

Excavations at Callow Hill, Glympton and Stonesfield, Oxon.

By NICHOLAS THOMAS

INTRODUCTION

THE excavations described in this report were carried out by the Oxford University Archaeological Society in order to throw new light on the problems posed by the group of Roman villas that lies in the area defined by the north Oxfordshire Grim's Dyke. It was agreed that this could best be done by investigating the ditch which enclosed one of these villas—Callow Hill, $3\frac{1}{2}$ miles NW of Woodstock (National Grid: 42/409195)—and the prominent earthworks immediately to the east of it. These earthworks appeared to have much in common with Grim's Dyke itself, which runs through Blenheim Park about one mile farther towards Woodstock. It was hoped that it would be possible to deduce some relationship, either chronological or political, between the villa at Callow Hill—and hence, to some extent, between the other villas hereabouts—and Grim's Dyke.

The work was carried out during the first three weeks of September, 1950, under my direction, assisted by Mr. Alan Hunter.¹

No previous research had been undertaken at Callow Hill. The site has long been known because of the amount of Romano-British building debris and potsherds which lie about on the surface. In 1916 a floor was found,

¹ The excavations were made possible by a grant of £30 from the Research Fund of the Oxford University Archaeological Society. Sincere thanks are due to His Grace the Duke of Marlborough, Col. Sir Charles Ponsonby Bt., Mr. and Mrs. E. Tomkins, and Mr. R. Bond for permitting the work to take place and for so much encouragement while it was in progress. I am grateful to Mr. A. G. Hunter for his unfailing help and advice on the site and in the preparation of this report; to Miss Grace Simpson, Mrs. F. L. Balfour-Browne, Dr. J. Wilfred Jackson and Dr. I. W. Cornwall for their specialist reports; to Mr. A. T. Jones for help with the survey; to Miss D. M. Hunter, Mr. P. Cass, Mr. M. Teague, Mr. P. J. Parr and Mr. J. D. Jones who acted as supervisors; and to all the other members of the Society who helped dig. I am also grateful to Mr. and Mrs. G. de Rowan, Youth Hostels Association, who provided accommodation for members of the Society at Charlbury Youth Hostel.

All the pottery and small finds will be deposited in the Ashmolean Museum, Oxford, together with the original copy of the survey of the Callow Hill area.

A key to the symbols used in all sectional drawings is given in FIG. 9, facing p. 24. Most layers bear numbers (in circles) in addition, for convenience of reference. In FIG. 9 (the sections across the villa ditch), letters (in circles) instead of numbers indicate the various layers. The figures in squares show the position of the Samian fragments reported on by Miss Simpson (p. 30). Numbers in triangles indicate published trench-faces, numbers without frames indicate trenches referred to in the text.

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together with foundations and wall-plaster.² The importance of the site was noted by O. G. S. Crawford in his study of the topography of the Oxfordshire Grim's Dyke in 1930.³ Further notice was taken when C. A. R. Radford excavated the villa at Ditchley, about a mile to the NW, another of the Roman farms lying within this earthwork.⁴ In 1935-6 D. B. Harden and C. Musgrave carried out an extensive survey, with selective excavation, of Grim's Dyke, in connexion with which the earthworks at Callow Hill were briefly described, but no attempt was made by excavation to deduce their relationship to the main earthwork.⁵

LOCATION OF THE SITE

(FIG. 4)

The Roman structures at Callow Hill lie on the Cornbrash, at about 430 feet O.D. The villa enclosure straddles the road (B.4437) from Woodstock to Charlbury. The ground hereabouts is sufficiently flat to allow of the construction of an air-field in the Second World War; one of its hangars still stands immediately west of Starveall Farm. To the north the ground dips sharply into Pool Bottom, a narrow valley through which a rivulet flows east to join the River Glyme a mile away. Two miles to the south the valley of the River Evenlode forms another edge to this limestone plateau.

To-day Callow Hill is a locally wooded area with flora consisting chiefly of beech, ash, hazel, elder and hawthorn. The subsoil is so near the surface and the soil is so poor that crops grow only with the aid of much artificial manuring. The name of Starveall Farm is significant. Local opinion argues that the area would serve better as grazing for sheep and cattle than for the production of crops. Ekwall⁶ derives the name Callow Hill from the Old English, meaning bald or bare, suggesting perhaps that this Roman farm had been developed in an open space in country otherwise wooded.

THE AERIAL AND GROUND SURVEYS

The late Major G. W. G. Allen obtained a number of good oblique aerial photographs of Callow Hill during the years 1933-6, three of which, reproduced

² *V.C.H. Oxon.*, 1, 313-5, where a good summary of all the information then available about Callow Hill is given.

³ O.G.S. Crawford, *Antiquity*, IV (1930), 310.

⁴ *Oxoniensia*, 1 (1936), 67. The map, *ibid.*, fig. 7, includes the area of Callow Hill villa; it lies at the bottom right-hand corner, by the words 'to Woodstock'.

⁵ *Oxoniensia*, 11 (1937), 78 and fig. 20.

⁶ *Oxford Dictionary of English Place-Names* (1936), p. 79.

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here for the first time (PLS. II-IV), serve to amplify the survey (FIG. 5) made on the ground before excavation. The features to be discerned fall into four groups which it is convenient to describe from east to west.

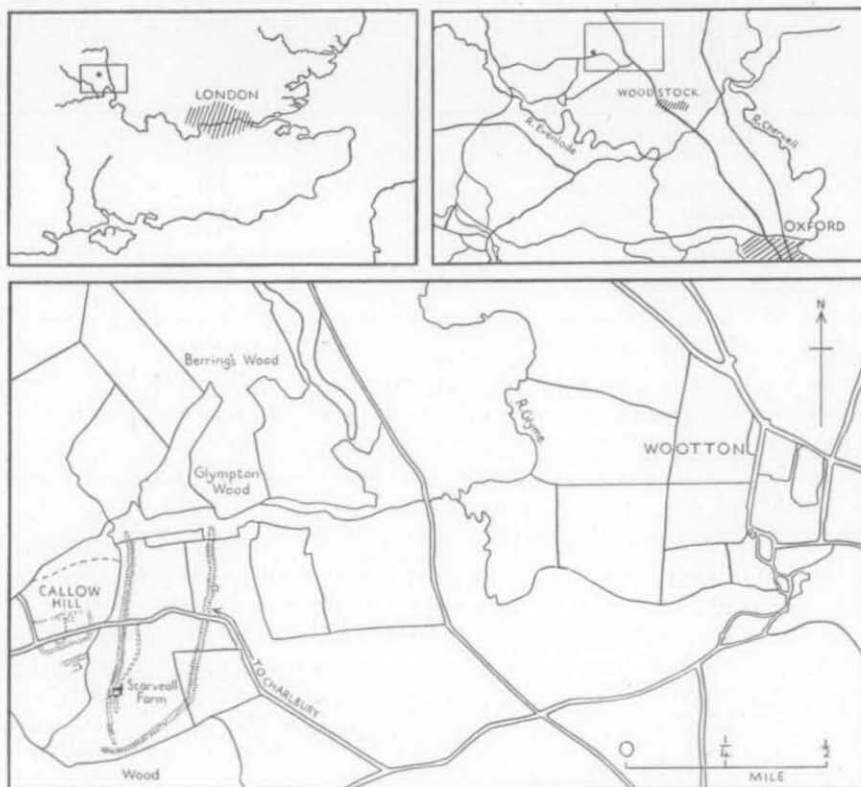


FIG. 4

CALLOW HILL, OXON. : ITS NATIONAL AND REGIONAL SETTING

Based on O.S. maps with the sanction of the Controller of H.M. Stationery Office.

THE CROSS DYKES

The two defensive Dykes, B and C, which run across country from Pool Bottom southward to the woods beyond Starveall Farm, are shown for the greater part of their length in PLS. II and III and were examined in Areas Y

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and Z (pp. 15-19). PL. II provides the only evidence that Dyke C curves round behind Dyke B, leaving a small gap between them. The small ditch 21 ft. east of Dyke B, interpreted below as a palisade-trench (FIGS. 6, 7; PL. VII, B), does not show up from the air or at ground level and so is not plotted on FIG. 5. A large pit resembling those in the villa area has been dug through Dyke C, 370 ft. north of the point where it underlies the road to Woodstock. This depression is about 60 ft. in diameter.

THE VILLA ENCLOSURE

Ditch D, surrounding the villa buildings, shows in all three air-photographs and was examined in Area X; it is the main feature visible in PL. IV. One small gap appears in its south side about 100 ft. from the SW. corner. The prominent gap in the centre of the east side was excavated in 1950. Three, possibly four, gaps appear in the north side. A ditch of slight proportions appears to lie outside the villa enclosure on this side, running from the NE. corner to the point opposite the main group of buildings where the villa ditch changes direction slightly (cp. PL. IV and, more distinctly, *V.C.H. Oxon.*, I, PL. XXI, A).

Within the villa enclosure the chief group of farm buildings lies centrally surrounding a hollow which shows as a dark mark in the photograph and probably represents a well. This area was raised slightly and levelled, the surface of the field around it falling away towards the north and east. The modern road rises and falls sharply where it crosses the area of the buildings. It was hereabouts that, in 1916, a mosaic floor was exposed during road work (above p. 11). South of the road another depression appears as a second dark circular mark in the air-photographs and lies between two curving parallel crop-marks leading towards the villa buildings from the gap through the southern side of the main enclosure-ditch.

FEATURES NORTH AND WEST OF THE VILLA

North of the villa enclosure a third depression appears as a circular mark in PLS. II and IV. Beyond this, towards the NW. corner of the field, PL. IV shows two narrow ditches running NW.-SE., and converging but not meeting. They should probably be associated with the meandering ditches in the field immediately to the west and the oval ditch in that to the south. The latter, faintly discernible in PL. III, shows in other air-photographs as an ellipse with a major axis 200 ft. long. NW. of it, not shown in the published photographs, other ditches and small irregular enclosures can be seen.

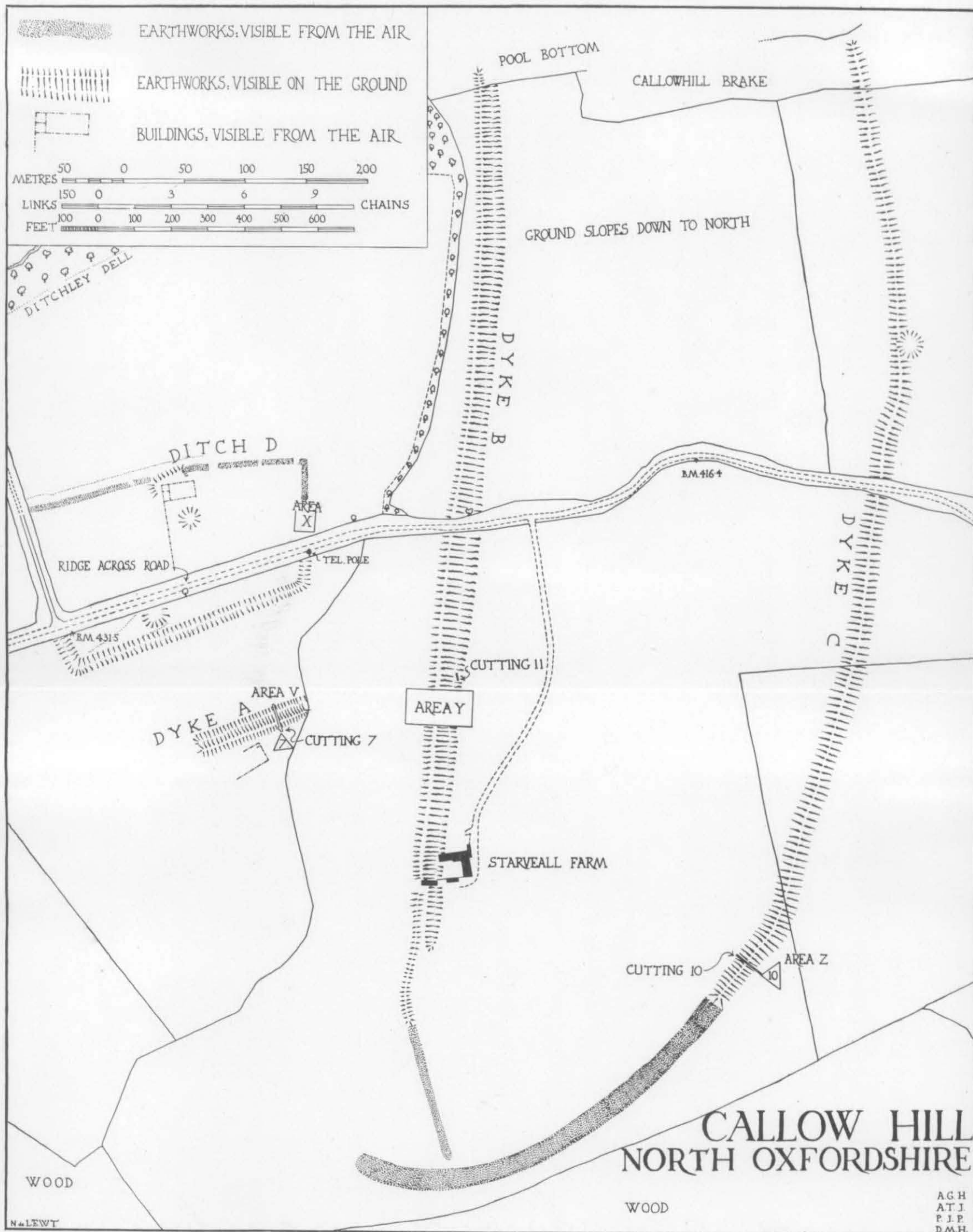


FIG. 5

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FEATURES SOUTH OF THE VILLA

Dyke A (FIG. 9) appears in PLS. II and III as the only crop-mark comparable in size to those of Dykes B and C and Ditch D. Its western end is clear and abrupt. During fieldwork in 1950 in Area V, marks visible in the growing corn at eye-level suggested that as it approached Area Y it forked and ran across Dyke B. Faint indications of this fork appear in some air-photographs but no traces of it were found by excavation.

Just south of Dyke A an enclosure with sides approximately 100 ft. and 50 ft. long is visible in PLS. II and III. The angularity of its outline, together with faint indications of a third (northern) side, suggest that it represents a rectangular building.

THE EXCAVATIONS IN AREAS Y AND Z

In Areas Y and Z cuttings were laid out to examine the two long earthworks east of the villa. Their physical relationship to the villa ditch is shown in the air-photographs (PLS. II and III) and in FIG. 5.

Dyke B (Area Y), an earthwork consisting of a ditch, bank and palisade-trench, runs for over half a mile nearly straight and in a N.-S. direction. Extensive fieldwork before the excavation began suggested that the northern end stopped at the edge of the small narrow valley called Pool Bottom (FIG. 5). On the ground the other end of this ditch changes direction slightly 200 yards south of Starveall Farm and then becomes invisible. The air-photograph (PL. II), however, shows that it runs on for some 100 yards and then stops just short of a large wood.

Dyke C (Area Z), similar in structure to Dyke B save that no palisade-trench was found, lies nearly 400 yards to the east and pursues a similar course. Its line is more curved, for while its north end is found in Pool Bottom, its other end appears to run round behind the southern end of Dyke B before stopping.

DYKE B

(Plan of excavations, FIG. 6: section, FIG. 7: cuttings 5, 6, 6A, 6B, 11.

PLS. V A, VI B, VII B: soil samples, p. 52)

THE DITCH

The ditch was 26 ft. wide at the surface of the Cornbrash and 6 ft. deep. Its floor was flat and its sides sloped gently. Silting had taken place slowly; medieval, seventeenth and eighteenth century sherds occurred to within 3 ft. of the

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bottom. The primary silt (layer 7) consisted of an even deposit of clean yellow sand 1 ft. thick, derived from the sides of the ditch. No datable finds came from it. From the inner edge of the ditch a heavy slide of rubble had tumbled in and lay directly on the bottom silt. Above these two layers the next filling comprised soil containing a large amount of limestone chips, spread evenly across the ditch (layer 6). The two upper layers beneath the modern plough-soil (5 and 4) contained material that was much less stony; layer 5 was redder and had a more clay-like texture than layer 4 which resembled the top-soil.

THE BANK (Finds : pottery, p. 32, FIG. 10, nos. 1-8 (all Belgic), FIG. 15, nos. 1-3 (Shelly Ware) ; bronze, FIG. 16, no. 6 ; bones, p. 51.)

The bank had been built up with Cornbrash derived from the ditch and perhaps augmented by surface scraping (see below). No revetting or internal strengthening were found. As it exists today the base of this heap is 16 ft. broad and its thickness 12-18 in. It is separated from the ditch by a berm 11 ft. wide.

Twenty-five ft. west of the inner edge of the bank a broad shallow scoop had been hollowed out in the rocky subsoil. As indicated below, the spread of material from the bank lay at a low level in this depression, suggesting that it may have been dug at the same time as the ditch to provide additional stone for the bank.

The erection of the bank involved the sealing of the land surface beneath it. This appeared in cuttings 5, 6 and 6B as a layer of bright red loam with a slightly clay-like consistency, 18 in. thick. It contained only a small amount of limestone chips. Dr. I. W. Cornwall's report on his analysis of soil samples from this layer appears below (p. 52).

THE PALISADE TRENCH

A second, very small, ditch was found in cutting 6A, 20 ft. east of the outer edge of the ditch of Dyke B and running parallel to it. This was shaped like a truncated V, the lower half being packed with Cornbrash chips lying on a little sandy bottom silt. Above, the ditch was filled with red earthy clay resembling layer 5 in the main ditch.

THE HEARTHES (Finds : pottery, p. 34, no. 8b, Hearth A).

Three hearths were found in Area Y. Hearth A lay on top of the bank as it exists today, at its inner edge in cutting 6B. It appeared as a circular patch of burnt stones and charcoal 2 ft. in diameter ; several sherds of a large vessel had been used to make a base for this hearth. Hearth B, similar in

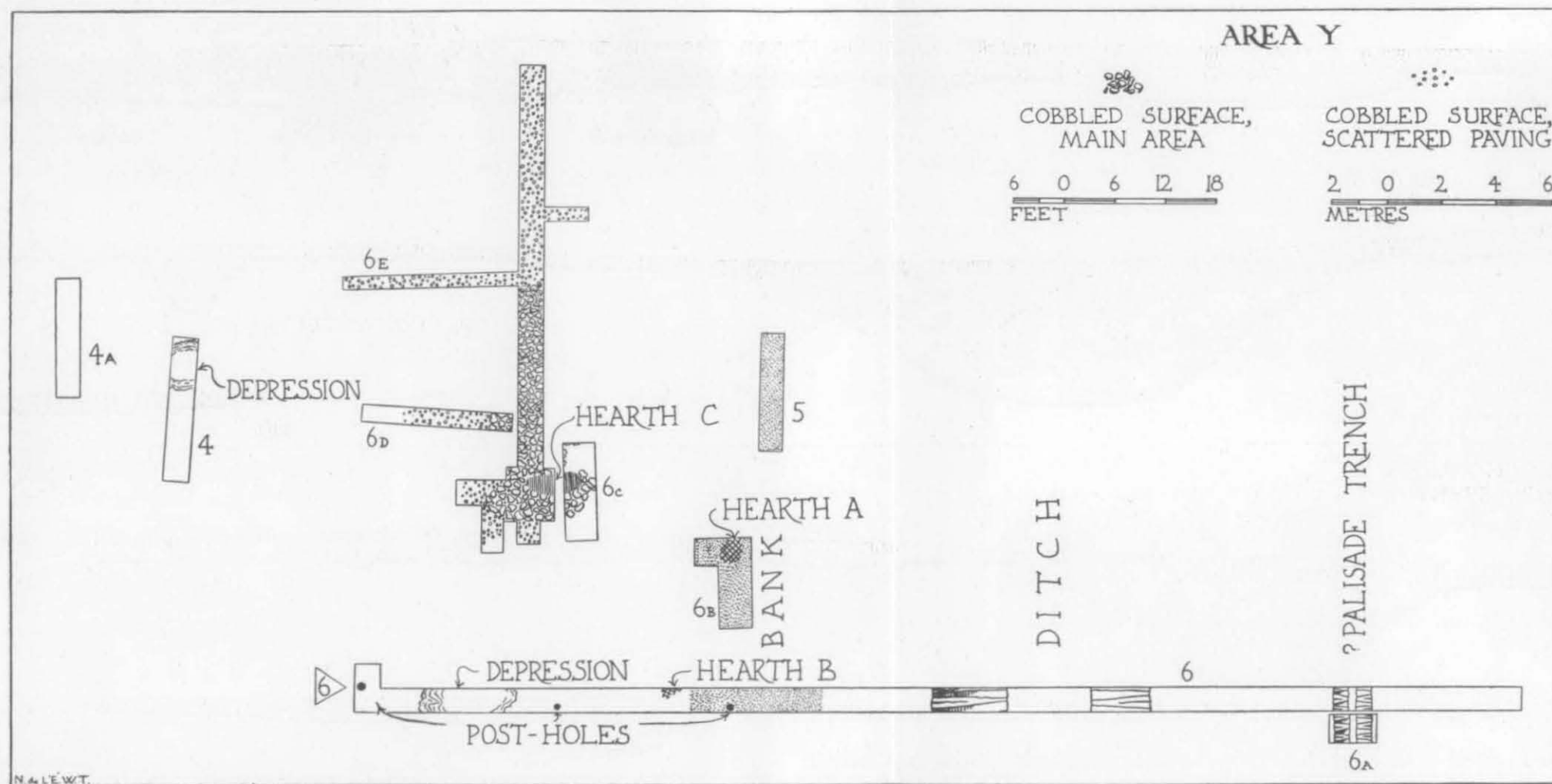


FIG. 6

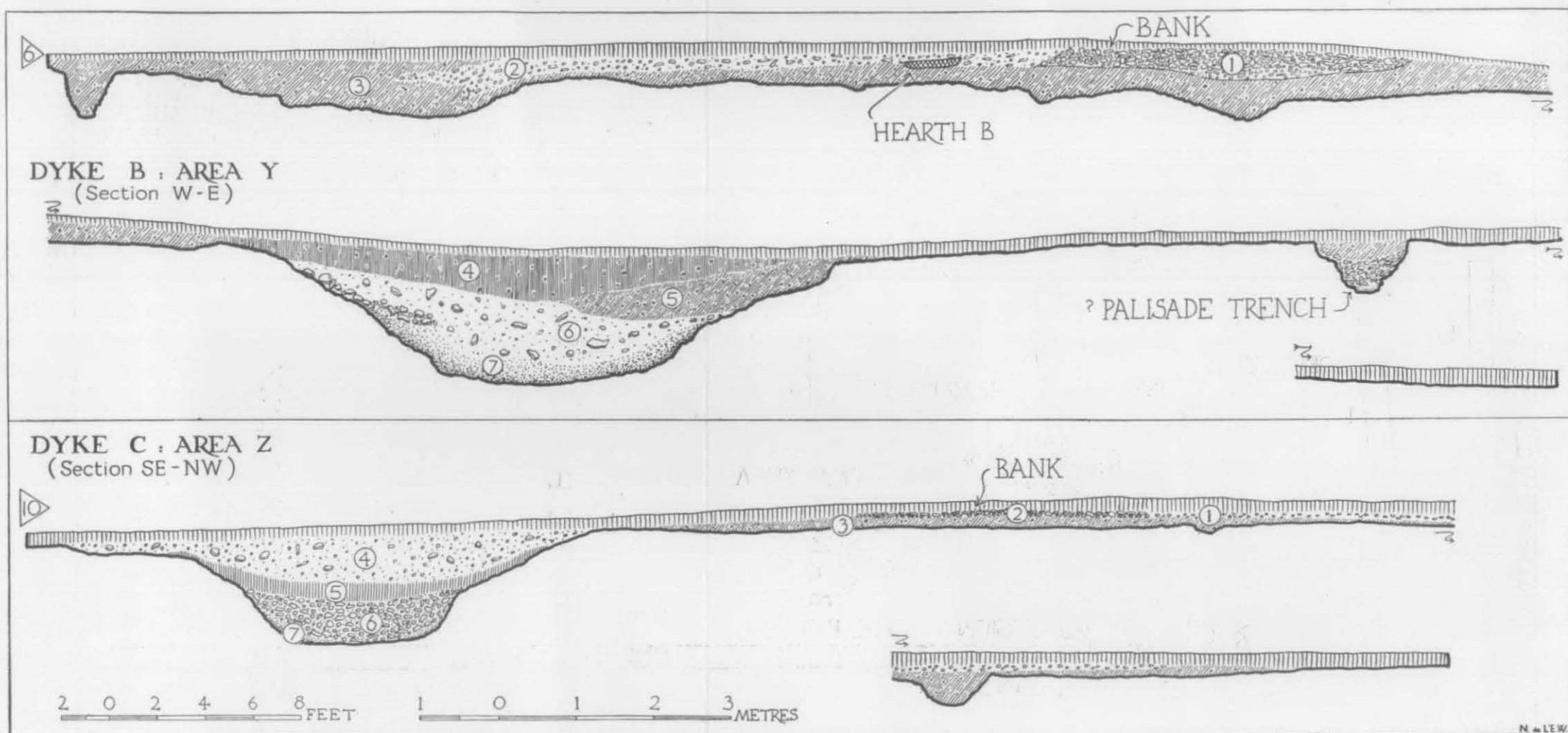


FIG. 7

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shape and size to hearth A but lacking associated pottery, was 3 ft. west of the inner edge of the bank in cutting 6, at the level of the old land surface. The third hearth, C, occurred at the south end of cutting 6c and appeared as an oval area of burning directly on top of the cobbled surface (see further below).

THE POST-HOLES

In cutting 6, three holes had been dug into the subsoil at intervals of 21 and 25 ft., the first occurring at the west end of the cutting. They were sufficiently regularly spaced and shaped to suggest that they were post-holes, though no trace of posts remained. Each was roughly cylindrical, 9 in. in diameter and sunk through the floors of wider, shallow depressions. The two to the east were 23 in. deep; that to the west penetrated the rock only 5 in. Their filling was sandy red loam closely resembling the soil sealed beneath the bank. The easternmost hole had been covered by the bank: if the holes belong to a single scheme, they must be considered earlier than Dyke B.

THE COBBLED SURFACE (Finds: pottery, FIG. 10, nos. 20-25 (Belgic); FIG. 15, nos. 4-5 (Shelly Ware); iron, FIG. 16, no. 15).

In cuttings 6c, 6d and 6e a cobbled surface was revealed lying just behind the bank of Dyke B. It was not completely investigated. Its SW. edge appeared in cuttings 6d and 6e; northward it extended 42 ft. without ending, though the stones composing it decreased in size at the end of this cutting. At the south end of this cobbling there was a roughly rectangular area of distinctly larger slabs of Cornbrash, about 10 ft. by 12 ft. (PL. VI, B, and FIG. 6), on top of which lay hearth C. North of it the stony layer appeared to be graded in two smaller sizes, medium-sized stones extending away from the area of hearth C for a distance of 24 ft. and smaller chips to the ends of cuttings 6d and 6e.

There was little stratigraphical evidence for the relationship of the paved surface to the earthwork. The paving lay 1 ft. beneath the present surface and was only 6 in. above the rocky subsoil. The spread of the bank of Dyke B lay over the cobbles, proving that the floor was of some antiquity. The pottery found on, in and under it was all Belgic or early Roman and most of it was similar to sherds associated with the bank.

THE SPREAD OF THE BANK, FIG. 7, layer 2 (Finds: pottery, FIG. 10, nos. 9-19 (Belgic)).

Cuttings 6, 6c, 6d and 6e showed a diffuse layer of limestone chips spreading westward from the inner edge of the bank for a distance of 24 ft.

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This material, spread from the bank by ploughing, sealed hearth B, covered the middle post-hole described above and appeared at a low level in the hollow in the Cornbrash which seems (p. 16) to have been an additional quarry for the bank. It also sealed the paved area north of cutting 6. The soil beneath layer 2 closely resembled the red loam beneath the bank (FIG. 7, layer 3) but was rather more stony.

POSSIBLE EASTWARD EXTENSION OF DYKE A (FIG. 6, cuttings 4, 4A, 5 : see also above, p. 15).

Cuttings 4, 4A and 11 were designed to show whether, as crop-marks suggested, Dyke A continued in an easterly direction and cut across or ran beneath Dykes B and C. They failed to reveal any trace of it. The only feature of archaeological significance found was a shallow depression in the Cornbrash in cutting 4 which resembled that revealed in cutting 6.

THE FINDS (FIGS. 10, 15, 16).

Sherds of native (i.e. Belgic) wares occurred in the make-up of the bank and in the material of its spread. The only piece of Samian, an early form of Drag. 27, was a surface find. A bronze ear-ring (FIG. 16, 6) lay on the land surface sealed by the bank in cutting 6B.

DYKE C

(Plan, FIG. 5 ; section, FIG. 7. PL. V B)

Dyke C ran roughly parallel to B, curving round at its southern end until it lay behind the butt-end of the latter. The presence of crops dictated the position of cutting 10, which was laid out at right angles to the line of the earthwork.

THE DITCH (Finds : bronze, p. 48; pottery, p. 47).

The ditch of Dyke C resembled that of Dyke B but was a little narrower and not quite so deep, it being 17 ft. wide and 4 ft. deep, measured from the surface of the Cornbrash. Its floor was flat and its sides sloped as gently as did those of the ditch to the west. A berm of 11 ft. separated the inner edge of this ditch from its bank.

At the bottom of the ditch a small amount of sand had accumulated in each corner (FIG. 7, layer 7). Above this was a deposit of very hard-packed earth and limestone chips 2 ft. thick. This was so compact that at first it seemed to be undisturbed rock. Across layer 6, sandy earth, devoid of pebbles,

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had collected to a depth of 9 in. Above this, reddish earth with pebbles filled the ditch to the level of the modern plough soil.

No palisade trench was found corresponding to that outside the ditch of Dyke B.

THE BANK

Very little of the bank of Dyke C had survived modern ploughing, but there was sufficient to show that it was made of Cornbrash derived from the ditch. Its base, as existing today, was 13 ft. broad. The bank lay on a clean, almost stoneless red earth similar to that in area Y but only 6 in. thick. This bank had spread partly into the ditch but more in the other direction, as had the bank of Dyke B. A line of pebbles can be seen in the section (FIG. 7, layer 1) spreading westwards for a distance of 25 ft.

THE FINDS

Four sherds of pottery and a fragment of the rim of a bronze dish (FIG. 16, 7) were found in this cutting. Two sherds from the spread of the bank and a third found at the level of the old land surface, but well clear of the bank, were plain pieces of native ware identical with the earliest fragments from Area Y. The fourth sherd was of grey Roman ware, lying at the very base of layer 5 in the ditch. The bronze fragment came from the spread of the bank.

THE EXCAVATIONS IN AREA V

DYKE A

(Plan, FIG. 5 ; section, FIG. 9. PL. VI C ; soil samples, p. 52)

THE DITCH

The profile of the ditch of Dyke A (section 7, FIG. 9) resembled a truncated V. The floor was flat and 5 ft. wide ; the walls sloped evenly to a width of 20 ft. at the rock surface. The bottom of the ditch lay 6 ft. from the surface of the Cornbrash. Three ft. from the bottom a slight ledge was visible in each wall, resembling section 1 of the villa ditch (p. 21).

The bottom silt (layer 12) on the south side of Dyke A was clean yellow sand, concentrated in the angle formed by the wall and floor. On the north side the corresponding silt (layer 11) was very hard-packed rubble. Above it the ledge in the wall already described was filled with sandy material like that of layer 12. A slide of very loose Cornbrash (layer 10), resembling layer H

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in the villa ditch (p. 23), but more finely broken up, sealed layer 12 and ran up against layer 11. It had entered the ditch from the south (inner) side. Layers 8 and 9 completed the filling of the lower part of this ditch : their upper limit suggested that an angle of rest had been reached in the course of the filling. Layer 9 was dark earth mixed with limestone pebbles. It lay on the north side of the ditch without extending across to either wall, just filling up the hollow between layers 10 and 11. Layer 8, above it, was a lens-shaped accumulation of clean fine brown loam. Layers 8-10 were sealed by a deposit of yellowish earth mixed with a large amount of pebbles. This had slipped in gradually from the south, reaching across to the other side of the ditch. Layer 6, a second, more substantial 'lens' of fine brown earth, lay above it on the north side of the ditch, filling the hollow between the surface of layer 7 and the north wall. A fire had been lit on the surface of layer 6 ; an area of burnt earth and charcoal spread from one side of the section to the other. An accumulation of fine dark soil with pebbles sealed layers 6 and 7. It was derived equally from the north and south and effectively completed the filling of the ditch. Modern ploughsoil covered it.

THE BANK (FIG. 9)

The rubble obtained from the ditch had been piled on the south side ; today a 10 ft. gap separates bank and ditch. Very little of the bank survives. Though still 12 ft. wide it was nowhere more than 9 in. thick and for half its width it was less than 6 in.

THE OLD LAND SURFACE (FIG. 9, layer 3)

The bank covered a natural depression in the Cornbrash so that the soil sealed beneath it was 2 ft. thick at one point. This old surface soil, as in Area Y, consisted of bright red clay with a few limestone pebbles.

THE SPREAD OF THE BANK : THE HEARTH (FIG. 9)

South of the bank a spread of pebbly soil nearly 12 in. thick (layer 2) separated the natural rock from the plough-soil. This represents rubble from the bank moved by ploughing and weathering. Layers 5, 7 and 10 in the ditch represent the same destruction.

Two feet south of the bank a pit had been dug through this layer and in it a fire had been lit. The presence of fragments of friable pottery resembling the native Shelly Ware of Areas Y and X in this hearth showed that in all probability it was Roman, though dug after the bank had started to spread.

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The pit was circular, 3 ft. in diameter and bowl-shaped. Its top lay at the base of the plough-soil and it had been cut into the rock to a depth of 10 in.

THE FINDS (FIG. 10, NOS. 1, 3 ; FIG. 15, NO. 22)

The only objects found in section 7 were a few small sherds of Belgic and early Roman pottery. Those that are sufficiently characteristic to be datable probably belong to the first or early second century A.D. Fragments of a decorated butt-beaker (pp. 35, Area V, no. 4) from layer 10 in the ditch resemble sherds from the bottom of the villa ditch.

THE EXCAVATIONS IN AREA X

THE VILLA ENCLOSURE

The Roman farm buildings north of Dyke A are surrounded by a roughly rectangular enclosure-ditch (D), about 410 ft. by 640 ft., and containing some 4 acres of flat land. Only excavation can settle the precise shape and ground-plan of the buildings within. The air-photographs suggest buildings on three sides of a square, facing east and with a large well in the courtyard so formed. The only foundation which shows clearly on the photographs (PL. IV) is a rectangular structure between the well and the north side of the enclosure, at the point where this ditch changes direction slightly eastwards. These foundations are about 100 ft. by 50 ft., a little smaller than the dimensions of the house at Ditchley. A broad flat ridge south of the visible foundations at Callow Hill, cut across by the road to Charlbury, supports the belief that more than one substantial block of buildings is situated near the central well. A conspicuous gap is visible (PL. IV) as a crop-mark at the centre of the east side of enclosure-ditch D. Though other gaps appear at intervals along the northern stretch of this ditch, this eastern gap seems most likely to have been the chief entrance to the villa, giving access to the open side of the courtyard (with its well) within the farm enclosure (PL. IV).

Excavation in Area X resulted in clearing the butt-ends of the ditch and cutting two further sections across it north and south of the entrance-gap.

THE ENCLOSURE DITCH (plan, FIG. 8 ; sections, FIG. 9 ; PL. VC, VIA, D)

This ditch was cut 5-6 ft. deep into the solid Cornbrash. Its floor, everywhere flat, was 6 ft. wide in section 1, 7½ ft. in section 2 and a little over 5 ft. in section 5. In section 1 the ditch had a ledge half-way down each side ; everywhere else the outer wall was fairly vertical, the inner one sloping a little more gradually. The butt-ends of the ditch on either side of the entrance-causeway were particularly steep.

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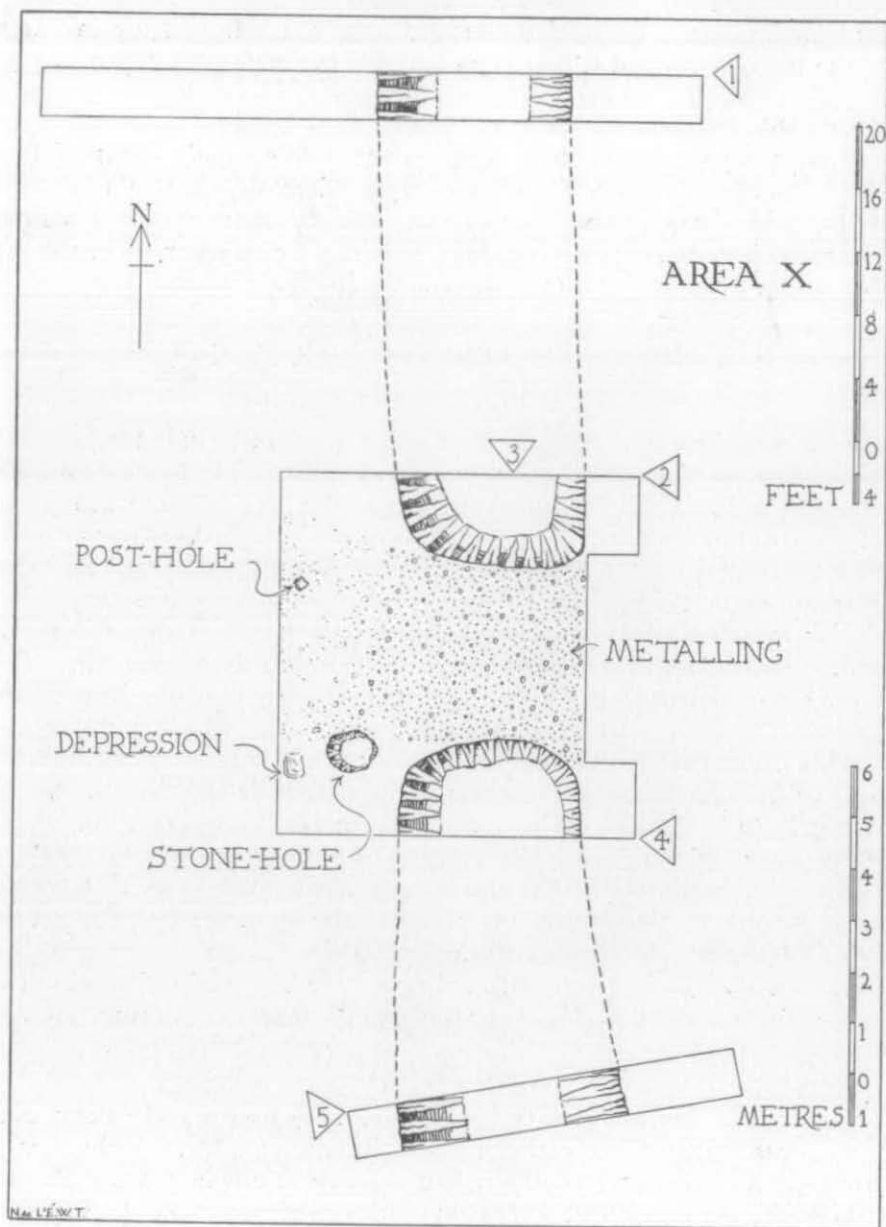


FIG. 8

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The sequence of silting varied so little from section to section that one series of letters has been used to describe and correlate the layers. These layers and the history of the ditch are here described from the bottom upwards.

Layer L (Finds : pottery, p. 35, nos. 1-4, FIG. 11; stone, p. 51, 4).

Yellow sandy clay containing a few small chips of limestone, virtually identical with the primary filling of the ditches of Dykes A-C, lay at the bottom. In sections 1 and 5 this material was restricted to the edges of the ditch ; elsewhere it formed a continuous layer 6 in. to 18 in. in depth. It was thickest and most evident in section 2.

Layer K (Finds : pottery, pp. 30, 35, nos. 5-10, 16-20, FIG. 11; iron, p. 48, 1, FIG. 16, no. 11 ; glass, p. 50, 2 ; bones, p. 51).

In section 5 a hard-packed layer of grey-coloured earth heavy with clay and limestone chips had entered the ditch from the outside, covering layer L to a maximum thickness (on the east side) of 3 ft. It contained many animal bones and sherds.

Layer J (Finds : pottery, pp. 30, 37, nos. 11-15, FIG. 11).

In sections 4 and 5 a deposit of rather purer clay, orange-brown in colour and fairly free of pebbles, had accumulated on the west side of the ditch. In section 4 this lay directly on layer L ; in 5 it lay above K and L.

Layer H (Finds : pottery, p. 37, nos. 1-18, FIG. 11 and p. 47, nos. 7-8, FIG. 15 ; bones, p. 51 ; charcoal, p. 52, 3).

The value of the ditch as a defensive work was effectively destroyed by the next filling, a heavy and sudden deposit of Cornbrash rubble quite devoid of any earth. This layer was so loose as to be a danger to the excavators. It tended to thin out as its distance from the entrance increased, and was heaviest and loosest in section 4. The largest pieces were about 12 in. square and 3 in. thick : none appeared to have been shaped artificially.

Layer G (Finds : pottery, p. 38, 1, FIG. 11).

South of the entrance in sections 4 and 5 a thick slide of burnt earth and stones sealed layer H, entering from within the villa enclosure and nowhere extending across the ditch. This thinned out as it spread away from the entrance.

Layer F (Finds : pottery, pp. 31, 38, nos. 1-12, FIG. 11 ; bronze, p. 48, FIG. 16, no. 4 ; glaze, p. 50, 1, FIG. 16, no. 8 ; stone, p. 51, 3 ; bones, p. 51 ; charcoal, p. 52, nos. 1, 4).

In sections 1 and 2 clay, redder in colour than that of layer J but otherwise similar in texture, had entered the ditch from the outside, to overlie the lower edge of layer H.

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Layer E (Finds : pottery, pp. 31, 39, nos. 1-88, FIGS. 11-13, and p. 47, nos. 9-13, FIG. 15 ; bronze, p. 47, 1-2, FIG. 16, nos. 1-2 ; iron, p. 50 ; glass, p. 50, 3 ; flint, p. 50, 1, FIG. 16, 9 ; slag, p. 51 ; bones, p. 51 ; charcoal, p. 52, 5).

The filling of the ditch was completed by a thick accumulation of earthy clay and stones, everywhere uniform in colour and consistency and full of occupation-débris. This layer includes much parti-coloured material and, in section 3, at the north end, some streaks of builders' mortar.

Layer D (Finds : pottery, p. 44, nos. 1-13, FIG. 13 and p. 47, nos. 14-15, FIG. 15 ; iron, p. 48, 2, FIG. 16, no. 12).

North of the entrance a second tip of rubble, again from within the enclosure, but much slighter than layer H, spread more than half-way across the ditch.

Layer C (Finds : pottery, pp. 31, 44, nos. 1-14, FIG. 13 and p. 47, nos. 16-17, FIG. 15 ; bronze, p. 48, FIG. 16, nos. 3, 5 ; iron, p. 50, nos. 3-4, 6, FIG. 16, nos. 13-14, 17 ; bones, p. 51).

In all sections the layer below the recent plough-soil consisted of clean black sandy loam devoid of limestone chips and containing only a thin scatter of potsherds and animal bones.

Layer B (Finds : pottery, pp. 31, 45, nos. 1-18, FIG. 14 and p. 47, nos. 18-19, FIG. 15).

A plough-pan consisting of a line of small stones 3 in. thick sealed layer C in all sections and, in some, also covered layer N. This represents the base of the soil disturbed since Roman times by the plough.

Layer A (Finds : pottery, p. 46, nos. 1-5, FIG. 14 and p. 47, nos. 20-21, FIG. 15 ; iron, p. 50, 5, FIG. 16, no. 16 ; coin, p. 51 ; bones, p. 51.)

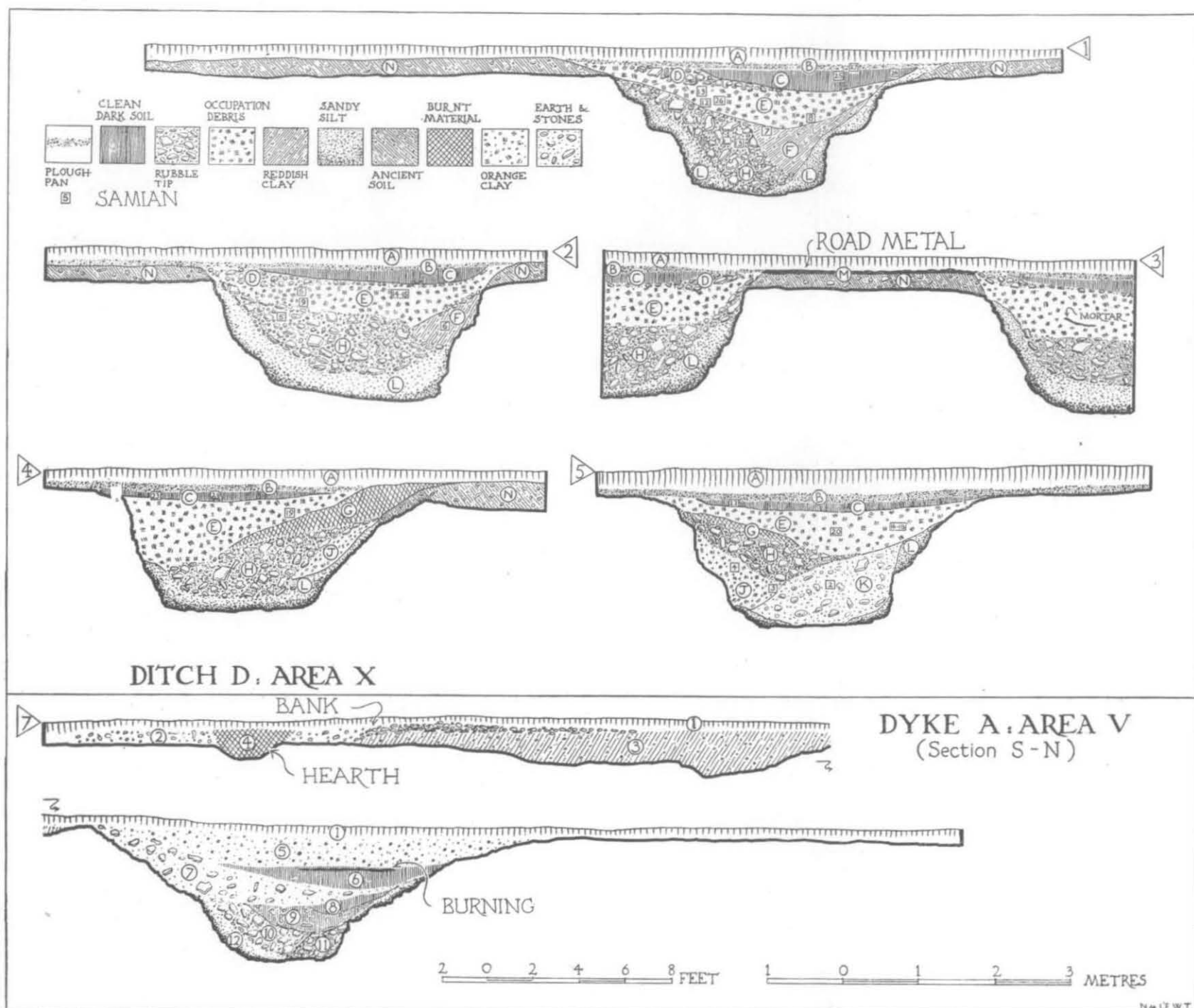
Topsoil covered the site to a depth varying from 6 in. to 1 ft.

Layer N (Finds : pottery, p. 46, nos. 1-2, FIG. 14 ; flint, p. 50, no. 2, FIG. 16, no. 10).

In sections 1-4, where the Cornbrash lay rather farther below the ground surface, there was a layer of what may be called ancient soil consisting of dark earthy clay with some limestone chips and a small amount of occupation-débris. It ante-dated layers D and E, the plough-pan in section 2 and the road surface associated with the entrance.

Layer M (Finds : pottery, p. 46).

The causeway across Ditch D was covered first by layer N and then by an irregular surface of limestone chips and gravel which resembled a metalled track. The gravel was of flint which must be foreign to the area.



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THE GATEWAY (plan, FIG. 8 ; PL. VII A)

Six ft. within the villa ditch a post-hole, 7 in. square and cut 10 in. into the Cornbrash, was found on the north side of the metalled track laid over the entrance causeway. Its filling, which included a few chips of stone and small fragments of pottery, consisted of orange-brown loam with specks of charcoal in it. The top of this hole began in layer N, where its less stony filling distinguished it from the surrounding ancient occupation-soil.

Facing the post-hole across the track through the entrance, a large depression in the Cornbrash was found on the last day of the excavation. Three feet in diameter and dug 10 in. into the rock, it was filled with chips of Cornbrash and some orange loamy soil. This hollow lay 12 in. east of a second depression in the subsoil, roughly 2 ft. in diameter and excavated less than 12 in. into the Cornbrash, which was filled with soil incorporating scraps of pottery and fragments of bone.

THE FINDS (FIGS. 11-16)

A great quantity of pottery was found in the soil filling the ditch and is described in detail below (pp. 32-46). Late first to early second century wares lay below the rubble spill (layer H). Above this the pottery became progressively later, colour-coated sherds occurring in the top of the ditch and in the topsoil. No coins were found in the ditch, but the thin scatter of Samian ware agreed in date with the coarse wares from each layer. Two early Roman *fibulae* came from layer E, one a derivative of the La Tène III type, the other a 'Langton Down' brooch.

DISCUSSION⁷

DYKES B AND C

Each of these earthworks consisted of a bank and ditch separated by a berm. In addition the western earthwork (B) included a palisade-trench outside its ditch. Both banks lay on a land-surface of bright red loam. Behind each, irregularities in the rocky subsoil suggested additional quarrying to heighten them. The berms, however, are likely to have been broadened by subsequent ploughing. The bottom silting of the ditch of Dyke B was partly covered by a sudden tumble of rubble from the bank side, which suggests that when these earthworks were constructed the banks lay close behind their ditches.

⁷ I am grateful to Professor C. F. C. Hawkes and to A. G. Hunter for comments and criticisms on which this section is largely based.

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The silting of the ditch of Dyke B must have been natural and gradual, for the finds from low down in it ranged from later Roman to the end of the eighteenth century. In Dyke C, however, the lowest ditch-filling was too hard-packed and homogeneous to have been anything but a deliberate throw back of the material from the bank. With its immediate purpose accomplished, and now only a hazard to cattle, we may suppose that Dyke-C was partially levelled by those living in the neighbouring farm and then abandoned. Its subsequent silting began with the formation of a soil which completely covered the artificial filling, and was followed by further natural silting hastened by the plough.

The palisade-trench in front of Dyke B may be interpreted as an alternative method of ending the danger which these defences must have presented to livestock. This ditch was larger than C, too large, perhaps, to have been filled up manually by the inhabitants of a small Romano-British farm. To erect a palisade instead would have been a good solution to their problem. If this palisade-trench had been an integral part of the original defence system, we would expect to have found a similar one outside Dyke C.

The land surface sealed beneath the banks of Dykes B and C yielded slight evidence (in the form of a low humus content) that the area had supported light vegetation rather than forest. Callow Hill in Roman times was probably as bare as it is today, and the erection of these earthworks behind the main line of the contemporary Grim's Dyke can best be explained by the existence of particularly open country in this area.

That Dykes B and C were contemporary and part of the same plan of defence is shown by their structural similarity, the intimate relationship of their southern ends, and the evidence provided by associated pottery.

These two dykes closely resemble Grim's Dyke in dimensions and shape. From its description, the land surface preserved beneath the bank of Grim's Dyke was the same as that found in Area Y and analysed by Dr. Cornwall, (below, p. 52). There is a linear earthwork lying outside Grim's Dyke on its north side,⁸ and its alignment and siting suggest that it supplemented the defences of Grim's Dyke. Dykes B and C at Callow Hill could therefore fit into this pattern of a defensive dyke, strengthened by supplementary shorter earthworks. Grim's Dyke itself soon fell into disuse,⁹ and the early deliberate throwing back of upcast from the ditch of Dyke C is a feature paralleled in certain stretches of Grim's Dyke.

Grim's Dyke was considered by Harden to have been erected by Belgic people against the advance of the Romans,¹⁰ since Belgic potsherds were

⁸ O. G. S. Crawford, *op. cit.* in note 3, 303 ff.

⁹ *Oxoniensia*, II (1937), 91.

¹⁰ *Ibid.*, p. 92.

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sealed beneath its bank. Sherds made in a distinctive soft soapy ware, often fired to a bright orange, which were associated with the banks of Dykes B and C at Callow Hill are identical with this material and afford the clearest proof that all these earthworks were contemporary.

The excavations of 1950 do not allow us to date the construction of Grim's Dyke more closely than Harden did after his excavation. From the evidence of the pottery in Area Y it seems clear that the cobbled floor and Dyke B were used by the same people—those, presumably, who made them. These people were Belgae. The extreme scarcity of post-conquest pottery in this Area suggests that the early inhabitants of the villa were no longer using the cobbled floor.

Belgic pottery and occupation-sites have now been recorded from a number of places outside the Colchester-St. Albans area, representing a westward extension of these people as far as the Cotswolds.¹¹ It thus seems likely that Grim's Dyke was either :

i. The work of a group of Belgae who, spreading westward in the second quarter of the first century A.D., were uneasy in their newly-won territory, surrounded as they were by native Iron Age folk.

ii. Erected against the advance of the Roman legions, as Harden suggested in 1937.

Whichever it was, it seems likely that Grim's Dyke is altogether earlier than the group of villas which lie within it. Perhaps the abiding sanctity of a Belgic military monument lent an added attraction to the fairly open and accessible country enclosed by it—country sparsely occupied before Roman times—and thus brought about the building of so many Romano-British villas within its circuit (cp. Caesar, *B.G.* vi, 13-20).

THE COBBLED FLOOR IN AREA Y

More excavation will be necessary before the relationship between Dyke B and the cobbled surface behind it can be understood. Belgic pottery identical with the assemblage from Grim's Dyke, together with a few fragments of romanized wares, lay on and under the cobbles ; and the latter were clearly sealed by the spread of the bank. Of the three post-holes found in cutting 6, one was covered by the bank. If these holes belong to a building or fence connected with the cobbled yard, this also must be earlier than Dyke B. It is, of course, possible that the few fragments of Romanized wares are later intrusions in the cobbling.

¹¹ E.g., Salmonsbury Camp, Bourton-on-the-Water; Bagendon, near Cirencester ; Linch Hill, Stanton Harcourt ; Langford Down.

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DYKE A

The dimensions and shape of Dyke A link it closely with Dykes B and C, yet the character of the filling in its ditch is quite different. In B and C the process seems to have been gradual and mainly post-Roman. The varied stratification in the ditch of Dyke A and the absence of post-Roman finds suggest that the filling was a continuous and partly artificial process virtually completed in Roman times. A Roman hearth-pit behind the bank had been dug when this had already started to spread by weathering or deliberate levelling.

The small quantity of potsherds found at various levels in this ditch was not sufficient to give it a firm date. Some were made in the soft, rather soapy ware which characterized the Belgic pottery from Grim's Dyke and Dykes B and C. Three sherds of brown ware with incised decoration closely resembling a sherd from the bottom of the villa ditch (layer L, no. 4) and some from the material comprising the bank of Dyke B (no. 8A) must belong to a Belgic butt-beaker. Dyke A may be considered to be broadly contemporary with Grim's Dyke.

This Dyke is at present a straight isolated stretch without meaning. The position of its bank indicates that it protected features to the south and cannot, therefore, be considered an additional ditch for the villa. Several air-photographs (e.g. PL. II) show a small rectangular earthwork immediately to the south, perhaps the site of a building (p. 15) and Dyke A may have been associated with this.

THE VILLA ENCLOSURE

The villa ditch (D) was an imposing work. Cut in the solid Cornbrash, flat-bottomed and with sides nearly vertical, it must have been for defence. The gap in the E. side (p. 21) had been fitted with a simple gate just inside the line of the ditch.

The filling of this ditch included only one layer which could not be interpreted as the product of gradual, natural accumulation. This was layer H, a heavy and exceedingly loose deposit of Cornbrash rubble including blocks nearly 12 in. across. The sections revealed that this had come from within the enclosure and also from the entrance-causeway. This rubble was thinning out noticeably as it spread north and south: for this reason it cannot be interpreted as the overthrow of an inner bank or wall. It is tempting to regard it as builders' débris tossed into a ditch which had now become a dumping ground for rubbish. Pottery incorporated in and sealed by this material suggests its deposition early in the second century. At Ditchley, the

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villa on the other side of the little valley to the north, the earliest wooden house was rebuilt in stone at about this time. Perhaps the same was happening at Callow Hill.

The enclosure-ditch was interrupted by a number of causeways, particularly along its north side. It is not certain which of these constituted the main entrance. The gap which was examined in Area X, apparently the only one in the east side, proved to have had a gate set slightly askew, whose remains consisted of a square post-hole on the north side of the inside of the causeway and a much larger hole 10 ft. to the south. Unhappily the latter was discovered on the last day of the excavation and for this reason was not properly examined. It seems likely, however, that the causeway was blocked by a gate, or set of hurdles, fixed at one end to a stout post or stone, and at the other to a square post.

In front of the gate the causeway was covered by occupation-soil (layer N), the surface of which had been patched at intervals with gravel, thus forming a metalled track. Within the enclosure this did not exist, so there was no proof that a metalled road ran through to the farmhouse, but only that a gap in the ditch had been left for vehicles, which must have so churned up the causeway that patching with gravel and limestone chips had become necessary.

The presence of a gate should imply some sort of timber or masonry wall associated with it. Nevertheless no other stone-holes or post-holes were found, although section 1 was extended inwards for 20 ft. in a search for them.

The quarrying of this enclosure-ditch is fairly securely dated to the second-half of the first century A.D. Fragments of decorated Samian ware found in layer H belong to the third-quarter of this century. Plain Samian, together with some of the coarse wares, belong to the end of the century. Assuming that, during the first years of its life, a defensive ditch will be kept free of rubbish, the digging of this ditch seems to have taken place a little before A.D. 75. Higher up, the pottery became progressively later and showed evidence of occupation lasting until the end of the Roman period. In these upper layers early fragments continued to appear, including two chips of *terra rubra* (Layer F, no. 10). The two fibulae from layer E, together with two early vessels associated with fragments of human skull on top of this layer (nos. 79-80 below), must also have been relics of the early occupation of the villa.

SUMMARY OF RESULTS

The most important result of the work at Callow Hill in 1950 has been the demonstration that Dykes B and C were contemporary with Grim's Dyke. They were the work of Catuvellaunian Belgae who had pushed west into the

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lands of the Dobunni ; but whether they built the earthwork against the Romans or merely to defend themselves from other Iron Age inhabitants we cannot yet tell.

The cobbled floor behind Dyke B was shown to be either contemporary with or immediately anterior to Grim's Dyke.

Dyke A was revealed as structurally akin to Grim's Dyke and probably broadly contemporary. Until its complete ground-plan has been traced its place in this complex of defences must remain uncertain.

The Romano-British villa here had been fortified with an imposing rock-cut ditch in the third quarter of the first century. This could, perhaps, have been intended as an addition to the protection afforded by the earlier Dykes B and C. The farmhouse may have been rebuilt in stone in the early second century.

Although this short season of selective excavation has raised a number of new problems, some old and important ones have been solved. Clearly Callow Hill is a site of outstanding importance for understanding the complex of fortified villas and earthworks at the edge of the Cotswolds.

THE FINDS¹²

SAMIAN POTTERY

By GRACE SIMPSON

AREA Y

1. Form 27. The rim shows that it is South Gaulish ; probably Neronian-Flavian. Topsoil.

AREA X

Layer K

2. (FIG. 11). Probably form 29. South Gaulish. 1st century. 5, 5 $\frac{1}{4}$ ft.

Layer J

3. Form 18/31. Probably Lezoux. Pre- or early Antonine. 5, 5 $\frac{1}{2}$ ft.
4. Curle type 15, a small version of the campanulate dish (Oswald and Pryce, pl. lvi, 8), Rheinzabern ware, probably before A.D. 180. 5, 4 $\frac{3}{4}$ ft.

Layer H

5. (FIG. 11). Form 29. The frieze shows a scroll design with a group of five beads covering the tendril-binding. Knorr (Textbild 6) records three potters who used this, ALBVS.FE, DARIBITVS and MARINVS.F. Neither he nor Hermet

¹² The Arabic numeral and dimensions in ft. and in. which appear after the description of each sherd represent the cuttings where found and depth from the surface.

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illustrate the leaf or the rosette. Moderate-sized beads limit the central moulding. Below is a series of corded ornaments, cf. Hermet, *La Graufesenque*, pl. 62, 1-5; Knorr, 1919, Taf. 19K by AQVITANVS, and Taf. 61 by OF NIGRI. The profile of the vessel tends towards the earlier hemispherical 29 rather than to the carinated Flavian 29 and may have been made c. A.D. 45-65. 2, 3 ft.

A small chip from the same vessel or from one of identical form occurred slightly higher, in layer E (2, 2 ft.). As there was no doubt at all about the derivation of the larger fragment just described it may be that the smaller was wrongly recorded and ought, also, to have been allocated to layer H.

Layer F

6. Form 29, base-ring. South Gaulish, perhaps Flavian (up to A.D. 85). Glaze similar to no. 5. 2, 3½ ft.
7. Form uncertain. Probably Lezoux. 1, 3½ ft.

Layer E (lower half)

8. Form 27. Probably South Gaulish, Neronian-Flavian. 1, 3 ft.
9. Form 18. South Gaulish, probably Neronian-Flavian. 2, 2½ ft.
10. Form 18/31, rim, heavily worn. 1, 3 ft.
11. Form 33, foot-stand, heavily burnt. Probably Lezoux. 1, 3 ft.
12. Form 27 or 33, foot-stand, slightly burnt. Probably Lezoux. 1, 2¾ ft.
13. Perhaps form 18/31. Probably Lezoux. 1, 1¾ ft.

Layer E (upper half)

14. Form 37, base-ring, very worn. 2, 1¾ ft.
15. Probably form 30, at basal angle perhaps. 2, 1¾ ft.
16. Form 33, three fragments. Lezoux, Antonine. 5, 2½ ft.
17. Form 18/31, early example. 5, 2½ ft.
18. Form 18/31, burnt. Probably Lezoux, Antonine. 5, 2½ ft.
19. Form not clear. Lezoux, late 2nd century. 4, 1¾ ft.
20. (FIG. 11). Form 18/31, slightly burnt. TINTIRIOM. This is Tintirio of Lezoux. Cf. Oswald, *Index*, pp. 316, 421, who suggests Hadrianic-Antonine for his period of production. 5, 2½ ft.

Layer C

21. Form 31, band filled with rouletted lines around the centre of the base-interior. Probably Lezoux, Antonine. 4, 9 in.
22. Form 18/31, heavily worn. Probably Lezoux, Antonine. 5, 1½ ft.
23. Form 18/31, heavily worn. Probably Lezoux, Antonine. 4, 2 ft.
24. Probably Curle 11, thick flange with barbotine ornament. Rheinzabern. Late 2nd-early 3rd century. 1, 1 ft.
25. Possibly form 36 (e.g. Oswald and Pryce, pl. liii, 21, without barbotine). Probably Rheinzabern, Antonine. A worn fragment of the same vessel was found in layer B (see below). 1, 1 ft.
26. Form 33. Perhaps Lezoux. 4, 1½ ft.

Layer B

27. Possibly form 36 (see no. 25 above). Worn. 1, 1 ft. 2 in.

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COARSE POTTERY¹³

AREA Y

With the exception of a handful of indeterminate sherds from the filling of the ditch of Dyke B, the pottery from Area Y is purely Belgic. Probably most of it was made within the period A.D. 35-50. The small vessel, FIG. 10, no. 6, is a classic example of the plain Belgic cooking-pot. The rest of the bowls, the fragment of a platter (no. 26) and the storage-jars (nos. 9, 20 and 28) can all be closely paralleled further east in the Belgic areas of primary settlement about Colchester and St. Albans. Nearer at hand good comparative material has turned up on Belgic sites at Cassington and Langford Down and from Grim's Dyke itself. The bowl-rim, no. 12, while still Belgic in form, is rather better fired than the rest. Together with the group of fragments listed as no. 27 it represents the introduction to the area of the improved potting—particularly firing—techniques used by the Romans.

Make-up of Bank (FIG. 10, 1-8)

1. Jar or beaker, brown-black soapy ware with finely crushed shelly grit. Well-smoothed surfaces. D. $5\frac{3}{4}$ in. Resembles no. 24. Cp. *Vicarage Field*, main encl. 1, 6.
2. Wide-mouthed jar, orange ware with white colour-coat. D. 9 in.
3. Jar, dark buff ware. D. 6 in.
4. Small jar, brown-black soapy ware similar to no. 18; native fabric. D. 6 in.
5. Small jar, black ware with mica and quartz grit; brown native ware. D. $4\frac{1}{2}$ in. Cp. *Leicester*, FIG. 25, 1 (Claudian); *Frilford*, FIG. 11, no. 22.
6. Jar, brown-black native ware, polished on exterior. D. 5 in., H., $3\frac{3}{4}$ in. Cp. *Vicarage Field*, main encl. 1, 2-5.
7. Base of jar, buff ware, black core, shell-gritted; native ware.
8. Jar, buff ware with shell and quartz grit. D. $5\frac{1}{4}$ in. Cp. *Vicarage Field*, pit E, 11 (but decorated), 2nd century.

¹³ Abbreviations used in this section :

- Alchester*, 1927 : C. F. C. Hawkes, *Antiq. J.*, vii (1927).
Alchester, 1929 : J. H. Iliffe, *Antiq. J.*, ix (1929).
Alchester, 1932 : J. H. Iliffe, *Antiq. J.*, xii (1932).
Bloxham : W. F. J. Knight, *Oxoniensia*, iii (1938).
Camulodunum : C. F. C. Hawkes and M. R. Hull, *Res. Rep. Soc. Ant.*, xiv (1947).
Collingwood : R. G. Collingwood, *The Archaeology of Roman Britain* (1930).
Ditchley : C. A. R. Radford, *Oxoniensia*, i (1936).
Dorchester : A. H. A. Hogg and C. E. Stevens, *Oxoniensia*, ii (1937).
Dorchester Kiln : D. B. Harden, *Oxoniensia*, i (1936).
Eynsham : J. S. P. Bradford, *Oxoniensia*, vii (1942).
Frilford : J. S. P. Bradford and R. G. Goodchild, *Oxoniensia*, iv (1939).
Grim's Dyke : D. B. Harden, *Oxoniensia*, ii (1937).
Leicester : K. M. Kenyon, *Res. Rep. Soc. Ant.*, xv (1948).
Langford Down : A. Williams, *Oxoniensia*, xi/xii (1946-7).
Rose Hill : D. B. Harden, *Oxoniensia*, i (1936).
Silchester : M. A. Cotton, *Archaeologia*, xcii (1947).
Stanton Harcourt : W. F. Grimes, *Oxoniensia*, viii/ix (1943-4).
Verulamium : R. E. M. and T. V. Wheeler, *Res. Rep. Soc. Ant.*, xi (1936).
Vicarage Field : N. Thomas, *Oxoniensia*, xx (1955).
Wittenham Clumps : P. P. Rhodes, *Oxoniensia*, xiii (1948).
Westbury (Wilts.) : *Devizes Museum Catalogue*, ii (1934).

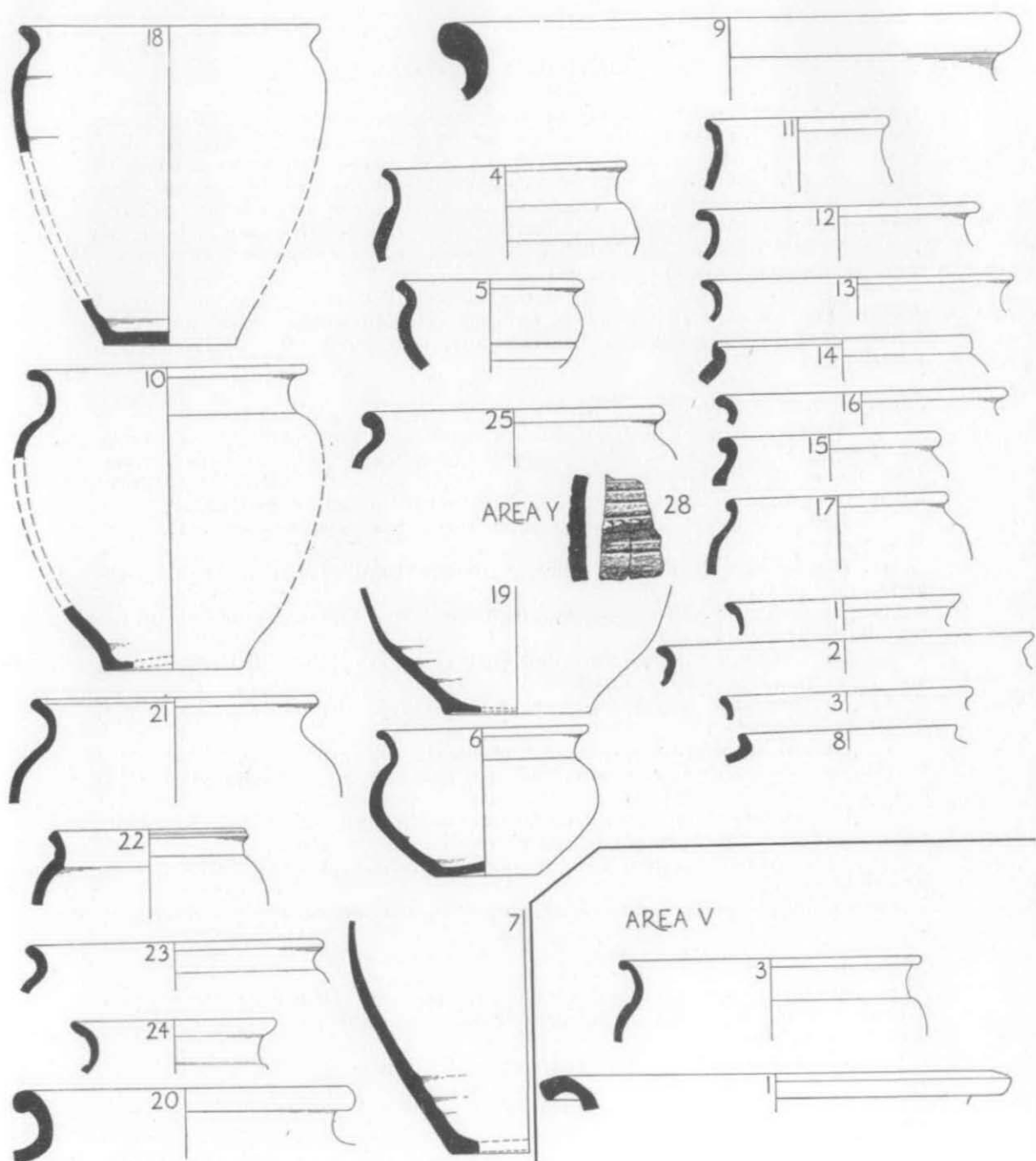


FIG. 10

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8a. (Not illustrated.) Group of worn sherds representing parts of the base, wall and rim of a butt-beaker, too fragmentary to reconstruct. Base flat, with groove following edge in place of foot-ring. Wall divided into series of bands by broad grooves, the spaces between being filled with roulette decoration. Rim expanded but not out-turned. Originally the surfaces seem to have been polished. Soft orange ware, incompletely fired grey core in places. The ware suggests that this is a native copy of a Gallo-Belgic butt-beaker. It corresponds approximately with *Camulodunum*, form 113 C, pl. vii.

8b. (Not illustrated.) Group of thick sherds used as the base for hearth A (cutting 6B) : wall, and junction of wall and rim represented. Hard grey ware. Condition of edges suggests that these are native ware sherds like no. 9, rebaked in hearth-fire.

Spread of Bank (FIG. 10, nos. 9-19)

9. Storage jar, grey buff ware, much fine quartz and shell grit. D. 14 in. Cp. *Vicarage Field*, main encl. iii, 1 : *Dorchester*, fig. 15, 17, beneath bank : *Grim's Dyke*, fig. 21, 3, pre-Grim : *Leicester*, fig. 29, 3 (early 1st century) : *Verulamium*, fig. 19, 60b (Belgic) : *Alchester*, 1927, fig. 8, 6 (but decorated), early Roman.

10. Jar, dark brown native ware, grey core, some fine shell grit. D. 7 in., H. c. 7½ in.

11. Butt-beaker, black native ware, polished outside. D. 4½ in. Cp. *Camulodunum*, type 75 (1st century).

12. Jar, grey-buff native ware, fine shell grit. D. 7 in. Resembles no. 10 but rim not thickened.

13. Jar, red-brown native ware, fine shell grit. D. 7½ in. Resembles nos. 3 and 5 but rim much less developed.

14. Jar, red-black native ware, corky texture. D. 6½ in. Cp. *Verulamium*, fig. 21, 64d (Belgic).

15. Jar, red-black native ware slightly polished. D. 5½ in.

16. Jar, black native ware with fine shell grit. D. 7 in. Resembles nos. 10 and 12.

17. Jar, red-brown native ware, dark core, fine shell grit. D. 5½ in. Resembles no. 15 but finer. Cp. *Vicarage Field*, pit K, 2 and 4 (A.D. 75-100).

18. Jar, red-black native ware, orange in places. D. 7½ in. H. c. 8 in. Resembles no. 16.

19. Base of jar, orange native ware, grey core, shell and quartz grit, rough surfaces.

Cobbled surface (FIG. 10, 20-25)

20. Storage jar, grey ware, much hard grit. D. 8¼ in. This ware is much more romanized than that of no. 1, but being found near hearth C it may have been refired, like no. 8b.

21. Jar, buff-black native ware, dark core. D. 7 in.

22. Jar, black gritty native ware, brown on interior. D. 5 in.

23. Jar, buff native ware. D. 7 in.

24. Jar, buff native ware. D. 5 in.

25. (Topsoil, area of cobbles.) Jar, black-buff native ware, grey core, quartz and shell gritted. D. 7¼ in. Resembles nos. 15 and 17.

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26. (Not illustrated.) Fragment of side and base of platter, probably a native copy of a Gallo-Belgic form. Inside wall-face markedly convex. Soft brown native ware. Cp. *Camulodunum*, pl. 50, form 26A.

27. (Not illustrated.) Small group of sherds from flat bases of beakers and bowls : too small to reconstruct. Hard, romanized ware, not later than second half of 1st century.

Cutting 4 (FIG. 18, 28)

28. Three adjoining pieces of lower part of large storage jar decorated with grooves above, and below, a band of impressed ornament. Soft native ware, brown exterior, grey core, light buff interior. Rocky red soil beneath topsoil in depression (quarry-pit for bank), depth 9 in. Cp. *Alchester*, 1927, p. 177, fig. 8, 6 (1st century)

AREA V

1. Bowl or pie-dish (FIG. 10), orange-buff ware, grey core ; much shell grit. D. $11\frac{1}{2}$ in. Either a bowl (e.g. Collingwood type 17) or a flanged pie-dish (e.g. Collingwood type 44). The lack of decoration suggests that it may belong to a carinated bowl of the 1st-2nd cent. : this is supported by the ware, which resembles that of some of the native bowls from Area Y. Cp. *Frilford*, fig. 13, 21. Ditch of Dyke A, layer 5.

2. Dish (FIG. 15, no. 22), typical Shelly Ware but exceptionally hard and fine (see p. 47, 22). D. 10 in. From an imitation Belgic dish, 1st century. Cp. *Leicester*, fig. 37, 21 (A.D. 90-100). Top-soil.

3. Jar (FIG. 10), grey ware. D. $7\frac{1}{2}$ in. Romanized version of Belgic bowl. Cp. Area Y, 10 and 6 (in native ware) and *Vicarage Field*, main encl. 1, 5 (grey ware). Rubble spill, layer 10.

4. (Not illustrated.) Three sherds of a beaker with vertical incised 'cut-glass' decoration separated by grooves. Thin grey ware, buff slip. One similar sherd occurred at the bottom of the villa ditch. Layer 10.

Of the rest of the sherds from Area V nearly half are in the soapy brown native ware while the rest are of hard grey ware.

AREA X

Layers J, K, L (FIG. 11)

1. Jar, hard smooth black ware, core, much finely crushed white grit. D. $6\frac{1}{2}$ in. Layer L. 2, $6\frac{1}{4}$ ft.

2. Jar, brown-black native ware smoothed on exterior. D. $6\frac{1}{2}$ in. Similar to Area Y, nos. 10 and 13. Layer L. 4, 5, 6 ft. 10 in.

3. (Not illustrated.) Part of neck of flagon, orange ware, grey core, burnished on exterior. Layer L. 4, $5\frac{1}{4}$ ft.

4. (Not illustrated.) Fragment of butt-beaker of soft pink ware decorated with incised 'cut-glass' pattern identical with fragments from the bottom of Dyke A, Area V (p. 21) and bank make-up, Dyke B, no. 8a (p. 34). Layer L. 1, $7\frac{1}{2}$ ft.

5. Dish, grey gritty ware. D. $7\frac{1}{2}$ in. Resembles layer F, no. 9, but different ware. Cp. *Alchester*, 1929, fig. 7, 37, A.D. 80-120 : *Vicarage Field*, pit E, 7 and pit P, 2. Layer K. 5, $4\frac{1}{4}$ ft.

6. Jar, grey ware, buff core. D. $6\frac{1}{2}$ in. Layer K. 5, 6 ft. 4 in.

7. Jar, black ware, grey core. D. $3\frac{1}{2}$ in. Layer K. 5, 6 ft. 4 in.

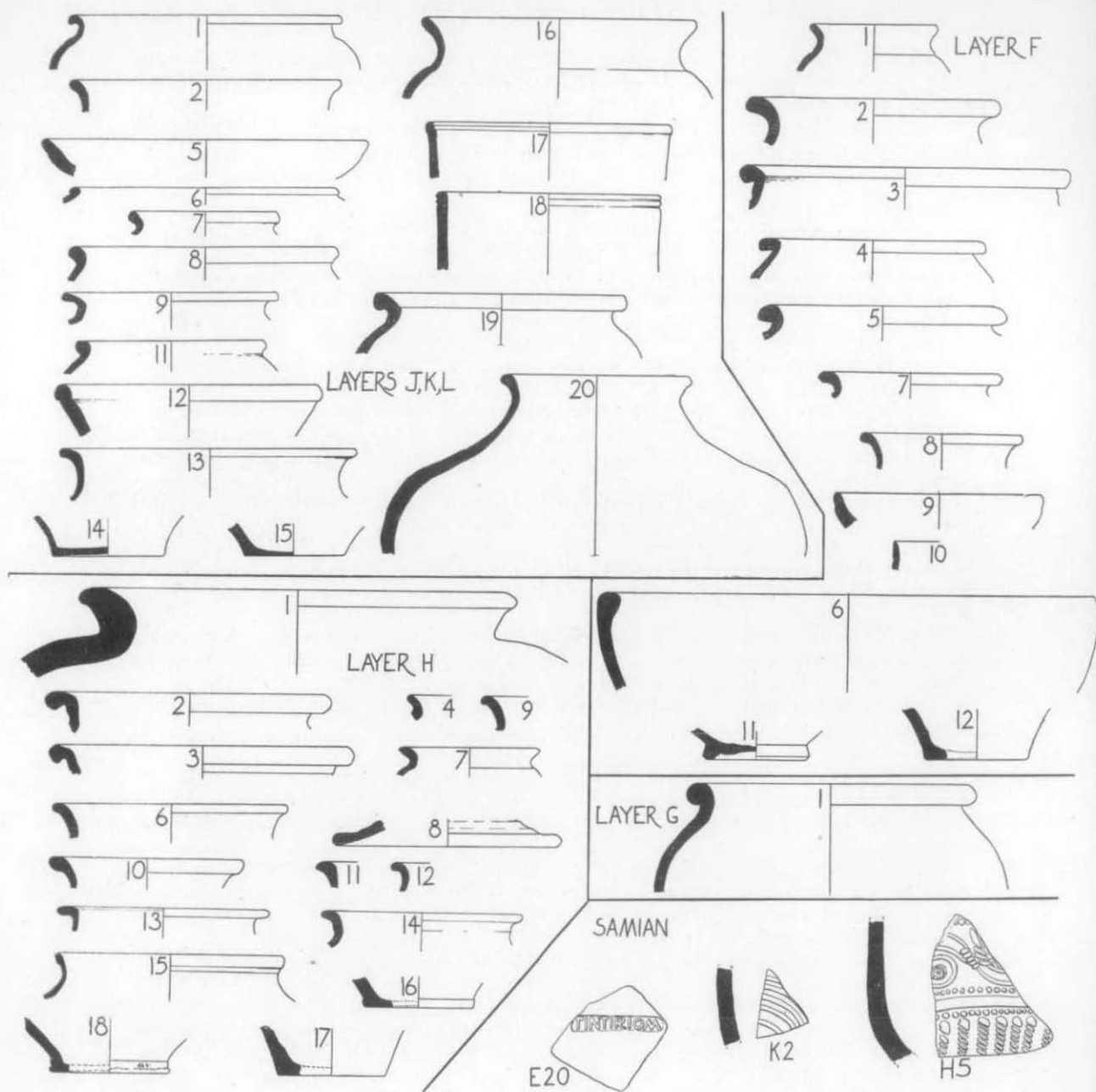


FIG. 11

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8. Jar, grey-black ware, polished exterior. D. $6\frac{1}{2}$ in. Layer K. 5, 6 ft. 4 in.
9. Jar, grey ware with traces of orange colour-coat on one sherd. D. 5 in. Layer K. 5, 6 ft. 4 in.
10. (Not illustrated.) Butt-beaker showing zones defined by deep grooves and ribs : one zone filled with close-set vertical incised lines. Orange soapy ware, grey core, burnished on exterior. Probably a native copy of a Gallo-Belgic butt-beaker : Cp. *Camulodunum*, Form 112A. Layer K. 5, 6 ft. 5 in.
11. Jar, black ware. D. $4\frac{1}{2}$ in. Layer J. 5, 5 ft. 4 in.
12. Dish, grey gritty ware. D. $6\frac{1}{4}$ in. Layer J. 5, $4\frac{3}{4}$ ft. Cp. *Dorchester*, fig. 15, 30 : *Leicester*, fig. 20, 3.
13. Jar, black ware, buff core, polished on exterior. D. 7 in. Cp. Area Y, nos. 10, 12, 13. Layer J. 5, $4\frac{3}{4}$ ft.
14. Base, black polished ware, buff core. D. $2\frac{1}{2}$ in. Layer J. 5, $4\frac{3}{4}$ ft.
15. Base, black ware with fine white grit (as no. 1 above). D. $2\frac{1}{2}$ in. Layer J. 5, $4\frac{3}{4}$ ft.
16. Jar, pink ware, grey core. Polished on exterior. D. $6\frac{1}{2}$ in. Cp. no. 2 above and layer H, no. 6. This form is derived from the Belgic bowl, well represented in Area Y. Layer K. 5, 6 ft. 4 in.
17. Mug, pink ware, polished exterior. D. $5\frac{3}{4}$ in. Layer K. 5, $5\frac{3}{4}$ ft.
18. Mug, pink ware, polished exterior. D. $5\frac{1}{2}$ in. Cp. *Vicarage Field*, pit E, 8 and 12 (2nd century) : *Bloxham*, fig. 12, 46 : *Leicester*, fig. 46, 20 (2-3 century) : Collingwood, fig. 58, 84. There can be little doubt that this mug and no. 17 belong to the early 2nd century, occurring as they did low down in the villa ditch. They are Collingwood's early form, where the wall is straight. Layer K. 5, 6 ft. 1 in.
19. Jar, black ware, buff core. D. $6\frac{1}{4}$ in. Cp. Layer H, nos. 2 and 3 and *Vicarage Field*, main encl. 1, 9. Layer K. 5, 6 ft.
20. Jar, grey ware. D. $4\frac{1}{2}$ in. Cp. *Dorchester*, fig. 15, 13, but smaller (1st century). Derives from a Belgic form. Layer K. 5, 5 ft. 4 in.

Layer H (FIG. 11)

1. Storage jar, grey ware, burnished on exterior. D. $10\frac{1}{2}$ in. 1, $5\frac{1}{4}$ ft.
 2. Jar, grey gritty ware. D. $6\frac{3}{4}$ in. 1, 5 ft. 7 in.
 3. Jar, pink ware, grey core, black slip. D. $7\frac{1}{4}$ in. Similar to last. 1, 5 ft. 7 in.
 4. Jar, plain out-turned rim ; pink ware with black core, polished on exterior. 1, 5 ft. 7 in. A sherd from same pot occurred in layer F.
 5. (Not illustrated.) Two sherds of rusticated ware¹⁴ : horizontal rows of small knobs. Black ware, grey core, fine quartz grit. 4, 4 ft.
- For discussion of this ware, see Collingwood, p. 241. In the south, it commonly shows horizontal rows of knobs, whereas in the north an irregular arrangement prevails. Good parallels from Alchester and Northleigh villa are in the Ashmolean. Cp. also *Camulodunum*, pl. lvi, 99 (Claudian-Nero) : *Leicester*, fig. 43, 2 (A.D. 125-30) and p. 138-9 (Vespasian date for House II and IIa).
6. Jar, pink ware, black core and interior. D. $5\frac{1}{2}$ in. 1, $3\frac{1}{2}$ ft.
 7. Jar, black polished ware. D. $3\frac{1}{2}$ in. Cp. *Frilford*, fig. 11, 3 (early 2nd cent.). 1, $3\frac{1}{2}$ ft.

¹⁴ I am indebted to Mr. F. H. Thompson for identifying these sherds.

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8. Lid, black ware, grey core, pink edge. D. $5\frac{1}{2}$ in. The only lid from the site. Cp. *Leicester*, 118. This type, quite flat on the under side of the edge, is generally Flavian to end of 2nd century. 1, $3\frac{1}{2}$ ft.

9. Jar, grey ware. Resembles layer H, no. 6 and layer J, K, L, no. 13. 1, $3\frac{1}{2}$ ft.

10. Jar, black ware, polished exterior. D. $4\frac{1}{2}$ in. 1, $3\frac{1}{2}$ ft.

11. Bowl, black ware. Resembles layer H, no. 7, but thicker. 1, $3\frac{1}{2}$ ft.

12. Jar, grey ware. Resembles layer H, no. 13. 1, $3\frac{1}{2}$ ft.

13. Bowl, black ware, grey core. D. 5 in. Cp. *Dorchester*, fig. 15, 19 (early 2nd century). 1, $3\frac{1}{2}$ ft.

14. Jar, black ware, grey core. D. $4\frac{3}{4}$ in. 1, $3\frac{1}{2}$ ft.

15. Jar, grey ware. 1, 4 ft. A sherd of same bowl came from layer F.

16. Base, pink ware. 4, 4 ft. 1 in.

17. Base, grey ware. 1, $3\frac{1}{2}$ ft.

18. Base, black ware, grey core. 1, $3\frac{1}{2}$ ft.

In addition there were a number of sherds of soft pink ware and a few thin pieces with a white slip. There were also fragments of hypocaust flue-tile.

Layer G (FIG. 11)

1. Cooking pot, black gritty ware. D. 7 in. Cp. *Vicarage Field*, ring ditch, nos. 1 and 2 : *ibid.*, main encl. 1, 9 and 18.

Layer F (FIG. 11)

1. Jar, grey ware, polished on exterior. D. 3 in. 1, $3\frac{1}{2}$ ft.

2. Jar, grey ware, D. 6 in. 1, $3\frac{1}{2}$ ft.

3. Jar, grey gritty ware. D. 8 in. 1, 5 ft.

4. Jar, black gritty ware, grey interior. D. $5\frac{1}{2}$ in. 1, 5 ft.

5. Jar, similar to last. D. 6 in. 1, 5 ft.

These jars are like layer K, no. 19, and layer H, nos. 2-3. Their under-cut rims are characteristic of Callow Hill, and seem to stem from a Belgic form in Oxfordshire.

6. Bowl, very hard pink ware. D. 1 ft. Cp. *Dorchester*, fig. 15, 6 and 45, but less upright walls. 1, 3 ft. 8 in.

7. Jar, grey-black ware, polished on exterior. D. $4\frac{1}{2}$ in. 1, 3 ft. 10 in.

8. Jar, grey ware. D. 4 in. 1, 3 ft. 10 in.

9. Small cup or dish, pinkish-buff ware, burnished inside and out. D. 5 in. Resembles layer K, no. 5, both perhaps imitating Drag. 18. Cp. *Vicarage Field*, pit E, 7 (2nd century) and *ibid.*, pit P, 2. 1, 3 ft. 10 in.

10. Cup, buff ware, dark red wash on surfaces, exterior burnished. The two sherds found were too small to give diameter or angle of side. 1, 5 ft. 2 in.

Mr. M. R. Hull writes :

‘The two chips are from a copy of an Arretine vessel. The most likely prototypes are the conical cup, Loeschcke 11, or the large platter, Drag. 17—probably the former, as only one side of the sherd seems to be polished so they come from a closed form. The material is Gallo-Belgic *terra rubra*, of the same class as the Pompeian red platters. The colouring on the outside is virtually the same, and the paste also, and red wash over the inner surface is just like the best of those platters.’ Claudian or earlier.

11. Base, hard grey ware polished on exterior. 1, 3 ft. 10 in.

12. Base, grey ware, pink core. 1, 3 ft. 10 in.

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Layer E

Storage-jars (FIG. 12)

1. Red-buff gritted ware typical of local storage jars. D. 1 ft. 8 in. Cp. *Vicarage Field*, pit L, 1 (2nd cent.) : *Bloxham*, fig. 12, 24. 1, 2 ft.
2. Buff-black ware, black core. D. 8 in. Cp. *Vicarage Field*, pit E, 13. 5, 2 ft. 7 in.

Jars (FIG. 12)

3. Hard grey ware. D. 1 ft. 1½ in. 1, 2½ ft.
4. Hard grey ware. D. 1 ft. 1, 2 ft. 10 in.
5. Buff ware, grey core, gritted. D. 1½ ft. 4, 2 ft. 2 in.
6. Hard grey ware, polished on exterior and on rim. D. 4½ in. 5, 2 ft. 7 in.
7. Grey ware. D. 9 in. 1, 1 ft. 10 in.
8. Grey ware, D. 7½ in. 4, 1 ft. 8 in.
9. Grey sandy ware. D. 10 in. 2, 1 ft. 8 in.
10. Buff sandy ware, black core. D. 6 in. 1, 1 ft. 10 in.
11. Hard grey ware. D. 7½ in. 5, 2 ft. 7 in.
12. Dark soapy ware. D. 6½ in. 4, 4 ft.
13. Dark brown gritty ware. D. 6 in. This should perhaps be included in the cavetto-rim series, though rather larger than usual. Cp. *Leicester*, fig. 18, 17 ; *Dorchester*, fig. 16, 49. 5, 2½ ft.
14. Hard gritty grey ware. D. 7½ in. 4, 2 ft. 8 in.
15. Black sandy ware. D. 3¾ in. 4, 2½ ft. This is derived from the late Iron Age bead rim. Cp. *Vicarage Field*, pit E, 11 : *Frilford*, fig. 11, 22.
16. Buff-black ware, smooth. D. 6¾ in. 4, 1 ft. 8 in.
17. Grey-buff ware. D. 6¼ in. 4, 1¾ in.
18. Hard grey ware. D. 6½ in. 4, 1¾ in.
19. Grey-black ware. D. 5¼ in. 1, 1 ft. 10 in.
20. Hard grey ware. D. 6½ in. 1, 2½ ft.
21. Thin grey ware, black polished exterior. D. 6 in. 5, 2 ft. 7 in. Cp. *Dorchester*, fig. 15, 18 (pre-wall ditch).
22. Grey ware, darker on exterior. D. 5¼ in. 1, 2½ ft.
23. Grey-brown ware. D. 7½ in. 5, 1 ft. 11 in. This is derived from the plain Belgic pot, e.g. Area Y, no. 10.
24. Hard grey ware. D. 3½ in. 1, 2 ft. 4 in.
25. Buff ware, polished on exterior and resembling the native ware of Area Y. D. 2½ in. 4, 2 ft.
26. Hard grey ware. D. 5½ in. The thickened neck suggests that this may be a cooking-pot. 5, 2 ft. 7 in.
27. Grey ware. D. 5 in. For this type cp. also nos. 31-2, 34, 37-40. At Callow Hill these plain-necked jars are rare in earlier levels than this, being virtually absent from Area Y. They are also very rare in earlier contexts at *Vicarage Field*. 4, 2 ft.
28. Grey gritty ware. D. 5¾ in. 4, 2 ft.
29. Thin grey ware polished on exterior. D. 4½ in. 1, 3 ft.
30. Grey-buff ware. D. 5 in. 4, 1 ft. 8 in.
31. Grey ware. D. 3¼ in. Same general type as no. 27. 5, 1 ft. 10 in.
32. Grey ware. D. 4½ in. 4, 2 ft.
33. Grey ware. D. 5 in. 4, 1¾ ft.

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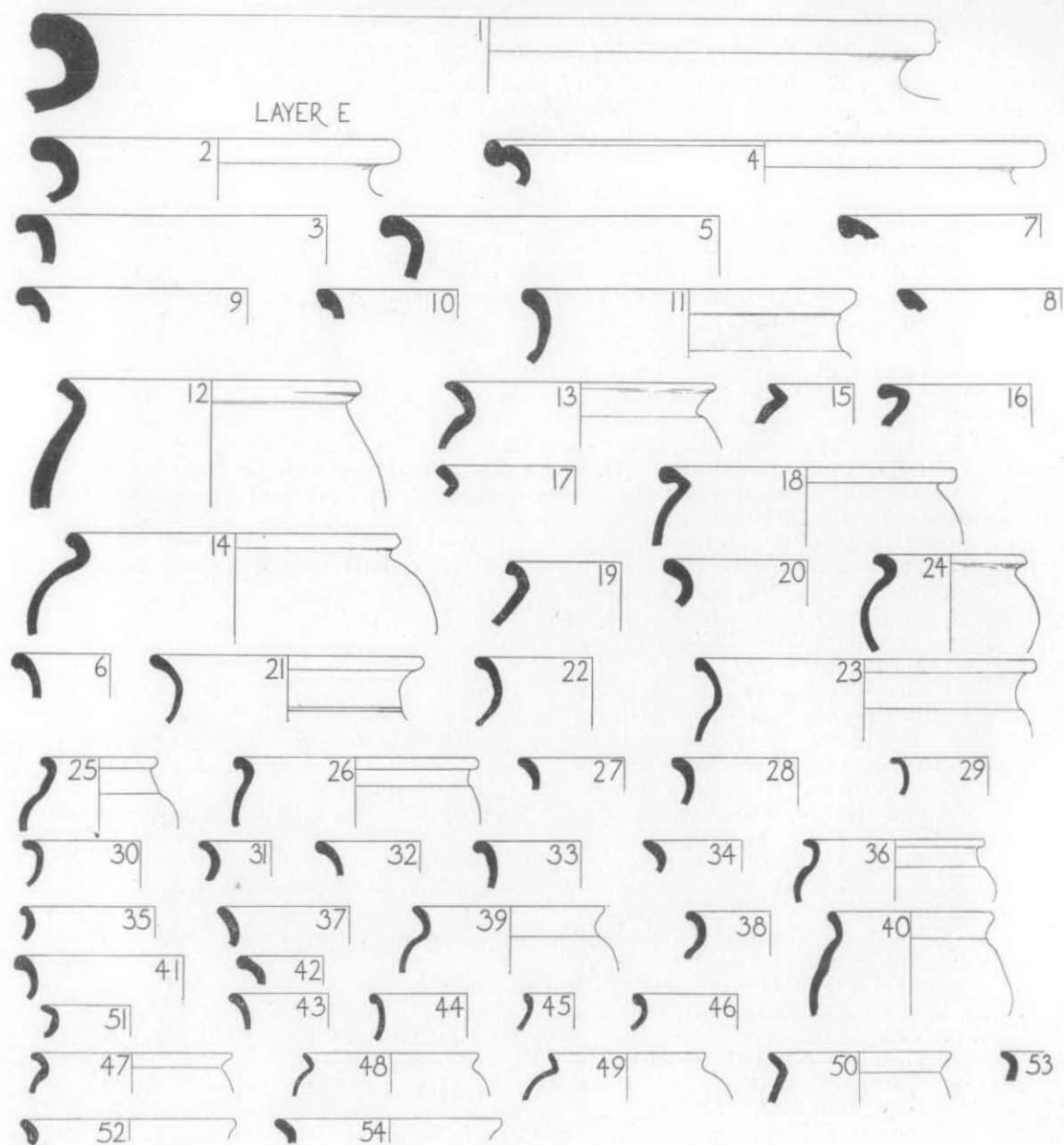


FIG. 12

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34. Grey ware, smoothed. D. $4\frac{1}{2}$ in. 5, 2 ft. 7 in.
35. Thin, heavily quartz-gritted, buff ware. D. $5\frac{3}{4}$ in. 4, 2 ft.
36. Hard thin grey ware, polished on exterior. D. 4 in. 4, $3\frac{1}{4}$ ft.
37. Dark buff ware, light core, polished exterior. D. 6 in. 4, 2 ft.
38. Grey ware. D. 4 in. 5, 1 ft. 10 in.
39. Black ware, polished exterior. D. $4\frac{1}{4}$ in. 4, 2 ft.
40. Grey-brown ware. D. $3\frac{3}{4}$ in. 5, 1 ft. 10 in.
41. Black ware, grey core, polished on exterior. D. $7\frac{1}{4}$ in. 4, 2 ft.
42. Hard grey ware. D. 4 in. 2, 1 ft. 7 in.
43. Hard grey ware. D. $4\frac{1}{2}$ in. 4, 2 ft.
44. Grey ware. D. $4\frac{1}{2}$ in. Resembles nos. 35 and 46. 5, 2 ft. 7 in.
45. Grey-buff ware. D. 2 in. 4, 2 ft. 2 in.
46. Black ware, buff core, resembling the native fabric of Area Y. D. $4\frac{3}{4}$ in.
2, 2 ft.
47. Pale grey ware. D. $4\frac{1}{4}$ in. 4, 2 ft.
48. Grey ware charged with fine quartz grit. D. 4 in. 4, 1 ft. 8 in.
49. Grey sandy ware. D. $3\frac{1}{2}$ in. 4, 2 ft. 2 in.
50. Dark grey ware, smoothed. D. 4 in. Similar to no. 47. 4, 2 ft.
51. Hard grey ware, polished on exterior. D. 4 in. Resembles nos. 30 and 36.
4, 2 ft.
52. Black polished ware, brown core. D. $4\frac{1}{2}$ in. 2, 1 ft. 8 in.
53. Black polished ware. 4, 2 ft. 2 in.
54. Grey polished ware. D. 5 in. 2, 1 ft. 8 in.

Dishes (FIG. 13)

55. Pink ware, grey core. D. 10 in. 4, $3\frac{1}{4}$ ft.
56. Pink ware. D. $5\frac{1}{2}$ in. 1, 1 ft. 10 in.
57. Pink ware, grey core, red colour-coat. D. 10 in. 5, 2 ft. 7 in.
58. Pink ware. D. 8 in. 1, 1 ft. 10 in.
59. Pink ware, red colour-coat. D. 9 in. 1, 1 ft. 10 in.
60. Pink ware, red colour-coat. 1, 1 ft. 10 in.
61. Grey ware. D. $9\frac{1}{2}$ in. 1, 1 ft. 10 in.
62. Buff ware, brown colour-coat. D. 4 in. 1, 1 ft. 10 in.
63. Grey-buff ware. D. 6 in. 1, 1 ft. 10 in.
64. Grey ware. D. 6 in. 5, $2\frac{1}{2}$ ft.
65. Grey ware, d. $6\frac{1}{2}$ in. 5, $2\frac{1}{4}$ ft.
66. Dark brown sandy ware. 1, 1 ft. 10 in.
67. Grey ware. D. 7 in. 4, $3\frac{1}{4}$ ft.
68. Pink ware. D. $5\frac{1}{4}$ in. 1, $2\frac{1}{2}$ ft.
69. Black polished ware, brown core. D. $7\frac{1}{2}$ in. 1, 1 ft. 10 in.

These bead rim dishes are very common, cp. *Frilford*, fig. 11, 41-2 (3rd-5th century) : *Dorchester Kiln*, fig. 15, 10-12 (4th-5th century) : *Rose Hill*, fig. 19, 18 (4th-5th century).

Mugs (FIG. 13)

70. Grey ware. D. $5\frac{1}{2}$ in. 5, 1 ft. 10 in. Cp. *Vicarage Field*, pit E, 12, but less concave, and wall plain : *Collingwood*, type 88 (early 2nd century).

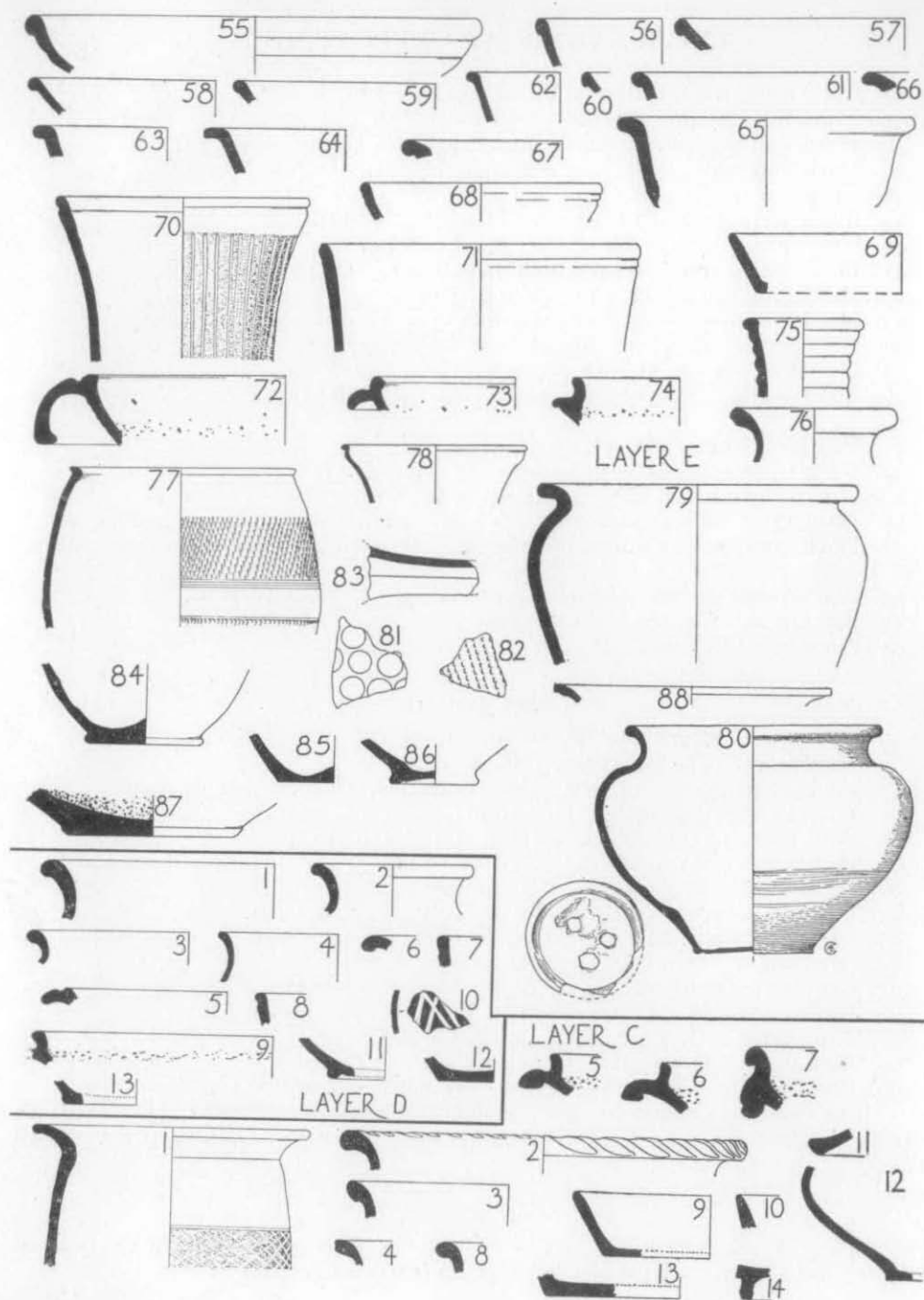


FIG. 13

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71. Pink ware, grey core. D. 7 in. 4, 1 $\frac{3}{4}$ ft. Resembles layer K, no. 18. Cp. *Bloxham*, fig. 12, 46 (late 2nd century) : *Collingwood*, type 84. On the evidence from Wroxeter this may be earlier than no. 70.

Mortaria (FIG. 13)

72. Hard white ware, grey core. D. 8 $\frac{1}{2}$ in. 5, 2 ft. 7 in. Cp. *Leicester*, fig. 18, 15 (2nd century) : *Alchester*, 1932, pl. xvi, 11 (early 2nd century) : *Rose Hill*, fig. 5, 48 (2nd-3rd century).

73. White ware. D. 6 $\frac{1}{4}$ in. 1, 1 ft. 10 in. Cp. *Leicester*, fig. 15, 24-5 (3rd-4th century) : *Bloxham*, fig. 12, 7 (3rd-5th century) : *Frilford*, fig. 13, 1.

74. Pink ware, red colour-coat. D. 4 $\frac{3}{4}$ in. 4, 1 $\frac{3}{4}$ ft.

Jugs (FIG. 13)

75. Pink ware, white colour-coat. D. 2 $\frac{1}{2}$ in. 2, 2 ft. 8 in. Cp. *Leicester*, fig. 28, 2 (early 2nd century) : *Alchester*, 1929, fig. 8. 82 (A.D. 80-120).

76. Grey gritty ware. D. 3 $\frac{1}{2}$ in. 5, 2 ft. 7 in. Cp. *Leicester*, fig. 28, 13 (2nd-3rd century).

Beakers (FIG. 13)

77. Hard pink ware, brown colour-coat. D. 5 in. 5, 2 ft. 5 in. Cp. *Collingwood*, type 77 : *Frilford*, fig. 11, 3, but not same decoration (early-mid. 2nd century) : *Dorchester*, fig. 16, 50.

78. Thin pink ware. Brown colour-coat. D. 4 in. 1, 1 ft. 10 in.

Urns from a grave-group (?) (FIG. 13)

79. Jar, buff-black native ware. D. 7 in. Resembles layer K, no. 19. Prob. late 1st century. 4, 1 $\frac{3}{4}$ ft.

80. Jar, three irregular holes punched through base after firing. Black ware, grey core, polished on exterior. D. 5 $\frac{1}{2}$ in. H. 5 in. 4, 1 $\frac{3}{4}$ ft.

These two urns, found broken, had been thrown into the ditch towards the south, from the entrance. As several fragments of human bone were found with them it is assumed that they were a 1st-century grave-group which had been disturbed in the late 2nd or early 3rd century, and been dumped irreverently into the ditch.

Decorated sherds (FIG. 13)

81. Fragment of grey ware with stamped circles. 2, 1 ft. 7 in.

82. Fragment of black polished ware with inclined rows of rectangular stab-marks. 4, 2 ft.

83. Fragment of nozzle, perhaps the mouth of a bellows. Buff ware, grey interior. 1, 1 ft. 10 in.

Bases (FIG. 13)

Three types of base were represented in this layer, those with a solid foot ring (e.g. no. 84 : 5, 2 $\frac{1}{4}$ ft.), flat bases without a foot ring (e.g. no. 85 : 5, 2 ft. 5 in.)

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and with foot ring hollowed below (e.g. no. 86 : 5, 2 ft. 10 in.). The first was rather commoner than the others, but none was scarce. Several of each had an internal kick at the centre of the floor. All wares were represented in each shape. The only mortarium base (no. 87 : 5, 2 ft. 8 in.) copied no. 84 in shape, but was much thicker than any other base.

White ware (FIG. 13)

There were, in addition, several plain fragments of thin white ware (at depths ranging from 1 ft. 10 in.-2½ ft.), e.g. :

88. Rim, possibly of a platter, with squared-off section, hard white ware polished all over. Probably Gallo-Belgic. 1, 2½ ft.

Layer D (FIG. 13)

1. Large jar, hard grey ware polished outside. D. 10 in. Resembles layer E, no. 6, but wider.
2. Small jar, hard grey ware. D. 3½ in.
3. Jar, hard grey ware. D. 7 in.
4. Jar, thin grey ware. D. 4½ in. Resembles layer H, no. 15 and layer E, no. 44.
5. Pie dish, black polished ware. D. 8½ in. Cp. *Leicester*, p. 83, fig. 19, 21-3, type E (3rd century) : *Frilford*, fig. 11, 17.
6. Pie dish, hard grey ware.
7. Mug or dish, grey ware.
8. Mug or dish, cream ware, pink core. Resembles layer E, nos. 68, 70-71.
9. Mortarium, cream ware with pink core. Resembles layer E, nos. 73-4.
10. Sherd with white slip decoration on dark ware ; perhaps New Forest ware, 3rd-4th century.
11. Base, cream ware, pink core.
12. Base, pink-brown gritted ware.
13. Base, pink ware.

These last three types were each represented by several examples.

Layer C (FIG. 13)

1. Cavetto-rim jar, black polished ware. D. 6 in. 1, 1½ ft. Cp. *Leicester*, 100-101, fig. 26, 20-22 (3rd-4th century).
2. Jar, pink-grey ware, grey core. D. 9½ in. 1, 1 ft. 2 in.
Rope-pattern pots occur in the New Forest. H. Sumner, *Excavations in the New Forest Romano-British pottery sites* (1927), pl. 3, xvii, 10.
3. Jar, grey ware. D. 7 in. 4, 1½ ft. Resembles layer E, no. 56.
4. Jar, pink ware. D. 6½ in. 4, 1½ ft.
5. Mortarium, buff ware. D. 8 in. 1, 1½ ft. Resembles layer D, no. 9.
6. Mortarium, brown ware. D. 9 in. 1, 1½ ft. This and the preceding rim are like *Leicester*, type J (4th century) : *Frilford*, fig. 11, 37 (3rd-4th century) : *Rose Hill*, *Cowley*, fig. 5, several : *Ditchley*, fig. 11, 3 : *Dorchester*, fig. 15, 3 (very late).
7. Mortarium, buff ware. D. 9½ in. 5, 1¾ ft. Cp. *Leicester*, p. 79, type H1 (Antonine) : *Bloxham*, fig. 12, 9.
8. Jar, grey ware. 4, 1½ ft.

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9. Dish, black ware, polished exterior. D. 6 in. 1, 2½ ft. Resembles layer E, no. 69.
10. Dish, pink ware. D. 5 in. 4, 1½ ft.
11. Lid, grey ware. 2, 1½ ft. Cp. layer H, no. 8 and *Leicester*, fig. 31, 2 (1st-2nd century).
12. Lower part of jar, grey ware. 2, 1 ft.
13. Base, black ware. D. 6 in. 2, 1 ft. 5 in.
14. Base, pink ware, red colour-coat. 2, 1½ ft.

Colour-coated and rouletted wares were well represented in this layer.

Layer B (FIG. 14)

1. Pie dish, grey ware. D. 7½ in.
2. Pie dish, black sandy ware, polished. D. 6½ in.

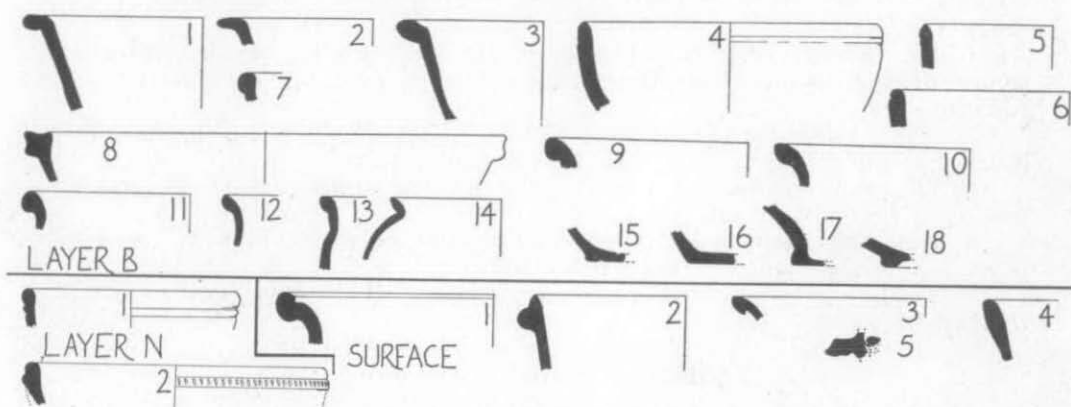


FIG. 14

3. Pie dish, pink ware. D. 6 in.
4. Dish, grey ware. D. 6¼ in.
5. Dish or mug, pink ware, grey core. D. 5½ in.
6. Dish, black sandy ware, polished.
7. Dish, buff ware.
8. Bowl, cream ware, quartz-gritted. D. 10 in. Cp. *Frilford*, fig. 11, 20 : *Rose Hill*, fig. 19, 15 (3rd-4th century) : *Bloxham*, fig. 12, 18 (3rd-4th century).
9. Jar, pink sandy ware, buff core. D. 8½ in.
10. Jar, buff sandy ware. D. 8 in.
11. Jar, hard grey ware. D. 7 in.
12. Jar, thin buff ware.
13. Jar, black sandy ware.
14. Jar, grey ware, white core. D. 4½ in.
15. Base, grey polished ware.
16. Base, grey ware.

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17. Base, grey ware.

18. Base, pink ware, red colour-coat.

All these types were well represented in this layer.

Layer N (FIG. 14)

The pottery from this layer, generally scanty, was in better condition than that from layer M. There was not enough of it to form a dated group.

1. Bowl, pink gritted ware. D. $4\frac{1}{2}$ in. This is rather narrower than the other bowls from the site (e.g. layers K, no. 18, E, nos. 68, 70-71, D, no. 7).

2. Dish, black ware, grey core. D. 6 in.

Layer M

All the sherds from this layer were very worn and appear to be of late date, comparable, so far as can be judged, to the pottery from layers C and B.

Surface (FIG. 14)

1. Jar. Sherd, rather worn, grey ware. D. 9 in. Cp. layer E, no. 4 : *Frilford*, fig. 11, 26 (early Roman beneath temple) : *Alchester*, 1927, fig. 9, 1 (late 1st-early 2nd century).

2. Flanged dish, hard grey ware. D. 6 in. Layer D, no. 5, was the only other flanged bowl found on the site. Cp. *Dorchester*, fig. 15, 37.

3. Jar, hard buff ware, grey core. D. 8 in. Cp. *Frilford*, fig. 11, 31 (2nd-3rd century) : *Rose Hill*, fig. 20, 10.

4. Dish, black sandy ware, polished. Resembles layers E, no. 69, C, nos. 9-10, B, nos. 5-6 (but with slight grooves below rim).

5. Mortarium, much worn, pink ware, grey core. Cp. *Rose Hill*, fig. 19, 17 : *Bloxham*, fig. 12, 8.

SHELLY WARE¹⁵ (FIG. 15)

Sherds heavily charged with pounded shell were so conspicuous on the site that it is thought worth while to consider the ware on its own. Its chronology at Callow Hill is well established stratigraphically. One sherd lay sealed by the bank in Area Y. Several sherds were included in the make-up of the bank in Areas Y and Z, and more were scattered on and under the paved surface in the former Area. One sherd (not illustrated) lay in the bottom silt of the ditch of Dyke A (Area V). In Area X Shelly Ware was not found lower than layer H in the villa ditch. It was scattered thickest in layers E and B.

The ware evidently began in Belgic times but was not being used during the early villa period. It reappeared in the second century and was used thereafter until the site was abandoned. At Vicarage Field, this ware was found in pit E in the mid-second century and in pit L early in the same century. It was not found in the Romano-Belgic enclosure-ditch, which was a little later than the earthworks of Areas Y and Z at Callow Hill.

Shelly Ware would appear to be a native product, whose gradual reappearance at Callow Hill may be explained by the resurgence of native culture which is such a feature of the later centuries in Roman Britain.

The forms of vessels produced in this ware are of three types, those with gently everted rims, with sharply everted rims, and plain dishes with straight sides. The

¹⁵ For further notes on Shelly Ware see W. F. J. Knight, *Oxoniensia*, III (1938), 51, nos. 29-31.

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dish from Area V (no. 22) was exceptional in its fine finish and its shape. The profiles of shouldered vessels always appear slack. Many pots appear to be hand-made. The ware is very soft and friable, with a distinctive corky surface. The pounded shell-grit is its most conspicuous feature. Colour ranges from black and buff to a delicate pink. It is not possible to show any typological developments in the Callow Hill series.

AREA Y

- 1-3, Bank make-up.
- 4-5, beneath cobbled surface.

AREA Z

- 6, Bank make-up.



FIG. 15

AREA V

- 22 (see p. 35), topsoil.

AREA X

- 7-8, layer H. Exterior of no. 8 is a deep pink, comparing with no. 14 from layer D. 4, $3\frac{1}{4}$ ft. ; 1, $3\frac{1}{2}$ ft.
- 9-13, layer E. Sections and depths respectively 5, 2 ft. 7 in. ; 1, 1 ft. 10 in. ; 1, 1 ft. 10 in. ; 1, 1 ft. 10 in. ; 1, $2\frac{1}{2}$ ft.
- 14-15, layer D. No. 14 appears hand-made. 1, 1 ft. ; 1, 1 ft. 10 in.
- 16-17, layer C. 4, $1\frac{1}{4}$ ft. ; 2, $1\frac{1}{2}$ ft.
- 18-19, layer B. 4, 1 ft. 1 in. (both sherds).
- 20-21, surface.

BRONZE

AREA X

- 1. *Fibula*, spring and pin lost. A one-piece brooch, bow expanding towards spring and deeply fluted. Junction of bow and foot marked by four horizontal lines.

NICHOLAS THOMAS

Pierced catch-plate with median tie-piece. Foot parallel-sided with slight groove following both edges down to base. Layer E, 1, 2½ ft. FIG. 16, 1.

Mr. M. R. Hull kindly comments: 'I do not know anything at all closely parallel to this brooch. Splaying of the head of such brooches starts early, and Almgren's numbers 4, 23, 67 have been quoted by those wishing to trace the trumpet-headed brooches. But all these numbers of Almgren's have the central moulding close up to the head, and the foot is very long and has a concave curve. The present brooch seems to have no connexion with any known series because the central moulding is really central and the foot is straight and parallel-sided. The date presents little difficulty, since the brooch is in one piece, with a simple bilateral spring with no hook, and has a long, pierced catch-plate. I think the moulding at the junction of bow and catch-plate, taken in conjunction with the rest of the brooch, is an early feature and the alternately convex and concave mouldings are exactly as in the rosette-type of mid-1st century or earlier.'

2. *Fibula*, Langton Down type: complete, but bow, spring-cover and catch-plate flattened. Layer E, 2, 1¾ ft. FIG. 16, 2.

R. E. M. Wheeler and G. C. Dunning defined and listed this type of early 1st century brooch (R. E. M. and T. V. Wheeler, *Excavation in . . . Lydney Park, Glos.*, Res. Rep. Soc. Ant. IX (1932), 71-4, fig. 10). C. F. C. Hawkes and M. R. Hull (*Camulodunum*, Res. Rep. Soc. Ant. XIV (1947), 317 ff.) added to the list. Besides the present specimen the following further examples from Oxfordshire and Wiltshire should be cited: 1. Yarnnton, A.M. 1935.508; 2, 3. Ditchley, A.M. 1936.379-80 (*Oxoniensia*, 1 (1936), 56, pl. ix, 13); 4. Mildenhall, nr. Marlborough, Devizes Mus., Brooke coll. no. 20 (*V.C.H. Wilts.*, 1, forthcoming).

3. *Ring*, probably for the ear. D. ½ in. Flattened section, one end pointed and the other slightly expanded. Layer C, 1, 11 in. FIG. 16, 3.

4. *Small clasp*, head flattened, squared off and at right-angles to shaft. Shaft has trough-shaped section tapering to sharp point. Length ⅞ in. Layer F, 1, 3 ft. FIG. 16, 4.

5. *Fragment of bracelet*, rectangular section; outer face has series of vertical grooves across it. Layer C, 1, 1 ft. FIG. 16, 5.

AREA Y

6. *Ear-ring*, wire with circular section, both ends pointed. D. 8/10 in. Cutting 6B, depth 1¾ ft. From red loam beneath bank of Dyke B. FIG. 16, 6.

AREA Z

7. *Fragment of bowl*, sheet bronze with rim formed by curling the sheet over a solid bronze rod. Cutting 10, depth 8 in. From spread of bank of Dyke C. FIG. 16, 7.

IRON

AREA X

1. *Tanged knife or cleaver*, wedge-shaped blade with concave upper edge blunted. L. (tang broken) 3 in. Layer K, 3, 4¾ ft. FIG. 16, 11.

2. *Nail*, shaft square in section. L. 4½ in. Head originally circular. D. 8/10 in. Layer D, 1, 1 ft. FIG. 16, 12.

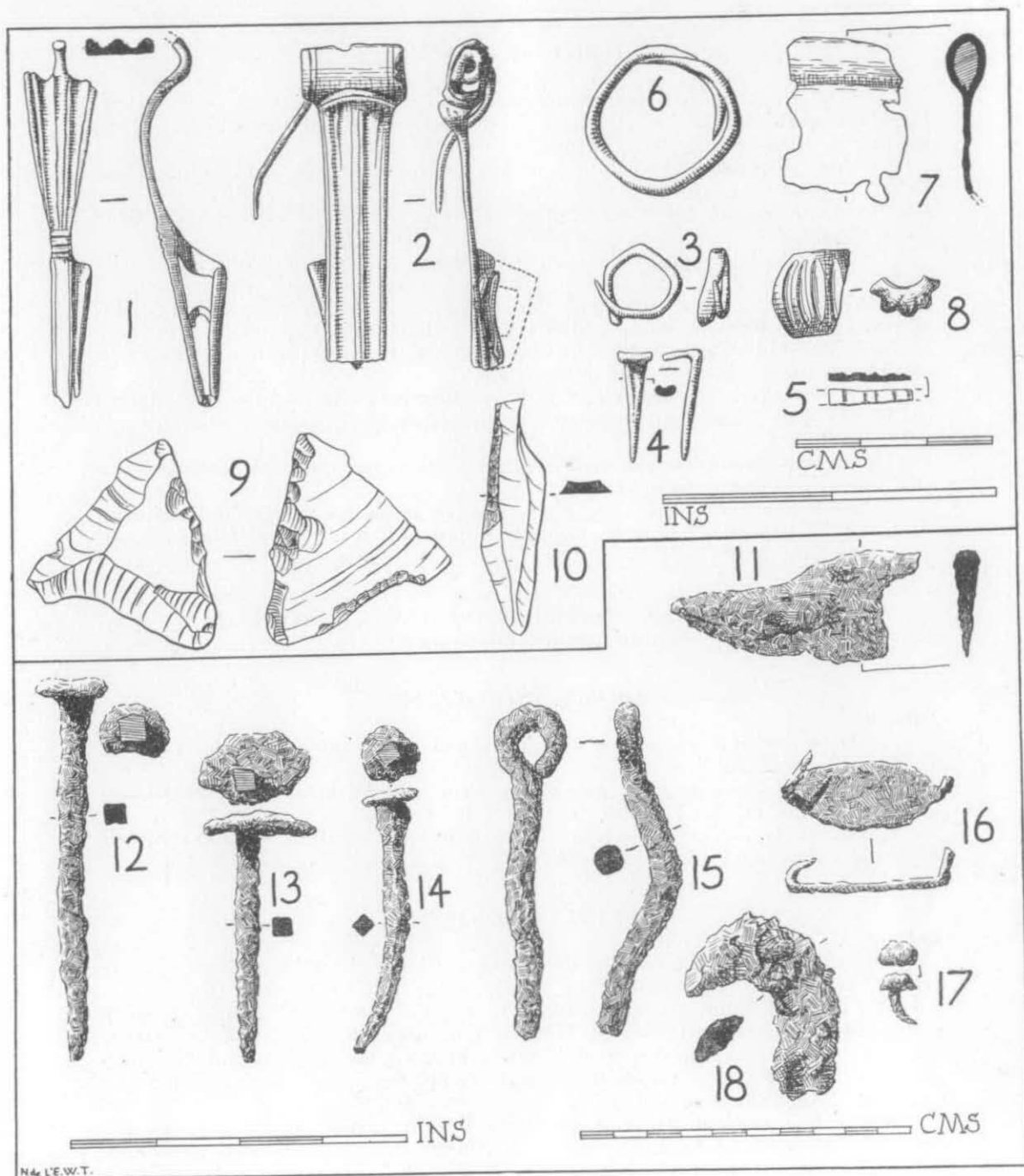


FIG. 16

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3. *Nail*, shaft square in section, tapering gradually to a point. L. 3 in. Head large and oval, L. (major axis) $\frac{4}{10}$ in. This type of nail seems to have been used for securing roofing tiles. Layer C, 1, 1 ft. FIG. 16, 13.

4. *Nail*, shaft square in section, tapering from head to point. L. $3\frac{1}{4}$ in. Head flat and circular. Layer C, 3, $1\frac{3}{4}$ ft. FIG. 16, 14.

Specimens of each of these types of nail (nos. 2-4) were recovered also from layers K and E.

5. *Cleat*, oval, two projections for attachment to wood or leather. L. 2 in. Topsoil. FIG. 16, 16. A common Roman type, sometimes being used by cobblers (e.g. *Devizes Mus. Cat.*, II (1934), pl. xxx, 3, 5, 7, 8, from Casterley Camp; *ibid.*, pl. lxx, 13, from Roman well near Silbury Hill; *Wilts. Arch. Mag.*, XLVI (1933), 206, burial at Yarnbury Castle, with hobnails, several cleats and decorative bronze studs, and shoe-leather—clearly a pair of sandals).

6. *Hobnail*, from a group of 42 found close together. All are alike, with domed heads. D. $\frac{1}{4}$ in., shafts square in section and tapering to a point. Layer C, 1, 1 ft. FIG. 16, 17.

Though these nails lay scattered irregularly, they must have been attached to a shoe when thrown into the ditch.

7. *Hook*, much corroded; suggestion of socket or flanges at base for attachment to shaft. Section of upper part originally a flattened oval. From filling of post-hole. FIG. 16, 18.

AREA Y

8. *Ring-headed nail* or *pin*, originally square in section, point missing. L. $4\frac{1}{4}$ in. Cutting 6E, depth 1 ft. Beneath cobbled floor. FIG. 16, 15.

GLAZE AND GLASS¹⁶

AREA X

1. *Melon bead* of green faience, exterior ribbed; only half preserved. Layer F, 1, 3 ft. 7 in. FIG. 16, 8.

2. *Fragment of window glass*, pale green, clear. Roller-moulded, with one side glossy, the other matt. T. $\frac{1}{8}$ in. Layer K, 5, $3\frac{1}{4}$ ft.

3. *Chip of glass*, clear, blue-green. T. $\frac{1}{16}$ in. Too small for identification but probably not window-glass. Layer E, 1, 3 ft. 5 in.

FLINT AND STONE

AREA X

1. *Arrowhead*, 'petit-tranchet' derivative; Clark's form D (*Archaeol. J.*, xci (1934), 32 ff.). Grey patinated flint. Layer E, 4, 1 ft. 10 in. FIG. 16, 9.

2. *Blade-flake*, white patinated flint. L. $1\frac{4}{10}$ in. One edge blunted by steep secondary chipping from the bulbar face, for a distance of $\frac{8}{10}$ in. from the striking platform. A vertical blow delivered on to this platform has detached a flake, which could be described as a graver-flake, from the edge opposite the trimming just described. Layer N. FIG. 16, 10.

These two implements must be derived from earlier contexts. They are probably the work of Neolithic people of Abingdon, or a more localized culture,

¹⁶ I am indebted to Mr. D. B. Harden for reporting on the chips of glass (nos. 2 and 3).

EXCAVATIONS AT CALLOW HILL

though H. J. Case has listed half a dozen finds of purely Mesolithic type from the Oolite of this region (*Oxoniensia*, xvii/xviii (1952-3), 1 ff.

3. *Fragment of roof-tile*, resembling a 'Stonesfield' slate. Nail hole tapped out, or ground, from one side only. Layer F, 1, 4 ft. At Ditchley such slates were used in the first stone house, which was built early in the 2nd century.

4. *Fragment of Great Oolite* roughly 4 in. × 3 in. × 2 in.; one face and edge have been worn or ground smooth in such a manner as to suggest that this may be a fragment from a doorstep. Layer L, 2, 6 ft. Several unshaped chips of the same rock occurred in the make-up of the bank of Dyke B in Area Y, cutting 6.

SLAG

AREA X

A few small fragments of *iron slag* occurred in Layer E, 1, 1 ft. 10 in.; 2, 1 $\frac{3}{4}$ ft.; 4, 2 $\frac{1}{2}$ ft.

COIN

Only one coin was found (topsoil, Area X, section 1, west end)—Claudius II (Gothicus), A.D. 268-70, Æ 3. D. 16 mm., very worn.

ANIMAL BONES

By DR. J. WILFRED JACKSON

AREA V

Bank make-up: Small Ox; Horse.

AREA X

Layer K: Small Ox; Sheep.

Layer H: Small Ox.

Layer F: Small Ox; Small Horse.

Layer E: Small Ox (typical *Bos Longifrons* horn core and fragments of another); Sheep; Goat; Pig; Horse; Dog; Frog; Roebuck; Human (imperfect humeri).

Layer C: Small Ox; Sheep; Pig.

Topsoil: Small Ox; Sheep; Pig; Red Deer.

AREA Y

Land surface beneath bank: Small Horse.

Bank make-up: Small Ox; Sheep; Pig; Horse; all much weathered.

Bottom ditch-silt: Dog. Greater part of skeleton, much broken; smallish animal.

Four or, say, five animals provided food for the inhabitants of the site. There are also fragments of two wild animals, red deer and roedeer, which have added to the larder. The dog would be used for herding animals. These animal types are typical of those from other Roman and pre-Roman sites. It is difficult to say which food-animal is the most abundant, but I am inclined to think that it is the small ox, next sheep, and then pig.

NICHOLAS THOMAS

CHARCOALS

By MRS. F. L. BALFOUR-BROWNE

Fragments of charcoal found at various levels in the villa ditch (Area X) have been identified as follows :

1. Oak. Section 1, layer F ; depth $5\frac{1}{2}$ ft.
2. Oak, Hazel. Section 1, layer F ; depth 5 ft. 2 in.
3. Oak. Section 1, layer H ; depth 5 ft.
4. Beech, Willow, Poplar, Holly, Ash, Hazel. Section 1, layer F ; depth $4\frac{3}{4}$ ft.
5. Willow or poplar. Section 2, layer E ; depth 3 ft.

REPORT ON THE SAMPLES OF SOIL

By DR. I. W. CORNWALL

AREA Y

Two samples were examined (1a and b) of the buried soil below the bank of Area Y. These proved to be almost identical :

| Samples | pH | carbonates | humus (mgs./100 gms.) |
|---------|-----|------------|-----------------------|
| 1 a | 6.4 | — | 39 |
| 1 b | 6.3 | + | 50 |

(grains of limestone)

A mechanical analysis was carried out on no. 1a giving the accompanying curve. This shows a somewhat sorted clayey silt with a small amount of coarser material, totalling only 7%, with a few particles larger than 2 mm.—sand and coarser, 7%, silt 66%, clay 27%.

This composition in the buried soil suggests a somewhat wind-sorted deposit subsequently weathered, the coarser fraction being probably due to rain-washing. Save for the higher percentage of clay and the generally finer grain-size, this material is not unlike the Dorchester and Stanton-Harcourt yellow-red loams of Bronze-Age date. It could easily have been formed from such parent-material by chemical weathering *in situ*. See *Proc. Prehist. Soc.*, XIX (1953), 137-8, 141-3.

AREA V

Three layers (6, 8, 10) in the filling of a Belgic (?) ditch were also submitted as samples, with the question whether either showed signs of a pause in silting, and growth of vegetation at the bottom of the ditch.

Experimental results were as follows :

| Layers | pH | carbonates | humus |
|--------|-----|------------|-------|
| 8 | 5.4 | — | 45 |
| 10 | 7.4 | + | 36 |
| 6 | 5.7 | — | 99 |

The humus concentration in 6 was sufficient to interfere with sedimentation in the mechanical analysis. By itself, this feature might have been taken to support the idea of the deposit being the humic horizon of a soil, but, from the section supplied, it is clear that the organic matter might as easily derive from the hearth which surmounts the layer. Nos. 8 and 10 show nothing beyond the humus concentration of the surrounding soil, as exemplified by the buried soil of Area Y.

EXCAVATIONS AT CALLOW HILL

A mechanical analysis of no. 6 showed it to be very similar in character to no. 1a, though slightly coarser and with slightly less clay. It is thus likely to have been formed by rain-washing of the banks of the ditch and is, therefore, perhaps an indication of a standstill in coarser silting.

The white 'fungus' noted in no. 10, seen in the interstices of the rubble, is a form of calcium carbonate incrustation in fine needle-shaped crystals. The resemblance of these to the Thornbrough gypsum (*Proc. Prehist. Soc.*, xix (1953), 144 ff.) and the similarity of their mode of occurrence at first suggested a sulphate, but a test for sulphate was negative. On addition of a drop of diluted acid under a lens the crystals were seen to dissolve completely. Such a deposit is not uncommon in the B-horizon of a brown-earth soil, when there are voids to permit free crystallization.

CONCLUSIONS

AREA Y

(1) No macroscopic plant-remains were found which might have indicated the type of vegetation contemporary with the buried soil. The fairly low humus-concentration does not suggest forest, but there is no comparative sample with which to compare the figure obtained.

(2) Evidence of cultivation depends rather on plough-marks and such physical phenomena. Manuring might be demonstrable by showing the presence of phosphate in greater amount than in a comparative sample of the natural subsoil. Here the pH is acid in both cases, so that it is unlikely that phosphate would have persisted, even if originally present.

(3) In comparison with Area V, the samples resemble no. 6 most closely, save in humus-content, in which no. 6 much exceeds them. Nos. 8 and 10 are much more stony, but, apart from this, appear to be of similar parentage.

(4) There is a marked general resemblance to the Oxfordshire loams previously investigated, save in the lower sand-content and higher clay-content. These differences may be due to a greater degree of weathering or to a somewhat finer grading in the insolubles from the Cornbrash, as opposed to those from the Summertown-Radley gravels.

AREA V

(1) The fineness and stonelessness of no. 6 do suggest the slow accumulation of rain washed silt, and its high content of organic matter (unless contaminated by the overlying hearth) suggests that it carried vegetation. At the same time, the section shows both no. 6 and no. 8 to be mere 'lenses' and not to continue laterally on the sloping banks of the ditch. They cannot, therefore, represent soils *in situ*, but only soil material derived from their surroundings.

(2) Climatic interpretations are not possible with the material available, but it appears as if this group of samples is formed from the prevailing soil-material, which may have been somewhat wind-sorted during the Bronze Age.

(3) Sample 10 appears to be artificial tip or a sudden natural foundering of the bank, judging by the looseness and plentiful voids. Nos. 8 and 6 suggest gradual silting but not soil formation *in situ*, which any long interval in the ditch-filling process would demand.



CALLOW HILL, OXON.

View looking north, dykes B and C on right, Villa ditch and dyke A on left.

Ph. : Ashmolean Museum



CALLOW HILL, OXON.

View looking west, dykes B and C in foreground, Villa ditch, dyke A and other crop-marks behind.



CALLOW HILL, OXON.

The Villa enclosure (ditch D) with well and farm-buildings at centre. Entrance excavated on right.

Ph.: Ashmolean Museum

PLATE V



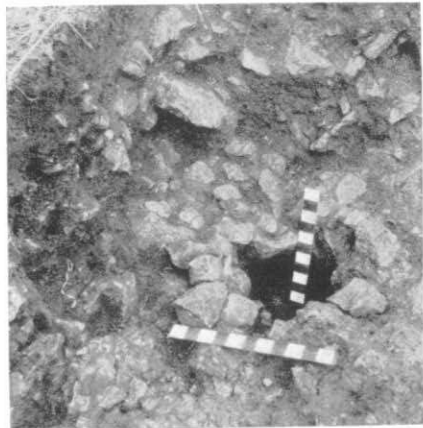
A



B



C



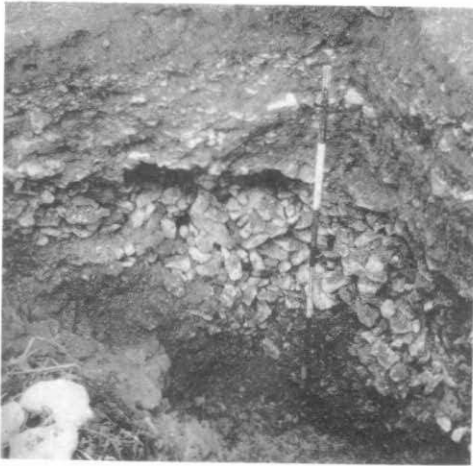
D

CALLOW HILL, OXON.

- A. Section of dyke B, looking north-west.
C. Villa ditch (D), section 5, looking west.

- B. Section of dyke C, looking south.
D. Post-hole of gate at entrance of Villa.

PLATE VI



A



B



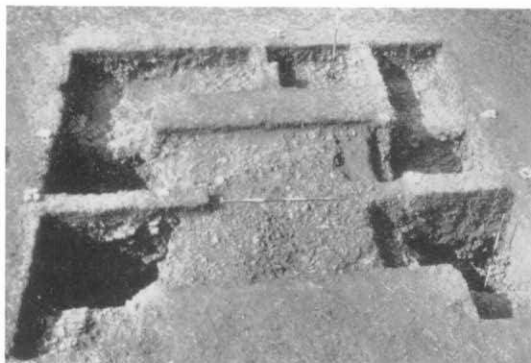
C



D

CALLOW HILL, OXON.

- A. Villa ditch (D), section 2, looking west. Rubble spill of layer H.
- B. Area Y, cobbled floor behind bank of dyke B.
- C. Section of dyke A, looking north-west.
- D. Villa entrance, causeway across ditch D.



A



B



C

CALLOW HILL, OXON.

A. Villa entrance, looking west, showing road-metalling on causeway across ditch D ; distant ranging pole set in post-hole gate; stone hole across roadway to left.

B. Section of palisade trench outside dyke B, looking north.

WITNEY, OXON.

C. Bronze Age bronze sword.

*Phh. : A, B, N. Thomas
C, Ashmolean Museum*