

ANGMERING ROMAN VILLA SITE 1941

BUILDINGS G & E

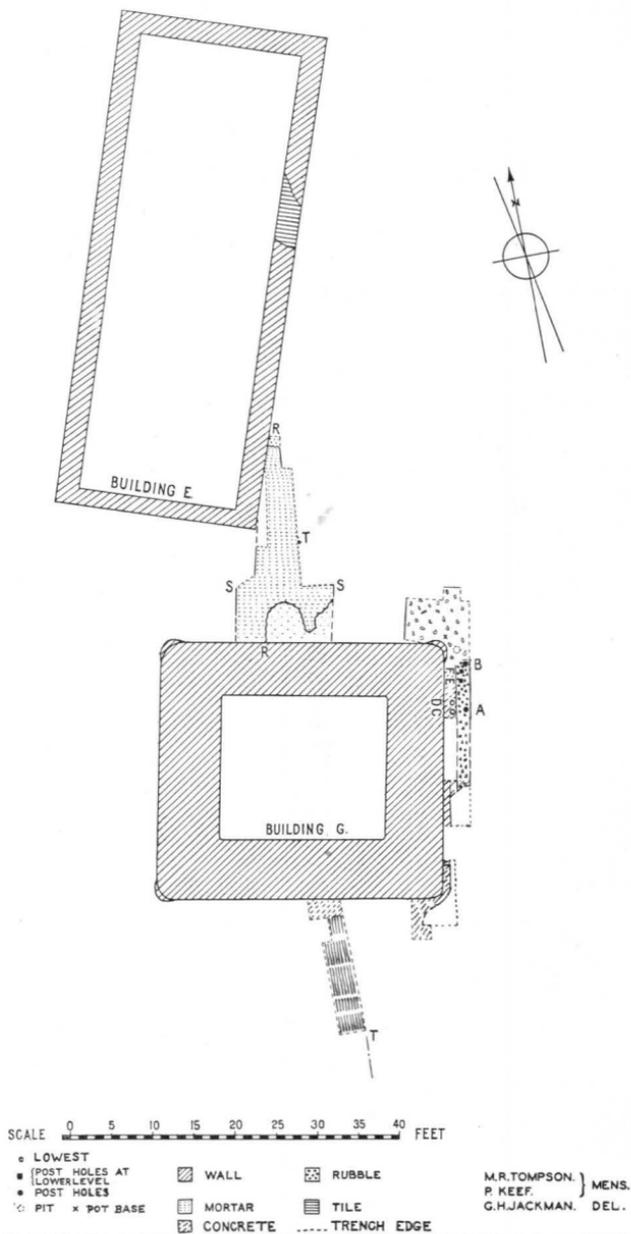


FIG. 1. PLAN OF BUILDING E AND G

ANGMERING ROMAN VILLA SITE: INTERIM REPORT ON EXCAVATIONS, 1941

BY P. A. M. KEEF, F.S.A. SCOT.

DURING the summer of 1939 two more buildings were found on the Angmering Roman Villa site by the Littlehampton Natural Science and Archaeological Society. On the highest point of the site, which is, however, only slightly raised above the remainder of the field, stood a rectangular building (Building G on plan), and 14 ft. north of it an oblong building (Building E on plan).

Little excavating could be carried out that year or in 1940. In 1941 a month's excavation was undertaken by the writer, on behalf of the same society, as the site seemed to be in danger from air-raids.

Site C¹ of the Angmering Villa lies 24 ft. to the east of Building E, and the Bath-house² 124 ft. to the north-west,³ Site B (Villa) 352 ft. west-north-west.

Building G was found to measure 18 ft. 6 in. by 20 ft. 3 in. inside, with walls 7 ft. to 7 ft. 6 in. thick, constructed of a concrete of white mortar and chalk lumps, laced with brick courses and faced inside and out with dressed chalk blocks. These blocks are 4 in. by 5 in. on their outer face and tooth-shaped. The interior and exterior wall-surfaces have been covered with white plaster, which was found still covering nearly the whole interior face of the south wall. It had been renewed once there. The exterior plaster was only visible on a very small area at the south-west corner. Foundations were reached at the base of the south and north walls' interior faces at 7 ft. It was found that only the brick course nearest the old ground-level is continued across the wall. The lower brick courses do not appear on the outside of the wall at all. The interior bottom course—an offset course of chalk blocks—rested on a layer of freshly struck flint chips, which tilted the course outwards, the angle being corrected with additional mortar to hold the clay working floor, described later in this paper.

¹ *S.A.C.* LXXX.

² *Ibid.* LXXIX.

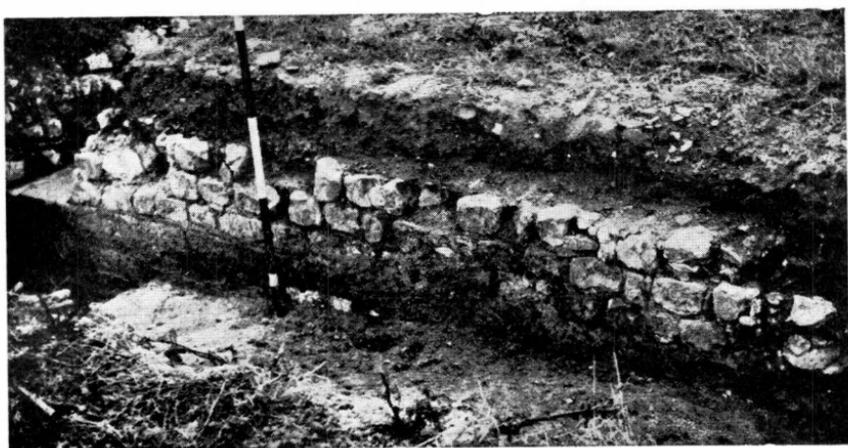
³ *Ibid.*

The walls are trench-built. The outer face of the south wall retreats inwards towards the bottom. Outside the south wall flints were found mixed in the brick-earth. Outside the north wall a sherd of terra sigillata was found 4 ft. down, sealed by the mortar arch of the Approach.



FIG. 2. BUILDING G: Interior view across South Wall at tile course, showing floor resting on offset at A

The interior corners of Building G are bonded in beneath plaster coving. The exterior corners appear to have been slightly rounded, as far as one can judge from the few stones remaining above old ground-level at the south-west corner. Below old ground-level these corners were found to be built out 1 ft. and to be made of the same concrete as the wall. The whole arrangement is little more than a bulge, but projects definitely from the line of the walls. In addition the whole east side of the building shows a concrete flange or shelf jutting out beyond these corner plinths. The south-east corner has this flange squared in section. With the



1. Inner Face of South Wall



2. Inner Face of North-east Corner



3. Exterior, North-west Corner

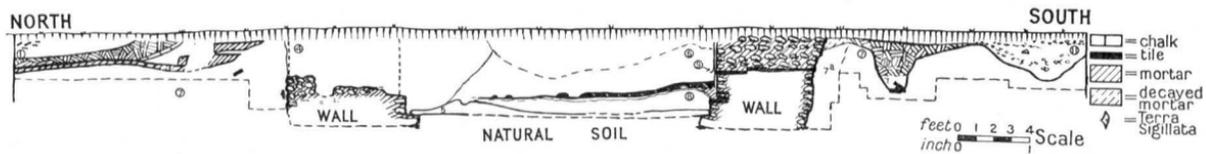


FIG. 3. SECTION A, at T-T (plan)

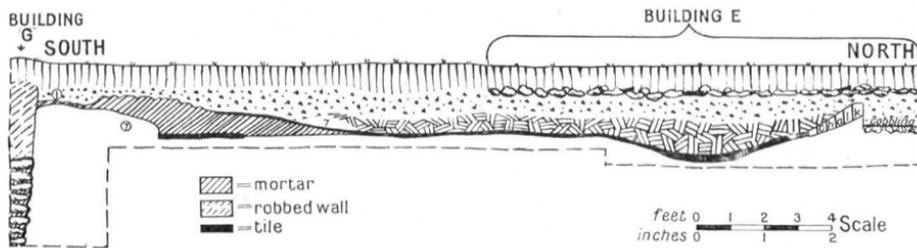


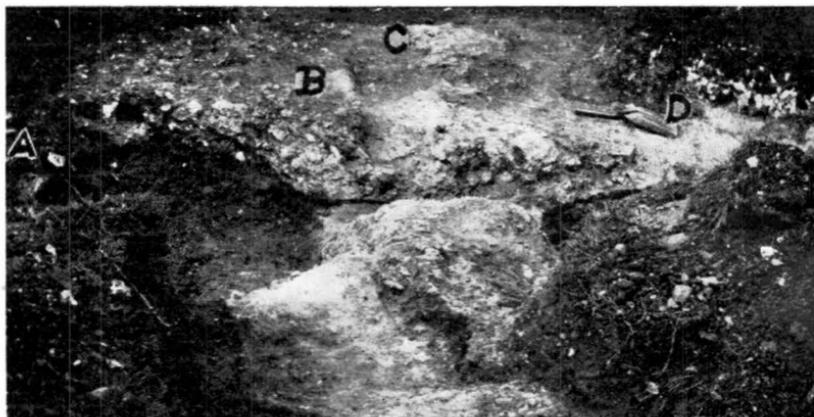
FIG. 4. SECTION B, at R-R (plan)

exception of the few stones at the south-west corner the walls have been robbed on all sides down to the old ground-level. On the west and north robbing had reduced the interior walls to the last few courses, and in some places the exterior face has been removed to far below old ground-level.

The floor of this building, of fine yellow sandy mortar, lies at basement level, 3 ft. below old ground-level. It springs from an offset brick course in the wall. An addition of mortar beneath the floor at that point gave it a slightly arched substructure on leaving the wall. The original surface, however, to judge by the decided coving of the wall plaster, seems to have been 5 in. above the present surface. The floor survives only in patches, principally near the south wall. It bends downwards and gradually disappears towards the north, though its level can be traced nearly to the north wall. Directly under the floor proper a packing of brick-earth levels the top of a layer 2 ft. deep of rammed building rubble. This rubble, which contains no wall plaster, lies over a clay and flint floor (presumably a working floor), to the level at which the mortar had been added on the bottom offset course of the wall. Under this was the natural soil.

It is remarkable that here and in many other parts of the building brick-earth, which packs down like clay under pressure, has been extensively used.

At the north wall of Building G the remains of an Approach (platform or steps) and approaching path were found. This Approach consists of a white mortar layer 12 ft. wide and 6 ft. long projecting from the north wall, but not at the central point of the wall. On the other hand, it is central between the north-west corner and the edge of the rammed rubble area at the north-east corner. A white mortar path led north from the broad portion towards Building E, by the erection of which its further extension had been destroyed. There were indications that steps or a platform had existed upon the broad part, as in that area rubble was mortared on to the flat mortar surface. This top surface was rough, and on to it had been rammed more rubble later. The top part of the steps (?) seems to have been removed and left rough to hold the second application of rubble. A mortar arch laid over brick-earth joined the Approach to the main building. The angle of the Approach and path to the main building showed that it led, not to the basement floor found,



1. Approach, from West:

- A. Robbed North wall of Building G
- B. Half-arch substructure of C—base of (?) steps
- D. Original surface of Approach path



2. Approach, from South:

- Rods at S-S in Plan, Man points at path.
- Robbed wall in foreground, left.

but to the story above. Tiles are laid flat where this arch leaves the path, at the major pressure point.

The later-added rubble surface on the mortar path seems to have aimed at an even higher level of Building G than did the mortar Approach. The rubble level is made up with chalk where necessary. As it rose above the present ground surface it is lost before it reaches the main building. At the north end, where the mortar path has been destroyed, the required surface has been continued with rammed chalk. Immediately north of that point appears the usual courtyard cobbling that is found intermittently all over the villa site.

Along the south and east sides of the building arrangements had been made by the builders to catch the drip from the eaves and to prevent surface water from accumulating by the foundations. Whereas these sides had carefully designed gutters and drainage the west wall shows no such feature. This is probably due to the natural soil being so near the surface there—only 2 ft. down. Combe Rock, the natural soil, has a natural drainage.

The gutter along the south wall consists of a concrete flange 2 ft. wide, much decayed. It projects from the wall-surface and leads rain-water down into a rubble-filled ditch, Ditch 1. The top of this ditch has been rammed down, and is so hard that it seems possible that it was a path. It will be noticed in the section that the filling of Ditch 1 overflows in lines of pebbles into Ditch 2. Ditch 2, then, was open when Ditch 1 was being dug and was apparently filled in at the same time.

For drainage at the east wall, but separated from it by a narrow layer of brick-earth, runs a channel 2 ft. wide, based on the natural soil (Combe Rock) and completely filled with loose flints. The top of the flint layer had been rounded off with brick-earth and a thin layer of mortar laid over, sealing the flint layer. Above this mortar brick-earth was packed up to the concrete flange or gutter running along the east wall. Unfortunately the stratification outside the wall has been destroyed by stone seekers between this point and the south-east corner. There are 2 small post-holes, Post-holes C and D, sealed by the mortar top. These belong to a series of post-holes and allied construction at the north-east corner.

The outer edge of the mortar sealing the flint-filled channel (outer is used to denote the side farthest from the wall) abuts on a narrow trench running north and south along the wall, filled with rubble and earth and rammed on top so hard that it also, like the south side, appears to have been a path.

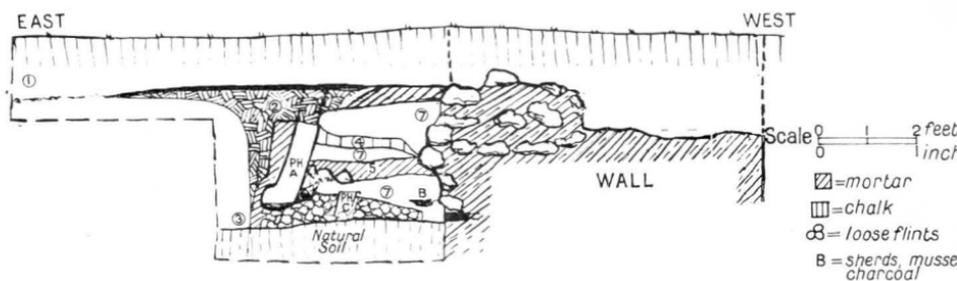


FIG. 5. SECTION OF POST-HOLE A

It was in the bedding-trench that 4 flint scrapers were found, also 2 pre-Roman sherds.¹ A large and elaborate post-hole had been sunk in the rubble-filled trench (Post-hole A). Another had been placed in a line with it 5 ft. farther north. This stands just outside the north-east corner itself (Post-hole B). And between these two, but out of line with them, and opening at a deeper level, are two more (E and F).

Post-hole A is set in mortar and slopes steeply towards the building. A shaped piece of chalk had even been mortared in and wedged with large flints to take the play of the post and to prevent it from sloping too much. A little round of black soil at the bottom of the post-hole represents the remains of the post itself. This was the only post-hole that showed any sign of the post. Post-hole A appears to be for something like a hoist or to have been used in the construction of Building G, though similar posts were found along the walls of the Triangular Temple at Verulamium,² at the same distance from the wall as these and about the same distance apart. Post-hole B had been set upright as carefully as A had been set at a slope. Its post had been squared on the outer face. Both posts are secured with mortar and open at the same level in the rubble. These two post-holes seem to belong together. As A had been set

¹ See report at end of paper.

² Wheeler's *Verulamium*.

crooked, it seems unlikely that they supported a veranda or portico. However, A's hole is mortared straight on the side farthest from the wall, so this post may possibly have been originally set upright, and reset later at an angle.

Post-hole F was small and simple and was based on the

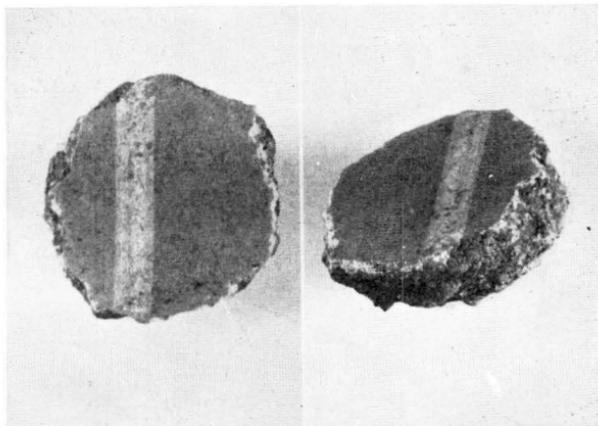


FIG. 6. PLASTER COUNTER

flint layer. It may perhaps have been a conduit hole from the higher layers to the flints and natural soil, and not a post-hole. Post-hole E, on the other hand, was nearly as elaborately made as A and B, but is not in line with them and opens at a lower level. Neither of these post-holes shows any signs of remains of posts or signs of wear. Both these and C and D may well be scaffolding post-holes.

A curious feature at the north-east corner just outside the wall is the rammed rubble area into which the rubble-filled trench draining the east wall widens. Five feet north of the corner it disappears completely. It does not run along the north wall. The surface rubble forms a small squarish floor stretching from the wall east and north. Among the rubble are long-shaped chalk lumps set with the long axis vertical. A patch of mortar in this floor proved to be a little pit 1 ft. deep. It contained a counter chipped from red wall plaster with a cream stripe.¹ This was in very fine condition and must have been sealed up as soon as it was made. A tile fragment spanning the pit from top to bottom had been

¹ A similar specimen was found at Maiden Castle.

placed by the counter and the pit filled in with mortar and brick-earth. Also, set flat near the pit and just below the surface was the base of a large coarse buff olla filled with charcoal and stained with burning. Another small base of the same ware had been found previously near Building G, but on another side. Between Post-hole B and the east wall, in the surface of the same rubble floor, a whole tile was found laid flat. Underneath it in a small hollow a great number of tiny snail shells (*Cocilioides acicula*)¹ were found; this is a meat-eating snail.

The elaborate levels in which the post-holes are sunk do not seem certainly to be of one build with the east wall. Some are divided from the wall surface by brick-earth. There seems the possibility that these levels belong to a building previous to Building G. However, the curious position of G's Approach lying centrally between the west edge of this rubble floor area and G's north-west corner, seems definitely to show that whatever construction was standing before G's time was still standing during G's first period, and was part of G's original plan.

It seems certain that Building G's roof was made of ordinary roof tiles (*imbrex* and *tegula*) as there are enormous quantities of these in the loose rubble and they are not used anywhere else in the building.

Building E is exceedingly simple. Its length is 60 ft. and its width 24 ft. The walls are 2 ft. 6 in. thick with the exception of the south wall, which is 6 in. narrower. Of these walls only the bottom stones (rubble of flint, chalk lumps and tile fragments) remain. At 35 ft. along the east wall a course of brick laid flat, 5 ft. broad, has been inserted. There is no rubble ruin in the building. Lying directly under the plough soil, it is unstratified. However, Section B shows that E is secondary to G, as E's wall foundation lies over the Approach to G.

Of the identity or possible use of Building E little can be said owing to its scanty remains, beyond suggesting that it was a timber structure on a rubble foundation. No indication of its basement floor even remains. Though the walls are founded in builders' trenches, the rubble they are composed of is so rough that a dwelling seems out of the question. The curving inset of tiles suggests that the building may

¹ See A. S. Kennard's report on the snails.

possibly have been heated by a flue from Site C,¹ the rather mysterious little bath building excavated by Miss Scott.

The question of the identity of Building G, which in many ways resembles the tomb at Keston,² is complicated by the presence of a bath-house,³ small bath building C, and

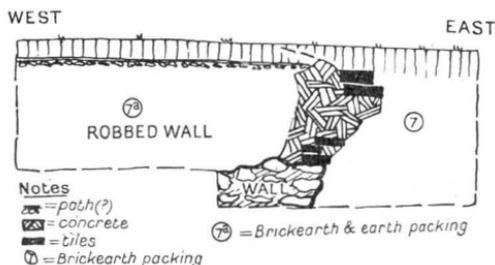


FIG. 7. SECTION ACROSS CENTRE OF EAST WALL

traces of a villa. Building G appears to stand beside some sort of track running east and west apparently towards a ferry or ford across the Black Ditch and there joining the east-west lane to Lyminster. Immediately across the Black Ditch⁴ stand Poling Church and the tiny village. The Black Ditch itself runs into the River Arun and may very well have been navigable in ancient times, at any rate for barges, though opinions differ on this point. Rome, it will be remembered, possessed an efficient European barge service.⁵ A narrow canal would serve for the passage of barges, so that the water-way need not have been tidal at that date, and silting would hide all traces of it later.

Building G seems to have been deliberately ruined. Trenches for this purpose can be seen breaking through the rubble levels at the north end of the interior and on the exterior in the centre of the east wall. The north end of the floor appears to be trampled away, as it bends downwards and gradually disappears from south to north, though its level can be dimly seen nearly up to the north wall. The interior facing-stones seem to have been the object of the search. The deliberate breaking-up of the steps or platform surface of the Approach and the superimposing of Building E's foundations over the path support the idea of demoli-

¹ S.A.C. LXXIX.

² V.C.H. Kent, III. 119.

³ S.A.C. LXXX and LXXIX.

⁴ Ibid. The position of the villa site is fully discussed by Miss Scott.

⁵ Déchelette, *Manuel d'Archéologie*. — *La France Gallo-Romaine*.

tion in Roman times, as these points show that Building G's Approach and Building E cannot have been used at the same time.

It seems that the north end of G may have been taken down first, perhaps in order to construct E, and that the south end was taken down later, thus causing a heavy fall of plaster after rubble was already spread over the remains of the floor. This may account for the better preservation of the south end of the floor and the enormous quantity of white wall plaster in the upper levels above the floor (see plan). It seems possible that the ceiling of this structure was a white plaster-covered vault. The bottom interior stone course is propped outwards deliberately, and the brick-earth takes the thrust of the whole arrangement. This tilting can surely not be necessary if a thrust was not postulated.

Exactly the same type of rubble that occurs in such great quantities inside this building has been rammed over the Approach and path. This arrangement is seen on other sites where a safe surface for traffic is required. In this case the traffic may have been carrying the building material from Building G to E.

Among this rubble, both in the building and on the Approach, lay nearly all the pottery found. Sherds from inside G actually fitted sherds of the same pot from the Approach. This surely means that this rubble must be all of one period and spread. Now, on the rubble-covered path were many little hearths, composed of sherds, nails, charcoal, and, in some cases, of mussels. They appear to have been workmen's hearths, based on miscellaneous sherds. It is interesting to note that there is a large bed of mussels at Littlehampton, 2 miles away, at the present day. These hearths were found at various levels up to the base of the plough soil.

It would appear, then, that the earth and rubble found over the path were filled in when the path was no longer required and soon after the demolition of G. In that case, was the rubble-covered way only needed to transport the building material?

As to Building G being a temple of Mithras or Mithraeum, it can be stated definitely that the structure lacks all the characteristics except that it is underground. A vaulted

substructure under a temple is not, however, unknown in Britain. For, though the Colchester temple¹ vaults were found filled with earth, that earth was added in the Middle Ages.

The floor of Building G is interesting. Black and white tesserae were found this year in the rubble over the Approach, and in 1940 a group of three white tesserae mortared together occurred in the same trench. As the plaster coving between wall and floor is placed 5 in. higher than the present floor surface, and the surface itself is so soft, even allowing for age, it seems very likely that there was a black and white tessellated floor in the building. Another point in favour of such a floor is the heavy rubble make-up under it. This is like the floor construction of the Wroxeter² temple, which was made of alternate layers of loose stones and clay, here paralleled by rubble and brick-earth. Again, there can be seen inside the south wall in Building G a curious gap of about an inch between wall and floor. It shows where the plaster face is still in existence and so cannot be intended for a space for wall plaster. But it is about the right width for the insertion of a crowbar to lever up the tessellated pavement segments for removal.

Building G may have had some architectural pretensions. In 1819 a piece of architrave of Sussex marble was found,³ though the exact spot is unrecorded. Another piece of architrave of the same marble has been found within the last two years near the buildings described in this paper. It was considered by Miss Scott⁴ that the Bath-house was used as a dwelling in its secondary phase. It appears that Building G was demolished in Roman times. So it seems at least possible that these architectural fragments may have belonged originally to G, and that they may have been carried away later to decorate the Bath-house. Thus, in what may be called Building G's period 1, it may have possessed Sussex marble architectural features and a black and white tessellated pavement.

The main impression that the ruin of this building makes is one of having, in every detail, been constructed to carry great weight and to be exceptionally stable and dry. As the

¹ I am indebted to Mr. M. K. Hull, of the Colchester and Essex Museum, for this information.

² *Wroxeter Excavations*, Bushe-Fox.

³ *V.C.H. Sussex*, iii. 20.

⁴ *S.A.C.* LXXIX, 13.

area of the building is small, the weight it seems designed to carry may be due to height.

Our dating material is scanty—the iron knife of a common Roman shape sealed by Building G's floor, and the sherd of terra sigillata sealed by the Approach. The report on the latter will be found at the end of this paper. The resemblance to the tomb at Keston,¹ mentioned earlier in this paper, is further supported by our building's proximity to a dwelling-house and road. Cremation burials were found in the excavations of 1819 in the field just east of the Angmering site, on the same east-west line leading to Poling. Moreover, if the estate changed hands the tomb might well be converted to other uses and demolished. The circular foundation of a tomb exists at Pulborough,² farther up the River Arun.

Building G resembles in some ways a small temple, even though it lacks so far the surrounding wall or portico usually associated with the common type of Romano-Celtic or Gallo-Roman temple, of which many examples have been found in north France and in parts of Britain. Both Lancing and Chanctonbury Ring temples are within a few miles of Angmering. There is a building at Jordan Hill,³ near Weymouth, which has many points in common with our site; and a temple at Autun (Augustodunum)⁴ in France, which is, in many ways, strikingly like Building G. That at Jordan Hill is situated on a hill (Building G is on the highest part of the site, it may be remembered). Its shape is rectangular, with walls 9 ft. thick, built of roughly dressed blocks of limestone enclosing rubble. Limestone is there easily accessible, as chalk would be at Angmering. There appeared to be no surrounding wall, but a mortar spread was traced round about and then the excavations could not be continued. The curious feature of the structure was the burial pit 14 ft. deep in one corner. The building was surrounded by a rough cobbled courtyard containing many bones, for the most part of young oxen. At Angmering there is an intermittent courtyard cobbling on the south side, the tiny pit outside the north-east corner and the rubble are there, with what may be food deposits in it.

The Autun building is called the Temple of Janus. This

¹ *V.C.H. Kent*. III.

² *S.A.C.* XI.

³ *Dorset Nat. Hist. and Arch. Soc.* 1931. Pottery resembling the Angmering large urn (No. 1) was found on this site.

⁴ *Autun: de Fontenay et de Charmasse*, p. 210.

temple building stands by the Roman road at Autun. Its walls are 2·20 metres thick with one offset, made without any dressed stones,¹ so they may have been plastered. The interior measures 16·75 metres by 16·25 metres and the interior floor-level is 0·60 metre higher than the surrounding level. At the present day the structure stands 23 metres high. In 1655 it was recorded that the floor was tessellated.² The roof was of ordinary tiles, as at Angmering. The Autun building, however, had some veranda or portico, for large ragged holes show that there had been some structural feature attached at a height of 13 metres on each side. Towards the present top are three windows on each side. This building appears to be the nearest analogy to Building G; though none of these buildings mentioned, it will be remarked, contains a floor at basement level.

Perhaps a guess may be made at Building G's second period, which seems to have been industrial. In addition to the heating arrangements near Building E, suitable for the drying of corn, in Building G we found a great quantity of mouse bones both in the rubble at the south end and in the silt on the floor, also at the south end. Was this building used for the storage of corn, thus attracting thousands of mice to its ruin? To this day corn grows well in the district and the site has the additional advantage of lying near the Continent. There is also the example of a French temple that was rebuilt probably as a granary.³ If that was the case, an enlargement of the site may have resulted in the demolishing of G in order that larger store-houses should be built from its material, though at present nothing has been found quite comparable to the well-known sites at Langton⁴ and Hambledon.⁵

ADDENDUM

A few days' work in March 1942 completed the excavation of the south-east corner and confirmed its shape. The plinth found there continues north for 4 ft. along the east wall. Its square edge has been obtained by laying it against flat-faced flints packed in brick-earth. The upper flat mortar

¹ 'Sans la moindre pierre taillée', cf. *ibid.*

² 'À la mosaïque', cf. *ibid.*

³ *Antiquaries Journal*, 1928.

⁴ 'A Roman villa at Langton near Melton, Yorks', Corder and Kirsh.

⁵ *Archaeologia*, LXXI.

surface of the corner occurs again 3 ft. to the south, the intervening 3 ft. having been destroyed. Along the east wall nearly all of it has been robbed away—a mortar floor 2 ft. thick founded on a mortar spread.

Deepening of the east wall trial trench showed that, in spite of extensive robbing, the plinth runs along the east wall surface, projecting about 1 ft. from it. The east wall here is 9 ft. wide, whereas the other walls do not exceed 7 ft. 6 in. The narrow rubble-filled ditch that had been found at the north-east corner appears again in this east wall trench. It evidently runs along the east wall to this point and originally it probably ran the whole length of the wall. At this point it is exceptionally firmly packed. Tiles are laid flat in its top and at the bottom. The whole is mortared together and mortared as well to the wall face, forming thus a concrete half-arch set over brick-earth (see section). The care with which it has been built suggests the necessity for great stability—the base of steps or even of a pillar? It is in line with the large post-holes (A and B) at the north-east corner. The concrete slope leading down to the top tile (see section 5) and its resemblance to the wall edge at the north-east corner and to the profile of the south-east corner plinth seems to indicate that this is the original design along the east wall and that the complicated variations near post-hole A are the result of resetting that post at a slope to act as a hoist, as Miss Taylor has suggested.

Extending all over the south-east corner at the bottom of the plough level and over the east wall itself runs a patchy chalk and mortar surface. This is founded on a thin uneven layer of rammed rubble laid over brick-earth and earth, packed over the whole east wall. It runs north to the north-east corner, but does not show east of the wall and becomes very patchy farther north, disappearing some feet north of the building (see plan).

These patchy remains of substantial rubble, when considered with the curious centring of the Approach, lying between the north-east rubble floor edge and the north-west corner, instead of centrally between north-east and north-west corners, seem to suggest that some sort of portico existed along the east side, occupying part of the thickness of the wall and projecting only a slight distance, the plinth and extension on the east side being its substructure. This

would be a departure from the usual arrangement of porticoes, which project bodily from the main wall. Examples of slight easterly projections, however, are found at Wroxeter, Caerwent (Mon.), and at Harlow in Essex.¹

It seems most probable that the highest rubble surface that covers the greater part of the east wall of Building G is a path or road running north and south, and that it was laid after the building was pulled down, the ruined east wall providing a dry foundation.

The platform level of the north and south-east corners seems to be part of the original projecting platform or portico, though so little remains of it that it is difficult to be sure. It appears that these remnants were incorporated later in the path or road surface, as, though they are constructed quite differently from the path surface, they lie at the same level.

On the whole, we seem to have a little more evidence for considering Building G to have been constructed as a small temple or tomb, designed with a portico running along its eastern wall, later partly overlaid with a path or road, and an entrance at the north or water side.

NOTE: 1944

Subsequent finishing of the original South-East Corner trench showed that both ditches had been redug and refilled for a distance of four feet in Roman times; the Inner Ditch with building rubble, flints and mortar set on the outer side against upright brick to prevent movement. This filling was rammed firmly down and extended to the wall face. The Outer Ditch was filled with brick-earth; in the centre, where sinking might be expected, brick fragments were piled from top to bottom. All this arrangement suggests a buttress foundation, secondary in erection to the building itself and probably to ensure its stability, as the section shows that this wall leans outwards at old ground level. One must conclude, therefore, that Building G threatened to collapse, or actually did so, and that its demolition was not entirely a matter of choice.

Trenching, independently carried out by members of the Littlehampton Society, in 1943, across Building E, uncovered

¹ *Antiq. Journ.* VIII. 300.

the rubble footing of a wall 6 feet long and 1 foot 6 inches wide, running inside the building, parallel to, and at 3 feet from the east wall at the tile inset (not shown in plan). Built into this short wall was part of the top stone of a rotary quern of late form, not earlier than the third century and probably fourth.

As the wall incorporating the quern lies exactly parallel to the main wall and is of exactly the same build, there appears to be no doubt that it is of contemporary erection, thus giving an approximate date for the building and for the rearrangement of both these buildings.

ACKNOWLEDGEMENTS

That the excavation—a war-time emergency one—could be carried out at all is due to the leave of absence kindly given me by the Colonel Commanding the Canadian Hospital, with which I was working, and of the Hospital Library Headquarters.

Funds were provided by the Excavation Committee of the Littlehampton Archaeological and Natural Science Society, supplemented from a private source. Work on the site was undertaken by a little enthusiastic paid labour and some volunteers, when their war work permitted. Of these should be specially mentioned Messrs. J. Matheson and Tozer and Miss Scrivenor, and members of the Littlehampton Archaeological and Natural Science Society.

For general information on the site between 1938 and 1940 I am indebted to Mr. G. Cutler.

It was most kind of Mr. Thompson to make the general survey under present conditions, and I have much appreciated Mrs. Evans's help on many constructional points in the report.

For the identification of flint implements found I am indebted to Dr. Curwen and for advice on pre-Roman sherds to Dr. Cecil Curwen. I should like to thank Mr. Philip Corder for examining the pottery; Mr. M. K. Hull for examining the terra sigillata sherd; Dr. Oakley for reporting on the stones used in Building G; and Mr. Kennard for identifying the snail shells.

Miss Patchett has very kindly drawn the pottery. Finally I must thank Miss Taylor for her most valuable advice and

help; Mr. Ian Richmond for examining the plans and material; and Lt.-Col. Drew for allowing me to examine the Jordan's Hill pottery in the Dorchester Museum.

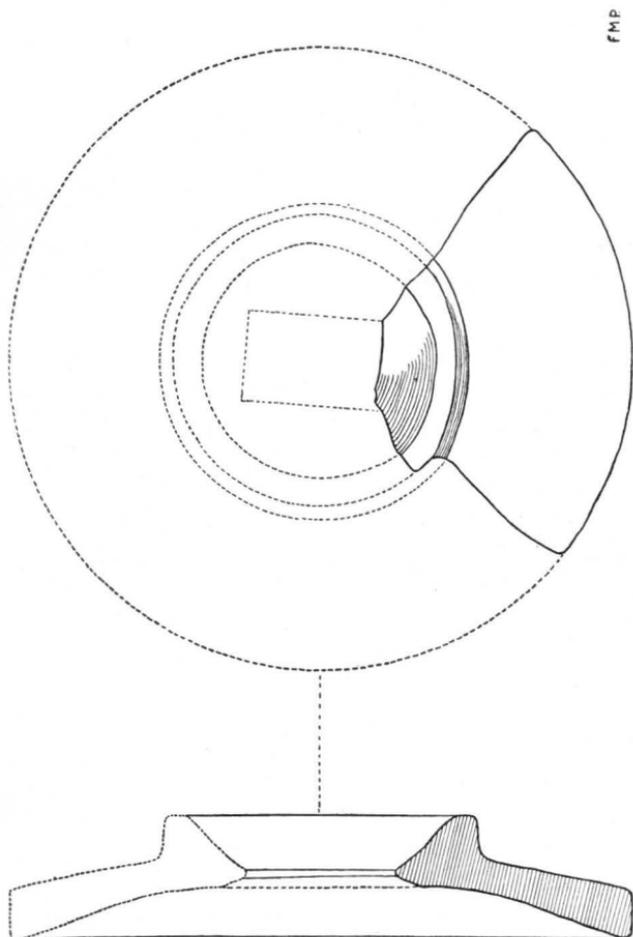


FIG. 8. FRAGMENT OF QUERN

FINDS

One fragment of *architrave* or *plinth*, $7\frac{1}{2}$ in. long, $4\frac{1}{2}$ in. high, and $3\frac{1}{2}$ in. thick, of Sussex marble, found in 1940 near Building G—unstratified.

Counter, chipped from red wall-plaster with one cream stripe. Found at bottom of pit at north-east corner of Building G.

Iron Objects

An iron *knife*, in rather bad preservation, of a well-known Roman shape— $2\frac{3}{4}$ in. long and $\frac{3}{4}$ in. wide at widest part. Found in the rubble make-up

of the floor in Building G and sealed by the floor. The shape of the knife is common throughout the Roman occupation of Britain.

Round-headed *nails* about 1 in. long.

Hobnails of common pattern.

All the nails were found with the workmen's hearths in the rubble and in the earth over the Approach path.

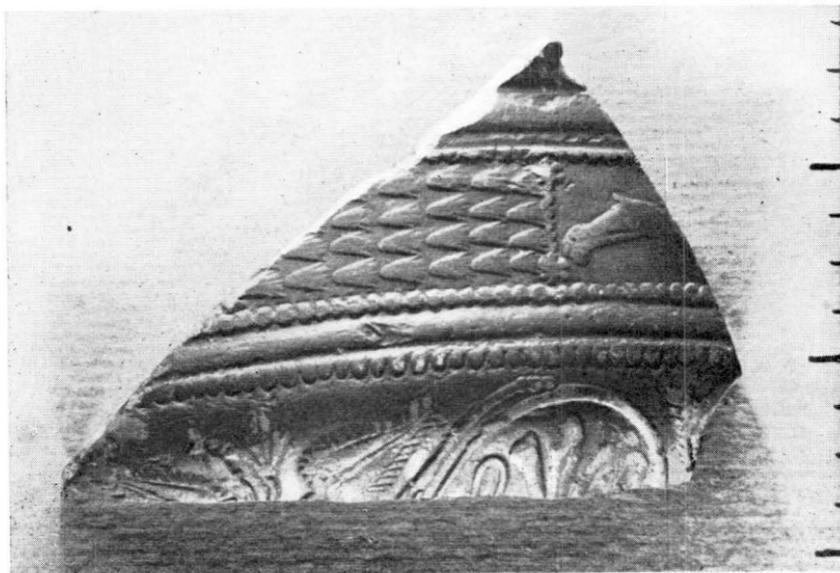


FIG. 9. SHERD OF TERRA SIGILLATA (scale of inches at side)

Window glass

A fragment of window glass, measuring 3 in. by 2 in., was found in the rubble lying near the Approach, with the pottery sherds.

Quern

A fragment of the upper stone of a rotary quern (fig. 8) from the short wall of Building E. The hopper has a rectangular aperture. The grinding surface is smooth, without grooves. The slope of the upper and grinding surfaces are nearly parallel. There are signs of such wear in the hopper and on the grinding surface that they nearly meet at the base of the hopper. The original width at that point is shown by a dotted line in the drawing. This quern is, Dr. Cecil Curwen thinks, a late type, not earlier than the third century and probably fourth. Its nearest Sussex analogy being a quern from Thundersbarrow Hill (*Antiq. Journ.* VIII, fig. 14).

The stone of which the quern is made is, Dr. Oakley considers, a buff-coloured grit stone, almost certainly from the Hythe Beds of the Lower Greensand—the nearest outcrop of these beds being in the Pulborough district.

REPORT ON TERRA SIGILLATA

BY M. R. HULL

The fragment of terra sigillata of Form 29 has a rather poor glaze, but the carination is not extreme. The decoration of panels of arrow-heads in the upper zone, alternating with panels of running animals, is well known from Claudius onwards. The large unilateral scroll of the lower zone begins similarly early, but the many units in each loop (apparently four) and the generally coarse style of the piece make the earliest possible limit Nero, and I consider the piece is most probably Flavian.¹ The following signatures are found on bowls of this form decorated with similar leaves: Jucund and Vaderio.² Bowls signed Mercator and Natalis³ use similar arrow-heads, and bowls signed Rufini⁴ bear a general resemblance to the Angmering bowl.

POTTERY

Pre-Roman Pottery

Two small sherds of the side walls of straight-sided pots were found in the rubble ditch filling outside the east wall, immediately beside post-hole A. This filling also contained flint scrapers. Apparently both flint implements and pottery were lying on the surface when the rubble was shovelled in.

The pottery is about half an inch thick, of soft dark body mixed with chalk backing and insufficiently fired. It appears, in Dr. C. Curwen's opinion, to belong to an Iron Age A straight-sided pot, as far as it can be identified from such small pieces possessing neither rim nor base.

Colour-coated Ware

Barrel flagon. A buff pipe-clay mixture body, once slip-coated inside and out a reddish-brown, now largely worn off. On the almost vertical sides is a white slip decoration the scheme of which cannot be accurately recovered. The clay of the neck has twisted while being thrown. Fumed grey specimens resembling this shape were found at Ospringe Roman cemetery, near Faversham, in Kent,⁵ Nos. 625 and 335. These are dated to A.D. 140–90. Barrel flagons are usually grooved, cf. Holt 118. Though pottery made by this technique was manufactured at the well-known kilns in the New Forest, this is not one of the shapes made there. This pot seems, so far, to be unique in Britain, and may possibly come from the Continent. Unstratified, in Building E.

Coarse Pottery

1. Bead-rimmed bowl, of brownish gritty ware with fumed grey surface. It is hand-burnished horizontally, except on the reserved band of chevron

¹ The second half of the first century A.D. is thus the earliest possible date for the erection of Building G.—P. A. M. Keef.

² *Terra Sigillata des Ersten Jahrhunderts*, plates 43 (4 and 6) and 80 (5) respectively. Knorr.

³ *Ibid.*, plates 57 (12) and 61 (3) respectively.

⁴ *Ibid.*, plate 69 (c).

⁵ *Ospringe Roman Cemetery*, Hawley, White and May.

pattern round the girth. This ornament has been incised with a sharp instrument. The bowl is probably of Claudian date. A grey olla from the Tilbury Romano-British village resembles ours closely, even to the chevron ornament, though this is placed higher on the pot's side at Tilbury (*London in Roman Times*, Fig. 56, No. 6). The nearest parallel, however, was found at Hengistbury Head, in a Belgic context (class J).¹ The Hengistbury jar,

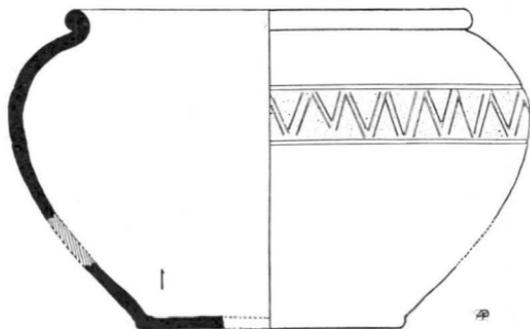


FIG. 10. GREY BOWL (No. 1)

though black, is strikingly similar in shape and burnish and has an unburnished reserved band of chevron pattern, like the Angmering specimen. One may also quote Fig. 28 in 'The Belgae of Gaul and Britain';² and a bowl from Farley Heath.³ Rim 8 in. in diameter, girth $10\frac{7}{12}$ in., base $5\frac{1}{4}$ in.; height $6\frac{1}{2}$ in. In Approach rubble, except one sherd, which was in Building G rubble above floor.

2. Amphora fragment. White body covered with white slip. Not illustrated. Unstratified, by east wall of Building G.

3. Lagna or large flagon, of smooth grey fumed ware. The surface of the neck has been brushed vertically while very wet and small panels have been burnished (not brushed) on the upper part of the girth. Diameter of base of neck $5\frac{1}{4}$ in. In Approach rubble.

4. Fragment of flagon with moulded double-ring lip, of fine grey fumed ware. No. 198 at Richborough⁴ is of this shape, and Nos. 196-7, 201, &c., at Colchester.⁵ Diameter of the rim $3\frac{5}{10}$ in. In Building G rubble.

5. Ring-topped flagon or jug, with three-ribbed handle of black ware, probably bitumen-coated. White ware examples of this shape occur at Richborough, Nos. 66-9. These jugs are usually made of a pipe-clay or a pipe-clay mixture. Though the shape of this specimen is excellent the surface shows clumsy handling, and it may therefore be a native imitation of 66. Diameter of rim $1\frac{10}{12}$ in., base of neck $3\frac{1}{2}$ in., girth $6\frac{5}{12}$ in.; height $7\frac{1}{5}$ in. In Approach rubble.

¹ *Excavations at Hengistbury Head*, Bushe-Fox.

² Dunning and Hawkes, *Arch. Journ.* LXXXVII (1930), where the subject of bead-rimmed bowls is dealt with exhaustively.

³ *Surrey A.C.* XLII (1934), p. 70, fig. 2.

⁴ *The Excavations at Richborough*, Bushe-Fox.

⁵ *Catalogue of Roman Pottery in the Colchester Museum*, T. May.

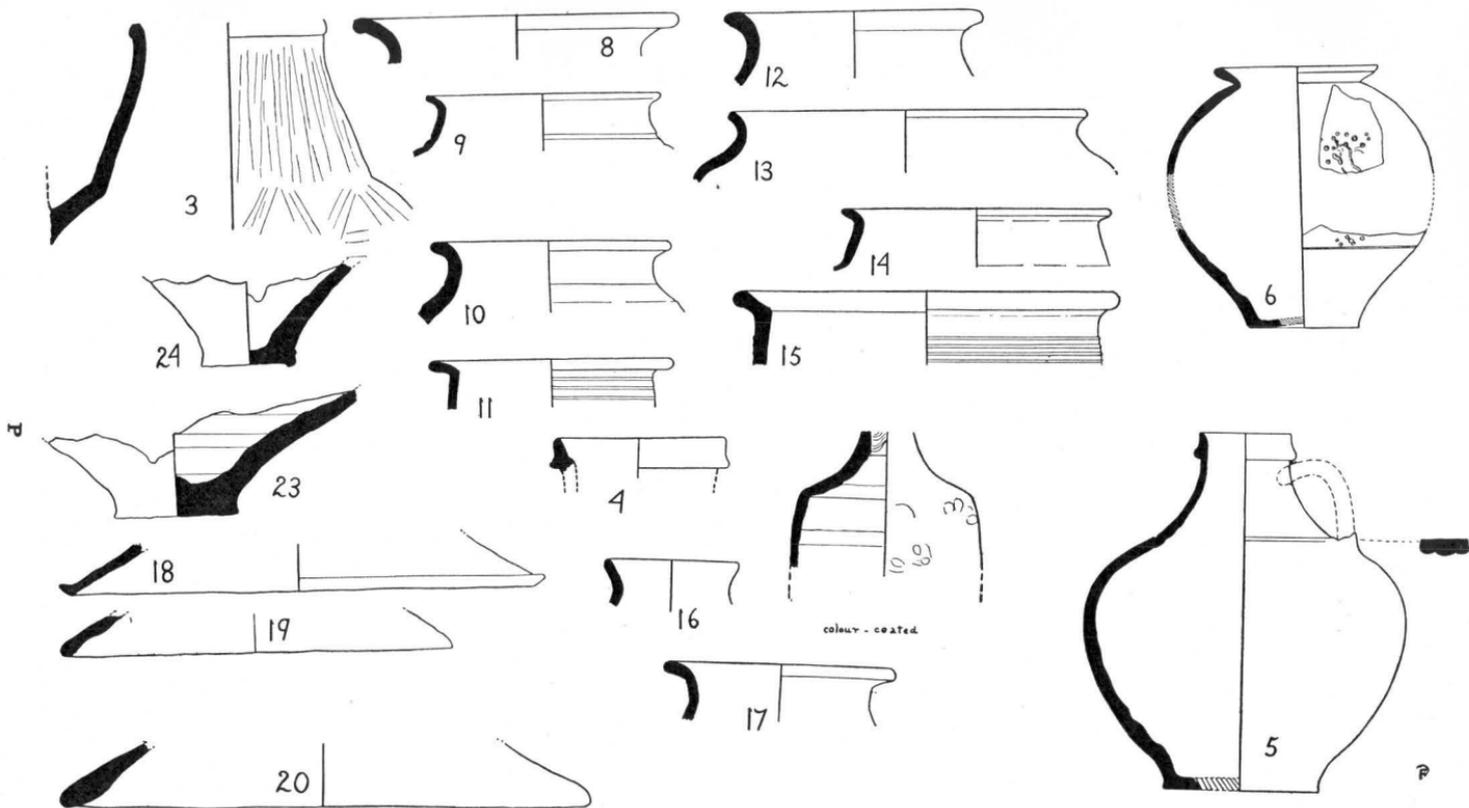


PLATE III. POTTERY FROM ANGMERING ROMAN VILLA SITE

6. Small beaker of fine grey fumed ware, called rusticated ware. The pot is partly slip-covered. The form is well known. The figures 278-87 from Richborough¹ resemble this beaker. At Margidunum² they are of Claudian date. There are examples also at Silchester (LXX, Nos. 157-9) and Colchester (III, No. 17). Diameter of rim $3\frac{1}{4}$ in., neck $2\frac{1}{2}$ in., base $2\frac{1}{4}$ in.; height $5\frac{1}{5}$ in. In Approach rubble.

7. Fragment of small rusticated-ware beaker, white fine pottery, probably a pipe-clay mixture, decorated on girth with regular dots of barbotine. Not illustrated. In Approach rubble.

Ollae and Cooking-Pot Rims and Lighter Beakers

8. Everted rim of black ware with high wheel-burnish, black coated. The black coating is partly burnt orange-red. This rim is quite out of step with the bulk of the collection. It belongs to a cooking-pot like Segontium 55-6 or Birdoswald type 19 (fig. 14) and many other places. It is universally found in the fourth century, but the date is really dependent on the form of the body, which is wanting at Angmering. Diameter $6\frac{3}{8}$ in.

This rim was found in a small open-air hearth, so the variation in colour may very likely be due to having been reheated in a clear fire, as the black colour of the pot was probably obtained by firing under reduction. The writer has found by experiment that such pots will become red on refiring in a clear fire. In Approach rubble.

9. Fine light pot, the rim only slightly turned over—slight cordon effect at base of decided neck. Fumed grey body covered with grey slip. Diameter $4\frac{3}{4}$ in. In Approach rubble.

10. Rim of large heavy olla of gritty ware. Rim slightly turned over. Two grooves at base of neck and slightly carinated shoulder $\frac{1}{2}$ in. below. Sandy body. Diameter $4\frac{5}{8}$ in. In Approach rubble.

11. Flattened rim of large jar of black ware. The rim stands out almost at a right angle to the wall of the pot. There are three wheel-burnished grooves below rim. Diameter 5 in. In Approach rubble.

12. Heavy rim, slightly everted, of sandy rough ware. This pot probably belongs to an early second-century form derived from a Belgic prototype, but might be earlier; cf. Richborough³ XXI. 16. Nearer dating depends on the shape of the body, which is here wanting. In Approach rubble.

13. Moderately everted rim of large fine olla with thin walls and sandy body. Certainly an early shape, probably first century. Diameter $7\frac{1}{4}$ in. Outside west wall of Building G, old ground-level.

14. Rim sharply everted from a decided neck. Fine reddish very hard ware, with fumed burnished surface; a light thin rim, resembling No. 9. This is probably Richborough³ 64 and belongs to the first century. Diameter $5\frac{1}{2}$ in. In Approach rubble.

15. Flattened rim, resembling No. 11, of dark grey ware. Three grooves made on the wheel are placed $\frac{1}{2}$ in. below the rim. Both this pot and No. 11 have rims suitable for holding a lid. Probably first century, but the shape is unusual. The grooving is a Roman descendant of the combing and scoring used on Belgic pots. Diameter $7\frac{3}{8}$ in. In Approach rubble.

¹ *The Excavations at Richborough*, Bushe-Fox.

² *F.R.S.* XIII. 134.

³ *The Excavations at Richborough*, Bushe-Fox.

16. Small grey beaker rim, hardly curved. Diameter $2\frac{5}{8}$ in. In Approach rubble.

17. Moderately everted grey olla rim. Diameter $4\frac{5}{8}$ in. In Approach rubble.

Lids

18. Buff-coloured lid of pipe-clay mixture. Diameter 10 in. Early shape. In Approach rubble.

19. Lid of buff pipe-clay ware. 8 in. in diameter. Old ground-level at north-west corner of G.

20. Lid of black fumed and coated ware with a darker slip. Not illustrated. The edge is wanting. In Approach rubble.

21. Lid of fumed grey ware. Early shape. 11 in. in diameter. In Approach rubble.

22. Fragment of a native-made and fired cooking-pot. It has been made on a slow wheel and is of poorly prepared clay. Not illustrated. On old ground-level outside north-west corner of Building G.

23. Base of a large coarse light buff olla. The exterior of the base shows that it has been taken off the wheel with a wire, the modern method. The upper part has been chipped round to a sort of tazza shape. This pot was found buried upright, showing fire stains and containing charcoal. Diameter of base $2\frac{1}{2}$ in. Upper portion 8 in. in diameter 2 in. above base. In rammed rubble surface at north-east corner of Building G.

24. A smaller specimen of exactly the same shape, but of softer-fired ware, found near the same building and set in the same way, in 1940. Base diameter 2 in. Near Building G at old ground-level.

REPORT ON STONES USED IN BUILDING G

BY K. P. OAKLEY

The tesserae found are made of the following stones:

Brown. Hard clay, probably Wealden series, exposed, for example, in the Arun valley north of Pulborough.

White. Chalk rock from the South Downs.

Yellowish-grey. Lower Greensand chert, probably from Pulborough district.

The slab of yellowish-grey (probably a piece of *Opus sectile*) is of the same claystone.

REPORT ON THE NON-MARINE MOLLUSCA

BY A. S. KENNARD, A.L.S., F.G.S.

Two species were obtained, viz.:

Helix aspersa, Muller. Two specimens from the under-face of concrete flange of South-east corner of Building G. Over the greater part of England this common living form was quite unknown until Romano-British times, when it was probably widely introduced as an article of food, and it is nearly always present on Roman occupation sites.

Cocilioides acicula, Muller. Several specimens from the under-surface of a tile set flat in rammed rubble spread at north-east corner of Building G. This is a subterranean species, and judging from their condition and position they are contemporary.