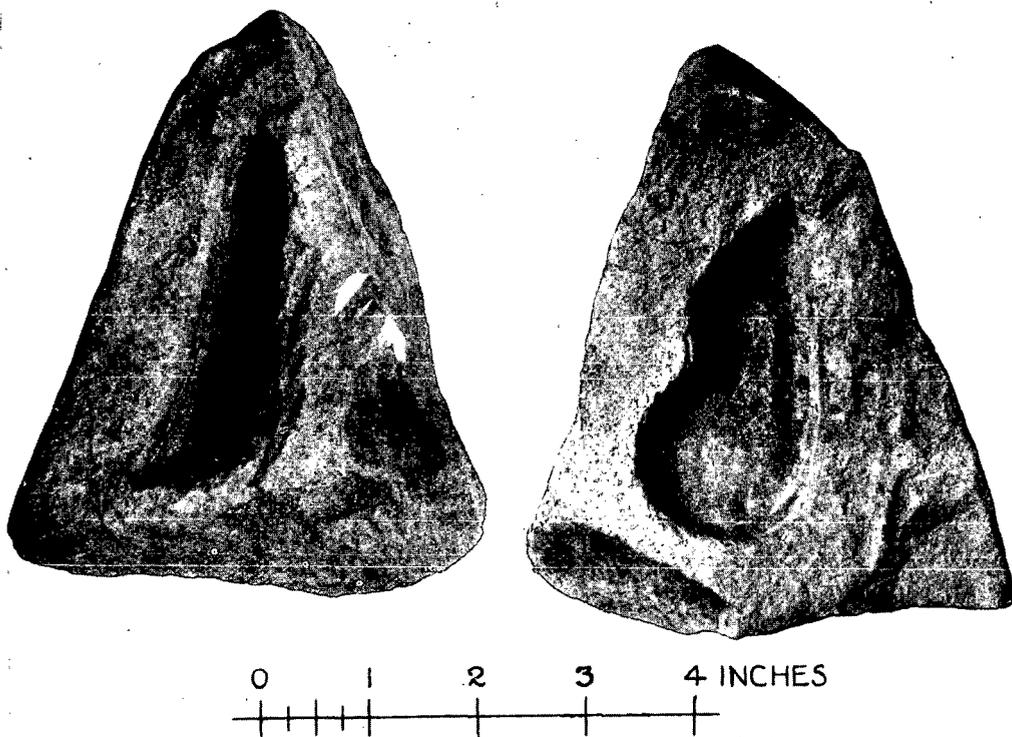


Fig. 41. Two Moulds on same Stone.

Two moulds which appear upon the one stone (fig. 41) are of more interest than the foregoing, as their purpose is less obvious. One is for a harp-shaped block of metal $3\frac{1}{4}$ inches in length by $1\frac{3}{4}$ inch at greatest breadth by $\frac{3}{8}$ inch in depth. It suggests the outline of a large fibula, but it seems hardly probable, when we find clay moulds for pins, that a nearer approximation to the form of a fibula could not have been obtained previous to the application of the graving tool. This mould came from the uppermost level. The second object to be

cast from the matrix on the opposite surface of the stone is equally inexplicable. It has been $3\frac{7}{8}$ inches in length, $\frac{3}{8}$ inch in breadth at

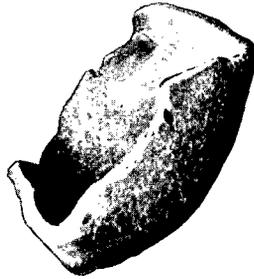


Fig. 42. Half of a Crucible. (3.)

the one end, expanding to $1\frac{3}{16}$ inch at the other, which is oblique, and it curves slightly in the direction of its length. The remaining mould (fig. 40, No. 1), from the second level, was for a disc $\frac{13}{16}$ inch in diameter and $\frac{3}{16}$ inch in thickness.

A number of fragments of crucibles were found all of the same class, cup-shaped with an ovoid base, formed from fireclay. The largest portion of one of these vessels is illustrated in fig. 42.

X. MISCELLANEOUS OBJECTS.

Another relic of stone, fig. 43, is an oval pebble, $3\frac{1}{8}$ inches in length by $3\frac{3}{8}$ inches in breadth, which has been hollowed out to serve as a

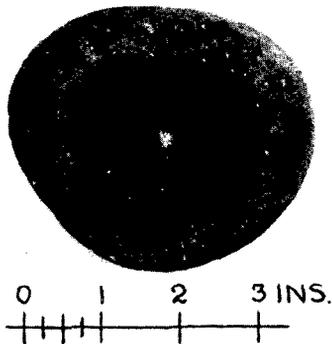


Fig. 43. Stone Lamp.

lamp. The hollow is still stained black by the fat, or oil, which was consumed in it. Such lamps are not uncommon on Iron Age sites.

An almost identical specimen came from the Keiss broch in Caithness excavated by Sir Francis Tress Barry.

Two small balls of stone, $\frac{1\frac{5}{8}}$ inch and $1\frac{1}{4}$ inch in diameter, were found, objects presumably used as sling stones; and a pellet of baked clay, $\frac{1\frac{1}{8}}$ inch in diameter, was possibly used for the same purpose.

Objects of bone were rare. Fig. 44, No. 3, decorated with vertical rows of incised chevrons, is probably the end of a handle. Fig. 44, No. 2 is one of a pair of exactly similar objects of unknown use, each terminating in a blunt point and broken through at a perforation; it is possible they may have been employed as dress fasteners. Both came from the lowest level. There were found also two portions of cylindrical objects of bone, $\frac{3}{4}$ inch in length, and the more complete (fig. 44, No. 5) $\frac{1}{2}$ inch in greatest diameter. These may have been worn as beads. Such ornaments have on several occasions been found, both in this country and south of the Borders, associated with Bronze Age interments.¹ These fragments came from the lowest level.

Among the miscellaneous relics are several objects of iron and of bronze that must be noticed. One of the most remarkable of the finds is an object of iron (fig. 44, No. 1), $3\frac{3}{4}$ inches in length, resembling a well-executed model of a deer's horn with three points. If it has not been intended to represent such an object it is difficult to conceive what it has been meant to represent. It came from the second level. On the same level, and not far from the large rectangular hearth of Area B, was found the handle of the Roman patella shown in fig. 44, No. 6. It is covered with a beautiful patina and has been ornamented with a diaper pattern in incised lines.

Fig. 44, No. 7 illustrates a curious little object of bronze which closely resembles a human leg and foot. It is tempting to imagine that we have here a foot-amulet such as was common in Europe in Early Iron Age times,² but I think that such an assumption would be rash. The bronze is much decayed, and owing to this cause the form it has assumed may be in part fortuitous. On one side also there is a small cup-like depression, the purpose of which is not obvious.

Fig. 44, No. 4 shows a small portion of a mounting of thin bronze ornamented along each edge with a row of repoussé dots; while fig. 44, Nos. 12 to 15 illustrate four out of five fragments of a mounting of bronze ornamented with moulded lines; three of the pieces still retain studs for attachment. The largest piece is fashioned on a curve both longitudinal and lateral. Fig. 44, No. 9 is another and heavier piece of a

¹ *Proceedings*, vol. xlii. p. 212.

² See Déchelette, *op. cit.*, p. 1306.

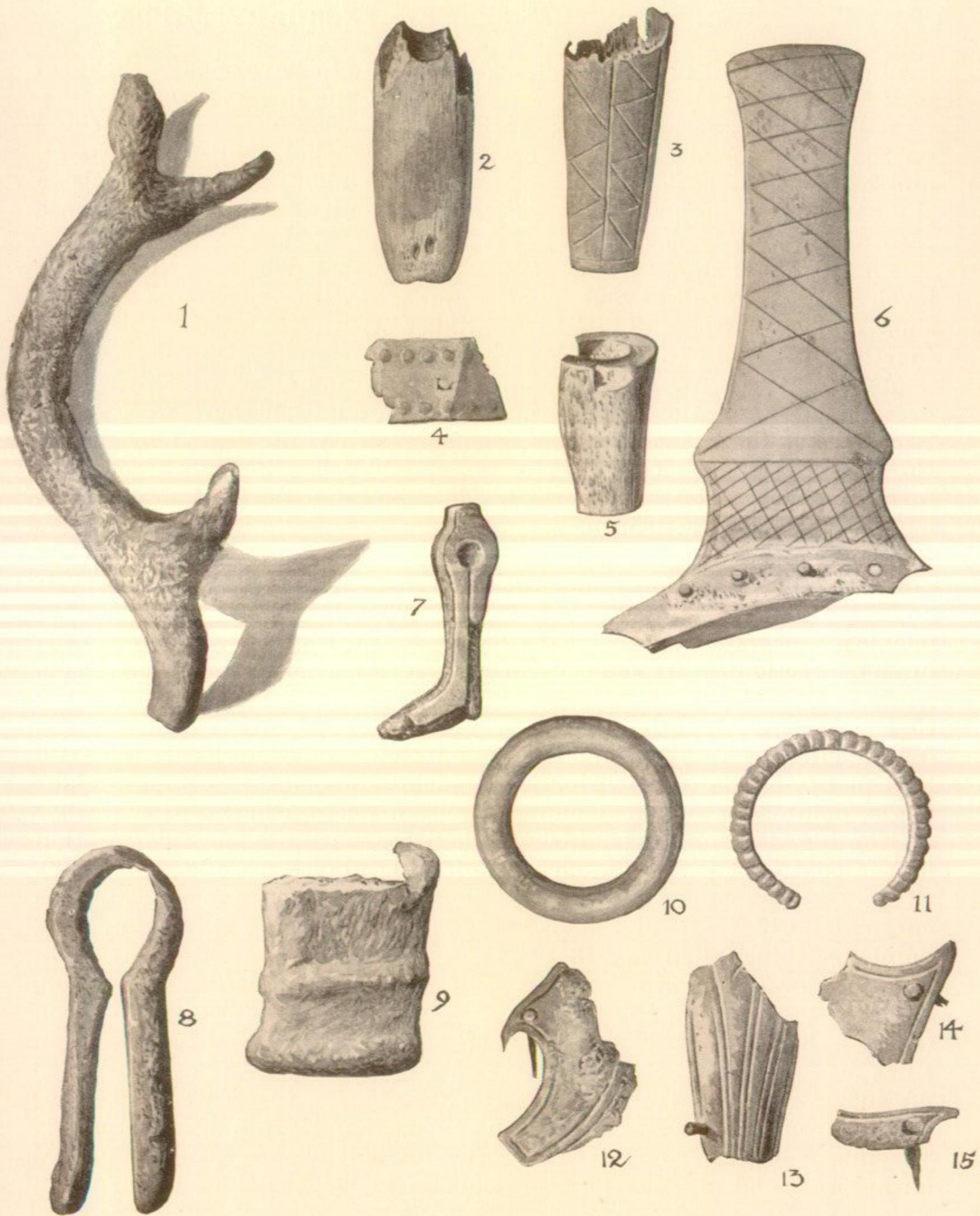


Fig. 44. Miscellaneous Objects of Bone, Bronze, and Iron. ($\frac{1}{2}$ except No. 6, which is $\frac{3}{8}$.)

mounting or finial of some sort which appears to have been in the form of a sheath. All these fragments came from the lowest level.

A ring of bronze, imperfect, $\frac{1\frac{1}{8}}$ inch in interior diameter, segmented on the upper surface and bevelled beneath, is shown in fig. 44, No. 11, and came from the level, only occasionally evident, immediately above the bottom and designated 1A. Fig. 44, No. 10 is a solid ring of bronze from the lowest level.

Fig. 45, No. 9 shows a half horse-shoe which came from the highest level. It has no calkin, and may be compared with a portion of a horse-shoe found by General Pitt-Rivers along with coins of the third and fourth centuries in the ditch of Wor Barron, Handley Down.¹

A considerable number of iron nails were found, of which the best preserved examples are shown in fig. 46; in addition there were found two objects known as split pins, one of which is illustrated by fig. 44, No. 8. A long nail (fig. 45, No. 20), shouldered, slightly curved, and furnished with a flat transverse head, came from the bottom level; it measures 6 inches in length.

Other objects of iron include a hook (fig. 45, No. 22), $4\frac{1}{2}$ inches in length. Similar objects were found at Newstead and at Woodcuts;² a quadrangular ring of iron (fig. 45, No. 16) resembling the loop of a buckle; a bar of iron (fig. 45, No. 19), $9\frac{5}{8}$ inches long, slightly curved in the direction of its length, forming a square of $\frac{3}{4}$ inch in section, worked to a blunt rounded point at one end and checked at the other to the depth of half its thickness for a length of nearly half an inch, found adjacent to the long hearth on the second level of Area C; a thin plate of iron (fig. 45, No. 2), $2\frac{9}{16}$ inches in length, forming a right angle, pointed at one end and probably a portion of hasp; a washer of iron (fig. 45, No. 15), $1\frac{3}{16}$ inch in diameter, with a square perforation in the centre; an object of iron of indeterminate use (fig. 45, No. 13), slightly imperfect at one end, $2\frac{1}{16}$ inches in length, forming an ogee curve in outline; part of the blade of a knife (fig. 45, No. 1) symmetrically pointed, $2\frac{7}{8}$ inches in length by $\frac{1\frac{3}{16}}$ inch in breadth; a tool of iron (fig. 45, No. 18), $5\frac{7}{16}$ inches in length, a square of $\frac{3}{8}$ inch in section, and slightly tapering to one end; another tool-like flat object of iron (fig. 45, No. 17), $5\frac{5}{8}$ inches in length, $\frac{3}{8}$ inch in breadth, $\frac{1}{8}$ inch in thickness, rounded at one end; a small iron punch (fig. 45, No. 3) $2\frac{1}{16}$ inches in length; a hook of iron (fig. 45, No. 8), $\frac{1\frac{1}{16}}$ inch in length; several iron tangs for tools or implements (fig. 45, Nos. 4, 5, 11, and 12), varying in length from $1\frac{9}{16}$ to $2\frac{1}{2}$ inches; a bolt with a head hammered on at either end (fig. 45, No. 21), $2\frac{3}{8}$ inches in length; the remains of an

¹ Pitt-Rivers, *op. cit.*, vol. iv. pl. 258, fig. 24.

² *Ibid.*, vol. i. p. 86, pl. xxviii. fig. 20.



Fig. 45. Miscellaneous Objects of Iron.

iron key, which has had a fixed ring at the end of the shank (fig. 45, No. 7), $4\frac{5}{8}$ inches in length. Fig. 45, No. 6 is an indeterminate object of iron, $3\frac{9}{16}$ inches in length, pointed at one end and with a straight edge at

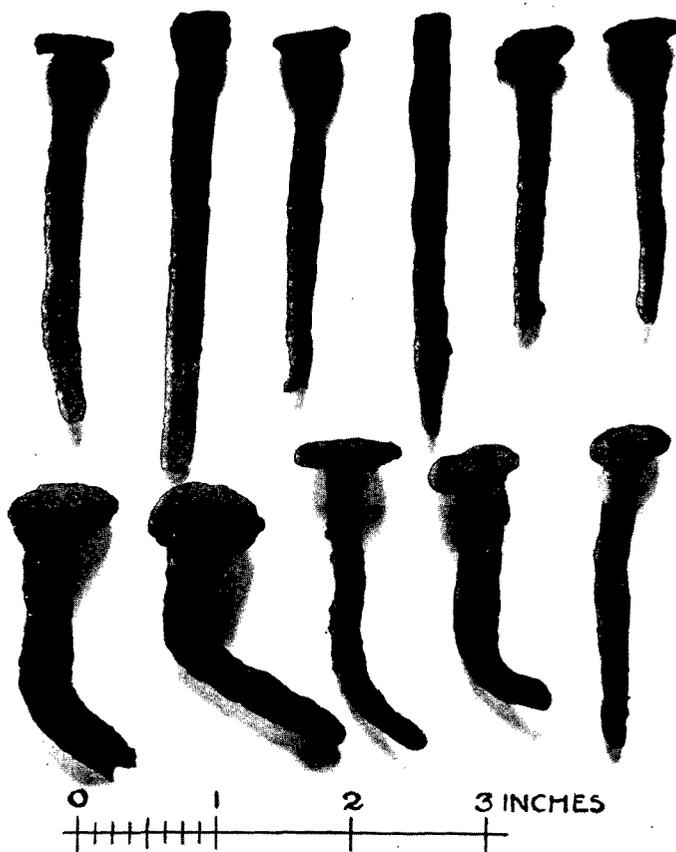


Fig. 46. Iron Nails.

the other. It has a very rude appearance and may possibly be a tool in an incomplete state.

In addition to the foregoing objects of metal there was found a portion, amounting to about one-half, of a perforated ball of baked clay, flattened at the two opposing poles and measuring in diameter $2\frac{5}{16}$ inches by $3\frac{9}{16}$ inches. Objects somewhat similar, believed to be loom weights, were found near Mountblair, Banffshire, and Ravensly,

Forfarshire, many years ago¹ and are now in the National Collection; and another was found in Kastell Zugmantel on the German Limes.²

The last of the miscellaneous relics that I need mention is, I am given to understand, a coprolite of the excrement of a large fish, probably a skate. It is a flattened sphere, $1\frac{9}{16}$ inch in diameter, with a surface white and slightly polished, marked with numerous black horizontal striæ in which appear small gritty particles.

XI. COINS.

Not the least important of the relics are the coins, for the identification of which I am indebted to Dr George Macdonald. These are certainly three in number, while a small disc of bronze may be a fourth completely effaced. From the lowest level of all, from among a number of large stones which were probably the foundations of a hut, came a denarius of Hadrian (A.D. 117-138). One of the small hearths which on Area B marked the level 1B, a few inches below that of the second occupation, yielded a denarius of Antoninus Pius (A.D. 138-161), while from the second level came a second brass of Trajan (A.D. 98-117). The small disc referred to above was found on the highest level; it is not a styca—for that it is too thick; possibly it has been a Roman minim.

What deductions may we draw from the foregoing? We have here a prominent hill eminently suited by its defensible natural features, its moderate height, and grass-covered slopes for the occupation of a large community in early times, when protection was required not only for the people themselves against enemies human and bestial, but also for their flocks and herds. We have seen evidence of two distinct schemes of defence of this site, one, with its almost obliterated ramparts, presumably much earlier than the other; each enclosing an enceinte nearly half a mile in length, but the later seemingly comprehending a broader superficial area. Our excavation, which relatively to the whole extent of the enceinte covers an insignificant plot, lies outside what we have presumed to be one of the ramparts of the older enclave and well within the later additional enclosure on the south-western slope. Five levels of occupation on this plot have been disclosed. The earliest of these, from the large proportion of the whole relics which it has yielded, was evidently the most important, at least in duration. Two relics of bronze—the dagger-point and the portion of a penannular armet, in company with two or three flint scrapers—might indicate the terminus *a quo* in the Bronze Age; but the general facies of the pottery, and of the numerous other relics referable to an Iron

¹ *Proceedings*, vols. iii. and ix. pp. 68 and 176.

² *Der Obergermanisch-Raetische Limes, Nr. 8, Kastell Zugmantel, Tafel xvii., fig. 45.*

Age horizon, point to these Bronze Age deposits being merely fortuitous. The native pottery, in the present stage of our knowledge, is not illuminating further than that it is of Iron Age character as found in southern Scotland. Its marked predominance in the lowest level, and the soil immediately overlying it, leaves no doubt as to the native character of that occupation. Of the *terra sigillata* which it has yielded almost all the fragments have a possible first-century date, and an early date may be attributed to some of the sherds of other Roman wares the periods of manufacture of which are less accurately known. The fibulæ, pins, clasps, and other objects from this level are such as have been found on Roman or Romano-British sites, the occupation of which has occurred at the end of the first and in the second century. One coin from this level, identified as a denarius of Hadrian, proves at least that the site was not abandoned before A.D. 117, the year of the commencement of his reign.

The houses, if one may hazard an opinion on very slight evidence, appear to have been roughly circular, with walls of wattle and daub, and the presence of nails implies a certain amount of squared woodwork.

There is nothing to guide us as to the date of level 1A; it only made itself apparent to a slight extent, and evidently followed quickly on the termination of the primary occupation. From the level above, however, 1B, which lay but a few inches beneath the well-defined second level, the denarius of Antoninus Pius carries us well into the second century and determines the earliest possible date as probably not before A.D. 140. The fragments of *terra sigillata* from the second level, as well as those of the other Roman wares, have a distinct second-century facies, and clearly refer the occupation of that level to the Antonine period between A.D. 140 and 180.

A remarkable lack of relics characterises the uppermost level of all, but the third to fourth century date attributed to the few fragments of Roman pottery recovered opens a vista of further suggestive discoveries. I may add that so far no site of a Roman fort is known in this region nearer than Inveresk, which is some twenty miles distant.

The Society is much indebted to the Right Hon. A. J. Balfour, to whom the hill belongs, for permission to excavate, and also for the disposal in the National Museum of the relics found.

One word more remains to be said. The success which has attended our first summer's excavation must in large measure be attributed to the close personal supervision exercised by Mr James E. Cree, Mr J. G. A. Baird, and Mr Keith R. Murray, who each gave several weeks of almost daily attendance on the hill, as well as to the enthusiastic, vigilant, and intelligent manner in which Mr Pringle, our foreman, and his two assistants carried out the work entrusted to them.