I.

ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW DURING THE SUMMER OF 1920: BY ALEXANDER O. CURLE, F.S.A.Scot., and James E. CREE, F.S.A.Scot.

On the 3rd of May the work of excavation was once more commenced on the Law. As there was still a considerable amount of promising ground on the plateau to which we have practically confined our attentions since we first broke the surface in 1914, we went forward from the limits of last year's excavated areas. The ground slopes away to the westward, but, as a not inconsiderable unexplored area remained in that direction before the gradient became too steep for occupation, we decided to clear it. This gave us the two irregular areas $I$ and $J$ of the plans, and brought us level at the north end with the extension in that direction of our last year's work. Thereafter an area of 50 feet square, marked $K$ on plan, was cleared out to the north of $J$, and another of the same dimensions, $L$, was explored to the east of $K$. The year's work, therefore, formed an Lshaped figure, extending along the west and part of the north sides of last year's excavated ground. The superficial extent amounted to 9080 square feet for the four sections I-L, some 1400 square feet more than we cleared during the previous summer; and in addition to that the area $X$ which lies in a north-westerly direction down the hill has to be taken into account, amounting to 1075 square feet more.

After removal of the turf and intervening soil, the uppermost level of occupation was reached at a depth of from 1 foot to 1 foot 2 inches below the surface. In the south-east corner of I a built wall was laid bare, slightly curving, as indicated on the plan (fig. 1), and appearing to connect with a setting of stones exposed in the previous year's digging on the adjacent section G, immediately to the south of which was the site of the cache. The stones of the wall were undressed, and formed two courses of drystone masonry. The wall extended for a distance of 9 feet, had a thickness of 2 feet, and a height of 1 foot 4 inches. This is the first piece of actual building we have met with. Slightly to the south-east of the centre of the section a small rectangular hearth was exposed, 4 feet 3 inches in length by 3 feet in breadth, paved with sandstone and surrounded, except on the north, with a kerbing, also of sandstone. Its orientation was directly north and south. Two irregular areas of flat stones, as if pavement, were laid bare, indicated on the plan by unhatched stones. Proceeding


ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 155
northward into section $J$, we found, as shown on the plan, several masses of large stones evidently purposely placed. The more interesting of these were (1) an irregular line which evidently demarcated the south-east side of a road which crossed the section diagonally, and (2) a semi-circular setting on the northern margin, which proved to be the rounded end of a large enclosure extending into section $K$ and terminating at its northern end in a double line of stones placed 3 to 4 feet apart, and which was probably the foundation of a turf wall. The general direction of this enclosure seems to have been north-east to south-west, and it evidently contained the cluster of hearths similarly orientated to the south-west of the letter $K$ on plan and parallel to the irregular setting of stones to the east, which probably represent the foundations of the wall in that direction. To return to section J, here three hearths were exposed-one on the eastern margin laid north and south at the north end of a broad setting of stones, one a small circular hearth some 3 feet in diameter to the south-west of the first, and the third close to the west side of the section and orientated northeast to south-west. The first and last of these hearths call for some remark: the first in respect that the kerbstone which forms its back rests directly upon one of the stones of the setting at the north end of which it is placed, and therefore is presumably of a slightly later date; and the second because it is differently orientated and is divided in two by a large rough hill stone laid on edge across it. The back portion thus formed is raised some 6 inches above the front, an arrangement we met with before in 1915 on the terrace near the quarry. The cluster of hearths in section $K$ consisted of one small rectangular hearth about 3 feet in length by 2 feet in breadth, paved in the usual way and surrounded by a kerb; an unusually elongated hearth 8 feet in length by 3 feet in width and formed in the customary fashion; and at the south-west angle of the latter, and partially superimposed, a third hearth 3 feet long by 2 feet broad. A small circular paved area extended from these hearths at the south end. On the extreme north margin of section $K$ was a small incomplete hearth, rectangular in form and placed north and south. In the north - west angle of the section was an area in which the natural rubble came almost up to the level of occupation, and which itself bore no traces of occupation. The structural remains on section $L$ were practically nil, though many large blocks of stone were scattered over the surface. Fragmentary remains of a small hearth, consisting of two kerbstones and some paving, were exposed in the south-east angle. Along the south line the rock outcropped to a small extent. Though the remains on this level have been treated
as belonging to one occupation, there was some evidence that in reality they connoted two, which succeeded one another with a very brief interval. Thus immediately beneath the southern half of the hearth, towards the centre of section $I$, there lay an earlier hearth at right angles. We have shown that the hearth on the eastern margin of J was evidently of slightly later date than the setting of stones, on one of which its terminal kerbstone rested. Similarly, immediately beneath the long hearth of the cluster in K lay another rectangular hearth with a similar alignment. It will be readily understood that it is a well-nigh impossible task to keep two levels distinct which are separated by only a few inches, and no distinction can be maintained in the relics recovered from each. One point may be noted. The hearths, with but one exception, lie either north and south or north-east to south-west; and inasmuch as in our previous exploration we have found that in general the hearths of each occupation maintained a similar orientation, it is possible that the north and south hearths belong to the one and the north-east to south-west to another.

With the removal of the vestiges of structures and settings of stones that formed our top level and of some 6 inches of additional soil, we came to the second level relating to what we generally regard as the third occupation. On section I the outcrop of rock which made its appearance on the level above along the south margin shows more fully, extending the area over which no trace of occupation existed. On the western edge of it, however, there was laid bare a portion of a small built wall (shown on plan, fig. 2) of two courses about 10 inches in height by 12 inches in width and slightly curving. A few feet to the north of it was a small circle formed of flat stones. The interior was unpaved, and did not appear to be a hearth. Several small areas of paving, shown by unhatched stones on the plan, occurred at several points in the section. Crossing the north-east quarter of the section was a quadrant formed of stones, several of which were set on edge. Within it was a triangular area measuring some 7 feet 6 inches in greatest length, laid with small stones; and to the outside near the south end were the remains of a hearth merely represented by two kerbstones set on edge at opposite sides and some slabs of flat sandstone with which it had been paved. Passing northward to section J, here there was a considerable area in the centre and a smaller one towards the south edge showing no trace of occupation owing to the outcrop of the rock. As elsewhere, a few paved areas were met with which conceivably represented the interiors of dwellings, and in the north-west corner there occurred a large roughly crescentic-shaped mass of stones corresponding in a marked degree with a setting found

above it on the first level. To the south-west there was an irregular line of stones some 13 feet in length. Three large stones at the north end of the line were set on edge; and as they were bedded in the level beneath (the third), and are in alignment with a setting of stones on that level, they seem to have been put to a similar use during the periods of both occupations. A large rough stone at the south end of the line, likewise set on edge, had protruded into the level above (the first), and had been utilised there to divide the hearth already described into two sections. Of rectangular hearths there were the remains of two. One, on the east margin of the section, consisted of the major portion of three sides formed with the usual kerbs and paved with two large sandstone slabs. Its main axis lay north-east and south-west. The other hearth, which lay some 16 feet distant to the south-west, was much more fragmentary.

On section $K$ the occupied area was restricted both towards the north and the east by the rising outcrop. Several irregularly shaped areas of paving were met. with, shown on plan by unhatched markings. Where the natural rock projected southward from the north-west corner a hollow occurred which had been filled in with soil and rubble and paved over with flat slabs. It was. bordered on the east by four stones, set on edge as kerbs. Two hearths, both incomplete, lacking some of the kerbstones and paving, were found a little to the south-west of the centre of the section. They were of the usual rectangular type, and were orientated north-north-east and south-south-west. The more complete one, which lay to the north-west of the other, measured about 5 feet 6 inches in length by 3 feet in breadth.

Passing into section L, we find that the area of unoccupied ground has greatly increased, and the portion which showed signs of having been lived on was practically restricted to the north-east triangular half. Two hearths were found-one almost square, surrounded by kerbstones, towards the south-east corner; and one oblong and rectangular, with kerbs on two sides only, near the north-east corner. The latter was orientated north-east and south-west.

With the removal of a few more inches of soil, the third level was laid bare (fig. 3). On section I a short and somewhat irregular double line of stones towards the southern end, slightly curving in direction, was almost the only indication of structure remaining. On section $J$ the outcrop occupied a greater part of the surface than on the level above. No hearths were found, but several paved areas were uncovered on the eastern side of the section, and on the west side occurred the five large rough stones set on edge which we encountered protruding to the higher level. On section K, owing to the spread of the outcrop, the area which

had been occupied was reduced to about the southern half. Slight remains of one and possibly of two hearths were found. About 4 feet to the westward of the more perfect of these hearths a small heap of whelk shells was found. The shells appeared to have been emptied out of some vessel. This is the first instance of the finding of the shells of édible molluses in our excavation. There were also several flatpaved areas, which are indicated in the usual way on the plan. On section $L$ quite one-half was taken up with outcropping rock at this level. No hearths were found, but along the northern margin there was exposed a remarkable semicircular segment of paving. In breadth it varied from about 1 foot 9 inches to 3 feet 9 inches. Inside, at a radius of about 3 feet, there appeared to be a concentric arc. Both of these segments run into unopened ground, which it is hoped will be excavated next summer.

A further removal of a few inches of soil revealed beyond the limits of the outcropping rock the small amount of ground that showed signs of having been under occupation at what we have hitherto regarded as our earliest period (fig. 4). On section I this amounted roughly to about one-half of the whole section. The remains of structure were scanty in the extreme, and consisted of portions of two rectangular hearths as shown on the plan, and of a row of three stones set on edge at the foot of the outcropping rock about 7 feet to the east of the most southerly of the hearths. The hearth in question was situated in a natural hollow in the rock, and the position of the row of stones directly covering it at a slightly higher level suggested a purpose of diverting any run of surface water from flooding the fire. The other hearth, nearer the centre of the section, was remarkable for the small raised platform at the back, such as has been observed in one or two previous instances. There is a possibility that on this platform there was erected a "reredos" or back against which the cooking was done. Judging by an analogy which is said to have survived in Shetland, ${ }^{1}$ this consisted of a wall of stone which afforded protection for the fire. However, we found no signs of a superimposed stone structure, and a turf wall with which to back a fire seems rather impracticable.

On section $J$, beyond the limits of the outcrop, a paved area on the east margin and an irregular setting of large stones in the north-west corner alone suggested structure.

On section $K$ less than one-half of the area was free from outcrop, and there were no remains; while on section $L$ only a few rough stones in the north-east corner and three in the south-east remained of any structure there might have been.
${ }^{1}$ Shaffrey, The English Fireplace, p. 11, fig. 10.


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

From the foregoing notes it will be seen that the general horizontal character of the levels or floors of occupation was throughout the area of excavation under report disturbed to a serious extent by masses of outcropping rock, which from broad bases at the lowest level sloped upwards to an immaterial protrusion on the highest level. As obviously the movements of the inhabitants on the respective floors were not restricted to the soil-covered areas around the rock or rubble which clothed it, they left occasional relics-bronze, glass, pottery, etc.-on the exposed slopes at higher levels than those on which they actually dwelt, with the result that, when the soil was removed in horizontal layers, the respective strata were found to contain objects obviously


Fig. 5. Cinerary Urns and Incense-Cup Urn from the fourth level. (Ca. b.)
of earlier provenance than the general horizon of the respective finds. This will be made clear when the relics are described. The result of this is that we are unable this season to be as certain as we would like of the relative periods of the relics; nor can we, owing to the gradual restriction downwards of the extent of occupied ground, draw conclusions as to duration of occupation, etc., from the relative amounts of pottery found on each level, as we were able to do in our last report.

Following the method previously adopted, we have dealt with the plans from the latest down to the earliest in the order in which they were exposed by the spade, and as formerly we shall proceed to treat of the relics conversely from earliest upwards, so that changes in fashions or developments in styles may the more readily be observed.

One of the most interesting features of last summer's excavation was the discovery on section $L$, while the second level was being laid bare, of a Bronze Age burial. In a position on a natural ledge of rock,

ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 163
shown on the plan of the fourth level as obviously belonging to the earliest period, there were found portions of four cinerary urns and a small incense cup (fig. 5). These urns were only about 1 foot 8 inches below the present surface, but when originally buried they cannot have been covered by more than about 6 or 8 inches of soil which contained the latest level, and it is not surprising that they were in a crushed condition. Practically all the rims of the urns were recovered in a more or less complete state. Considerable portions of the walls also remained, but only one of the bases. Probably all four urns had been inverted, but only under the largest were incinerated human remains found.


Fig. 6. Cinerary Urn from the fourth level.

A fairly large portion of the wall of this vessel lay over the incense cup, and probably had served to protect it from destruction. After restoration as far as possible, the urns correspond to the following descriptions:-

No. 1. About three-quarters of the mouth portion belonging to the type with heavy overhanging rim, ornamented with a lattice pattern formed by the impressions of a rough twisted cord (fig. 6). The top of the rim is bevelled inwards, and bears no ornamentation. The colour is a dirty red. External diameter of mouth when complete, $8 \frac{1}{4}$ inches. External diameter at shoulder, $9 \frac{5}{8}$ inches. Wall, $\frac{11}{16}$ inch thick.
No. 2. An almost complete section of a shoulder part, encircled by a cordon. The indicated diameter over all at the shoulder is $6 \frac{1}{2}$ inches, and the thickness of the wall $\frac{3}{8}$ inch. Colour, dark reddish.

No. 3. About two-thirds of the mouth, encircled at the shoulder by a single cordon (fig. 7). The space between this and the lip is tilled with a series of large vertical lozenges formed with a pointed implement. The rim is bevelled inwards, and is ornamented with a zigzag pattern. Estimated diameter at mouth, $6_{4}^{\frac{1}{4}}$ inches. External diameter of shoulder, $6 \frac{3}{4}$ inches. Thickness of wall, $\frac{1}{4}$ inch. Colour of ware, reddish.


Fig. 7. Cinerary Urn from the fourth level.
No. 4. The upper portion, encircled at shoulder by a single cordon, the space between the rim and shoulder ornamented with oblique impressions formed by a rough twisted cord (fig. 8). Over-all diameter of mouth, $5 \frac{3}{4}$ inches; of shoulder, $6 \frac{3}{8}$ inches Wall, $\frac{5}{18}$ inch thick. Colour, brightish red; ware very friable.

The incense-cup (fig. 9) is of dark-coloured ware, bowl-shaped, with a slightly rounded base, and rather deep in proportion to its width. External diameter of mouth, $1 \frac{1}{2}$ inch; height, $1 \frac{7}{16}$ inch; thickness of the wall at the mouth, $\frac{3}{16}$ inch. The vessel is rather coarsely made, and is devoid of ornamentation.

The discovery of these urns confirmed an impression which had gradually emerged from the character of some of the relics of our earlier excavations-that we bave, in addition to the four Iron Age occupations, also to deal with one belonging to the Bronze Age. But it has not thus far been possible to identify an actual floor of occupation of that period, the relics being few in number and sparsely scattered. No domestic pottery that can be assigned to the Bronze Age has yet come to light. The majority of the relics are small chisels or punches. Of these we have now found eleven; one in 1915, five in 1919,

## ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 165

and five last summer. All came from the lowest level, with the exception of two, both imperfect, found in 1920 on the second and third levels. Those last found measure respectively $2 \frac{3}{4}$ inches, $1 \frac{15}{18}$ inch, $1 \frac{1}{16}$ inch, $1_{8}^{7}$ inch, and $1 \frac{7}{8}$ inch. They are straight-sided, rectangular in section, and taper to a point at one end, much resembling in type four implements found in the hoard of Bronze Age relics from Loch Trool, Stewartry of Kirkcudbright, recently presented to the National Museum of Antiquities; also presenting an almost closer analogy in type to a


Fig. 8. Cinerary Urn from the fourth level.


Fig. 9. Incense-Cup Urn from the fourth level. (f.)
small chisel found in the Heathery Burn Cave, Durham. ${ }^{1}$ In addition to the chisels of this type we also recovered last summer a shouldered chisel of bronze (fig. 10, No. 15), measuring $3 \frac{1}{4}$ inches in length. The cutting edge, which is curved, measures about $\frac{7}{8}$ inch in breadth. At the lower end of the tang, $1_{10}^{\frac{7}{6}}$ inch from the cutting edge, a stop projects from each side to prevent the tool being driven too deeply into the handle when in use and thus splitting it. The tang is squared, and measures about $1 \frac{5}{8}$ inch in length. It is of an unusual type, and somewhat closely resembles a specimen found at Yattendon, Berks, with a founder's hoard. ${ }^{2}$ It is also nearly akin in character to the bronze chisel found in 1916 in a grave on the farm of Balneil, Wigtownshire, with a cinerary urn and other relics. ${ }^{3}$ The Balneil chisel has, however, in place of the side stops on the Traprain example, well-defined shoulders. We have also recovered this year from the second level a small segment of the orifice

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Fig. 10. Bronze Age Relics found in different years. (Ca. ह.) •

## ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. $16 \%$

of a socketed axe of bronze (fig. 10, No. 3), and there can be no doubt that the object (fig. 10, No. 4) found in 1914 and illustrated as No. 9 of fig. 44 in the Report of the excavations for that year was part of another. Portions of narrow dagger-blades or knives were found in 1915 and 1919 (fig. 10, Nos. 1 and 2), ${ }^{1}$ to which the blade from the Isle of Harty hoard ${ }^{2}$ presents an analogy. On the third level of section I last summer there was found an imperfect object of bronze (fig. 10, No. 17), consisting of a blade of which about $\frac{3}{4}$ inch of the length remained, by 1 inch in breadth, and a tang rounded at the end and measuring about $\frac{7}{8}$ inch in length by $\frac{5}{16}$ inch in breadth. In the blade, about $\frac{1}{4}$ inch above the tang, is a small circular perforation. This object suggests a Bronze Age razor-blade; but as it appears to have had only one cutting edge, it more probably falls into the class of knives, resembling rather closely, as far as it goes, the knife from the Isle of Harty hoard illustrated by Sir John Evans. ${ }^{3}$ It differs, however, in being perforated like a razorblade. We have thus, apparently, remains of knives of two classes, both very unusual in form, and both finding analogies in the same hoard, which was of the late Bronze Age, and included socketed axes and moulds from which they were cast.

The small triangular polisher found in 1915 (fig. 10, No. 20) is another Bronze Age relic; also the portion of a penannular armlet found in 1914 (fig. 10, No. 18), and a button found in 1919 (fig. 10, No. 19); and so probably are the arrow-heads and scrapers of flint of which every season we find a few. The absence of characteristic pottery other than cinerary urns, so far, may indicate that we have not been actually on the site of an occupation; but possibly the finding of the greater part of a saddle-quern on the third level of section $J$ may have reference to a settlement. While the saddle-quern in itself is not necessarily a Bronze Age relic, it was found on this level associated with a couple of flint scrapers and a stone celt, and is the only quern of this kind that we have thus far met with. It measured over all 1 foot $8 \frac{1}{2}$ inches in length, 1 foot 1 inch in breadth, and was worn down to a depth of $4 \frac{3}{4}$ inches.

As in previous years, with the exception of these late Bronze Age relics, there appears to be nothing among any other finds of last season that indicates their belonging to an earlier period than that commencing with the advent of Agricola in the end of the first century of our era.

We have, as last year, illustrated in association the various objects found on each level; but it will be observed, for the reasons stated above, that in various cases objects seemingly from the same level are obviously not coeval. Thus the flint scrapers and stone axe from the third level

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Fig. 11. Group of Relics (other than of iron) from the fourth level. (3.)

## ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 169

could not be contemporaneous with the bow-shaped fibula and coin of Victorinus (263-267 A.D.), also found there.

Relics from the fourth level are grouped together in fig. 11.
Fibulce.-We have three complete bow fibulde from this level, the head of another, three small penannular brooches, and what appears to be about one-half of a fourth. One (fig. 11, No. 1, and fig. 12, No. 1) is complete except for the pin, and measures $2 \frac{1}{2}$ inches in length. The bow, which is plain, but for a rosette or notched disc towards the head, is flat-sided. The rosette is riveted through the bow. A lightly engraved line runs along parallel with the margin on both sides. The cross-piece at the head is grooved. The pin has been hinged, and the ring at the head is rigid. The plate, which is the survival of the collar at the base of the ring, is ornamented with a bar notched on its surface between two grooves. There is a socket at the foot which has on its surface a small, flat-headed boss rising in the centre, which may have been surrounded by enamel. This type cannot be earlier than the second century, and may possibly belong to the third. The second fibula (fig. 11, No. 2, and fig. 12, No. 2) is identical with one found on the third level in 1919, and illustrated in the Report for that year. ${ }^{1}$ It has a plain bow, rounded at the sides. There is the socket for a rosette or boss towards the head, and another, imperfect, at the foot. A band of silver is inlaid along the bow and across each end of the cross-piece. The pin has worked on a hinge. The cross-piece is grooved, as in the last example. This fibula is also comparatively late in form, and its period is probably in the second century. The third bow fibula (fig. 11, No. 3, and fig. 12, No. 3) is of a type of which we found a fine example in 1919.2 This specimen is fairly complete, the ring, the pin, and the lower part of the catch-plate only being lacking. As it is, the brooch measures 2 inches in length. The bow, instead of being round, presents a rhomboidal section towards the foot, and has a trumpet-mouth form at the head. Along the mesial line of the front and back portion there appears to have been a band of silver, while the positions of three spots of silver are observable on both sides of the foot portion; on the head, one spot of the metal remains on one side, and a trace of the other is visible on the opposite. On the crest of the bow is a circular disc containing between two rings of silver a circle of dark blue enamel within which is a dise of red enamel, much decayed, with a silver spot in the centre. Small bronze projections extending from the side of the central dise tend to produce a square aspect. The coiled spring is of bronze. The ring has been an integral part of the casting, as in the case of the later brooches with hinged pins. The fragment, representing a head (fig. 11, No. 4, and fig. 12, No. 4), has
${ }^{1}$ Proceedings, vol. liv. p. 78, fig. 12, No. $1 . \quad{ }^{2}$ Ibid., vol. liv. p. 78, fig. 12, No. 2.


Fig. 12. Special Objects from the fourth level. (1.)
a coiled spring of bronze and an iron pin. The ring has been formed from an axial wire. The other fibulæ are of the penannular type, and of small size (fig. 11, Nos. 5 to 7, and fig. 12, Nos. 5 to 7). In one the terminals are somewhat more elaborately finished, with mouldings below the actual knobs, than is the case in the usual small penannular brooches of this type. The terminals of that shown in No. 6 are of an unusual character, having a socket or cup on the ends of the ring with a flange below it. These small brooches are not uncommon on Roman sites in Scotland, and on that account may be of first or second century date. No. 7, as is usually the case with the type, shows a fine bright patina. A fragment of a fourth calls for no comment.

Pins.-There are imperfect remains of three objects, two of which may have been pins. One of the latter, formed from a piece of rounded bronze wire, has a bend at the head (fig. 11, No. 9, and fig. 12, No. 8); and the other (fig. 11, No. 10, and fig. 12, No. 9) is in the form of a hook, the wire from which tapers down the shank. The third object (fig. 11, No. 11, and fig. 12, No. 10) is of indeterminate use; it is broken into two parts, which together measure 5 inches in length; formed of a wire elliptical in section at the centre, it takes a square form at both ends, there being a notch on one side $\frac{1}{4}$ inch from one end.

A bronze ornament (fig. 11, No. 12, and fig. 12, No. 11) of the class usually termed harness mountings is identical with two which were found in 1919 on the lowest and third levels respectively. It is a leafshaped object, $1 \frac{3}{8}$ inch in length, with a prominent boss in the centre, and slight prominences at both ends confined to opposite sides. The ornament much resembles a human eye with a projecting eyeball. There is the usual square loop at the back. Another object of the same class is an oblong rectangular plate (fig. 11, No. 13, and fig. 12, No. 12), measuring 1 inch by $\frac{3}{4}$ inch, absolutely devoid of ornament, and furnished with a loop, as above. An almost identical specimen was found in 1914, also on the lowest level. A short segment of a ring with two flat-topped prominences, both on the same side and towards one end (fig. 11, No. 14), does not explain itself. An almost identical fragment was found on the third level, the two possibly belonging to the same ring, though they do not exactly fit. Equally inexplicable is a curved object, about one-half of an ellipse (fig. 11, No. 15), with an arc of $1 \frac{5}{8}$ inch. The circular rod of which it is formed is tapered to both ends, and its use is indeterminate.

Other objects of bronze from the fourth level are:-A piece of a thin mounting bent to a loop, $\frac{5}{8}$ inch in breadth, and ornamented along both edges with a row of repoussé dots; a ring (fig. 11, No. 16) measuring $1 \frac{1}{4}$ inch in diameter over all; a couple of studs or short nails with round
flat heads, both imperfect, the longest (fig. 11, No. 17) 1 inch in length; a small piece of semi-tubular binding, probably for the edge of a sheath, similar to pieces found in previous years; ${ }^{1}$ also the chisel with the side stops, and three of the other chisels (fig. 11, Nos. 18 to 21, and fig. 12, Nos. 13 to 16) mentioned above.

Glass.-There are segments of eleven glass armlets. Five of these are of opaque white glass and one of opaque yellow, of the class usually associated with our earliest level, ${ }^{2}$ and with no trace of ornamentation; one small fragment shows the end of a loop in blue glass on its surface. There is also one piece, amounting almost to one-half of an armlet (fig. 11, No. 22), which has had an interior diameter of about $2 \frac{1}{8}$ inches. It is triangular in cross section and of a dark olivegreen, almost black colour, with hook-like figures of white enamel which have been trailed along the surface before the glass composing the armlet cooled, so that they are to some extent incorporated in it. This is a variety that has hitherto, for the most part, been found on the higher levels. One piece, of translucent, pale green glass, has the end of a loop of opaque white glass appearing at one end; a segment of pale bluish-green translucent material has been coated on the outer surface with a layer of somewhat opaque sapphire-blue glass, into which there has been run along the mesial line a cane of opaque white, with, on either side, a small eye-shaped ornament in similar material (fig. 11, No. 23). A segment, of pale green translucent glass, is covered on its convex surface with alternating oblique stripes of dark blue and pale yellow opaque glass, and shows the remains of a yellow spot on the blue (fig. 11, No. 24). In accordance with the invariable practice followed with regard to specimens of this character, the outer cover has been cut down at the extremity so as to form a short stump or projection, presumably to hold a mounting. This pertains only to one end of this specimen, as the other is fractured. ${ }^{3}$ The only other pieces of glass are a triangular fragment of thin, clear, colourless metal, having two engraved parallel lines across it; a small segment of milky-white colour with an inlay of blue (fig. 11, No. 25); and several tragments of clear green glass, with trails and hooks of white.

There are two glass beads. The first (fig. 11, No. 26) is of sapphireblue translucent glass, into which has been fused, somewhat irregularly, a wavy ribbon of opaque white. It is discoidal in form, and measures $\frac{3}{4}$ inch in greatest diameter. Similar beads were found in the excavation

[^2]ACCOUNT OF 'THE EXCAVATIONS ON TRAPRAIN LAW. 173
of the Roman site at Newstead, ${ }^{1}$ also by General Pitt Rivers at Bokerly Dyke. ${ }^{2}$ The other is a small globular bead of green translucent glass.

Of parts of glass vessels there are three fragments: two of pale green colour, about $\frac{1}{16}$ inch in thickness, and the other of similar colour and double the thickness.

Jet or Lignite.-There are segments of six armlets of this material (fig. 11, Nos. 27 to 32). One is markedly triangular in cross section and measures about $2 \frac{3}{16}$ inches in length; two of them are of brown material, and two of black. One of the last (fig. 11, No. 29) is much chipped and flaked over the surface, and presents a peculiarity in having a sharp arris on the inner surface, which would render it rather unsuitable for wear. It has the appearance of a "waster." A triangular fragment (fig. 11, No. 33), with a thickness of $\frac{1}{4}$ inch, is curved in the direction of its length, and looks as if it might have been a piece of a beaker or cup. There is also a segment, amounting to about one-half, of a broad flat ring (fig. 11, No. 34). It measures in diameter over all about $3 \frac{3}{18}$ inches, and is about 1 inch in breadth. In the periphery, equidistant from both ends, two angular adjacent notches have been cut, leaving a triangular projection between them, while, towards one end, on either side, there has been sunk by a drill a coneshaped hollow $\frac{3}{8}$ inch in diameter. The ring has been bevelled to an arris on the inner edge.

Stone and Flint.-An arrow-head of dark brown flint (fig. 11, No. 35) is of elongated form and lop-sided, with a single barb. This is the first arrow-head of this peculiar type that we have met with in the course of the excavations. This level has also produced a scraper, worked on one edge, of grey flint (fig. 11, No. 36), and eight flakes, two of which show secondary working.

There are three whorls (fig. 11, Nos. 37-39): one of red sandstone, measuring $1 \frac{17}{3} \frac{7}{2}$ inch in diameter, with the perforation seemingly made from one face only; another, $1 \frac{15}{16}$ inch in diameter; and the third, $1 \frac{1}{4}$ inch in diameter.

An irregularly shaped piece of green radiolarian chert (fig. 11, No. 40), 2 inches in length and 1 inch in thickness, has a hole on one surface in form of an inverted cone $\frac{1}{4}$ inch across. The stone has been rudely shaped, and the surface in which the hole is sunk appears to have been rubbed down till it is slightly concave, while the under side is flat. The purpose this stone served is not obvious.

A stone, somewhat in shape like a small thin stone axe, slightly tapered towards the butt, with flat sides and a blunt cutting edge (fig. 11,

[^3]No. 41), also comes from this level. The butt is broken away, and onehalf of a perforation appears on the broken surface towards one side. This has probably been a whetstone. There is also a second whetstone, of lunette shape, symmetrically ground from both sides to a sharp edge along the straight side (fig. 14, No. 59). ${ }^{1}$
'There is one small playing-man of sandstone (fig. 11, No. 42), measuring $\frac{7}{8}$ inch in diameter. Playing-men have hitherto been rarely found on this level.

Bone.-The fragment of a hollow cylindrical bone handle, split longitudinally, shows a design of chev-


Fig. 13. Clay Vessel of native manufacture. ( ${ }^{\frac{1}{5} .}$ ) rons with the alternate angles filled in with transverse lines, all incised (fig. 12, No. 17).

Iron.-There are no iron relies from this level calling for remark.

Pottery. - The only piece of Roman pottery deserving notice is a small portion of the lip of a dark grey cooking-pot, the body ornamented with scored lattice ornament. Other two small rim fragments of this vessel were found on the third level, and a third on the second level. They were contiguous parts, and when cemented together formed about the quarter of the rim of a vessel of about 5 inches diameter at the mouth. A fragment with identical rim section was found on the third (so-called second) level in 1914. ${ }^{2}$

In section $L$ was found the greater portion of a hand-made pot of coarse ware of native manufacture (fig. 13). The fragments lay embedded among clayey soil, in a position which showed that when the vessel had been discarded it must have been complete except for small portions of the wall. The restoration shows that it has been rudely made, of semi-globular form, and with one side bulging out considerably more than the other. It measures $6 \frac{3}{16}$ inches in height, $6 \frac{1}{2}$ inches in diameter at the mouth, $7 \frac{1}{4}$ inches at the widest part, and $4 \frac{1}{2}$ inches at the base.

Coins.-Three coins were found on the lowest level. One, a denarius, believed to be of Valens (A.D. 365-378), is obviously out of place, while

[^4]

Fig. 14. Group of Relics (other than of iron) from the third level-except No. 59 , which was found on the fourth level. (1.)
one, a second brass of Domitian (A.D. 81-96), is in its correct level. The third is indecipherable.

Relics from the third level are grouped together in fig. 14.
Fibulce.-There are remains of seven fibulæ. A small bow-shaped one (fig. 14, No. 1, and fig. 15, No. 1), measuring $1 \frac{5}{8}$ inch in length, is of a not uncommon type, with a floriated knob in the middle of the bow, and should belong to the second century. It has a coiled spring, on which the pin has worked. The front part of the pin, half the spring, and a large part of the head of the fibula which covered it, are awanting. The only comparatively perfect fibula is one of unusual shape and attractiveness (fig. 14, No. 5, and fig. 15, No. 2). It is a bow fibula, and the pin, the only part awanting, has worked on a hinge. On the highest point of the bow there is a bead; thence, forward to the foot, the bow is plain; towards the head the bow assumes an oblong form, and contains a rectangular panel filled with three bands of enamel separated by strips of metal. These bands are divided up into sections of different colour, the only one now clearly identifiable being turquoise blue, which is the colour of three alternate sections in the centre row. Across the base of the ring are two slight mouldings, one of them enriched with pellets, while the ring itself is pointed outwards and incised with a couple of diagonal lines converging on a vertical moulding at the point-a suggestion of late Celtic decoration. Two parts-the head and foot of another bow fibula (fig. 14, Nos. 2 and 3, and fig. 15, No. 4)-are much corroded. On the head remains of enamel are visible, consisting of a leafshaped figure of blue enamel on either side, with a circular spot of the same colour between. The pin has worked on a spring. A bow only represents a third fibula of the class (fig. 14, No. 4, and fig. 15, No. 3) which has had a boss above the head; it has been silvered along the top of the bow. Two small penannular fibulæ with plain spherical knobs are represented by a terminal fragment of each (fig. 14, Nos. 7 and 8), and there is a plain circular discoid brooch, abraded round the edges, with catch and hinge-plate beneath, of a type not found hitherto on the hill (fig. 14, No. 9, and fig. 15, No. 6). A penannular ring (fig. 14, No. 6, and fig. 15, No. 5), $1 \frac{1}{8}$ inch in greatest diameter, has probably been a brooch, but both the recurved terminals are gone.

Pin.-There is only one pin from this level (fig. 14, No. 10, and fig. 15, No. 7), imperfect, and measuring $3 \frac{11}{16}$ inches in length. It has a bend or shoulder on the stem, and the head, which is flat on one side, has a small tapered cavity on the other, above an oval moulding. A very similar pin was found in 1914 on the lowest level, ${ }^{1}$ and another was found at Newstead. ${ }^{2}$

[^5]

Fig. 15. Objects of Bronze from the third level. (1.)

Finger Rings.-A finger ring (fig. 14, No. 11, and fig. 15, No. 8), formed of a strip of bronze $\frac{10}{10}$ inch in breadth in centre and tapered to a point at both ends, is ornamented with a series of narrow horizontal flutings which run out about $\frac{1}{4}$ inch from the ends. This ring is possibly a Bronze Age relic. A similar ring, formed of a plain strip of bronze, was found in 1919 on the third level. A little more than one complete coil of a spiral finger ring of bronze, with a ribbed surface except for a short length at one end (fig. 14, No. 12, and fig. 15, No. 9), is of a class of which Traprain Law has already yielded several examples.

A ring, $1 \frac{1}{4}$ inch in diameter over all, with a smaller ring working upon it (fig. 14, No. 13), does not reveal its purpose. The smaller ring seems too slight to have formed the head of a pin with a ring as heavy as the larger one attached, and the overlap of the ends does not suggest such


Fig. 16. Bronze Terminal of belt or strap. (i.) an ornament. Two very similar combinations of rings were found on the second level.

Button.-A dumb-bell-shaped button is the only other personal relic of bronze (fig. 14, No. 14 , and fig. 15, No. 10). It measures $\frac{11}{16}$ inch. One found in 1914 came from the lowest level.

Harness Mountings.-This level yielded a portion of a terret with spherical protuberances on the outer periphery (fig. 14, No. 15), similar to those found in previous years, and also another object, which has evidently been attached to the end of a strap to serve as fastener or button (fig. 14, No. 16, and fig. 16). It consists of an oval head in the form of a petal, with a boss in the centre, a design which we have frequently met with in the objects usually designated dress fasteners. Instead, however, of a triangular loop springing from the back and projecting on a lower but parallel plane, there is a thickish stem, $1 \frac{1}{8}$ inch in length, terminating in a square plate, at the back of which there is an elliptical loop. The upper part of the stem or shank is carried slightly above the surface of the plate, and is finished off with a characteristic late Celtic moulding.

Miscellaneous Relics of Bronze.-One object, $1 \frac{7}{8}$ inch long, spatulate and perforated at the end of the shank (fig. 14, No. 17, and fig. 15, No. 11), has undoubtedly been one end of a tubular padlock, and is most probably Roman. ${ }^{1}$ Another object is a portion of a handle formed from a flattish strip of bronze, the ends of which, after forming a loop which

[^6]
## ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 179

has been hammered out flat, have been intertwisted (fig. 14, No. 18, and fig. 15, No. 12). This method of forming a handle was in vogue in Bronze Age times, and this, too, may possibly be a relic of that epoch. It recalls certain parts of Bronze Age bits for horses found on the sites of lake dwellings at Moeringen. ${ }^{1}$ There are also a small ring, $\frac{7}{1}$ inch in diameter, and a part of an object formed from a thin plate of bronze, bifurcated at one side, with a perforation in each wing. Another object is a segment of a bronze ring, on the periphery of which, towards one end, are two flat-topped studs (fig. 14, No. 19). This object is identical with the fragment found on the fourth level. Part of a stout ring, tapering considerably towards one end, was found. A short rod of bronze, square in section and broken in two, has probably been another Bronze Age chisel, but it is in too incomplete a state for certain determination. The portion of a tanged blade (fig. 14, No. 20, and fig. 10, No. 17) is mentioned above ( p .167 ) among the undoubted Bronze Age relics.

Glass.-This level yielded fifteen fragments of glass armlets, representing apparently thirteen or fourteen armlets, as two pieces seem to belong to the same one, and possibly other two may be related. Three are pieces of opaque white glass, of which one is about $\frac{3}{4}$ inch in breadth and another $\frac{1}{2}$ inch. Two more, of opaque white, are ornamented with lines of light brown (fig. 14, Nos. 25 and 26). Four fragments are of opaque yellow glass. Five other pieces are decorated: one of them is of pale green translucent glass, coated with strips of opaque enamel, yellow and brick-red (fig. 14, No. 24). One end of this last-mentioned piece has been checked or slightly reduced in diameter; the other end has been fractured. Another piece of pale green translucent glass is coated with yellow opaque enamel, traversed obliquely by two parallel lines of dark blue separated by a yellow line (fig. 14, No. 22). A segment of similar green glass has also been decorated with dark blue (fig. 14, No. 21). Another fragment of the same green glass has been coated with dark blue enamel, into which chevrons of yellow have been blended, with lines of yellow along the edge (fig. 14, No. 23). Still another fragment of pale green translucent glass has had threads of white glass trailed along it. This last fragment is a lighter form of armlet, such as is usually associated with the higher levels. The last piece of an armlet to be noticed is a short segment of dark blue translucent glass with a white opaque line along each edge, and three contiguous bands of dark blue glass inlaid with an opaque white thread applied plastically on the surface along the central line of the armlet (fig. 14, No. 30). The only other object of glass is a segment, about one-third, of a light blue translucent spherical bead, the surface of which shows iridescence.

[^7]Jet or Lignite.-There are small unimportant segments of seven armlets (fig. 14, Nos. 34 to 36 ), one of them seemingly part of an unfinished ornament. There is one complete ring (fig. 14, No. 38), measuring $1 \frac{5}{8}$ inch over all. It is somewhat roughly fashioned, rectangular in section and irregular in thickness, being thinner on one half than the other. Two pieces of this material are segments of rings, the larger with an estimated diameter of about $2 \frac{1}{2}$ inches over all, and the other with a diameter somewhat less. These rings are, as a rule, flat on the sides and thicker than the armlets, their cross section being elliptical, while that of the latter is usually triangular. The only other objects of jet are a small counter or playing-man (fig. 14, No. 39), $\frac{1}{2}$ inch in diameter, and two whorls (fig. 14, Nos. 40 and 41).

Stone and Flint.-- Of whorls of stone this level yielded four complete (fig. 14, Nos. 42 to 45 ), and portions of two others; thus, with those of lignite and pottery included, the whorls represented are ten. Not one of these came from section I. From that section, however, there is a roughly shaped disc of coarse sandstone which conceivably is a whorl in the making (fig. 14, No. 47). There are two oblong hones (fig. 14, Nos. 48 and 49). One of these, of a close-grained red sandstone, has on both faces a longitudinal groove about $\frac{3}{8}$ inch broad, as if produced by the sharpening of a chisel or gouge. Another object of stone is an irregularly shaped piece of coarse sandstone about the size of a pigeon's egg, flat on one side and showing on the other three small depressions as if caused by a drill. There are two whetstones. The first, of an unusual form, is a rather thin triangular piece of tine-grained buff-coloured sandstone (fig. 14, No. 50). One angle is acute, formed by the convergence of two straight sides, the surfaces of which have been very smoothly polished. The third side is on a curve, and is interrupted by a wedgeshaped slot cut out of it. There is about a quarter of a small, flatbottomed, saucer-shaped vessel with a low, upright brim. A complete axe (fig. 14, No. 51) in good condition is the only other stone relic. It measures $4 \frac{1}{8}$ inches in length, has a curved cutting edge, and tapers to a blunt point at the butt. It has been slightly flattened on the sides. Of two hammer-stones, one is abraded at the ends and the other round the circumference.

Six flints were found: a leaf-shaped arrowhead of grey flint, with the point awanting (fig. 14, No. 52); a hollow-based, almost lop-sided, arrowhead of dark grey flint, with a notch broken out of one edge (fig. 14, No. 53); a small discoidal scraper of grey flint (fig. 14, No. 57); two unworked flakes of black and grey flint, and a small one-sided scraper of yellow flint (fig. 14, No. 54).

Whorls.-A whorl made from the base of a Roman Samian dish was


Fig. 17. Objects of Iron from the third level. (1.)
found (fig. 14, No. 58). It bore a potter's mark, of which only the first letter, "D," and the last two, " U S," remain. DEVIXTUS is suggested for the complete name, and for this space allows. On the under side, in graffiti, are the letters "T B," repeated. Half of another whorl, formed from a shard of coarse pottery, was also recovered.

Iron.--The iron objects worthy of note from this level are very few. Two spear-heads (fig. 17, Nos. 1 and 2), an ox-goad (fig. 17, No. 4), part of a bucket handle, and a fragment, possibly part of the cheek-piece of a bit (fig. 17, No. 3), comprise the lot. Of the spear-heads, No. $1,6 \frac{7}{8}$ inches long, is lanceolate, and has a closed socket, which is a characteristic, as


Fig. 18. Mounting of Iron for handle of bucket.
we have shown before, of the La Tène weapons, while No. 2 has a shorter leaf-shaped head and has a split socket.' The opening does not extend, however, far up the socket, and as a spear-head of similar form, with a slightly opened socket, was found on the lowest level in 1919, ${ }^{1}$ it is probably equally a Celtic weapon. The ox-goad takes the usual form of such objects, a number of which have been found on Romano-British sites in England. ${ }^{2}$ Its structure differs slightly, for, instead of being formed spirally from a narrow strip of iron, it has been made from a shorter and broader piece by the two ends being brought together so as to form a socket with a point drawn up from one. The three-armed object (fig. 18), with a perforation at the end of each arm, has obviously been attached by two of the arms to one side of a bucket. The other perforated arm extended above the rim of the bucket and formed the loop through which the handle passed.

Lead.-There is a small coiled strip of lead.

[^8]
## ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 183

Pottery.-A considerable quantity of Roman and native ware came from the various sections, I to L, on this level, but not much of it has any distinctive interest. A triangular shard of Samian is part of the bottom of a vessel of indeterminate form, and is impressed with a potter's mark which reads CHRESIMI. This potter is represented at Silchester ${ }^{1}$ by the same stamp, also at Wroxeter. ${ }^{2}$ Little is said to be known of him, but he is supposed to be of South Gaulish origin. On the under side of the fragment there are the remains of an inscription in graffiti, which probably read "Antonius" when complete. The glaze on the ware is poor and the base has been thin.


Fig. 19. Fragment of Samian Bowl.

Two shards of a thick decorated ware (fig. 19) are contiguous parts of the side of a large bowl (Dragendorff, form 37). No traces of rim or base remain. The decoration is in the panel style, the demarcation of the panels being produced by a wavy line. The general character much resembles that of the ornamented bowls found in a cellar at Bregenz. ${ }^{3}$ It is probably of South Gaulish make. Two birds are represented in separate panels, one with its head raised and the other with its head down, and two small figures, each carrying a bunch of grapes; a larger panel bears a less reputable figure with a staff in the left hand.

Portions of the rim of a black cooking-pot with lattice ornament, which join together, have come from this as well as from the second and fourth levels, showing again the mingling of periods which circumstances rendered inevitable in last summer's excavation. A small reeded and curved handle of buff clay is similarly made up of pieces from both levels.

[^9]Coins.-Only one coin was found on this level, a small brass, believed to be of Victorinus (A.D. 263-267). This fits in quite well for dating with the third-level coins of the previous year, which were those of the reigns of Probus, Allectus, and Carausius, all belonging to the last quarter of the third century.

Relics from the second level are grouped together in fig. 20.
Bronze-Fibulce.-There are three bow fibule (fig. 20, Nos. 1 to 3, and fig. 21, Nos. 1 to 3), and the lower part of the bow of a fourth (fig. 21, No. 4). Two are of the same type-that which has a socket at the foot, a socket for a boss of some sort at the head end of the bow, with a flange projecting between this socket and the cross-piece. Both of these have had hinged pins and fixed rings. On one the bow is perfectly plain (fig. 20, No. 1, and fig. 21, No. 1), but on the other there is a series of lozengeshaped compartments running from the upper socket to the foot (fig. 20, No. 2, and fig. 21, No. 2), flanked on either side with triangular compartments; but of the enamel which probably filled these there is not now a trace. A similar fibula, but still enamelled, came from the lowestlevel in 1914. The third bow fibula is of very simple design, with a plain bow, lacking both sockets and the flange at the head (fig. 20, No. 3, and fig. 21, No. 3). Like the others, it has had a hinged pin. The only penannular brooch is of the common form with the fluted knob terminals (fig. 20, No. 4, and fig. 21, No. 5). The pin is broken at the hinge. As is usual with this style of fibula, it is beautifully patinated. This peculiar condition points to a common origin for these little brooches. Fig. 20, No. 5, and fig. 21, No. 6 illustrate an object which perhaps ought to be reckoned a buckle rather than a brooch, as it conforms to no known type of the latter. It is not, however, of the usual fashion of a buckle, in which the pin is fixed in the centre of one side and lies across the loop if it happens to be, as in this case, elliptical -not along it. Nor, with a lozenge-shaped plate for the pin to rest on, could this object function properly as a buckle. It almost looks as if a brooch had been evolved from a buckle. The object, in form elliptical, measures in extreme length $2 \frac{3}{8}$ inches, and in breadth $1 \frac{1}{8}$ inch. It is formed of a rod of bronze, $\frac{3}{10}$ inch broad and plano-convex in section, being flat on the under side. On one of the longer sides of the ellipse the rod is expanded to form a flat oblong plate, $1 \frac{1}{8}$ inch long by $\frac{1}{4}$ inch broad, while on the opposite side a similar plate extends for half the length and abuts against the head of a curve formed by turning back the one end of the rod, while the contiguous plate has formed, as it were, the other end. The penannular character is thus, however, merely - suggested, as the ring has actually been made continuous. The pin, which remains, but is detached, has worked on a collar at one end,


Fig. 20. Group of Relics (other than of iron) from the second level. (3.)
while it appears to have rested at the other on a lozenge-shaped plate. There is no catch on this plate, and, as the pin has a movable collar and tapers to a point, it does not seem likely that it was fixed to it. The surface, from having been dipped in a solution of tin, has still in parts a silvery appearance.

Pins.-A pin, with a circular head formed of six beads on the front and flat on the back (fig. 20, No. 6, and fig. 21, No. 7), resembles such a one as would have been cast in the mould found on the third level in 1919. ${ }^{1}$ The stem is shouldered and not quite of its original length. Over all, the pin measures $2 \frac{1}{2}$ inches. A second pin (fig. 20, No. 7) is possibly a stem with the right-angled turn, from the end of which a head has been broken off.

Finger Rings.-Two finger rings are both of the coiled wire type. One, of silver (fig. 20, No. 8, and fig. 21, No. 8), is perfect, and consists of three coils formed from a wire thicker and heavier than is usually employed. It has an interior diameter of $\frac{5}{8}$ inch. The other (fig. 20, No. 9, and fig. 21, No. 9), formed of a lighter wire, remains to the extent of two and a half coils, and has an interior diameter of $\frac{13}{16} \mathrm{inch}$, being rather larger than usual.

Dress Fasteners. - Three complete examples of these objects were found on this level. One (fig. 20, No. 10, and fig. 21, No. 10), of a new type from Traprain Law, is in the form of a somewhat lightly made, plano-convex ring, to which the loop is attached by a shank grooved on the under side and brought across the periphery of the ring from the inside, in such a way as to give the appearance of being hooked on. The two other dress fasteners are of not uncommon forms-one (fig. 20, No. 11, and fig. 21, No. 11) with a square plate and a triangular loop, and the other (fig. 20, No. 12, and fig. 21, No. 12) of the ordinary boss and petal, or eye form. Both forms, in previous years, have been found on various levels. The head of another, of flat, discoid form, was also discovered.

Miscellaneous Objects in Bronze.-From this level, as from the level below, there is a ring, $\frac{7}{8}$ inch in diameter over all, with a smaller ring working upon it (fig. 20, No. 13). A slight thickening on one part of the smaller ring may be where a pin has been broken off, but it is not obvious. An ornament, practically a square of $\frac{7}{8}$ inch (fig. 20, No. 14, and fig. 21, No. 13), has been divided on its upper surface into four triangular spaces with controlling lines of bronze left undisturbed in the champlevé process. These spaces have been filled alternately with dark blue and bright yellow enamel. The surface of the ornament, especially that of the enamel, suggests that the piece has been a failure and has not been

[^10]

13


Fig. 21. Objects of Bronze and Silver from the second level. (1.)
completed. One of the triangles of yellow enamel does not appear to have been completely filled; the surfaces have not been polished and are somewhat vesicular, while the enamel has not been confined very successfully to its beds. The condition of this piece points to enamel work having been done on the hill. An oval mount with four small rounded projections springing from the edge (fig. 21, No. 16), and inlaid with a setting of blue glass which has been cracked by fire, bears a strong resemblance to the ornament on the front of the bow of a fibula found on the third level in 1919. ${ }^{1}$ A dise of bronze (fig. 20, No. 15, and fig. 22, No. 1), $1 \frac{3}{4}$ inch in diameter, bent round and damaged at the edges, has been a mounting. Around the centre is a double concentric circle. A peculiar helmet-shaped object (fig. 20, No. 16, and fig. 22, No. 2) is open at its base, and towards the lower edge of each side is pierced with an oblong rectangular opening about $\frac{3}{1 B}$ inch in depth. It is evidently a mounting, and its peculiar construction suggests that it has been used at the junction of two straps crossing each other at right angles, each strap passing through the two opposite openings. A most unusual relic is a mounting in the form of a bull's head with horns (fig. 20, No. 17, and fig. 21, No. 14), to the top of which is attached a fixed ring, the whole being $1_{4}^{1}$ inch in length. A slight projecting ledge on the back, below the ring, shows that this object has been attached to the edge of a vessel to hold the end of a loop handle or a chain. An ox head of bronze, but slightly larger, was found some years ago by Mr Willoughby Gardiner in his excavations at Dinorben. ${ }^{2}$ It was found in a high stratum which yielded Roman coins of the third and fourth centuries. Similar heads have been found on Ham Hill. ${ }^{3}$ A curved strip of bronze (fig. 20, No. 18, and fig. 22, No. 3), $4 \frac{1}{8}$ inches in length, imperfect and tapered to both ends, has possibly been a handle to a light casket, or some such object. A stem or handle, with an imperfect flattenedout expansion at one end, slightly concave and curving backwards (fig. 20, No. 19, and fig. 22, No. 4), is an object of uncertain purpose. A stud (fig. 20, No. 20, and fig. 22, No. 5), with a heavy conical head, $\frac{5}{8}$ inch in diameter, and a short, imperfect stem, from its weight may have been the tip of a spear butt. An object with a flattened spherical head and a shank (fig. 20, No. 21), imperfect, $1 \frac{1}{8}$ inch in full length, from the rapid taper on the latter has more probably been a nail than a pin. A nail (fig. 20, No. 22), $1_{16}^{7}$ inch in length, was found. There is also, as mentioned previously, from this level the greater part of what has evidently been a bronze chisel or punch (fig. 20, No. 23,

[^11]

Fig. 22. Objects of Bronze from the second level. (t.)
and fig. 22, No. 6). It measures, with the point or cutting edge lacking, $1 \frac{7}{8}$ inch in length. Like the others of its class, it is square in section and diminishes towards the point. Fig. 20, No. 24, and fig. 22, No. 7, is a rivet, square in section, with a thin flat head and a thin rectangular washer on the other end. A similar rivet, with the washer awanting, was found on the fourth level in 1914. Fig. 20, No. 25, and fig. 22, No. 8, is an object in shape of a bisected baluster, with a loop at one end through which an iron pin has been thrust. It is impossible to say what purpose it has served. The object shown in fig. 20, No. 26, and fig. 21, No. 15, has probably been part of an étui, a portion of a rather fragile ring remaining at one end. At the broad end there appears to have been a projecting point at both sides. The surface is decorated with transverse and diagonal lines, and the edges are lightly waved towards the ring, end on one surface and towards the broad end on the other. A small segment of a socketed axe of the Bronze Age (fig. 20, No. 27, and fig. 22, No. 10), previously mentioned, is the only other object of bronze.

Silver.-This metal is represented by a well fashioned pin, $2 \frac{7}{16}$ inches in length (fig. 20, No. 28). There is a short, incomplete right-angled return, from which the head has evidently been wrenched.

Glass.-There are fifteen fragments of glass armlets, probably representing thirteen different specimens, as four of the specimens range themselves in pairs. One pair is composed of segments of opaque white and brightly surfaced glass, of the lighter make, which we incline to attribute to the later periods of occupation. Seven pieces are of duller and heavier opaque white. One piece is of opaque yellow glass, and two, probably portions of the same armlet, are of pale green translucent glass with a white opaque thread trailed along the surface. Two other pieces, of pale translucent green ornamented with white opaque threads trailed on the surface, though similar in appearance, are not identical in section (fig. 20, Nos. 33, 34, and 35). They are of a kind that has been frequently met with before. The last piece is a segment of pale green opaque glass, coated on the upper surface with opaque yellow and a broad band of brick-red, from either edge of which short parallel lines of the same colour protrude into the yellow so as to simulate a cord pattern (fig. 20, No. 36). An oval yellow spot like an eye appears in the middle of the red band. As is the case with almost all the pieces of armlet of this class, the end which is not fractured is cut down for a short distance so as to form a tenon or neck. The only other objects of glass are half of a melon-shaped bead of blue vitreous paste (fig. 20, No. 67) and two playing-men, one of the latter of clear brown glass chipped out of the bottom of some Roman glass vessel
(fig. 20, No. 38); the other like a button (fig. 20, No. 39), $\frac{3}{4}$ inch in diameter, of blue opaque glass, and most likely of Roman origin.

Jet or Lignite. Whe objects in this material are somewhat numerous, and include eighteen fragments of armlets. Two of these have either never been finished or have been roughly used. On one of them there is a slight transverse groove close to the end. The interest in this lies in the treatment of the end of another small fragment (fig. 20, No. 40). This piece has been reduced in diameter for $\frac{1}{4}$ inch from the end, and above this necking two grooves run from either side to meet on the crest, forming a chevron. The surface of the termination is irregular, as if it had been fractured, whereas in the glass armlets, which show a somewhat analogous treatment, the end is always smoothed down. Five fragments appear to belong to two armlets. Further than that, one armlet, represented by three pieces, has been of unusually light make-little more than $\frac{1}{8}$ inch in thickness. One piece, that calls for particular remark (fig. 20, No. 41), has been an armlet triangular in cross section, and on one of the ends of the fractured portion there are cut two chevrons, the points of which are on the apex of the triangle of the section, the base being the inner circumference. This style of ornamentation, which appears on several pieces of these armlets found last season, has not been observed previously. It recalls a fragment of an armlet of Kimmeridge shale in the Devizes Museum, from the Romano-British settlement on Cold Kitchen Hill, which has a design formed with incised curves upon the front of it. ${ }^{1}$ Fig. 20, No. 55, is the one half of a spherical pin head, somewhat larger than any found previously, and has measured $1 \frac{1}{2}$ inch in diameter. The pin, the socket for which appears in section, has been $\frac{1}{8}$ inch in thickness, and was probably of iron. A little iron rust remains at the end of this hole. A small playing-man (fig. 20, No. 56), $\frac{7}{8}$ inch in diameter, has been scored with the point of a knife on both flat surfaces. There are four pieces of rings, two of them seemingly unfinished fragments (fig. 20 Nos. 53 and 54), and the other tío of rings (fig. 20, Nos. 51 and 52) with interior diameters of $\frac{7}{8}$ inch and 1 inch respectively. The only other objects of this material are two whorls (fig. 20 , Nos. 57 and 58), a well-fashioned specimen and an imperfect example.

Stone and Flint.-There are three highly polished discs of sandstone (fig. 20 , Nos. 59 to 61 ), measuring $3 \frac{1}{4}$ inches, $2 \frac{1}{16}$ inches, and $2 \frac{1}{8}$ inches in diameter respectively. The two larger of these are of fine-grained sandstone, thin and very smooth. There are three playing-men (fig. 20, Nos. 62 to 64 ), one being fashioned from a small flat pebble with the edges rubbed down. Two complete whorls (fig. 20, Nos. 65

[^12]and 66) and broken pieces of two others are the only other stone objects, while a neatly fashioned and small leaf-shaped arrowhead, $\frac{7}{8}$ inch in length, a small scraper, and a calcined oval object are the only pieces of worked flint.

There are ten polishing or sharpening stones of various sizes and shapes. The largest is flat and oblong in form, and measures $4 \frac{5}{8}$ inches in length; another, of square section, $3_{2} \frac{1}{2}$ inches long, has been worn hollow by use on the four sides; four, varying from $4 \frac{5}{8}$ inches to $3 \frac{5}{18}$ inches in length, are long, flat, and ovoid in shape, and one shows deep grooves formed by a sharp tool; one, formed from a flat oval pebble, $3_{\frac{5}{16}}$ inches by $2 \frac{1}{2}$ inches, is smoothed round the edges; another, of lozenge form, measuring 3 inches by 23 inches diagonally, shows the edges obliquely ground; another, beautifully formed, and measuring $3 \frac{17}{32}$ inches by $1 \frac{1}{32}$ inch, is of rectangular shape; and another, formed from a rounded pebble of grit, has a number of hollow grooves rubbed out on the flattened side. In addition, there is a piece of a hone with a semicircular groove across one end.

Half of a disc of stone, rudely dressed into shape and perforated, measuring $2 \frac{1}{16}$ inches in diameter, is broken across the perforation.

Iron.-The iron objects worth remark are more numerous from this level than from the one below. They are shown in fig. 23. Nos. 1 to 4 are blades of knives or shears, and not differing essentially from others that we have found in previous years. Nos. 5 and 6 are sockets for the butt ends of spears. Similar sockets we have found previously, but split. No. 7 is a light rod of iron showing a spiral twist in its formation. It is $7 \frac{3}{8}$ inches in length, and its purpose is not obvious. No. 8 is probably the cheek-piece of a bit; No. 9 a link of a chain in the form of a figure eight, such as we have found previously; No. 10 is a short section of a bar broadening towards one end, where it is cut off obliquely so as to form a wedge-shaped object; and No. 11 is a large conical-headed nail or bolt, measuring $2 \frac{1}{8}$ inches in diameter at the base of the head, which must have been used in some heavy piece of wood-work.

Pottery.-A fragment of Samian ware is a piece of the rim and side of a bowl with overhanging flange (Dragendorff, form 44). The slight carve of the portion of the side above the flange indicates that the bowl was hemispherical, resembling an example from Rheinzabern of the Hadrian-Antonine period. ${ }^{1}$

A class of pot not met with previously is represented by four shards of light reddish-brown colour, one of which came. from the top level. Each bears the remains of decoration, consisting of two somewhat
${ }^{1}$ Oswald and Pryce, op. cit., p. 203, pl. 1xi., 2.

## ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 193

rudely incised lines of zigzags bounded and divided by incised horizontal lines. A shard which appears to be decorated in a similar manner


Fig. 23. Objects of Iron from the second level.
was found at Woodyates. ${ }^{1}$ There is also a very small fragment of a rim, decorated en barbotine with a leaf.

None of the other fragments were of any moment.

[^13]VOL. LV.

Coin.-Only one coin was found on this level, and that one sadly out of date-a second brass of the Emperor Nerva (A.d. 96-98). For dating purposes, it is therefore of no use.

Relics from the latest or first level of occupation are grouped together in fig. 24.

As usual, the relics are less numerous than those from the corresponding areas on the lower levels.

Bronze-Fibula.--There came one fibula from this level (fig. 24, No. 1, and fig. 25, No. 1). It is bow-shaped, of the well-known Backworth type, with the floriated knob and the pin (amissing) working on a spring. From its style, it obviously does not belong properly to this level of occupation, but to the lowest, and consequently is only proof of the mingling of relics of different periods which had unavoidably occurred last season.

Ring.-Fig. 24, No. 2, and fig. 25, No. 2, shows a contorted finger ring rudely fashioned from a piece of fluted wire into a ring of two coils.

Pin.-A pin (fig. 24, No. 3, and fig. 25, No. 3), bent, and $3 \frac{1}{8}$ inches in length following the curve, with an oblong rectangular head surmounted with a narrow crest at right angles to the front of the head, small projections at the upper angle on the front, and a loop-like moulding extending down the stem, recalls a very similar pin recovered from the highest level in 1919, ${ }^{1}$ and others, without the crest, obtained previously from other levels. ${ }^{2}$

Miscellaneous.-Fig. 24, No. 4, and fig. 25, No. 4, is a semi-cylindrical object of bronze, corrugated on the upper surface, closed at the ends, and pierced near each end for a stud or nail. A mould, found on the third level in $1919,{ }^{3}$ was for the casting of an article of the same kind, but of smaller dimensions. It has been a mounting, but for what is not apparent. Fig. 24, No. 5, and fig. 25, No. 5, is a toilet object presumably, of which we have found other examples last year. It measures $1 \frac{3}{4}$ inch in length, and has been fashioned with a number of minute teeth at the broader end, to be used for purposes, too obvious for description, in a state of society when washing facilities were not provided. It was probably made with a ring at the pointed end, and was carried attached to tweezers. Fig. 24, No. 6, and fig. 25 , No. 6, shows a rather diminutive toothed toilet scratcher, measuring only 1 inch in length. It appears to have had four teeth. Possibly..associated with it originally was the pair of tweezers (fig. 24, No. 7, and fig. 25, No. 7). Such a pair was found in 1914 on the highest level. Two pairs were obtained in the excavations of the Roman fort at Newstead, and there

[^14]

Fig. 24. Group of Relics (other than of iron) from the first level-except No. 13, which was found on the second level. (3.)
are numerous recorded instances of their occurrence on other Roman sites. ${ }^{1}$ The key (fig. 24, No. 8, and fig. 25, No. 8) is a relic ${ }^{2}$ of an uncommon sort. It has been for a tumbler lock, and is of the pipe variety. It is formed from sheet bronze folded over, and a small perforation at the upper end of the shank shows where a ring has passed through for suspension.

Perhaps the most remarkable object of bronze which we have yet recovered from Traprain Law is a boldly modelled figure of a raven (fig. 24, No. 9, and fig. 25, No. 9). The object appears to have been cast. Through the lower part of the casting, beneath the bird's body, is a perforation $\frac{3}{8}$ inch in diameter. A ridge across the back indicates the ends of the folded wings. The extreme length of the relic is $1 \frac{3}{4} \mathrm{inch}$. Marked traces of what appears to be iron oxide, within the perforation, indicate that the bird rested on the top of a ring or rod of iron. Possibly it has been a mounting on harness. A figure of a cock, in solid bronze, $1 \frac{1}{2}$ inch in length, was found in the Roman villa at Great Bedwyn, Wilts, and is preserved in the Devizes Museum. Another of a similar heavỳ make was recovered at Corstopitum ${ }^{3}$ in 1908, while another bronze cock was found at Wroxeter in $1913 .{ }^{4}$ In the case of the two last mentioned the feet are awanting, and there is nothing to show whether they also had any arrangement for attachment.

A piece of semi-tubular binding (fig. 24, No. 10), about $2 \frac{1}{2}$ inches long, is similar to various other pieces found in previous years. A flat-headed stud with a stem (fig. 24, No. 11), square in section, is slightly cut down to a smaller dimension at the end, and was possibly completed with a dise to act as a washer. Lastly, there is a smaller stud with a hollow semi-globular head.

Silver Ring.-Two pieces of a finger ring to contain an oval setting were found on this level (fig. 24, No. 12, and fig. 25, No. 10), about 1 foot apart. A portion of the shank of one piece is amissing. On the level below, about 5 feet distant from the position on which these two pieces were found, there was found a setting of red amber (fig. 24, No. 13, and fig. 25 , No. 11), $\frac{3}{32}$ inch in thickness, slightly convex on the back and flat on the front. On the front the surface has been relieved with a reticulated pattern formed of incised lines which have been filled with some white substance. The interior measurement of the ring has been $\frac{13}{10}$ inch by $\frac{7}{8}$ inch. Although there was a slight difference between the levels in which the setting and the fragments of the ring were found, there seems no doubt that they are all parts of the same ornament.

[^15]

Fig. 25. Objects of Bronze and Glass from the first level-except No. 11, which was found on the second level. (t.)

Glass.-The only objects of glass are three beads and two small segments of armlets of milky-white colour. The first bead is discoid, of opaque yellow material (fig. 24, No. 14, and fig. 25 , No. 12), $\frac{3}{8}$ inch in diameter. Other beads of this class have been found in previous years, no less than eight being found in 1915. For the most part, they came from the two earliest levels. The second is of the melon-shaped variety, and consists of two segments, rather rudely fashioned of green glass. The third is a tiny grey globular bead from which the colour seems to have been bleached.

Jet or Lignite.-Fig. 24, No. 15, is a ring, $1 \frac{3}{4}$ inch in diameter over all. At one point on the circumference an appreciable groove has been formed. As the ring is light and the groove at all points of equal depth, the groove would appear to have been purposely fashioned in order to keep the ring in a fixed position with relation to a cord fastened in it, rather than to have been the result of friction caused by the object being worn as an amulet. Fig. 24, No. 16, is another ring, the interior diameter of which is $1 \frac{1}{8}$ inch. As in the case of the ring above mentioned, it has at one point a groove of equal depth running across it. There are also three small pieces of other rings, one of which is plano-convex in section (fig. 24, No. 17); another (fig. 24, No. 18), which has a breadth of $\frac{13}{16}$ inch, has belonged to a ring $2 \frac{1}{4}$ inches in diameter. The only other objects of jet are three fragments and one segment of an armlet (fig. 24, Nos. 19 to 22), and an imperfect dise with a small perforation of about $\frac{1}{8}$ inch diameter, which may have been a whorl (fig. 24, No. 23). A semielliptical object, measuring $1 \frac{5}{16}$ inch along the chord and $\frac{15}{1} \frac{5}{6}$ inch in thickness with a tenon beneath, is unlike any previous find and appears to be in an unfinished state.

Lead.-Fig. 24, No. 24, and fig. 25, No. 13, is an object resembling a portion of a pencil sharpened from two sides so as to produce a flat point at one extremity while at the other it has been rounded. Another article of lead is a ring (fig. 24, No. 25), $\frac{5}{8}$ inch in diameter over all and some $\frac{3}{8}$ inch in depth. About one-third has decayed away.

Stone and Flint.--There are two hammer-stones-one of oblong shape, abraded at one end, and the other of flattened oval shape, worn around the periphery; a roughly dressed disc of red sandstone, which was probably a pot lid; and three rubbing-stones, two of oblong shape and one pointed at one end. Two incomplete moulds of red sandstone were recovered. The first, made from an irregular block of stone, measuring $4 \frac{5}{8}$ inches by $3 \frac{5}{8}$ inches by $2 \frac{3}{8}$ inches, bears on one face a $T$-shaped matrix, $2 \frac{1}{2}$ inches high and $1 \frac{7}{8}$ inch broad at the top; the other, of which less than half remains, is made of a water-rolled pebble and shows part of a matrix for casting an object with a spheroidal head, resembling the knobbed


Fig. 26. Objects of Iron from the first level.
ferrules for spear-shafts of the Early Iron Age. There are three stone whorls (fig. 24, Nos. 26 to 28) and a half one; a disc, which seems to have been a whorl in the making (fig. 24, No. 29), with holes on the opposite faces only sunk a short depth; another (fig. 24, No. 30) with no hole or perforation, which was also probably intended for a whorl; and part of a large discoidal object. A small playing-man (fig. 24, No. 31), a natural pebble very slightly rubbed down on a part of the edge, is also among the finds. Another whorl, fashioned from a piece of decorated Samian ware, may be mentioned here (fig. 24, No. 32).

A bead (fig. 24, No. 33), $\frac{3}{4}$ inch


Fig. 27. Portion of Samian Bowl. in diameter, is formed from the material known as coprolite.

Of flint there is only one implement, a side-scraper or knife of dark colour.

Iron.-The objects of iron from this level are not numerous, but are of interest. A large axe (fig. 26, No. 1), $5 \frac{3}{8}$ inches in extreme length and some $3 \frac{3}{4}$ inches broad at the broadest part of the blade, is peculiarly fashioned with a high shoulder on what appears to be the upper edge. It has a well-fashioned socket, and is a serviceable tool. Fig. 26, No. 2, is an implement or tool of which we have not hitherto found an example in our excavation. It is a file, such as at the present day is used for various purposes and largely in agricultural pursuits. The teeth are only on one side, and are not placed very close to one another, there being about twelve to the inch. It is furnished with a tang for a handle, and a shoulder to prevent its being thrust too far into the socket and splitting it. Its length is $5 \frac{9}{16}$ inches. Déchelette ${ }^{1}$ gives a reference to two such files from a tumulus at Celles, and to another found in a grave of the cemetery of Rondsen in Eastern Prussia, all of the La Tène period. Fig. 26, No. 3, is an iron rod, about 5 inches in length, spirally fluted throughout its length. Fig. 26, No. 4, is one-half of a horse-shoe. Similar halves have been found in previous years. Fig. 26, No. 5, is either a link or perhaps the loop of a buckle, and fig. 26, No. 6, a round-headed stud or nail. An iron bar, 2 feet $5 \frac{1}{4}$ inches in length,

[^16]of rectangular section, measuring $1 \frac{1}{4}$ inch by $\frac{15}{18}$ inch near the top, and tapering towards one end for less than half its length, pierced by two small holes $\frac{3}{8}$ inch in diameter and $3 \frac{1}{4}$ inches apart, the lowest $10 \frac{1}{4}$ inches from the pointed end, was also recovered.

Pottery.-The highest level yielded rather more pottery than has hitherto been the case. It is, however, mixed. Of Samian ware there is a portion of the side of a large bowl (Dragendorff, form 37) showing two animals in vigorous movement within a large medallion (fig. 27). It appears to be of Antonine type. There is a small fragment, of indeterminate form, of thick ware, with two rosettes and traces of other ornament, and a small section of a shallow bowl, probably of form 18.

There is one piece, which joins together with one from the level below, of a rather thick grey ware, whitish in fracture, ornamented on the outside with a band of close vertical impressions produced with a roulette. A piece of the same or of a similar vessel was found on the second level in 1915. ${ }^{1}$ From this level we have another fragment of a vessel, of reddish-brown colour, decorated with a double line of zigzags; about half of the rim of a bowl, of polished black ware; a couple of pieces


Fig. 28. Fragment of object of Pottery. of a good-sized beaker or pitcher, of red, well-washed clay which has been coated with a pink slip, now much rubbed off. One of the pieces shows two horizontal lines of roulette markings, about $\frac{1}{2}$ inch apart. This appears to be ware such as has been found at Sandford, Oxon., and Ashley Rails in the New Forest, of fourth-century manufacture. This level also yielded a peculiar object formed of two shards which join, but still are incomplete (fig. 28). It is fashioned of a well-washed clay, and is of the reddish tint of the Sandford ware. It appears to have been a circular flat stand, measuring $3 \frac{3}{4}$ inches in diameter and $\frac{5}{8}$ inch in height, with a double foot-rim, the outer one formed by the turned-down edge of the stand. It has been perforated subsequent to manufacture at irregular intervals.

Among the shards of native pottery occurs a small segment of a rim, of the thick black ware of vesicular texture found on the second level in 1915.2 The section of this fragment differs from that found previously.
${ }^{1}$ Proceedings, vol. l. p. 95, fig. 19, No. 16. ${ }^{2}$ Ibid., vol. 1. p. 88, fig. 16, No. 5.

Coins.-The coins from this level are comparatively numerous, but much mixed. The following is a list:-


An indecipherable coin.
Disregarding the four earliest coins, which are obviously out of place, the general period represented by the four others that are either identifiable or partially so is the fourth century, and, as we must carry the final date of the occupation down beyond the earliest possible date of our latest coin, we must assign it to the end of the fourth or the beginning of the fifth century of our era. This agrees with conclusions arrived at in previous years.

Owing to the prolonged wet weather during the month of August, it was found necessary to discontinue for a time the excavation on section $L$ above described, and to turn attention to a fresh area where the thick covering of turf prevented the soil beneath from being saturated. For exploration an area was selected farther down the hill to the north-west of sections $K$ and $L$, and a little more than 100 feet distant from the rampart, where immediately between the two gateways which form the most northern pair, settings of stones protruding through the turf in an irregular fashion gave evidence of occupation. A piece of ground was pegged out, irregularly rectangular, measuring roughly 44 feet in length by, on an average, some 25 feet in breadth, which we termed section X. On the first level (fig. 29, No. 1) being laid bare, there was observed bordering the east line of the section several large stones set in line. At a distance of about 2 feet to the west of these, a few more stones lying parallel were uncovered, the intervening space being devoid of stones. Towards the north a double row of stones were set close together on an arc, the western extremity of which curved towards the south-west. Along the south side of the section a line of rough single stones extended, with a break of about 10 feet, while from the south-west corner two parallel settings, each consisting of two large stones, 2 feet apart, lay parallel to the somewhat similar double line on the east margin. This arrangement of parallel lines is evidently analogous to the setting noted above on the first

ACCOUNT OF THE EXCAVATIONS ON TRAPRAIN LAW. 203
level of section K, and possibly formed the foundation for a wall of turf. Some 12 feet from the south-east corner of the area was a setting of three large stones set on edge-one almost at right angles to the others,-while extending from them in an easterly direction was a paved area measuring about 11 feet 6 inches in length by about 3 feet 6 inches in breadth. No indication of hearths such as were uncovered


Fig 29. Plans of Foundations on the four levels in section X.
elsewhere, was met with. With the removal of a few inches of soil, the second level (fig. 29, No. 2) was exposed. 'An outcrop of rock and rubble on the southern margin restricted the area of occupation. Towards the east side of the section, at a distance of 12 feet from the north and east boundaries, was a hearth of the usual rectangular type, bounded with kerbstones on three sides and open on the fourth towards the north. It measured 3 feet 6 inches in length by 3 feet in breadth. It differed slightly from the usual construction in that the stone of the hill had been used both for the kerbs and the paving, and by the latter having apparently been covered with clay. Almost adjoining the hearth, some 2 feet distant from it, was one of those small, irregulariy circular paved areas of which various other instances have been met
with. In it a quern-stone had been used as paving. Possibly these areas represent the floors of huts. To the east and south-east of the paving a number of rough stones were laid bare without indicating any structure, but among them, surrounded by a circle of stones, was a small heap of yellowish-brown clay such as might have been intended for the manufacture of pottery.

Nearly due west from the first paved area, and some 16 feet distant, was a second area, triangular in shape, and composed of small flat stones. A similar triangular area was found on the second level of section I above.

When the third level (fig. 29, No. 3) was opened out it was found that the area of rock and rubble on the south side had greatly increased, till it represented fully one-third of the whole surface exposed. The only. remains were those of hearths, there being no suggestions of walls or other structures. Towards the north-west corner was one, incomplete, measuring about 4 feet 4 inches in length, with its longest axis east and west. It was paved with sandstone and partially enclosed with a kerb. A portion of what may have been another hearth abutted on it on the north. Some 10 feet from the north-east corner was another: rectangular hearth. It was enclosed on three sides with kerbstones, and had the open end towards the north-east, measuring 3 feet 6 inches in length by 2 feet 6 inches in breadth. Like the others to the westward, it was paved with sandstone. Adjoining it on the west, and on the same level, was a portion of another, the south-west kerb of which overlapped the back of the larger hearth to the extent of fully one-half. Almost adjoining these last-mentioned hearths was a large irregular area of clay, measuring roughly 12 feet in length by about, 6 feet in breadth, with a depth of about 2 inches. It appeared to continue into the unexcavated ground on the east.

The fourth level exposed, showed rather more than one-half of the section occupied by rock and rubble. The only suggestion of structure consisted of a number of rough stones, to the east of the centre, set on a curve, with the upper stone of a rotary quern of coarse-grained sandstone lying among them.

Considering the relics according to the arrangement followed previously, we commence with those from the lowest level. They are singularly few in number.

The one object of bronze is a small portion of what has possibly been a pendant disc, the finished edge being curved and having what appears to be the base of a fixed ring rising from it. On the surface are a series of rows of triangular depressions which may have contained enamel. The only object of jet is a segment, about $2 \frac{1}{2}$ inches
in length and 1 inch in breadth, of a large flat ring. It is in a rough state, as if it had never been completed. There is a segment of an armlet, of greenish-yellow opaque glass, triangular in section, and another of pale green translucent glass, plano-convex in section, narrow, and ornamented with a hooked line of white enamel. The only other


Fig. 30. Fragment of Vessel of pottery. object of glass is a fragment of the reeded handle of a Roman green glass bottle. The pottery found consisted of some shards of native and of Roman ware; among the latter are three of Samian ware. There was also a small fragment of the wall of a vessel of thin grey paste, dark in the interior and ornamented on the outside with a group of small darkcoloured spots aligned horizontally and vertically (fig. 30).

A billon coin of Alexandria, probably of late fourth-century date, found on this level, doubtless came from a later occupation.

The relics from the third level are not much more illuminating. They consist of a very small piece of silver $\frac{1}{2}$ inch in length, which may have been a segment of a ring or armlet, as it is curved; a thin curved plate of bronze $2 \frac{13}{18}$ inches in length, tapering to both ends, which is much eaten away along each edge. Of glass there is a segment of an opaque white armlet, which has been decorated originally with a hook-like line of pale blue, but this inlay has been chipped out. The segment is plano-convex in section. A carefully fashioned object of micaceous


Fig. 31. Basal fragment of Samian Bowl. schist, 5 inches in length, appears to have been a hone.

The pottery consisted of a small quantity of shards of native and Roman manufacture. Among the latter two pieces of Samian ware when put together form about one-half of a base, the upper edge of which appears to have been ground down (fig. 31). This fragment bears the stamp of Dagomarus, a first-century potter of Lezoux.

The second level was even less prolific than the foregoing. Within a few feet of the paved floor there lay six ovoid pebbles of quartzite,
each measuring about $1_{4}^{\frac{1}{4}}$ inch in length, and so uniform in size and shape as to suggest that they had been purposely selected. Such small pebbles occur naturally in the soil, but the occurrence of this group indicates their use possibly as playing-men. Portions of an indented beaker of thin light coloured ware covered with a brownish black slip outside and inside, and rough-cast on the exterior, were found on the second, third, and fourth levels, but the largest pieces were found on the second. Two fragments of thick greenish Roman bottle-glass and one piece of clear, translucent glass, part of a cup or vessel of some sort, complete the record.

The top level, like the lower levels, was disappointing in results. It produced a disc of bronze, either a playing-piece or an indecipherable coin; a couple of objects of lead, viz. a discoid piece $1 \frac{11}{16}$ inch in diameter, like a cap, convex on the upper side, across which there lies an irregular ridge, and a strip $\frac{7}{16}$ inch in breadth slightly coiled; a flat pebble of coarse sandstone with a number of parallel grooves produced by the friction of a tool on both faces; a discoid pebble slightly polished with the edges ground flat; one or two objects of iron, the most noteworthy of which are a tanged knife-blade, imperfect, of a peculiarly curved form, and a small lozenge-shaped object. The pottery, both native and Roman, was of small quantity and not remarkable. A small Roman coin, probably a minim, but indecipherable, was also found.

While this paper was passing through the press, and just on the eve of our recommencing work for the season, we suffered an irreparable loss by the death of our foreman, Mr George Pringle. He came to us in the early summer of 1914, when our excavations commenced on Traprain Law, quite untrained to such work, but possessed of a quick eye, a receptive mind, and an intelligence which brought such zest to his labours that the progress and success of the excavations became his absorbing thought. His sterling honesty, added to these other qualifications, made him an ideal man for his post. When the shortage of men became serious in the war, though no longer young, he joined the army, underwent the hardships of the campaign in France, and was severely wounded, which possibly hastened his end. Those of us who were closely associated with the excavations have lost a friend and fellow-worker of whom we have none but the kindliest remembrances.


[^0]:    ${ }^{1}$ Evans, Ancient Bronze Implements of Great Britain, p. 166, fig. 191.
    ${ }^{2}$ Evans, op. cit., p. 169, fig. 196.
    ${ }_{3}$ Proceedings, vol. 1. p. 302.

[^1]:    ${ }^{1}$ Proceedings, vol. l. p. 136, fig. 45, and vol. liv. p. 66, fig. 7, No. 5.
    ${ }^{2}$ Evans, op. cit., p. 212, fig. 253.
    ${ }^{3}$ Evans, op. cit., p. 214, fig. 260.

[^2]:    ${ }^{1}$ Proceedings, vol. xlix. p. 185, fig. 34, Nos. 3 and $4 . \quad{ }^{2}$ Proceedings, vol. xlix. p. 177.
    ${ }^{3}$ These armlets have been treated of at some length in the Report for 1915, Proceedings, vol. l. p. 104.

[^3]:    ${ }^{1}$ J. Curle, A Roman Frontier Post, plate xci. figs. 17 and 19.
    ${ }^{2}$ Pitt Rivers, Excavations, vol. iii., plate clxxvii., No. 12.

[^4]:    ${ }^{1}$ This has been figured by mistake amongst the relics found on the third level.
    ${ }^{2}$ Proceedings, vol. xlix. p. 163.

[^5]:    ${ }^{1}$ Proceedings, vol. xlix. p. 172, fig. 25, No. 1. ${ }^{2}$ James Curle, op. cit., plate xcii., No. 11.

[^6]:    ${ }^{1}$ See Proceedings, vol. xlvi. p. 192.

[^7]:    ${ }^{1}$ Gross, Les Protohelvètes, pl. xxiv., Nos. 15-17, 19, and 20.

[^8]:    ${ }^{1}$ Proceedings, vol. liv. p. 73, fig. 9, No. 1.
    ${ }^{2}$ Proceedings, vol. xlix. p. 189.

[^9]:    ${ }^{1}$ May, Silchester Pottery, p. 213. $\quad{ }^{2}$ Bushe-Fox, Excavations at Wroxeter in 1912, p. 41.
    ${ }^{3}$ Oswald and Pryce, Terra Sigillata, pl. xvi., Nos. 1 and 2.

[^10]:    ${ }^{1}$ Proceedings, vol. liv. p. 81, fig. 14, No. 3.

[^11]:    ${ }^{1}$ Proceedings, vol. liv. p. 78, fig. 12, No. 2.
    ${ }^{2}$ Arch. Cambrensis, 6th series, xiii. part 2, p. 195, fig. 2.
    ${ }^{3}$ Proc. Soc. Ant. Lond., 1906, xxi. p. 133.

[^12]:    ${ }^{1}$ Wilts Arch. Mag., vol. xxxv. p. 406, fig. 27.

[^13]:    ${ }^{1}$ Pitt-Rivers, op. cit., p. 150, pl. clxxxvii., No. 12.

[^14]:    ${ }^{1}$ Proceedings, vol. liv. p. 96, fig. 23, No. 1.
    2 Ibid., vol. 1. p. 101.
    ${ }^{3}$ Tbid., vol. liv. p. 81, fig. 14, No. 1.

[^15]:    ${ }^{1}$ Proceedings, vol. xlix. p. 175, and p. 174, fig. 26, No. 6.
    ${ }^{2}$ One was found at Lochspouts Crannog (Ancient Scottish Lake Dwellings, p. 177, fig. 176).
    ${ }^{3}$ Archreologia Aliana, 3rd series, vol. v. p. 410, fig. 31.

    - Society of Antiquaries of London: Wroxeter Report, 1913, p. 12, fig. 5, No. 18.

[^16]:    ${ }^{1}$ Manuel d'archéologie-archéologie celtique ou protohistorique, vol. ii. p. 1375.

