

PLATE I. AIR-PHOTOGRAPH OF THE TRUNDLE at 3,000 ft., showing Early Iron Age ramparts and inner Neolithic ring.

(Royal Air Force official: Crown copyright reserved).

EXCAVATIONS IN THE TRUNDLE, GOODWOOD, 1928.

BY E. CECIL CURWEN, M.A., M.B., B.CH., F.S.A.

THE great rampart known as the Trundle, or "hoop," which surrounds the summit of St. Roche's Hill, above the Goodwood race-course, is well known to all who have visited the locality. The site lies four miles to the north of Chichester, and the hill, which rises higher than its immediate neighbours and commands an extensive view on all sides, forms the western termination of a ridge that runs parallel to, and south of, the main-ridge of the Downs. The plan of the camp forms an irregular nine-sided polygon, and the ramparts are of bold and fairly uniform contour. They consist of a large inner, and a small outer, bank, separated by a ditch, the present bottom of which averages some 17 feet below the crest of the inner vallum. The overall width is about 85 ft. The ramparts enclose an area of $12\frac{1}{2}$ acres, while they themselves occupy a further 6 acres and measure some 3080 ft. in circumference along the ditch. There are two original entrances, to north-east and south-west respectively, and in each the ramparts are recurved in a characteristic manner.

In 1925, an air-photograph, taken at the instigation of Mr. O. G. S. Crawford, revealed within the area of the camp certain semi-obliterated ramparts which had not previously been observed, though they are sufficiently obvious when once attention has been drawn to them (Plate I.). Mr. Crawford recognised these as the remains of an earlier camp which had been superseded by the builders of the great rampart, and he

expressed the opinion that if excavated they would prove to belong to the neolithic period, like the camp on Windmill Hill, Avebury, Wilts., which is being excavated by Mr. Alexander Keiller. It was in order to put this to the test that the writer carried out excavations in the camp with the help of some friends in August, 1928, the results of which abundantly fulfilled Mr. Crawford's expectations. Neolithic camps of the Windmill Hill type are distinctly rare, though examples are being discovered as a result of the attention that has been drawn to the type by Mr. Keiller's excavations. Sussex is rich in possessing three examples in the Trundle, Whitehawk Camp at Brighton, and Combe Hill near Eastbourne, while the first-mentioned is only the fourth of its kind to be excavated in Britain. The importance of this work in the study of the little-known neolithic period will thus be readily seen.

The little that was previously known of this hill and its history has been told by Mr. Allcroft in an earlier volume.¹ It suffices here to note in passing that there existed a chapel to St. Roche² on the highest point of the hill in or about the fifteenth century, and that this was succeeded by a windmill which was burnt down in 1773, while a beacon existed there in 1731. Mr. Allcroft also refers to the legend of the Golden Calf having been buried there—a legend that was much upon the lips of the people of Singleton during the progress of our excavations. It would be interesting to trace the origin of such a localised legend. At the Caburn we met with a similar belief in a buried Silver Coffin—a tradition which has not altered since Pitt Rivers' day.

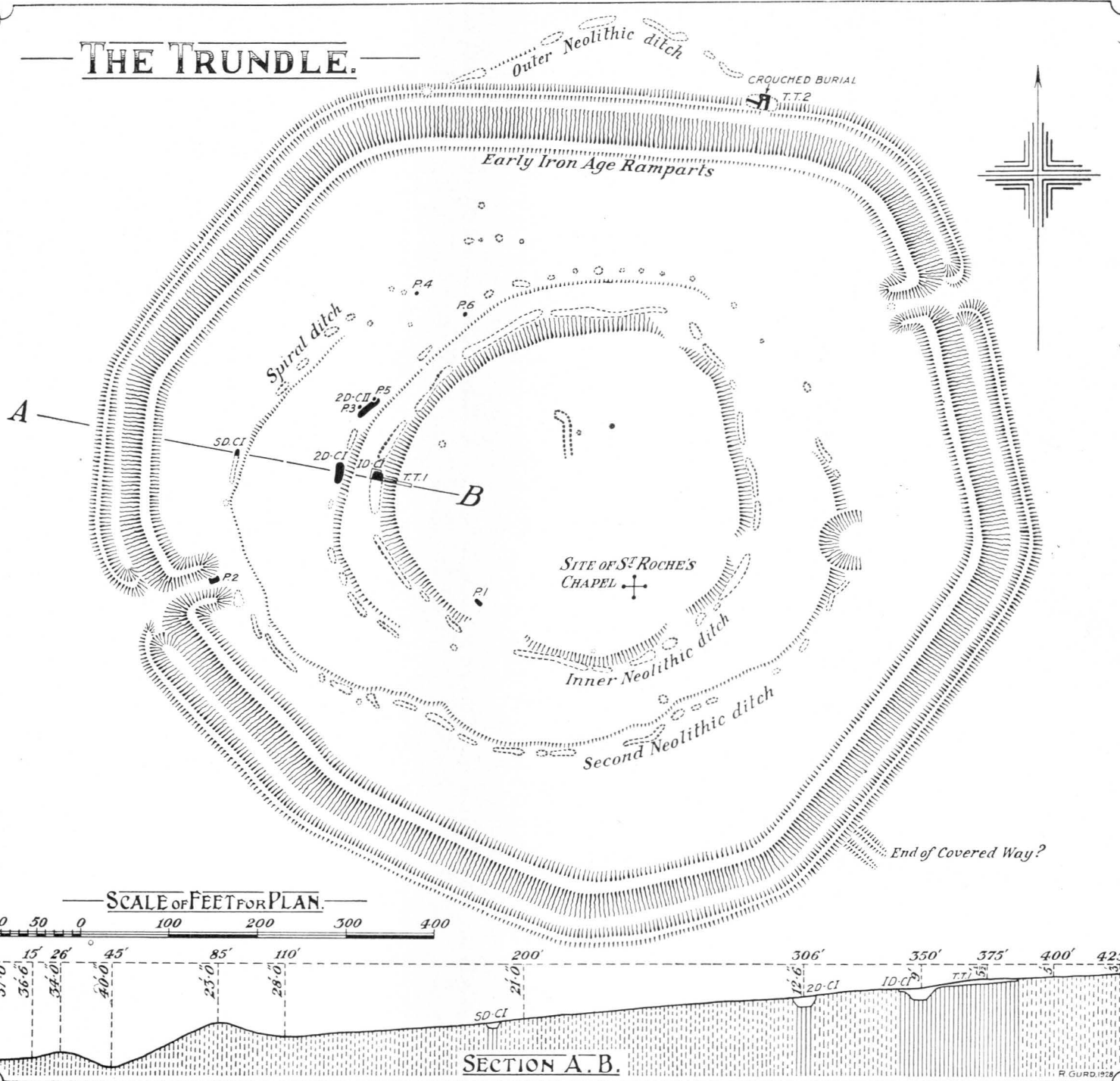
One other point is worthy of mention. In a charter of the year 725 Nunna, King of Sussex, granted to Edbert, bishop of Selsey, a piece of land at "Hugabeorg and Dene" in Sussex.³ Though none of the landmarks

¹ S.A.C., LVIII., 74-80.

² Stukeley (*Itinerarium Curiosum*, plate 43) shows six courses of masonry of the chapel still standing in 1723.

³ Birch, *Cart. Sax.*, I., 211.

THE TRUNDLE.



SCALE OF FEET FOR PLAN.

SECTION A. B.

given have yet been identified, the references it contains to Dene and "lavingtun" show that the charter concerns land in the neighbourhood of East or West Dean, near Singleton. One of the landmarks quoted is "billingabyrig," and as the Trundle is the only *burh* at present known for some miles around, it would seem probable that this may have been the "billingabyrig" of the Saxons—a name which, if it had survived to the present day, would normally have become "Billingbury." Some confirmation may perhaps be derived from the passage of a parish boundary along the southern rampart of the camp, as parish boundaries sometimes perpetuate the bounds of land detailed in early charters, but until the other landmarks of the present document are found, the identification of the Trundle with "billingabyrig" cannot be considered more than a probability.

Our thanks are due to H. G. the Duke of Richmond for so readily permitting the excavation to be carried out on his land, and for the interest he has taken in the proceedings. Thanks also are due to the tenant, Mr. Jack of Singleton Manor, who readily granted his consent. The writer was assisted in the work by Mr. Reginald P. R. Williamson of Emmanuel, Cambridge, and for various parts of the time by Mr. Piggott, of Churcher's College, Petersfield; Mr. Stuart Piggott,⁴ of Reading Museum; Mr. C. W. Phillips, M.A., of Selwyn, Cambridge; Mr. T. B. L. Bryan, of Christ's, Cambridge; and Mr. F. L. Billows. Only one hired labourer was employed, and for this we were fortunate in getting the services of H. A. Gordon, of Lewes, who had worked for us at the Caburn. The whole party lived under canvas within the circuit of the ramparts during the period of the digging, which lasted from August 7 to September 1. Not a single hour's work was lost owing to rain.

The work done consisted first in making a detailed plan of the site (Plate II.), which shows the massive

⁴ Since appointed to the Royal Commission for Ancient Monuments for Wales.

rampart of polygonal plan with its two recurved entrances. Within the area enclosed by this vallum are the remains of the neolithic defences, consisting of reduced ramparts with ditches interrupted by very numerous causeways of undisturbed chalk. These segmented or interrupted ditches are characteristic of neolithic castrametation as exemplified at Windmill Hill, Avebury. Their character cannot always be discerned by the eye, but their plan can often be recovered by going over the ground with a rammer and putting in pegs at the points where the percussion-note changes, the disturbed soil of a filled-in ditch yielding a booming note which contrasts with the dead sound heard over solid chalk. The plan of the interrupted ditches at the Trundle was obtained in this way by means of an 8 lb. rammer, but the long, rank grass made absolute accuracy difficult, so that the resulting plan must be regarded as approximate until checked by the spade. It reveals an inner line of broken ditches surrounding the top of the hill and enclosing an area of 3 acres, the accompanying rampart being still some 7 ft. high on the north side. A second line begins on the south-west, encircles the hill one and a quarter times, and is lost on the north-west, the overlapping portion being here distinguished as the "Spiral Ditch." Only a small portion of the outermost neolithic line survives. It is to be found *outside* the great rampart on the north side, the remainder of the circuit probably having been buried under this later vallum. In addition to these ditches the soundings revealed several scattered pits, of which a great many more probably exist.

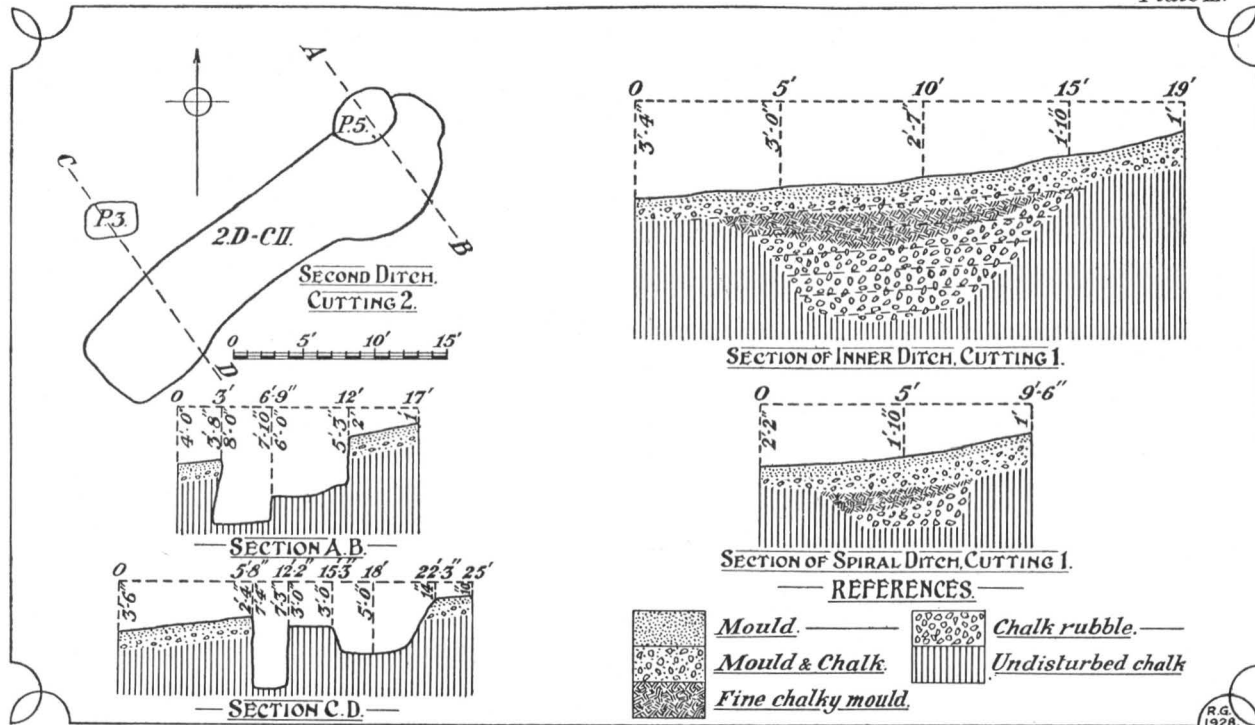
The actual digging consisted in making one cutting into the Inner Ditch (I.D.-C.I.), with an extension through the adjacent rampart (T.T.1), two cuttings into the Second Ditch (2 D.-C.I. and 2 D.-C.II.), one into the Spiral Ditch (S.D.-C.I.), and a series of trial trenches into the Outer Ditch at its eastern intersection with the great rampart (T.T.2). In addition, six scattered pits were opened, all of which proved to

belong to the Early Iron Age. Although the great rampart was not examined with the spade, there is very little doubt that it belongs to the Early Iron Age occupation of the hill, judging from the analogy of camps that have been excavated elsewhere.

The cuttings into the ditches were made by digging in a series of horizontal spits, and keeping separate all the objects found in each spit. The spits were numbered from above downwards and each object or group of objects discovered was marked with the number of the cutting, and of the spit in which it was found. The finds, together with the depth of the various spits, are recorded in the tables at the end of this report. An object, therefore, labelled "2 D.-C.I.4," was found in the Second Ditch, cutting I., and spit 4, and reference to the tables shows that it therefore came from a depth of 24 to 36 inches below the surface.

INNER DITCH: CUTTING I. (I.D.-C.I.).

This cutting, 15 ft. long and 12 ft. wide, was made into the end of a segment of the inner ditch, adjacent to a causeway. A vertical section through the filling was thus exposed, revealing three distinct layers below the turf: (A) Mould and chalk; (B) fine chalky mould; and (C) clean chalk rubble. Excavation was carried on in 9-inch spits, and the relation of these spits to the three layers is shown in the section on Plate III. It was found that layer C represents the silting that took place during, and soon after, the period of occupation of the camp by the original neolithic builders, and contained typical neolithic pottery of so-called Windmill Hill type. Immediately above this were traces of what must have been a thick turf-line, representing the surface throughout the Bronze Age, when the site was deserted. Layer B was almost sterile; what little was found was referable to the Hallstatt-La Tène I. period, and this stratum probably represents the efforts of the earliest iron-users to level the old neolithic ramparts. Above this, layer A represents the occupation-level of



the Hallstatt-La Tène I. people, being full of pottery-shards of that period, together with a few pieces referable to La Tène II. times.

In a small part of the filling of this ditch these three layers were dug out separately, and objects found in them are recorded as coming from spits A, B and C respectively in the tables at the end. The amount so dug was, however, not sufficient to be representative.

A study of the relic tables will reveal what holds good of all the cuttings, but is most obvious here, namely, that (1) the flint flakes are commonest in the neolithic levels, and scanty in the Early Iron Age part, though undoubtedly derived from the former; (2) pot-boilers are far commoner in the Celtic than in the neolithic settlements; (3) beach-pebbles selected as sling-stones belong exclusively to the Early Iron Age; and (4) small fragments of broken querns are to be assigned to the Early Iron Age, in contrast to the larger fragments of quern and grain-rubbers, such as occurred in the neolithic levels.

From the incidence of iron pyrites and round fossil sponges (*Porosphaera globularis*) in all the cuttings there is no reason to suppose that these things, which occur naturally in the chalk, were collected for any purpose in any particular period.

SECOND DITCH: CUTTING I. (2 D.-C.I.).

In this cutting the whole of the filling was removed from a complete segment of the second ditch, 25 ft. long and 8 to 10 ft. wide, between two causeways. As no vertical section of the filling was exposed, its layers were not recorded. The Early Iron Age occupation of the superficial part of the filling was not so marked as in I.D.-C.I., but otherwise the general findings were similar.

SECOND DITCH: CUTTING II. (2 D.-C.II.).

This cutting, like the preceding, cleared out a whole segment of the second ditch, 30 ft. long by 6 to 8 ft. wide, between causeways (see Plate III. for plan and



PLATE IV. THE SECOND NEOLITHIC DITCH, CUTTING II., AFTER EXCAVATION.
The further figure stands in Pit 5.

section). No vertical section of the filling was exposed. The Early Iron Age occupation level was almost confined to the top 9 inches, the soil below yielding remains of the neolithic period down to 27 inches, below which the filling was absolutely sterile down to the bottom at or about 42 inches. The majority of the neolithic remains were found in a line down the centre of the ditch in spit 3 (18 to 27 inches).

Pit 5 (Early Iron Age) had been sunk partly through the filling of this segment of the second ditch and into the solid chalk to a depth of 2 ft. below the bottom of the latter (Plates III. and IV.).

SPIRAL DITCH: CUTTING I. (S.D.-C.I.).

This cutting, 8 ft. long by 6 ft. wide, was made into the end of a segment of the spiral ditch adjacent to a causeway. The vertical section of the filling corresponded with that exposed in I.D.-C.I.

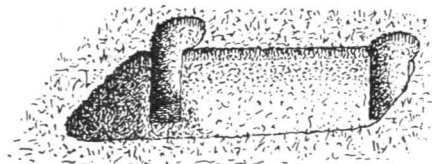
PIT 1 (P. 1).

This large rectangular pit, situated near the highest part of the hill, had the following dimensions:—

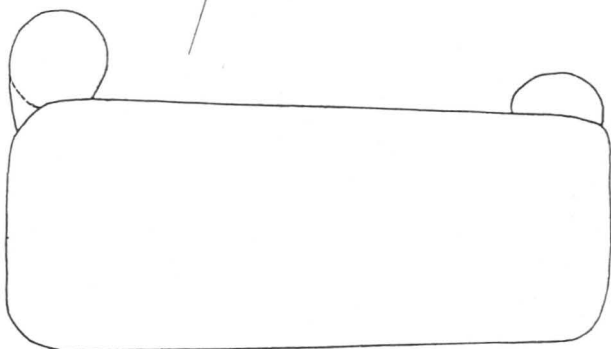
- Length: $9\frac{1}{2}$ ft.
- Breadth (N.W. end): $4\frac{1}{2}$ ft.
- „ (S.E. end): 5 ft.
- Depth: 54–57 inches.
- Orientation of long axis: N.W.–S.E.

The walls were vertical and had been accurately tooled with a metal adze having a blade 16 mm. wide, as revealed by numerous tool-marks. A trodden slope existed near the middle of the south-west wall, some 2 feet above the floor, and projecting 2 ft. into the pit towards which it inclined (Plate V.). The upper 27 inches of the filling of the pit contained principally shards of Hallstatt-La Tène I. ware with some admixture of later La Tène pottery, while the lower half of the pit yielded considerable quantities of fragments of good quality La Tène II. pots, half of a nice saucepan-shaped vessel being found under the trodden slope alluded to above (Plate XIII., No. 155).

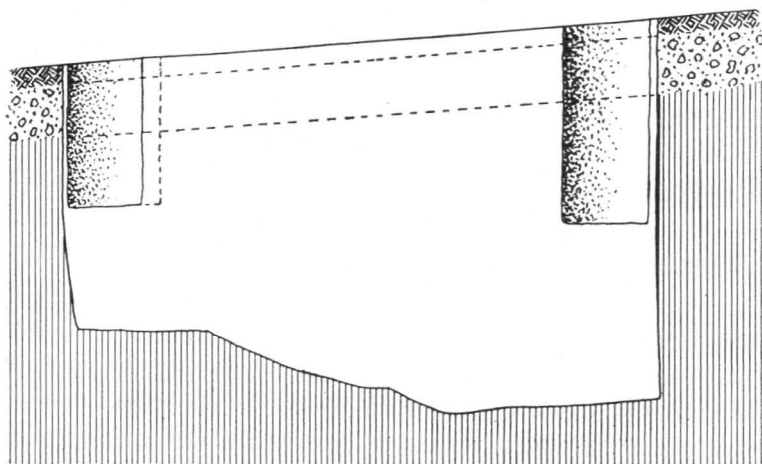
— **PIT N^o 2** —
 Showing Post-Holes.



— Sketch View. —






— Plan. —



— Sectional Elevation. —

Inches 12 6 0 1 2 3 4 5 6 7 8 9 10 Feet.

— References. —

Turf mould  Mould & Chalk & large Flints.  Undisturbed Chalk. 

It was evident that this pit had been in the nature of a cellar under the floor of a hut of the La Tène II. period, that it was used as a receptacle for broken pottery, pot-boilers and other rubbish, and that it was entered from the middle of the south-west side. After the removal of the hut which had concealed and protected it, it had been filled in with soil containing earlier potsherds.

PIT 2 (P. 2).

This curious pit was accidentally discovered by percussion in the south-west entrance of the Early Iron Age camp. There was absolutely no visible indication of its presence until it was revealed by the rammer in the process of percussing out the neolithic spiral ditch. Its dimensions are as follows:

Length: 12 ft.
Breadth (W. end): 5 ft.
 „ (E. end): $4\frac{1}{2}$ ft.
Depth (W. end): $5\frac{1}{2}$ ft.
 „ (E. end): 8 ft.
Orientation: E.N.E.-W.S.W.
Shape: Rectangular.

At the two extremities of the north wall what appear to have been two large post-holes were visible in section (Plate V.). Each was cylindrical and carefully tooled, and each had a diameter of 2 ft. The western hole was sunk to a depth of 3 ft. below the surface, and had very plain marks of a metal tool upon its floor. The eastern hole was 4 feet deep. Judging from their position in the entrance of the camp it would seem reasonably certain that these were the holes in which massive wooden uprights stood to support either the actual gates or perhaps a wooden gate-tower. Search for other post-holes was deferred to another occasion as our attention was primarily directed to neolithic features.

The pit was filled with clean chalk rubble, and the walls, which showed the marks of an adze-headed metal tool, had not been exposed to the weather. A

characteristic shard of La Tène II. ware occurred at a depth of $4\frac{1}{2}$ ft., below which the filling was sterile. The entrance to the camp, above the filling of the pit, was found to have been paved with large blocks of flint which had been squared, as for building, the fractured surfaces being patinated a thick white.

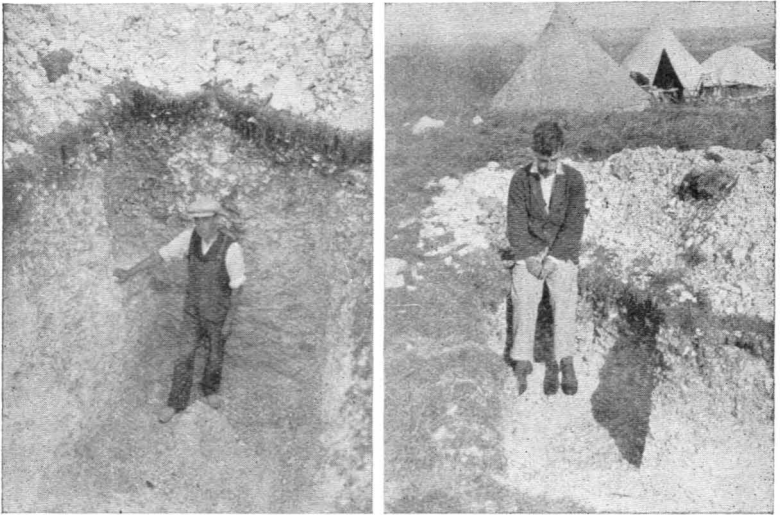


PLATE V. Left : Pit 2; the man's hand rests on the floor of the eastern post-hole.
Right: the western post-hole seen in section on the wall of Pit 2.

The date of this pit can hardly be other than Early Iron Age, i.e. it was contemporary with the great ramparts. Its purpose, however, remains a mystery, situated as it is right in the fairway of the gate. It must have been filled in very soon after having been dug, and cannot therefore have been intended as a trap for unwelcome visitors. It is noticeable that another pit has been revealed by percussion in precisely the same position in the fairway of the north-east entrance of the camp. Excavation of this may throw more light on the question, but it seems evident that

both pits formed an integral part of the scheme of defence of the two entrances.

PIT 3 (P. 3).

This small refuse-pit is situated close to the side of the second neolithic ditch (2 D.-C. II.), and was discovered in the process of percussing out the limits of the latter (Plate III.). Its dimensions are as follows:

Length (top): 3 ft. 4 in.
 „ (bottom): 2 ft. 10 in.
 Breadth (top): 2 ft. 6 in.
 „ (bottom): 2 ft. 6 in.
 Depth: 5 ft. 4 in.
 Orientation: E.-W.
 Shape: Rectangular.

Pickmarks visible on the walls had been made, some by an antler-pick or tool of similar shape, others by a metal adze with convex working edge. The principal features of this pit were: (1) The La Tène II. pottery, indicating its period; (2) the large number of pot-boilers—over 1100 were counted; and (3) the discovery of the greater part of the cranium of a human skull.

PIT 4 (P. 4).

This proved to be only a shallow depression, 2 ft. deep and 3 ft. in diameter, yielding a few bones of ox and sheep.

PIT 5 (P. 5).

This small oval rubbish pit had been sunk through the edge of the filling of the neolithic second ditch (2 D.-C. II.), and into the solid chalk to a depth of 2 ft. below the bottom of the latter. It contained La Tène II. pottery and part of a left human ulna. Its dimensions were as follows:

Length: 4 ft. 6 in.
 Breadth: 3 ft. 9 in.
 Depth: 55 inches.
 Orientation: N.E.-S.W.
 Shape: Oval.

It had been worked with a metal adze having a convex working edge.

PIT 6 (P. 6).

This was a narrow, circular pit, situated in the line of the neolithic second ditch, but dating from the Early Iron Age (La Tène II.). Its dimensions are as follows:

Diameter (top): 4 ft. 3 in.
 „ (bottom): 3 ft. 0 in.
 Depth: 6 ft. 0 in.

It has been worked with a metal adze having a convex working edge.

TRIAL TRENCH 1 (T.T.1).

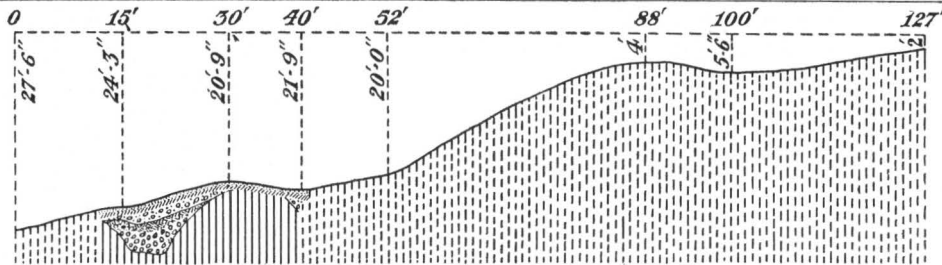
This trench was carried eastwards from I.D.-C.I. through the adjoining neolithic rampart, but yielded no information. The only finds were scanty relics of the Early Iron Age from the surface. Great difficulty was experienced in determining the surface of the undisturbed chalk underlying the rampart—not an uncommon problem in some excavations.

TRIAL TRENCH 2 (T.T.2) AND CROUCHED BURIAL.

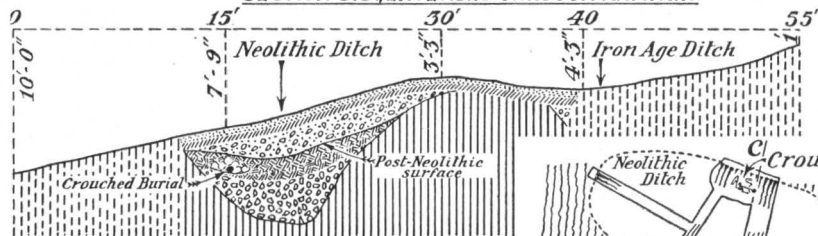
A trial trench was dug through the outer Early Iron Age rampart at the point where the eastern end of the outer neolithic ditch appears to run under it. The object was to verify this apparent relationship. By extending the trench in various directions the limits of a segment of the neolithic ditch, 9 ft. deep, were roughly determined as shown in the plan (Plate VI.). The filling consisted of coarse chalk rubble in the lower 3 ft., above which was fine chalk rubble. The upper limit of the latter was evidently the old surface line upon which the builders of the Iron Age Camp threw up their outer rampart which at this point is meagre and consists of (1) fine chalk rubble with mould, above which is (2) a layer of mould and chalk. The old surface line covering the silting of the neolithic ditch may conveniently be called the post-neolithic surface.

This series of trial trenches proved to be sterile except for a crouched burial, a couple of animal bones, and a piece of scored-chalk. The discovery of the skeleton was entirely accidental, but is particularly

EASTERN JUNCTION OF OUTER NEOLITHIC LINE WITH EARLY IRON AGE RAMPART ON NORTH SIDE OF CAMP.



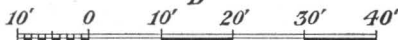
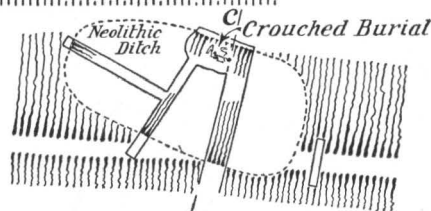
SECTION C. D., EXTENDED THROUGH RAMPART.



SECTION C. D.

REFERENCES.

- | | | | |
|---|--------------------------------------|---|-----------------------------|
|  | <u>Mould.</u> |  | <u>Fine chalk rubble.</u> |
|  | <u>Mould & Chalk.</u> |  | <u>Coarse chalk rubble.</u> |
|  | <u>Fine chalk rubble with mould.</u> |  | <u>Undisturbed chalk.</u> |



R.G.
1928.

interesting on account of its position in relation to the ancient defences of the hill. The bones are those of a young adult woman, whose body was laid upon its back with the knees drawn up to the right and the head turned slightly to the left. The right arm was flexed at the elbow with the hand beside the right

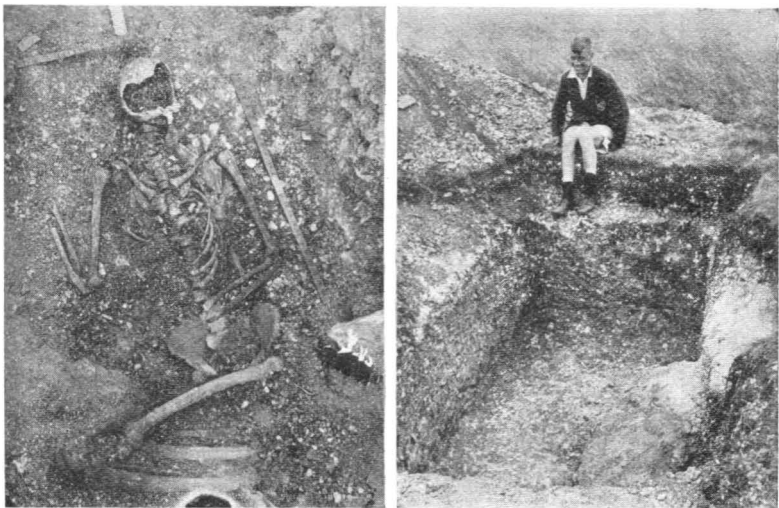


PLATE VII. Left: Vertical view of the Human Skeleton *in situ*.
Right: Pit 1, showing the trodden slope.

shoulder; the left forearm lay across the abdomen with the fingers curling round the right hip-bone. The whole skeleton occupied a space 3 ft. 8 in. in length by 2 ft. 2 in. in breadth, and a line drawn through the feet, vertebral column and head pointed 12° south of true east (Plate VII.).

The body had been buried under a small cairn of chalk-blocks in the upper part of the silting of the neolithic ditch, and therefore just below the post-neolithic surface, and it had subsequently been covered over by the Celtic rampart. This means that at the time of the burial the ditch had silted up to the level at which it remained for between 1000 and 2000 years,

thus indicating that the neolithic camp must have been deserted for a very considerable time before the burial took place, and this can scarcely have been later than the Early Bronze Age, judging from the crouched position and the nature of the skeletal remains.

The only object found with the skeleton was a small *Porosphæra globularis* having a natural perforation. This fact is recorded here because Mr. H. S. Toms has reason to believe that in some cases such may have been utilised as beads to adorn the person.

THE POTTERY (Plates VIII.—XIII.).

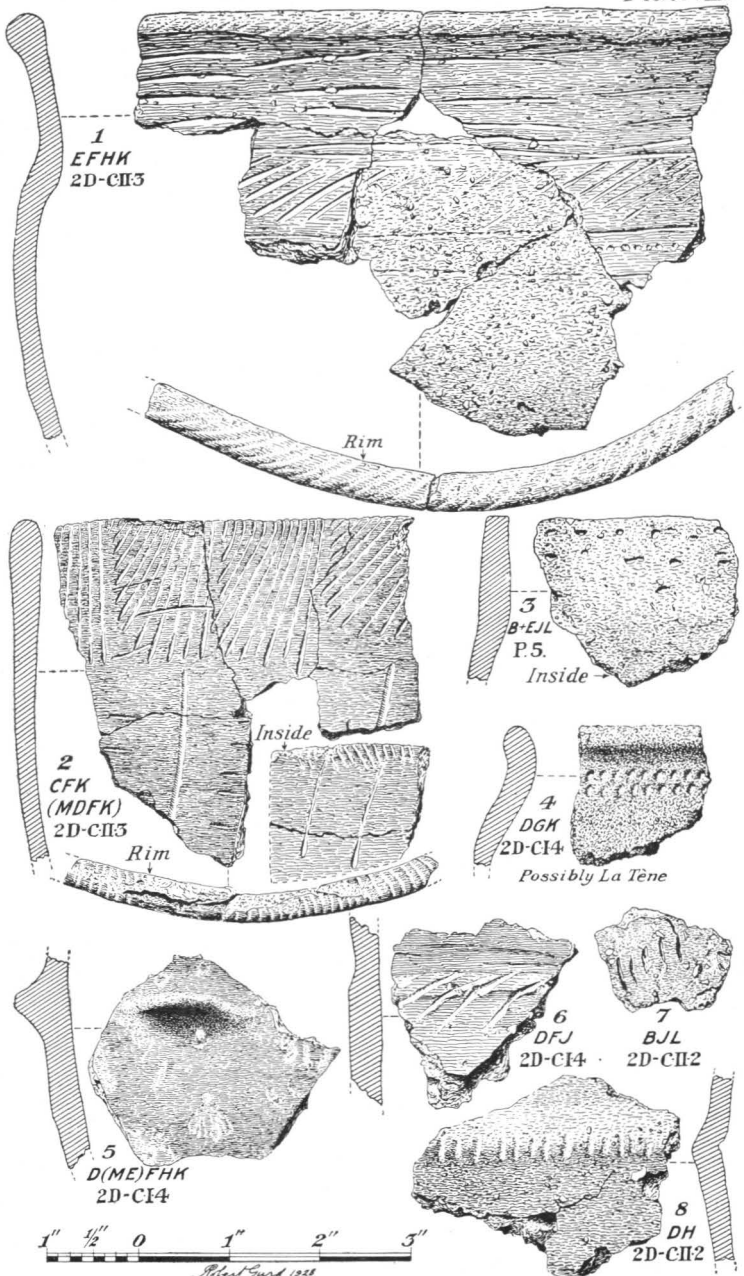
The pottery found in the excavation belongs to three types:—(a) neolithic; (b) Hallstatt-La Tène I., and (c) La Tène II.

In the illustrations, which show all the principal characteristic pieces, every effort has been made to render descriptions in the text unnecessary. For this purpose each piece illustrated is marked with three things:—(1) Its reference number; (2) a series of code-letters indicating the nature of the ware, etc.; and (3) the number of the spit and cutting or pit in which it was found (as "2 D.-C.II.3" or "P. 5"). Where profiles of pieces are drawn the *interior* surface is always shown to the *right*. In the case of the neolithic pottery where ornamentation sometimes appears on the inner surface as well as on the outer, the aspect shown in the drawing must be understood to be the exterior except where indicated by the word "Inside."

The following is the key to the code-letters indicating the nature of the ware:—

<i>A</i> Grey	<i>J</i> Coarse flint grits
<i>B</i> Red	<i>K</i> Hard
<i>C</i> Black	<i>L</i> Soft
<i>D</i> Brownish grey	<i>M</i> Interior
<i>E</i> Buff	<i>N</i> Soapy
<i>F</i> Smooth surface	<i>O</i> Smooth slip
<i>G</i> Fine flint grits	<i>P</i> Badly baked.
<i>H</i> Medium flint grits	

Thus, No. 5 (Plate VIII.), which is labelled "*D(ME)FHK—2 D.-C.I.4*," would be interpreted thus:—"Brownish grey, interior



THE TRUNDLE: NEOLITHIC POTTERY.

buff, smooth surface, medium flint grits, hard; found in the second ditch, cutting I, spit 4, viz. between 24 and 36 inches deep."

Further, if *B* signifies "red," *B?* will mean "reddish," and *D(B?)* will be "brownish grey with a reddish tinge." Similarly *AE* will signify a colour between grey and buff, while *A+E* will describe a piece which is grey in some parts and buff in others.

(a) *Neolithic Pottery* (Plates VIII.-X.).

The pottery from the neolithic levels closely resembles that found by Mr. Keiller at Windmill Hill, and belongs to what Mr. E. T. Leeds calls the Windmill Hill type. Its characteristics, embracing vessels of several types, include the following:

(1) The bottoms are usually round; no trace of flat bottoms occurred in our digging, though they have been found elsewhere.

(2) Handles, when they occur, take the form of small horizontal ledges, without perforations in our examples (cf. Nos. 5, 17 and 154), though perforations do occur in examples from other sites, both in horizontal and vertical handles.

(3) There is a considerable variety of rims, mostly developments from the upright rim with lip which is round in section, which is the commonest type (cf. Nos. 2, 16 and 21). The varieties consist principally in a thickening of the lip, either outwards or inwards or both. More rarely there is eversion (No. 11), or even a tendency to the formation of a shoulder below a slightly everted lip (No. 1). Carinated shoulders, so common at Abingdon and Whitehawk, were very rare here.

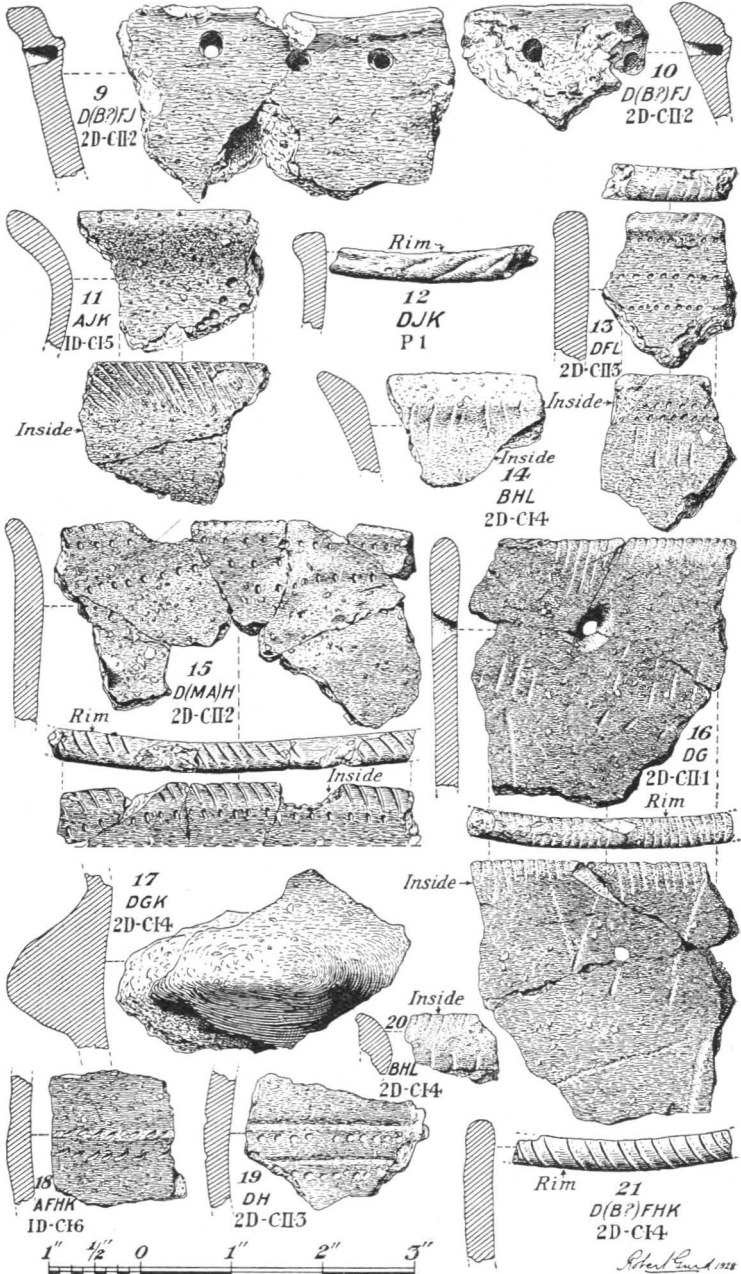
(4) Ornament is scarce and sparse, and is practically confined to parallel combings and rows of stabbed dots, one particularly characteristic variety being a series of oblique or transverse parallel lines on the lip (cf. Nos. 1, 2, 12, 13, 15, 16, 20, 21).

There does not seem to be any doubt that all the different types here classed as neolithic are contemporary. Pottery of the Mortlake (W. Kennet or Peterborough) type was entirely absent.

The following pieces call for special comment:

No. 4 is so suggestive of La Tène ware that one cannot help wondering if it may be an intrusion from a higher level, introduced by a rabbit.

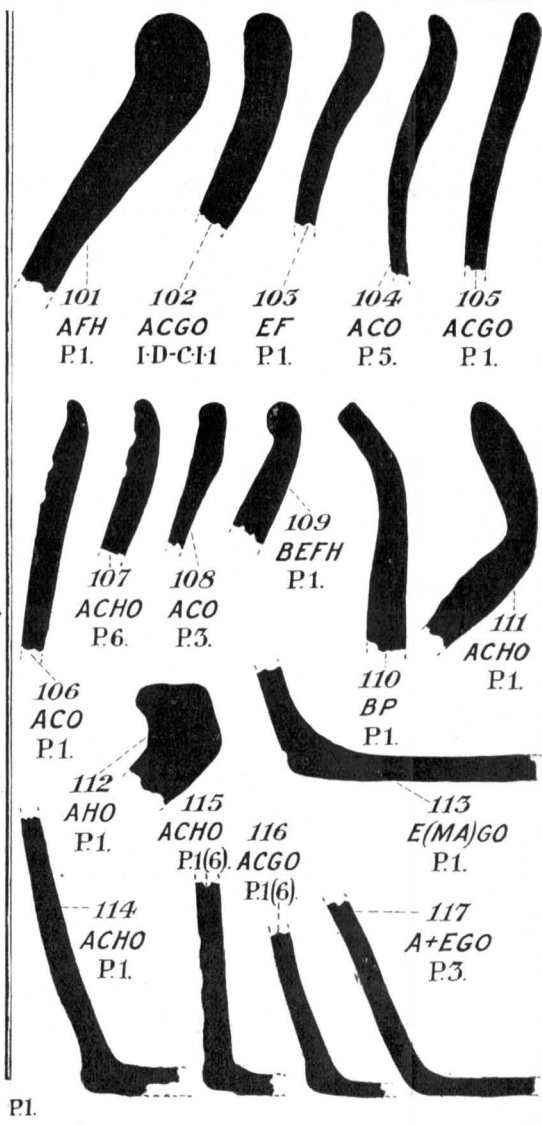
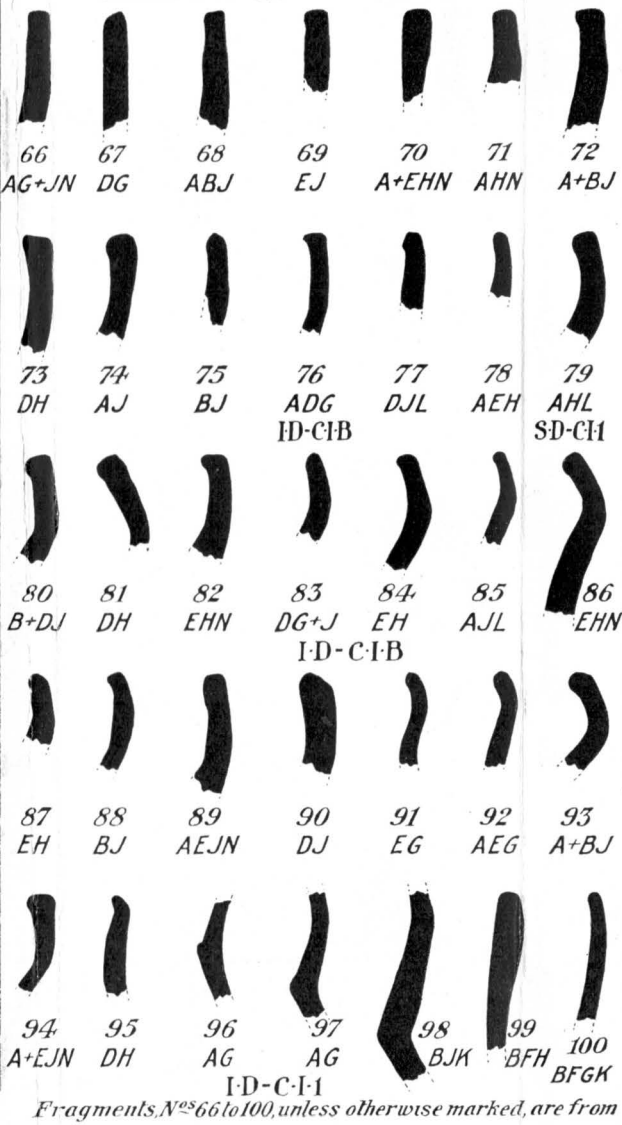
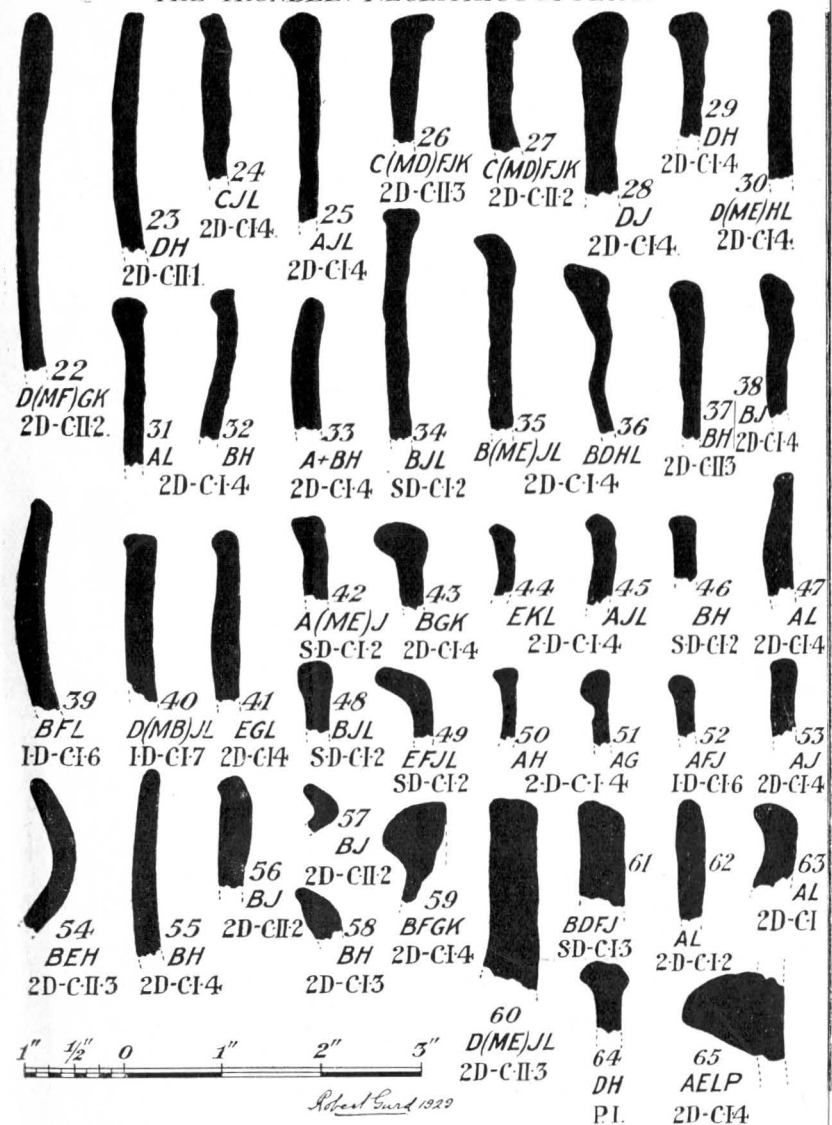
No. 8 is carinated, the prominence being marked externally with short, vertical, parallel grooves. The internal surface has a marked furrow corresponding to the external ridge—a distinctly unusual and noteworthy feature. In the Pitt Rivers Museum at Oxford Mr. Balfour has kindly shown me a shard found by Pitt Rivers at the depth of 13 ft. in the shaft of the large flint-mine shaft at



THE TRUNDLE: NEOLITHIC POTTERY.

HALLSTATT-LA TÈNE I. POTTERY.

LA TÈNE II. POTTERY. Plate X.



Fragments, Nos 66 to 100, unless otherwise marked, are from P1.

Cissbury. This shard, which preserves a portion of the lip of the vessel, has the same carination, though without the ornament, and it also has precisely the same internal furrow. The ware of the Cissbury piece is buff (interior black), fine to medium flint grits, hard. Similar internal furrows occurred on several neolithic shards from Whitehawk Camp, Brighton.

Nos. 9 and 10, evidently belonging to one vessel, closely resemble a perforated shard found at Grime's Graves in a hut-circle situated above a filled-in mine-shaft.⁵ The chief differences are that the latter specimen possesses, in addition to the perforations, a round boss and the parallel oblique lip-markings which are so characteristic of this period. In our examples the perforations did not originally penetrate the wall of the vessel, but caused the soft clay to bulge inwards, the bulge subsequently breaking off in one instance and leaving the perforation complete (see illustration).

No. 16. It is uncertain whether the perforation is accidental or part of the original design—probably the latter.

(b) *Hallstatt-La Tène I. Pottery* (Plates X. and XI.).

The pottery which represents the next occupation level above the neolithic, has been assigned by Mr. Reginald Smith to the late Hallstatt period and compared by him with that found at Scarborough.⁶ Mr. Christopher Hawkes tells me that it corresponds with that found by the Hampshire Field Club in St. Catharine's Hill Camp at Winchester, which was destroyed and abandoned early in the La Tène II. period.

The noteworthy features are: (1) Finger-nail and finger-tip impressions applied to the body of the vessel, not to raised bands (cf. Nos. 120-123); (2) the notched rim or "pie-crust" (cf. Nos. 130, 134, 135); (3) the lip square in section; (4) the neck everted at the Hallstatt angle; (5) the paste hard with fine or medium grit. For the most part pottery of this period has quite a different feel to that of the neolithic or later La Tène periods.

(c) *La Tène II. Pottery* (Plates X., XII. and XIII.).

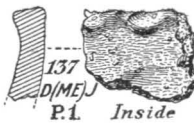
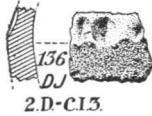
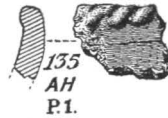
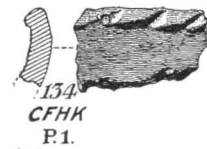
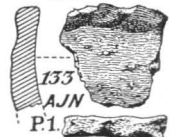
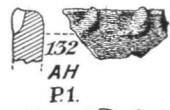
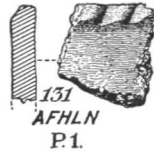
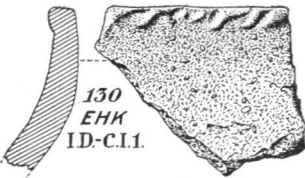
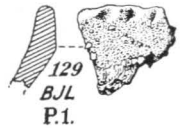
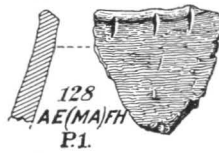
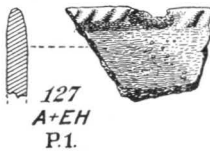
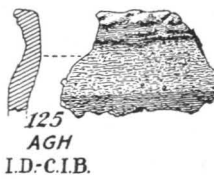
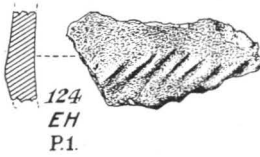
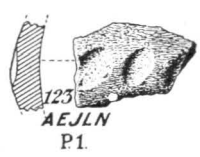
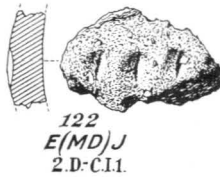
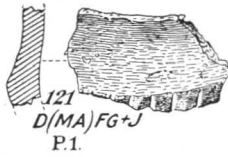
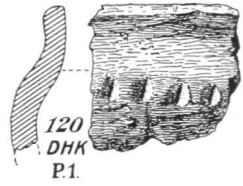
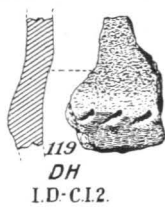
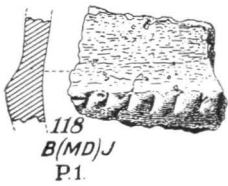
This represents the latest period of occupation of the site, so far as present knowledge goes. It is to this period that the six pits belong. The pottery is mostly of characteristic hard ware, with smooth, grey-black

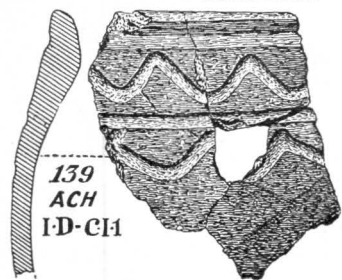
⁵ *Excavations at Grime's Graves*, 1914, pp. 117, 212, and fig. 82.

⁶ *Arch.*, LXXVII., 179.

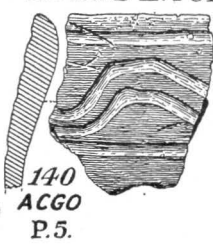
Plate XI.

THE TRUNDLE: HALLSTATT-LA TÈNE I. POTTERY.

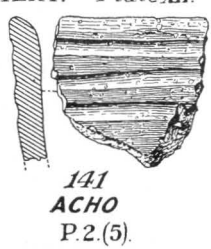




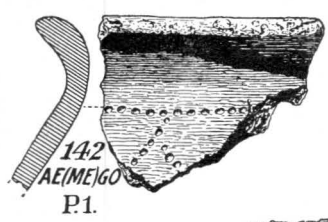
139
ACH
I-D-CH



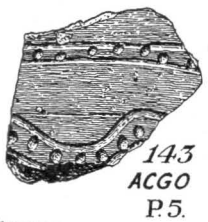
140
ACGO
P.5.



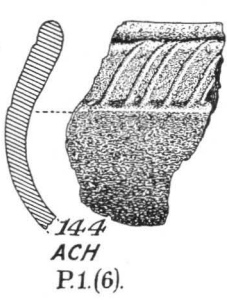
141
ACHO
P.2.(5).



142
AE(ME)GO
P.1.



143
ACGO
P.5.



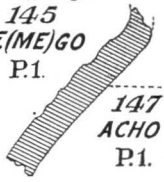
144
ACH
P.1.(6).



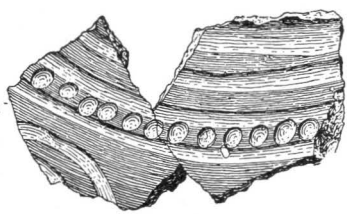
146
AE(ME)GO
P.1.



145
AE(ME)GO
P.1.



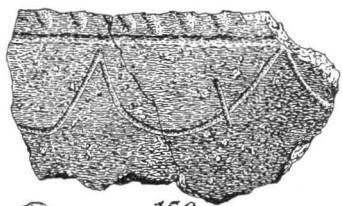
147
ACHO
P.1.



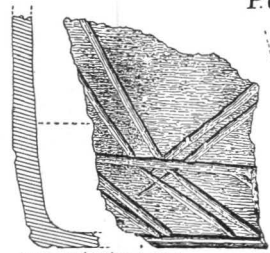
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ACHO
P.5.



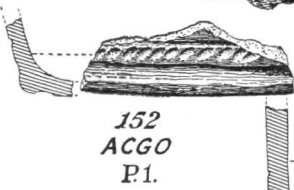
149
ACHO
P.6.



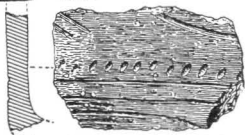
150
ACFH
P.3.



151. E(MC)KO. P.6.



152
ACGO
P.1.



153. ACGO. P.1.



surface, and ornamented with straight or wavy shallow grooves or rows of slight depressions. Judging from the fragmentary remains, the commonest form was a pot shaped like a saucepan without a handle (cf. Nos. 155 and 156), though globular bowls with everted rims also occur (cf. Nos. 142, 147). Except for a single groove running just within the edge in some cases, the bases of the pots were not ornamented in any way.

BONE OBJECTS (Plate XIV).

No. 161. A bone tool shaped like a modern nib, well-carved and symmetrical. Use unknown. Early Iron Age from 2 D.-C.I.2.

No. 162. Part of a tool formed by squaring the sides of a hollow bone and tapering it to a point. Use and period uncertain, probably Early Iron Age. From 2 D.-C.I.4.

Nos. 163 and 164. Two pointed bone tools from neolithic levels (I.D.-C.I.5 and 2 D.-C.II.3). Such bone points are rather characteristic of this period, and occur elsewhere in association with neolithic pottery of Windmill Hill type. At Grime's Graves some specimens were found, one of which appeared to have been used in ornamenting pottery.⁷ Another possible use is that of pressure-flaking in the final stages of the manufacture of flint implements, and especially in the production of the minute serrations on the edges of certain flakes to be described presently.

No. 165. Part of the handle of a weaving-comb, ornamented with dot-and-circle pattern. One of the two fragments of which it is composed had been partially burnt. La Tène II. from Pit 1 (spit 5).

No. 175. Carefully carved object of bone, possibly a phallus. It is complete in itself, having been severed by being sawn all round to a depth of 3 to 4 mm. and the remainder broken through. It must be neolithic, coming from I.D.-C.I.4, and is particularly interesting as an example of the work of a flint saw (see below, "Serrated Flakes").

IRON OBJECTS (Plate XIV.).

No. 166. Iron ring from I.D.-C.I.1, closely resembling in size one from the Caburn (*S.A.C.*, LXVIII., p. 10, fig. 25).

Nos. 167 and 168. Small iron spear-head and iron ferrule for hinder end of spear, found side by side in Pit 6 at 56 inches. La Tène II. Each had a rivet.

No. 169. Small iron spear-head with point bent and socket broken off. From I.D.-C.I.1.

Nos. 170 and 171. Nondescript iron objects.

⁷ *Grime's Graves Report*, 1914, pp. 213-4.

Plate XIII.
THE TRUNDLE: POTTERY RESTORATIONS.

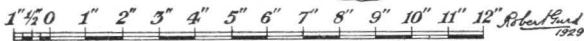
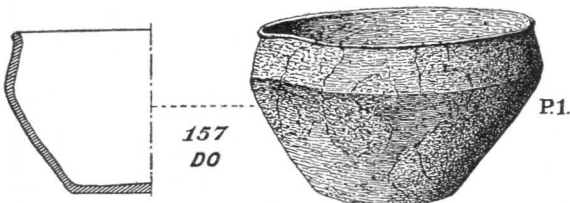
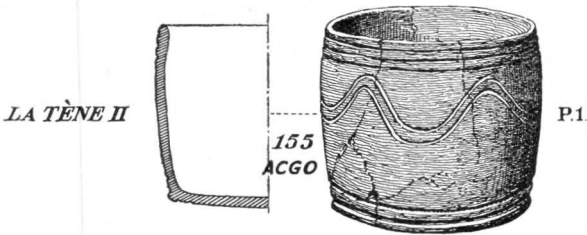
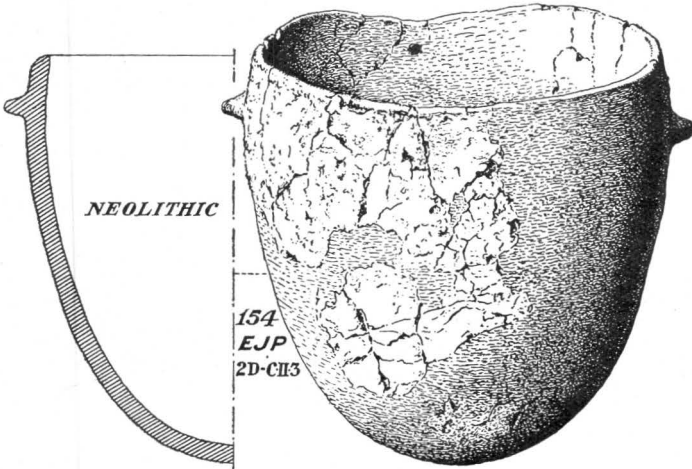
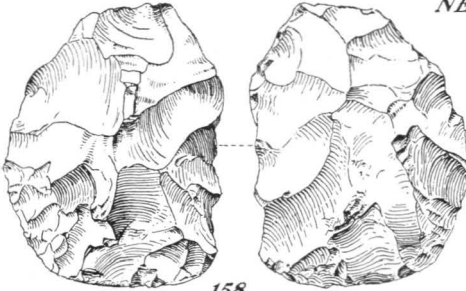


Plate XIV.

NEOLITHIC.



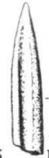
158
ID-C.I.C.



159
2D-C.I.4.

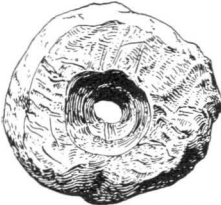


163
2D-C.II.3.

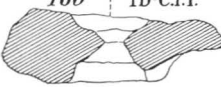


164
ID-C.I.5.

EARLY IRON AGE.



160
ID-C.I.1.



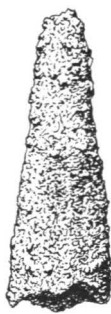
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2D-C.I.2.



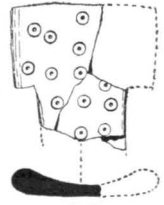
162
2D-C.I.4.



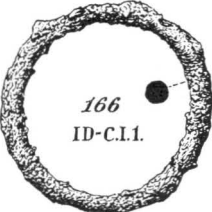
167
P.6.



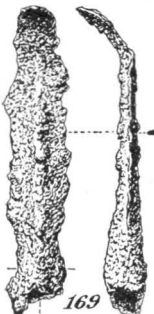
168
P.6.



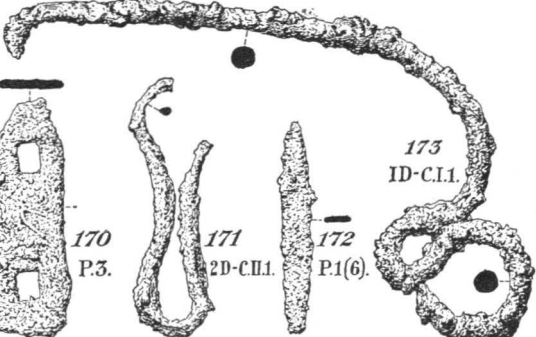
165
P.1.(5).



166
ID-C.I.1.



169
ID-C.I.1.



173
ID-C.I.1.



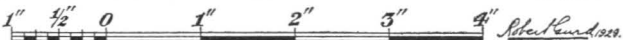
170
P.3.



171
2D-C.II.1.



172
P.1(6).

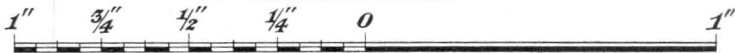
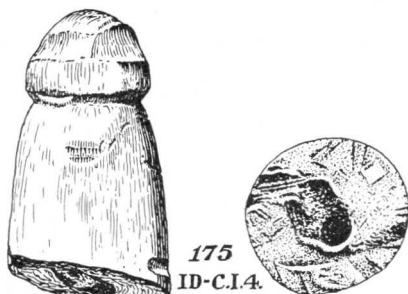
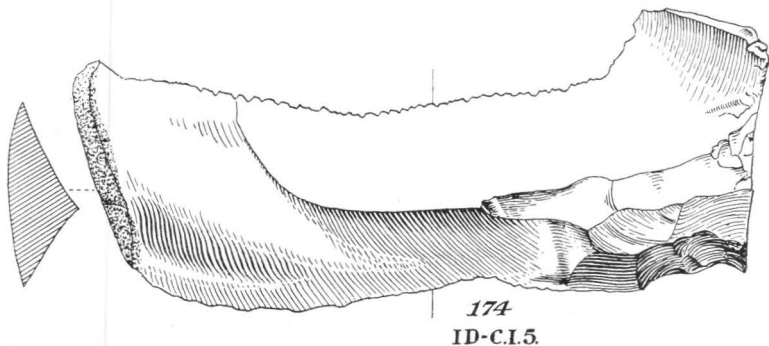


Robert Keim 1929.

No. 172. Small knife-blade of iron (Pit 1, spit 6), resembling one from the Caburn (*S.A.C.*, LXVIII., p. 10, fig. 24).

No. 173. Fine and complete specimen of a Celtic latch-lifter of iron, with loop handle. Compare specimen found by Pitt Rivers at the Caburn (*Arch.*, XLVI., pl. xxiv., No. 17).

Plate XV



Robert Curd 1929

FLINT IMPLEMENTS.

There was evidence of local flint-knapping in the presence of considerable quantities of flakes, which, though present in all spits, were commonest in neolithic levels, as will be seen in the tables. The few actual tools found, however, were mostly rough choppers and cores, with one hammer-stone (Pit 1), one rough-out celt (I.D.-C.I.4), two rough scrapers and

a borer (No. 159). Besides some rather nice concores the neatest piece of work is afforded by a carefully chipped tool resembling a small ovate (No. 158).

Serrated Flakes (No. 174).—The most numerous and interesting class of worked flints consisted of ordinary flakes with one or more edges finely serrated to make them more efficient as cutting tools. These serrations, which number from 25 to 35 to the inch, have been intentionally produced by pressure-flaking from one face of the flake, generally from the flatter face, and they are not merely the result of using the flake for cutting hard substances. The results of such use can be seen in some flakes where the edge has been irregularly splintered, but these contrast with the minute and careful workmanship of the serrated specimens. In all we found 53 serrated flakes of very varying quality, and of these there are 17 which show little patches of bright lustre on the flatter side of the teeth, indicating that they have been used to cut some substance which is capable of imparting a polish to the flint. Wood and bone are the substances most likely to have needed cutting, and, indeed, we seem to have an example in Fig. 175 of a bone object which has been severed by sawing round it to a depth of 3 or 4 mm. and snapping the remainder. This is about the maximum depth to which a saw possessing an inevitable V-shaped section could be expected to cut.

In some countries, including Mesopotamia, Palestine, Egypt, Switzerland, and Spain, serrated flint flakes were set in wooden frames and used as sickles. This use produced a broad band of lustre along the edges of the flints, extending for a distance of $\frac{1}{4}$ to $\frac{1}{2}$ inch from the serrations, and due to the polishing action of the silica contained in the stalks of corn. This is quite unlike the lustre on the flakes from the Trundle; in this case the band is extremely narrow, and is confined to the flatter face of the minute serrations, indicating that it has been produced by some harder substance than straw. I have experimented with freshly made serrated flakes and have been able easily to reproduce

the wide band of lustre caused by cutting corn, and I find moreover that cutting wood produces the narrow band, while bone scarcely gives any lustre at all. This is because wood contains a considerable amount of silica in its composition.

The conclusion, therefore, would seem to be that these flakes were used in all probability for making nicks round the outside of bones and pieces of wood preparatory to breaking them across, and that they were not intended for use as sickles. A proper sawing action would be rendered impossible by the V-section of the flint and by the curved or irregular course taken by the edge.

Mr. Crawford has drawn my attention to a serrated flake in the Lausanne Museum, found at Concise, Lake Neuchâtel. It is blade-like in shape, serrated along one edge, the other edge being embedded in a wooden handle which extends the whole length of the flake. Our English flakes may well have been mounted in a similar manner.⁸

CHALK OBJECTS (Plates XIV. and XVI.).

No. 160 (Plate XIV.). Very rough chalk spindle-whorl, bearing marks of the tool with which it was shaped. The perforation which seems to be incomplete, has been bored from both sides, perhaps with a conical tool, or more probably with a knife-blade worked by the hand. Early Iron Age, probably Hallstatt-La Tène I., from I.D.-C.I.1.

No. 176. Piece of chalk scored on one face with parallel grooves by means, probably, of a piece of flint. Purpose obscure. Neolithic, from S.D.-C.I.3.

No. 177. Similar piece of chalk scored with irregular, though intentional, scratches. Period uncertain, probably neolithic; from outer neolithic ditch near crouched burial, but not immediately associated with it.

These two examples of chalk-scratchings are comparable with, but not quite similar to, the graffiti found in the Harrow Hill flint-mine (*S.A.C.*, LXVII., 121-5).

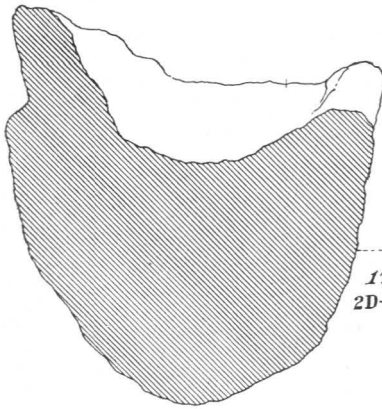
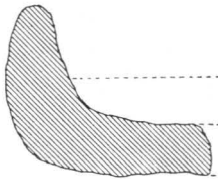
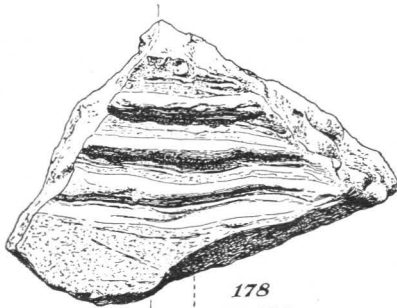
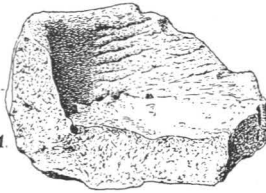
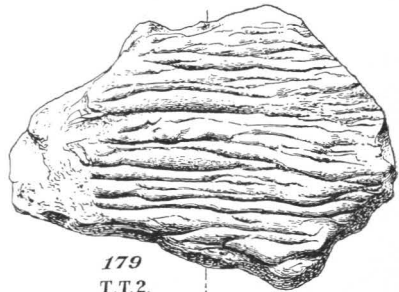
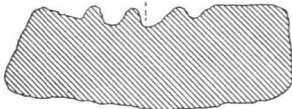
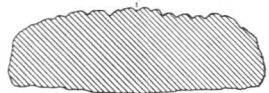
No. 178. Roughly shaped chalk cup, not worn by use. Neolithic from 2 D.-C.I.5.

No. 179. Part of another chalk cup, better carved, and worn smooth. From 2 D.-C.I.1.

⁸ Cf. *Guide to the Stone Age* (Brit. Mus.), 2nd edn., p. 129, fig. 147.

THE TRUNDLE.

Plate XVI.

176
2D-C.I.5.177
2D-C.II.1178
SD-C.I.3.179
T.T.2.

Robert Ford, 1929

These two cups, sometimes, though probably incorrectly, termed lamps, resemble other examples found in flint-mines at Cissbury (*Arch.*, LXIII., 118, fig. 17) and Grime's Graves (*Report*, 1914, p. 211).

In addition to objects illustrated here, the following deserve mention:

In Pit 1, spit 4, occurred two shapeless pieces of chalk, each having in the middle of one side an incipient perforation caused by a rotary metal tool. In the one case the point of the tool was conical, in the other it was like an ogee arch in section.

In Pit 6, spit 5, were found two chalk loom-weights resembling those found at the Caburn (*S.A.C.*, LXVIII., p. 23, and figs. 47-49). In both the perforation had been at the smaller end; in one this had fractured, followed by the rejection of the weight, while in the other two parallel perforations had each fractured, and a third, pierced in a direction at right angles to the first two, had held.

In different parts of the excavation blocks of chalk were found bearing tool marks of various kinds. Among these could be distinguished the marks of simple pointed instruments such as tines of deer's antler, but more commonly of metal adzes with both square and convex cutting edges. Probably all the pick-marked blocks must be attributed to the Early Iron Age.

QUERNS.

As will be seen from the Tables, the Early Iron Age levels abounded with fragments of querns broken up so small as to make it appear that their fracture was intentional. Only one fragment from these levels is large enough to reveal the type of quern to which it had belonged, for it still retains the halves of two perforations into one of which a wooden handle had originally been fitted, showing that it had belonged to a rotary quern. So far as is known this type of quern was introduced about the end of La Tène I. (B.C. 250), but did not entirely oust the older saddle-quern till the beginning of the Christian era.⁹

In neolithic levels quern-stones were scarce, but had not been broken up small as had the later specimens. The best example was the greater part of the lower stone of a fine saddle-quern from 2 D.-C.I.4. Parts of an upper and of a lower stone were found in 2 D.-C.II.2.

⁹ See *Antiquity*, I., 268.

Representative fragments of all these stones have been submitted to Dr. H. H. Thomas of the Geological Museum, Jermyn Street, who has kindly examined them and reports that all the quern-fragments, both neolithic and Early Iron Age, consist of fine siliceous or glauconitic sandstone and have been derived from the Hythe beds of the Lower Greensand, which outcrop in the Weald of Sussex.

MISCELLANEOUS.

About a quarter of the circumference of a *blue glass ring* was found in Pit 1, spit 4. When complete it had measured 28 mm. in external diameter, and 14 mm. in internal diameter, and the section is circular, flattened internally.

About one-fifth of the circumference of a *bracelet of Kimmeridge shale* was recovered from Pit 1, top spit. When complete its external diameter had been 84 mm. and its internal 70 mm. Its thickness is about 14 mm. and its section is semi-circular, the flat side being internal.

Beach-pebbles.—As at the Caburn, so also here selected beach-pebbles were common, but the Tables show that they were confined to the Early Iron Age levels. They were in all probability collected as ammunition for slingers. In all 346 were found in the course of the excavation. (See *S.A.C.*, LXVIII., 20-1.)

Pot-boilers.—These were common in Early Iron Age levels, but very scarce in the neolithic period. Not counting numerous fragments, 1964 specimens were noted in Iron Age levels and pits, of which 1100 came from the small Pit 3, while only 41 could definitely be assigned to the neolithic deposits. The latter were patinated white, while the former were grey-blue, and this difference in colour was sufficiently constant to make the distinction in date easy, apart from the question of levels.

Squared Flints.—In beginning to clear out Pit 2, which is situated in the fairway of the south-west gate of the Early Iron Age camp, it was found that the entrance roadway had been paved with large blocks of flint, many of which had been trimmed square. This paving went right across the filling of Pit 2. The squared surfaces were patinated a thick white, which points to their antiquity. This paving must have been laid down either by the Early Iron Age people or at some subsequent date, for example, by the miller who worked the windmill which stood upon the ruins of St. Roche's Chapel. In either case the flints may have been trimmed specially for that purpose, or previously trimmed flints may have been utilised. Thus the Iron Age people may have used flints which had been blocked out by the neolithic folk as raw material for flint-napping, but the absence of any evidence that blocks were trimmed in this

way for napping renders this theory improbable. The patination of the fractured surfaces also makes it unlikely—not to say impossible—that an eighteenth century miller should have squared them, so the resultant conclusion seems to be that in all probability the flints were both squared and laid by the original builders of the Early Iron Age Camp.

Potter's Clay (?).—A mass of soft red clay was found in Pit 6 (spit 3), identified by Dr. Thomas as having been derived from combe rock. From this it has been possible for us to mould and bake crude pottery vessels.

OYSTER-SHELLS.

In view of the importance attached to oyster-shells in connection with the question of the date of Cissbury,¹⁰ it is specially necessary to record the details of their occurrence at the Trundle. This was as follows:

<i>Provenance.</i>	<i>Depth.</i>	<i>No. of specimens.</i>
P. 1 (1)	0-9 in.	3
P. 1 (2)	9-18 in.	2 (beach-worn)
P. 1 (5)	36-45 in.	1
P. 1 (6)	45-54 in.	1 (beach-worn)
P. 6 (1)	0-12 in.	1
P. 6 (3)	24-36 in.	2
2 D.-C.II.1	0-9 in.	1

It is to be observed from the above that no specimen can be attributed to the neolithic period, and that, though five examples which occurred in the top-soil might be of any date, nevertheless four specimens were found at depths varying from 2 to 4½ feet in pits of La Tène II. date. It would seem, therefore, unsafe to rely on the presence of oysters as a criterion of Roman date. The paucity of the Trundle specimens, together with the water-worn condition of some of them, suggests that they were not eaten, but used for some other purpose. We need to know whether the oyster-shells found by Pitt Rivers in the ditch and rampart at Cissbury were water-worn or not, for the Romans ate their oysters, whereas the earlier Britons seem to have collected the shells for another purpose.

Our experience at the Caburn is in agreement with that at the Trundle, for out of 17 oyster-shells found

¹⁰ *S.A.C.*, LXVII., 76-83.

distributed in 13 pits, one specimen was found at a depth of $4\frac{1}{2}$ feet in Pit 62.¹¹

NATURALLY PERFORATED "BEADS."

Seventeen specimens of *Coscinopora (porosphæra) globularis*, having natural perforations, were found in various levels in the excavations. They vary in diameter from 7 to 19 mm., the smallest example having been found with the human skeleton. In three of them the perforation was incomplete. There was also one perforated specimen of *Porosphæra pileolus*. These facts are recorded here as Mr. Toms is studying the question of the use of such fossils as beads. He urges caution against washing them when found, as the surface in most cases is so soft that even careful scrubbing would remove all trace of evidence that they had been strung and worn.

THE HUMAN REMAINS.

Professor F. G. Parsons, F.R.C.S., F.S.A., has most kindly examined the skeleton found in T.T.2, and reports as follows:

Skull.—

Glabello-maximal length	..	..	180 mm.
Max. breadth	..	..	137 mm.
Basi-bregmatic height	..	..	134 mm.
Auricular height	..	..	120 mm.
Upper face height	..	..	60 mm.
Inter-stephanic breadth	..	..	114 mm.
Bizygomatic breadth	..	..	119 mm.
Bimaxillary breadth	..	..	59 mm.
Nasal height	..	..	48 mm.
Nasal width	..	..	25 mm.
Orbital height	..	..	30 mm.
Orbital width	..	..	40 mm.
„ „ (to dacryon)	..	..	37 mm.
Palatal length	..	..	41 mm.
Palatal breadth	..	..	37 mm.

No torus palatinus. Foramen magnum very small. All the vault sutures open both externally and internally except the sagittal which was prematurely closed. Basal, sphenoccipital suture closed. Nasal bones wide and flat. Teeth very perfect, though worn flat, except the last molar, which had evidently only recently erupted. The second premolar of the upper jaw has failed to appear, and the second milk molar, which it should have

¹¹ S.A.C., LXVIII., 28, 49.

replaced, is still in position. In the lower jaw the ramus is wide from before backward.

Vertebrae.—All present and normal.

Sacrum.—Very slightly curved.

Clavicle.—12·6 cm. long; epiphysis united (indicating that the person was over 25 years old).

Scapula.—Glenoid cavity very small.

Humerus.—28·8 cm.

Radius.—21·6 cm., including styloid process.

Ulna.—23·9 cm., including styloid process.

<i>Femur</i> .— Oblique length	.. ..	39·3 cm.
Maximal length	.. ..	39·5 cm.
Diameter of head	.. ..	4·0 cm.
Width of lower end	.. ..	6·6 cm.
Platymeric index	.. ..	63

(That of modern English woman is 80.)

Tibia.— 33·3 cm., not including spine. There is a well-marked squatting facet on the front of the lower end. Platycnemic index, 63·6 (modern English average is about 78).

Fibula.— 32·5 cm.

Os innominatum shows all the female characteristics. The epiphysial line of the iliac crest is not entirely obliterated, showing youth.

I should regard this as the skeleton of a woman, aged between 25 and 30 years; 4 ft. 11 in., or thereabouts, in height; slightly built, and answering in most respects to what we know of the neolithic or Mediterranean race. The skull is, no doubt, modified by the abnormally early close of the sagittal suture. That it is not more modified makes me think that the closure had only lately taken place.

Of the portion of skull found in Pit 3 Professor Parsons reports:

The hinder end of the skull from Pit 3 is that of a person in whom the sutures are in process of synostosis, probably, therefore, between 30 and 40 years of age. It seems to be part of a dolichocephalic skull, but I cannot identify the sex.

In addition to the above, the middle portion of a left femur was found in Pit 6, and the proximal part of a left ulna occurred in Pit 5. The occurrence of fragmentary human bones in Early Iron Age pits is not uncommon and is a perplexing feature.

THE ANIMAL BONES.

These have been very kindly examined by Professor D. M. S. Watson, F.Z.S., who reports as follows:

Neolithic Period.

By far the commonest bones are those of domestic *oxen*, all parts of the skeleton being represented. There is not a single complete long bone, and it is evident that, as at Windmill Hill, these have been smashed, probably not primarily for marrow, but as the only available method of breaking them in two.

The range in size, though considerable, is quite consistent with all the animals belonging to the same kind.

There is only a single pair of complete horn-cores, agreeing closely with some of those, assumed to be cows, from Windmill Hill. The remaining fragments are clearly of the same type, some of much thicker cores being probably bulls.

The ox is small, and has long, powerful horns.

Sheep bones are rarer than ox or pig. As no horn-cores are preserved they might be goat. The individual bones are slender and long.

Pig is common, individuals of all ages from sucking pigs to extremely old boars occurring. Some of the individual third molars are of exceptional size.

Roe deer are very rare; the bones found present no special features.

No bones of horse or red deer were found.

Early Iron Age.

The remains of *cattle* from the Iron Age levels could all belong to a single breed. The long bones are usually broken, but several metapodials are complete or nearly so, in contrast to those from the neolithic levels.

All the skulls and horn-cores are characteristically of the type often, but incorrectly, called *Bos longifrons*. The horn-cores are extremely short, the mid-region of the occipital margin produced into a boss, and the lower jaw short, with a very convex lower border. The breed is totally distinct from that of the neolithic levels. The type is very small, though rather variable in size.

Identical animals have been found in the La Tène I. settlement at All Cannings Cross and the Glastonbury lake-village and in the Roman amphitheatre at Caerleon.

Sheep is relatively much commoner than in the neolithic levels. The animals were horned and had very delicate legs; all of them were small.

The *pig* bones present no features of interest.

Roe deer is very rare and shows nothing of interest.

The discovery of the ruins of three *horse* skulls in Pit 6, associated with a single scapula, and with no lower jaws or other bones, is peculiar. The skulls are too fragmentary to allow of any discussion of their type. They are, however, comparatively small.

THE MOLLUSCA.

The land-snails found in the excavations, together with samples of soils from some of the spits, have been submitted to Messrs. A. S. Kennard, A.L.S., and B. B. Woodward, F.L.S., who have very kindly examined them and report as follows:

A certain number of shells were of doubtful age, and these we have ignored in our conclusions. It is clear that great caution must be used in dealing with the mollusca. On a calcareous soil the shells will remain for a very long time unaltered, and the difficulty is often presented as to whether we are dealing with contemporary species or the relics of conditions that have passed away. Moreover the possibility of mixing where there have been successive human occupations is obvious.

(a) *Neolithic.*

The neolithic levels yielded 23 species, viz.:

<i>Pomatias elegans</i> (Müll.)	<i>Helicella pura</i> (Ald.)
<i>Carychium minimum</i> (Müll.)	<i>Vitrea crystalina</i> (Müll.)
<i>Pupilla muscorum</i> (Linn.)	<i>Xerophila itala</i> (Linn.)
<i>Acanthinula aculeata</i> (Müll.)	<i>Trochulus hispidus</i> (Linn.)
<i>Vallonia costata</i> (Müll.)	<i>Trochulus striolatus</i> (Peiff.)
<i>Cochlicopa lubrica</i> (Müll.)	<i>Helicodonta obvoluta</i> (Müll.)
<i>Ena obscura</i> (Müll.)	<i>Chilotrema lapicida</i> (Linn.)
<i>Goniodiscus rotundatus</i> (Müll.)	<i>Arianta arbustorum</i> (Linn.)
<i>Arion</i> sp.	<i>Cepæa nemoralis</i> (Linn.)
<i>Helicella cellaria</i> (Müll.)	<i>Cepæa hortensis</i> (Müll.)
<i>Helicella nitidula</i> (Drap.)	<i>Clausilia rugosa</i> (Drap.)
<i>Helicella radiatula</i> (Ald.)	

This fauna may be considered as indicative of the conditions that prevailed just previous to the construction of the neolithic defences, though a few of the smaller forms are probably contemporary with the occupation. It is a damp woodland fauna, and it is clear that much damper conditions existed at that time than at the present day. The abundance and large size of *Arianta arbustorum* is noteworthy. At the present time this species has retreated to the valleys with permanent streams. The assemblage is practically identical with that found in the flint-mines at Blackpatch.

(b) *Early Bronze Age (?)*.

The following series of shells was washed out of the earth contained within the skull of the human skeleton in T.T.2. Eleven species were represented, viz.:

<i>Pomatias elegans</i> (Müll.)	<i>Helicella nitidula</i> (Drap.)
<i>Acanthinula aculeata</i> (Müll.)	<i>Milax gagates</i> (Drap.)
<i>Cochlicopa lubrica</i> (Müll.)	<i>Trochulus hispidus</i> (Linn.)
<i>Vertigo pygmaea</i> (Drap.)	<i>Clausilia rugosa</i> (Drap.)
<i>Arion</i> sp.	<i>Cecilioides acicula</i> (Müll.)
<i>Helicella cellaria</i> (Müll.)	

It is very doubtful if all these shells are contemporary with the interment. They were probably in the soil at the time of burial, and are thus earlier. *Cecilioides acicula* is probably contemporary. It is carnivorous and is frequently found with human skeletons. This assemblage denotes damp conditions, though not so pronounced as the neolithic series.

(c) *Early Iron Age*.

Nineteen species were obtained from the deposits of the Early Iron Age, fifteen occurring in the material from the ditches, and thirteen from the pits. The species are:

<i>Pomatias elegans</i> (Müll.)	<i>Helicella radiatula</i> (Ald.)
<i>Carychium minimum</i> (Müll.)	<i>Helicella pura</i> (Ald.)
<i>Pupilla muscorum</i> (Linn.)	<i>Vitrea crystallina</i> (Müll.)
<i>Acanthinula aculeata</i> (Müll.)	<i>Xerophila itala</i> (Linn.)
<i>Vallonia eccentrica</i> (Sterki)	<i>Trochulus hispidus</i> (Linn.)
<i>Cochlicopa lubrica</i> (Müll.)	<i>Trochulus striolatus</i> (Peiff.)
<i>Goniodiscus rotundatus</i> (Müll.)	<i>Arianta Arbustorum</i> (Linn.)
<i>Arion</i> sp.	<i>Cepæa nemoralis</i> (Linn.)
<i>Helicella cellaria</i> (Müll.)	<i>Cepæa hortensis</i> (Müll.)
<i>Helicella nitidula</i> (Drap.)	

It is doubtful if all these examples are contemporary judging from their condition, and the earth in the interior of some of them was quite different from the soil from which they were obtained. The series denotes slightly damper conditions than at the present, though not so marked as in the neolithic times. One species, *Limax maximus* (Linn.) occurred only in a mixed layer, but it probably belongs to the neolithic fauna.

THE CHARCOAL.

The charcoal collected from the various spits has been sent to Mr. J. Cecil Maby, B.Sc., who has most kindly examined and reports as follows:

The condition of the examples received was, generally speaking, poor. Some were damp, many very crumbly, and many very small. However, no "coaly" or "glassy" specimens were noticed. It was possible to examine and identify the majority without further

preparation, but owing to poor condition or uncertain identity microscopic transverse sections were made of some 20 specimens.

The tree genera distinguished among the batches of charcoal received were as follows:

<i>Betula sp.</i>	Birch
<i>Carpinus sp.</i>	Hornbeam
<i>Corylus sp.</i>	Hazel
<i>Crataegus sp.</i>	Hawthorn
<i>Fagus sp.</i>	Beech
<i>Fraxinus sp.</i>	Ash
<i>Populus sp.</i>	Poplar
(?) <i>Prunus sp.</i>	Plum, cherry, etc.
<i>Pyrus sp.</i>	Apple, pear, etc.
<i>Quercus sp.</i>	Common oak
<i>Rhamnus sp.</i>	Buckthorn
<i>Salix sp.</i>	Willow
(?) <i>Sambucus sp.</i>	Elder
(?) <i>Tilia sp.</i>	Lime
<i>Ulex sp.</i>	Gorse
(?) <i>Ulmus sp.</i>	Elm.

As is common with charcoals, a considerable proportion of the specimens were apparently derived from either poorly grown (and hence narrow-ringed), or else from small-sized, branches and stems, the structure of the wood being thus rendered rather different from that to be found in older or better-grown timber.

It is interesting that no coniferous woods were present. Also the specimen of beech is the earliest that I myself have yet come across amongst indigenous British woods.

Populus is not easily distinguished from *Salix*, nor *Carpinus* from *Alnus*, so that identifications of such woods are open to uncertainty.

From the detailed specifications supplied in Mr. Maby's report I have compiled the list of woods represented in the separate spits in the Tables.

Grouped chronologically the charcoals identified by Mr. Maby work out as follows:

(i) *Trees common to Neolithic and Early Iron Age levels.*—Poplar, hazel, ash, apple, hornbeam (?), hawthorn (?), willow, lime (??).

(ii) *Tree peculiar to Neolithic levels.*—Birch.

(iii) *Trees peculiar to Early Iron Age levels.*—Oak, buckthorn, gorse, elm (?), elder (??).

(iv) *Period doubtful.*—Beech. This, only occurring in 2 D.—C.II.1 belongs in all probability to the Early Iron Age, but not only did this spit contain a mixture of neolithic and Early Iron Age objects, but being a top spit one cannot exclude the possibility of a much later origin.

Mr. Maby very kindly included in his report eight microphotographs of the specimens identified.

CONCLUSIONS.

It will be clear from the above description of our excavations and discoveries that, as far as present knowledge goes, St. Roche's Hill was inhabited and fortified in two main periods, viz. (a) in the neolithic period, probably about 2000 B.C. or a little earlier, and (b) in the Early Iron Age from late Hallstatt times to the end of the La Tène II. sub-period, say 500 to 100 B.C. or a little later. The hill seems to have been unoccupied during the whole of the Bronze Age. It remains to add a few words on subjects which arise out of these conclusions.

(1) *The Trundle and other Neolithic Camps.*

The neolithic fortifications of the Trundle belong to a type that has only been recognised in this country within the last twenty years, and more especially since Mr. Keiller began his extraordinarily careful excavations in the camp on Windmill Hill, Avebury, Wilts., about six years ago.¹² The first example of its kind to be excavated was the camp on Knap Hill, Wilts., which was examined by Mr. and Mrs. B. H. Cunnington in 1908-9.¹³ More recently Mr. E. T. Leeds has been working on a site of the same period near Abingdon, differing from the others chiefly in being placed in a low-lying situation.¹⁴ Other camps, suspected with more or less assurance of belonging to this type, but not yet excavated, exist at Robin Hood's Ball near Shrewton (Wilts.), Elworthy Barrows (Exmoor), and Dinas in Llanidloes Without (Montgomeryshire).¹⁵ The Early Iron Age camps of Yarnbury and Scratchbury in Wilts. have inner rings like the Trundle, and these are strongly suspected to be neolithic.

In Sussex, as has been said before, we have the Trundle, and Whitehawk Camp, Brighton, and Coombe

¹² Report not yet published. ¹³ *Wilts. Arch. Mag.*, XXXVII., 42-65.

¹⁴ *Antiq. Journ.*, VII., 438-464; VIII., 461-477.

¹⁵ Information of Mr. W. J. Hemp F.S.A.

Hill, near Eastbourne. Whitehawk has just been examined by the Brighton and Hove Archæological Club, under the direction of Mr. Reginald Williamson, with most interesting and satisfactory results.

All these camps are characterised by possessing one or more concentric rings of ditches which are interrupted by numerous causeways of undisturbed chalk. The question immediately arises as to what can have been the object of so many causeways which must, to all appearance, have been a source of weakness to a defended position.

To answer this question we must turn to consider the similar forts which have been excavated in Germany, and which have been discussed by Hans Lehner in a most suggestive paper,¹⁶ to which my attention has been drawn by Mr. Keiller. Camps consisting of one or two lines of interrupted ditches, and proved to be neolithic in date, have been discovered at Mayen in the Eifel, and at Urmitz on the left bank of the Rhine north of Coblenz. Of these the former is a hill-top fortress, while the latter encloses a piece of low-lying land of which the Rhine itself appears to have formed one side of the defence. In each of these cases examination of the causeways by which the ditches were interrupted has revealed the existence of post-holes and grooves which clearly mark the positions of timber structures forming defensible gates, very possibly of the nature of wooden towers. We have not yet examined a causeway at the Trundle, but at Whitehawk, where three causeways were uncovered, no trace of post-holes was found. It will be observed from the plan of the Trundle that gaps exist in the innermost rampart at points opposite most of the causeways across the inner ditch. It is reasonable to infer, therefore, that the scheme of defence comprised one or more ramparts with external ditches, both of which were interrupted by numerous strongly fortified wooden gate-towers.

¹⁶ H. Lehner, "Der Festungsbau der jüngeren Steinzeit," *Prähistorische Zeitschrift*, Bd. II., Heft i. (1910), pp. 1-23.

Hans Lehner attempts to trace this type of fortification to the Aegean coasts where he compares with it the neolithic stone forts of Dimini and Sesklo in Thessaly, described by Tsountas.¹⁷ Dimini, the better preserved example, consists of roughly concentric rings of stone walls pierced by several radial alleys which he considers to be analogous to the causeways of the earthen forts.

Lehner also raises an interesting question by drawing a comparison between the fortress at Urmitz by the Rhine, and the ramparts described by Homer as having been erected by the Achaeans to protect their ships on the sea-shore. From the description given in the seventh and twelfth books of the *Iliad* one learns that the Achaean defences consisted of a rampart with external ditch and palisades, broken at intervals by several timber towers through which gates opened. This might well be a description of the fortress at Urmitz as reconstructed from archaeological evidence, and probably provides us with the true key to the problem of the numerous causeways which characterise these neolithic forts in Britain.

That the multiplicity of such gateways may have been intended to enable the defenders to make simultaneous sallies from all sides against a besieging force is suggested by a passage in the *Iliad* where the Egyptian Thebes is described as having "a hundred gates from each of which rush out two hundred men with horses and chariots."¹⁸ Such a description may be taken as the poet's exaggerated conception of what constituted a strong city in the Europe of his time, rather than an actual description of Thebes.

On the other hand it may be that the builders of these earthen forts relied mainly on the ramparts for their defence, and that the ditches served merely as quarries from which to derive the necessary material. This is suggested in those cases where causeways have

¹⁷ Ch. Tsountas, *Αἱ προϊστορικαὶ Ἀκροπόλεις Διμηνίου καὶ Σέσκλου*, published by the Athens Archaeological Society, 1908.

¹⁸ *Iliad*, IX., 381-4.

no corresponding gaps in the banks. If this is so, it may point to the builders being more familiar with stone walls than with earthen ramparts, thus perhaps suggesting a recent continental origin.

(2) *The Trundle and the Flint Mines.*

Were the neolithic people of the Trundle the same folk as those who worked the flint-mines of which Sussex probably possesses no less than nine groups? The mines may have been worked over a considerable period of time in the neolithic and Early Bronze Ages, but in the objects found at the Trundle we certainly appear to have some parallels with others from Cissbury and Grime's Graves (Norfolk).

(i) The type of flint-working is similar, making due allowance for the fact that the Trundle was not primarily a workshop. The rough flint wedges and choppers might have been found characteristically in either situation.

(ii) Pottery found deep in a shaft at Cissbury and also some from Grime's Graves shows characteristics of the so-called Windmill Hill type of pottery such as is found at the Trundle (see above).

(iii) Bone points, exactly resembling those from the Trundle, were found with the Windmill Hill type of pottery at Grime's Graves.¹⁹

(iv) Chalk cups occurred at all three sites.

The most important of the above points is that concerning the pottery, the remainder being confirmatory rather than conclusive in themselves.

Incidentally, just a mile to the south-west of the Trundle are the so-called Lavant Caves, a series of underground workings in the chalk which can only have been flint-mines.²⁰ In them were found part of a red deer's antler, a chalk cup and a few worked flints, together with sundry Roman and sixteenth century objects, evidently intrusive.²¹

¹⁹ *Grime's Graves Report*, 1914, pp. 213-4.

²⁰ *Sussex Notes and Queries*, II., 81.

²¹ *S.A.C.*, LVIII., 71.

(3) *The Trundle and Chichester.*

With the exception of Cissbury and the Dyke, which do not seem to have been inhabited as cities, but to have been intended as camps of refuge, the Trundle is the largest and strongest hill-fortress in the territory of the Regni. As we have seen, it was inhabited as a walled city by Celtic peoples from the beginning of the Early Iron Age down to about the first century B.C., when it was apparently deserted, for we have found as yet no evidence of destruction by fire.

During the Roman period the capital of the Regni was at Chichester, then called *Regnum*.²² Of the date of the foundation of the city of Chichester we have as yet no direct archæological evidence, except that we may perhaps infer from the famous "Neptune and Minerva" inscription that it was already in existence as a city in the reign of Claudius, that is, right at the commencement of the Roman occupation. But we have indirect evidence in the similarity of the plan of the fortifications of Chichester with those of Silchester (*Calleva Atrebatum*) in Berkshire, a point on which Lt.-Col. Karlake lays great stress,²³ and in the fact that two brothers, Epillus and Tincommius, reigned over the Atrebates and the Regni respectively towards the end of the first century B.C., the former coupling the name of *Calleva* with his own name on some of his coins.²⁴ There is also direct archæological evidence that *Calleva* was founded about the middle of the first century B.C.,²⁵ so that we may be fairly safe in assuming a similar date for the foundation of Chichester.

It would seem, then, that the Trundle, the largest hill-city in the territory of the Regni, was deserted at just about the time that Chichester, four miles to the south of it, was founded. The inference is that there was a migration of the capital city away from a cramped and bleak fastness to a more spacious situation on a

²² *Antonine Itinerary*, Route VII.

²³ *Proc. Soc. Antiquaries*, Apr. 29, 1920, pp. 185 ff.

²⁴ Evans, *Anc. Brit. Coins*, 523-4.

²⁵ *Proc. Soc. Antiq.* (1920), pp. 192, 200.

fertile plain and near to a natural harbour. Striking confirmation of this view is found in the fact that Ptolemy, who flourished in the second century A.D., calls Chichester Noviomagus (Νοιόμαγος),²⁶ and quotes Marinus of Tyre as saying that Noviomagus was situated 59 miles south of London²⁷—a very fair estimate of the position of Chichester if we remember that to the ancients “south” included south-west and south-east. Now Noviomagus is a name that occurs elsewhere both in Britain and on the continent, and Professor Ekwall tells me that it is Celtic and means “new place” or “new plain.” One cannot resist the inference that Chichester was the new place on the plain to which the inhabitants of the Trundle migrated, and the occurrence of the name elsewhere, and also of other names containing the two elements “nov-” and “magus” differently combined, bears testimony to the frequency of such migrations as a feature of the century preceding the coming of the Romans. Is there, for instance, any such relationship between Maiden Castle and Dorchester, or between Solsbury Hill and Bath?²⁸ The persistence of the hill-city of Old Sarum right down to the thirteenth century was altogether exceptional, but the migration to Salisbury had to come sooner or later.

The whole question of these city-migrations, if such they be, and of the influences which may have brought them about, needs further study. Seeing that valley settlements were the rule among the Teutonic people who conquered Britain after the departure of the Romans, and that hill-villages were characteristic of the Celtic peoples, may not these migrations from hill to valley have been largely influenced by an influx of Teutonic peoples before the coming of the Romans? Such were the Belgae according to Cæsar.²⁹

²⁶ Ptolemy, *Geographia*, II., 3, 13.

²⁷ *Ibid.*, I., 15.

²⁸ Mr. Christopher Hawkes tells me that there was no direct migration from St. Catherine's Hill to Winchester, for excavation shows that the former was sacked and burnt about 150 B.C.—probably too early a date for the founding of Winchester.

²⁹ *B.G.*, ii., 4, 1.

RELIC TABLES.

Abbreviations. MC = Mould and chalk.
FCM = Fine chalky mould.
CR = Chalk rubble.

INNER DITCH: CUTTING I. (I.D.-C.I.).

Spt.	Depth.	Soil.	Pot-boilers.	Flakes.	Bench Pebbles.	Porosphaera globularis.	Iron pyrites.	Iron slag.	Fragments of querns.	POTTERY.	ANIMAL BONES.	CHARCOAL.	REMARKS.
1.	0-9"	MC	245+	32	13	4	6	0	56	+++ Hallstatt-La Tène I., with few La Tène II.	+++ Sheep ++ Ox ++ Pig Dog 1	+ Poplar Oak	Celtic latch-lifter, iron ring, part of iron spear-head, chalk spindle-whorl, all at 6 in. 1 echinococcus; 2 semi-perforated natural beads.
2.	9-18"	MC FCM	0	43	0	2	2	0	0	+ Hallstatt-La Tène I.	+ Ox Pig Sheep	+ Hazel Ash Oak	Rough flint chopper. 1 Flint core.
3.	18-27"	FCM CR	0	161	0	0	0	0	0	12 shards, Hallstatt-La Tène I. and ? neolithic	Few: Ox Pig Sheep	+ Poplar	1½ Natural perforated beads 3 Roughly worked flints. 1 Flint wedge. 2 Flint cores. 1 Steep-faced scraper.
4.	27-36"	CR	6	135	0	6	0	0	0	Few shards: neolithic	Few: Ox Pig Sheep Bird 1	Hazel ? Willow	Rough-out axe (flint). 3 Serrated flakes. 1 Carved bone (? phallus). 1 Echinococcus. 3 Rough flint wedges. 4 Flint cores.

5.	36-45"	CR	30	90	0	0	0	0	0	6 shards: neolithic	Few	1 willow?	3 Serrated flakes. 1 Pointed bone implement. 1 Flint core.
6.	45-54"	CR	3	++	0	1	0	0	0	Few: neolithic	+ Ox + Pig 3 Sheep 1	0	8 Serrated flakes.
7.	54-57"	CR	0	0	0	1	0	0	0	5 shards: neolithic	Few	0	
A.	0-13"	MC	2	2	2	0	1	1	3	+ (gritty inde- terminate, prob. early La Tène)	+ Ox Pig Sheep	1	
B.	13-27"	FCM	5	1	1				4	+ (prob. early La Tène)	Few Ox Sheep		
C.	27-57"	CR		5						1 shard	1		Ovate hand-axe?

SECOND DITCH: CUTTING I. (2 D.-C.I.).

1.	0-8"	MC	20	26	41	1	19	5	0	Few shards; Early Iron Age	+ Ox Pig Sheep or goat	0	1 Small piece of iron. 1 Small "cone" among the pot-boilers. 1 Large round flint pebble. 1 Echinococcus. 1 Steep-faced scraper.
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Spit.	Depth.	Soil.	Pot-boilers.	Flakes.	Beach Pebbles.	Porosphaera globularis.	Iron pyrites.	Iron slag.	Fragments of querns.	POTTERY.	ANIMAL BONES.	CHARCOAL.	REMARKS.
2.	8-16"		2	13	23	3	+	+	0	Few shards; indeterminate possibly neolithic	Few: Ox Pig Sheep or goat	1	1 Echinococcus. 1 Pointed bone implement. 2 Small pieces of iron. 2 Perforated and 1 semi-perforated natural beads. Fragments of antler of roe deer.
3.	16-24"		4	16	9	5	10	3	0	Few shards; prob. neolithic general character of ware resembling that from spit 4	+ Ox + Pig Sheep or goat	4 Poplar	$\frac{1}{2}$ Chalk spindle-whorl? 1 Perforated natural bead. 1 Small piece polished bone (? pin). 2 Serrated flakes. 1 Iron rod. 1 Naturally perforated beach-pebble.
4.	24-36"		2	151	0	3	11	0	4	++ neolithic	++ Ox +++ Pig ++ Sheep or goat	++ Birch Hornbeam? Hazel Ash Poplar Apple Willow	1 Echinococcus. 12 Serrated flakes. 3 Broken antler-tines. Bone gouge-shaped tool, lacking point. 1 Flint borer (?) $\frac{1}{2}$ Saddle-quern.
5.	36-54"		0	18	0	0	0	3		2 shards; coarse, gritty, presumably neolithic	+ Ox ++ Sheep or goat Pig?	+ Ash Hawthorn? Willow Apple Lime??	

1.	0-9"	MC	60	127	33	30	14	+	5	+ Early Iron Age and neolithic	+ Sheep or goat + Ox Pig ? Horse	++ Hazel Ash Beech Poplar Apple Hawthorn Willow Oak Plum ?? Lime ??	Small iron loop and 3 other fragments of iron. 1 Modern tile (frag.). Part of chalk cup. 2 Polishing pebbles (?). 1 Flint cone core. 1 Serrated flake ? 1 Oyster.
2.	9-18"		30	152	7	11	16+	1	6	++ neolithic	++ Ox + Sheep or goat Pig		12 Serrated flakes. 1 Worked flint.
3.	18-27"		0	105	0	13	1			+++ neolithic	+++ Ox +++ Sheep or goat Pig Roe-deer (shed antler and lower jaw)	+ Hazel Willow	14 Serrated flakes. Pair of horns of ox. Antler of roe-deer. Pointed bone tool. 1 Flint core.
4.	27-42"		0	0	0	0	0	0	0		0	0	

SPIRAL DITCH: CUTTING I. (S.D.-C.I.).

1.	0-18"		15	47	24	5	3			Few shards; coarse, gritty, indeterminate; 3 La. Tène II. rims	Few: Ox Sheep Pig		1 Flint core.
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Spit.	Depth.	Soil.	Pot-boilers.	Flakes.	Beach Pebbles.	Porosphaera globularis.	Iron pyrites.	Iron slag.	Fragments of querns.	POTTERY.	ANIMAL BONES.	CHARCOAL.	REMARKS.
2.	18-24"		2	42	1	2				Few shards; neolithic	+ Ox Sheep Pig Roe-deer		3 Serrated flakes. 1 Flint core. 2 Roughly worked flints.
3.	24-30"	CR		4						V. few shards; neolithic	V. few : Ox		1 Piece of chalk with parallel grooves.

PIT 1.

1.	0-9"	MC	122	71	9	20	6	1	27	+++ Hallstatt-La Tène I.	++ Ox++ Sheep++ Pig+ Dog 1 Roe-deer 1 Bird 1 (for all spits)		2 Echinococi. 1 Piece soft sandstone. 14 Pieces of flat stone. Modern tile, numerous fragments. 1 Hammer-stone. 3 Oysters. Part of bracelet of Kimmeridge clay. 3 Flint cores. 1 Coarse serrated flake (white).
2.	9-18"	MC (burnt)	25	38	11	14	5	3	11	+++ Hallstatt-La Tène I.	+	2 Oak Elm?	1 Flint core. 1 Echinococcus. 2 Oysters. 3 Modern tiles (frag.). 1 Perforated natural bead. 1 Piece sandstone.

3.	18-27"	MC (burnt)	54+	40	7	10	4		8	+++ Hallstatt-La Tène I.	+	+ Ash Oak Buckthorn	2 Echinococci. 4 Roughly worked flints and cores.	
4.	27-36"	MC (burnt)	50+	33	13	8	1	+	3	+++ La Tène II.	+	++ Hazel Ash Apple Oak	Part of blue glass ring. Clay (? daub). Head of iron nail. 2 Blocks of chalk with central borings.	
5.	36-45"	MC (burnt)	20+	11	19				3	1	+++ La Tène II.	++	++ Hazel Hornbeam? Ash Poplar Apple Laburnum? Hawthorn? Willow Elder?? Lime?? Oak	1 Serrated flake (blue). Flakes, etc. patinated blue. Clay (soft)—? daub. Gravel pebble with natural perforation. Burnt fragment of handle of weaving comb orna- mented with dot and circle, fits similar frag- ment from spit 6. 1 Oyster.
6.	45-54"	MC (burnt)	160+	28	20	5			1	1	+++ La Tène II.	++	++ Ash Hazel Poplar Apple Oak	Small iron knife-blade. Fragment (not burnt) of same wearing comb as in spit 5 (see above). Small gravel pebbles. 1 Water-worn oyster. Half of saucepan vessel found under trodden slope.
7.	54-57"	MC (burnt)	5	2	2	2					+ La Tène II.	Few	+ Ash Oak	

PIT 2.

Spit.	Depth.	Soil.	Pot-boilers.	Flakes.	Beach Pebbles.	Porosphaera globularis.	Iron pyrites.	Iron slag.	Fragments of querns.	POTTERY.	ANIMAL BONES.	CHARCOAL.	REMARKS.
1.	0-9"	MC	1		4					3 very small shards	Ox Pig Horse (for all spits)		Many large flint nodules paving entrance to camp. 1 Flat stone.
2.	9-18"	MC CR	3	4	20		1	4	4	9 shards	V. few		1 Perforated natural bead.
3.	18-30"	CR	1		2					2 shards	4		
4.	30-48"	CR	3		12	1				5 shards La Tène II.	V. few		1 Echinococcus.
5.										1 shard La Tène II. at 54 inches			

PIT 3.

—	0-64"	MC (burnt)	1100+	9	4	1	2		1	+ La Tène II.	+ Sheep + + Pig Ox	+ Hazel Ash Apple Oak Lime??	1 Perforated natural bead. Part of human skull at 40". 2 Pieces of iron, one having 2 square perforations.
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PIT 4.

—	10-18"	MC	18		1						Few; Ox		1 Flint core.
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PIT 5.

—	34-55"		70	5	1				1	+ La Tène II.; 1 shard, neolithic	+ Frog Horned sheep Ox Pig Dog	+ Hazel Oak Hornbeam?	Includes only objects found below the level of the bottom of 2 D.-C. II. (see plan and sections). Human ulna (prox. part of left).
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PIT 6.

1.	0-12"	MC	11	10	26	3	2		11	3 shards; La Tène II.	Ox++ Horse++ Sheep Pig (for all spits)		1 Medieval shard. 1 Mod. tile fragment. 1 Oyster.
2.	12-24"	MC	4	7					9	Few shards; La Tène II.	+		
3.	24-36"	MC	1	1	17	2			9		V. few		Iron object. 2 Oysters. Soft clay (red).
4.	36-48"	MC			4					V. few shards; La Tène II.	+		Part of left human femur (spit uncertain).
5.	48-60"	MC	1		19	1		2	17	V. few shards; La Tène II.	++		2 Chalk loom-weights. Soft clay. Iron spear-head and ferrule for spear at 56".
6.	60-72"	MC			2			1	9	V. few shards; La Tène II.	V. few		