# Excavations at Madmarston Camp, Swalcliffe, 1957-8

### By P. J. FOWLER

### INTRODUCTION

MADMARSTON HILL lies 4 miles west-south-west of Banbury in the north of Oxfordshire (FIG. I),<sup>1</sup> on the north side of a valley in which the Swale brook runs eastwards to the River Cherwell. The top of the hill, about 540 ft. above O.D., is a smooth plateau some 5<sup>1</sup>/<sub>4</sub> acres in extent, sloping gently downwards from north to south; its sides fall away evenly, the northern slope being the steepest. At the head of this slope is a small copse, and a few trees also stand at the south-eastern corner of the hill-top (FIG. 2). The wood shown on the air photograph (PL. 1) has recently been chopped down, and this southern slope is now under pasture.

1 NGR 42/386389. O.S. 6-inch SP 33 N.E. V.C.H. Oxon., II (1907), 311-12; P.P.S., XXIV (1958), 215 and xxv (1959), 276. The following abbreviations are used in this report:

Alchester: Harden, Oxfordshire Arch. Soc. Report (1937), 23-40. Beesley: Beesley, The History of Banbury (1841).

Beesley: Beesley, The Instory of Dannury (1041), Bloxham: Knight, Oxoniensia, III (1938), 41-56. Bradford: Bradford, Oxoniensia, VII (1942), 36-60. Bredon Hill: Hencken, T. C., Archaeological Journal, xcv (1938), 1-111. Breedon-on-the-Hill: Kenyon, Trans. Leics. Arch. Soc., xxvI (1950), 17-82, Camerton: Wedlake, Excavations at Camerton, Somerset (1958).

Cassington: Leeds, Antiquaries Journal, XV (1935), 33-8. Chastleton: Leeds, Antiquaries Journal, XI (1931), 382-8. Déchelette: Déchelette, Manuel d'Archéologie, IV (1927, 2nd ed.).

Déchelette: Déchelette, Manuel d'Archéologie, IV (1927, 2nd ed.). Ditchley: Radford, Oxoniensia, I (1936), 24-69. Dorchester: Harden, Oxoniensia, I (1936), 81-102. Draughton: Aspects of Archaeology (ed. Grimes) (1951), 159-61. Glastonbury: Bulleid and Gray, The Glastonbury Lake Village (1911-17). Hunsbury: Fell, Archaeological Journal, XCIII (1936), 57-100. Jewry Wall: Kenyon, Society of Antiquaries Research Report, XV (1948). The Jurassic Way: Grimes, Aspects of Archaeology (ed. Grimes) (1951), 144-171. Kenyon: Kenyon, Eighth Report (1952), Institute of Archaeology, University of London, 29-78. La Têne: Vouga, La Têne (1923). Llyn Cerrig: Fox, A Find of the Early Iron Age from Llyn Cerrig Bach, Anglesey (1946). Lydney: Wheeler, R. E. M., and T.V., Society of Antiquaries Research Report, 1x (1932). Lyneham: Bayne, Oxoniensia, xxII (1957), 1-10. Maiden Castle: Wheeler, R. E. M., Society of Antiquaries Research Report, XII (1943).

Mount Farm: Myres, Oxoniensia, II (1937), 12-40.

Rivet: Rivet, Town and Country in Roman Britain (1958).

Stradonitz : Pič, tr. by Déchelette, Le Hradischt de Stradonitz (1906).

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FIG. I

Location map for Madmarston, showing its relation to hillforts in the West Midlands (fig. 1b), and to other sites at Swalcliffe Lea (fig. 1c). Land over 300 ft above O.D. stippled on fig. 1b.

Ι.	Madmarston
2.	Breedon-on-the-Hill

3. Hunsbury

4. Chastleton 5. Lyneham

- 6. Wittenham Clump
- Cherbury
   Meon Hill Cherbury
- - 9. Salmonsbury
  - 10. Bredon Hill

Based upon the Ordnance Survey map with the sanction of the Controller of H.M. Stationery Office. Crown copyright reserved.

Madmarston Hill lies within the marlstone region around Banbury, bounded to the north by the Lower Lias Vale beyond Edgehill and to the south and south-west by the Limestone hills of the Cotswolds. The subsoil on the hill-top is a micaceous clay containing thin bands of ironstone. Over-

lying this clay at the northern corner is a small area of Northampton Sand<sup>2</sup> (below p. 15).

Around the hill-top are the earthworks of a small fort. They consist of two banks and a medial ditch, with an outer ditch and bank on the southern and western sides (FIG. 2; PL. I). These earthworks are much ploughed down, and only in parts now resemble ramparts proper. There is, however, a drop of as much as 12 ft. from the crest of the inner rampart to the top of the filled-in ditch along the southern and western sides of the site. The second of the banks is, and probably was, little more than a counterscarp for the greater part of its length, the exception to this being the stretch on the north in the copse.<sup>3</sup> A hedge runs along the line of the outer ditch for most of its length, and a modern pond has been dug into it west of the entrance. Indications of a bank outside this ditch are slight, again suggesting counterscarp rather than true rampart construction.

The remains of only one entrance are visible.4 They lie on the southern slope where the ground has been disturbed by the removal of the wood. The earthworks consist of a low central mound screening the entrance, where it passes obliquely through the inner rampart; the gap is now blocked by a modern lynchet. A break in the outer ditch and bank east of this mound indicates one certain way round it, and possibly there was a similar track round the western side (FIG. 2).5

Along the foot of the hill below the entrance is a Roman road, traced to this point from Alcester.6 On either side of the road around Swalcliffe Lea Farm was a Romano-British settlement (FIG. 1c).7 Trial excavations, begun in 1958 on the Townground, where the remains of a substantial medieval structure were partly uncovered (FIG. 1c), were continued in 1959 on the Romano-British settlement.

No archaeological excavations, previous to those described here, had taken place either in the valley or on Madmarston Hill. The hillfort has, however, received notice in several publications: Beesley recognized its pre-Roman origin, and within recent years it has been assigned to various phases of the British Iron Age.8 Excavations were carried out in 1957 and 1958

6) The British Hoh Age. Excavations were carried out in 1937 and 1936
<sup>4</sup> Information from Geological Survey.
<sup>3</sup> Cf. ramparts at Woodbury Camp, Bere Regis, Dorset.
<sup>4</sup> Beesley, 11 and 18, shows four entrances, including that here described. The other three are not visible on the ground, though a possible entrance shows on an R.A.F. air photograph (F. 22-82, R.A.F. 1003/0019) halfway along the western inner rampart where Beesley marked one. Four entrances are also shown in North Oxfordshire Arch. Trans. (1853-5), 53.
<sup>5</sup> Cf. entrance at Nettlecombe Tout, Melcombe Horsey, Dorset.
<sup>6</sup> Ordnance Survey Map of Roman Britain (3rd ed., 1956); Margary, Roman Roads in Britain, 1 (1955), 10.1 and for.

140-1 and fig. 5. 7 V.C.H. Oxon., I (1939), 308; Beesley, 17-19; Rivet, 152. 8 Beesley, 8; V.C.H. Oxon., I (1939), 255; Case, The Oxford Region (ed. Martin and Steele) (1954),

92; Lyneham, 9-10.

by the Oxford University Archaeological Society under my direction as part of a long-term policy to examine the Cotswold hill-forts in Oxfordshire, the first result of which was the report on the excavations at Lyneham Camp.<sup>9</sup> Cuttings 1-4 were made in 1957 and cuttings 5-16 in 1958. I am greatly indebted to all those who have helped in so many ways, and in particular to Nicholas Bayne, my second in command during the excavations, and to my wife, whose assistance during the excavation and in preparing the report has been invaluable. The successful introduction of the proton magnetometer to a prehistoric site during the second season's work was due to the co-operation of Dr. M. J. Aitken and the Research Laboratory for Archaeology, Oxford University.<sup>10</sup>

#### SUMMARY

An Iron Age occupation, desertion, a late-Romano-British re-occupation, and final desertion, were the main phases of Madmarston Camp's history. Culturally, the main Iron Age phase belonged to *Southern Second B*, and was characterized by coarse hand-made pottery, pits, some metalwork and an agricultural economy to some extent at least based on cattle-raising. The re-occupation furnished similar material but with late Romano-British wheelmade wares prominent.

#### THE EXCAVATION

Notes on the section drawings (FIG. 3). Similar conventions indicate similar features throughout. This is possible because only three main types of soil were encountered on the site: brown humus, yellow clay, and grey clay. The exceptions were the sand in cutting 15 and the various types of pit filling. Where two of the main types of soil were mixed, the two symbols are used together. The frequency of any given symbol indicates the darkening and thickening of a particular layer. Thus the dot symbol of the brown humus becomes more frequent when indicating an occupation layer. A continuous line is used only to indicate a clear break between two strata, e.g. in FIG. 4 where the remains of the rampart are demarcated. All the cuttings illustrated, with the exceptions of 5 and 8N, were in ploughed ground and showed a common feature of about 1 ft. of ploughed topsoil. This is indicated by a blank below the modern turf. The letters PH indicate a post hole.

#### 9 Lyneham, 1-10.

<sup>10</sup> The Society is extremely grateful to Mr. and Mrs. D. M. Jack of Swalcliffe Lea Farm for permission to excavate and for their invaluable assistance and kindnesses. I acknowledge the kindness of the Chief Inspector of Ancient Monuments, Ministry of Works, in permitting excavation at a scheduled monument. I would like to thank very much the contributors to this report: Miss Elizabeth Burley (Mrs. Elizabeth Fowler), M.A., F.S.A.Scot., Miss M. Howard, Miss Grace Simpson, M.A., F.S.A., and Dr. G. W. Dimbleby; and the staff of the Ashmolean Museum, in particular Mr. H. J. Case and Mrs. M. E. Cox; Professors C. F. C. Hawkes and I. A. Richmond; the Geological Survey; colleagues on the staff of the Royal Commission on Historical Monuments (England); the Society for its financial help, and the many members and friends of the Society who worked so hard, not least the cooks, Mr. and Mrs. C. J. Leaney.

#### THE SOUTHERN DEFENCES (FIG. 2)

#### Cutting I (FIGS. 2 and 4, PL. II, A and B)

Cutting I was I30 ft. long, stretching from inside the back of the inner rampart to the inner lip of the outer ditch. It was impracticable to continue it over the outer ditch and bank because of the intervening hedge.

The hill top has been ploughed in recent years as well as in the 1830s,<sup>11</sup> and presumably the accumulation of humus behind the rampart and in the ditch down to the silted line of small stones (layer 2) can be attributed to this disturbance. At the north end of the cutting, a darkening of the humus on top of the grey clay of the rampart indicated a scattered occupation layer (layer 6). Beneath this layer behind the rampart was the old land surface (layer 13), a rich, dark brown humus containing sherds, charcoal, flint and scraps of burnt bone.

The inner rampart originally rested on a base 46 ft. wide. It was constructed of two sorts of clay from the ditch excavation. A pile of looselypacked yellow clay (layers 7 and 8) had been dumped on the inner edge of the ditch and capped with glutinous grey clay (layer 9). Additional height had then been obtained by heaping more yellow clay on the back of the original bank and binding the whole construction with an overall layer of the glutinous clay (FIG. 4). The inner band of grey clay had clean-cut edges, while that originally on the outside of the rampart was slightly blurred in outline and was covered with a thin layer of dirt. The two grey clay layers represented a constructional device and not two chronological phases in the history of the earthwork. They also showed that a great part of the rampart had been ploughed away. There were no traces of structure on the top of the existing remains.

Outside the rampart was a ditch, 30 ft. wide and 10 ft. deep below the present ground level. The outer slope of the ditch was steeper and more clearly defined than the inner, which could only be detected by breaks in the thin ironstone veins in the clay subsoil. Stratification in the ditch filling began below the line of small stones. Beneath the stones was a darker, wetter layer of humus, and below that a solid wad of different coloured clays (layers 8-11, FIG. 4). A small amount of root material, some of which had been cut, was found in layer 11 (see below p. 47). The differences in colour of the basically grey clays were probably due to the lower levels of the ditch being more frequently under water. The bottom 3 ft. of filling were continuously under water during excavation, despite the dry weather (PL. II, B).

The second or middle bank outside this ditch showed no structural

" Beesley, 11.

7

features. The undisturbed clay and ironstone were only 2ft. below the modern turf, the material between being an undistinguished rubble-like clay such as was found above the subsoil in other cuttings. There was no old land surface, and no finds were made. The bank had been a counterscarp at most.

The section as a whole indicated that the inner rampart, the inner ditch and the counterscarp all belonged to one phase. The ditch stratification showed that the primary silt came from the middle bank, which suggested once more that it was in no way revetted. The inner rampart had held together longer on account of its hardened clay capping, though a little, presumably rain-washed, grey clay had fallen from it to the bottom of the ditch. The grey clay filling in the lower half of the ditch represented the collapse of the outer face of the inner rampart, which took with it some of the yellow clay heaped behind it.

No finds were made in the yellow clay still *in situ*, but two sherds were found in the silted clay at a depth of nearly 8 ft. (FIG. 14, 29, and below p. 37). None of the late Romano-British pottery scattered so liberally over the site as a whole was found in the ditch silt.

#### *Cutting* 6 (FIG. 2, not otherwise illustrated)

The main object of cutting 6 was to investigate the cause of readings recorded by the proton magnetometer (FIG. 10, and below p. 17). The section is not illustrated because it was substantially the same as that at the north end of cutting I (FIG. 4 and above p. 7). It showed the rampart construction already described, only differing slightly behind the rampart where layer 6 on the clay capping was more clearly marked. A small fire-pit had been hollowed out of the capping of the rampart. Cuttings I and 6 alone established a pre-Roman occupation, though neither provided stratigraphical evidence of a re-occupation.

# *Cutting* 5N (FIG. 2, not otherwise illustrated)

Cutting 5N was placed across the slight surface indications of a middle bank to the east of the entrance. The section was similar to that through the middle bank in cutting I (FIG. 4 and above p. 7). There was no evidence of structural features, though presumably the 2 ft. 6 in. of yellow clay between modern turf and subsoil had been dug out of an inner ditch, now obscured by a modern lynchet (FIG. 2).

#### Cutting 5 (FIGS. 2 and 5)

The object of cutting 5 was to find out whether a ditch existed to the east of the entrance and whether the outermost bank was as insubstantial as the



Plan of Madmarston Camp, showing cuttings and area of magnetic survey, 1957-8. (Drawn from a survey by P. J. and E. Fowler.)

[face p. 8

middle bank (see above p. 8). A ditch was found, smaller than the inner one, measuring only 6 ft. across the top, and its greatest depth below present ground level being 7 ft. The ditch bottom was pointed (cf. FIG. 4), being sharply defined in a layer of otherwise undisturbed grey clay.

There were no traces of the middle bank at the north end of the cutting. The ditch had been filled with silt from the outside, for all the main tip lines sloped inwards. The remains of the outer bank were slight, there being only a layer of yellow clay between the topsoil and the clay subsoil (cf. p. 7 and p. 8). The bank must have been several feet high originally, however, to account for the material in the ditch filling. Only a few sherds came from this filling. Again one was a piece of samian ware (see below p. 33).

The western section of cutting 5 revealed features similar to those on the eastern side. The ditch profile, however, was smaller, and the ditch therefore seemed to be narrowing, presumably to stop short of the trackway through the outer bank immediately to the west (FIG. 2 and above p. 5). The existence of the ditch confirmed that this trackway turned left after passing through the outer bank.

#### THE ENTRANCE (FIG. 2)

#### Cuttings 2, 3 and 4 (not illustrated)

Three narrow cuttings, 2, 3 and 4, were laid out over the entrance to discover whether excavation in this much disturbed area was worthwhile. Cuttings 2 and 3 proved little, since they both hit an old field drain running north-south through the entrance. Cutting 2, although deepened to nearly 3 ft., provided no evidence of the inner ditch which had been found at the same depth in cutting 1. It is therefore possible that a second way through the entrance existed round the west of the central mound (FIG. 2).

Cutting 4 was placed between the tail of the middle bank and the back of the mound in the entrance, to see if there were traces of a trackway leading in from the break in the outer bank. A layer of stones, 11 ft. broad, was uncovered at a depth of 2 ft. in the middle of the cutting, lying on a thin band of silt-like humus. Beneath this was grey clay subsoil, cut down slightly on the uphill side to make a levelled strip. These features evidently represented a trackway passing through the entrance.

#### Cutting 5R (FIGS. 2 and 6)

Cutting 5R was the most northerly of three cuttings along the same line immediately to the east of the entrance. It showed that no inner rampart existed here, and instead revealed two small trenches and four post holes, all

cut into the clay subsoil. No time remained to excavate further in this area, and the features revealed in plan remain tantalizingly incomplete. One must assume that they are the remains of some wooden structure, perhaps a gate.

Three clay slingstones, the only ones on the site, were found in layer 3 (FIG. 6; and see below p. 45 and FIG. 19, 5).

### Cutting 5 W (FIGS. 2 and 11; PL. II, D)

Cutting 5W was designed to uncover any westward extension of the trenches in cutting 5R. None was found.

The cutting was, however, placed on top of a pit cut into the clay subsoil. From the top of the filling came several Iron Age sherds. Beneath this dark humus was a thin band of dark soil, then another layer of brown humus, and finally the bottom of the pit was filled with more black soil and crammed with animal bones resting on the large pieces of a broken cooking pot (FIG. 11, p. 34 and FIG. 14, 1). The base of the pot was lying across the bottom of the pit, slightly off-centre, and resting on a thin layer of brown humus which had presumably fallen into the pit when it was open. There could be no doubt that the pit had been filled in this way deliberately, and the impression given during excavation, and since confirmed (see below p. 46), was that the remains were of one particular meal or feast. In view of the pit's position in the entrance area, and of the careful way in which it had been filled, the whole feature probably represented a ceremonial act. When the pit was emptied, sherds from several smaller vessels were found, as well as the large cooking pot, Most were decorated with vertical scoring on the exterior (FIG. 14). Two fragments of a quern stone came from immediately above the pit (FIG. 11).

#### THE EASTERN DEFENCES (FIG. 2)

#### Cutting 16 (FIG. 7; PL. II, C)

Cutting 16 was made to ascertain whether an inner rampart existed along the eastern side of the fort. The visible remains are slight here, from the copse on the north round to the entrance.

A full-length cutting was not attempted when it became clear that a rampart existed, and that the stratification was similar to that at the north end of cutting 1 (FIG. 4). The rampart sealed an old land surface (layer 13), and layer 6 recurred on the back of the rampart. The sherds from both layers were very fragmentary. There was no wheel-made pottery in layer 13, and no finds at all in the rampart itself.

Between these two layers was a thin band of grey clay. Within it were a series of grey streaks, lying obliquely across the line of the rampart and almost

parallel to one another (PL. II, C). They appeared to be the shapes, preserved in clay, of decayed wood. A similar phenomenon occurred in cutting 8 (see below p. 11 and FIG. 8). It seemed in both cases that pieces of wood had been lying on the ground over which the rampart had been built. In cutting 16 it looked very much as if they had been deliberately laid: possibly an attempt had been made to hold the rampart clay on the hill slope by means of a slight wooden foundation or framework. A different interpretation of the feature is made in the case of cutting 8.<sup>12</sup>

#### THE NORTHERN DEFENCES (FIG. 2)

#### Cutting $\delta$ (FIGS. 8 and 9; PL. III A and B)

The purpose of cutting 8 and its extensions was to investigate the earthworks on the north side of the site, where they consist of two ramparts and a medial ditch only. The point chosen was where the drop from the crest of the inner rampart to the top of the ditch was at its greatest.

Cutting 8 stretched from behind the slight surface indications of the back of the inner rampart to a point well down its forward slope. Different types of clay (layers 9, 10 and 12), presumably material from the ditch, had been dumped on top of one another to construct the rampart. A horizontal layer of stones, laid as a rough cobbling, overlay the tail of the rampart and supported an occupation layer up to 6 in. thick (PL. IIIA). Between the stones and the tail of the rampart was a layer of humus and clay from which came sherds and charcoal; and running the length of the cutting beneath the rampart was the old land surface (FIG. 9).

In plan, the base of the rampart stretched nearly the whole length of the cutting. Beneath it in the old land surface were two post holes, which, when taken with the similar evidence from cutting 8L, suggested a palisade pre-dating the rampart (FIG. 8). The posts had not continued upwards into the rampart clay. Associated with them, and actually lying on top of layer 13, were a number of lines of grey clay, up to  $\frac{1}{2}$  in. thick, and markedly angular in plan. These were interpreted as being casts of pieces of wood which had decayed after being covered by the rampart. If this is correct, then they can best be explained as the remains of wattling from the palisade, left lying on the surface when the upright stakes were removed to make way for the rampart.

A great deal of pottery came from all three main layers, the bulk of it from layer 4. The majority of the sherds were of wheel-made late Romano-British wares (FIG. 17). Stratified in the western section of the cutting was a hoard of iron objects (Cutting 8H, FIG. 8; and see below p. 41, FIG. 18, 1-6 and PL. III, B).

<sup>13</sup> Cf. also a similar feature at Castleshaw, Lancs. Trans. Lancs. & Cheshire Ant. Soc., LXVII (1957), 118, pl. IX.

Laura	KEY FOR	ALL SECTION DRAWINGS :
Layer	1 1 1	Turf and ploughed soil
2	North And	Brown humus
3		Mixture of humus and yellow clay
4		Late Roman occupation layer
5		Stones
6	7//////	Occupation layer behind inner rampart
7	8/* / , /0/0/0/ 0/ //e, 0/ , / /0/ej	Yellow clay mixed small stones
8	131111111	Yellow clay
9	11111	Blue-grey plasticine-like clay
10	11/1/1/	Silvery-grey clay
11	V////////	Dark grey clay
12	11/1/1/1/19	Mixture of yellow and grey clay
13		Pre-rampart land surface
14		Clay subsoil i)Yellow crumbly clay ii)Greyish glutinous clay
		Olive-coloured clay (Cuttings 1, 5, 8)
Other layers,		Ironistone (Cuttings 1,5)
not numbered	$\begin{smallmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 $	Sand (Cutting 15)
		Orange-coloured clay (Cutting 8N)
	4 4 9 9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Black soil with small stones and charcoal (Cutting 145)
Turne		Burnt soil with charcoal (Cutting 145)
Types of pit filling	*****	Burnt daub and clay (Cuttings 7, 145)
10 11.6		Burnt stones and soil (Cutting 7)
	C, D, C,	Yellow sand and brown humus (Cutting $14 \text{ N}$ )

F1G. 3

It was lying partly in the clay on the back of the rampart and was sealed by the stone layer. A small pit in the clay beside the hoard was filled with charcoal and other burnt material. A small extension of the cutting, 8H, was necessary to recover the hoard (FIG. 8).

#### Cuttings 8A-D (FIG. 8; PL. IIIA)

Cuttings 8A-D formed a small grid on the south and west of cutting 8. Their main object was to discover the extent of the stone layer. This petered out in cuttings 8C and 8D but continued to east and west of cuttings 8A and 8B respectively. Cutting 8B was not excavated below the stone layer.

The stratification in cutting 8A was exactly the same as in cutting 8. In cuttings 8C and 8D it became less well-defined as the stone layer came to an end. Several post holes were found (FIG. 8). Cutting 8C produced the only one in the stone layer. Two post holes in the clay subsoil and the old land surface were found in cutting 8A, and larger ones in cuttings 8C and 8D. Pottery occurred at all levels, and two iron objects were found in cutting 8D (FIG. 8, and see below p. 42, FIG. 18, 7-8).

#### Cutting $\delta N$ (FIGS. 2 and 9)

A complete section across the two ramparts and medial ditch could not be cut because of the intervening fence; but cutting 8N continued the line of cutting 8 across the outer rampart, which appears to stand up to 15 ft. high.

The section showed that the rampart was in fact of no great size. The comparative steepness of its outer face, and its apparent height, were caused by making good use of the natural slope on to which material from the medial ditch had been dumped. There was no outer ditch. Probably the rampart was a little higher in its original state, for although it has not been ploughed, some of the clay has slipped forward down the slope of the hill. The outer lip of the medial ditch was visible at the south end of the cutting, confirming the surface indications.

The evidence from cutting 8 and its extensions showed that the two ramparts and the medial ditch belonged to the same phase, and that there were three separate occupations on the hill top. The earliest, in the old land surface, preceded the rampart and was associated with a palisade and possibly some other wooden structure (FIG. 8). This occupation was succeeded by another after the ramparts had been built, and this second was in turn sealed by a stone layer supporting the last occupation on the site. The purpose of the cobbling was not clear, since a single post hole was the only structural feature associated with it. Perhaps it was simply a yard. It stretched for an unknown distance on either side of cutting 8 (cf. FIG. IO), but was of no great width.



FIG. 4

West section across inner rampart, inner ditch and middle bank on the south of the hillfort.

Cuttings 15 and 15W (FIG. 2, not otherwise illustrated)

Cutting 15 was the last to be laid down on the site of a magnetic anomaly (see below p. 16 and FIG. 10). Its unorthodox position along the top of the inner rampart is explained by the line of magnetic readings running through the rampart in the northern corner of the site. There was no surface indication of a break in the rampart, and the cutting was laid out at right angles to this line to explain the magnetic readings. In fact, running along the line was a small gully cut into a layer of undisturbed sand (see above p. 5), here overlying the clay subsoil. The feature was probably artificial, both on account of its length as indicated by the magnetometer, and of its section, which showed several stones tipped into the humus which filled it. This was, however, otherwise sterile.

To obtain a section through the rampart as well as along it, cutting 15W was laid out at right angles to cutting 15 (FIG. 2). The section along the two cuttings was consistent, showing that here the rampart was made simply of heaped-up yellow clay, dumped on a fairly steep slope.

# THE INTERIOR (FIG. 2, PL. III, C and D)

### The Magnetic Survey (FIGS. 2 and 10)13

While being used to detect pottery kilns at Water Newton, Northants., the magnetometer also recorded, under favourable conditions, other remains of human activity.<sup>14</sup> Since the main object of returning to Madmarston for a second season's work was to investigate the ploughed-out interior, Dr. M. J. Aitken was invited to conduct a magnetic survey of part of the hill top, in the hope that the magnetometer would record features, such as pits, in an area which was archaeologically featureless on the surface. It might thus give a detailed picture of the intensity of occupation, provided that a correlation could be established between variation in magnetic readings and the various features found subsequently by excavation (see below p. 17). The magnetometer had not previously been used either on a prehistoric site, or on a subsoil containing ironstone.

The survey covered nearly 2 acres of the fort's interior. Essentially it consisted of 1,200 measurements of the magnetic intensity within a grid of 50 ft. squares. This unit of area was used for convenience, and because it is large compared to the size of archaeological features, but small compared to most geological changes. The magnetic measurements were relative, recording the points at which the magnetic strength just above ground level differed

<sup>&</sup>lt;sup>13</sup> Archaeometry, 2 (1959), 32-3, 37-9, 40-2; Antiquity, XXXII (1959), 205-7. I am much indebted to Dr. M. J. Aitken for assistance in writing this section. <sup>14</sup> Archaeometry, 1 (1958), 25; Antiquity, XXXII (1958), 270-1.



 $$_{\rm FIG.~5}$$  East section across outer ditch, east of the entrance.

significantly from the average value for the region. The ironstone in the clay subsoil made conditions particularly suitable for the production of marked magnetic disturbances. Where such disturbances were located while surveying at 10 ft. intervals, additional measurements were taken at closer intervals to establish to the nearest foot the centre of each disturbance, and to estimate its maximum depth and the nature of its cause. To allow for the slight displacement to the south of the maximum of a magnetic disturbance, cuttings were orientated north-south, the south end of the cutting being nearer the peg marking the disturbance.

The results of the magnetic survey are shown diagrammatically in FIG. 10. There was not time to investigate all the magnetic disturbances. Those investigated are shown with the cutting number, and the feature or object found, alongside the symbol. The outline of the area surveyed is shown on the site plan, FIG. 2.

#### The Magnetic Chart (FIG. 10)

The cause of the generalized disturbance along the eastern side of the grid is unknown. It may be geological or it may be due to human activity,



FIG. 6

Section and plan of features at the inner end of the entrance.

excluding the digging of pits. The linear disturbance on the south was probably caused by the clay capping on the back of the inner rampart (see above p. 8 and FIG. 4). The magnetic disturbance and the clay capping were almost identical in width. Possibly continued baking by the sun would produce appreciable thermo-remanent magnetism in the clay. The linear disturbances elsewhere probably arose from the same cause, except for the most northerly, which indicates the line of the inner ditch.

Of the isolated disturbances indicated on the chart, it is probable that all, except those in the weakest category, represent pits or other substantial features. It is unlikely that there were any pits elsewhere in the surveyed area, except possibly within the areas of continuous disturbance. Variations in the intensity of disturbance in the north-eastern corner, for example, indicated at least three pits, one of which was revealed by cutting 12. The generalized disturbance over the same area might indicate the eastward continuance of the stone layer uncovered in cutting 8 (FIG. 8).

The Madmarston survey proved a successful illustration of the part magnetic surveying can play in hillfort exploration and excavation. Only one of the cuttings put down over a magnetic anomaly failed to produce an archaeological result (see below p. 19). Otherwise, so accurate was the magnetometer that not only did each cutting based on an anomaly prove worthwhile, but in each case a cutting 10 ft. by 4 ft. was sufficient to indicate the nature and extent of the disturbance. The amount of time and labour saved was very great, particularly as trial trenching was unnecessary.



FIG. 7 Section through part of the inner rampart on the east of the hillfort. AB is the west end of the cutting, BC the north face.

Cutting 7 (FIGS. 2 and 11; PL. III C)

Cutting 7, the first to be laid down over a specific magnetic disturbance, was intended also to pick up traces of occupation behind the inner rampart, and of the northward rise of the old land surface.

At a depth of 9 in. a large iron nail was found. It was thought that this might account for the magnetic reading, but the magnetometer showed the anomaly was still present after removal of the nail. Subsequent excavation revealed a small pit dug into the clay subsoil. The second series of readings indicated the exact position of the pit, the first prehistoric pit to be so discovered. It was oval in plan, I ft. deep and 3 ft. wide across its narrow axis. It was not completely excavated. The filling was dark-coloured humus, containing daub and a few sherds of crumbly black pottery. A few minute pieces of bronze lay in the top of the filling (see below p. 41, 1).

The pit was too small to be a proper storage pit: perhaps it was simply a hole dug to contain the rubbish found in it. It was of prime importance,



FIG. 8

Plans and sections showing features related to the inner rampart on the north of the hillfort.

however, since it proved that the magnetometer worked, and worked accurately, on this site. Excavation was therefore continued on the basis of the magnetic survey.

# Cutting 9 (FIG. 2 only)

Cutting 9 was the one failure of the magnetic survey. It was taken down to the clay subsoil, but nothing was found. After excavation, a second series of readings (cf. above p. 18) indicated that the anomaly had now been removed. It had presumably been geological rather than archaeological. The section was the same in all essentials as that of cutting 7 (FIG. 11).

### Cutting 10 (FIG. 2 only)

Cutting 10 was also laid down over an anomaly. The subsoil lay no more than 1 ft. below the modern turf, with only a layer of crumbly yellow clay

between the two. There was no old land surface, and it appeared that here, just off the highest point on the hill, ploughing and erosion had moved the humus down the slope towards the inner rampart.

A gully was uncovered, running diagonally from north-east to south-west. It was 3-4 ft. wide and 4-6 in. deep. It contained fine brown humus and some small sherds only. Over the top was a scatter of objects: an iron nail, an iron ring (FIG. 19, 1), some pieces of slag and a few sherds (FIG. 13, 8 and 10). The gully petered out in extension 10A. Cutting 10C was laid out to the east of the main cutting in case the gully was associated with a hut. No post holes or other archaeological features were found, nor was any conclusive evidence of the purpose of the gully discovered.

#### Cuttings II and IIA (FIGS. 2 and II)

The magnetometer indicated accurately the southern edge of a pit which was uncovered in cuttings 11 and 11A. A small gully, the third on the site (see above p. 15 and p. 20), ran downhill from this edge, suggesting that there had been a cover over the pit from which rain-water was drained away.

The pit was filled with dark-coloured material, becoming blacker and stickier near the bottom; it consisted largely of burnt soil containing charcoal, small stones, some flint chips, a few pieces of slag and black, crumbly handmade pottery. Late Romano-British sherds, two nails and some glass fragments overlay the pit (FIGS. 16, 1-7 and 19, 16). The top of the pit, about 6 ft. in diameter, was just over a foot below the modern turf, the pit itself being cut slightly more than 2 ft. into the clay subsoil. It was not primarily a rubbish pit since the material in it had silted in, but there was no definite evidence that it was designed for corn storage. Some of the pieces of burnt material might have been a rough daub originally lining the sides. Whatever its purpose, the pit had been used and abandoned during the pre-Roman occupation, since no Romano-British pottery was found in the filling.

#### Cutting 12 (FIG. 2 only)

Cutting 12 was again sited on a magnetic anomaly (FIG. 10). It was placed in much the same relationship to the inner rampart on the north side of the site as was cutting 8D, and in several ways the stratification was similar. A considerable layer of humus and stones to a depth of 2 ft. contained pottery (FIG. 16, 8-23), white burnt lead, a few pieces of coal,<sup>15</sup> and some bones. Beneath was a shallow saucer-shaped pit, cut into the clay subsoil and filled with brown humus containing only a few scraps of pottery and charcoal.

15 Cf. Ant. J., xxxv (1955), 199-217; Camerton, 94-5.



East section across inner and outer ramparts on the north of the hillfort.

### Cutting 13 (FIG. 2 only)

Cutting 13, also over a magnetic disturbance, proved rather inconclusive. Beneath a layer of stony soil, similar to that in cutting 12, a small pit was uncovered in the crumbly clay subsoil. Though no doubt the cause of the magnetic reading, the pit, otherwise similar to that in cutting 7 (FIG. 11), contained only dark-coloured humus and some scraps of charcoal.

## Cutting 14N (FIGS. 2 and 12; PL. III D)

One of the strongest of the magnetic readings determined the position of cutting 14N which, originally 10 ft. by 4 ft., was exactly over the centre of

the largest pit discovered on the site. The cutting was later extended to the west; the eastern portion of the pit remains unexcavated.

The clay subsoil, here overlain by a patch of sand (see above p. 5), was 2 ft. below the modern turf. The pit was cut entirely into the subsoil, its flat



FIG. 10

Diagram showing the area of the magnetic survey and the relative strength and weakness of the anomalies recorded. Excavated anomalies are indicated by the cutting number and the feature found.



FIG. 11 Sections and plans of three pits inside the hillfort.

bottom being nearly 6 ft. below ground level. The sides were smooth and even, rising almost vertically to a sealing layer of stones and brown humus containing late Romano-British pottery (FIG. 15, 9-19) and two coins of the 4th century A.D. (see below p. 40). There was a marked break between the stony layer and the damp, dark-coloured pit filling. When the cutting was extended westwards, it was clear that the stones came from a loosely-built kerb running around the rim of the pit. Some of the largest stones were still in position; the remainder had been pulled over the top of the pit after it had been filled in. The pit filling was remarkably homogeneous, and clean by the standards of the other pits. It contained few sherds, mostly right on the bottom (FIG. 15, 1-8). No stones from the surrounding kerb had fallen into the pit itself. The sherds indicated a pre-Roman date for the use of the pit.

The purpose of the pit was not clear. There was nothing to prove that it was a corn storage pit, and it had not been used for rubbish. It had probably not been open very long, and it had been deliberately filled up. Possibly it was

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a water tank, for which purpose, being sited just off the highest point of the hill, it was well situated. If this was so, perhaps experience proved that the surrounding clay, and the proximity of the sand, did not make a water-tight container.



FIG. 12

Section and plan of two adjacent pits located by the magnetometer.

### Cutting 14S (FIGS. 2 and 12)

Another anomaly recorded immediately to the south of cutting 14N proved to be another pit. It was very different from its neighbour, being bowl-shaped in section, 5 ft. 6 in. in diameter and 2 ft. 6 in. deep into the clay subsoil. It was completely filled with black rubbish, much of it burnt, amongst which was a great deal of charcoal (see below p. 47), including fragments of a globular wooden vessel, some large lumps of daub with stake impressions, and a number of sherds (FIG. 14, 8-18).

Like its larger neighbour, the pit in cutting 14S had been deliberately filled up, but in this case with rubbish. It might have been dug to burn rubbish in, or to dispose of rubbish already burnt. Such tidiness may seem unlikely, yet there was no trace at all of any débris lying around the pit. Its date is slightly puzzling.

Two rim-sherds found in the bottom of the pit joined with sherds found lying on a stone over the edge of the pit in cutting 14N (FIG. 14, 8-9; see above p. 23, and below p. 35). These sherds from cutting 14N were associated with the 4th-century coins and wheel-made late Romano-British wares. But the



FIG. 13 Imitation samian ware (1-6); scale  $\frac{1}{4}$ . Pottery from the old land surface (7-10); scale  $\frac{1}{4}$ .

two sherds from cutting 14S were mixed up with rubbish and came from the bottom of the pit. Although there was some evidence of hand-made 'native' pottery being used during the 4th-century re-occupation (see below p. 33), in this case the complete absence of any wheel-made sherds in the pit, and the presence of one base in particular (FIG. 14, 16), must surely mean that both the pit and its contents were pre-Roman, and that the joining sherds from the layer over the pit in cutting 14N had become fortuitously associated with much later material, probably during relatively recent ploughing.

#### DISCUSSION

Madmarston Camp, one of a number of small hill-forts on the fringes o the eastern Cotswolds,<sup>16</sup> lies in the central area of England and of the Jurassic Uplands in particular.<sup>17</sup> A distribution map of hill-forts in the western Midlands (FIG. 1*b*) shows Madmarston to be on the western fringe of the Trent

<sup>16</sup> Case, op. cit. in note 8, fig. 26; Lyneham, fig. 1.

<sup>17</sup> The Jurassic Way, figs. 38 and 39.

Basin and East Anglian Iron Age cultures, and at the north-eastern end of the concentration of hill-forts associated with Western B and in particular with duck-stamped pottery.<sup>18</sup> Madmarston is also peripheral to the known distribution of 'Celtic' fields,<sup>19</sup> corn storage pits,<sup>20</sup> Belgic<sup>21</sup> and Dobunnic<sup>22</sup> coins, and indeed to Dobunnic territory itself.23 In addition, the nearest excavated hill-fort, Chastleton, produced pottery described in 1931 as suggesting ' the earliest known phase of the Iron Age in Britain '.24

Madmarston was occupied during two distinct periods, with a break of some two hundred and fifty years between them. The pre-Roman phase was two-fold, the earliest occupation showing some Iron Age 'A' influence. Indeed, the first settlers may have been related to those at Chastleton. Associated with this occupation was a timber palisade suggesting, on part of the hill top at least, an unditched enclosure. The axe fragment and worked flints are insufficient evidence to prove earlier occupation, the former in particular being a type known to survive.<sup>25</sup>

The main Iron Age occupation was culturally of Southern Second B, probably dating from towards the end of the 2nd century B.C.<sup>26</sup> Material similarities exist with many sites: Breedon-on-the Hill, Draughton and Hunsbury to the north and north east, Upper Thames valley settlements to the south, Camerton and Glastonbury to the south-west along the Jurassic Uplands, and, further away, Llyn Cerrig to the north-west. The bulk of the Iron Age material from Madmarston lends weight to the validity of the term Southern B by indicating the extent to which a common culture existed over a wide area. None of the similarities need be particularly significant, with the possible exception of the scored pottery. More diagnostic material is needed to elaborate the hint of a possible infiltration into the eastern Cotswolds from the Trent Basin.<sup>27</sup> Since there was no evidence that Western B people penetrated to Madmarston along the Jurassic Ridge,<sup>28</sup> it would seem probable that settlers came into the north Oxfordshire region either over the Trent-Cherwell watershed or up the Cherwell valley itself (FIG. 1b). It is an established thesis that this valley was

18 Kenyon, fig. 1; Fox, Personality of Britain (1947), fig. 11; Hawkes, Antiquity, XXXII (1959), 180 and figs. 1 and 3.

<sup>19</sup> Piggott, Roman and Native in North Britain (ed. I. A. Richmond, 1958), 8.

20 Piggott, op. cit., 9-10; Radford, P.P.S., xx (1954), 11 and fig. 4.

The Jurassic Way, 170 and fig. 44.
 Radford, op. cit., fig. 6; Allen, Archaeologia, xC (1944), map VII.

<sup>23</sup> Rivet, fig. 1; Radford, op. cit., in note 20, fig. 6.

24 Chastleton, 397.

<sup>25</sup> Cf. a similar greenstone axe, W.A.M., LIV (1951), 162-4 and fig. 18, 26; and J.R.I. Cornwall, N.S.I. (1951), Appendix, 71.

<sup>10</sup> Howkes, op. cit., 180-2 and fig. 4.
 <sup>27</sup> The Jurassic Way, 168-9; Kenyon, 70.
 <sup>28</sup> O'Neil, Ant. J., XIV (1934), 31; Piggott, British Prehistory (1949), 171; Rivet, 35; and cf. The Jurassic Way, 163, and Hunsbury, 98.



Pottery from the pits in cutting 5W (1-7), and cutting 14S (8-18); layer 6 (19-25); rampart clay (26); outer and inner ditches (27-29). Scale:  $\frac{1}{3}$ .

the eastern boundary of the Dobunni,29 yet Madmarston produced not one Dobunnic coin.30

Perhaps at the beginning of the B phase, the palisade was replaced by a rampart and ditch enclosing the entire hill-top along the contours. On the north, an outer bank steepened the natural slope.<sup>31</sup> Construction was by the simple dump technique, although on the south this was elaborated by including a binding layer of glutinous clay in the middle of the rampart.<sup>32</sup> There was no evidence of stone revetment.<sup>33</sup> The outer ditch was probably a later addition. The material from it was also thrown outwards, but this line of defence covered only the west and south sides of the hill-top and did not follow exactly the line of the inner ditch. The final plan of the entrance, and the trackway through it,<sup>34</sup> must be associated with this outer ditch and bank, but there is no reason why the ceremonial pit containing the scored pottery should not be associated with the building of the inner rampart and of the original entrance through it.

The occasion for the addition of a ditch and bank is uncertain; it may have been the advance of Belgic peoples across the Cherwell not far to the south of Madmarston,<sup>35</sup> or the Roman military advance, or perhaps even some unrecorded threat along the Jurassic Ridge from the south-west. Probably the hill-fort was still occupied in the mid-1st century A.D., but there was no evidence of Iron Age C culture, or of Roman assault. The Romano-British settlement in the valley began early,<sup>36</sup> and, although a few sherds of the Ist century A.D. were found on the hill-top (see below p. 33), Madmarston was soon abandoned.37

The above evidence supports the thesis that the plateau and hill-top camps of the eastern Cotswolds represent two phases within the Iron Age.<sup>38</sup> Clearly Madmarston<sup>39</sup> was later than, and different in origin from, the

29 Rivet, 48 and fig. 1; Allen, op. cit. in note 22, 3, 37 and map 1; Leeds Ant. 7., XI (1931), 404.

<sup>30</sup> Cf. *Rivet*, 48, 151-2. None of the pre-Roman coins from Swalcliffe can be said definitely to have come from the hill-fort. Refs. in *Archaeologia*, LXXI (1921), 258. <sup>31</sup> Cf. similar construction on steep slopes at, e.g., Hambledon Hill, Dorset, and Whitesheet

Castle, Wilts.

<sup>32</sup> Cf. Titterstone Clee Camp, Ant. J., XIV (1934), pl. VIII; and a similar section interpreted as two building phases at Figsbury Rings, W.A.M., XLIII (1925-7), 56 and fig. 11.
 <sup>33</sup> Cf. the nearby forts of Chastleton and Rainsborough, Northants., both with stone-revetted

ramparts.

<sup>34</sup> Cf. e.g., Cherbury, Oxoniensia, v (1940), 18.
<sup>35</sup> Thomas, Oxoniensia, xxII (1957), 29; Rivet, 48 and fig. 1; Hawkes, op. cit. in note 18, 182.
<sup>36</sup> Provisional assessment from preliminary examination of earliest pottery from 1959 excavations directed by Jeffrey May. Cf. V.C.H. Oxon., II (1907), 325.
<sup>37</sup> Cf. Hunsbury in The Jurassic Way, 159.

38 Lyneham, 9-10.

<sup>39</sup> Ilbury is the only nearby hill-top fort, and should probably be considered with Madmarston. V.C.H. Oxon, 11 (1907), 311.







sporadically occupied plateau-camps such as Chastleton and Lyneham.40 It was perhaps a local tribal centre in the northern territory of the Dobunni, becoming most important at the time of the Catuvellaunian expansion not far to the south,<sup>4r</sup> when its people remained unaffected by Belgicization, and therefore probably resisted it.42

The Iron Age economy was probably mainly pastoral: certainly cattle and sheep43 were slaughtered for food. There are no ' Celtic ' fields nearby, fragments of only one quern stone were found, and none of the pits excavated was indisputably for the storage of corn. Some had been used for rubbish and one, containing the sealed deposit of scored pottery, almost certainly held the remains of one special feast. A few fragments of slag suggested the ironworking one might expect in this region. The currency bars may therefore have been made locally, although they ostensibly support the thesis of trade along the Jurassic Route,<sup>44</sup> two suggested trackways of which run immediately to north and south of Madmarston.45 Even if imported, they need not necessarily have come from the Forest of Dean, since iron-working is now attested further east.<sup>46</sup> The excavation suggested, however, that by and large Madmarston supported an isolated and self-sufficient settlement.

The hill-fort was re-occupied for most of the 4th century, perhaps being most used c. 350.47 The defences had collapsed and were not rebuilt. Occupation was confined to the north, on the highest part of the hill, where there was a levelled ' yard ',48 possibly to be associated with corn-stacking or, more likely, cattle. It is uncertain exactly when and why the hill-top was finally deserted.<sup>49</sup>

<sup>40</sup> Lyneham, 9-10. Idbury and Tadmarton, V.C.H. Oxon., π (1907), 315-6, and possibly Rainsborough, V.C.H. Northants., π (1906), 400-1, complete the group.
 <sup>41</sup> Thomas, op. cit. in note 35, 29; Hawkes, op. cit. in note 18, 182; Rivet, 48.
 <sup>42</sup> A hostile population to the north would help explain the linear earthworks associated with the

Belgic site at Callow Hill. Thomas, op. cit. in note 35, 30.

43 Cf. Rivet, 152.

<sup>44</sup> The Jurassic Way, 158, Fox, Pattern and Purpose (1958), fig. 37; Hunsbury, 97.
 <sup>45</sup> The Jurassic Way, fig. 39.

46 Fox, op. cit. in note 44, 53; Draughton, 160.

47 Cf. Ditchley, 67-9.

<sup>48</sup> Cf. similar feature at Wandlebury, Cambridge Ant. Soc. L (1956), 15-8.
 <sup>49</sup> Cf. Bloxham, 55-6. The valley settlement may have continued later, vide coin evidence, Archaeologia, LXXI (1921), 258, and pottery from excavations 1958-9, report forthcoming.



Pottery from cuttings 11 and 11A (1-7); and from cutting 12 (8-23). Scale:  $\frac{1}{3}$ .



Romano-British pottery from layers 4-5; wheel-made (1-25); hand-made (26-39). Scale: 1/3.

#### THE FINDS

#### POTTERY

#### SAMIAN POTTERY

#### By MISS GRACE SIMPSON, M.A., F.S.A.

Gaulish terra sigillata: 3 small sherds only (not illustrated):

1. From a platter. The small surviving patches of slip are deep red in colour. Possibly South Gaulish. Depth 7 ft. 6 in. Layer 10, cutting 1.

2. A chip only, with dull, deep red slip. South or Central Gaulish, 1st or 2nd century A.D. Layer 6, cutting 1.

3. Sherd badly affected by wet conditions, but retaining on both sides small portions of the once glossy slip sufficient to show it came from a thin-walled vessel. Possibly South Gaulish platter, and therefore made 1st century A.D. Depth 5 ft. 5 in. Layer 10, cutting 5.

#### Imitation samian ware: (FIG. 13, 1-6)

1. Rim and neck fragments from rouletted bowls, not imitating a samian form. Cf. Arch., LXXI (1921), 174, fig. 11, 70, and Jewry Wall, 195 where most of the imitation samian ware is dated A.D. 350-400:

1-layer 4, cutting 8 5—layer 5, cutting 8D 6—layer 5, cutting 8B 4-layer 4, cutting 8B 2. Flanged vessels, probably imitating Dr. 38 (4th century A.D.)

3-layer 5, cutting 8B 2-layer 4, cutting 8C

All the imitation samian ware contained mica.

#### NATIVE IRON AGE AND ROMANO-BRITISH COARSE POTTERY

The large number of sherds exhibited a range from the coarsest of hand-made pottery to the painted wares of the 4th century A.D.

The pre-Roman pottery was itself varied, but contained no Iron Age C wares. Most of the sherds from the old land surface were very small and riddled with small holes throughout their dark, friable and porous fabric. They crumbled at touch, and proved impossible to illustrate, not least because rims and bases were almost entirely lacking. The four sherds illustrated (FIG. 13, 7-10) were relatively hard, and did not contain grit to such a marked degree.

Pre-Roman pottery was also found in the pits in cuttings 5W, 11 and 14 N and S. Affinities lie with Iron Age sites on the Oxford gravels to the south, and with sites in either direction along the Jurassic uplands<sup>50</sup> (FIG. 1b). There was no decoration in Glastonbury or Hunsbury style but the vertical scoring, confined to sherds from the pit in cutting 5W, is similar to that on pots from Breedon-on-the-Hill, Leicester. The other principal characteristics-the slight foot<sup>51</sup> and the small overhanging rimoccurred more frequently on the site and re-appeared in the 4th century re-occupation. Indeed, profile and fabric were often not sufficient criteria to distinguish between the native hand-made pre-Roman pottery and late Romano-British wares.

<sup>50</sup> Cf. Kenyon, 73. <sup>51</sup> Kenyon, 70, for refs. to other examples.

The technique of finishing a pot with a form of burnish was, however, more common on the native wares in the later period than in the pre-Roman occupation.<sup>52</sup>

None of the Romano-British wheel-made pottery could be ascribed with certainty to the middle period of the Roman occupation.<sup>53</sup> Almost exclusively, it was late Romano-British, dating at earliest from after A.D. 300 and continuing well into the second half of the 4th century. The wares are generally similar to those of the same period from the *Jewry Wall* site, Leicester, cf. especially FIGS. 52, 54, 55.

Only stratified sherds are described and illustrated. The large quantity of pottery in the topsoil was almost entirely late Romano-British, and is represented by the stratified sherds in FIGS. 16-17. Throughout the catalogue, the abbreviations HM and WM indicate whether the ware is hand-made or wheel-made.

#### The old land surface (FIG. 13, 7-10)

7. Small bowl, half complete. HM. Simple in form and technique. Dark grey core, brownish surfaces slightly uneven, though with signs of attempted smoothing. Cutting 8C, layer 13. *Hunsbury*, fig. 8.

8. Sherd. HM. Ext. decoration of 7 holes, one being divided from the others by a grooved line. Grey core, buff int. with small grits and mica, dark brown ext. with black accretion. Slightly curved. Decoration effected by jabbing from bottom left of sherd as illustrated. Cutting 10. *Breedon-on-the-Hill*, fig. 2, 3.

9. Rim. HM. Grey core, brown int. and yellow-brown coat on ext. Traces of iron-staining on int. Sharp inward and downward kick in wall with small groove in angle. Cutting 16, layer 13.

10. Rim. HM. Dark grey throughout, surfaces pitted, clay poorly levigated. Cutting 10. *Mount Farm*, fig. 6, B4.

#### Pit in cutting 5W (FIG. 14, 1-7)

1. Large cooking pot, nearly complete. HM. Uneven, small and everted rim, slight irregular foot. Scoring and soot on ext. Int. much pitted and partly red with heating. Ext. of base buff, becoming black half way up walls. Rough, coarse brownish-grey fabric with large bits of shell grit. *Cassington*, fig. 2, f; *Mount Farm*, fig. 33, AI 17; *Draughton*, Pl. VI, B.

2. Cooking pot. HM. Slightly everted rim. Roughly vertical scoring and soot on ext. Int. cork-like and pock-mocked. Coarse black fabric with shell grit. *Breedon-on-the-Hill*, fig. 5, 7 and fig. 3, 6.

3. Cooking pot. HM. Less angular version of 2 above. Scoring on ext. Int. corky and pock-marked. Black fabric with orange patches from burning. *Mount Farm*, fig. 10, A VII 2.

4. Cooking pot. HM. Same type as 2 and 3 above but profile less angular. Scoring on ext. Coarse black fabric similar to 2 and 3, only less well levigated. 1-4 have a purplish tinge to the int. surface. Cf. generally *Cassington*, *Draughton*, fig. 42, *Hunsbury*, fig. 8, *Breedon-on-the-Hill*, fig. 3, 1-4 and 6-7.

5. Everted rim, possibly wheel-turned. Pink core and int., with black slip on ext. Well-fired, not crumbly like 1-4. Surfaces smooth. Two other similar sherds from the pit. *Breedon-on-the-Hill*, fig. 3, 9.

<sup>53</sup> Cf. the profiles and fabric of 'native' pottery of Romano-British period at Huckhoe, Northumberland, *Archaeologia Aeliana*, 4th series, XXXVII (1959), fig. 13.

53 The rarity of Samian ware also indicates desertion in the 2nd and 3rd centuries A.D.

6. Fragment of base. HM. Grey core with brown int. surface.

7. Rim of cooking jar. Same as 2 above except that rim slightly inturned. Breedon-on-the-Hill, fig. 4, 4, fig. 3, 5; Chastleton, fig. 7, type 4; Bradford (Woodeaton), fig. 13, 21.

#### Pit in cutting 14S (FIG. 14, 8-18)

8. Rim and walls of large jar. HM, though of very different quality from 14-16. Core black, int. brown and black with smoothing marks, ext. same colours. Surfaces dotted with small holes. The portion of the jar as illustrated comprises two sherds from the stony layer in cutting 14N and one from the bottom of the pit in cutting 14S (FIG. 12).

9. Rim. HM. Part of globular jar. Grey core, brown int., black ext. Clay well levigated; no holes, ext. smooth, int. a little rough from pronounced smoothing lines. Some grits and mica in clay. Top of rim slightly uneven. The portion of the jar as illustrated consists of two sherds from the stony layer in cutting 14N and one sherd from the pit in cutting 14S. *Alchester*, fig. 5, 67.

10. Rim. HM. Int. buff and pitted, ext. pitted but with signs of deliberate smoothing. Mica. *Bradford* (Wytham), fig. 12, 32.

11. Rim, possibly WM. Grey core, smooth black int. and ext., with smooth black burnish on ext. Hard well-fired fabric.

12. Base. WM. Ext. greyish brown, int. black. Ext. smoothed. Slight foot around base which is not a true circle.

13. Base of a pot similar to 17 below. HM. Slight foot, being more pronounced in some parts than others. Dark grey int. and ext., int. being pitted. The angle at which wall rises from base varies, that shown being the greatest from the vertical.

14. Base. HM. Parallel smoothing marks on int. Dark throughout. Corky texture, surfaces much pitted and rough, particularly on ext.

15. Base. HM. Dark throughout. Surfaces much pitted and irregular.

16. Base. HM. Very crumbly, badly levigated and unevenly fired. Core and surfaces vary from black to orange, ext. being mainly latter. Bottom sags slightly from angular join with walls.

17. Rim of globular jar. HM. Int. black, much pitted, containing grits. Ext. buff. *Alchester*, fig. 4, 10.

18. Base. HM. Very friable and badly levigated. Int. grey and black, and rough. Ext. buff.

Layer 6 (FIG, 14, 19-25)

19. Base. WM. Grey throughout. Cutting 6.

20. Flanged rim. WM. Light grey throughout. Cutting 6.

21. Rim. HM. Overhanging rim profile. Black core, brown surfaces.

22. Rim as 21.

23. Rim. HM. Black with shell grit.

24. Rim as 23. Light brown surfaces. Bloxham, fig. 12, 28-31 and p. 51.

25. Rim. HM. Slightly everted. Dark grey core and int. Buff ext. Dorchester, fig. 6, 23; Lydney, fig. 27, 57. Nos. 21-25 were from Cutting 1 (FIG. 4).



FIG. 18



Top of the rampart clay, cutting 8 (FIG. 14)

26. Base. HM. Irregular profile, though has slight foot. Black core and int., light brown ext. Grit and mica in paste. Breedon-on-the-Hill, fig. 3, 4.

#### Outer ditch, cutting 5 (FIG. 14)

27. Base. HM. Slight foot, splayed walls. Dark grey throughout. Breedonon-the-Hill, fig. 5, 15 and 20.

28. Rim. WM. Very coarse, rough and heavy. Grey core, rust coloured surfaces. R-B or medieval (?).

#### Bottom of inner ditch, cutting I (FIG. 14)

29. Rim. WM. Grey throughout with slightly darker core. 1st century R-B (?).

#### Pit filling in cutting 14N (FIG. 15, 1-8)

1. Rim of plain bowl. HM. Profile, rim and walls uneven. Black core with surfaces varying from black through buff to off-white, presumably the result of heat. Int. very rough and broken, ext. smooth but uneven. Contains mica. Camerton, fig. 30, 5A; Mount Farm, fig. 10, B IV 2; Bradford (Stanton Harcourt), fig. 13, 9.

2. Rim and walls of plain bowl with inturned walls at rim and base. HM. Black throughout. Int. irregularly smoothed leaving bumps and holes. Ext. well smoothed. Mica.

3. Inverted rim. HM. Similar to 1 in surface appearance and texture. Dark grey throughout. Int. rough, ext. smoothed. Mica. Breedon-on-the-Hill, fig. 3, 5; Bradford (Allen's Pit), fig. 12, 44.

4. Rim. HM. Grey core, brownish int., dark grey ext. Surfaces pitted. Mica.

5. Rim. HM. Heavy coarse fabric with grits and mica. Light grey core, dark grey int., black and buff ext. Fabric better than e.g., 1. Camerton, fig. 30, 9.

6. Flat-topped rim. HM. Dark grey core with mica, black surfaces. Possibly turned on slow wheel. Smooth surfaces, grits showing on int. Breedon-on-the-Hill, fig. 3, 7. 7. Rim. HM. Greyish core, black surfaces. HM

8. Sherd, from immediately below rim. HM. Grey core showing through to surfaces where not covered by dirty cream-coloured layer of baked clay. Vertical scratch marks on ext.

#### Layer sealing pit in cutting 14N (FIG. 15, 9-19)

9. Rim. HM. Rough coarse orange brown fabric, with thin grey central core. Faint and rough oblique scoring on ext.

10. Rim of globular pot. HM. Ext. coated with brown slip which, unlike 12 below, is not polished. Compact black fabric, brown surfaces with mica. Only sherd of this type on the site.

11. Rim. WM. Thin-walled vessel. Orange throughout.

12. Flat-topped rim. WM. Grey paste, shiny black surfaces.

13. Rim. HM, though probably wheel-turned. Grey core, darker int. and brownish ext.
14. Base. HM. Heavy and solid. Grey paste, black int. and ext. with brown tinge on ext. sides. Base ext. uneven though smooth, int. heavily marked with chopped grass impressions (?). Certainly something was in vessel when still wet, and the effect seems deliberate since marking stops at regular line around walls.

15. Rim of thick jar. HM. Dark grey fabric, int. black with smoothing lines, ext. grey with carefully finished surface, now dotted with many small holes. Walls thinning towards base. Mica and grit in paste. 16. Base. HM. Well fired and smooth finish. Grey core, brown ext., black

int. with scratches on base. Slight foot.

17. Base. HM. Grey core, black surfaces with mica. Smoothing marks on int.

18. Rim. WM. Grey core, brown surfaces with remains of black coat on ext. 19. Base. HM. Grey core, brown ext., black int. Corky texture.



FIG. 19

Miscellaneous objects of iron (1-4), clay (5-6), stone (7-10), flint (11-14), and glass (15-17). Scale: 1.

#### Cuttings 11 and 11A (FIG. 16, 1-7)

1-3. Rims and walls of large jars. WM. Grey surfaces. Cf. e.g. Jewry Wall, fig. 24, 9; ' mainly late '.

 Base. HM. Dark grey core and int., brownish ext.
 Base. HM. More than half complete. Slight foot with irregular profile. Black core and int., buff ext. Thin-walled.

6. Sherd. HM. Angular with two sharp turns. Dark grey core, dark brown int., and buff ext. Corky texture.

7. Rim. HM. Dark grey core. Both surfaces smoothed and covered with black coat giving polished appearance. Mica on ext.

The above sherds were on top of the pit filling.

Cutting 12 (FIG. 16, 8-23)

8. Rim. WM. Buff throughout.

9. Mortarium rim. WM. Grey core, orange surfaces.

10. Base. HM. Grey core, buff int., black ext.

11. Rim. HM. Black throughout. Smoothing on both surfaces. Cf. FIG. 14, 21-4.

12. Base. WM. Imitation samian ware (cf. rims, p. 33).

13. Rim. WM. Hard grey fabric, much grooved on ext.

14. Base. WM. Grey core, orange surfaces, with traces of reddish wash on ext. Sherds 8-14 were in a mixture of humus and yellow clay to a depth of 1 ft. 6 in.

15. Rim. HM. Black core and surfaces, latter smoothed.

16. Rim. HM. Dark grey core and surfaces. Harder fabric than 15.

17. Rim. HM. Black core, brown int., dark brown ext. Surfaces pitted and corky. Unparalleled on the site.

18. Rim. HM, though possibly wheel-turned. Texture and fabric as 17 above. Unparalleled on the site. Breedon-on-the-Hill, fig. 3, 2; Camerton, fig. 31, 17.

19. Rim. WM. White fabric with grey-blue colour coat.

20. Rim. WM. Grey core with dark grey coat on brownish surfaces.

21. Rim. WM. Hard rough grey fabric with mica. Jewry Wall, fig. 56, 15, 'late Roman'. Sherds 15-21 were in stony humus to a depth of 2 ft. 6 in.

22. Rim. HM, though smoothed and much worn. Grey core, buff surfaces.

23. Rim. WM. Grey core, purplish tinge to surfaces, and cross hatching on ext. Hard but fragile fabric. Jewry Wall, fig. 52, 28, A.D. 300-325; Bloxham, fig. 12, 39. Sherds 22-23 were in the pit filling.

#### Cutting 8 and extensions (FIG. 17)

Wheel-made sherds from layer 4-5, nos. 1-25

1. Mortarium rim. Grey slip on orange surface. Grey int. with grits. Arch., LXXII (1922), fig. 6, 33.

2. Rim. Hard grey fabric with mica.

3. Rim. As 2, except for slight incised bands on ext. Archaeologia Aeliana, 4th series, xxxv (1957), fig. 31, type 321, A.D. 350-400.

Rim. Brown-grey surfaces with grey wash. Mica.
 Rim. Light grey fabric with darker grey ext. wash.

6. Rim. Grey fabric. Mica.

7. Rim. Orange ext. and int. Hard paste with mica.

8. Rim. Brown-grey fabric with dark grey int. and ext. Mica.

9. Rim, with handle. Rough grey fabric with mica.

10. Rim and end of handle. Soft grey fabric with mica.

11. Rim. Buff with grey inner core. Mica.

12. Rim. Grey inner core, outer surface brown grey with dark grey wash. Mica.

13. Rim. Grey fabric with dark grey slip on white surface.

14. Rim. Orange ext., grey core. Soft and soapy texture.

15. Mortarium rim. Brown grey core, buff ext., black int., with grits. Mica Jewry Wall, fig. 19, 33, 'mid-4th century'.

3

16. Rim. Grey core with white outer covering under brown slip. Jewry Wall, fig. 52, 23 and 28, A.D. 300-325.

17. Rim. Grey coat over both surfaces covering white core.

18. Rim. Brown grey coat on white core cf. 17; and Lydney, figs. 26 and 27.

19. Rim. Grey core, buff surfaces with mica, and decoration on ext. shoulder.

20. Rim. Grey throughout. Jewry Wall, fig. 30, 4 and 8, 'to end of 4th century '.

21. Rim. White core, brown wash on both surfaces.

22. Base. Grey core, buff surfaces.

23. Rim. Grey core, orange surfaces, grits on int.

24. Base. Grey core, brownish surfaces.

25. Three pottery counters.

Hand-made pottery from layers 4-5 (FIG. 17, 26-39). Cf. Dorchester, fig. 15

26. Rim. Buff fabric with black slip on ext. Int. pitted. Mica.

27. Rim. Black fabric, int. brownish, pitted and showing mica in poorly levigated clay. Jewry Wall, fig. 52, 20, A.D. 300-325.

28. Rim. Wheel-turned? Black fabric with shell grit.

29. Rim. As 27 above.

30. Rim. Wheel-turned? Brown grey core with orange surfaces covered in places by black coat.

31. Rim. As 27 above except that int. black.

32. Rim. Grey core with brown coat covering black fabric.33. Rim. Brown core with black surfaces. Slightly pitted surfaces. Jewry Wall, fig. 29, A.D. 300-325; Dorchester, fig. 15, 23.

34. Rim. Black fabric including shell grit. Dark brown coat on surface. 35. Base. Brown core and int. Black uneven ext. Coarse fabric with shell grit.

36. Base. Grey core, brownish pitted surfaces.

37. Base. Grey core, black to rust-coloured surfaces with ridging.

38. Base. Dark grey core, buff int., black ext. Pitted, slight foot.

39. Base, wheel-turned. Black fabric, pitted and poorly levigated. Slight foot.

#### COINS

Three coins were found, two from layer 5 over the pit in cutting 14N, and both of types classified in Hill and Kent, Late Roman Bronze Coinage (1960), Part I:

1. No. 149. VICTORIAE DD AVGG Q NN  $\frac{D}{TRP}$ 

Constans, A.D. 341-6. Good condition.

# 2. No. 141 or 142. PF AVG ... (damaged) $\frac{*}{\text{TRP}}$

Constantius or Constans, A.D. 341-6.

3. A small, much corroded, coin, probably a minim. Layer 4, cutting 8C.

### THE METALWORK

### By ELIZABETH FOWLER, M.A., F.S.A. (Scot.)

The metalwork as a whole is undistinguished, and there is no evidence whatsoever of any decorative work. Such affinities as there are seem to be with southwestern sites; but this need, and does, mean no more than a common sharing of Early Iron Age traditions, neither specifically 'A' nor 'B'. One has at Madmarston the confused and ill-defined elements that were the basis of Romano-British ironwork. It can only be said that, as one would expect, the material has more in common with the metalwork at, for example, *Llyn Cerrig*, than that in the three Scottish hoards published by Professor Piggott.<sup>54</sup>

#### BRONZE

1. Small semi-circle of bronze. Possibly part of a disc-shaped pin head. Diam. 0.6 cm. Top of pit in cutting 7.

2. Scrap of folded sheet bronze, 1.5 cm. long, 0.8 cm. broad. Two tiny holes on one side may indicate rivet holes. The bronze might, therefore, be the binding or edging for a thin leather or cloth belt. Layer 4, cutting 8B.

3. Pointed bronze wire, square section, 1.6 cm. long, 0.3 cm. thick. Above pit in cutting 11A.

4. Fragmentary bronze object, 2.75 cm. long, pointed at one end but flattened and scoop-shaped at the other (broken) end. Possibly a minute version of the Roman ear-scoop, or a ligula. Found with coin 1.

#### IRON

#### Hoard of iron objects

A hoard of iron objects consisting of twelve currency bars, a square-sectioned bar, an axe-head, a sickle, a 'poker', and two pairs of bridle-bits, was found sealed underneath the northern edge of the stone floor lying in the top of the clay on the back of the inner rampart in cutting 8H (FIG. 8, PL. III B). It had not been disturbed since its deposition, but, though the surrounding clay had afforded it protection, the objects were in an advanced stage of corrosion. The currency bars had rusted together into a solid mass. The axe-head is well preserved, and it, the sickle, the 'poker', and 3 of the currency bars have been cleaned and treated by the Ashmolean Museum Laboratory.

### Currency bars (1-12)

1. Complete except for broken off point. The socket was formed by beating up each side of one end of the flat bar to make a partially closed tube. Length 80.9 cm., width 3.3 cm., thickness 0.48 cm. FIG. 18, 1.

2. Incomplete, point and half the socket broken off. Length 81.2 cm., width 4.3 cm., thickness 0.48 cm. FIG. 18, 2.

3. Incomplete, with a rounded point but only the beginning of the socket. Length 77.7 cm., width 4.3 cm., thickness 0.48 cm. FIG. 18, 3.

The above 3 currency bars have been cleaned and partially restored. Bars 4-13 have not been treated and are much corroded. The measurements are, therefore, approximate to a greater or lesser extent. They are not illustrated.

54 P.S.A.S., LXXXVIII (1952-3), 1-50.

4. Broken point and incomplete socket. Length 84.7 cm.

5. Probably complete, though socket is too corroded to be certain. Length 86 cm.

6. Most of socket complete but point broken off. Length  $84 \cdot 1$  cm. The above 3 bars are approximately  $4 \cdot 3$  cm. wide.

7. Without point or socket, both of which broken off. Length now 69.5 cm. 8. Socket complete but point broken off. Length 76.5 cm. It was possible

to measure the length only of the above 2 bars.

9. Point broken, only the bottom of the socket remaining. Length 81.55 cm., width 4.5 cm., thickness 0.77 cm.

10. Complete rounded point and most of rolled over socket. Length 98.1 cm., width 4.3 cm. Slightly thicker than other bars.

11. Broken into 8 pieces including point and base of socket. Length 77.7 cm. width 3.69 cm., thickness 0.58 cm.

12. Broken but with base of socket. Length 67 cm., width 4 cm., thickness 0.98 cm.

13. Square-sectioned bar. Length 74.6 cm., width 1.12 cm.

The currency bars are all of the broad variety and are exceptionally long. Most of them have lost their points so would have been longer than the measurements above. There was no point in weighing even the nearcomplete bars since so much of the iron had turned to rust. From the way the bars were lying below the other objects in the hoard, and neatly arranged with all the sockets at the same end of the bundle, it appeared that they had been bound together, but no trace of any binding remained. The 'poker', no. 16 below, was lying among the bars, and was only recognized to be different from them during the course of separation and treatment. The same is true of the square-sectioned bar, no. 13 above.

The finding of these dissimilar bars in the actual bundle of currency bars suggests that they too may have served as currency. As bars of iron, even if they were made for some specific purpose, they would have a certain intrinsic value and might therefore have been used in lieu of, or as well as, the more formal type of bar. Indeed, since all the currency bars are, or probably were, of similar dimensions, and therefore presumably of similar 'unit value', it is possible that the 'poker' and the square-sectioned bar possessed that value too. The possibility that bars of iron, other than the socketed bars now generally accepted as being currency, were used for barter, is perhaps strengthened by the curved iron bars in the Belgic burial pit at Hertford Heath. These bars have no apparent function.<sup>55</sup> Though the number of currency bars found at Madmarston is not large compared with that at Salmonsbury,<sup>56</sup> for example, the find is nevertheless the northernmost group which can properly be called a hoard.

14. Shaft-hole axe-head, with squared butt and slightly drooping blade. Overall length  $19 \cdot 5$  cm.; depth of butt  $5 \cdot 7$  cm., of shaft-hole  $5 \cdot 2$  cm., of blade  $6 \cdot 5$  cm. at tip; breadth of butt  $2 \cdot 3$  cm., of blade  $1 \cdot 8$  cm. to  $0 \cdot 4$  cm. at tip; external diameter of shaft-hole  $4 \cdot 3$  cm., internal diameter 3 cm. by 5 cm. longitudinally. FIG. 18, 5.

<sup>55</sup> Information from Dennis Britton, M.A., Publication forthcoming in *P.P.S.*; interim report *E. Herts. Archaeological Society Trans.*, XIV, part 1, (1955-7), 1-19.

<sup>56</sup> Antiquity, v (1931), 489-91.

The lines of forging are apparent on the longitudinal view but they do not run out to the butt end. Possibly this was tempered and beaten once the forging was complete to make the butt especially strong and hammer-like. The shaft-hole, square on the side nearest the butt end and narrowing to a point on the other, is uncommon, but may have been due simply to an idiosyncrasy of the mould around which the iron was forged. The axe-head is a La Tène (La Tène, pl. 43, 7 and 8) rather than a Roman type, but could have been made during the Roman period. Certain military sites, e.g. Housesteads<sup>57</sup> in Northumberland and Saalburg<sup>58</sup> in Germany, have produced similar axes.

15. Sickle: with straight tang and two, possibly three, rivets; remains of slightly curving blade, the cutting edge making an angle with the tang of approximately 157 degrees. The rivets are domed each side and must have held in position two flat bone or wooden plates, or a partially split piece of wood, to form a handle. FIG. 18, 6. Overall length 18.2 cm.; overall width of tang 2.5 cm., of blade 3-4 cm.; thickness of tang and blade approximately 0.9 cm. The handle when complete must have been approximately 2.5-3 cm. thick.

Déchelette (889, fig. 614, 5) figures a similar object from Celles, Cantal, France. Maiden Castle (271, fig. 88, 5) and Wookey Hole, 59 from which also came 3 currency bars, have produced sickles with riveted socketed handles. Glastonbury (Pl. LXI, I, 30) has also produced a tanged, riveted sickle to which the Madmarston example approximates. Cf. also Bredon Hill, 83, fig. 10, 11.

16. 'Poker': rectangular-sectioned bar with a flattened, oval-shaped blade at one end and an oval ring set at right angles to the plane of the blade at the other. Possibly this ring, now much corroded, was originally free-riding. Overall length 74.6 cm.; blade 11.4 cm. long by 3.8 cm. broad, with the extreme point possibly broken; and 0.48 cm. thick. Approximate external diameter of ring 2.5 cm.

Stem 1 · 1 cm. by 0 · 9 cm. FIG. 18, 4. This is an addition to the class of objects to which attention was drawn by the similar find at Southcote, Reading.<sup>60</sup> Others have been found on British sites, e.g. Meare, Glastonbury, possibly Sutton Walls and Hunsbury, though Payne argues that these last are plough shares.<sup>61</sup> Another example was found in 1958 at Danes Camp, Bredon Hill.62 The association at Madmarston could mean that such bars were used in metal-working or, perhaps secondarily, as currency (see above p. 42).

17. Bridle bits: two pairs. Both were in an advanced state of corrosion and it was only possible to see that one had rings, with an overall diameter of 7.5 cm., and what looked like a two-link bit. The second bridle seemed to have incomplete and larger rings and apparently a three-link bit. It is impossible to be more definite about its features. Llyn Cerrig 58 (83, Pl. xxvi) is presumably the type of the first bit; and Hunsbury (66, Pl. VI, A) of the second.

#### Other Iron Objects

18. Socketed chisel: a long, square-sectioned bar with a chisel point and the remains of a socket. Bar now bent, although probably straight originally. Overall

57 Unpublished.

58 Jacobi, Das Romerkastell Saalburg (1897), pl. 33, 14.

<sup>39</sup> Archaeologia, LXII (1911), 574 and 576, pl. LXXVIII, 13.

<sup>60</sup> P.P.S., m (1937), 43-57.
 <sup>61</sup> Archaeological Journal, CIV (1947), 93.
 <sup>62</sup> Information from N. Thomas, M.A., F.S.A.

length 49 cm.; length of socket 2.5 cm.; bar 0.8 cm. thick. Depth, 1 ft. 6 in. to 2 ft. in near vertical position, cutting 8D. FIG. 18, 7. The best parallels are continental La Tène, cf. *Déchelette*, 872, fig. 601; *La Tène*, Taf., 44, 6; *Stradonitz*, pl. xxxvIII, 22.

19. Flanged plate: flat plate with convex upper surface and flanges down each long side. One end broken and the other possibly pointed. Length 10.5 cm.; width 6.5 cm.; thickness 0.2 cm. Corroded lumps on the surface indicate what might have been rivets and suggest that the plate was fastened on to a piece of wood. The object is too thin to have been a plough share. Cutting 8D, as 18 above. FIG. 18, 8.

20. Spear-head: small oval head, corroded socket, thick cross section. Overall length 9.5 cm.; length of head 4.5 cm.; width of blade 2.2 cm. An Iron Age type but smaller than usual. Layer 4, cutting 8. FIG. 18, 9. Almost exact parallel from *Maiden Castle* (fig. 91, 9). On the continent, cf. *La Tene*, pl. xIV, 26, and *Stradonitz*, pl. XIX, 14. Cf. also *Bredon Hill*, 78, fig. 8, 5.

21. Knife: tanged and single edged. Corroded and fragmentary, overall length 3.5 cm. Unstratified, FIG. 19, 3. Probably the usual type of Iron Age knife with slightly curving, convex blade, and tang running straight into the blade back. Cf. La Tène, pl. XLI, 7. Common on southern English Iron Age sites, e.g. Hunsbury, 65, pl. IV, A; Bredon Hill, 79, fig. 9, 2.

22. Object: tanged and flattened extended blade. Overall length 9.7 cm.; length of tang 3.6 cm.; approx.width of blade 2.6 cm. Originally a rectangular bar which then had one end beaten out thinly to form a V-shaped aperture at the blade end of the tang. The 'blade' is broken in two places and most of the edges are corroded. It is impossible to see whether one edge was sharper than the other. Depth 2 ft., cutting 12. FIG. 18, 10.

Exact parallels unknown, though a similar object was found at Traprain Law.<sup>63</sup> A tanged object with its 'upper portion turned over as a kind of flattened spoon ' is illustrated from Wookey Hole.<sup>64</sup> Possibly the object is a sort of tanged chisel or a saw, cf. *Glastonbury*, 385, pl. LXI, I, II.

23. Ring: flat with round central hole. External diam. 3 · 2 cm.; approx. diam. of hole 1 · 2 cm. Possibly a type of washer. Over gully, cutting 10. FIG. 19, 1.

24. Ring: half of a large round-sectioned ring. External diam.  $5 \cdot 3$  cm.; internal diam.  $3 \cdot 5$  cm. Probably a harness ring. Found with 18 and 19 above in cutting 8D. FIG. 19, 4.

25. Spike: pointed both ends, square section. Length 8.7 cm; width 0.6 cm. Unstratified. Not illustrated.

26. L-shaped clamp: length of one arm  $4 \cdot 1$  cm., of the other 0.8 cm.; approx. width 1.5 cm. Layer 13, cutting 16. Not illustrated.

27. Bent flat bar: length 12.8 cm.; width 3 cm.; thickness 0.5 cm. Pit filling in cutting 14N. Not illustrated.

28. Heavy chisel: length 16 cm.; width 1.4 cm. by 1.2 cm. Cf. La Tène, pl. XLIV, 10. Layer 3, cutting 7. FIG. 18, 11.

29. Nail: flat head off-centre. Length 6.3 cm., 0.9 cm. square. Layer 2, cutting 1. FIG. 19, 2. This is similar to seven other nails found on the sit, four of which were definitely associated with the 4th century re-occupation.

63 Burley, P.S.A.S., LXXXIX (1955-6), 118-226, no. 534a.

64 Balch, Wookey Hole (1914), 87, pl. xvII, 5.

#### LEAD

Some scraps of lead were found associated with a small quantity of coal at a depth of 1 ft. 4 in. in cutting 12.

#### CLAY OBJECTS

1. Slingstone: one longitudinal half of a clay slingstone made from blue-grey clay as found in ditch. Topsoil in cutting 5R.

2-3. Slingstones: two of baked yellowish clay from layer 3, cutting 5R.

4. Slingstone: baked yellow clay, showing groove at pointed end made by or for leather of sling. Cf. Maiden Castle, 49, pl. XXII, B. Found as 2. FIG. 19, 5.

5. Baked clay object: surfaces smoothed, notch across one of them. Use unknown: possibly part of clay oven? Depth 1 ft. 4 in., cutting 12. FIG. 19, 6.

6. Daub: large, heavy lumps with smoothing marks and stake impressions. Possibly from pit lining or hut walls. Pit filling, cutting 14S.

#### STONE OBJECTS

1. Whetstone: broken on two sides, other two polished and smooth, with small, very shiny patch near one end. Micaceous ironstone. Layer 3, cutting 7. FIG. 19, 9.

2. Whetstone: complete, though only two sides are polished. Soft bluish shale-like stone which flakes easily from the unpolished sides. Depth 1 ft. 4 in., cutting 12. FIG. 19, 10.

3. Strike-a-light: broken across middle. Groove runs lengthwise. Micaceous ironstone. Pit filling, cutting 14S. FIG. 19, 8.

4. Axe fragment: curved surface smoothed and polished. One edge original, the other secondary. The stone has probably been reshaped to its present form. Greenstone.<sup>65</sup> Layer 13 under rampart in cutting 1. FIG. 19, 7.

5. Quernstone: two fragments, probably not local stone. Layer 3, cutting 5W. Not illustrated.

6. Roughly circular flint scraper: dark blue pebble flint. Top of ditch fill in cutting 1. FIG. 19, 11.

 Small flint blade: light brown flint. Layer 13, cutting 8. FIG. 19, 12.
 Small flint blade: light brown flint. Layer 6, cutting 1. FIG. 19, 13.
 Small flint blade: light blue flint. Unstratified in cutting 8D. FIG. 19, 14. Several flakes, cores and chips were also found.

#### GLASS

1. Neck and handle of globular jar: light green glass containing small elongated bubbles. Cf. similar two-handled type, Mayen cemetery, Bonner Jahrbucher, 147 (1942), 263, fig. 3b.66 Layer 4, cutting 8B. FIG. 19, 15.

2. Rim: same type of glass as 1. Small moulded ridge on exterior. Depth 1 ft. 4 in., cutting 12.

3. Rim: thin green glass with split rim forming elongated interior hollow. On top of pit filling, cutting 11. Cf. Ditchley, fig. 12, 4. FIG. 19, 16.

65 Petrological examination by Professor F. W. Shotton, Dept. of Geology, University of Birmingham, has shown the axe-fragment to be 'a perfectly typical example of Group vi, and so from the Langdale group of factories". <sup>66</sup> I am grateful to Dr. D. B. Harden for this reference.

4. Fragment of curved opaque glass, very thin. Layer 5, cutting 14N.

5. Chipped lump of pale yellow glass, looking like a flint core. Found with minim in cutting 8C.

6. Glass bead: opaque white glass, with nearly continuous yellow scroll streaked with dark green. Colouring immediately under surface of glass. 9 in. into rampart clay in cutting 8L. FIG. 19, 17.

#### ANIMAL BONES

### By MISS M. MAITLAND HOWARD

#### Institute of Archaeology, University of London

#### Layer 13, cutting 8

Bos longifrons. Fragments of bone, including metatarsal. Sheep, metacarpal.

#### Pit filling, cutting 5W

Bos longifrons and sheep. The bones from the pit in this cutting are all of cattle, except for a few of a small immature sheep. There are no complete skeletons, but remains are present of four small animals, all typical Iron Age Bos longifrons with very small horn cores. The bones are immature (epiphyses unfused), and the teeth newly erupted, indicating that the animals were 2-3 years old. This is the age at which food animals were usually slaughtered and, as all the long bones have been split for marrow extraction, the bones in this pit are probably the remains of a feast.

#### Pit filling, cutting IIA

Bos longifrons, young. Teeth and part of metatarsal.

#### Pit filling, cutting 14N

Bos longifrons. Tooth and bone fragments.

#### Pit filling, cutting 14S

Unidentifiable calcined bone fragments.

#### Layer 6, cutting 8

Bos longifrons. I milk molar, I milk pre-molar and 2 immature molars, i.e. the animal was still cutting teeth when killed.

#### Layer 5, cutting 14N

Bos longifrons. Bone fragments. Horse, small. Molars.

#### Layer 4, cuttings 8, 8B and 8C

Bos longifrons. Many fragments, including 1 rib, a half hoof, and a fragment of molar.

#### Layer 4, cuttings 8, 8A and 8B

Sheep. Teeth, including molar, and bone fragments.

#### Layer 4, cutting 8D

Horse, small. Molars.

The bones throughout are those of small animals of typical Iron Age type. Cattle predominate to a very great extent, though sheep and horse occur. There is no pig. The majority of the bones appear to be food remains.

### CHARCOALS

### By Dr. G. W. DIMBLEBY

Department of Forestry, Imperial Forestry Institute, Oxford

Layer 13, cutting 1 Hawthorn/apple, 1.

Layer 13, cutting 6 Oak and willow, 1 each.

Layer 13, cutting 8 Oak, several; hawthorn/apple, 1.

Layer 11 (ditch filling), cutting 1 (?) willow, root of. Several.

Pit filling, cutting 5W Hazel, 1.

Pit filling, cutting 14N Oak, several; hawthorn/apple and ash, 2 each.

Pit filling, cutting 14S

Hazel, 1; large quantity of large pieces of beech, oak and ash.67

Layer 6, cutting 6

Oak, 2; prunus and birch, 1 each.

Layer 6, cutting 8 Oak, several.

Layer 5, cutting 14N

Oak, 4; hawthorn/apple and ash, 3 each.

<sup>67</sup> I am grateful to H. W. M. Hodges, Institute of Archaeology, University of London, for treating the fragments of the wooden vessel, and the lumps of daub, from the pit in cutting 14S.

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Layer 4, cuttings 8, 8A and 8B Oak, 5; ash, several; prunus and hazel, 1 each.

Note: (i) The numerals after each identification indicate the number of samples examined. (ii) On the evidence of charcoal structure it is impossible to separate Hawthorn and Apple: hence the hybrid name. (iii) In this material it was difficult to distinguish between Blackthorn and the Cherries, here indicated as Prunus.



Oblique aerial photograph of Madmarston Camp from the south-west.

OXONIENSIA, VOL. XXV (1960)

Ph.: Ashmolean Museum FOWLER, EXCAVATIONS AT MADMARSTON CAMP, SWALCLIFFE



 $\mathbf{C}$ 

A. Cutting 1 across the inner rampart, inner ditch and middle bank. The Swale valley is in the background. From the north.
B. Cutting 1, east face, showing ditch section. From the south-west.
C. Cutting 16 showing the clay impressions on top of the buried surface. From the east.
D. The pit in cutting 5W, showing the deposit of animal bones on top of the large cooking pot. Phh.: P. J. Fowler

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A. Cutting 8B showing the stone layer associated with the 4th century A.D. re-occupation.
 B. The hoard of currency bars and associated objects lying on the back on the inner rampart beneath the stone layer. Cutting 8H from the south.
 C. Cutting 7 showing the first prehistoric pit to be located by the magnetometer. From the south-west.
 D. Cutting 14N showing the largest pit excavated, the section across it and the stone kerb around it. From the west.

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