

II.

ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW DURING THE SUMMER OF 1922. BY JAMES E. CREE, F.S.A.Scot.

This year the excavations on the Law were resumed on 22nd May. The ground selected formed an L-shaped area and lay to the north and east of that opened last year. It amounted to two complete sections, each of 50 feet square, and a fractional area adjoining on the north section O which was previously explored. The two complete sections mentioned have, in conformity with our previous method of identification, been named P and Q, while the fragmentary area which lay immediately north of section O has been called O^a.

Minor excavations on other portions of the hill were carried out during the summer, but these will be described later.

It will be remembered that last year, after determining that the ground examined had been under continuous occupation, at least during the period from the end of the first to the beginning of the fifth centuries A.D., we reverted to the original method of removing the ground in four more or less arbitrary levels of occupation. This method has been continued during the present year, and it must be borne in mind when examining the plans that they do not represent accurately the actual conditions existing at any particular period. As was explained, however, in our last report, the method of removing the soil in four levels has a certain stratigraphical value, as it assists us in approximately dating the relics recovered.

¹ *The Roman Wall in Scotland*, p. 312, No. 19.

² *Ibid.*, p. 314, No. 22.

We shall now describe the excavated area, commencing with the first level section P. After removing the turf and, as usual, about 14 inches of soil, two large circular enclosures formed of rough stones were found to occupy the central position of the section, in a line north and south of one another (fig. 1). That to the north is smaller but more clearly defined. In the larger of the two a small piece of paving occupies a position not far from the south section line; while a few feet towards the west and adjoining the rough stones forming the enclosure, paving-stones may also be noticed. About 10 feet to the north-east lay a ruinous hearth, with three flat stones adjoining it on the north. This seems to have been orientated nearly east and west, the open end being probably towards the west. A few large stones will be noted forming a portion of the outline of the circle on the south-east. These have reference to the alignment of stones placed on the north-west of the roadway, which was described and shown on section N in last year's report. From the smaller enclosure on the north, two narrow passage-ways appear to have led to the south-west and north-east respectively; the latter being bordered on both sides with large stones. A ruinous hearth breaks the continuity of the northern arc of this circle, and a few small paving-stones adjoin it on the north. Another fragmentary hearth orientated north-west and south-east, the open end being towards the north-west, and adjoining which were a few paving-stones, lay close to the western line of the section. In one half of another circular enclosure lying to the east lay the ruins of two or more hearths. The remaining segment of the circle appears on the west side, and also adjoining the roadway in section N excavated last year.

Advancing now into section Q, another fairly well-defined enclosure, again formed of rough stones, will be noticed, lying towards the eastern side of the section. What appeared to have been two ruinous hearths were found slightly to the north-west of the centre; the more northerly being formed entirely of water-worn stones. Neither had any kerbstones remaining. To the north-east were indications of a passage-way, having on its north side a roughly circular area of paving, and another ruinous hearth with only three kerbstones left in position. In the eastern arc of the enclosure, and adjoining the east section-line, remains of another hearth were laid bare; while on the south-east, and also breaking the outline of the enclosure, were a number of flat paving-stones. Close to the south section line, and within a few feet of the hearth last described in section P, lay a roughly square paved area; while on the extreme west of the section, and within a few feet of the south section-line, lay yet another. Due east of the former, and on the east section-line, half a rotary quern was found.

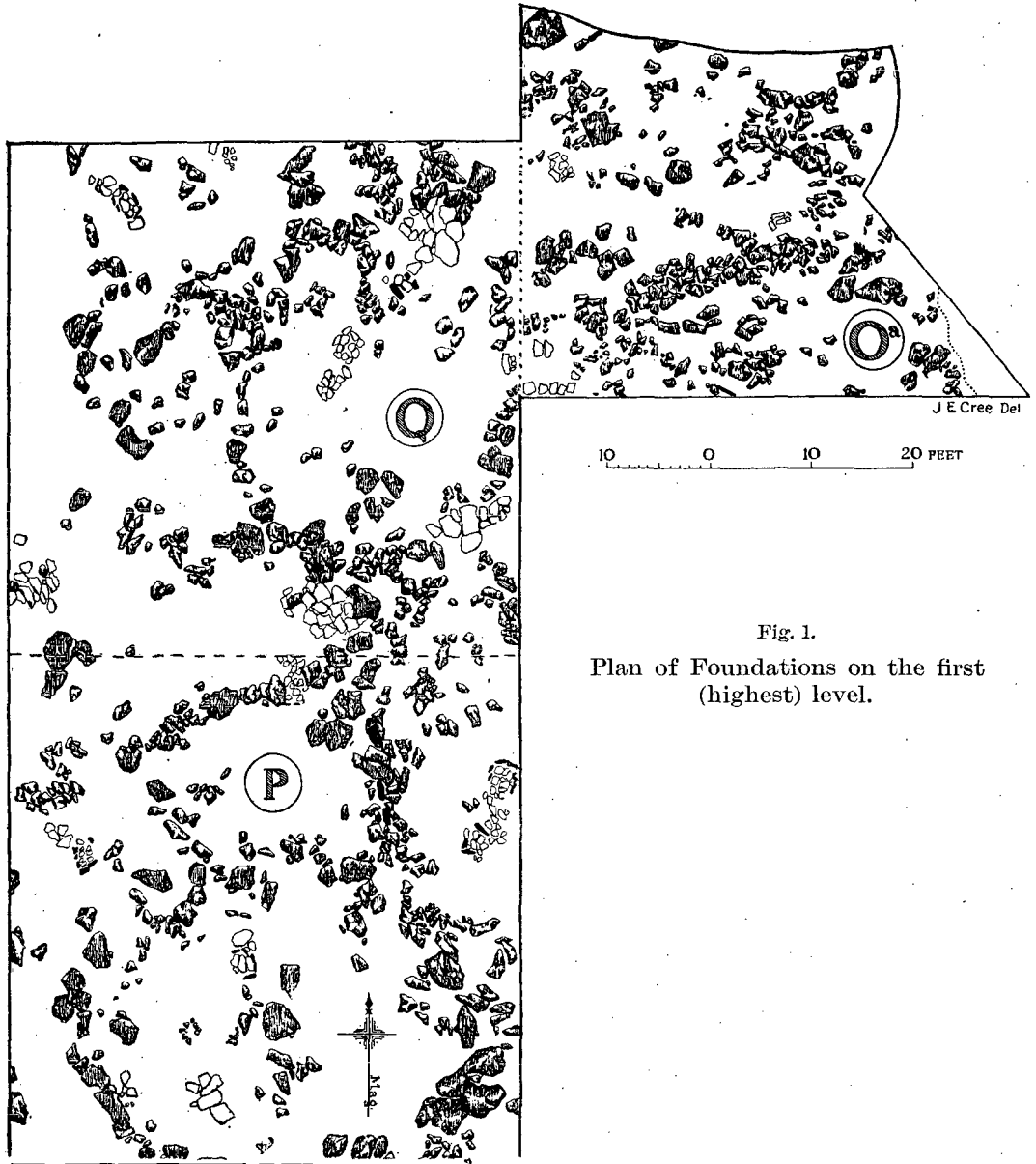


Fig. 1.
Plan of Foundations on the first
(highest) level.

The only other structures worth noting in this section are the remains of a hearth formed of a few small water-worn stones and devoid of kerbing, which lay close to the north line of the section, and a rectangular hearth in the north-west corner orientated north-west and south-east, the open end being in the former direction. A few paving-stones must again be noted adjoining this hearth on the north-west.

Entering now the fragmentary section marked O^a on plan, we found few indications of structure definite enough to be worthy of notice. At the south-west corner were several paving-stones; while a more or less indefinite line, formed of rough stones, extended towards the east for a distance of over 25 feet. Slightly to the east of the centre of the area and towards the north-west were small groups of paving-stones which may have been remains of two hearths.

After removing the stones and soil from the first level, we came to the second level, at the usual depth of about 6 inches. Commencing again with section P (fig. 2), a large number of rough stones were disclosed, of no great size, and having no recognisable formation. Among them, however, several hearths and a considerable number of paved areas were identified, and are shown on plan. Close to the south line, and in the centre of the section, an alignment of paving was found, running in a north-westerly and south-easterly direction. Still further towards the north-west, another slightly curvilinear line of paving-stones, following the same direction, may have had some connection with it; but, as will be seen, the line is not continuous. At the east end of the more westerly alignment, a hearth in fragmentary condition and of uncertain orientation was discovered. Towards the north, and not far from the west section-line, two other settings of paving-stones were found. On the east section-line, and not far from the south-east corner, two other smaller paved areas were uncovered, and about 10 feet from these, in a north-westerly direction, a large and peculiarly shaped hearth was exposed in a somewhat ruinous condition. One large triangular slab and two or three smaller flat stones formed the floor of the hearth, which was bordered on each side by one large kerbstone. Probably the open end of this hearth was towards the north-west, in which direction two very large stones were set on edge and placed outwards at different angles, possibly to induce a draught.

A few feet to the north-west of this, a well-defined semicircle composed of five flat stones was discovered, but its purpose was not obvious. Due east of this, a ruinous rectangular hearth may be noted on the east section-line; about 6 feet north-west of it lay the remains of another hearth, but only two kerbstones remained, both being on the north-west side. A few feet still further to the north lay a small paved area; while

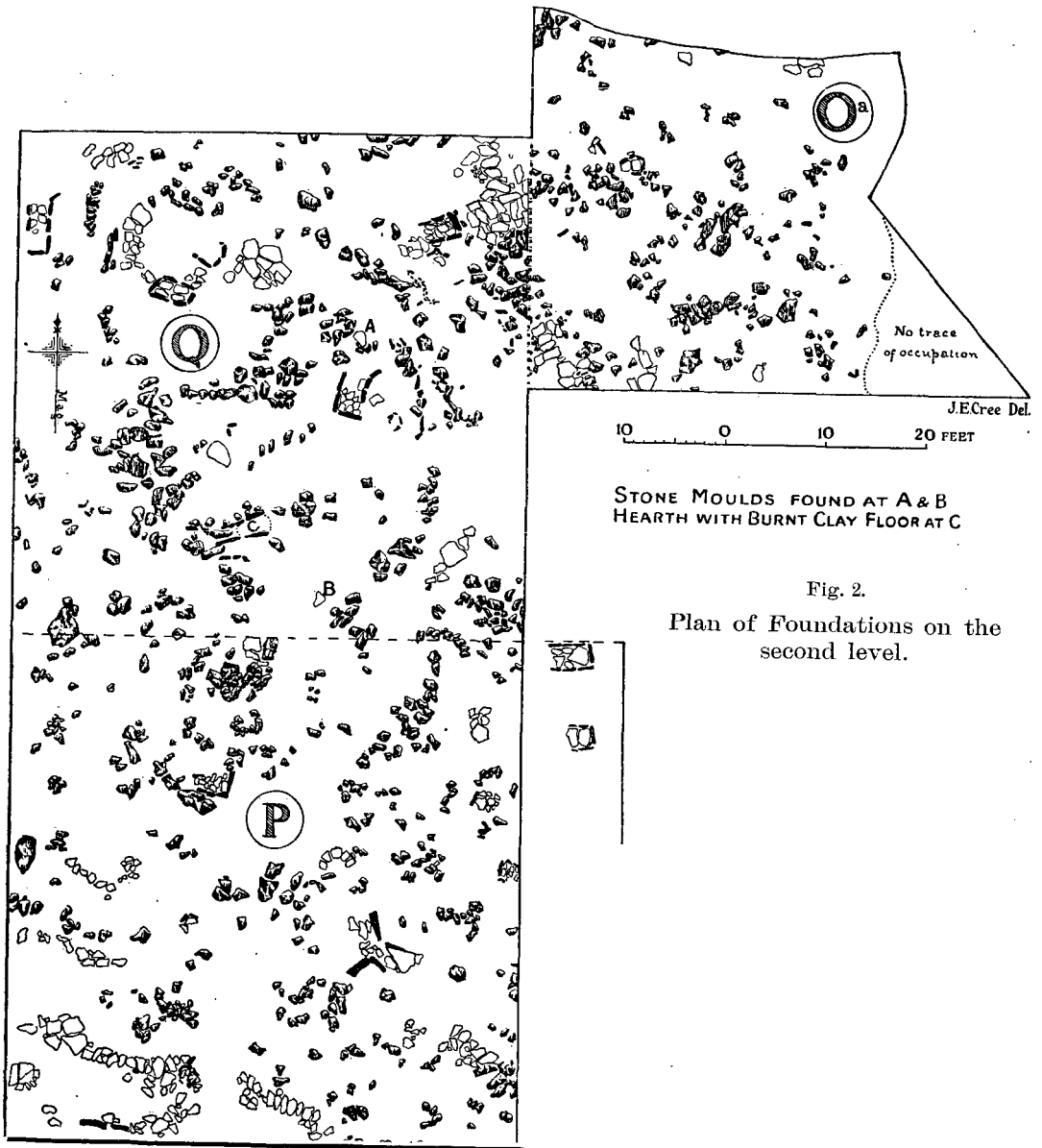


Fig. 2.
Plan of Foundations on the second level.

immediately underlying this lay a portion of a rectangular hearth, orientated due east and west. To the north, and nearly on the north line of the section, yet another rectangular hearth was uncovered, about 4 inches below the level we are describing. Its orientation was also east and west, the open end being in the latter direction. The two hearths last mentioned have been placed on the plan, although they do not belong, properly speaking, to this level; yet they afford striking evidence of the continuous occupation of the ground in question. Another fragmentary rectangular hearth, whose open end also appears to have been towards the west, will be noticed slightly to the north-west of the centre of the section. A small rectangular hearth was laid bare, in the centre of and adjoining the north line of the section. It was orientated north-east and south-west, the open end being in the former direction. Contiguous to it on the west and south were three paving-stones.

Proceeding now into section Q, many rough stones were found; without, as in the previous section, any very definite structure being obvious. A small alignment of paving-stones was uncovered in the south-east angle. About 20 feet due west of this, a curious structure which may have been a hearth was brought to light. It was composed of three kerbstones on the north-west side and two large ones opposite, and it measured about 5 feet in length. At the north-east end the kerbstones were about 20 inches apart, while at the opposite end the structure contracted to about 1 foot. No paving-stones were here noticed, but within the dotted lines marked C on plan, burnt clay about 4 inches in thickness was revealed. Eight feet to the north-west of this, a roughly square stone set on end as a pillar, which was sunk some inches deeper, extended to approximately 1 foot 10 inches above the level being described. Seventeen feet to the north of this a rectangular hearth was uncovered, whose orientation was north-west and south-east and which was completely enclosed by kerbstones. Adjoining the hearth on the north-east lay four paving-stones; while a larger and roughly circular paved area was found a few feet still further to the north-east. Close to this on the north-west, was a small semi-enclosed space formed of five stones set on edge; possibly these kerbstones may be all that remained of a hearth. From the north-west end of the complete hearth last described, a curvilinear line of pavement extended in a northerly direction for a distance of about 8 feet. To the west a slightly ruinous rectangular hearth was exposed close to the west line of the section. Its orientation was due north and south, the open end being towards the north. On the eastern side, the line of kerbstones terminated at the open end by an additional kerbstone set at an angle outwards. This

particular feature is worthy of special note, as a hearth of similar construction was found slightly to the east of the centre of the section; this also, it will be seen, has the open end in a northerly direction, with the kerbstone extension on the same side as in the example immediately before noted. Other hearths, resembling this peculiar type, have been brought to light previously,¹ but their significance is not apparent, and it must be pointed out that all of these hearths have been found on the second level, and may therefore be given a fourth century attribution. It will be noted, however, that the kerb extension is in every case on the same side, *i.e.* to the left, as one faces the closed end of the hearth. About 10 feet north-east of the hearth, a small sinuous line of stones set on their edges may be observed on the plan, and a few feet further north a rectangular hearth orientated nearly east and west. A few paving-stones are to be seen adjoining this to the south-west; while to the east and north-east lay a large paved area, which may possibly have had reference to a dwelling. At a point a few feet north of the rectangular hearth, to the east of the centre of the section, a block of sandstone (marked A on plan) was found, having a mould on two opposite faces for the casting of some object; while towards the south line of the section another and similar block of sandstone (marked B on plan) was discovered, having a mould cut on one face only. These will be described later.

Advancing now into O^a, we again found the structure very indefinite. At the south-west corner some paving will be observed, while a few other paving-stones may be noted slightly towards the east. At the south-east corner, a triangular piece of ground was exposed on which no trace of occupation was discovered. About 21 feet from the south line of the section and 10 feet from the east line, a small fragmentary hearth was brought to light; while on the extreme north-east of the excavation, three paving-stones complete the indications of structure worthy of notice on this level.

About 6 inches below the second level we came to what has been designated the third level (fig. 3). In section P, a small strip of ground in which no occupation was noticed extended to about 30 feet in length, but only a matter of a few feet in width, and lay along the eastern line of the section. As usual, this is indicated by a dotted line. This section and level is of very considerable importance, by reason of the finding of the completion of a circular paved area, an arc of which was discovered on the adjoining ground to the south in 1920. The completed circle has an internal diameter of approximately 30 feet. It may be suggested that the paving shown on plan was laid as the foundation

¹ A hearth of this construction was found in 1914 (*Proceedings*, vol. xlix. p. 150, fig. 6), and another in 1915 (*Ibid.*, vol. l. pp. 77 and 79, figs. 10 and 12).

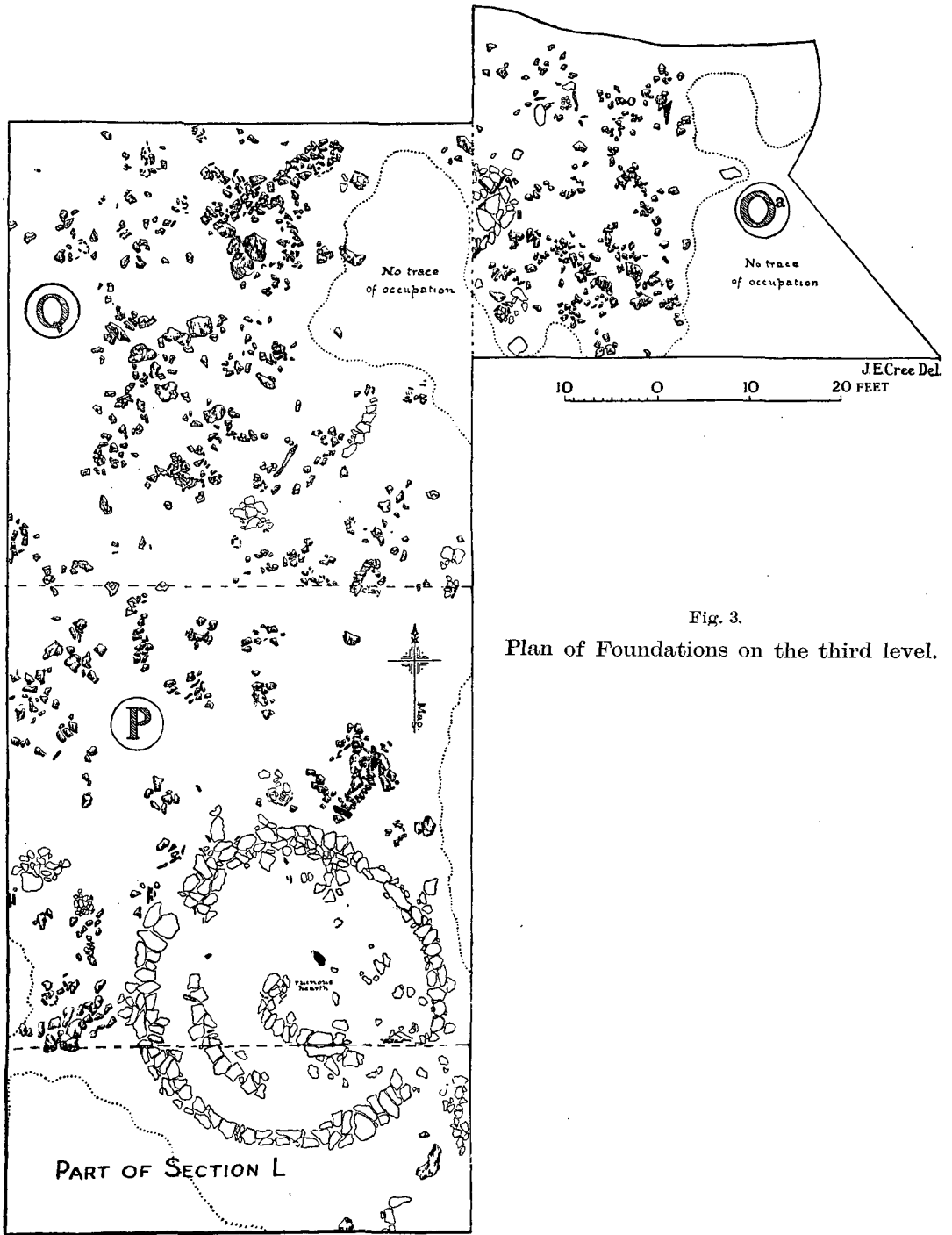


Fig. 3.
Plan of Foundations on the third level.

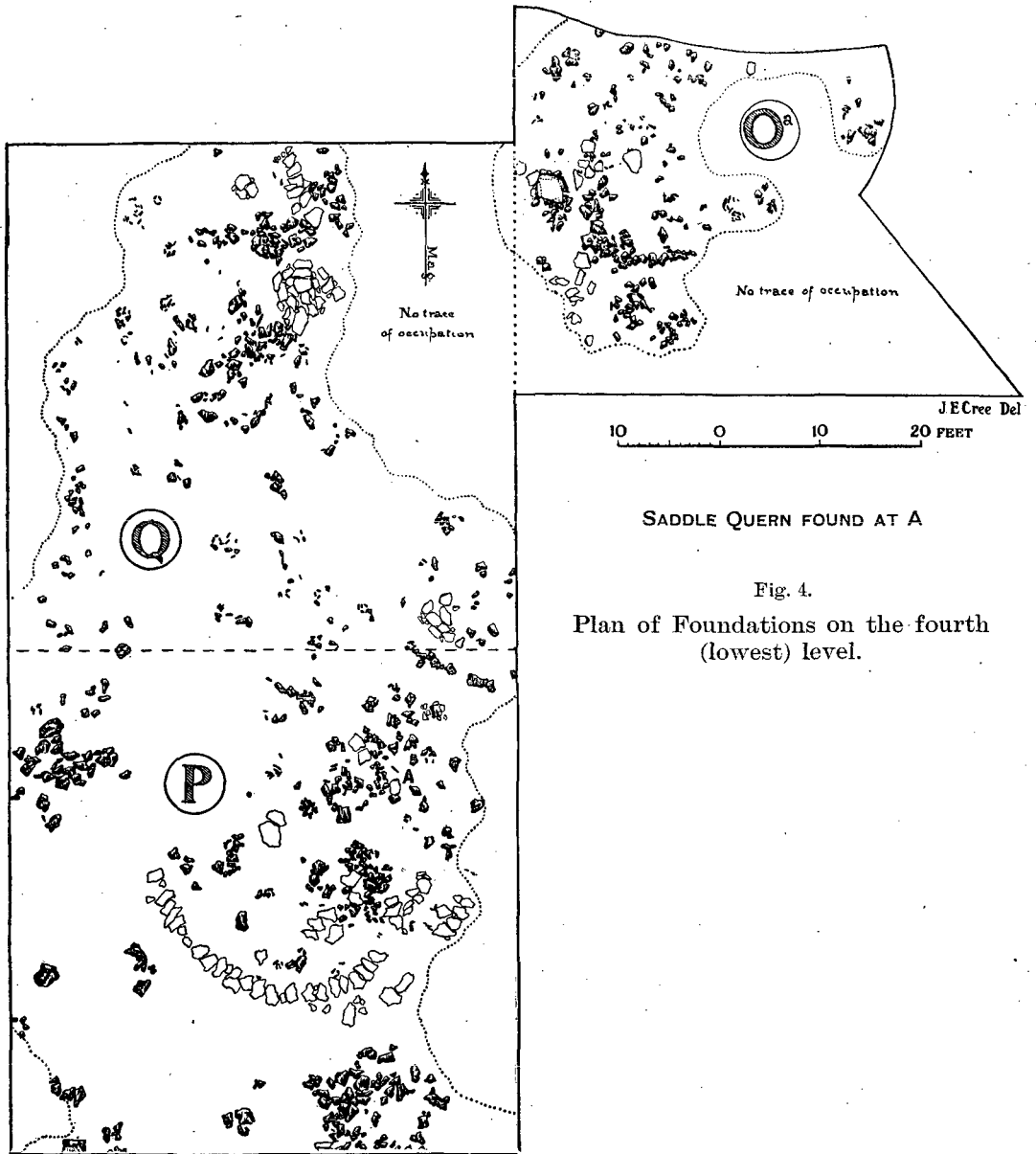
for a turf enclosing wall. The complete enclosure possibly surrounded a single dwelling, as only one hearth, and that in fragmentary condition, was found occupying a central position. An opening about 2 feet in width in the circle of paving to the north-west of the hearth may have been an entrance. Another possible entrance to the south-east will also be seen on the plan of part of section L (excavated in 1920), which has been added to section P in order to show the complete structure. Two inner concentric segments of paving were found, but no flat stones were recognisable which could definitely be attributed to the floor of a dwelling. Presumably, however, a dwelling occupied a prominent position within this circle, and it may be suggested that the enclosure surrounded the residence of some person of importance in the tribe. To the west of the entrance a ruinous hearth was discovered; while a few feet to the north-west lay a paved area. A small incomplete circular hearth was laid bare in the south-western angle of the section, close to an alignment of rough stones which lay in a north-easterly and south-westerly direction. Towards the centre of the section was another fragmentary hearth; while a few feet towards the west one-half of a rotary quern was uncovered. The structure in section Q was of small importance. A ruinous hearth lay at the south-east corner, partly in this section and partly in section P. A few paving-stones lay a couple of feet to the northward. About 8 feet due east, a number of rough stones were laid closely together in line for a distance of about 5 feet. Another structure similarly composed had been placed so as to form two sides of a triangle; while the space between them was filled with clay. Some 10 feet in a north-westerly direction lay a small roughly circular paved area; while almost adjoining it on the south was a small enclosure formed of stones set on edge, which may have been a post-hole. North-east of the floor already mentioned was a line of paving about 6 feet in length. A large irregularly shaped piece of ground, measuring about 30 feet in length and 15 feet in greatest width, occurred on the north-east of the section, in which no trace of occupation was observed. Close to this area, however, a small rectangular hearth was exposed, orientated north-west and south-east, the open end being in the latter direction.

Turning eastwards into section O^a, a considerable portion of the area on the eastern side failed to exhibit any trace of occupation. In the south-west angle, a small ruinous hearth was uncovered, close to which on the north-west, north-east, and south-east lay a few paving-stones. Some 8 or 10 feet to the north of this more paving was brought to light; while the remains of another hearth, probably of rectangular form, lay immediately to the northward, and about 9 feet in a north-easterly direction another ruinous hearth was identified.

The fourth and lowest level (fig. 4) was reached, some 6 or 8 inches below the level just described. In section P, a strip of ground along the eastern side, as indicated by the dotted line, showed no trace of occupation. The principal structure in the section, as may be noted on plan, was a semicircle of flat slabs, which occupied a position slightly to the south of the centre. This in many respects resembled a similar structure shown on the level above. An apparent opening in the enclosure occurred on the south-east side. Two paving-stones, some little distance to the north, may possibly have been a continuation of the circle, as they seemed to lie in the same line of circumference, as did also a saddle quern, marked A on plan. The internal diameter of this structure was about 25 feet. Within the circle was a considerable number of rough stones, some paving-slabs, and a large number of smaller stones set on edge, but their purpose was not apparent. A single kerbstone, having paving on both sides of it, which may be the remains of a hearth, lay in the north-east angle. From the south-west quarter of the section a number of flint and some stone implements were recovered, but no structure referable to the Neolithic or Bronze Ages was recognised.

Proceeding now into section Q, a small paved area was uncovered, close to the south-east corner. Another and larger paving was found slightly to the north-east of the centre; while a few feet distant, in a northerly direction, lay a line of paving-stones about 8 feet in length, and a few more flat slabs forming a small circle were exposed 3 feet to the west of the latter. Numerous rough stones were uncovered, scattered throughout the occupied portion of the section, but these seemed to be devoid of structural form. As was observed in section P, a large number of small stones set on edge were again noticed, and many of these appeared to have been set in more or less square formation, suggesting post-holes. On both east and west sides of the section, considerable portions of the area showed no trace of occupation.

In section O^a adjoining, we found that only about half of the total area had been under occupation. This ground lay mainly towards the west and north of the section. An arc of rough stones was noticed towards the south-west, and a few paving-stones were discovered, both to the north and south of this formation. The only other structure of interest was a small square enclosure about 2 feet 6 inches in internal diameter, lying close to the west section line and within a foot or two of the paving above described. Its purpose was not apparent. The sides were formed of rough stones, which were placed on the natural rubble. The top consisted of one large flag, which was cracked, probably owing to the pressure of soil above. At the north side, the enclosure measured about 1 foot in depth, while at the south side, owing to the natural



SADDLE QUERN FOUND AT A

Fig. 4.
Plan of Foundations on the fourth
(lowest) level.

upward slope of the hill, the depth was only 8 inches. On lifting the covering slab, the interior of the space was found partially filled with fine silt, and this, on examination, proved to contain only a few fragments of bone, some of which had been burnt. The only relic which came from this enclosure was a small segment of a glass armlet, covered all over its outer surface with enamel. It is of a type now well known at Traprain, and will be described later. Owing probably to its having been found under the large covering slab, it is in better condition than the majority of examples found elsewhere.

As usual, we shall commence with a description of the relics from the lowest level.

RELICS FROM THE LOWEST LEVEL.

While no dwelling-site or structure belonging to the Neolithic or Bronze Ages was found this year, several important relics were brought to light belonging to these periods. We may first describe objects of flint and stone, which possibly may be referable to Neolithic times, and these are shown on fig. 5. No. 4 is a lozenge-shaped arrow-head of grey flint which came from section P. It measures $1\frac{1}{8}$ inch in length, and is nicely worked on both surfaces. Another arrow-head, No. 5, is leaf-shaped, and is somewhat blunted at the point. It is of grey flint, also measures $1\frac{1}{8}$ inch in length, and came from section O^a. From section P came the following scrapers:—One, No. 6, measuring $1\frac{3}{4}$ inch in length and about $1\frac{1}{8}$ inch in breadth, is of brownish flint; another, No. 7, also of brownish flint, made from a flake, and measuring about $1\frac{9}{16}$ inch in length; a small specimen of greyish-brown flint, measuring $1\frac{1}{16}$ inch in length; another, of dark brown flint, is only represented by a semicircular point, measuring $1\frac{1}{16}$ inch in breadth; and yet another, which is calcined, measuring about $\frac{3}{4}$ inch in length. Several other flakes of flint were recovered and one flake of chert, none of which, however, show any working and therefore they are not illustrated.

Relics of stone from this level consist of one fairly large axe of felstone, of which both the cutting edge and the butt have been considerably abraded. It measures about $6\frac{1}{4}$ inches in length, and the cutting edge seems to have been approximately $2\frac{3}{8}$ inches across. No. 1, shows a smaller axe, measuring about $2\frac{7}{8}$ inches in length and $1\frac{1}{4}$ inch across the cutting edge. An implement of greywacke, which is of uncertain use, and may possibly have been a hoe, measures about $5\frac{1}{8}$ inches in length, and is illustrated in No. 2. A deep groove is fashioned on one side about the centre of the stone, and a depression extends across the face to the opposite side. No doubt the purpose of this was for the fixing of the haft. Above the groove on one side the

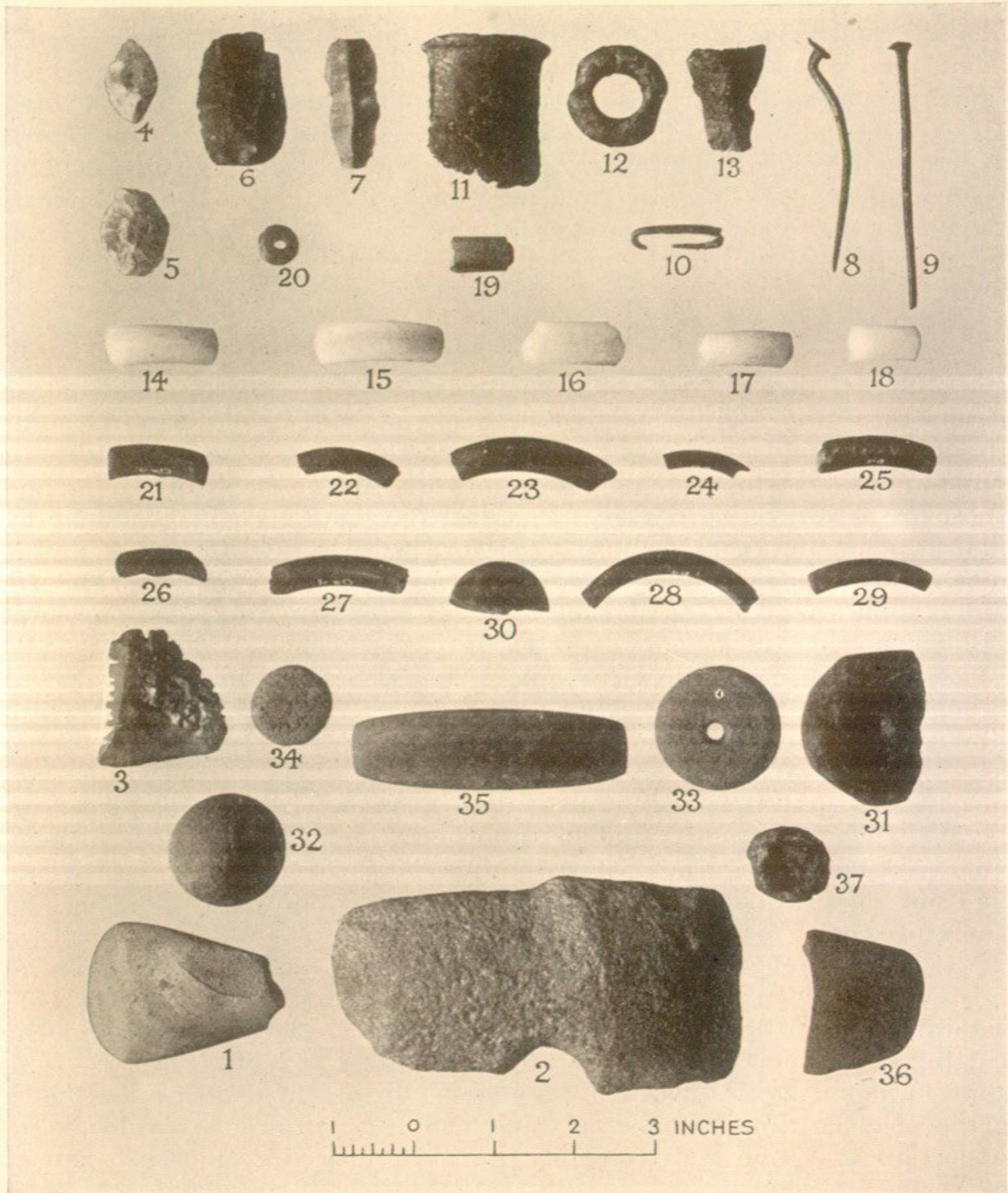


Fig. 5. Group of Relics (other than of Iron) from the fourth (lowest) level. (8.)

stone has been fractured in ancient times, but possibly this side of the butt had been originally similar to the other. The portion of the implement from the groove to the point has pittings all over the surface on both faces, and this probably indicates the method employed in fashioning it.

Relics referable to the Bronze Age are represented this year by a hollow bronze ring, with transverse perforations through it (fig. 5, No. 12, and fig. 6), which came from section Q. It measures $1\frac{5}{16}$ inch in external diameter, and, as far as is known, is the first example of its kind found in Scotland.¹ Two pins (fig. 5, Nos. 8 and 9, and fig. 7), one of which came from section P, and the other from section O^a. The former measures $3\frac{7}{16}$ inches in length, but the point is wanting. The head is circular, and the stem, which is also circular in cross section, tapers gradually towards the point. The second pin, although bent, is complete to the point. It is similar to the one already mentioned, and measures nearly $3\frac{1}{16}$ inches in length. The only other object belonging to the Bronze Age is a portion of one side of the socket of an axe (fig. 5, No. 11). It measures about $1\frac{7}{8}$ inch in length, shows no decoration, and the socket seems to have been ovoid. This came from section Q.

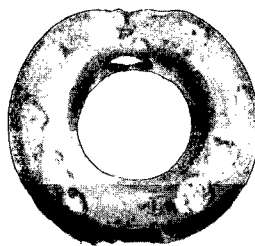


Fig. 6. Hollow perforated Bronze Ring. (†)

Here may be mentioned an object of felstone which, so far as ascertained, appears to be unique (fig. 5, No. 3, and fig. 8). It is roughly triangular in shape, and came from section Q. From base to apex it measures $1\frac{3}{4}$ inch. The base has been worked from both sides to a cutting edge. On each side saw teeth have been cut; those on one side being nearly double the size of those on the other. The method which has been adopted in forming the teeth seems to have been, in the first instance, to cut a V-shaped slot in the stone and then to round the space between the teeth at the base with a small rounded file. The whole process of fashioning the teeth seems to have been conducted from the same side of the stone. At the apex a tapering slot has been cut, possibly for the affixing of a handle or

¹ Similar hollow rings have been found in Ireland (*Ancient Bronze Implements of Great Britain*, by Sir John Evans, p. 398, fig. 496). The example here illustrated was found at Trillick, Co. Tyrone, and has a pin passing through two such rings. Another is mentioned as coming from Llangwyllog, Anglesea.

haft. Stone saws have been found heretofore, although they are rare, but an implement fashioned in this manner seems to be quite new to Scottish archæology. Although this comes from the fourth level, and is described immediately following recognisable objects of the Bronze Age, it is by no means certain that it is referable to that period. It may even belong to the Romano-British period; other relics relating

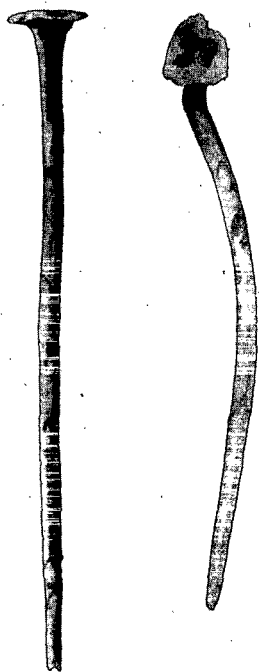


Fig. 7. Bronze Pins. (†.)

to which will now be described, and these, as usual, are attributable to about the beginning of the second century A.D. The sections under review have been curiously unprolific in relics, despite the fact that the ground exposed seemed promising.

Miscellaneous Relics of Bronze.—The following objects of bronze were recovered:—Fig. 5, No. 10, and fig. 9 was possibly an ornament or a clasp for clothing. It came from section Q, and measures about $1\frac{3}{16}$ inch in length. From the centre, which is flat and nicely patinated, it tapers towards both ends. What may have been the upper end has been bent back on the under side of the object for a distance of $\frac{5}{8}$ inch, and forms a squared point. The opposite end has also been bent backwards in a nicely rounded curve. A similar and slightly larger object, but made of iron, was found in 1915.¹ A more ornate example of this class of object from Herpes, France, is illustrated in fig. 196 of the *British Museum Guide to Anglo-Saxon Antiquities*, and is considered typically of Frankish origin. A piece of waste metal from the gate of a mould (fig. 5, No. 13), found in section Q, is similar

to one found last year which came from section M, fourth level.² Two or three other fragments of bronze, which were recovered from all three sections, are too unimportant to merit description.

Objects of Lead.—From section Q came a slightly flattened circular roll nearly $\frac{1}{8}$ inch in length; two small discoidal objects, one measuring 1 inch in diameter and $\frac{9}{16}$ inch in thickness, and the other about $\frac{1}{8}$ inch

¹ *Proceedings*, vol. 1. p. 120, fig. 34, No. 10.

² *Ibid.*, vol. lvi. p. 212, fig. 13, No. 4. Another, but conically shaped, piece of waste metal, also from the gate of a mould, is illustrated (*Ibid.*, pp. 234 and 255, fig. 29, No. 10).

in diameter and $\frac{9}{32}$ inch in thickness. Other discoidal objects of varying sizes made of this metal have been found, and it may be suggested that these were weights.

Glass.—Two segments of white opaque glass armlets came from section P, and three smaller ones from section Q (fig. 5, Nos. 14 to 18). They vary from $1\frac{1}{2}$ inch to about $\frac{3}{4}$ inch in length. A small segment of another armlet, complete in itself (fig. 5, No. 19, and fig. 10), only measures $1\frac{3}{8}$ inch in length and $\frac{7}{16}$ inch in breadth. It is plano-convex in cross section, and is checked down at both ends, probably to allow it to be joined by means of metal bands to other sections. The surface is entirely covered, except on the under side, by yellow enamel; and on both sides there is a tapering wedge-shaped device formed of reddish enamel; the point of the wedge being reversed on either side. On the mesial line at one end is an oval formed by a cord pattern of blue and white surrounding a yellow centre. This segment came from the small covered enclosure in section O^a, which has been already noted. A fine bead of dark blue glass (fig. 5, No. 20,



Fig. 8. Stone Saw-like Object. (†.)



Fig. 9. Bronze Clasp. (†.)



Fig. 10. Segment of Armlet and Bead of Glass. (†.)

and fig. 10), measuring $\frac{1}{2}$ inch in greatest diameter and $\frac{5}{16}$ inch in thickness, is ornamented with a wavy line of white opaque enamel; the hole through it is large and slightly oval.

Jet or Lignite.—There are ten segments of armlets, only one of which is plano-convex, while the others are markedly triangular in cross section (fig. 5, Nos. 21 to 29). Six were recovered from section P, one

small fragment from section Q, and the remaining three from section O^a. They vary in length from about 2 inches to $\frac{7}{8}$ inch. The only other object of jet is half of a large pin head (fig. 5, No. 30), which when complete would have been a flattened spheroid.

Stone.—A saddle quern, shattered at one end, came from section P; a nicely shaped hone (fig. 5, No. 35), formed of a fine-grained stone,

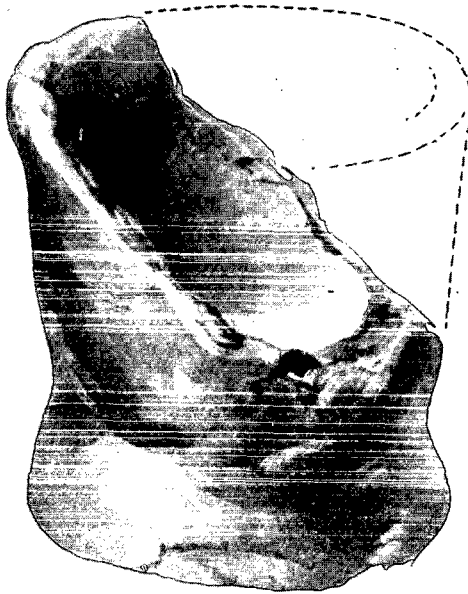


Fig. 11. Vessel of Clay. (†.)

measuring $3\frac{7}{16}$ inches in length and a little over 1 inch in breadth in the centre, from which point it tapers towards both ends, which are squared, and it is evident from marks of striation that it has been much in use; a pounder which shows battering at one end, about $5\frac{3}{8}$ inches in length; a water-worn stone, which has possibly been used as a smoother, and subsequently as a pounder, is much battered at both ends, and measures $4\frac{1}{16}$ inches in length; three other stones which appear to have been used as hones or polishers, measuring respectively $4\frac{3}{4}$, 7, and $7\frac{1}{4}$ inches in length; one flat piece of sandstone, $\frac{3}{4}$ inch in thickness, which shows battering on both faces; a small flat piece of fine-grained sandstone

(fig. 5, No. 36), measuring about $\frac{1}{4}$ inch in thickness, and fractured $1\frac{7}{16}$ inch from the end, which is rounded and sharpened from both faces to a thin edge, and bevelled away in a similar manner, on one side, came from section P; a roughly spherical object (fig. 5, No. 32), which may have been a sling-stone, from the same section; one stone playing-man (fig. 5, No. 34) from section Q; and a piece of limestone which has been burnt, from O^a; also one piece of yellow ochre which has been shaped and faceted.

Whorls.—One complete whorl (fig. 5, No. 33) came from this level. It is of reddish sandstone, measures $1\frac{5}{8}$ inch in diameter, and was found in section O^a; also a roundish piece of shale (fig. 5, No. 31), which is fractured and has probably been intended for a whorl. In what has been the centre of one side is a small cup-marked depression, indicating the commencement of the hole; while on the opposite side a drill has been started in a corresponding position.

Moulds.—The fragment of one-half of a mould made of clay came from section P. It is the portion for the point of a weapon, possibly a spear-head. The matrix is $1\frac{1}{4}$ inch in length, and about $\frac{9}{16}$ inch in width at the broad end. Several other fragments were recovered which may also be portions of matrices for the casting of blades.

Pottery.—A considerable amount of pottery was recovered from these sections. Roman pottery included fragments of Samian ware, cooking-pots, and other wheel-made vessels, including several fragments of a mortarium which came from section Q. A large shard of a fairly coarse vessel came from section O^a. It is possibly a portion of the base and wall of an amphora. Native pottery includes two small vessels. One, the base and part of the wall to the rim on one side, of a small cup-like object which came from section P (fig. 11). The base, which is flat, measures $2\frac{1}{8}$ inches in diameter, while the total height measures $2\frac{3}{16}$ inches. The internal measurement is $1\frac{3}{8}$ inch in diameter and about $1\frac{1}{2}$ inch in height. The other vessel (fig. 12), which is very rudely made, came from section Q. It has a rounded base, and measures $1\frac{1}{8}$ inch in diameter and 1 inch in height. The interior is extremely rough, and seems to have been fashioned merely by pressing the finger into the soft clay in three or four places. The paste of which it is composed contains several stones.¹ A small irregularly shaped object with a deep

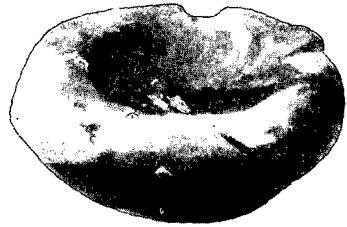


Fig. 12. Vessel of Clay. (†.)

¹ Small cup-shaped objects of similar dimensions have been found at Glastonbury (*Glastonbury Lake Village*, by Arthur Bulleid and H. St George Grey, vol. ii. p. 556, pl. lxxxix., Y6 and Y11). Other small earthenware cups are mentioned in *Proceedings*, vol. lv. p. 126, fig. 8, Nos. 4 and 5. They were found in the excavation of Dun Beag, Struan, Skye.

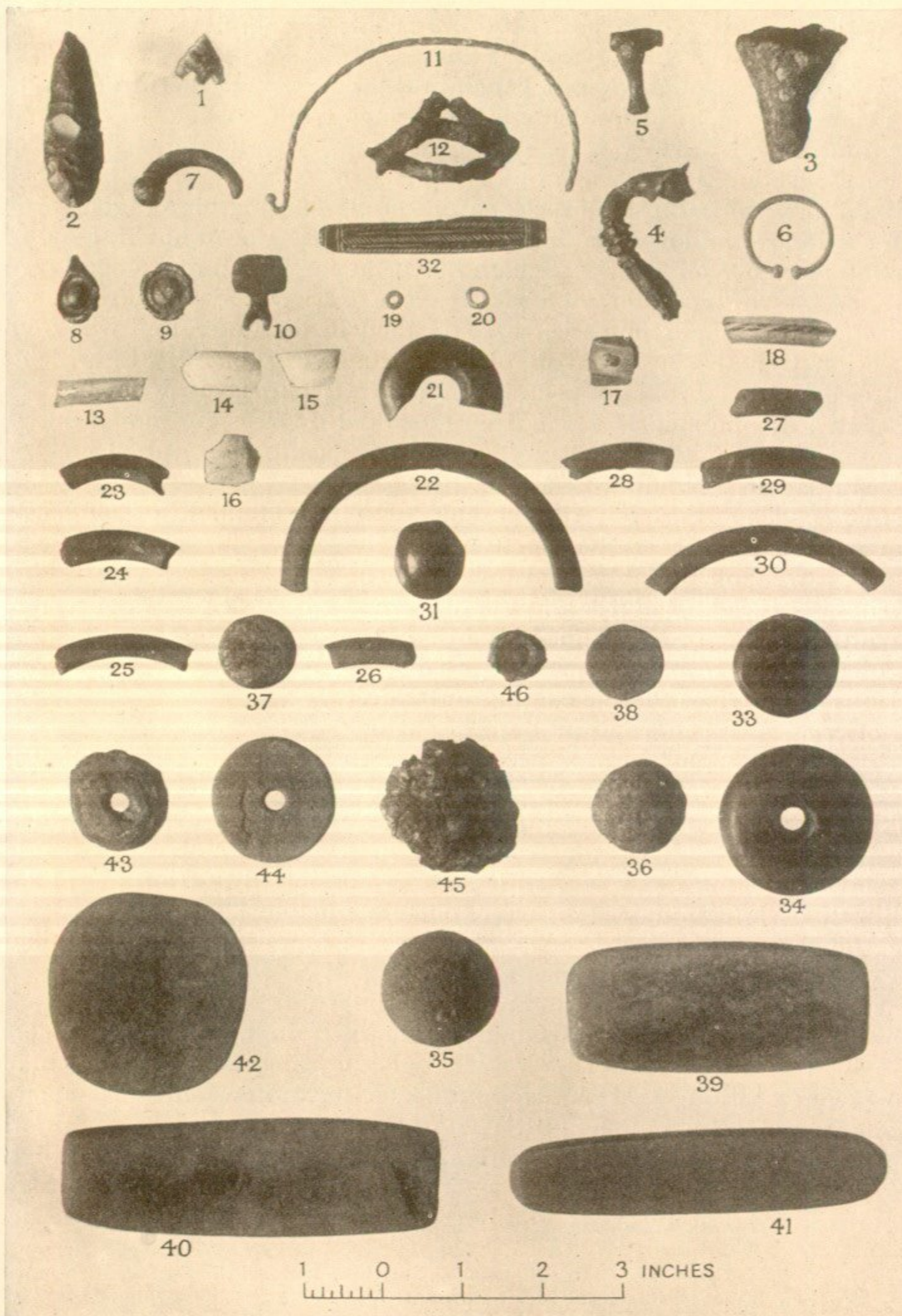


Fig. 13. Group of Relics (other than of Iron) from the third level.

cup-marked depression on one side, measuring $\frac{9}{16}$ inch in diameter, came from section P. A large number of shards of native ware of the usual coarse character were found. They are all undecorated and do not merit description. A fragment of a small crucible came from section Q.

RELICS FROM THE THIRD LEVEL.

We now come to a description of the relics from the third level, which of course, as will be understood, succeeded in an arbitrary sense the preceding and lowest level. They are grouped together on fig. 13.

Objects of Flint.—Several objects referable to the Neolithic Age were also found on this horizon. The flint artifacts are interesting, and include the following:—A fine knife (fig. 13, No. 2) made of a dark brown flint, which measures $2\frac{1}{2}$ inches in length and $\frac{3}{4}$ inch in greatest breadth, came from section P. It is rounded at the base and is nicely worked on both sides to a point. A small barbed arrow-head came from section Q (fig. 13, No. 1). It is of a greyish material, and measures $\frac{5}{8}$ inch from the point to the end of the tang and nearly $\frac{1\frac{1}{8}}$ inch across the barbs. The tang and barbs are all slightly broken. A scraper made from a flake of brown flint, which measures $1\frac{9}{16}$ inch in length and about 1 inch across the broadest part, is from section P. It shows evidence of having been much in use. A small scraper from section O^a is made from a thin flake of brown flint, and measures about $\frac{3}{4}$ inch in length and $\frac{1\frac{1}{8}}$ inch in breadth. It is finely worked along one side from underneath. There is also another small scraper, which has been calcined, and which measures $\frac{3}{4}$ inch in length. From the same section came a saw broken at one end, and also calcined, measuring $1\frac{1}{2}$ inch in length and about $\frac{5}{8}$ inch in breadth. The teeth have been very finely fashioned. Possibly the most interesting object of flint recovered is a “pigmy” (fig. 14), made from a flake of radiolarian chert, and measuring $\frac{7}{16}$ inch in length and about $\frac{5}{32}$ inch in breadth. It is nicely worked round two sides to a point. The mesial ridge is high and slightly crescentic. This is the first pigmy implement found on Traprain Law.¹ Numerous unworked flakes were also recovered.



Fig. 14. Pigmy Implement. (†)

Having found no relics definitely referable to the Age of Bronze, we now come to a description of those referable to the Romano-British period.

Bronze:—Fibulae.—One bow-shaped fibula (fig. 13, No. 4, and fig. 15)

¹ Several pigmies have been found in Berwickshire (*Proceedings*, vol. 1. p. 307, *et seq.*). Another has been found on a Neolithic horizon in a sandy valley to the north-east of Muirfield, East Lothian. Similar pigmies have been recovered from other districts.

with trumpet head, which covers a coiled spring, has the foot, the pin, and most of the catch-plate wanting. The centre of the bow is ornamented by a more or less conventional floriated knob. The fibula is not enamelled, and the workmanship is of rather poor execution. Another fibula (fig. 13, No. 5, and fig. 15) is of the knee-shaped pattern. The pin and catch-plate are again wanting. It is undecorated, and measures only $1\frac{1}{8}$ inch in total length.¹ A finely patinated penannular brooch (fig. 13, No. 6), having fluted terminal knobs, but with pin wanting, measures about $1\frac{1}{2}$ inch in exterior diameter; a fragment of a small penannular brooch also finishes in a fluted terminal knob.

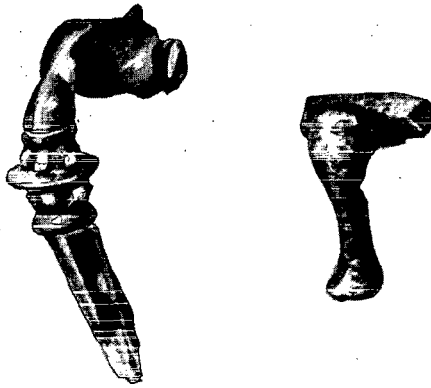


Fig. 15. Bronze Fibula. (3.)

About one-half of another penannular brooch (fig. 13, No. 7), very massive in character, has measured when complete about $1\frac{3}{8}$ inch in external diameter. The terminal is formed by a rounded knob, below which are two raised mouldings alternating with two grooves; from here, towards the point of fracture, the metal is thinned. All of these brooches came from section Q.

Miscellaneous Relics of Bronze.—Portions of three dress-fasteners (fig. 13, Nos. 8 to 10) were recovered—one from section P and the other two from section Q. That from section P consists of the head only, and is of the boss and petal type. One from section Q has the head formed of a rectangular plate of metal, which is devoid of ornamentation. The loop, which is broken, is more pear-shaped than triangular. The head of the third fastener is circular; the centre is occupied by a slightly raised

¹ Two knee-fibulae were found in 1915 (*Proceedings*, vol. 1. p. 97, fig. 22, Nos. 4 and 5).

boss and the loop is wanting. From section Q also came about one-half of a finely patinated twisted wire armlet (fig. 13, No. 11). It is about $\frac{3}{32}$ inch in thickness, and along the curve it measures about 6 inches. One end remains, which is of the usual hook-like character, terminating in a rounded knob. Had the curve been more open, this fragment might well have been a torc. It has only tentatively been mentioned as an armlet, owing to its apparently restricted diameter. Again, it might reasonably have been referred to the Bronze Age, in which period these ornaments are well known. Still, there is nothing necessarily incompatible with such an ornament belonging to the period under review. Another fragment may have been a portion of an armlet. It is crescentic in form, and measures $1\frac{5}{8}$ inch in length and about $\frac{1}{4}$ inch in thickness. At one end it is checked down, and seems to have been encircled by two mouldings. A piece of waste metal from the gate of a mould (fig. 13, No. 3) is larger, but somewhat similar in form, to one from the fourth level which has been already described. Several of these objects have been found in previous years and have been already noted. A few thin plates, together with three short bars of bronze, all being of indeterminate use, and one piece formed of several rods which have fused (fig. 13, No. 12), sum up the objects under this heading from the sections with which we are dealing.

Lead.—A small and irregularly shaped piece of lead came from section P. Another piece has been fashioned, and may have been intended to act as a pattern for some implement of an axe-like character. The front is smooth, and from the marks of striation may have been dressed with a file; the sides and end are squared but the back is rough, and the object has the appearance of having been spoiled in the making. There was also found a circular piece of lead, much oxidised (fig. 13, No. 45), measuring about $1\frac{1}{2}$ inch in diameter and $\frac{3}{4}$ inch in thickness. It will be remembered that from the level below two smaller discoidal objects, also of lead, were recovered.

Glass.—A few fragments of opaque white glass armlets (fig. 13, Nos. 13 to 16) were brought to light from all three sections, but none merit description. From section Q came one fragment of an armlet (fig. 13, No. 17) richly decorated and completely covered with enamel, except on the under side. A brownish band, upon which is an oval device of a different colour, crosses the fragment obliquely, and this is flanked on both sides by yellow. From the same section came a small segment of a translucent green glass armlet; a trace of white enamel decoration remains on the mesial ridge at one end. A very small fragment of opaque blue glass armlet, triangular in cross section and ornamented with a band of yellow along the mesial ridge, was also found

in the same section. This is the first fragment of this colour recovered from our excavations. A segment of translucent green glass armlet came from section P (fig. 13, No. 18, and fig. 16).



Fig. 16. Fragment of Glass Armlet. (†.)

It is ornamented along the mesial ridge by an applied cord pattern. This is composed of strands of dark blue and white, the latter alternating in width from a hair line to $\frac{1}{16}$ inch. Also from section P came a small bead of yellow vitreous paste (fig. 13, No. 19), measuring about $\frac{1}{4}$ inch in diameter. Less than half of another bead, also of yellow paste, measures $\frac{7}{16}$ inch in diameter; while one of blue (fig. 13, No. 20) is pierced by a large hole, and measures $\frac{9}{32}$ inch in outside diameter. A few fragments of Roman bottle glass recovered are not of sufficient importance to need description.

Jet or Lignite.—Altogether ten segments of armlets of lignite, nine of which are illustrated (fig. 13, Nos. 22 to 30), were recovered from the three sections: four small segments from section P and three from each of sections Q and O^a. Only two segments need here be described. The one amounted to nearly one-half of an armlet (No. 22), slightly tri-



Fig. 17. Jet Bead. (†.)

angular in cross section, and measuring when complete $3\frac{1}{16}$ inches in internal diameter; the other (No. 30), more triangular in cross section, would when complete measure about $3\frac{7}{16}$ inches in internal diameter. There were also found about half a ring of jet (fig. 13, No. 21), measuring $1\frac{9}{16}$ inch in external diameter; a large bead of tubular form made of fine jet (fig. 13, No. 32, and fig. 17), measuring $2\frac{1}{16}$ inches in length, about $\frac{1}{2}$ inch in diameter at the centre, and beautifully ornamented over the entire surface. It is decorated at either end with eight longitudinal grooves, between which the raised mouldings are crossed diagonally by short incised lines placed on each ridge in opposite directions. Still

further towards the ends an undecorated octagonal zone is left, $\frac{1}{8}$ inch in breadth. This is followed by other two encircling incised lines, while a cord pattern surrounds the extreme ends. Unfortunately, the bead is imperfect, a portion having been broken off longitudinally on one side. The perforation is incomplete, and it would thus seem that the drilling of the hole had taken place after the decoration of the bead was finished. About one-half of the head of a pin (fig. 13, No. 31) came from section Q. There is a disc of jet (fig. 13, No. 33), measuring $1\frac{5}{16}$ inch in diameter and $\frac{7}{16}$ inch in thickness. It is roughly fashioned, and centred on both sides by a hole. One large wedge-shaped block, measuring about $3\frac{1}{2}$ inches in length, and a small flake about $2\frac{3}{16}$ inches in length, came from sections P and Q respectively. A flat irregularly shaped piece of lignite came from section Q, and shows striæ on one surface, having possibly been used as a polisher. Another small piece from the same section is roughly circular, and also shows striæ on one face.

Wood.—There is one small piece of wood, rectangular in shape, and measuring $1\frac{3}{8}$ inch in length and about 1 inch in breadth.

Stone.—A saddle quern was found in section P. It measures about 19 inches in length, $11\frac{1}{2}$ inches in breadth, and $6\frac{1}{4}$ inches in thickness, and has been hollowed out to a depth of $\frac{5}{8}$ inch. A sharpening-stone was found in section Q. It is worn down by use on two sides, and measures about 5 inches in length, $2\frac{7}{8}$ inches in breadth, and is $4\frac{1}{4}$ inches in thickness. There may also be recorded a pounder, which has been much used, made from a water-worn quartzite stone; and four polishers, or smoothing-stones. The last vary in length from about $5\frac{5}{8}$ inches to about 2 inches, and in some cases striation marks are visible on them. There is a large water-worn stone measuring 7 inches in length and showing considerable battering on its surface. It may also, however, have been used as a polisher. A number of friction marks, as though made by a cord, are noticeable along one edge. A similar feature was mentioned in our last year's report when describing stones of this nature.¹ Worth noting also are a fine-grained stone (fig. 13, No. 42) having two rounded and two straight sides which are not parallel, about $\frac{5}{16}$ inch in thickness and bevelled down on two opposite sides;² three hones, all nicely shaped, varying in length from $3\frac{3}{4}$ inches to $4\frac{1}{4}$ inches (fig. 13, Nos. 39 to 41); a fragment of a hone, only measuring about $2\frac{3}{16}$ inches in length, of fine-grained stone, and, where fractured, an effort has apparently been made to polish the break to a smooth surface; another small hone, only $1\frac{1}{4}$ inch in length, seems to have been used on all faces; a small

¹ *Proceedings*, vol. lvi. p. 248.

² Two similar stones were obtained last year and are illustrated in *Proceedings*, pp. 239 and 256, fig. 21, Nos. 6 and 8.

fine-grained stone of a slaty character, in the form of an isosceles triangle, flattened on two sides and measuring about $1\frac{1}{2}$ inch in length. Two small sling-stones (fig. 13, Nos. 35 and 36) came from section P, and two playing-men (fig. 13, Nos. 37 and 38) from section Q. They are of the usual size.

Whorls.—Three whorls, two of which are illustrated (fig. 13, Nos. 43 and 44), and portions of three others, came from sections P, Q, and O^a; a large jet whorl (fig. 13, No. 34), measuring $1\frac{5}{16}$ inch in diameter and $\frac{11}{16}$ inch in thickness, from section P. Another from section O^a is of micaceous sandstone, measuring $1\frac{9}{16}$ inch in diameter; while that from section Q, which is of a slaty material, only measures $1\frac{3}{8}$ inch in diameter. The fragments of three others do not merit description.

The following objects of iron may be noted as coming from section P:—

Iron.—A portion of the blade of a sword (fig. 18, No. 1) with a slight midrib, measuring at the fracture $1\frac{1}{4}$ inch in breadth and 7 inches in length to the point; the head of a weapon resembling a spear-head but having a blade of triangular section and a closed socket (fig. 18, No. 2), measuring $5\frac{5}{16}$ inches in total length (the head is $2\frac{1}{2}$ inches in length and the socket $2\frac{13}{16}$ inches; the sides of the head at the widest part measure $\frac{7}{16}$ inch across; the end of the socket, which is imperfect, measures about $\frac{5}{8}$ inch in external diameter);¹ a large oval loop with a stem (fig. 18, No. 3) measures $5\frac{7}{16}$ inches in length. The exterior of the loop, which is placed at right angles to the stem and is of rounded section, measures 3 inches in greatest length; a flat file with tang of rectangular section (fig. 18, No. 4), measuring 5 inches in total length, the tang, which is fragmentary, measuring only $\frac{1}{16}$ inch in length. From section Q came an S-shaped, hook-like object (fig. 18, No. 5) having a large rounded knob at one end, measuring across the curves $2\frac{3}{4}$ inches in length; a blade of a sickle with tang awanting (fig. 18, No. 6), measuring $4\frac{1}{8}$ inches across the inner curve and $\frac{13}{16}$ inch across the blade at the widest part; a knife-like object with a triangular blade and tang (fig. 18, No. 7), measuring 2 inches in length, and a chisel-like implement with rounded stem (fig. 18, No. 8), measuring $3\frac{3}{8}$ inches in length, came from section Q. There may also be mentioned a small irregularly shaped piece of hematite flattened at one end, which may have been used as a polisher.

Pottery.—A considerable quantity of Roman pottery came from all sections. Portions of the bases of three Samian ware bowls and about half the base of a vase may be noted. Several fragments show decoration,

¹ One from Newstead is in the Museum, but is not mentioned by James Curle in *A Roman Frontier Post*. It measures $5\frac{3}{8}$ inches in extreme length, the socket being $2\frac{3}{4}$ inches in length.

and on one small shard from O^a the potter's name, GATVS, is stamped.¹ Some shards of a mortarium, including portions of the rim, came from all sections. Several shards of a large vessel of thick reddish ware, including portions of the base, wall, and rim, came from section P. The body of the vessel has been decorated with three incised lines placed about $\frac{5}{8}$ inch apart, between which an irregular wavy line has been made

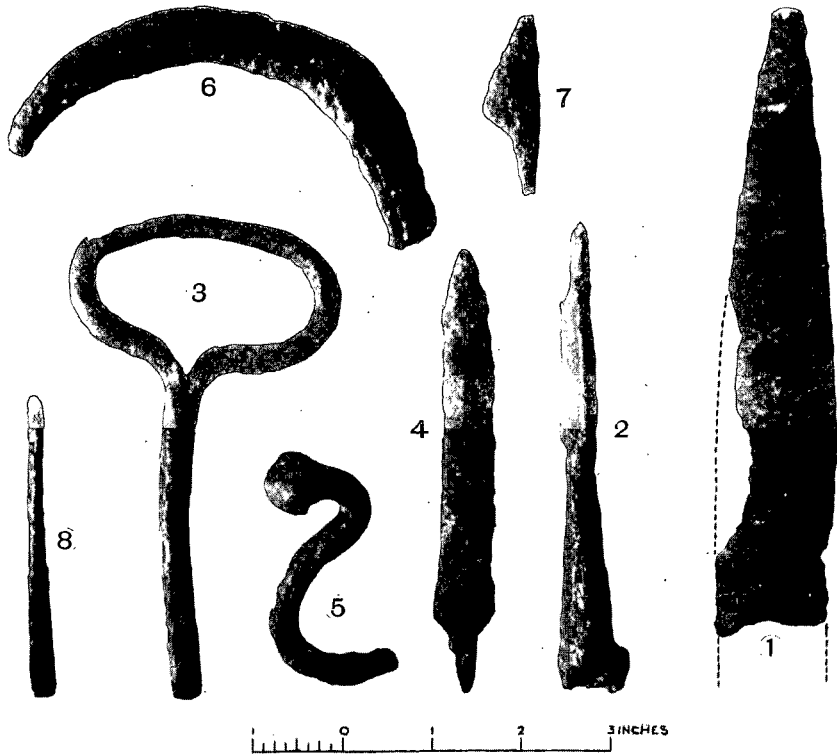


Fig. 18. Objects of Iron from the third level.

with a pointed stick. Other shards of this, or a vessel showing similar decoration, were found in 1920. The base of a vessel of reddish-brown ware, measuring $2\frac{3}{8}$ inches in diameter, shows the inside to have been finished with a lighter coloured slip. Several shards were recovered of the wall and rim of this vessel. The latter is everted, and it would appear that when complete the exterior lip diameter would have been about 5 inches. A number of shards of cooking-pot having the usual

¹ This potter's name was found at Alteburg.—Oswald and Pryce, *Terra Sigillata*, p. 114.

lattice-work decoration were brought to light, and many shards of other vessels whose form cannot be ascertained. Fragments of two pots of native ware were found. One consists of a portion of a bowl-shaped vessel from base to rim, which measures about $1\frac{7}{8}$ inch in height, while the external diameter at the rim seems to have been about 4 inches. The other is of hard texture, and is vesicular and porous in appearance. The base measures $3\frac{1}{8}$ inches in external diameter. Several other shards of the same vessel, and a large number of shards of coarse ware representing many vessels, were also recovered.

Crucibles.—The recovery this year from section Q of several portions of crucibles is of considerable interest and importance. These have been shallow vessels with rounded bases, much like the crucibles used at the present time for the melting or manufacturing of enamel, and evidently have been used for a similar purpose. Four crucibles, represented by portions of the rims and walls, would when complete have measured approximately $1\frac{3}{8}$, 2, $2\frac{3}{16}$, and $2\frac{1}{2}$ inches in internal diameter. The thickness of the rims respectively are $\frac{3}{16}$, $\frac{3}{32}$, $\frac{1}{4}$, and $1\frac{3}{16}$ inch. The fragment of the second crucible mentioned includes a portion of the base, from which it has been possible to measure the approximate internal depth of the vessel, which has been $\frac{5}{32}$ inch. On the inside of the fragments mentioned a thickish coating of pigmented glass adheres to the surface; the colours suggested being red, yellow, and possibly blue. On one or two pieces the glass is coloured from a pale green to an almost transparent white, and in several cases this has splashed over to the outside of the vessel. The fact that pale green or transparent glass is shown on some of the fragments indicates that probably the glass was in a molten state in the vessel before the pigment was added. One piece shows clearly that glass was being melted after the vessel had been cracked, the molten glass having run through the crack and still adhering to the sides of the fracture. With the finding of this evidence of the melting of glass and making of enamel on the hill, it now seems beyond doubt that this form of ornamentation of at least many bronze objects was carried out locally by native workmen. This being established, the suggestion may be made that glass armlets, of which we have found so many segments, have also been manufactured on the hill. The finding of a small rod of glass in 1915¹ first suggested to us the melting of glass on Traprain, but further proof was lacking until the above-mentioned crucibles were found. We are much indebted to Mr Balsillie, of the Royal Scottish Museum, for his kindness in making an analysis of some of the glass found, and his report is as follows:—

¹ *Proceedings*, vol. 1. p. 110, fig. 26, No. 11.

“The materials submitted by Mr Cree from the excavations at Traprain Law have now been subjected to careful examination; these included:—

- (1) Fragments of a substance that looked like old pottery.
- (2) Portions of coloured glass armlets.
- (3) Piece of dark slag.
- (4) Fragment of whitish-grey rock.

What has been found in reference to these is as follows:—

(1) The fragments of what seem at first inspection to be old pottery are undoubtedly the remains of some small vessels that have been used for the melting of glass. The shape of these vessels appears to have been approximately hemispherical, and their size, judging from the curvature of some of the pieces, something under 35 mm. radius. The substance of which they are composed has probably been a grey fireclay, now, however, with an infusion of vitreous material. Abundant evidence of the glass-melting operations that have formerly been carried on in these crucibles is furnished by the coating of glass that here and there can be seen adhering to their surfaces, sometimes to a thickness of 1 mm. The glass is occasionally colourless, of refractive index 1.522, quite isotropic, and is likely a simple alkali-lime-silicate glass just such as might be expected. It is interesting to note that on the interior surfaces of the vessels the glass is often pigmented, whereas on the exterior the medium is uncoloured. Apparently various metallic oxides were being introduced into the melts, but this only after complete fusion of the glass essentials, and after a melt had had time to creep over the upper edges of the crucible or escape through some small fissure on to the outside. What the pigmenting substances have been it would not be possible to ascertain without destroying the relics.

(2) An examination of the coloured glasses submitted has not been an entirely simple matter, but from the first samples it was easily possible to ascertain that the colour of the yellow glass was attributable to lead. An analysis of the blue glass, however, did not yield sufficient evidence of cobalt to sanction the assertion of the presence of that element, which the colour certainly suggested. Under the circumstances it was considered advisable to get another opinion, and what remained of the material was therefore submitted to Dr Leonard Dobbin, of the Chemistry Department, Edinburgh University, who very kindly made an independent and careful examination. He likewise was not able to establish the presence of cobalt, but thought that analysis of a larger sample might yield more convincing evidence.

(3) The dark slag contains lead and copper.

(4) The rounded fragment of whitish-grey rock is a piece of one of the Lower Carboniferous marine limestones which here and there are known to occur in the vicinity of Traprain. The possibility is that such a substance, ground to a powder, may have been used in the glass-making operations mentioned above.

I should like to record my indebtedness to Dr Dobbin for valuable assistance in carrying out the above analyses. DAVID BALSILLIE."

Coin.—Third brass of Titus (A.D. 71-81).

RELICS FROM THE SECOND LEVEL.

Relics from this level are grouped together on fig. 19.

Objects of Flint.—A leaf-shaped arrow-head of dark brown flint (fig. 19, No. 1), measuring $1\frac{1}{32}$ inch in length and about $\frac{9}{16}$ inch in breadth, nicely worked on both sides, but with the point wanting, and three flakes and one nodule, comprise the total finds from this level referable to the Neolithic culture.

Silver.—From section Q there came a pin, the head of which is missing, measuring $1\frac{1}{16}$ inch in length, and a semicircular piece of fine wire, measuring about $\frac{5}{8}$ inch in diameter.

Bronze:—Fibula.—A fibula of very uncommon form of the cross-bow type (fig. 19, No. 2, and fig. 20, No. 1), and probably of Roman provincial manufacture, came from section Q. It is devoid of ornamentation, but seems to have been gilt. From the head to the foot it measures $2\frac{3}{8}$ inches, and the vertical height of the bow to the top is 1 inch. The catch-plate, which measures $\frac{1}{16}$ inch in length, is flat on both upper and under surfaces; and while the upper surface of the bow is also flat, the under side is nicely rounded. At the back of the catch-plate, the slot for receiving the pin is wide and trumpet-shaped; while a rounded semicircular moulding is placed at the entrance, to act as a guide for the pin. The head of the fibula is formed of a semi-cylindrical casing, and measures about $1\frac{3}{8}$ inch in length. This has served as a covering for the spring which governed the pin, but both spring and pin are missing. A small penannular brooch which came from section P (fig. 19, No. 3) is finely patinated, and has the usual fluted terminal knobs. It is slightly crushed, so that the two knobs overlap, and the pin is wanting.

Pins.—The head and part of the shank of a pin (fig. 19, No. 4, and fig. 20, No. 3) also came from section P. The head, although incomplete, is circular, and measures $\frac{9}{16}$ inch in diameter. It is decorated with a series of transverse lines placed at somewhat irregular intervals, giving the appearance of small beads. A large pin, the point of which is

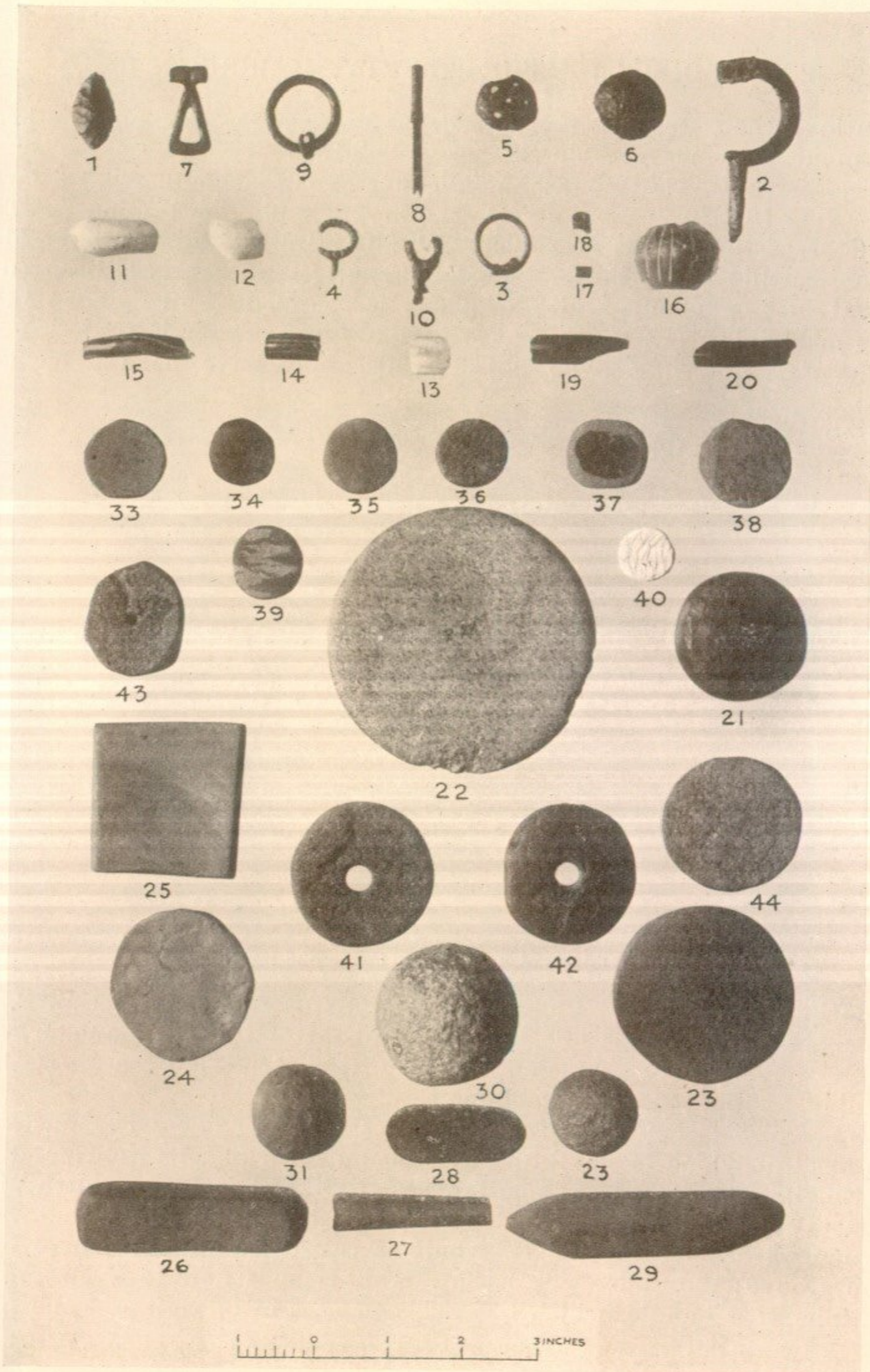


Fig. 19. Relics (other than of Iron) from the second level. (2.)

awanting, was found on section P. It has a squared zoomorphic head and snout, and measures $3\frac{7}{16}$ inches in length.¹

Finger Ring.—The mount and portion of both shoulders of a large finger ring (fig. 19, No. 5, and fig. 20, No. 2) came from section Q. The diameter of the mount is $\frac{3}{4}$ inch, and this is filled with a bright blue enamel setting measuring $\frac{5}{8}$ inch in diameter. Into this is inserted a central spot of opaque white, which is surrounded by five spots of the same material, placed towards the periphery of the setting.

Harness Mounting.—One object which may have been a harness

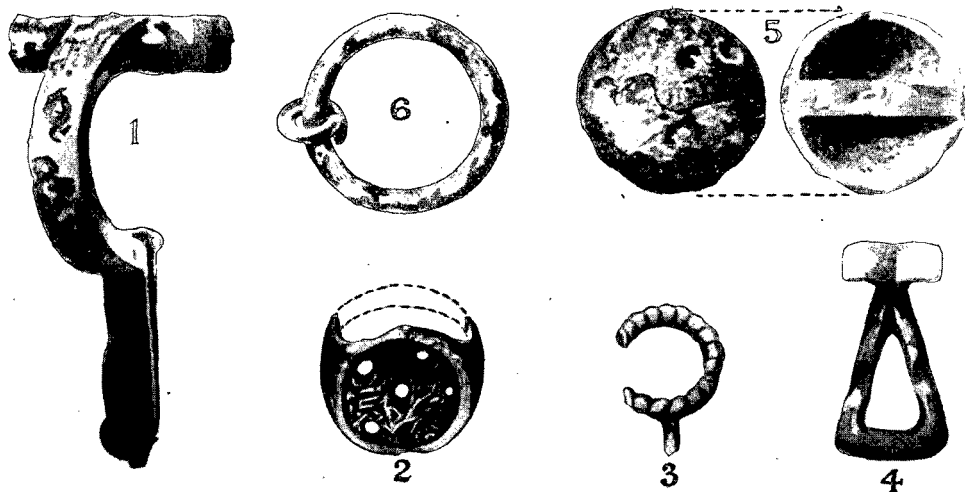


Fig. 20. Objects of Bronze from the second level. (†)

mounting (fig. 19, No. 6, and fig. 20, No. 5) was found on section P. It is convex on the upper side, measuring about $\frac{1\frac{5}{16}}$ inch in diameter, and on the opposite side, which is concave, it is crossed by a single bar, possibly for purposes of attachment.

Miscellaneous Relics of Bronze.—From section Q came a dress fastener, the head of which is small and of unusual form (fig. 19, No. 17, and fig. 20, No. 4). The loop is triangular, and the head is formed of a piece of metal measuring $\frac{1}{2}$ inch in length and about $\frac{3}{16}$ inch in breadth. It is rounded on the upper side, where it is crossed in the centre by a deep groove; the under side is flat. This type is new to Traprain. A grattoir with handle, which has all been cast in one piece, came from

¹ Three pins of this type were found in 1915, and are illustrated in *Proceedings*, vol. 1. fig. 23, Nos. 6, 9A, and 9B, and also on p. 101, fig. 24.

section Q (fig. 19, No. 8, and fig. 23, No. 1). It measures $1\frac{3}{4}$ inch in length. The handle is circular in cross section and is $\frac{3}{4}$ inch in length. It is ornamented by two incised lines placed close together in the centre, while two similar lines encircle the handle, both at the head and foot. The stem, which is rectangular in cross section, is ornamented on all sides by incised lines. A ring (fig. 19, No. 9, and fig. 20, No. 6), measuring 1 inch in diameter, is a flattened oval in cross section. A small link is attached, the ends of which slightly overlap. A few fragments which seem to have been part of a shallow cup came from section Q. The thickness of the metal at the rim is little over $\frac{1}{32}$ inch. Several thin flat



Fig. 21. Fragment of Glass Vessel. (1.)

pieces of bronze and two or three indeterminate pieces, together with one piece of waste metal, complete the objects of bronze from this level.

Glass.—There are six segments of armlets to be recorded (fig. 19, Nos. 11 to 15). Two small fragments are of opaque white, another of opaque yellow, while a fourth is a fragment of opaque white having a pale blue ornamentation on its surface. The remaining two segments are of green translucent glass, one being ornamented with opaque white enamel. This piece is somewhat twisted, possibly through the action of fire. Several fragments of a vessel of Roman manufacture are of a greenish transparency (fig. 21). They are about $\frac{1}{16}$ inch in thickness, and have been decorated by thin rods of glass applied to the outer surface horizontally and also obliquely. Several other fragments of glass of Roman manufacture include a portion of the rim of a bottle. When complete the rim would have measured about $1\frac{7}{8}$ inch in internal diameter.

It is of a light pea-green colour. About half of a large dark blue melon-shaped bead (fig. 19, No. 16) came from section O^a. It measures about $\frac{7}{8}$ inch in length. Beads of native manufacture include one of a yellow-



Fig. 22. Glass Beads. (4.)

green colour and hexagonal form measuring $\frac{7}{32}$ inch in length (fig. 22). Another, which is fragmentary, is bluish-green, and is also hexagonal (fig. 22). These, it may be noted, are the only examples of beads of this form so far recovered from Traprain. A small fragment of a bead of bright bluish colour merits no description.

Lead.—This metal is represented by a rod of circular section measuring $2\frac{3}{8}$ inches in length.

Jet or Lignite.—Two small segments of armlets (fig. 19, Nos. 19 and 20), both of which are triangular in cross section, are all that were recovered from this level. One came from section P and the other from section Q. A small irregularly shaped piece of jet measures about $1\frac{1}{16}$ inch in length, and has apparently been roughly dressed by a file, except at one side, which seems to have been fractured. A large piece of jet of circular form (fig. 19, No. 21) measures $1\frac{3}{4}$ inch in diameter and about 1 inch in thickness. At both sides the piece has been cut down towards the centre by some tool, after which apparently it has been broken off from the adjoining block, and the sides have been further bevelled by a small gouge. This object possibly may have been intended for a ring or whorl, but in either case it is only in process of manufacture. One roughly circular disc of lignite measures $1\frac{1}{2}$ inch in diameter; while three unfashioned pieces require no description.

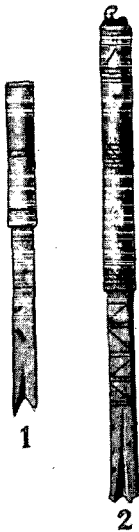


Fig. 23. Bronze Grattoirs. (4.)

Stone.—From section P came three discs (fig. 19, Nos. 22 to 24); the largest is of spotted slate, measuring $3\frac{9}{16}$ inches in diameter and $\frac{1}{4}$ inch in thickness. On one side, for a distance of $\frac{3}{4}$ inch from the periphery, the surface rises gently, and it is then slightly hollowed towards the centre; on the opposite side, two faint ridges cross the stone and form a large

right angle, inside of which it is again slightly hollowed towards the centre. Both faces have been polished. Another, which is not so completely circular, is of a fine-grained micaceous sandstone. It measures $2\frac{5}{16}$ inches in diameter and about $\frac{5}{16}$ inch in thickness. It is flat only on one side, the opposite side being uneven. The third is still more roughly fashioned, and is more ovoid than circular in form. It is also made of fine-grained sandstone and is unevenly finished on both faces. Neither of the last two discs mentioned is hollow in the centre. Another came from section Q. It measures about $1\frac{3}{8}$ inch in diameter and $\frac{7}{32}$ inch in thickness. On one surface it is smooth; on the other it is slightly rough. About a quarter of another disc, which when complete would have measured about $3\frac{1}{2}$ inches, is made of a fine-grained reddish sandstone. On both faces it has been smoothed approximately to a level surface.¹ It is worthy of record that altogether nine complete discs have been recovered from the excavations at Traprain. Of these, seven are definitely known to have come from the second level; while two are mentioned as coming from the first or top level, but these might easily have been referable to the top of the second level, and therefore their occurrence may be given a fourth-century attribution, as none has been found below the second level. Other relics of stone are a fine-grained piece of sandstone approximately square (fig. 19, No. 25), measuring $2\frac{1}{8}$ inches and about $\frac{1}{4}$ inch in thickness, of which one face is flat, while the opposite side is considerably hollowed towards the centre; eight polishing-stones, several of which show marks of friction on their surfaces, as though made by a cord, vary in length from $5\frac{1}{4}$ inches to about $3\frac{1}{2}$ inches; one hone (fig. 19, No. 26), measuring $3\frac{1}{8}$ inches in length, apparently considerably used, of a fine-grained sandstone, square in section, and at one end rounded to a blunt point, while the other has been squared; another small hone (fig. 19, No. 29), measuring $3\frac{1}{16}$ inches in length, faceted and brought to blunt points at both ends, while on one face it has been considerably hollowed by use; a third hone (fig. 19, No. 27) of a fine-grained slaty stone, $2\frac{1}{8}$ inches in length, at one end bevelled away from both upper and under sides to a blunt point, with a small groove $\frac{5}{32}$ inch in width in the centre, and one side of the stone bevelled from the upper surface nearly to the base, while left vertical on the other; a small stone, coloured by red iron oxide (fig. 19, No. 28), of fine texture, and measuring $1\frac{7}{8}$ inch in length, showing marks of

¹ Polished stone discs have been found in various brochs and are now in the National Museum. The undernoted have been found on Traprain:—One, in 1914, is known to have come from the first level (*Proceedings*, vol. xlix. p. 191, fig. 38, No. 9). Another, obtained in 1919, having a diameter of $1\frac{3}{8}$ inch, is noted (*Ibid.*, vol. liv. p. 97, fig. 22, No. 17); it is recorded as coming from the first level. Three others are noted in 1920, all from the second level (*Ibid.*, vol. lv. p. 191, fig. 20, Nos. 59 to 61).

striation on both sides and rubbed to an edge at both ends; a sharpening-stone, measuring about 3 inches in length and made of a coarse-grained sandstone; another of a very coarse-grained stone, measuring $5\frac{3}{4}$ inches in length and flat on one face; a third, somewhat pear-shaped, with several smooth facets on its surface and showing battering on one end; a small polisher, made from a broken pebble, smoothed on the under surface; a pot-lid of sandstone, measuring about $2\frac{5}{8}$ inches in diameter; a small segment of a circular object of fine-grained sandstone, measuring about $1\frac{9}{16}$ inch in length and $\frac{1}{3}\frac{1}{2}$ inch in thickness, having on both upper and under surfaces a deeply cut groove, with a similar groove cut round the periphery; three sling-stones (fig. 19, Nos. 30 to 32), one measuring $1\frac{3}{4}$ inch in diameter, another $1\frac{3}{16}$ inch, and the third about $1\frac{1}{8}$ inch; thirteen playing-men of stone (fig. 19, Nos. 33 to 40), some fashioned, while others seem naturally rounded pebbles—one is of coprolite (fig. 19, No. 40), and measures only $\frac{1}{16}$ inch in diameter.

Whorls.—Two complete whorls came from this level (fig. 19, Nos. 41 and 42)—one of sandstone from section P and one of lignite from section Q. A fragment of another, from the latter section, also made of lignite, may be recorded; while there is also a discoidal object of sandstone, having a hole which is only sunk a short depth in the centre of one face, and which may possibly have been intended for a whorl.

Iron.—A socketed spear-head (fig. 24, No. 1), measuring $5\frac{3}{8}$ inches in length, with a blade, which has a slight midrib, measuring $3\frac{3}{8}$ inches in length and across the broadest part $1\frac{3}{8}$ inch—the socket, which is closed, measures $\frac{1}{16}$ inch in external diameter; a portion of a blade, which has a slight midrib (fig. 24, No. 3), measuring $3\frac{1}{16}$ inches in length and $\frac{9}{16}$ inch in breadth; a socket, with remains of a tanged file (fig. 24, No. 4), which is circular in cross section, from section Q (the socket measures $1\frac{3}{8}$ inch in length, while the file is $\frac{5}{8}$ inch in diameter; on one side these sharp furrows still remain for $\frac{3}{8}$ inch in length); one loop with long stem (fig. 24, No. 5),¹ measuring $4\frac{1}{2}$ inches in length, and another with the loop broken and the stem fragmentary; a knife with tang complete (fig. 24, No. 2), measuring $9\frac{3}{16}$ inches in total length, having a blade $5\frac{7}{16}$ inches in length, 1 inch across at its broadest part, and curved backwards at the point, with a tang square in cross section, measuring $3\frac{1}{16}$ inches;² the blade of another knife, measuring $3\frac{7}{16}$ inches in length and $1\frac{3}{16}$ inch across the widest part, with about $\frac{1}{2}$ inch of the tang remaining.

Moulds.—A portion of a clay mould, which seems to have been for the casting of a spear-butt. A similar object was found in 1919.³

¹ An identical object was found in 1915 (*Proceedings*, vol. I. p. 120, fig. 34, No. 1).

² A knife of somewhat similar type is noted in *Wookey Hole*, by H. C. Balch, p. 85, fig. 8.

³ *Proceedings*, vol. liv. p. 89, fig. 20.

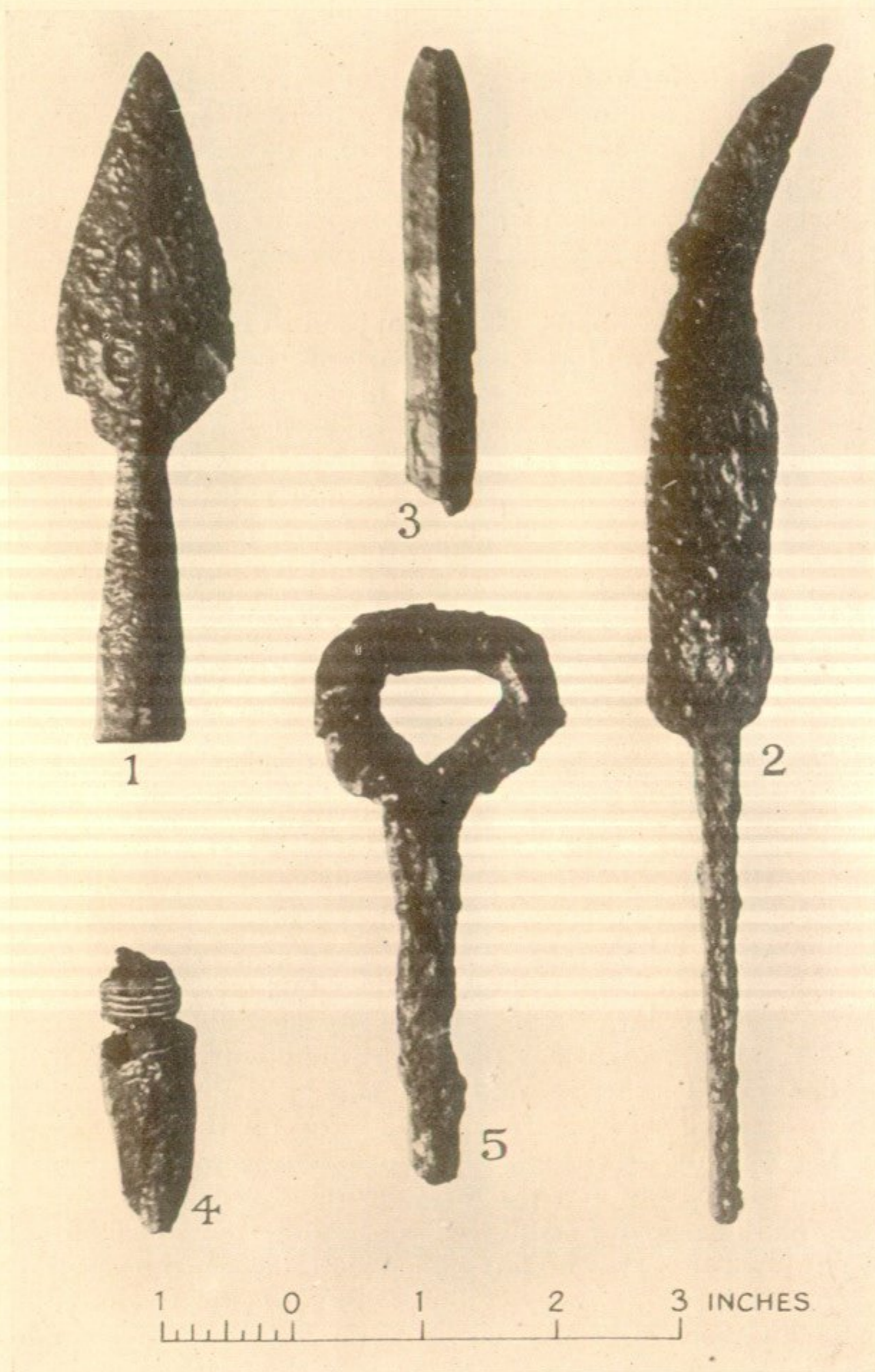


Fig. 24. Objects of Iron from the second level.

A few other portions of moulds found are too fragmentary for description.

Pottery.—The Roman pottery includes several pieces of decorated and undecorated Samian ware. One object which deserves special mention is an appliqué lion-faced spout of a deversorium or mortarium with an upright rim. From the edge of the mask radiate a series of diagonal incised lines. This form of deversorium was manufactured both in Central and East Gaul, and the lion mask appears to characterise the examples notably from Trèves. No example was found at Newstead, but one was found at Housesteads. It is supposed to belong to the latter part of the second century and the early part of the third, but a specimen



Fig. 25. Lion-faced Spout of Samian Ware. (†.)

discovered in a grave at Vermand takes it down to a date between A.D. 276 and 400 (fig. 25).¹ A portion of the base and base rim of a bowl and a number of other small fragments were recovered. Two playing-men (fig. 19, No. 37) may here be mentioned, both of which are fashioned from shards of Samian ware. Several fragments of a mortarium came from all three sections; and we have also recovered shards of thickish red ware, which is orna-

mented by three parallel incised lines, placed horizontally round the vessel, between which two wavy lines have been made with a pointed stick. Other shards belonging to this vessel were found on the level below, and have also been found in previous years. A piece of the rim and wall of a large wheel-made dish or bowl was recovered, made of a reddish-brown paste and showing traces of fire on the outside. The rim is flattish and has a single groove inside. Some fragments of this vessel were found last year on the same horizon, and have now been joined to the pieces mentioned. Two shards, now joined together, of the body of a dark grey globular vessel, are ornamented with three shallow grooves, placed close together horizontally. The shards are of hard texture and have been well fired. One small fragment, the body of which is of a grey colour, is covered on the outside with a red slip and has been ornamented by three parallel lines made with a roulette. The inside of the shard is covered with a grey slip. In addition to the above, there are many shards of cooking-pots ornamented

¹ Oswald and Pryce, *An Introduction to the Study of Terra Sigillata*, p. 216.

as usual with a lattice-work design; some of these show a sooty incrustation on their outer surface. A considerable number of fragments of other wheel-made vessels also came to light. Native pottery is as usual plentiful, but only two or three shards require to be described. On the level below, a number of pieces, including the base of a vessel of vesicular texture, were mentioned. Several fragments of the same character were also found on this level. One shard which came from O^a deserves notice. It is of the usual coarse character, and an apparent attempt at decoration has been made. Lines, more or less parallel, have been drawn with a pointed stick; while other lines cross these, suggesting lattice-work.

Crucibles.—Several fragments were recovered from this level. Of these, three are especially worth noting, as they are portions of shallow cup-like vessels similar to those found on the third level in section Q, and which have already been described. When complete, the internal diameter at the rims of the vessels mentioned would be approximately 2, 2, and $1\frac{1}{2}$ inches, while the thickness of the rims are respectively $\frac{3}{16}$, $\frac{5}{32}$, and $\frac{5}{32}$ inch. The last and smallest fragment mentioned has had an internal depth of only $\frac{27}{32}$ inch, and is thickly coated with a bluish-green pigmented glass; another shows a dark blue glaze on the interior surface. Two or three other small fragments are coated on the inside with a yellow glaze.

Coins.—Third brass, probably of Hadrian, and another of Galerius Maximianus (A.D. 305–11); a small brass of Gallienus (A.D. 253–68), and another of the Constantine Age with head of Constantinopolis.

RELICS FROM THE FIRST LEVEL.

Relics from this level are, as usual, sparse, and are grouped together on fig. 26.

Bronze.—A pin having no head (fig. 26, No. 1) measures $3\frac{3}{16}$ inches in length; it is $\frac{5}{32}$ inch in thickness at one end and tapers to a point at the other.

Miscellaneous Relics of Bronze.—A grattoir, which is finely patinated and cast in one piece (fig. 26, No. 2, and fig. 23, No. 2), measuring $2\frac{9}{16}$ inches in length, came from section P. The handle, at the end of which is a small loop now slightly broken, is circular in cross section, and measures about $1\frac{3}{8}$ inch in length and $\frac{5}{32}$ inch in diameter. The stem or shank, which is rectangular in cross section, measures about $1\frac{1}{16}$ inch in length. The ornamentation round the top of the handle consists of five grooves placed closely together; this is followed by a narrow band ornamented with a zigzag pattern, below which are four more grooves. In the

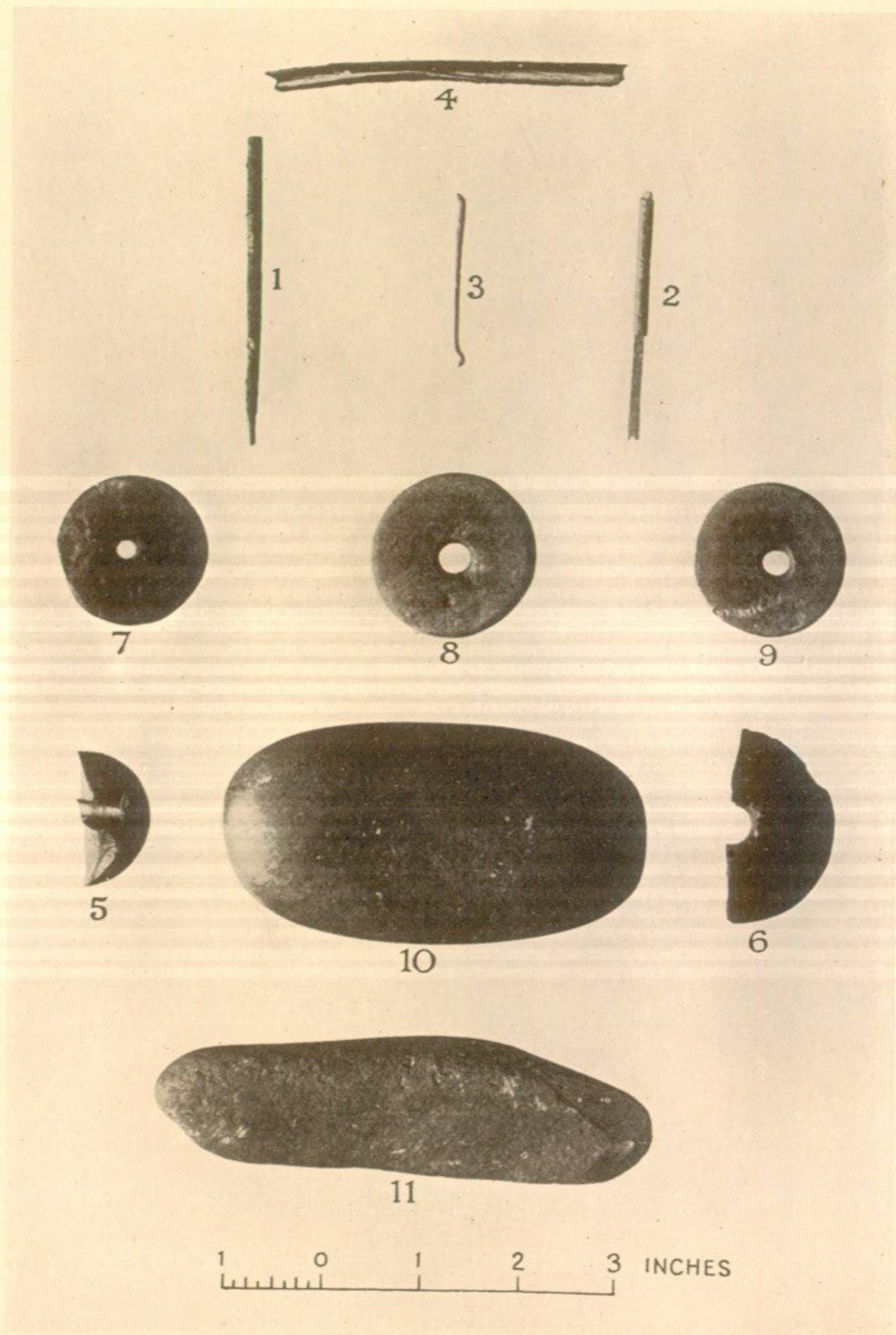


Fig. 26. Relics (other than of Iron) from the first (highest) level. (3.)

centre of the handle is a group of six grooves, which are crossed diagonally by others, giving the appearance of engine-turning. At the base of the handle is another group of six grooves; the mouldings constituted by these on the upper and lower sides are left plain, while the four grooves in the centre are, as in the case of the decoration in the middle of the handle, crossed by diagonal lines, giving the engine-turned effect as above mentioned. Above the bifurcation the stem or shank is crossed at regular intervals by two incised lines. These are carried completely round, and other incised lines cross diagonally the spaces between in such a way that the pattern on each face and side forms a complete lozenge.¹ About one-half of a pair of tweezers (fig. 26, No. 3), measuring $1\frac{3}{4}$ inch in length, also came from section P. One piece of binding, which might have been used to protect the edge of a leather shield or scabbard (fig. 26, No. 4), measuring $3\frac{5}{8}$ inches in length, came from section O^a.

Glass.—One small fragment of opaque white glass armlet, a few fragments of greenish glass, and one of a pale yellowish-green colour may be noted. One of the small pieces of greenish glass, about $\frac{5}{8}$ inch in length, seems to have been a drop.

Jet or Lignite.—About half of the head of a pin (fig. 26, No. 5) seems to have been in the usual form of a flattened spheroid, and measures $1\frac{3}{8}$ inch in diameter. An irregularly shaped piece of lignite shows tool marks on one surface.

Stone.—Two sharpening-stones (fig. 26, No. 11), each 5 inches in length; a fine polishing-stone (fig. 26, No. 10), in shape an elongated oval, flattened at both ends and sides, and measuring $4\frac{1}{4}$ inches in length; a roughly circular piece of sandstone, measuring $1\frac{3}{4}$ inch in diameter and $\frac{7}{16}$ inch in thickness.

Whorls.—Three whorls and half of another were recovered (fig. 26, Nos. 6 to 9). Two are of stone, while the third and remains of the fourth are of lignite.

Iron.—The handle and upper part of the blade of two large knives, and the point of one of them (fig. 27), came from section Q. The blades are heavy and single edged, the back is thick, and there is a broad groove close under it on one side. The edge and the back are straight and parallel, except near the point, where the cutting edge curves downward very slightly, and the back more sharply to form the point. In both cases the tang of the hilt is square in cross section, and has a projection in front $1\frac{1}{4}$ inch above the commencement of the blade. The hilt terminates in a pommel, formed by a broad ring which narrows

¹ A similar grattoir is illustrated in Wilde's *Catalogue of Antiquities* in the Royal Irish Academy, p. 549, fig. 434.

slightly where it crosses the end of the tang. Both pommels, which are imperfect, are fixed in position by a stout cotter pin which penetrates the tang; and although one has been bent in so as to suggest an antennæ-shaped pommel, it seems more likely that both were completely annular. One knife measures $10\frac{1}{4}$ inches in total length, the tang 7 inches, and the breadth of the blade $1\frac{7}{8}$ inch. About $5\frac{1}{2}$ inches of the point also remains. The other measures $7\frac{1}{8}$ inches in total length, the tang being $6\frac{3}{4}$ inches. The size and general character of these knives resembling weapons rather than tools suggest at once an analogy with the Teutonic scramasaxes; but there the analogy stops, for in details they do not correspond. So far as we have been able to learn, parallels

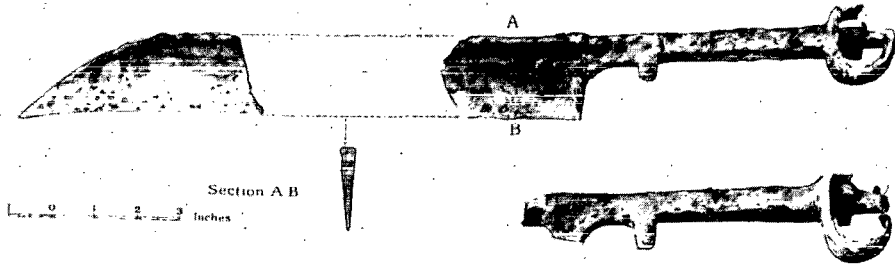


Fig. 27. Iron Knives.

to these knives have not been found in continental or home museums or in archæological literature.

Pottery.—As is usual on the top level, the amount of Roman and native pottery found was small. We have several fragments of the base of a large Samian ware bowl, together with several other fragments of the same material, one shard of which is decorated. A small fragment of a vessel of Rhenish ware, which has not been represented since 1914, and the portion of the neck of a bottle of reddish ware, is the only Roman pottery worth mentioning. Native pottery is of little consequence, and includes a few shards of the usual coarse character and one fragment of vesicular ware, of which other similar shards were noted both from the second and third levels.

While removing the turf and soil covering the top level of section P, an iron spur was found in a fairly good state of preservation. It measures $5\frac{3}{4}$ inches in total length. The sides, which are rounded on the outside and flat on the inside, have a spread of $2\frac{1}{4}$ inches and are

considerably depressed. At the termination of the sides are two circular perforations, and at the end of one are the remains of a hook for strap attachment. The neck measures $1\frac{1}{2}$ inch in length, and the rowel, which has eight points, measures $1\frac{1}{4}$ inch in diameter. This spur has no connection with the relics from the last level of occupation, and may be given a fourteenth-century attribution.

EXAMINATION OF THE TANK OR RESERVOIR.

Taking advantage of some exceptionally dry weather towards the end of June, work on the natural terrace was discontinued for a couple of days and excavation of a tank was commenced, which is situated about 100 feet slightly to the east of south of the cairn on the summit of the hill. This reservoir has been formed in a natural oval basin, the south side and east end of which consists of the natural rock; while on the north side it is bordered by a number of large slabs set on end, many of which protruded through the turf. At the west end two lines of stones are placed about 30 feet apart, and these widen slightly outwards. The purpose of these stones was possibly to form a solid foundation or edging for turf walls, which, with the natural rock already mentioned, completely enclosed the tank, and also formed a lane into it from the west. At the east, advantage seems to have been taken of a depression or cleft in the rock, through which the overflow may have been led. The source of supply must have been principally by infiltration of rain-water. Roughly, about two-thirds of the area was excavated. From the present surface, about 10 inches to 1 foot of soil was removed, beneath which the bottom was found to consist of a stiff, compact, bluish clay. This reservoir would no doubt be of inestimable value to the inhabitants of the hill; for beyond two so-called springs, one on the north side of the summit and one on the south, which, however, are merely fed by surface water and are nearly dry in a dry season, no other supply exists on the hill. The relics, all of which were found lying immediately above the clay described, were comparatively few, and owing to this fact, it was considered inadvisable to complete the excavation of the whole area. The objects recovered were as follows:—

Bronze.—The principal object found is of uncertain use. It is square in cross section (fig. 28), and bent at right angles about the centre. The head is formed of a nicely rounded loop, which is squared where it joins the stem. A deep groove flanked by two narrow grooves encircles the loop to the shoulders. On the outer edge of the loop are a number of short incised lines giving a cord-like appearance. Below the head for a distance of $\frac{3}{16}$ inch the stem is crossed by a series of narrow

incised lines. From this point towards the bend are three slightly raised longitudinal mouldings. From the bend for a distance of $\frac{5}{32}$ inch is a further group of transverse incised lines. Here there is a washer about $\frac{5}{8}$ inch square, and slightly convex on the side facing the point, which extends for a further distance of $\frac{13}{16}$ inch. It is suggested that the point of this object has been possibly driven into wood, and the washer would prevent its being driven in too far. From the position of the

ornamentation it is probable that the loop was placed downwards. Two fragments also found when joined together form one side of a pair of tweezers.

Lignite.—A small whorl, measuring about $1\frac{1}{4}$ inch in diameter.

Stone.—One hone, which is fractured on one side, is of a fine-grained stone, and has been faceted in several places; two other smoothing- or polishing-stones, one of which shows abrasions at one end, and one sling-stone, which measures about $1\frac{5}{16}$ inch in diameter.



Fig. 28. Bronze Object. (4.)

Iron.—Two horse-shoes: one having four nail holes on each side and without calks, measures $5\frac{1}{4}$ inches in length and $5\frac{1}{4}$ inches in width across the heels; the other, having three nail holes on each side and small calks, measures $4\frac{7}{16}$ inches in length and 4 inches across the heels.

Moulds.—A fragment of a mould for the casting of a blade has had a hole running longitudinally under the matrix, for the purpose of reinforcing the mould by means of the introduction of a bronze rod. It will be remembered that last year, the question of reinforcing moulds for the casting of bronze swords was gone into at some length. It would seem that the fragment at present described is a part of a mould for the casting of a long blade, possibly a sword, in which case it is probably referable to the late Bronze Age.

Pottery.—Several fragments of a large vessel of native ware were recovered. These are of very coarse texture and the paste contains many stones. Three or four fragments of mediæval pottery, showing a green glaze on their outer surface, need not be described, and are probably referable to the period in the fifteenth and sixteenth centuries when a watch-beacon was maintained on the hill.

EXAMINATION OF GATEWAY THROUGH RAMPART.

Having completed the excavation of the ground on the natural terrace, which it was arranged should be opened this year, and there

being still some time to spare before the closing down of the work for the season, it was considered advisable to carry out some excavations at one of the gateways penetrating the rampart at the west end of

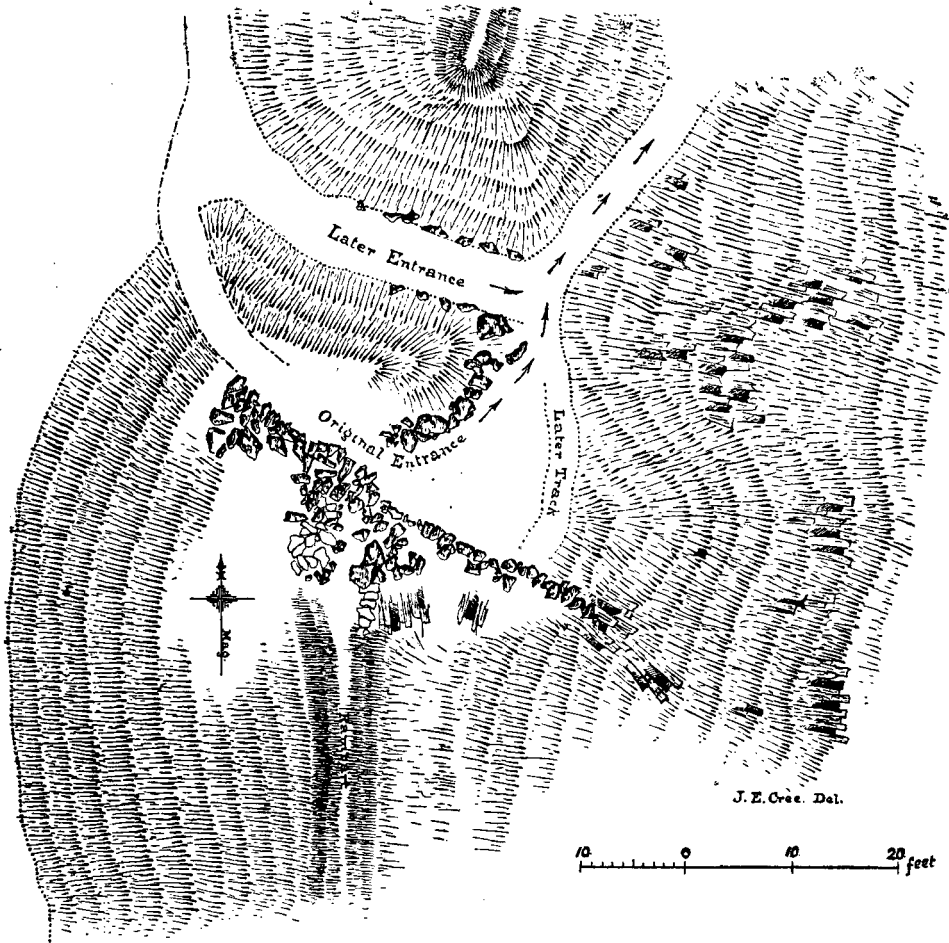


Fig. 29. Plan of Gateway.

the hill. These gateways, it may be remembered, are four in number; two being close together towards the south-west, while the other two, also placed a short distance apart, lie to the north-east of these. The one selected for examination was the more northerly of the first pair mentioned. A depression in line with the top of the rampart, and about 20 feet from the entrance, seemed to suggest a guard-chamber,

and it was thought desirable to obtain information on the subject and definitely determine the nature of the structure.

After removing a considerable quantity of soil and stones, it was ascertained that the hollow mentioned had no reference to a guard-chamber, and no such structure was found to exist during our excavation. Returning then to the entrance, at a point where the road bends up the hill to the north-east and where a track lay almost due south, the soil to the natural rubble was removed in a south-westerly direction (fig. 29). On the west side, a crescentic formation of stones of considerable size extended towards the south-west. A few feet distant from



Fig. 30. Section of Wall near Entrance.

the end of this formation, a line of stones was encountered lying in a north-westerly and south-easterly direction. It proved to be the foundation of a wall built of large stones set in a mixture of soil and yellow clay. This wall was followed towards the south-east, where it was found to abut on natural rock projecting from the slope of the hill. Following the building to the north-west, the wall terminated some 15 feet from the end of the crescentic setting of stones already mentioned; its total length being 42 feet 6 inches. The wall, at what appeared to have been the original entrance, was still about 6 feet 4 inches in height (fig. 30). At this entrance, as will be seen on plan, the original roadway appeared to turn somewhat sharply towards the north-east. On the rising ground, about 15 feet up the hill-side, was a sloping plateau, formed on the lower or western side by projecting rocks, above which the ground rose in an easterly direction. This would no doubt be of advantage in guarding the entrance should

occasion require. Our excavations did not disclose when this entrance was discontinued or found to be undesirable; but the fact remains that for some reason a new entrance was made a little further to the north; while the original entrance was covered over, and the roadway filled in to the required depth with a mass of stones and soil, and the rampart extended correspondingly towards the north. Judging from the number of large stones lying in front of the wall, it seemed beyond doubt that about 2 feet of the top had been deliberately thrown over to help to fill in the old roadway. The foundation of the rampart will be noted on plan by a number of flat slabs laid towards the north. Here the rampart has been increased in width, and it seems likely that a bulge in the wall may have reference to its termination. The later entrance having been made nearly parallel to the original one, joins the old road, where it bends upwards towards the north-east. It will be seen that the same natural plateau on the slope of the hill towards the east would serve equally well for defensive purposes in guarding this gateway. The approximate line of the revetment to the west and north of the rampart is shown on plan, together with the old roadway which penetrates the revetment to the north, and joins the later roadway a few feet further in the same direction.

As might be expected, the relics recovered from the "fill-in" are few, and give us little or no information. They are as follows:—

Bronze.—A pin, which is square at one end, circular at the other, and split towards the point, measures $2\frac{3}{16}$ inches in length. A small rod measures $1\frac{1}{8}$ inch in length; a piece of waste metal and a small piece of indeterminate use.

Glass.—A segment of a small armet of green translucent glass; on one side is a trail of white opaque enamel, which runs diagonally towards the mesial ridge. A small bead, $\frac{3}{16}$ inch in length and square in cross-section (fig. 22), of blue paste, and ornamented by a broad irregular line of white opaque enamel, in the centre of which is a thin line of red opaque enamel, was found in the 2 inches of soil which had been removed from the later roadway, just at the entrance.

Stone.—A hemispherical block of sandstone is roughly pointed at the base. Across the top, which is flattened, it measures about 8 inches by 7 inches, and it is $5\frac{1}{2}$ inches in height. On the upper surface a cup-shaped depression has been formed, measuring 4 inches in diameter and $\frac{1}{2}$ inch in depth. One whetstone, portions of four others, and about a quarter of what seems to have been a discoidal stone.

Moulds.—One fragment of a mould is too indefinite to be described.

Pottery.—The greater portion of the base and a small piece of the wall of a vessel of grey ware of Roman manufacture, and one fragment

of Samian ware, are the only two pieces of Roman pottery requiring mention. Several shards of native ware, of the usual coarse character, and a portion of the rim of a vessel of vesicular texture, and two other shards of the same material, complete the pottery from the rampart.

The Society must again proffer sincere thanks to the Right Hon. The Earl of Balfour for his kindness in permitting the excavations to continue, and for so generously handing over all the relics found to the National Museum. It must also mention its indebtedness to Mr Mark, the tenant of Traprain Law, for so kindly allowing the excavations to be carried on. To the Carnegie Trustees and to Mr John Bruce of Helensburgh hearty thanks must be given for their most generous donations, which enabled the work to be proceeded with during the past season. For assistance with the preparation of this report I must again express my gratitude to Dr George Macdonald, C.B., for kindly identifying the coins found, and to Mr J. Graham Callander, Director of the National Museum, for most valuable advice and assistance ungrudgingly given on many occasions.