STAR ROMAN VILLA, SHIPHAM, SOMERSET

BY KENNETH JAMES BARTON!

Note: Roman figures refer to Plates; bold Arabic numerals refer to Text Figures.

SHMMARY

Excavations on the known Roman site at Shipham revealed a Mesolithic working floor underlying an Iron Age settlement. A suite of Roman buildings, constructed between A.D. 80 and 100 and demolished at the end of the 3rd century, was replaced by another building which underwent several alterations before it was, in turn, demolished after A.D. 353.

INTRODUCTION

The site was described in 1915 by F. A. Knight:2

... in ... a field called Allen's Were, bordering on Pyle Well Lane, a narrow cart-track which leaves the Bristol Road halfway between the four crossways and the Star Inn, and whose straightness suggests the possibility that it may be Roman,³ are some long low mounds which mark the site of a Roman villa. About the year 1826 . . . the foundations of the house were laid bare. No definite record of this has been preserved, and no one now living [1915] saw the place when the ground was dug up. But it is said that nine walls met at one point, and that there were a number of underground passages, about two feet wide. Quantities of broken pottery were found, and some blackened wheat; but there is no tradition of the discovery of coins or weapons or any objects of metal whatever. A great deal of stone was carted away from the spot for building purposes, and the field gate of Allen's Were hangs on two stones that were taken from the ruins.

With contributions and information supplied by Mr. M. R. Hull, F.S.A., Mr. B. Hartley, F.S.A., Mrs. K. Hartley, M.A., Dr. Graham Webster, F.S.A., Dr. D. B. Harden, F.S.A., Mr. L. V. Grinsell, F.S.A., Prof. E. K. Tratman, F.S.A., Mr. E. T. Davies, F.R.C.V.S., Mr. B. Brazener, F.R.N.S., Mr. A. ApSimon, B.A., Mr. P. Rahtz, Mr. B. H. Cossham, Dr. M. L. K. Curtis, F.G.S., Mr. J. Herbert, Mr. P. H. Carstairs, Mr. J. W. F. Peake, Dr. A. J. Willis, without whose valuable assistance this paper could not have been written.

² Heart of Mendip, p. 121.

³ This is also the opinion of Professor E. K. Tratman; see "Some Ideas on Roman Roads in Bristol and N. Somerset" Proc. Univ. Brist. Spel. Soc., Vol. 9, No. 3, 1962.

THE SITE (1 and 2)

The buildings are situated at the hamlet of Star, in the parish of Shipham, Somerset (ST435589). They lie on the 250 ft. contour at the head of a westward facing valley and are sheltered from the north by slopes which rise 400 ft. higher. The slope above the buildings is composed of carboniferous limestone with a talus of conglomerate limestone covered over by a dark red triassic clay. This clay weathers into a fine brown loam. Water is provided by springs which rise in several places within a hundred feet of the buildings.

The buildings lie in the NE. corner of a field and are indicated by (a) a long mound; (b) walls exposed in a recently re-cut ditch in the southern hedge; (c) the fact that the boundary at the east end is 3 ft. higher than the adjacent field. The ground in the eastern section of this area is not as distinctively mounded as the rest but is sufficiently irregular to indicate the possibility of buildings in that area.

THE EXCAVATION (I and II)

The object of the excavation was to study the construction and sequence of the buildings. These were excavated on a 10 ft. grid with a control section left through the centre of the building complex (I, A-B). The excavation of the site and the buildings was not completed and the evidence offered here is based on information gleaned from the small areas uncovered. Special efforts were made to preserve salient features in the buildings. No damage was done to the structures and wall plaster was carefully packed during the refilling. The fireplace (I, G/6) and the ovens F/5 and K/5 were retained in full. The bulk of the complete roof tiles and other worked stone items were buried in Room Three B in the area of M/6.

The excavation was undertaken by the Axbridge Caving Group and Archaeological Society under the direction of the writer. The number of volunteers — members and non-members — who attended was far too great for all to be mentioned individually. Special thanks are due to Mr. E. T. Davies, co-director, Mr. J. Hancock, who took all the photographs, Mr. S. J. Smith, Mr. J. Weare, Mr. and Mrs. Browne, Miss M. Berwick and Mr. D. Weare, who attended frequently, as also to the late Mr. Adams and his son Eric for their permission to excavate.

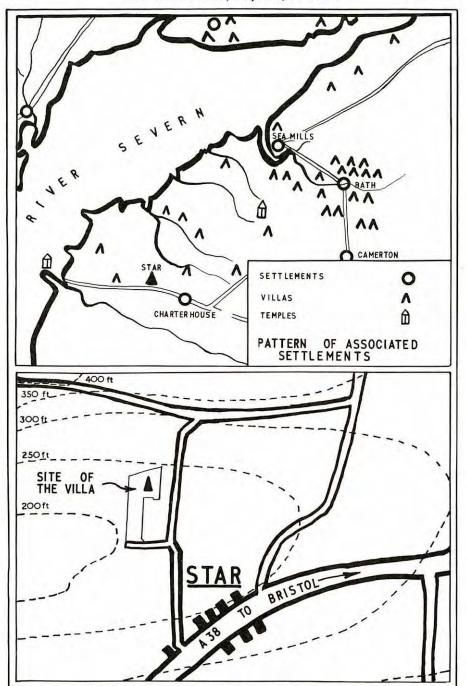


Fig. 1

A complete series of photographs of the excavations both in black and white and in colour is deposited with the finds at the Museum of the Axbridge Caving Group and Archaeological Society.

OCCUPATION

The site has been used by man in three distinct phases:

- (1) Mesolithic; (2) Iron Age—Romano-British; (3) Medieval—Current, which are subdivided into:
 - 1. Mesolithic.
 - 2a. Iron Age.
 - 2b. Romano-British building phase I (2 distinct parts).
 - 2c. Romano-British building phase II (3 distinct parts).
 - 3. Late Medieval Farming to date.

MESOLITHIC

The deposit underlying the Iron Age level is a brown loam varying from 18 to 24 ins. in depth (IIIA, 1). This layer is separated from the red triassic marl by a very thin deposit of iron pan.

In areas D/2, D/3 and H/6 (I) thirty struck and worked flint flakes were found (6) on, or slightly above, this pan layer. Above the flints was at least 15 inches of loam with Iron Age deposits only in the top 2 inches.

THE FLINTS: Of the 30 flints one is a core; one a serrated blade; two are notched; three are scrapers; one is a blade and one possibly a diamond-shaped arrow head.

IRON AGE OCCUPATION

The evidence for a native occupation earlier than the buildings rests on finds of pottery and slag associated with a black, greasy trodden layer. Structural features comprise three single and one double post-holes; two areas of burning that may have been hearths; and one clay-lined pit. Most of these were found in I, D/2, together with a hearth in I, F/6 (III A, 2). Pottery was found in a sondage at H/6, north of the fireplace.

A small quantity of iron slag was found together with the mouth of a small crucible associated with the clay-lined storage pit, which was filled with stones and ash. The slag from this crucible was examined⁴ and found to have a high iron content, although it was thought not to be an iron slag. It is possible that it is derived from

⁴ See Appendix 1.

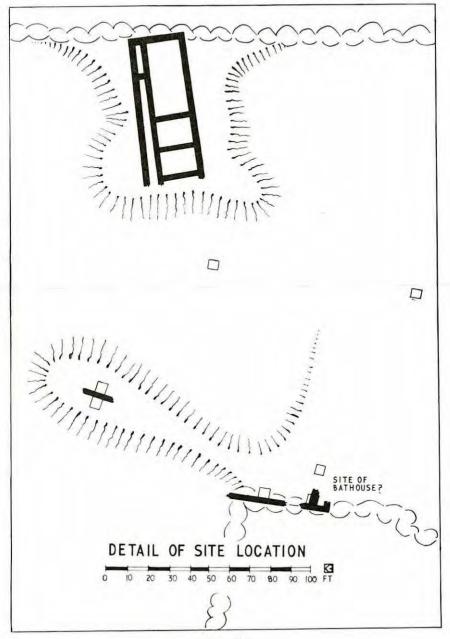


Fig. 2

lead or zinc. Time did not permit a more detailed examination of these features.⁵

BUILDING PHASE ONE (I, D-K/2-7; II; IIIA)

The whole of this building had been destroyed during the second building phase. All that remain are the footings (IIIA, 4, 5 and 6) and one small section of walling incorporated in a later wall (G/5).

No part of this building was fully explored, but details were revealed during the excavation of Phase Two.

The older building ran slightly east of NW./SE. and comprised, to the south, a large room with an enclosed courtyard to the north and evidence of another large room to the west.

The native settlement underlying this building was sealed by a thick layer of red clay (III A, 3), through which the footings were cut. The clay and the footings immediately overlay the earlier features (III A, 2; I, D/2) and the footings cut into two of the post-holes. They were 3 ft. 0 ins. to 3 ft. 6 ins. thick and trench built (H/6). This trench was square in section, 3 ft. in depth and filled with roughly pitched stone with finer pitching on top held by odd splashes of mortar.

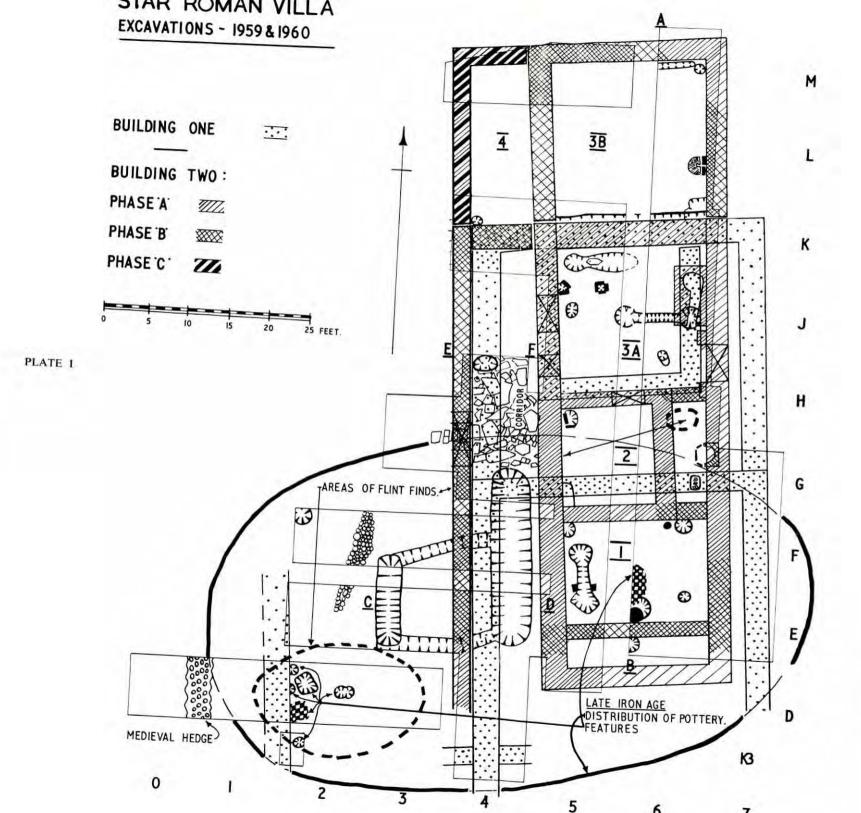
South Room (I, D-G/4-7; III A).

This room could not be completely examined as the south part was badly robbed. It appears to have been 30 ft. square. The only roof support (I, E/6; III A, 8) was suggested by a concrete column base on stone-built footings. This concrete cap (III A, 9) was set slightly below the floor level and the soil accumulated over it indicated that a column or post, probably 2 ft. in diameter, had been later replaced by another shorter pole, set on a round concrete mound (III A, 10) covered with a layer of hard grey clay. This was set slightly to one side of the first pole indicating a working replacement, or more probably a truss.

The floor of this room was the top of the clay seal. There was no evidence of other methods of flooring here. A small rubbish pit had been cut into this layer slightly east of the central post.

The east wall lay under the yard of Building Phase Two. Its badly abraded upper surface stands to the top of the foundations, and in two places retains the first course of stones.

⁵ The pottery from these levels has been examined by Mr. A. ApSimon.



The west wall of this room was traced to the south as far as D/4. The end of this trench was badly robbed, but the southern section (I, 4) showed that the wall had continued further. At this point were the remains of a cross wall, apparently butt-jointed against the main wall. A cutting made south of D/2 showed that this section of the butted wall did not continue to the west.

North Room (I, G-K/4-7; III A, 4, 5, 6)

To the north of the room just described lies a cobbled yard with three enclosing corridors, and marking the end of the building in this direction.

The internal measurements of the room are 30 ft. square and of the yard 14 ft. square. The external wall footings are 3 ft. thick and the internal ones 2 ft. thick. The north wall of this room rested on a foundation of large blocks of stone set with many gaps (III A, 7).

The floor of the large room and the first floor of the small room were of clay (III A, 11), covered with a thin skin of mortar, probably the bedding for a floor of flags. The yard was cobbled with roughly pitched conglomerate stones set into a dirty brown soil. This cobbling had been repaired on several occasions. Set under one of the cobbles was a Villa Anthée type brooch of 2nd century date. (7, 1).

West Room (III A, D-E/2-4)

To the west of the south room, at a distance of 22 ft., another section of wall was found. In construction, in mortar content and stratigraphically this wall was associated with Building Phase One. The red clay seal within this room had carried a tessellated pavement of grey limestone tesserae $\frac{1}{2}$ in. square. The tesserae were found in small groups (20 at E/2, 16 at D/3, 2 at D/2, 2 at F/2, 1 at E/3, 1 at D/0). A little mortar bedding was also found. The scattering of these tesserae suggests that the floor had been exposed to the elements for some time. The west wall also was very weather-worn — again an indication of lengthy exposure.

At least two periods of construction were indicated by the footings of the north and south rooms. On examination at G/4 it was seen that the methods of laying the footings and the measurements were identical. But the footings of the north room butted on to those of the south room, the stones of which were faced and aligned at this junction. Furthermore, the footings of the south room

⁶ This is the standard footings measurement used throughout the history of the buildings. These footings carry walls of 2 ft. and 1 ft. 6 ins. thick respectively.

were composed entirely of conglomerate, whereas those of the north room were of limestone. Nevertheless, the methods of construction are so alike as to suggest that the walls were built at the same time.

The foundations of the north wall of this building (III A, 7; I, K/6) rest in a trench that is probably 6 ft. wide and more than 3 ft. deep. This trench is filled with massive pitched blocks of stone with spaces between. The upper layers were filled in with graded smaller stones. This trench extended beyond the width of the wall to the north by 2 ft., where it was originally sealed with a layer of dirty brown clay (III A, 13), and later with a cap of white concrete (14). Although there was some silting of the upper layers, the bottom was quite open and dry. The construction was probably designed to take any rapid accumulation of surface water coming off the steep land to the rear.

The date of the construction and occupation of this building is not established by the material found. The native Iron Age material gives a terminus post quem of A.D. 75-80. Two pieces of dateable pottery are associated with the construction. The first is a mortar rim⁷ found in the red clay seal over the Iron Age levels (III A, 3; I, E/6). This rim, form B.F. 26, is Flavian with a possible extension into the first years of the second century. The same layer also contained a piece of Samian, form 37,8 with a date range of A.D. c. 96-120. Another piece of Samian found built into the footings of the north wall of Room One (I, G/6) is of form 18, dated to A.D. 70-120. A.D. 96-120 is therefore suggested as the period during which the construction took place.

The only piece of dating evidence for the occupation is the Villa Anthée brooch⁹ (7, 1), a well-known type manufactured during the second century A.D. Its condition at the time of deposit was probably perfect. The position under a stone hints at secretion after theft.

That the occupation of this building was not prolonged is indicated by the unworn condition of the floors. There are only two points indicating time and change: the replacement of the central post and the filling of the courtyard with pitched stones.

At the time of demolition, the west room stood derelict; its floor was cut up in a way that suggested that it had been exposed to frost

⁷ Identified by Mrs. K. Hartley.

⁸ Identified by Mr. B. Hartley.

⁹ Identified by Mr. M. R. Hull, F.S.A.

or walked over by hoofed animals. This disuse may have only affected the west room and not the building as a whole, although the thorough demolition and rebuilding would suggest that it must have been in poor condition when taken over by the new owners.

The building was roofed with tiles and had glass windows.¹⁰ The dressings were probably of Bath stone. Other parts of the villa complex had limestone columns, of which a base and portions of one column were found. A possible bath-house site lies due south of the building complex (2).

Building Phase Two (2; I, D-K/4-7; II)

This house has three building phases.

PHASE TWO A

This comprises a building of three rooms with an external corridor; the complete length could not be ascertained as the south wall was badly robbed. The evidence available suggests that a three-roomed building is most likely. Following the demolition of the earlier buildings the walls of Phase Two were laid out on the same lines (I, 4).

A rectangular structure 60 ft. long \times 23 ft. wide was set out with walls 2 ft. thick on 3 ft. footings (III A, 15, 16, 17, 18). The inner walls were then constructed with butt-joints against the outside walls (I, H/5, G/5). The footings to the external corridor were laid at the same time; then all Phase One structures within this area were covered with clay (III A, 19). This was thinner in Room Three (J/6), which has a higher floor level, than in Rooms One and Two.

Room One (2; I, D-F/5-7; III A, 15, 16)

This room is 17 ft. square. Like all the other rooms, this had a clay seal over the earlier levels. This seal formed a floor, which had become very worn before it was renewed. It had a skin of concrete which remained in the corners. The floor was patched with a variety of materials and in one place a large section had been renewed (F/6). A small pit was dug in the NE. corner of this room. A wooden bench or table had stood against the middle of the east wall. It measured 4 ft. wide by about 6 ft. long as indicated by an unworn area of mortar with a groove in front. The new floor consisted of a carefully laid foundation of pitched stones covered with concrete (III A, 20).

¹⁰ See Appendix 2.

The north and west walls retained their plaster (IV A) two layers of a uniform red colour. The first layer was a very coarse duncoloured plaster, which was not keyed. The finishing coat had, therefore, stripped off quite easily. The finished plaster retains the marks of a strip of wood laid along the top of the footings at a height of 8 inches. This suggests a skirting board or panelling over the footings, though there is no evidence of fixing. It is possible that the mark was made in the laying of the plaster, but its regularity is against such an explanation.

This room was entered from an internal corridor by a door in the NE. corner. A post-hole associated with this door was cut into the concrete floor. There was probably an entrance to the south, but this was not discovered.

Internal Corridor (I, G-H/6; II)

This corridor, which linked all the rooms, was floored with red clay covered with a layer of mortar.

A rotted beam, which had left a gap in the stone fill (VI A) of the southern entrance, suggested the existence of doors. This sill did not fill the width of the door and suggested a wooden framework.

Room Two (I, G-H/5-6; II; III A, 16, 17)

The flooring of this room is the clay seal (III A, 19) that covers the walls of Phase One. The room was completely plastered (22). This plaster had a red dado over 4 ft. high. Above this height it had a white ground with a painted border of interlocking black, yellow and red rings. The walls still retain large areas of the red plaster.

Room Three (I, H-K/5-6; III A, 17, 18)11

This room had three, and possibly four, doors: (a) through the external corridor to the west; (b) through the internal corridor to the south; (c) to the yard by the east wall, and another small exit to what might be a small room at the head of the external corridor (J/5). The doorways to the east and west had buttresses set in the floor to carry the door pivot, although no hole is provided.

The initial flooring of this room was the standard red clay seal found in the other rooms. This butted against, but not over, the footings of the wall of Phase One. This wall was exposed for some time as it showed some wear and the interstices held some dirt,

¹¹ Called 'A' in this context. When originally worked these rooms were thought to be one and were called 'Three'. All associated material was subsequently marked Three A and Three B.

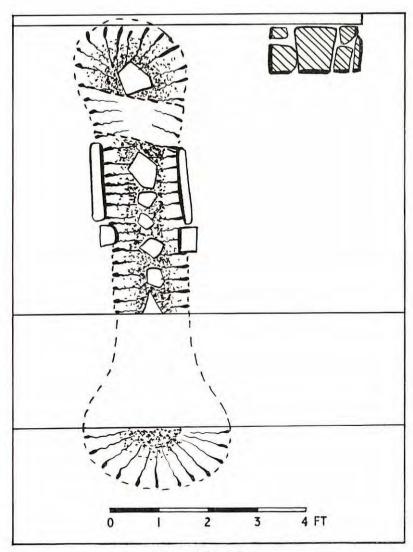


FIG. 3A. OVEN ONE

especially near the corridor door. Later, probably at the same time as the renewal of the floor of Room One, a concrete floor was laid over everything (III A, 23). Shortly after the laying of this floor a platform was constructed at the north end of the room. It was a group of stones bound and capped with concrete (I, K/6; III A, 24).

The principal features in this and the subsequent phases were the ovens built into the floors, which, taken with the lack of decoration, mark this room as a kitchen (II A and B; I, J-K/5-6; III A, 25, 3 A; 3 B). Only one of these ovens was in use at this phase (Oven One) (III A, 25; 3 A). This was damaged in the construction of Oven Two. Oven One consisted of a trench with two bulbous ends, the western being smaller and deeper than the other. The feed was against the east wall, with the flue situated in the middle of the room. It was filled with charcoal and floored with fragments of Pennant roof tiles. The walls of the oven nearest the stoke-hole were strengthened with packing stones. 12

External Corridor (2; I, D-K/4; III B; III C)

This feature belongs to this phase, as is shown by (a) the footings being like those of the rest of the building and (b) the clay seal found here as elsewhere (III B, 1; III C, 1). There is however little evidence to determine its original purpose. The floor was covered with cement in its early stage (III B, 2). That the footings of the original wall may have carried a wooden structure is suggested by the finding of one complete rectangular stone buttress and traces of others resting against the house wall and associated with the clay and mortar floors. This verandah is situated in the most favourable position for sun and view, although, as is suggested in II, there is no certainty that there was an entrance to the west at this time. No cross wall was found at D/4.

Yard (I, E-G/7)

The yard in this phase covered the floors and surface of the stripped walls of Phase One. These features were much abraded and the surface of the earlier wall was worn. The whole area was covered with a thick, greasy black soil which was full of rubbish.

PHASE TWO B (I, D-M/4-7; II; III A, walls 26, 16, 17, 18, 27).

This phase includes major external repairs and additions, as well as internal alterations.

¹² Cf. Ovens Three and Four.

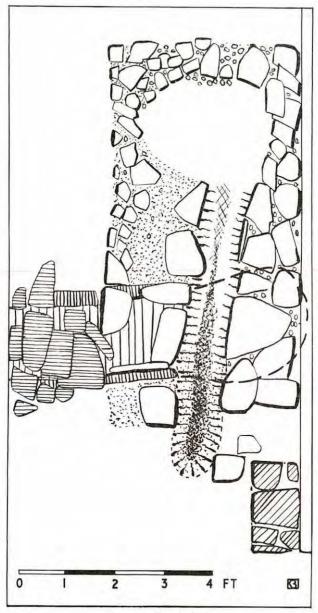


Fig. 3B. Oven Two

Room One

The southern wall of this building had collapsed or at least was so badly cracked that it had been rebuilt.¹³ This was indicated by two features: the repairs to the west wall (E/5) and to the east wall (E-F/7). The irregularity of the work does not indicate alterations but repairs; there is also the insertion of the wall (III A, 26; I, B) at the southern end of the room. The repairs were of an inferior build (V A), the stones being weather-worn. The mortar used in these repairs is yellow, whereas the walls of the Phase Two Building are set in grey mortar.

Prior to these repairs a post was inserted in the south centre of the concrete floor (I, E/6; III A, 27). This was presumably to support the roof beams in a state of collapse and during repair. One edge of the foundation trench cut the lip of the post-hole. This trench was filled and capped with flat stones. Shortly afterwards a thin grey clay floor was laid over everything (probably during the major alterations).

The inserted wall (26) was given a coat of plaster, traces of which were found (29).

Room Two (I, G-H/5-6; II; III A, wall 16, 17)

This room was considerably altered during this phase. The corridor wall was removed, the floor totally covered with mortar and a fireplace inserted into the east wall. The entrances to the existing corridor were filled in and, in the southern entrance, this filling lay directly on the wooden beam of the door frame (which had rotted away leaving a gap (VI A). Access was now through a central door in the north wall. After demolition the corridor wall and the floors were buried under a layer of mortar (III A, 30).

The fireplace is situated in the centre of the east wall, where the inner-facing stones have been removed (I, G; II; VI B; 4). It is 3 ft. wide and reaches the existing height of the wall (3 ft. at this point). It is constructed of re-used Pennant roof tiles, some still with their nail holes (4). These tiles stand proud in a semicircle. The back tiles rest on the footing, while the side tiling rests on the kerb-stones. These kerb-stones are mainly composed of fragments of rotary querns (4) laid in a trapezoidal form to contain the hearth. Both the kerb-stones and the limestone walling showed evidence of the pro-

¹³ The placing of this repair in this phase is only based on evidence of the floor levels. The writer feels that this repair falls between the original building phase and the major alterations.

PRE-BUILDING OCCUPATION

SEQUENCE OF CONSTRUCTIONS 40 FT 20 30

BUILDING TWO'A'

BUILDING ONE

BUILDING TWO 'B'

BUILDING TWO 'C'

longed use of this fire and the heat generated. At a later stage a shallow semicircular pit was dug in front of the kerb to hold ashes. It contained small fragments of coal and much charcoal. There were several fragments of coal in the stone surround of the hearth and a quantity of the same material was found in the External Corridor.¹⁴

Some time after the construction of the fireplace, an infant of 5-6 months was buried in a small, stone-lined grave just south of it (G/6). No finds were associated with this burial.

The wall plaster of this room, existing from Phase Two A, had been thoroughly pecked in preparation for another coat which was never applied (VI A).

Room Three 'A' (I, H-K/5-6; II; III A, walls 17, 18)

At the time of the reconstructions (though not necessarily forming part of them) there were two ovens and two stone-lined post sockets in this room. Oven Two (J/6) replaced Oven One, which was filled with clay and capped with stones (3 B; III A, 25), the new oven being constructed over the eastern third of the older. Owing to subsequent demolition only footings remain. These comprise an oblong structure 4 ft. ×8 ft. lying north and south and built against the footing of the east wall. A narrow trench had been cut up the middle of this oblong. This trench was inclined slightly east of centre and terminated at the edge of a circular space. The clay sides of this trench at its north end and the clay floor of the circular patch were burnt red. At the south end there was an accumulation of charcoal. The area between these features, and the outside of the oven were packed with stones and vellow clay. It was probably a raised structure. the flue carrying heat to a raised platform over the combustion chamber. It resembles a corn-drying kiln of known type; but its presence within a domestic building suggests that it may have been a bread oven.

Following the construction of this feature a skin of mortar was laid over an accumulation of debris with a high charcoal content spread between it and a point to the north of Oven One (III A, 31). This debris overlay the now worn and partly damaged platform. The mortar sloped from east to west and faded out about the middle of the room.

Oven Three (K/5) was probably built to replace Oven One. Although not examined throughout its length, it was of similar ¹⁴ See Appendix 3.

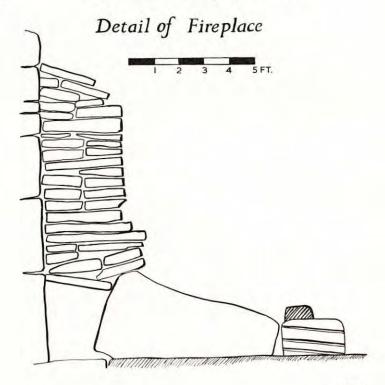


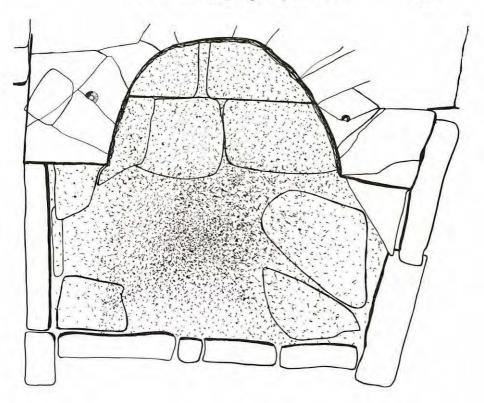
Fig. 4

construction to the other trench ovens, except that the connecting trench was not symmetrical, but this may be due to a later collapse. The oven was floored with roof tiles, one of which was complete. Close to the oven and running parallel to it are two stone-lined postholes (with possibly a third under the platform), carrying posts 5 inches across. They lined up to an opening into the north end of the external corridor.

Room Three 'B' (I, K-M/5-6; II; III A, walls 18, 27; IV B)15

This room was built on to the north end of Building Phase Two. The walls were butt-jointed against the existing wall and constructed of narrow slabs cemented with a fine white mortar that still remains quite hard. Access to this room was through Room Three 'A', although the entrance was not discovered.

¹⁵ Only half of this room was examined.



There was no flooring in this room, but a spread of red clay and small stones over everything (III A, 32). This filled in a worn area to the north of the concrete cap (III A, 14) over the footings of the Phase One wall. But at a later stage a series of odd patches of flooring was laid. One was a layer comprising a quantity of charcoal (III A, 34), ash, stone and clay. Over this was a layer of clay (III A, 33). North of this was a thick levelling of clay (III A, 35).

External Corridor (I, D-K/4; II; III B; III C).

The timber structure was removed and replaced by a wall constructed in the same manner as that found in Room Three 'B' (I, K-M/5-6. This wall terminated at the south at approximately the same place as the footings of the earlier foundations. There was an entrance to the west in the middle of the wall. This wall was butt-jointed where it met the wall of the principal building above the foundation level.

The corridor at this stage included a large trench, 22 ft. long by 4 ft. wide and 10-15 ins. deep. The trench had rounded ends and a flat bottom, and was lined in places with red clay to prevent leakage. Excess liquid would be carried through two channels, filled with flat stones laid longitudinally. These channels were constructed during the building of the new outer wall and led to a soakaway, which lay to the west of the building. This soakaway was in the form of a round-ended rectangular trench, 12 ft. long by 3 ft. deep; the trench had sloping sides diminishing from 3 ft. wide at the top to 2 ft. 6 ins. at the base. The soakaway, which penetrated through the clay seal above the Iron Age levels, was filled with an irregular packing of loose stones. These arrangements suggest that the corridor was designed to serve as a latrine.

The arrangements did not work. The channels through the wall silted at an early stage and the soakaway was dry and clean with the stones unstained. It appears that it had been intended to remove the contents of the channel for manure, a purpose indicated by the careful arrangement for the retention of the solids. It is possible that this was done for a time, but the use of the latrine continued throughout the remaining life of the building. Rubbish of all kinds was deposited, including masses of food bones, shells, pottery, etc. The blocking of the drains rendered the filling too liquid for removal by normal means, and the channel overflowed, flooding the corridor. The first part affected was the worn hollow beside the kitchen and the west exit; here a passage was provided by a layer of flat stones, which only served to increase the rate of silting. A sump (III A, J/4) dug down to the foundations of the earliest building had no effect and a further layer of stones was necessary. Eventually the liquid spread into the kitchen and through the west door, fanning out into deltas extending over 6 ft. in each direction.

The deposit consisted of a black silty layer with a very small amount of grey powdery material at its base within the channel.¹⁶

The Yard (I, E-G/7)

It was probably during the reconstruction that some other building was taken down and the stones used as a paving over the dirt layers and wall footings of Building Phase One. These stones were laid with a step, as the yard was on a slope. Their worn upper surfaces

¹⁶ The writer has met this phenomenon at Linford, Essex, under a layer of domestic rubbish in a hut, (Trans. Essex Arch. Soc., 1962).

suggested considerable use. This yard had a thin covering of black greasy soil.

PHASE TWO C (2; I; II; III A, walls 26, 16, 17, 27)

This phase comprises the last major additions and alterations. They were carried out shortly before the occupation came to an end. *Room One* (I)

The thin clay floor laid in this room was worn in patches by this phase, and at its eastern end another trench-type oven, Oven Four, was built into it (I, F/5; 5). This was similar to Ovens One (J/6) and Three (K/5). It has a trench with a circular flue at one end and a fanshaped stoke-hole at the other (VB). Two stones were inset in the entrance to the stoke-hole as in Oven One. The capping stones to this oven were *in situ*. They are three pieces of conglomerate (originally two; one was cracked in half by heat). These stones are reddened with heat. The bottom of the oven was lined with broken roof tiles as in the other ovens. The bottom of this trench had a deep layer of charcoal which was from oak.¹⁷ This charcoal contained many nails bent into various angular shapes, suggesting that building timbers had been burnt here.

In the NW. corner of this room a small pit was dug, containing the bones of three young sheep,¹⁸ and several bones of a human child of probably five months or less.

Room Two

Following the Phase Two B alterations, a bench or platform and a pit were added. The platform (G/5) was roughly rectangular—3 ft. long, 18 ins. wide and 12 ins. high. It was built of clay and stones, and faced with tiles. The top was quite level and smooth. The pit was in the NW. corner (H/5) and was circular with two flat stones set in upright, and at right angles. It did not contain rubbish, nor was it stained by liquids; it did not appear to have held a post.

Room Three ('A' and 'B' combined) (2; I, H-M/5-6; II; III A, walls 17, 27)

In this phase Rooms Three 'A' and Three 'B' were combined to form Room Three by the demolition of the party wall (I, K/5-6; III A, 18). This was effected by making a breach in the east wall at the junction of Three 'A' and Three 'B' (I, K/7). Following the demolition

¹⁷ See Appendix 4.

¹⁸ See Appendix 5.

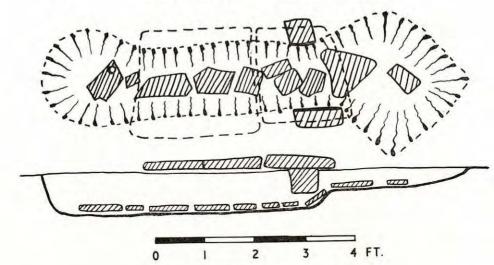


Fig. 5. Oven Four

of this wall, the breach was repaired in a casual fashion, any available material being used. This removed the butt-jointing feature at this point, but not at the west side. At the time of the demolition, the surface Oven Two and the trench Oven Three were destroyed and filled in. For some time the original flooring was used as is shown by the spread of floor (33) over wall (18). This floor was very worn at the north end and it had a narrow trench cut in it. A post-hole was situated at one end of this trench. This may well be evidence for a cowstand, the trench being intended to carry away liquids.

Shortly after the extension of the room, earth, rubble and, especially in the southern end, quantities of broken tiles were dumped, levelling up the floors (III A, 36). This was piled up in the southern portion of the room and thinned out to the north end, as if it had never been finished.

Room Four (I, M/4)

This room is attributed to this phase as both its junctions were butted against existing walls. Had it been constructed in Phase Two B it is likely that the north wall would have been continuous. Only the southern end was examined (K/4). This is a small room that abuts the west wall of Room Three and the north wall of the External Corridor. It was plastered as high as the top of the walls.

There was a fine concrete floor in pristine condition and free from dirt. In the south-west corner of this room (K/4) was a large, round hole, possibly a post-hole. An iron spur was found here (8, 20). The cleanliness of this room is remarkable in view of the state of the rest of the house.

Room Five (K/4)

The possibility of another room at the north end of the External Corridor is indicated by the discovery of red plastered walls. The floor levels were different, and entrance to such a room is suggested by certain features of the party wall.

External Corridor and Yard

Both read the same as Phases Two B and Two C with one difference — that the entrance in the corridor wall was reduced in width from 6 ft. to 4 ft.

PHASE TWO D

In this phase we see the destruction of Rooms One and Two by fire, and the conversion of Room Three into living quarters.

Room One

Just prior to, and indeed at the time of the fire, Oven Four was in use as a corn-dryer. The burnt corn was spread all around it and all over the floor of the room, lodging in worn hollows. Thick layers of ash lay in patches all over the floor of this room and a very thick layer in Room Two (III A, 37). Room One had been partially cleared of rubble and ash which was dumped against the outside of the south wall (III A, 38). The floors showed the criss-cross marks of fallen burnt beams, and many nails were found in both rooms. Another feature was the finding of many fragments of ash-glazed limestone. The distribution of ash was limited to Rooms One and Two, to the upper layer of the corridor and the yard by the wall of these rooms. There was also a scatter in Room Three. The fire must have been caused by the use of Oven Four and was restricted to the two rooms.

In Room Two the ash layer was left as it had accumulated together with fallen plaster and tiles. A scatter of broken tiles was spread all over the surface of this ashy floor, after which the doorway was roughly blocked with loose stones.

This was the only occasion when this type of oven was used for this purpose; no carbonised grain was found in Room Three A.

Following the destruction of the living quarters, Room Three was converted into some form of shelter. A rough hearth was built of half a millstone (I, L/6; IV B) placed on a dirt layer in front of the stones against the footings of the east wall. The millstone acted as a hearthstone for the fire which was made right on to the wall footings. The stones at this point had been badly damaged by heat; four stones were missing.

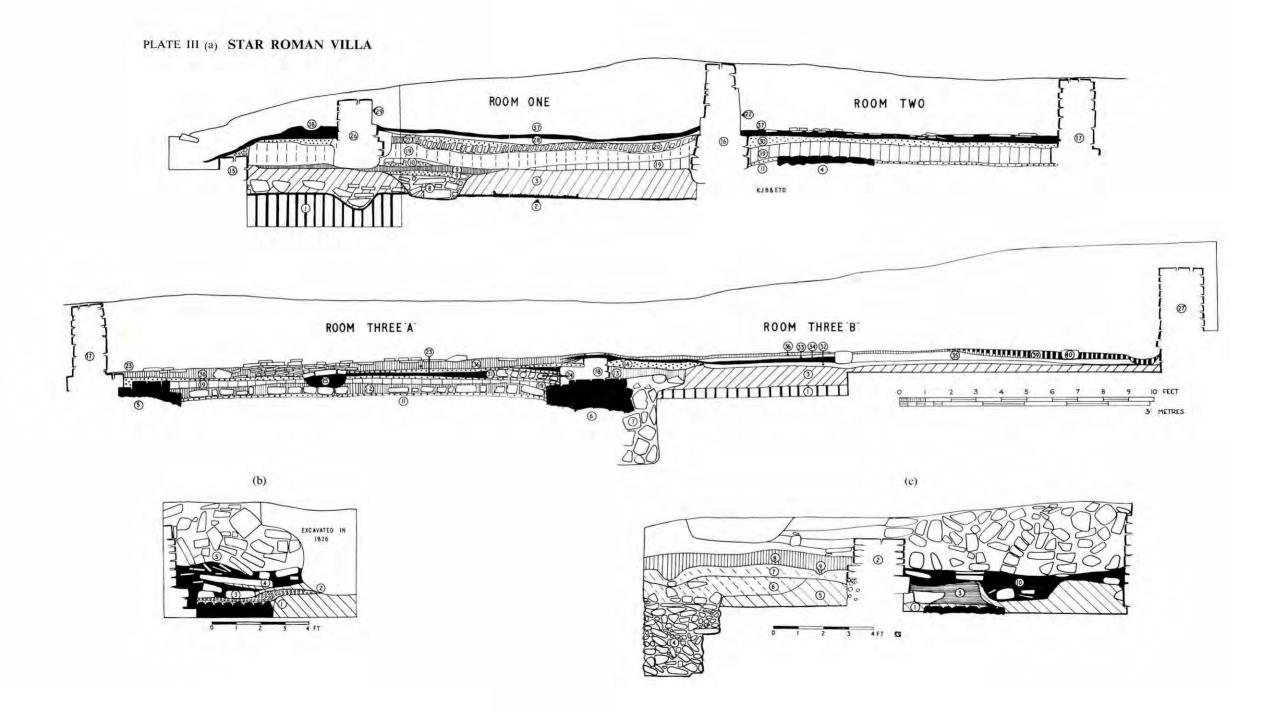
A considerable quantity of refuse and charcoal was thrown up in the north end of the floor, filling the Phase Two C depression (III C, 39). The spread of rubbish was from this source. A worn column base was set here and may have been used as a seat (III C, 40).

This occupation continued until demolition. Firstly, the roof was stripped of its tiles and the timbers removed, and the nails pulled in situ and left on the floor. The complete tiles were stacked in Room Three and lay over the hearth. They were found scattered about probably not because the stack had collapsed, but because someone had disturbed them when looking for suitably sized tiles for another purpose.

Finally, the building was demolished. The evidence for this is in the distribution of the fill which is contained within the confines of the rooms and yard, mostly within Rooms One and Two. Room Three had a preponderance of clean red soil. There were no soil lines, no evidence of accumulated vegetable growth, no siltings. There was no sign of collapsed walling outside the building, even in places where the wall stands on a downward slope. In most cases the height of the existing walls is relatively level.

Building Two was, in all probability, a single-storey building with a stone tile roof. This roof was drained by Bath stone guttering (10, 34). The gable-end at Room One was decorated with a stone lintel (9, 31). One of the doors was probably closed automatically by a Bath stone weight (11, 35) which ran in a wooden channel. The sides of the weight became polished by friction and the bottom was roughened by contact with the floor. It was held by an iron clamp fitted into a groove along the top.

There is no evidence to suggest that the building had had either glazed or grilled fenestration. No traces of a chimney were found.



The quantity of nails found suggests that many of the fittings were built of wood.

POST-FIRE OCCUPATION

This occupation was of 'squatter' type by people living under conditions of stress; the temporary nature of the occupation with its disregard of normal living conditions indicates this. The period was of sufficient duration to allow for the accumulation of much rubbish and for the fire to have burnt out a section of the wall. Important to this occupation is the appearance of hand-made pottery. The significance of this is not fully understood, but it may suggest either poverty or the inability to obtain supplies of industrial manufactured wares.

DATING OF BUILDING PHASE TWO

A total of sixty-six stratified coins were found associated with this building, of which forty-three were found in the External Corridor. These coins range in date between A.D. 313 and 354 (with the exception of one which is dated 259-68).

Phase Two A	A.D.
Room One clay seal 19	320-321
concrete floor 20	335-341
Room Two None	
Room Three A infill of Oven One 25	313-317

Phase Two B

Room One resting on floor 20	341-346
Room Two in pit by fireplace, cut into floor 30	335-341
Room Three B None	

Phases Two A and Two B

External Corridor in silt, 31 coins	from 330-350 plus
Entrance 3 coins	337-350
Under top layer of stones 2 coins	(330-335
40.00	330-335 341-346
Under second layer of stones 2 coins	341-350
On top layers 2 coins	(330-335
	346-350

Phase Two C

Room One one coin	259-268
Room Two on floor 30	337-341
Room Three A and Three B 7 coins at 36	330-346
Room Three A: Oven Three 5 coins	325-354
" " " in top of clay floor 28	353-354
On floor 28	353-354
On top of yard	353-354
10 TO TO TO TO TO TO TO THE TOTAL OF THE TOT	

There are one or two anomalies in this list, e.g. the date of floor 20, but these coins are grouped within the pattern of building development.

There is only one coin to date the construction of Building Two, that in the clay seal of Building One, deposited after 321, but before 341.

As we see by the coin of 341-46 resting on the concrete floor of Room One, there was a continuous occupation, and that the change to Phase Two was not one of sharp divisions.

The occupation in Phase Two B appears to have its real beginnings about 335, definitely before 341, and on to and after 346. The latrine channel was in use in this period, and it has a coin tally from 330-350 plus with the bulk of the coins deposited (21 coins) between 337-346.

The alterations and preparations for the Phase Two C Building must have occurred prior to its destruction in part by fire; as we see from the coin resting on the clay floor of Room One and in the fill of Oven Three. This took place after 354, and although the make-up of the rough floor contained coins of 330-346, these must have been imported with the make-up. A coin in this floor of 353-354 is recorded, as is also one from the very upper layer of Yard Two.

This terminal date of 354 plus, is a difficult one to accept when the building has had so much done to it in such a short time, but the deposition of coins in the pre-Phase Two C oven of a co-terminal date with those in Room Three floor, plus the terminal date of 350 plus for the coins in the External Corridor, suggests that a terminal of 354-60 is not impossible.

LATE MEDIEVAL

At the junction (I, D/O) a line of stones was found that lay roughly parallel to the building line. These stones were all weatherworn and rested on a layer of black soil that contained a very small

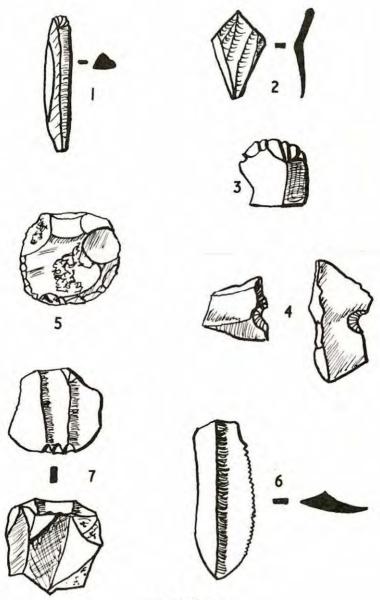


Fig. 6. FLINTS

fragment of a thin, green-glazed, white-bodied Tudor ware. A serpentine paternoster rosary bead²⁰ was found at F/3, in the upper soil layer. This can be attributed to the same period as the pottery, *i.e.* 15/16th century—as can the saw (8, 21).

The stones may suggest field clearance and boundary making of this period, the paternoster and saw being lost at the same time.

THE ILLUSTRATED FINDS

Mesolithic (6)

A group of 29 flakes (7 wasters) and 1 core. All resemble those illustrated by Wainwright.²¹ No. 1 is a blade similar to Wainwright's Fig. 2, 42 and Fig. 5, 68. No. 2, although not retouched, has the angular form of the smaller blades illustrated by him. No. 3 (broken end of a scraper) is similar to Figs. 2, 34 and 38; 3, 16 and 21; 5, 74 and 90. No. 4 (two notched blades) is paralleled in Fig. 3, 6. The thumb-scraper (No. 5) is similar to those from Middlezoy. The blade (No. 6) is different in its bold profile and very light touching on an already sharp edge; and the core struck from a prepared face is also not paralleled. These flints were all or partially patinated.

Iron Age (12, Nos. 1-4)

The bulk of the material is black burnished coarse wares of a sandy and calcite gritted nature. The calcite gritted wares are predominant. No. 1 is a coarse sandy black ware. Nos. 2 and 3 are rough pastes with black interiors, "calcite grits" and a brown finish. There are no decorated fragments. No. 4, the lip of a crucible made in a very coarse open-textured ware, has been burned with use to a cinder and covered without in slag; it comes from the square claylined pit (D/2).

BUILDING PHASE ONE

Under cobbles of North Room (7, 1) Brooch, Villa Anthée type, in bronze with double lozenges of inset green enamel decorated with small blue spots. Two appended circles with green and blue enamel decoration. Zoomorphic terminal with green enamelled eyes.

8, 17 Iron Pot Hook. Built into wall of Building One (F/4) reconstruction of a badly corroded hook with iron ring at top end. Some evidence of use indicated by wear at one point on the ring.

²⁰ See Appendix 2.

²¹ G. I. Wainwright, "The Microlith Industries in South-West England and their Affinities", P.P.S. Vol. XXVI, No. 10, pp. 193-202.

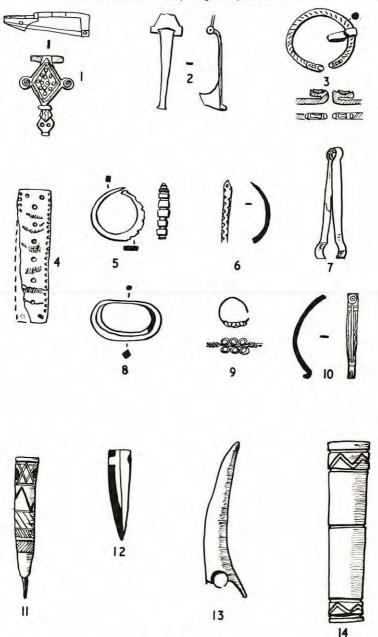


Fig. 7. Small Finds

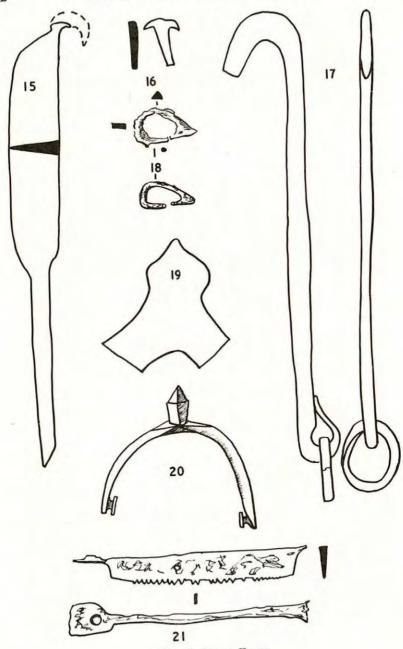


FIG. 8. SMALL FINDS

SEALING OF IRON AGE LEVELS

12, 5 (D/2) Rim fragments in black calcite gritted ware. Very dense gritting, very soapy texture.

NOT ILLUSTRATED

Mortaria,²² (E/6). Fragment of fine yellowish, buff fabric with much small grey flint grit, some in the fabric. (This fabric is normal for the form B.F. 26). There are many Flavian records, with a possibility that manufacture may have continued into the first few years of the 2nd century.

Samian²³ (F/6) form 37 (decorated) "Central Gaulish". This distinctive style of decoration is usually associated with IOENALIS (*Central Gaulish Patterns*, pl. 41, 481-2, etc.). In fact, it is now clear that it is impossible to differentiate the work of DONNAVSVS, IOENALIS, MEDETUS and RANTO. This is because they were all bowl finishers working for the same firm, or closely connected firms at Mastre de Vegre. But fortunately, there is no difficulty about dating their products. The site record confirms that they worked under Trajan and in the early years of Hadrian's reign, but not later than 125 A.D. The figure-types are Neptune (Dech. 39), mask (O. 1295B) and birds (02239B and Dech. 1038).

(F.6) form 27. Central Gaulish (not identifiable) first half 2nd century.

BUILDING PHASE TWO

IN SEALING OF FLOOR LEVELS OF HOUSE I

- 12, 6 Fragment of a small grey burnished jar with roughened centre portion and loop burnishing decoration.
 - 12, 7 Rolled rim in hard grey sandy paste.
- 12, 8 Small globular necked bowl with collar rim, in grey burnished ware (several of this form).
 - 12, 9 In footing trench of Room One hard orange gritty paste.
 - 12, 10 Sealed in pit in floor I(F/6) coarse black burnished ware.
 - 12, 11 Fine black burnished ware.

IN FILL OF YARD ONE (Over Building One)

- 12, 12 Hard sandy, red-grey ware, with gritty finish.
- 12, 13 As above.
- 12, 14 Orange exterior, grey sandwich interior with gritty finish.
- 12, 15 Black burnished coarse paste.
- 22 Identifications by Mrs. K. Hartley.
- ²³ Identifications by Mr. B. Hartley.

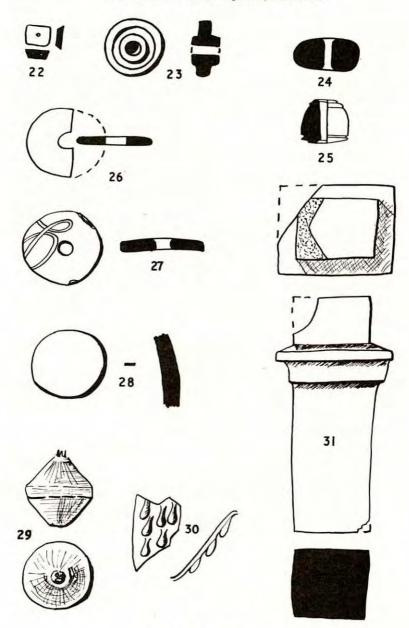
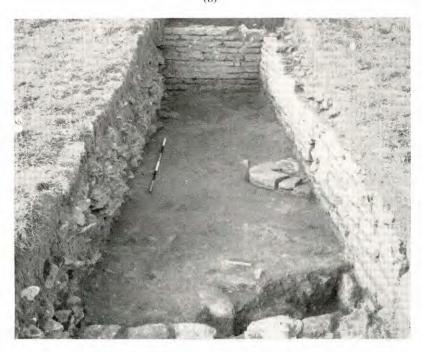


FIG. 9 SMALL FINDS



STAR ROMAN VILLA — Room One, Plaster Work (p.54)

(b)



STAR ROMAN VILLA — Room Three B (p. 60)



STAR ROMAN VILLA — Patching at West End of House Two (p. 58)

(b)



STAR ROMAN VILLA — Oven Four — Corn Drying Kiln (pp. 63-5)

PLATE VI





STAR ROMAN VILLA

(a) Room Two showing: a wall of Building One; demolished Internal Corridor wall and blocked doorway with gap due to decay of wooden lintel; Phase A wall plaster pecked in preparation for new layers; fireplace of Phase B (left); blocking of corridor entrance (left foreground); rough blocking of Phase B door (right foreground) (p. 58)
(b) Room Two Fireplace (p. 58 and 4)

ROOM TWO (In floor 30)

- 12, 16 Fragment of a bowl in a red paste with grey finish,
- ROOM ONE (Infill of packing under concrete floor 20)
 - 12, 17 Metallic greyware (cf. corridor material below)
 - 12, 18 Hard red ware body with grey finish.
 - 12, 19 Black burnished ware.

ROOM ONE (In make up of grev floor 28)

- 12, 20 Lamp filler in metallic grey ware.
- 12, 21 Fragment of a small globular jug in red ware (see below).
- 12, 22 Fragment from a lugged dish in black burnished ware. The lug decorated with grooves and a dimple cut out before firing.

FILL OF EXTERNAL CORRIDOR

This feature produced the bulk of the pottery found at this site, and as the coin evidence suggests, this pottery was deposited between the years 330-350 plus, with the bulk of the material deposited between 337-346. This pottery (which in bulk weighed about 1 cwt.), can be split into three main groups: black burnished ware, metallic grey ware, and red ware, with one minor class of handmade ware.

Black Burnished Ware

- 13, 23-33 There are 25 forms of this ware, mostly jars and dishes. The jars all have wide flaring rims. The dishes are in two forms, straight sides and flanged. These types with the exception of the flanged dishes, are frequently decorated by burnishing in various ways (33, A-E). The paste is invariably a coarse sandy form.
- 13, 23 and 24 Example of flaring rim jars, one with narrow diamond hatching over a burnished central band.
- 13, 25 Small bowl with heavy infolded rim only one of this type.
- 13, 26-9 Steep sided dishes, of which 26 and 27 are the best and commonest examples of this form with a thickened basal angle. These are decorated on the outside of the base with burnished loops, and are finely wrought types. 28, is a coarse finished type which has both plain and beaded rims. 29 belongs to this form and is handled—several of these were found.
- 13, 30 Flanged dishes of well known form in the same coarse, sandy body seen in the other types. Fragments of these form the bulk of the black burnished ware finds. One (13, 31) had a batch mark on its rim.

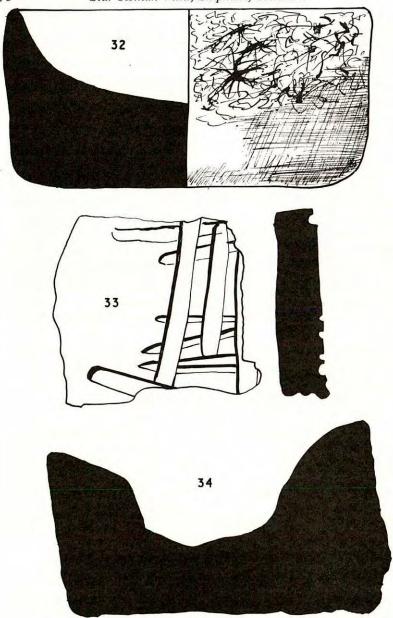


Fig. 10
Mortar, Sandstone Fragments and Bath Stone Guttering

Metallic Grev Ware

A very distinctive ware, so called because it is practically a stoneware with a distinct metallic ring when struck. It fires to a blue grey matt finish, and is sometimes, but not often, gritted. The ware, as has been said, is highly fired and there are frequent bubbles and misshaped pieces on pots. The ware is thrown thin and very rapidly; the finish of the ware suggests that the vessels were produced in quantity and that there was a great demand. Some of the wares are burnished all over, some in part and many are not burnished at all. One vessel was undoubtedly hand made.

Vessels of this form are illustrated here in 13, 34-40 and 14, 42-3.

- 13, 34 and 35 illustrate the commonest form of this ware. These represent over 75% of this ware used at this site. 36 and 37 are jug forms, of which 36 is probably the neck of a 37 vessel. 36 has scroll-type burnishing on neck. Handle on 37 type was applied very wet and fastened in place with a tool. 38 is not a common form. 39 illustrates a form of central zone burnished decoration seen on several fragments.
- 13, 40 is a rim form seen on only a few other examples, although there is a tendency for thick rims of this sort to be tooled. 14, 41 is tooled on the edge of a flared rim over a shoulder. This is the only form paralleled in the black burnished wares (cf. 13, 23) 14, 42 illustrates a colander of a relatively common type in this period; many fragments of colanders were found (see below).
- 14, 43 is a fragment of the rim of a very large vessel. This fragment shows that the vessel was not turned on a spinning wheel, but was butted out by hand. The rim is most crudely formed. The whole, is, however, fired extremely hard, indicating the sort of temperature range that could be obtained at these kilns.

Red Ware

This ware has a soft buff body covered with a fine red slip. The body is so soft that it suffers from weathering, and also it breaks up very small; consequently, there were many small featureless pieces on the site.

Those illustrated here are 14, 44-7. 44 is a common form of flanged bowl (a better example is show below). This example is very worn. 45 and 46 are two mortars, both gritted with well-worn white quartz grains. 47 is the only painted example worthy of illustration, though others were found.

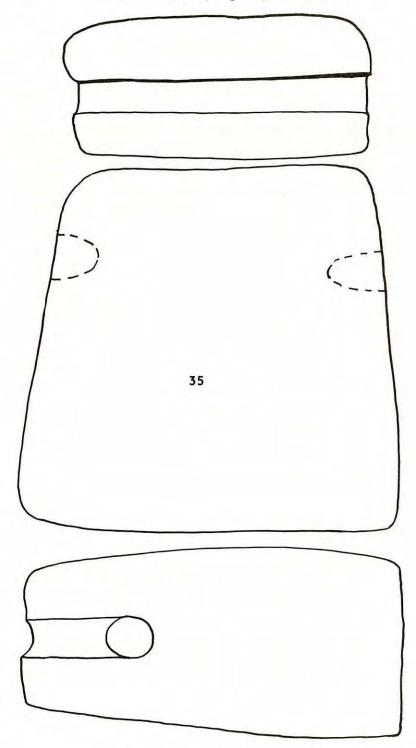


FIG. 11 BATH STONE COUNTER WEIGHT

Mortar

48, a mortar fragment, is a hard white paste with quartz grits.

Hand-made Wares

14, 55, 56 and 57. These are of two distinct kinds. 55 is a soft coarse red ware with many large inclusions, very rough finish inside and out (see Pottery in Room Three).

56 and 57 are fragments from two vessels in a similar paste. They are both roughly made and do not seem to have been wheel turned. The paste is calcite gritted, but endorsed so that it leaves an open corky texture which feels smooth and waxy. Colour buff. 59 is finished with horizontal rilling.

OTHER FINDS FROM CORRIDOR

Spindle Whorls

- 9, 26 and 27 are made from black burnished pottery fragments. 24 is in shale and is fashioned by hand; another shale whorl (9, 23) is machined-turned.
- 7, 13 is deer tine with drilled hole at one end, point well polished with use.

Bronzes

- 7, 4 Fragment of box binding.
- 7, 9 Finger or ear ring of fine bronze wire with filigree decoration.
- 7, 5 Crude bronze finger ring.
- 7. 6 Terminal end of small bracelet.

Lead

9, 29 Steel yard weight with remnants of iron filling.

Shale

9, 22 Piece from a segmented shale bracelet.

Stone

10, 33 Old Red Sandstone fragment used to sharpen or grind rods of bone or metal.

Tile (Not illustrated).

Fragment of a solid tile with plaster on a face incised with semicircular sectional criss-cross grooves and circular jabs at junctions.

FINDS FROM LAST OCCUPATION LAYER (not including corridor finds) Pottery in Room Three

There was a considerable quantity of fragments of hand-made ware on this floor. This ware was of a coarse open texture, grey

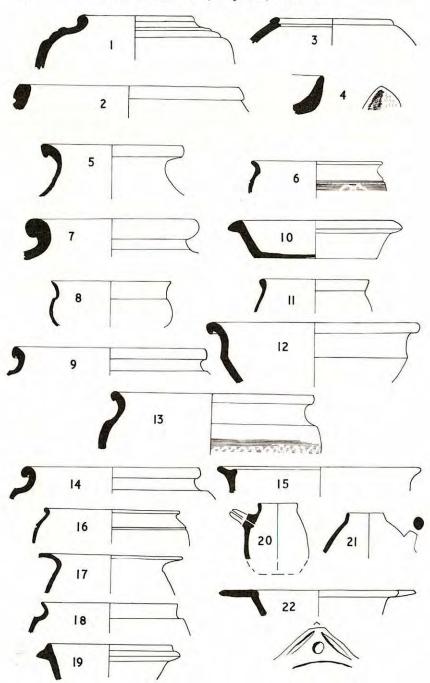


Fig. 12 Iron Age Pottery

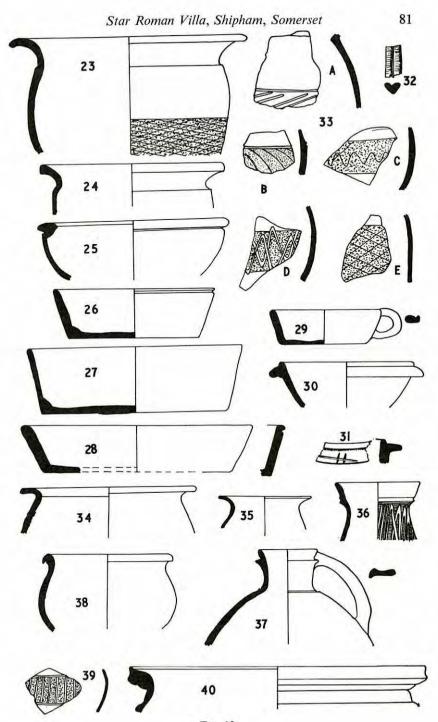


Fig. 13

within and red without. There were no rims or other recognizable features.

YARD

- **14**, 49 Surface of yard. Late profiled form of vessel in a soft brown paste with some slight gritting well fired.
- 14, 50 Ditto. Hard grey ware, blistered outside dressed in leather state.

ROOM FOUR

14, 51 Fragment of a beaker in a buff ware with a brown colour coat impressed with rosette stamps.

ROOM THREE B (Upper floor)

- 14, 52 Colander. Metallic grey ware zig-zag hole pattern.
- 53 Small flanged bowl in red ware.
- 54 Beaker in metallic grey ware.

OTHER FINDS FROM THESE LEVELS

Iron

ROOM FOUR

- **8,** 15 Blade and tang of a knife with remnants of a hook or loop at one end.
 - 20 Iron prick spur.

ROOM THREE B

16 Iron horseshoe nail.

YARD (Upper layer)

19 Fragment of sheet iron decoration.

Glass

ROOM THREE B

9, 30 Fragment of glass (see Appendix 2).

Bone

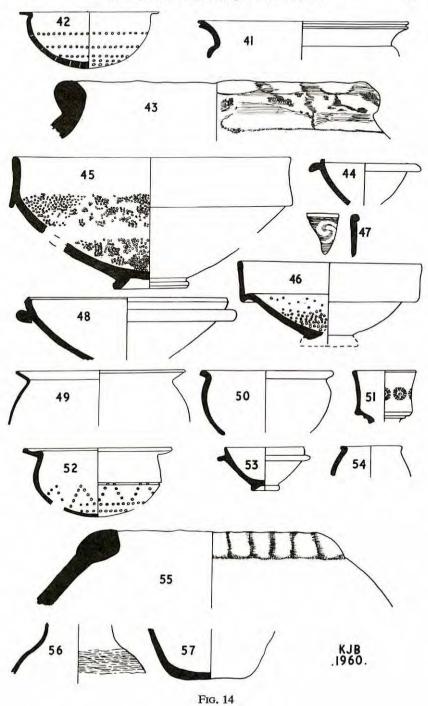
ROOM FOUR

- 7, 14 Turned and carved bone handle for a bronze implement (some traces of corrosion remain within).
- 7, 11 Awl, turned and carved bone awl with rivet hole for missing top, and iron needle inset.

ROOM THREE B

Stone

10, 32 Stone mortar — in Old Red Sandstone — outside roughened and burned.



Ceramic

9, 28 Disc — black burnished pottery ware.

Bronze

ROOM THREE A

7, 3 Penannular brooch — pin broken before discarded. Zoomorphic terminals.

Iron

ROOM THREE A

8, 18 Two (a pair?) of iron brooches or pins very corroded, found lying on the floor side by side (probably originally in a piece of cloth).

FINDS FROM WITHOUT THE BUILDING AND UNSTRATIFIED FINDS

- 7, 8 Bronze belt buckle no pin.
- 7, 2 Bronze brooch.
- 7, 7 Bronze tweezers.
- 7, 10 Fragment from a bronze bracelet.
- 8, 21 Small iron saw blade with plates to fasten on to a handle. Of Tudor date, paralleled exactly by a find from Steyning, Sussex, dated to c. 1500 (cf. Sussex Arch. Coll. forthcoming).
- 9, 25 Shale spindle whorl, finely turned; (fragments of several like this were also found).
 - 7, 12 Bone point with fastening holes.
 - 10, 34 Section through a Bath stone guttering.
 - 11, 35 Bath stone counter weight.
- 9, 31 Bath stone finial weathered where exposed at top. Clean and unweathered shaft with evidence of dressing with a 5 pronged comb chisel.

APPENDIX 1

IRON SLAG

We have undertaken a limited amount of analysis on the sample of slag you sent us from your excavations at the Star Roman Villa. The figures are as follows:

	G.3 L.3
Description	Small Pit
Si02 %	28.0
Fe0%	58.0
Cao %	7.0
A1203%	3.0

As you are, of course, aware, we do not smelt iron here at Avonmouth, so we have no experience of iron making slags. However, one fact that seems to me to stand out in these analyses is the relatively low percentage of calcium present in the slag. It appears to be common for iron making slags to run considerably higher in this element, wheareas the silica levels can be correspondingly lower at say 7-14%. As will be noted, the sample contains very substantial quantities of iron.

B. H. Cossham, Laboratory Superintendent, Imperial Smelting Corporation.

APPENDIX 2

GLASS AND BEADS

2 frags. of green prismatic bottles. Roman 1-2 cent.

2 indeterminate vessel frags. Roman, undatable.

Frag. of colourless beaker-rim with horizontal trail below—2-3 cent.

Two frags.— the greenish one is Roman of indeterminate shape and date; the dark brown one might be Roman or later.

Frag. of bowl or beaker, [9, 30] olive greenish with knobbed design in quincunx formation — perhaps representing a stylized bunch of grapes. Undoubtedly Roman and probably 2-3 cent., but unique in my experience. I cannot parallel the decoration or reconstruct the complete shape of the vase.

Four frags., probably from an indented beaker. The biggest piece seems to be part of the columnar edge of such a glass. Type very frequent from c. 200 to the 4th cent.

2 frags. of window glass of the matt/glossy type — 1/2nd cent.

Two glass beads faceted to polyhedral shape: (a) colourless; (b) blue. These are undoubtedly Roman, as one can tell from the weathering and wear, as well as from the shape.

The large spherical bead (F/3) seems to be an exact parallel to the one I published in *Antiq. J.* XXXIV, p. 189. Fig. 2, which I identified as a paternoster rosary bead; the dimensions tally and both are stone. (Serpentine).

D. B. HARDEN.

APPENDIX 3

COAL FROM FIREPLACE AND CORRIDOR SILT

This coal resembles the coals of the bottom series of the lower coal measures in the Nettlebridge area of the Somerset and Bristol coalfield, except that it has a rank of 306, whereas the above mentioned coals have a rank of 301a. The difference between these two lies in the different caking properties, 301a being a very strongly caking coal, whereas 306 is non-agglutinating. A further difference between the two coals is the inherent moisture which is approximately 1 in the case of the lower series against 5.6% in the sample you left with me.

Both the increased moisture content and the absence of caking properties in your sample could be due to long weathering, first in the outcrop of the coal seam and then in the drain where it was found.

The low sulphur and CO₂ contents are probably due to leaching. It is probable that the coal was obtained from an outcrop of the lower coal measures in the Nettlebridge area (the Fosse Way crosses this outcrop).

Other possibilities are the outcrops of the Nailsea Basin and the Welsh coalfields, which both contain seams of rank 301a coal.

I give below the analytical details of your coal and a 301a coal from Mendip Colliery, Stratton-on-the-Fosse, for comparison.

	Coal from	Coal from
	Star Villa	Mendip Colliery
	%	%
Moisture	5.6	0.8
Volatile less moisture	21.6	23.5
Ash	3.6	6.3
Fixed Carbon	69.2	69.4
Sulphur	0.45	1.10
CO_2	0.20	1.51
Swelling Number	0	$8\frac{1}{2}$
Grey-King Low Temperature Coke T	ype A	G.7
Volatile Matter on Dry Mineral		
Matter Free Coal	23.3	23.7
Rank	306	301a
	J. HE	RBERT.

Group Laboratory Manager, National Coal Board, South Western Region.

APPENDIX 4

OVEN FOUR CHARCOAL

The samples have been examined by our Research Laboratory at Tylers Green, where it has been found that they compare very favourably with Oak (Quercus) spp.

The examinations were carried out by Mr. D. Patterson, who states:

"As you will appreciate I have not examined every small sample in the packets, but I feel that a very representative sample has been taken, and that all the specimens are of the same species. It has all been taken from small dimension material — probably small branches".

D. N. CARSTAIRS, Regional Officer, Timber Development Association, South Western Region.

APPENDIX 5

MAMMALIAN BONES

The bones described were obtained in the course of excavations at Star Villa, Shipham, during the summers of 1959 and 1960.

Most of the remains were found in the silt filling of the external corridor, many were lying on the cobbled stones of the yard (F/7), and others were scattered over the various floors of all the rooms, and small numbers of sheep and pig bones were found in shallow pits in the corners of the rooms. One of these pits contained a mixture of fragments of sheep and human skull bones.

RODENTIA

Evotomys glareolus

A left inferior maxilla with m1 and m2 was found resting on the cobbled courtyard paving (G/7).

Microtus agrestis

A right inferior maxilla with m1 and m2 was found amongst the stone paving and debris of occupation in the courtyard (F/7).

UNGULATA

Bos sp.

The remains were scattered all over the floors and yards and in the silt of drains. It was possible to determine the parts of at least three adult oxen and one calf less than six months old. One of the adults was a larger animal than the others and may have been a bull. The smaller ox bones are from small cows of the size and build of the Celtic ox. Many bone fragments have been cut with knives and choppers and most of the long bones have been deliberately split. They are all clearly the remains of several meals and also show signs of having been gnawed by dogs.

Ovis aries

Sheep bones were the most frequently found and remains of at least twenty-one individuals could be recognised. Pits in the floors were filled on three occasions with only sheep bones. In one pit these consisted of bones from one lamb less than six months old. The other two pits of sheep bones contained remains in each case from three individuals. Many bone fragments were calcined, and most display the marks of butchering. It would appear that mutton formed an important part of the diet and was eaten more frequently than beef.

The majority of the bones were from sheep about $1\frac{1}{2}$ years old. Others were six months old while the remainder were $2\frac{1}{2}$ years old or more. The number of bones recovered were probably insufficient to assess the importance of this age at which the sheep were killed. The bones from the adult sheep were from quite large animals and resembled in some ways those of the present Exmoor breed.

Sus scrofa

Remains of probably at least twelve pigs were found, and with one exception were scattered over the floors and yards and in drains. Some pig bones were found in a pit in room Three B mixed with those of sheep. The pig remains in this case were from two animals, both approximately 4 months old. Some of the pig bones were from young weaners — that is between two and three months old, but nearly half of the remains appeared to be from young adults. All the bones were broken as in butchering, and a few appear to have been gnawed by dogs.

Equus caballus

Several fragments of two horses' bones and teeth were found. One metacarpal was complete, measuring 22.6 cm. long.

Proximal head	antero-	posterior	3.1 cm.	lateral	4.8 cm.
mid shaft	,,	59	2.5 cm.	,,	3.3 cm.
distal epiphysis	,,	,,	3.1 cm.	,,	4.5 cm.

Such a bone might be found in a horse between 14 and 15 hands high. A fragment of tibia was also found with the distal epiphysis infused and this would be from a horse which was less than 2 years old.

Dama sp.

Two deer tines were found. One was from a red deer and the horn core had edges worn smooth resembling those which have been used as implements. The other horn core was 11.5 cm. long.

CARNIVORES

Canis familiaris

Portions of three dogs were found. Two were in the silt of the drain in F/4 and E/4, and both were from dogs with powerful jaws and long faces.

The third dog remains were parts of a skull of an adult female about the size and shape of a large terrier.

None of the canine bones were arranged in a way suggesting burial.

E. T. DAVIES, F.R.C.V.S.

MARINE MOLLUSCA

Oyster

These were abundant in all periods of occupation, but especially in the last phase of occupation.

Winkles

Two shells only found of this shell fish from the corridor silt. Limpets

Thirteen shells from the top floor of Room Three north end.

Mussels

One half shell from corridor silt, and fragments on the top floor of Room Three north end.

APPENDIX 6

GRAIN AND WEED SEEDS (Room One)

The two samples of carbonized cereal grains appear to be largely, if not entirely, of Barley of the "naked" type without husks (*Hordeum polystichum* Doell). This identification was made by Mr. R. L. Jefferies, B.SC., and confirmed by me.

There remains a possibility that some of the poorly preserved, eroded grains may be of wheat, although we have no clear evidence

to suggest this. Barley and Emmer wheat have, however, often been grown as mixtures in early times. Extensive sub-fossil records exist for 'Naked Barley', and in the Iron Age there was considerable cultivation of barley on calcareous soils of Somerset and Dorset.

The weed "seeds" from pits associated with the corn-drying kiln are one-seeded portions of the fruits of the White Charlock (Wild Radish), *Raphanus raphanistrum* L. (determined A.J.W.). Previous records indicate that the White Charlock was rather common as a weed in Roman times, and its occurrence in the present site is not unexpected.

A. J. WILLIS, Dept. of Botany, Bristol University.

APPENDIX 7

HUMAN REMAINS
Burial in Room Two

The remains of a child of about 5 months. Cause of death—unknown.

Pit in Room One

Fragmentary remains of a child's skeleton, mixed up with sheep bones. Child of less than 5 months old.

K.J.B.

APPENDIX 8

Notes on the Geology of the Country around Star, near Shipham, Somerset

Star is situated near the axis of the Blackdown Pericline,¹ the most westerly of the four great anticlinal folds of the Mendip range. The core of the Blackdown Pericline is formed of Old Red Sandstone which forms the high ground of Black Down, and this is surrounded by Carboniferous Limestone, which, on the northern limb of the fold extends westwards through Dolebury Warren, Sandford Hill, Wavering Down and Crook Peak. The western part of the core of the fold was eroded in pre-Triassic times to form a valley, and this was partly filled during the Triassic Period with sediments of which the scree-like deposits of Dolomitic Conglomerate occupy part of

Welch, F. B. A., "The geological structure of the Blackdown Pericline". Proc. Bristol Nat. Soc. (1932) (4), 7, 388-96.

the area, and are succeeded to the west by the Keuper Marls. The village of Star is situated on Dolomitic Conglomerate, but patches of superficial deposits described as "head" on the Geological Survey maps² occur immediately north-west of the village. Veins containing galena and calamine are numerous in the Carboniferous Limestone and Dolomitic Conglomerate of this area.3 The ores of lead and zinc have been extensively worked, and indeed during the eighteenth century the villages of Shipham and Rowberrow became the headquarters of the zinc mining industry in the Mendip Hills.4

> M. L. K. CURTIS. City Museum, Bristol.

APPENDIX 9	
THE COINS (ref. to III A)	
Phase Two A	
ROOM ONE	
Clay seal (19)	A.D.
Constantine I.	
D.V. Constantine. Max. Aug.	
Vol. XX. St.	320-321
Concrete Floor (20)	
Imitation of Urbs Roma, of RIC. 87. Prototype	335-341
ROOM THREE A	
Oven One (25)	
SOL INVICTO COMITI.	
PLN. of <i>L.R.B.C.</i> I. 64a	313-317
Phase Two B	
ROOM ONE	
Resting on Floor (20)	
Imitation 2 victories type, late Constantina copy	
of minimissimi SS, of R.I.C. 13	341-346
TRP	
In clay floor (28)	
Constantinius II.	
F.T.R. FPLG. of $L.R.B.C.$ II	353-354
Resting on floor (28)	
Fel. Temp. Reperatio Imitation minimissimi	350 plus
Room Two	
In ash pit in front of fireplace, cut into floor 30	
Constantinian imitation.	
? Gloria exercitis Standard	335-340

² Geological Survey One-inch Map. Bristol district sheet (1962).

³ Green, G. W., "The Central Mendip Lead-zinc Orefield". Bull. Geol. Surv., No. 14 (1958), 70-90.

⁴ Gough, J. W., The Mines of Mendip (Oxford, 1930).

ROOM THREE A

Oven Three (5 coins)

(a) Fel. Temp. Rep. L.R.B.C. II, 76	353-354

(b) Constantine,

VICTORIA GDD AVGGQNN. T.R.P. *L.R.B.C.* 1-156 341-346

(c) P. Const. GLOR. IA EXERCITIS. L.R.B.C.

1-419 337-341 (d) T.R.P. of *L.R.B.C.* 1-15-16 324-330

(e) Too worn to identify.

EXTERNAL CORRIDOR

Coins from fill of latrine trench

These will be listed briefly according to Carson, Hill & Kent Late Roman Bronze Coinage (1960)

Coin No.	L.R.B.C.	A.D.
10	1-181	330-335
14	1-1016	,, ,,
85	1-51	37 39
86	1-48/60	,, ,,
51	1-52	,, ,,
50	1-181	15 55
15	1-228	335-337
76	1-754	25 55
38	1-242	337-341
16	1-242	,, ,,
17	1-242	,, ,,
29	1-105	,, ,,
80	1-118	,, ,,
53	1-132	,, ,,
48	1-113	25 55
127	1-116	5, 5,
92	1-424	55 55
13	1-138	341-346
84	1-148	", ",
81	1-794	,, ,,
71	1-151/2	,, ,,
73	1-148	55 55
75	1-158	,, ,,
55	1-151	25 25
49	1-158/60	,, ,,
120	1-145/47	,, ,,
45	2-30	346-350
46	2-30	,, ,,
47	2-30	,, ,,
41	2-56	350-353
54	2-76	353-354

External Col	RRIDOR	
SEALED DEPOS		
Corridor e		
Coin No.	L.R.B.C.	A.D.
91	1-100	337-341
93	2-39	346-350
112	1-142	
		341-346
136	n top layer of stones 1-66	220 225
140	1-66	330-335
		,, ,,
101	layer of stones 1-101	341-346
98		346-350
	2-180/1	340-330
123	ond layer of stones 1-449	241 246
77	2-43	341-346 346-350
		340-330
	of corridor (Room Five) 1-51	220 225
67 95	1-52	330-335
The second secon	1-32	330-335
PHASE TWO C	l H (28)	
Gallie	e on clay floor (28)	
Rev.	PICTAL AVG. 1	
Mint	of Milan. R.I.C. VI. p.n.s. No. 507	259-268
	o on floor (30)	239-200
	tantinius II.	
	Gloria Exercitus	
7.77.15	ndard ? mint	337-341
	ee (A and B)	337-341
In floor me		
	worn for identification.	
147	1-419	337
150	1-139	341
Resting on		541
	VIDEN TIAEAVGG.	
	tantine period 1.	
	P.L.G. L.R.B.C. 1-169	324-325/6
Magnentiu		324-323/0
	Cemp. RAPARATIO	
	T.R.P. L.R.B.C. 2-48	350-351
Yard	1.K.1 . L.K.B.C. 2-40	330-331
In top fill		
	entius. Salus. DD.NN.	
	Caes. AMB.	
	3.C. 2-19	351-353
Also	2-17	331-333
Coin 34	L.R.B.C. 1-92	335-337
COM ST	L.H.D.C. 1-14	200-001