

## Report on the Excavation of the Roman Structure at Rothamsted Experimental Station, Harpenden

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THE existence at Rothamsted of certain foundations, and of what were believed to be "Roman pavements," has been known locally for many years. Not, however, until the end of 1936 had there been any investigation of these remains, and the carrying out of these investigations, which continued during 1937, was due entirely to the initiative of Sir John Russell, Director of the Rothamsted Experimental Station. Not only did he approach this Society regarding the undertaking, but gave all facilities for excavation and for the eventual preservation of both the structural remains and the objects found during the work.

The excavation was under the direction of Mr. James Broad, who has collaborated in the production of this report, and Mr. Denis Wilson assisted in the survey of the site. The work was carried out by labour provided by Sir John Russell and by volunteer helpers, the latter mainly at week-ends.

The site forms part of an extensive level plateau, at over 400 ft. O.D., raised well above the surrounding ground. The subsoil is a mixture of clays and gravels such as, under natural conditions, would be likely to support dense oak forest. It is about a mile from the Roman road "Watling Street" (see map, fig. 1), which here is about four miles north of Verulamium.

The ground is under cultivation (experimental crops) and has been for many years. A map of 1623, preserved in the Public Trustee's office, is of considerable interest in this connection, and a copy of part of it (superimposed on the 25" O.S. sheet) is here reproduced (fig. 2). On this map the names of the different fields are given, and the boundaries, which are here shown in dotted line. It will be seen that the boundaries on the map of 1623 agree very closely with existing boundaries, but that there is a small patch of wood-

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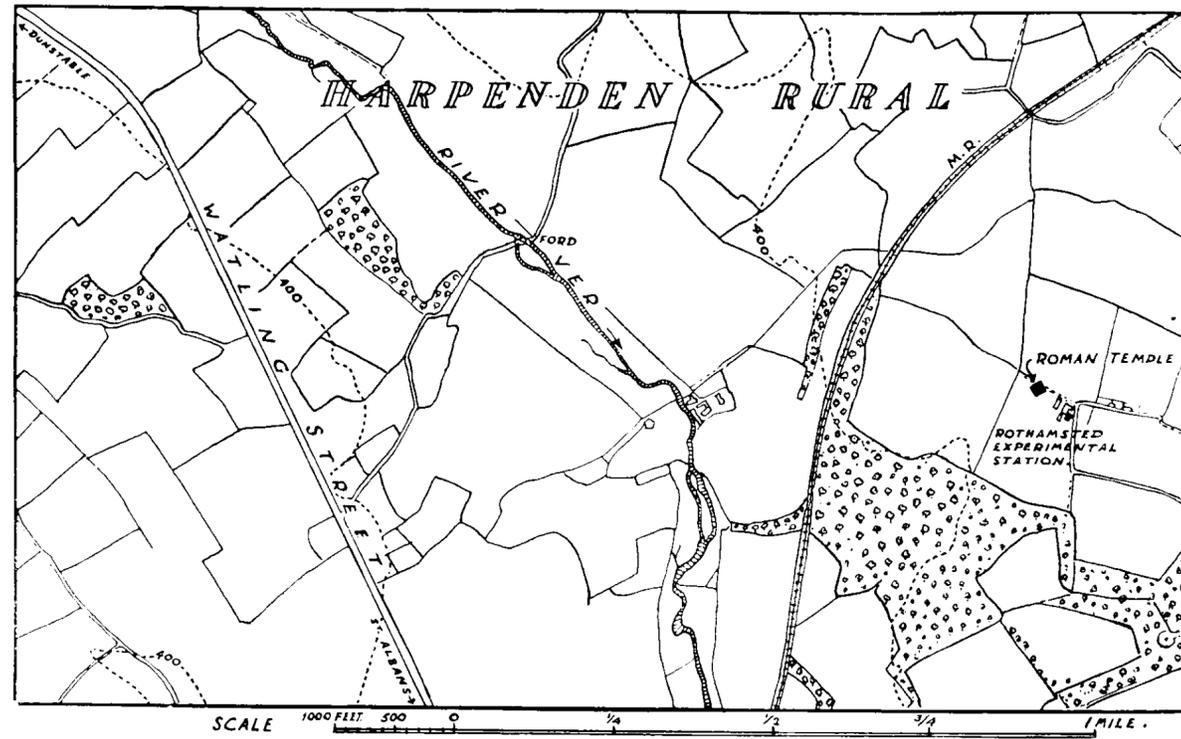


FIG. 1.



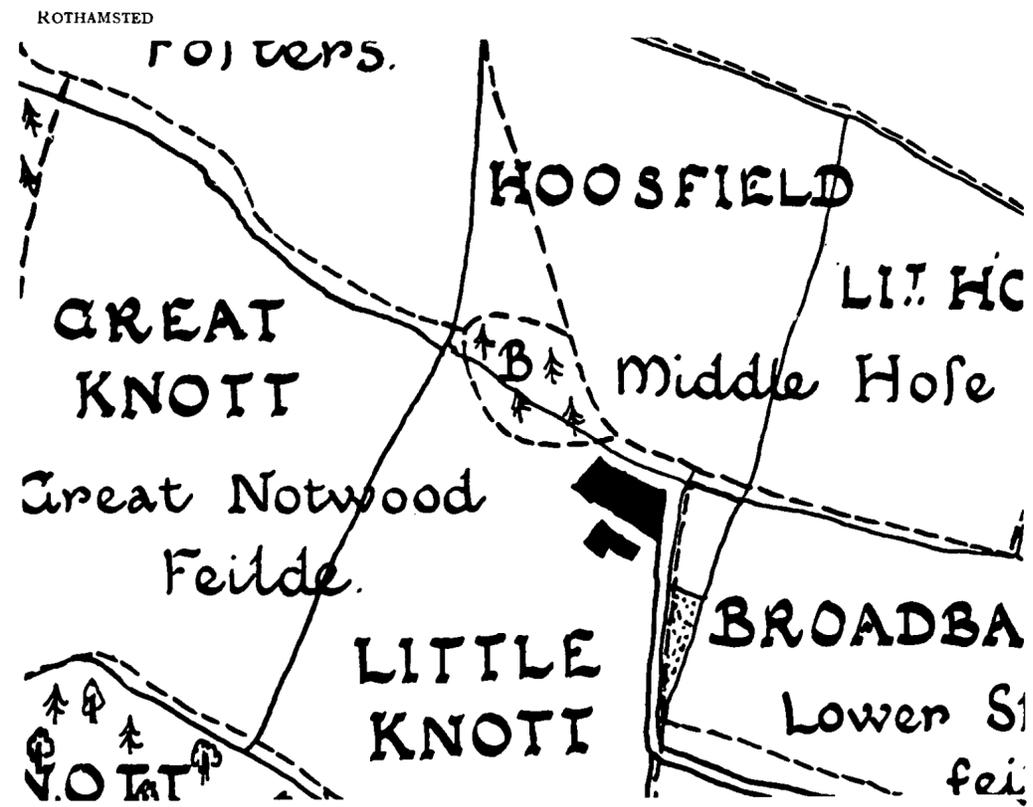


FIG. 2. B=Collye Grove.  
 (Based on a map, dated 1623, in the Public Trustee's Office.)



# ROMAN TEMPLE

AT ROTHAMSTED EXPERIMENTAL STATION, HARPENDEN, HERTS.

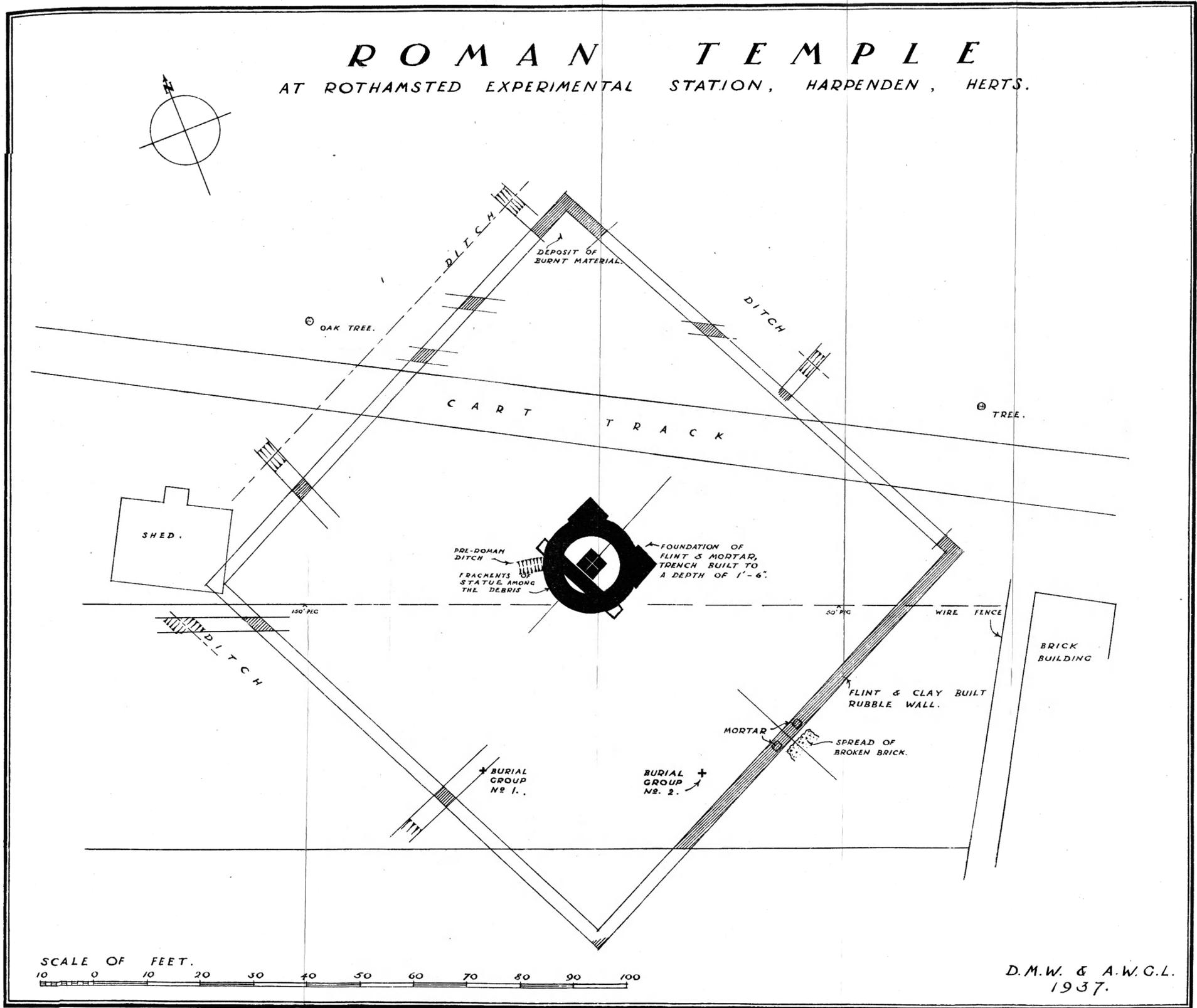


FIG. 3.



land, marked B, that no longer exists. Its name is given on the old map as "Collye Grove." This small wood agrees with the area of the Roman foundations, which are the subject of this report, so closely as to suggest that these foundations may have been the reason for this piece of ground being left uncultivated. It is possible that parts of the structure were visible above ground at the date when the fields and their boundaries came into existence. In recent years, the underlying flintwork was encountered whenever the ground was ploughed or dug into, and the whole patch of ground had come to be recognised as being particularly unsatisfactory from the farmer's point of view, and for this reason was partly given over to tanks and huts.

Connected with this site, there is the record of the finding of an urn many years ago, at a point about one hundred yards to the north of the present excavations. It has not been possible to trace its present whereabouts, and so to find out whether it is Roman, or is to be connected with the pre-Roman (?Belgic) occupation of which evidence was obtained during the work.

The plan (fig. 3) shows the whole of the structural remains disclosed by the excavations. It will be seen that these consist of a square enclosure, almost exactly one hundred feet square, within which is a small irregular structure, situated near the centre of the enclosure. An external ditch is on three of the sides of the enclosing wall, the latter being 2 ft. 6 ins. wide. The absence of the ditch on the fourth, or south-east side, suggests that the entrance was on this side. This suggestion was strengthened by the finding of two patches of mortar, each approximately eighteen inches square, on the surviving upper surface of the wall, at a distance of four feet apart, almost in the centre of this side of the enclosure. They suggest that there was a doorway here, with stone- or tile-built jambs set in mortar. A layer of broken bricks led to this point, and had probably been part of a road or pathway leading to the site. It may be conjectured from this that further structures await discovery to the south-east of the present site.

The excavations began with the digging of a trial trench across part of the site which had recently been ploughed, and which was well covered with pieces of Roman brick, roof tile and flints. No Roman pottery was observed among this surface debris. This trench was found to be cutting obliquely across what subsequently proved to be the west enclosure wall, and the external ditch adjoining it (fig. 6). The wall at this point was not too easily identifiable as such, as all that remained consisted of the foundations, "trench built" of loosely packed flints without any mortar, though with a suggestion that sand had been used as a binding agent. Later on, some parts of the wall were found which retained the first course of "free built" flintwork, showing that large flints had been used for the outer faces, with a filling of small flints between them. The ditch was V-shaped, and about 5 ft. across the top and  $2\frac{1}{2}$  ft. in depth. Amongst the silt filling it were small pieces of Roman brick (mostly very much "washed") and a number of flints similar to those used for the wall. Beyond the pieces of brick, showing the ditch to be not earlier than the Roman period, no dateable material was found in it at any of the four points where it was examined.

After several trial cuts had been made, the enclosure wall was traced out in its entirety, and found to form a square of 100 ft. 6 ins.  $\times$  101 ft. A cremation burial (No. 1) was found just under the surface at a point close to the south-west enclosure wall, and later on another (No. 2) was found at a similar distance from the south-east wall. Burial No. 1 consisted of an urn, three flagons of "screw-neck" type, a Samian dish of form 18/31 (stamp destroyed) and pieces of small globular cup of "rough-cast" Castor ware. The whole group (fig. 8) can be dated to the second quarter of the second century A.D.

Burial No. 2 consisted of an urn, screw-neck flagon, and a Samian dish of form 18/31. The urn had been badly smashed, evidently the result of ploughing, but it is recognisable as being slightly earlier than that of No. 1. The date of this group is probably *c.* A.D. 100-125.

Neither group is very reliable for the purpose of

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FIG. 4. VIEW FROM THE WEST. THE DARK PATCH IN FOREGROUND IS PART OF THE PRE-ROMAN DITCH.



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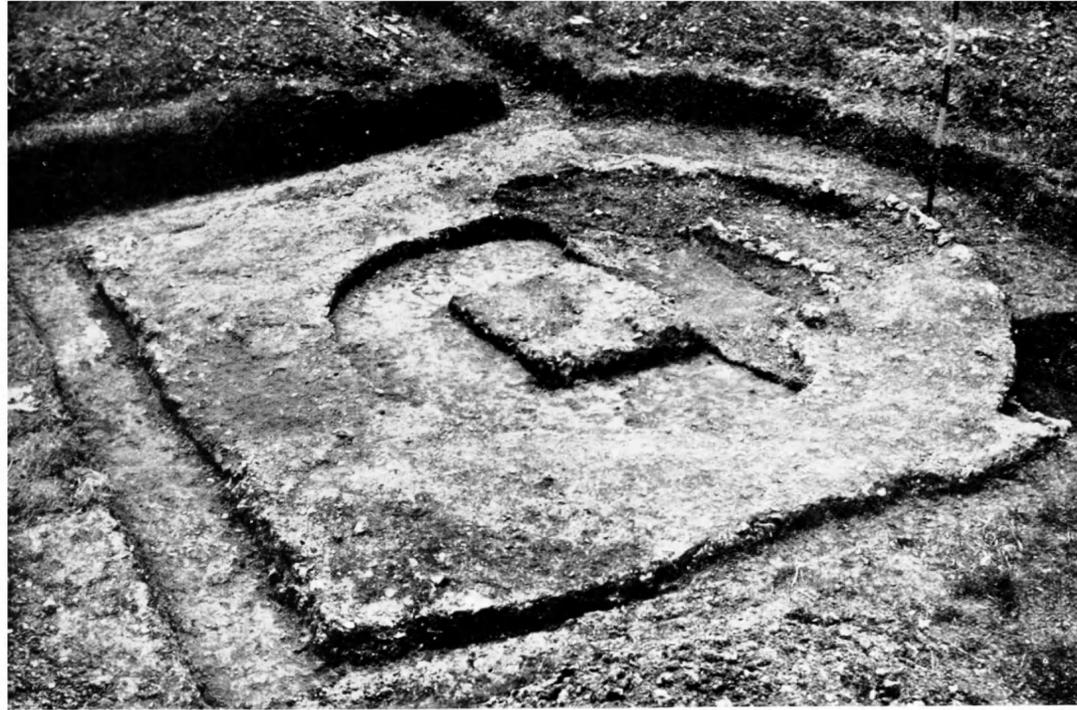


FIG. 5. VIEW LOOKING SOUTH.



arriving at a date for the enclosure wall, since they could be earlier or considerably later than the date of its construction. There was no surviving "stratification" whereby the burials could be connected with any pre-wall or post-wall levels. Actually it is only reasonable to conjecture that the enclosure was already there when the burials were carried out, and that it is, therefore, likely to be Hadrianic or earlier.

During the work on the enclosure wall a small area of burnt material, resting directly on the gravel subsoil, was found in the north-east corner. This material consisted of carbonised straw and several roughly spherical carbonised objects that appeared to be the remains of some kind of fruit. The latter were submitted to Mr. C. Maby, who reports that they appear to be some kind of fruit, apparently something of the nature of apples, but the identification is not at all certain. Experiments in carbonising apples produced objects that did not altogether resemble the objects found.

At this stage of the work some trenches inside the enclosure were dug, and what at first appeared to be a mortar floor, or "spread," was located in the centre of the enclosure. This passed beneath a large tank, which had to be disconnected and removed, together with the supply pipe leading to it, before the work could proceed. Before long it was realised that what had at first seemed to be merely a spread of mortar was, in reality, a solid flint and mortar foundation, surviving to a depth of 1 ft. 6 ins. beneath the surface of the subsoil. Over it lay two to three inches of building debris and nine inches of plough top-soil. The whole of this foundation had been "trench built," the superstructure having started from the level mortar surface that now forms the upper surface of these foundations. Undoubtedly courses of tiles had rested directly on this foundation, and the robbing of the structure had, with one exception, stopped at this point. The exception was a length of about four feet of the main curved wall, behind the "altar," which had been dug out to the bottom of the foundations; evidently this was done to see if there were any tiles at this lower level.

The structure (it is difficult, for lack of exact parallels, to decide for certain whether it was a " Shrine " or a " Tomb ") consisted of a circular compartment, eleven feet in diameter, contained by a wall three feet thick. In the centre is an isolated foundation measuring 3 ft. 9 ins. × 4 ft., apparently the base for either an altar or a statue. Solid angle pilasters, attached to the north-east external surface of the curve, appear to have emphasised a doorway which entered between them. At the back, or south-west, of the compartment, a chord-wall foundation suggests that the part behind the " altar " formed a separate niche, being separated by pilasters, one on either side, in the same manner that an apse (e.g., Verulamium, IV, 9) was normally separated from the remainder of the room. The irregular extensions of this foundation on the outside of the building must be due to the foundation trench for the chord-wall having been dug (as a straight trench 20 ft. long and 2 ft. 6 ins. wide) independently of the trench for the circular wall; they would not have been " built up " as part of the structure, any more than would the chord-wall foundation inside the building, with the exception of the two pilasters already referred to.

The foundations of chord-wall and circular wall are, however, homogeneous, merely because, as with buildings at the present day, the foundations were completed for the whole structure before any part of it was carried up above ground level.

The central foundation was formed after the remainder of the foundations (there is a gap of about two inches between it and the chord foundation), which reinforces the suggestion that it was for a fitment such as an altar.

That there had been a statue in connection with the structure, and that it had been a draped figure, carved in limestone and apparently about life-size, was shown by a number of fragments (of which three are shown, fig. 7), almost all of them found in the robbed portion of the curved wall, where it had formed the back of the niche. In fig. 7, no. 1 is part of the left shoulder, no. 2 possibly part of the right shoulder, and no. 3 a moulded fragment, probably part of the plinth. It

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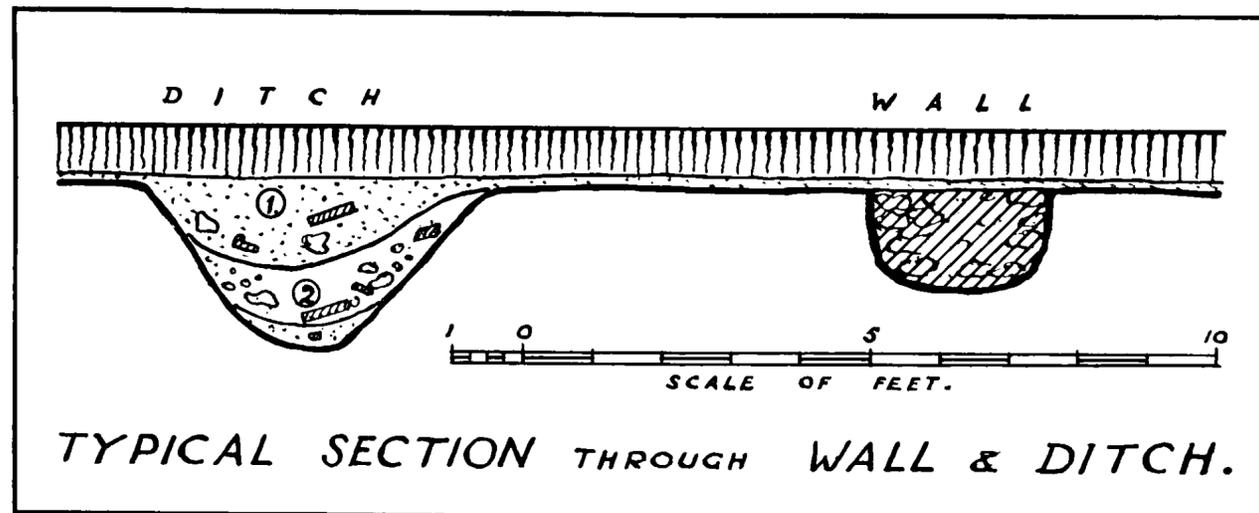


FIG. 6.



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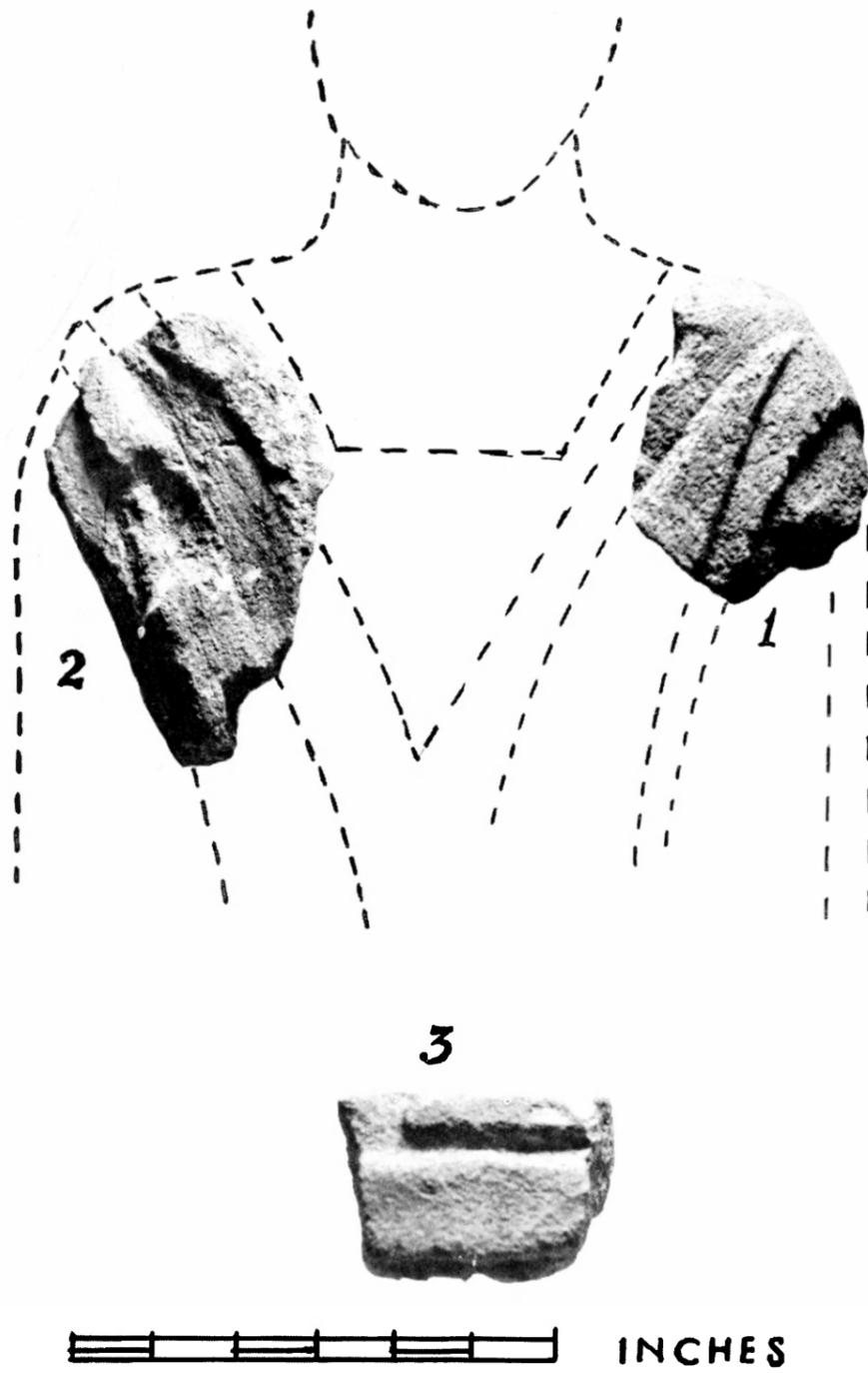


FIG. 7. THREE PIECES OF THE STATUE, WITH SUGGESTED RECONSTRUCTION FOR TWO OF THEM.



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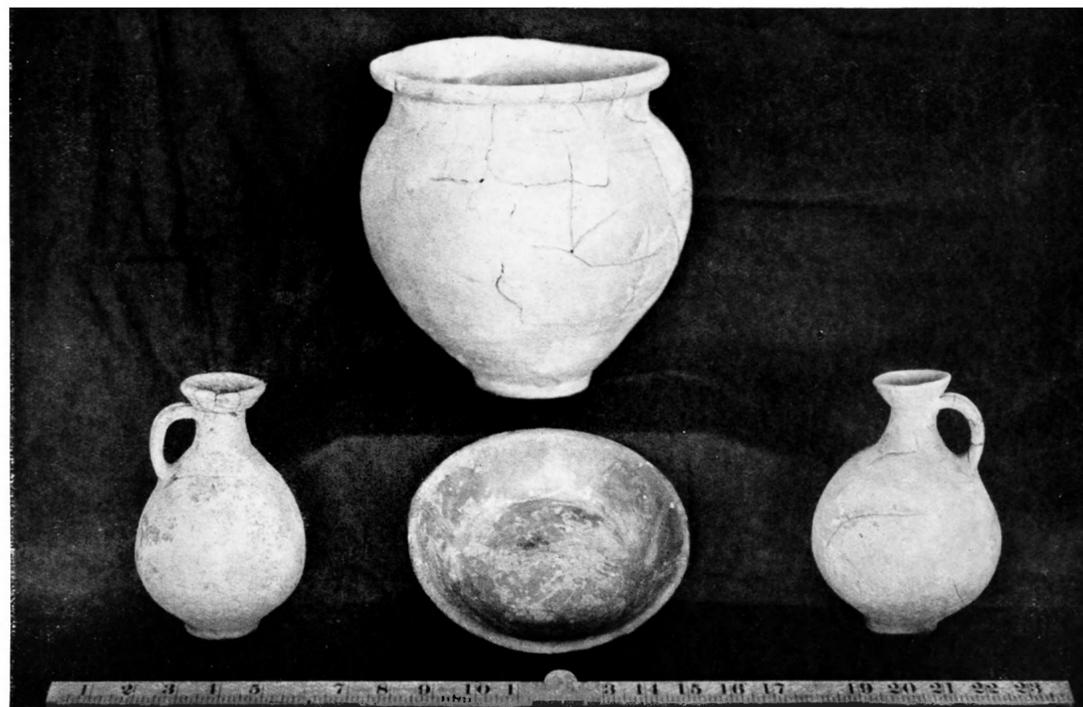


FIG. 8.



seems reasonable to suppose that this statue stood in the niche behind the altar.

The debris from the building, of which the main quantity recovered was from the "robber trench" containing the pieces of statue, was not such as to throw any light on the building's construction. The depth and thickness of its foundations suggest that it was of considerable height, possibly at least twenty feet, and that it stood up in the form of a small tower, as do many of the Roman tombs in Spain and S. France. On the other hand, it seems to have fulfilled the functions of a small temple or shrine; to have been capable of being entered, and to have had an altar on which offerings were made before a statue, either of a God or Emperor. In this respect it is more akin to the small square Romano-Celtic temples, of which a number have been found in this country, one being excavated by the writer at Verulamium in 1934.<sup>1</sup>

In view of the two burials inside the enclosure, and the probability (almost a certainty in view of the small extent explored) of there being many others, this site can be compared with the Roman "walled cemeteries" of the type found at several places in this country; for example, at *Joy Wood, Lockham, near Maidstone, Kent*. There, a walled enclosure measuring 85 ft. × 77 ft. contained a circular tomb, 5 ft. in diameter internally and with a 3 ft. thick wall. In addition, there was a rectangular tomb (externally 12' 6" × 14'), two "cist" burials and five cremation burials, in urns with associated pottery. Apparently the pottery at this site was early second century in date.<sup>2</sup>

At *Sutton Valence* a similar walled cemetery was found and investigated by Roach Smith. It contained nearly one hundred cremation burials.<sup>3</sup>

At *Keston, Kent*, circular tombs, probably originally in a walled enclosure, were found.<sup>4</sup>

Walled cemeteries occur in Germany, France and Belgium. Miss M. V. Taylor, of the Society for the

<sup>1</sup> *Transactions*, 1935, and *Antiquaries' Journal*, XVII, No. 1.

<sup>2</sup> *Arch. Cant.* XV, p. 81, 1883.

<sup>3</sup> *Arch. Cant.*, *op. cit.*

<sup>4</sup> *V.C.H. Kent*, 111.

Promotion of Roman Studies, has very kindly furnished me with particulars of many that have been published, but none of them appear to have been provided with a shrine or building akin to the one at Harpenden, which must have served as a mausoleum.

As regards the pre-Roman occupation on this site, the first indication which was encountered consisted of calcined flints and rough flint trimmings among the top-soil. Later on a small ditch, earlier than the Temple in date, was found on the west side of the building whose curved wall interrupted it. It had been silted up, with dark sandy silt, before the period of the building, since the foundation trench of the latter had been dug into this silt. In contradistinction to the silt in the Roman ditch, this silt contained no particles of brick, but a few fragments of pottery of Belgic (Wheathamsted) type were found in it and one roughly-worked flint flake. Some further scraps of pottery of the same type were found on the surface of the subsoil in other parts of the site. It may be recalled that the Redbourn Camp, The Aubreys, is two miles south-west of this point, while the Wheathamsted Oppidum is a few miles to the east.

Some apology must be made for the fact that the photographs (figs. 4 and 5) do not show the exterior of the curved wall as it appears on plan, and as it is now known to have been. Subsequent to their being taken it was found that there was some more material that should have been trowelled away from three sides of the structure, and that the curved surface of the circular wall had, in reality, been exposed on these three sides. The irregularity of the edges of all these foundations (since we were dealing only with "trench-built" work) made points such as this difficult to establish.