

XV.—*Excavations at Caerwent, Monmouthshire, on the Site of the Roman City of Venta Silurum, in 1899 and 1900.* By A. T. MARTIN, *Esq., M.A., F.S.A.*, and THOMAS ASHBY, *Jun., Esq., M.A., F.S.A.* With Notes on the animal and other remains found. By ALFRED E. HUDD, *Esq., F.S.A.*

Read 17th January, 1901.

At a meeting of the Society on 16th February, 1899, Mr. A. T. Martin, in his Report as Local Secretary for Gloucestershire, gave an account of some recent "trial excavations" at Caerwent, and formulated a scheme for the systematic exploration of the site. The suggestion having been approved and encouraged by the Society, it was shortly afterwards decided, at a meeting of local antiquaries held at Clifton, to appoint a Committee, and to start a Fund to be called the "Caerwent Exploration Fund." At a meeting held at Caerwent on 11th September, 1899, Lord Tredegar was elected President, and other officers and a Committee were appointed. Also an Executive Committee, consisting of Messrs. Alfred E. Hudd, A. T. Martin, J. E. Pritchard, and John Ward, was elected (to which Mr. Thomas Ashby, jun., was added later), under whose superintendence the excavations have been made.

In presenting this first detailed account of the results of their work, the Executive Committee wish to express their acknowledgment for the help which has been afforded by the Society of Antiquaries, and their obligations for the support which has been given to the undertaking by several local antiquarian societies and by a large number of subscribers. The Executive Committee wish also to gratefully acknowledge the assistance they have received from the directors of the Silchester Excavations, who have always been ready to afford advice and suggestions on any difficult point.

Work was begun in August, 1899, in the south-west corner of the city (fig. 1), in a field belonging to the executors of the late Mr. Lysaght, who have not only made these long-desired excavations possible by their permission to dig, but have afforded assistance in other ways.

Up to the present date three acres have been completely explored, as well as some portion of the city wall. In these three acres are included portions of (probably) six houses. Of these only two are completely within the area at present in our occupation, and it has therefore been decided to present now an account

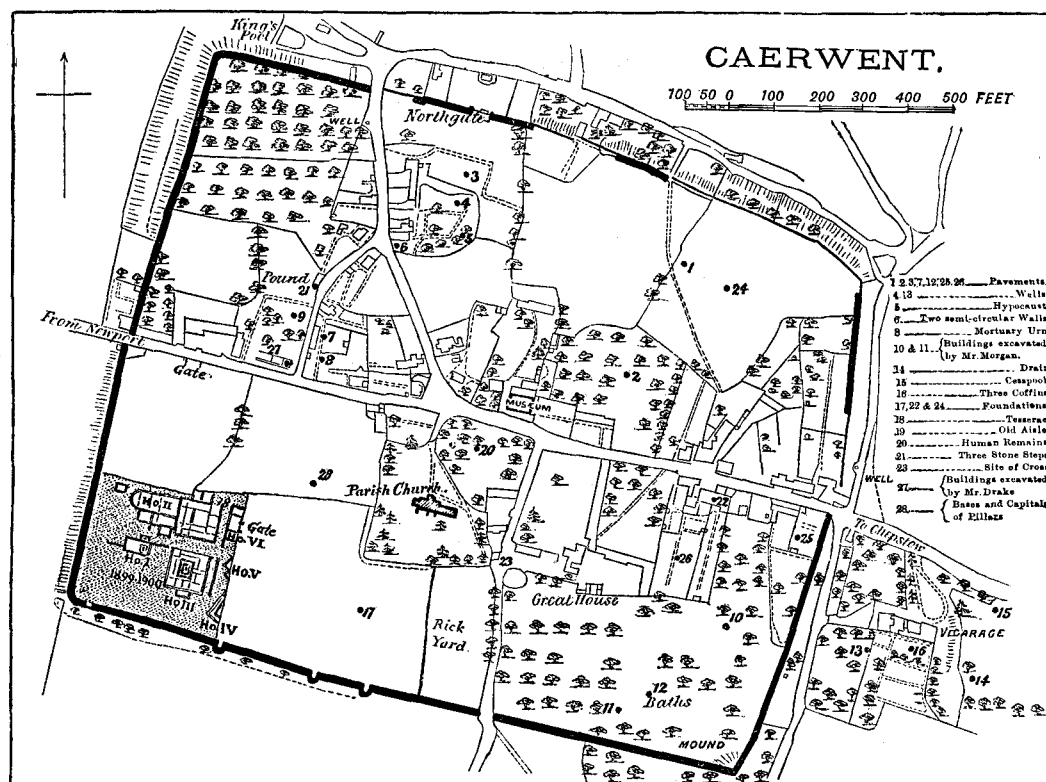


Fig. 1. Plan of Caerwent, showing portion excavated in 1899 and 1900.

only of these two houses, and to defer the description of the others till the neighbouring plots come into our hands and the ground plan of these houses is completed.

It has also been thought more desirable to defer the description of the city wall until further explorations are made, which it is hoped may clear up some difficult problems presented by differences in construction in the parts already uncovered.

The trenches which were dug in the extreme south-west corner of the city revealed no walls of any kind, but at a depth of from three to four feet a layer of rich black earth was found which contained numerous fragments of pottery of the coarser kind, bones of domestic animals, coins, and fragments of articles of domestic use. These trenches were dug diagonally from south-west to north-east, and it is noteworthy that the character of the articles found tends to improve as the distance from the city wall increases and as the houses are approached.

The black earth nowhere extends to a greater depth than 6 feet 9 inches from the present ground level when the natural soil is found, and where this depth is reached there is usually a shallow pit or pocket. A section from north to south taken 100 feet from the west wall shows that the ground gradually slopes down to the south, and affords some indication of the level in Roman times. On the whole the contour of the ground can have altered but little, though there has doubtless been a tendency for the soil to fall down hill and to render the present slope less steep than formerly. It would also appear that this downward slip has been arrested by the city wall, against which the earth has accumulated. The black earth layer is no doubt due to this part of the city being waste ground where rubbish was deposited, and the shallow pits or pockets may only be natural depressions in the ground, where the rubbish has tended to accumulate.

Eastwards the black earth practically disappears within 150 feet from the west wall, and northward there are but few traces to be found beyond 100 feet from the south wall. In no case, however, does it appear to extend within 30 feet of the wall itself. This fact may possibly be due to the existence of a road running parallel with the wall, but no definite evidence of such a road could be found, though there are some doubtful traces of a gravelled road against the west wall opposite House No. 1^a and along the south wall.

In the angle between Houses Nos. 1 and 3 there were many apparent indications of pitching, and occasional indications of a wall, but in all cases these were probably due to the accidental collocation of stones which had doubtless originally come from the ruins of these houses.

House No. 2 is bounded on the north by a well-defined pitched road 25 feet in width, and on the east by a gravelled road 20 feet wide. This last road is interrupted or diverted towards the south by the eastern corridor of House No. 3, but inasmuch as it is in line with a road of which there are indications much

^a The term "house" is, here and elsewhere, used for convenience, without its being intended to imply that House No. 1 was, strictly speaking, a house at all.

further to the north, and as these roads are roughly parallel with the west and south walls respectively, it seems probable that Caerwent, like Silchester, was divided into *Insulæ*. If this hypothesis turns out to be correct, this *insula* would be nearly square, with sides of about 336 feet (measuring from the city walls), dimensions which correspond fairly closely with those of some of the *insulæ* at Silchester. Assuming then for the present that we have here an *insula*, a large portion of its area is filled by Houses Nos. 1, 2, and 3. One corner of the House No. 2 and the north-west part of this *insula* are on ground which will not come into our hands till next year.

House No. 1 is situated on the western side of the *insula*, and consists only of two rooms, with a third compartment at its north-east corner, which, although probably of different date, may be described in connection with this house.

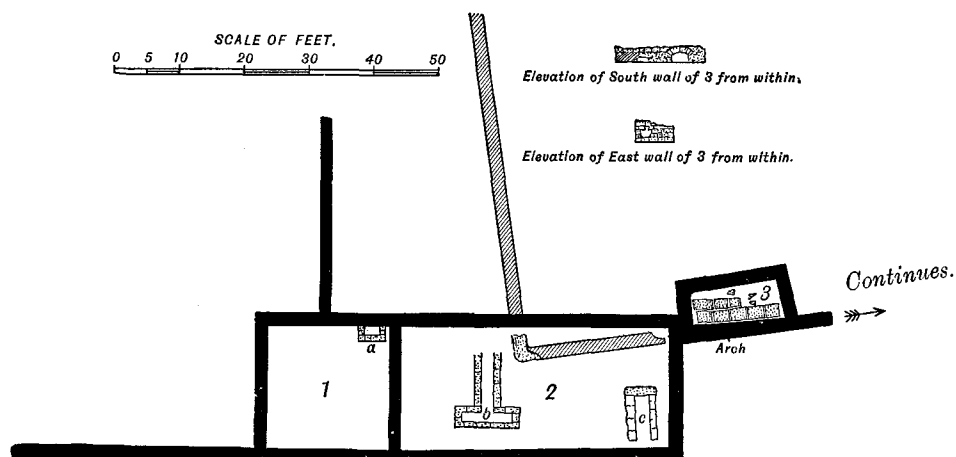


Fig. 2. Ground plan of House No. 1.

The southern wall of this house is prolonged for 42 feet towards the west city wall. The footing of this wall is covered with rough slabs of flat stone, and similar slabs are found on the western portion of the south wall of Room 1.

Room 1 is rectangular, and measures 19 feet 3 inches by 19 feet 8 inches. In its north-eastern corner on the inside of the north wall is a rectangular space (*a*), bounded by a kerb of stones 4 feet in length. In the enclosed space there was a good deal of cement. This may possibly have been part of a step leading into the room, but it seems more probable that it was a hearth. In the north-west corner and also on the east side a quantity of soot and carbonised matter was found, and nearer the centre a large number of roofing stones. The floor appears to have been rammed gravel paved with rough flags of stone. Externally from the north wall of this room a wall runs at right

angles 31 feet 6 inches towards the north. This was probably the west wall of another room, or rooms, as there are clear traces of a good *opus signinum* pavement in the south-west angle, but the other walls have disappeared. Westward of this wall there were traces of a floor of rammed gravel.

Room 2 is very nearly rectangular, being 41 feet 6 inches long, 19 feet 10 inches wide at the west, and 19 feet wide at the east end. It is built across the south-west angle of a room of earlier date, of which the walls are broken through to make way for its walls on the north and east. In the north-western corner are traces of a floor some 7 inches thick, which appears to have been *opus signinum*. This room is remarkable as containing two furnaces, one (*b*) with the entrance facing north and the other (*c*) with its entrance facing south.

Furnace (*b*) is of peculiar shape, resembling an inverted T, the channel or entrance being 9 feet 4 inches long and 2 feet 2 inches wide, diminishing to 2 feet where it passes into the furnace itself, which is only 1 foot 6 inches wide and 8 feet 4 inches long. It is built of rough walling. A large stone which was found at the entrance into the head of the T may have bridged the opening. The furnace contained a quantity of ashes, which have been examined and pronounced to be wood ash.

In the south-east corner of this room is the other furnace (*c*) composed of two sides or cheeks bridged over at the northern edge by a single stone. These sides are formed by large slabs of stone set up on edge. They are crowned by a single course of walling. Inside were quantities of charred wood. One *tessera* was also found here, and a quantity of big stones, apparently forced in when the wall fell.

All the walls of this house, except the entire south wall and the southern portion of the east wall of Room 2, are of good workmanship and solidly built; the portions noted as exceptions are somewhat more irregular, but this irregularity is due to the wall having been destroyed down to the footing course.

Nothing was found in these rooms to afford a clue to their use, but it seems most probable that they were used as a factory, of which the furnaces were an important part.^a

^a The matter from these furnaces was afterwards examined and analysed by Mr. Gowland, F.S.A., who found no traces of any metal. There were, however, strong traces of ammonia, which would indicate that, whatever was their original use, the furnaces at a later time were used for deposits of refuse, or even possibly as latrines.

Among the few interesting objects that were found here was a pocket knife, with bronze handle and part of the iron blade.

Immediately outside and adjoining the north-east corner of Room 2 was found a roughly rectangular compartment resembling a bath or tank. The north side measured 13 feet 3 inches, the south side 13 feet 8 inches, the east side 5 feet 10 inches, and the west side 5 feet 5 inches, and it was from 2 to 3 feet in depth from the top of the walls as they now exist. It is bounded on the south by the prolongation of the older wall already mentioned as having been cut by the eastern wall of Room 2. This wall, however, is somewhat peculiar. Near the western end it is pierced by a neatly turned arch 2 feet 9 inches wide and 1 foot 4 inches high, and the piers of this arch go down nearly a foot deeper than the rest of the wall. Towards the east this wall consists only of one course resting on the natural soil; elsewhere it has been carried down to the bottom of the bank. (See elevation in fig. 2.) When the arch was cleared it was found that flat stones were cemented to the soffit; these subsequently fell. Nearly the whole of the floor of this compartment is paved with flat stones as shown in the plan. The east wall is pierced by a somewhat irregular hole, which must have been made through it after the wall was built. (See elevation in fig. 2). Lying partly under the arch and partly inside was a flat stone 2 feet 4 inches by 1 foot 8 inches, which apparently was not *in situ*. This was covered with fine sandy earth with a yellow deposit, on which were many stones, apparently the debris of the walls.

The whole compartment was nearly full of fine sandy earth, among which was found wall plaster, slag or cinders, a portion of the collar or joint of an iron pipe, fragments of ridge tiles, and one perfect pot of black ware. The excavation south of the arch revealed only fragments of red tiles.

The sandy earth has been examined by a chemist, who pronounces it to be merely the earthy deposit left by standing water, with traces of hydrated oxide of iron. This so far favours the theory that this compartment was a tank, and the hole in the east wall might very well have held a supply pipe, but the arch in the south wall is much too large for the drain of a tank of this size, and there were no indications of any means of blocking it; moreover, the water in the tank would have percolated through the eastern part of the south wall. There are no traces of the action of fire either in the arch or in the interior. Possibly it was the latrine of House No. 1.

House No. 2, as already stated, has not yet been completely excavated, and its description is therefore postponed till the next Report. It is a large and

important building, of which upward of forty apartments have been at present uncovered, and contains remains of some good tessellated pavements, baths, and other interesting features.

To the south of House No. 2, and separated from it by a space about 30 feet in width, is another house which we have called House No. 3. This intervening space was at first thought to have served in all probability as a street, but no traces of this were found; the trenches, which were dug to a depth of 5 feet 6 inches, revealed nothing but a considerable amount of common pottery, there being in three or four cases sufficient fragments to complete a whole pot. Further, at the east end this space is closed by the prolongation of the extreme eastern wall of House No. 2, until it comes almost in contact with the north side

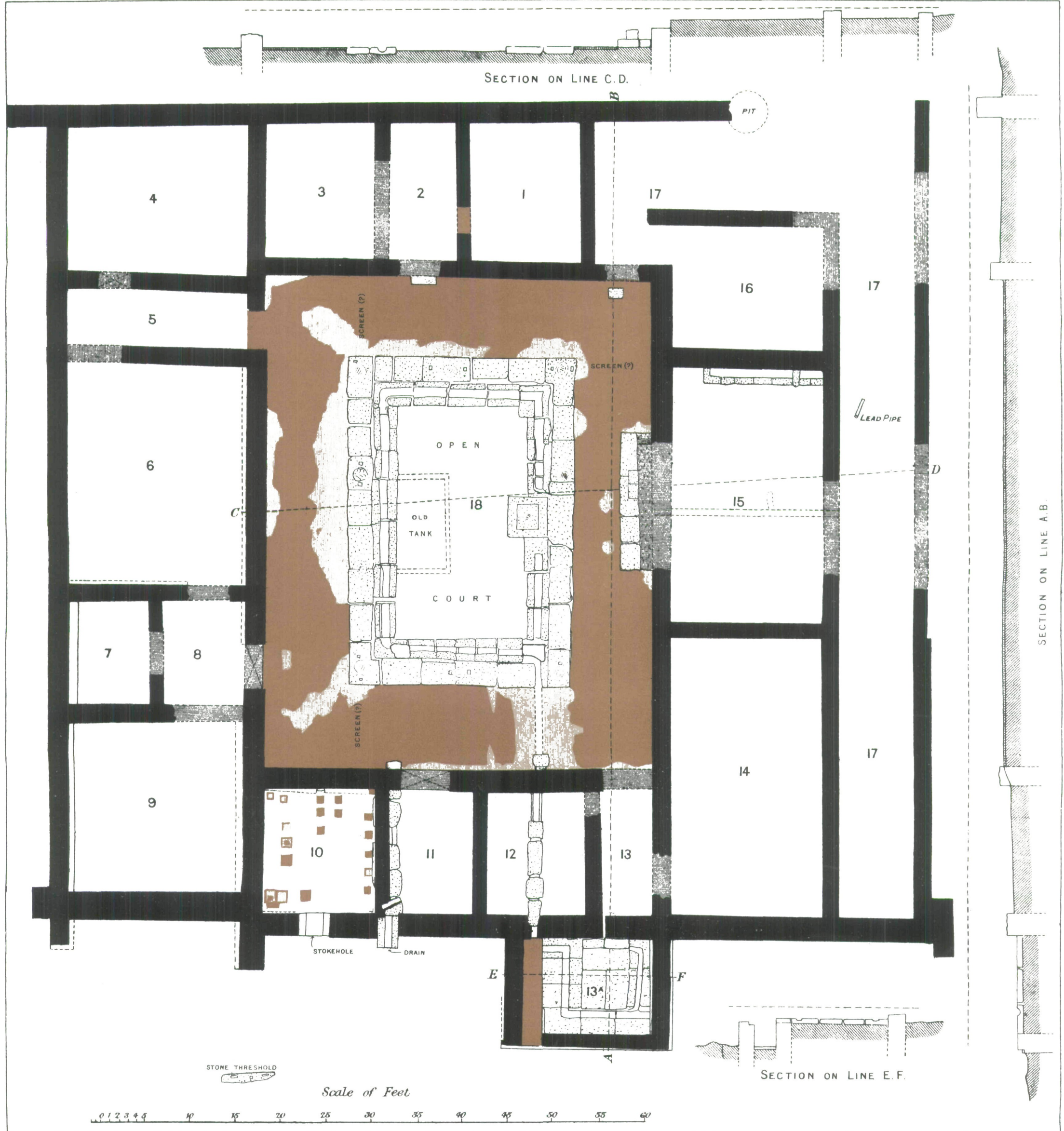


Fig. 3. View of remains of peristyle in House No. 3 from the south-west corner of Room 10.

of House No. 3 near the north-east angle. This wall does not run quite straight, but is broken 6 feet 9 inches from the south end of House No. 2, and the space intervening between this point and the wall of House No. 3 is closed by a wall set back some 18 inches; 11 feet 10 inches beyond this it is pierced by an aperture 6 inches by 5 inches, formed by two ridge tiles of pottery.

House No. 3 is also connected with House No. 1 by a wall starting from its north-west angle in prolongation of its main north wall, which after 67 feet 6 inches falls into the south wall of the tank at the north-east angle of House No. 1.

House No. 3 is of a type perhaps unique in England as regards its ground plan. (Plate XL.) It may be compared with House No. 1, *Insula XIV.*, at Silchester,



CAERWENT. — PLAN OF HOUSE NO. 3.

to which it bears some resemblance.^a The peristyle, however, though not the rest of the house, is Italian in plan. The main entrance was apparently on the east. We first pass into a corridor (17) running along the entire length of the east side and a part of the north side, and paved with gravel; crossing this, we pass through another room (15), and descend by a flight of three steps (of which only the lowest is preserved) into a large peristyle, measuring 52 feet 4 inches from north to south by 42 feet 8 inches from east to west. Though the peristyle is oblong



Fig. 4. Section of capital of column from peristyle of House No. 3. ($\frac{1}{8}$ linear.)



Fig. 5. Capital of column from the peristyle of House No. 3.

the house itself is almost square, measuring 90 feet 10 inches north to south by 94 feet 2 inches east to west. On all four sides of this peristyle was an ambulatory of an average width of 9 feet, paved with *tesserae* of brick. The lean-to roof which covered this ambulatory was supported by columns which rested upon solid stone slabs averaging 2 feet 6 inches wide, varying in length from 3 feet to 4 feet 6 inches (except on each side of the entrance on the east where they are smaller, only 1 foot and 2 feet long respectively), and 11 inches in thickness, resting on a

^a See the ground plan in *Archaeologia*, vol. lv. pl. xi.

foundation of rough stones 3 feet deep. The columns were ten in number, and stood 11 feet apart from centre to centre. This may be deduced from the arrangement and shape of the peristyle, from the fresh marks of chiselling which still remain in one or two places where the columns stood, and from the occurrence on each side of the space occupied by each column (except on the east side, where these holes do not occur) of a small hole $3\frac{1}{2}$ inches by $2\frac{1}{2}$ inches by 2 inches deep, intended probably to support some sort of wooden screen between the columns, which was continued in three places across the ambulatory (see plan). The occurrence near the top of the shaft of one of the columns of a somewhat similar hole lends colour to this supposition. Of the columns themselves several fragments exist. The most perfectly preserved (figs. 4 and 5) includes in one piece the capital, which has simple Romano-Doric mouldings of good style, and part of the shaft with the "collarino."^a Below the "collarino" is the hole just mentioned as having possibly served to support a wooden screen. At each end is a square dowel hole. The shaft is 1 foot 5 inches in diameter, while the abacus measures 2 feet 1 inch square. The "collarino" is $2\frac{1}{2}$ inches below the bottom of the capital. The height of the whole piece is 2 feet $5\frac{1}{2}$ inches.

A capital of similar dimensions was found at the south-west corner of the peristyle, but in this case the "collarino" and upper portion of the shaft were in a separate piece. A third capital was found a little further north, belonging to the second column on the west side, with a large drum of the column itself. The capital is, however, smaller than the other two, the abacus measuring only 1 foot 11 inches square, while the diameter of the shaft is 1 foot 3 inches. With this measurement agrees also the diameter of the large portion of the column, which, in 5 feet of length, increases from 1 foot 3 inches to 1 foot $4\frac{3}{4}$ inches.^b It is very likely, therefore, that the columns at the angles were slightly larger. A part of a drum of another column was found close to the baths on the south side of House No. 2. It measures 1 foot 3 inches to 1 foot 4 inches in diameter at the top;

^a This piece was discovered at the extreme north-west angle of our plot at a distance of 4 feet 2 inches from the lowest set-off of the city wall. It had been placed upright with the capital downwards upon a layer of loose stones, probably in order to serve as a boundary stone, as the top of it was only 1 foot 9 inches below the modern ground level.

A piece precisely similar both in mouldings and in dimensions (possessing both capital and "collarino," the interval between which is $3\frac{1}{2}$ inches), but only 1 foot 10 inches in height, was found upside down in July, 1901, close to the west city wall, and seems certainly to belong to this house.

^b Upon this shaft a Roman schoolboy has cut the first four letters of the alphabet, the curve of the D being only faintly scratched and not cut out.

$3\frac{1}{2}$ inches below the top comes the collarino. The piece is 1 foot $4\frac{1}{2}$ inches to 1 foot 5 inches in diameter at the bottom, where it is broken off; its total length as preserved being 1 foot 5 inches. On the north side of the courtyard of House No. 3, near the north-east angle, another drum of a column was found, 3 feet 6 inches in length, the diameter increasing from 1 foot $4\frac{3}{4}$ inches to 1 foot 5 inches. The smaller end was lying towards the north. The columns seem to have had no bases.

The line of blocks of stone which support the columns is broken on the east side, opposite the main entrance, for an interval of 5 feet 6 inches; this is yet another proof that the number of columns was ten. Here there is a large stone slab 4 feet 6 inches square. It bears obvious traces of having served as the base of an altar or of the pedestal of a statue, which measured 2 feet 4 inches by 2 feet 8 inches.

The space within the peristyle was open to the air. All round it, contiguous to the blocks of stone which carried the columns, runs a gutter averaging 10 inches wide, cut in slabs of stone of similar size to those supporting the columns, which carried off the water from the pent-house roof of the ambulatory into two drains. One of these runs from the south-west angle of the peristyle (where it has a small sediment pit) under the south side of the ambulatory and along the east wall of the hypocaust 10, falling out into the open at the south-east angle of this room. This drain is a very fine and solid piece of masonry, the blocks in which it is hollowed being well worked. Where it passes under the ambulatory the concrete which supports the tessellated pavement is sufficiently strong to serve as its roof, but further on it is covered with slabs of stone, which are worked into the east wall of the hypocaust.

The other drain runs from the south-east angle of the peristyle, through Room 12 to the latrine 13A, and is smaller, being $9\frac{1}{2}$ inches wide and 11 inches deep. It has stone slabs above and below, and is cemented at the sides. The tessellated pavement of the ambulatory has been removed where it passes under it, very likely upon an occasion when the drain required cleaning in late Roman times, but that it is not a later addition is shown by the fact that the north wall of Room 12 is carried over it upon a large tile.* Probably the pavement was removed in order to clean the drain. This drain served to flush the sloping channel of the latrine. In it was found a finely preserved small chopper or bill-

* There is, however, some trace of reconstruction on the south side of this wall, and if the wall has been cut to allow the passage of the drain the drain may still be a later addition.

hook. At the north-west corner of the peristyle a broken part of one of the drain slabs was taken out and turned up on end to serve as a kerb to prevent an overflow of water at the angle.

The central space of the courtyard may have been occupied by a garden; some traces of a gravel floor appear on the south side, but nothing very definite. A quantity of clinkers and iron slag was found on the surface in the centre, and some coal.

Upon the west side of the courtyard, in the centre, an interesting discovery was made. It was found that, at a period at any rate anterior to the laying of the gutter round the courtyard, though not necessarily previous to the existence of the peristyle, there was here a rectangular tank, lined with puddled grey clay about 9 inches thick, within which was planking, no remains of which existed, though the shape and size of the boards was clearly traceable, and the holes for the posts at the corners 3 inches to 4 inches square were to be seen. The tank measured 9 feet 5 inches in length from north to south, and 7 feet 8 inches from east to west; for 2 feet 2 inches of its width it runs under the stone blocks of the gutter. It was filled in with reddish yellow clay when the gutter was laid and the courtyard formed. The tank is 3 feet 3 inches in depth, and the top of the puddling is about 1 foot below the floor of the courtyard.

At the bottom of the tank was found a piece of lead pipe, probably merely a waste piece, as it was lying loose, and is too much crushed in to be of any use; also many oyster shells, some charred wood, a long bronze pin, half of a large bronze clasp for holding a cloak together, and some fragments of pottery, among which are noticeable the neck (internal diameter $4\frac{3}{4}$ inches) of a large vessel in grey clay of fine design, part of a very large *mortarium* in rough red pottery, and part of an ordinary red pot, which had been broken by a tile which had fallen on it, to which its fragments still adhered.

A depression in the tessellated pavement of the west ambulatory seemed to point to the existence of a pit prior to the construction of the house, but excavation failed to reveal traces of anything of the kind.

The chief entrance to the courtyard was, as has been said, on the east side. Here there is a line of stone blocks with a total length of 14 feet 10 inches, which vary in width from 1 foot $7\frac{1}{2}$ inches at the north to 2 feet 4 inches at the south end. There is an earth and cement filling between the blocks and the wall, which varies from 1 foot 2 inches at the south end to 2 feet 1 inch at the north end, so that the total width of the step is 3 feet 6 inches at the south and 3 feet $8\frac{1}{2}$ inches at the north end. The height of the step is $9\frac{1}{2}$ inches, and the

tread 10 inches to $10\frac{1}{2}$ inches. Upon it are two small blocks, the remains of a second step, $9\frac{1}{2}$ inches in height and 1 foot 1 inch in width. The distance from the front of the steps to the east wall of the courtyard is 2 feet 9 inches, and the level of the floor of the room (No. 15) beyond this wall is 2 feet 5 inches above that of the tessellated pavement, so that the steps were probably three in number, each about $9\frac{1}{2}$ inches in height with a tread of 10 inches to $10\frac{1}{2}$ inches. Other entrances exist on the north side into Rooms 2 and 16; in both cases a block of stone has been roughly laid as a step upon the tessellated pavement; the rise is 11 inches into Room 2 and 1 foot $5\frac{1}{2}$ inches into Room 16.^a On the west side there are entrances from the court into Rooms 5 and 8,^b and on the south side, on the level, into Rooms 11 and 13.^c All these rooms, with the exception of 11, 15, and 16, are passage ways, and served as means of communication between the courtyard and the other rooms of the house. These did not for the most part communicate with the courtyard directly, nor with one another, nor yet with the corridor (No. 17), which runs along the east and part of the north side of the house, and which, as regards the internal arrangements of the house, seems to have been of no importance whatsoever.

Room 2 was evidently nothing but a passage, into which opened Rooms 1 and 3, neither of which has any other doorways. So also was Room 5, into which opened Rooms 4 and (probably) 6, the latter having also an opening on its south side into Room 8.

Room 7 is merely the western half of Room 8, divided from it by two small partition wing walls, probably a later addition. Room 8 was another passage way, into which opened Rooms 6 and 7 and 9 also. Room 13 was yet another passage, giving access to Rooms 12 and 14, and also to the latrine before its south end was blocked by a later filling wall, by which the latrine was shut off from the house, unless, indeed, this wall was the foundation of a step. Whether there was any entrance to the house itself on any side besides the east side it is impossible to say, as we have found no certain traces of any such doorways.

The rooms which lie on all four sides of the courtyard are for the most part

^a It was impossible to tell whether the north wall of Room 16 was ever prolonged westwards as far as the east wall of Room 1, or whether there was a doorway into Room 17 at the point where it stops.

^b The floor of Room 5 is 4 inches above the tessellated pavement, while that of Room 8 is on a level with it.

^c Room 10 was probably also entered from the courtyard directly, but the level of the floor could not be ascertained exactly.

comparatively small, and it has been suggested that the house may have been an inn. The idea finds some confirmation in the rather exceptional size of the latrine.^a

The rooms are paved as follows: Rooms 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, with hard gravel concrete, with a quarter round bead moulding in the angle between the floor and the walls, generally about 3 inches in height; Rooms 11, 13, 14, 16, 17, with rammed gravel. Room 15 has two floors, one 10 inches above the other, the upper of *opus signinum*, the lower of gravel concrete.

In many of the rooms and in the ambulatory traces of wall plaster have been found. Most of this was apparently white, with broad crimson lines; in Room 6 some yellow and green colours were also found.

Room 10 (the hypocaust) has had no less than three successive coats of plaster, the design being entirely different in each case. At first it was decorated with dark yellow or mustard colour with a green or red band $\frac{5}{8}$ inch wide, between two white bars $\frac{1}{8}$ inch wide. The next coat was a lighter yellow, with crimson band; while the third was white, with a broad crimson line, finer lines of various other colours, and leaves, etc. roughly sketched in green.

It is curious to notice that in some pieces we get all three coats superposed the one on the other, while in others we only get two or one in the same thickness of plaster. It is clear that when the new coat was applied, the old had already been to some extent broken away. Where the old coat remained, its surface was hacked in places to make it take the new coat more easily and hold it more firmly.

Room 2 shows traces of a similar change in decoration, some pieces having been found with the earlier coat painted yellow, while the later colouring was

^a The dimensions of the rooms are: Room 1, 12 feet 4 inches by 14 feet 6 inches; Room 2, 7 feet 3 inches by 14 feet 6 inches; Room 3, 12 feet 1 inch by 14 feet 6 inches; Room 4, 19 feet 9 inches north side, 19 feet 6 inches south side, 16 feet 8 inches east side, 15 feet 4 inches west side; Room 5, 6 feet 2 inches by 19 feet 6 inches; Room 6, 23 feet 10 inches west side, 23 feet 5 inches east side, by 19 feet 6 inches north and south sides; Room 7, 11 feet 4 inches by 8 feet 4 inches; Room 8, 11 feet 4 inches by 9 feet; Room 9, 17 feet 11 inches west side, 18 feet 4 inches east side, by 19 feet 6 inches north and south sides; Room 10 (the hypocaust), 12 feet 3 inches by 13 feet 5 inches; Room 11, 9 feet 1 inch by 13 feet 5 inches; Room 12, 10 feet 6 inches north side, 11 feet 1 inch south side, by 13 feet 7 inches east and west sides; Room 13, 5 feet 5 inches north side, 4 feet 11 inches south side, by 13 feet 5 inches east and west sides; Room 13A (latrine), 12 feet by 10 feet 4 inches; Room 14, 29 feet 10 inches by 16 feet 6 inches; Room 15, 27 feet 5 inches by 16 feet 4 inches; Room 16, 13 feet 1 inch by 16 feet 6 inches; Room 17 (the corridor), east wing, 86 feet by 8 feet 2 inches; north wing, 35 feet 2 inches by 9 feet 6 inches—9 feet 10 inches.

white with a red band. In Room 4 also there are two coats of plaster *in situ*, the upper one painted yellow, the lower apparently uncoloured, and two shades of red have also been found upon pieces from the courtyard. Room 15 has also been painted in two layers, the lower yellow, the upper white, with lines in green, brown, and other colours upon it.

The hypocaust (Room 10) had its floor supported by *pilæ* of tiles, of which the lowest tile only remains. They are of two sizes, the one 11 inches, the other 16 inches square; upon them were laid smaller ones 7 inches square. In many places where the tile itself is gone, its bedding upon the gravel concrete of the lower floor was still to be seen. The opening, 1 foot 8 inches in width, through which fuel was inserted in this hypocaust, is on the south outer side, this being the only artificially heated room in the house. The flues which ran up the walls can be traced in the centre of the north wall and in the north-east angle. On the north and east sides there is a projecting ledge which gave additional support to the floor; this is absent on the west side, while the south wall is not preserved to a sufficient height to enable one to tell whether it existed there or not. A large block of stone, 6 feet 3 inches in length, lying about 15 feet away, and having holes for two doorposts and a bolt in the centre, was very possibly the threshold of the entrance to a small fenced woodyard.

Inside the north wall of Room 15 there is a curious projection, which may very likely be the foundation upon which stood a dresser. The north wall of the room, where it falls inside it, is roughly stuccoed, more roughly than outside it, and the outer wall of the projection is also plastered.

On the floor of Room 14 was found an iron dagger of unusual type with a bone handle (fig. 6), and a large piece of Samian pottery. In Room 16 was found the upper stone of a quern 1 foot 3 inches in diameter, with a circular aperture $3\frac{1}{4}$ inches in diameter; the outer edge is $3\frac{1}{2}$ inches thick; on the upper side it has a hole for a wooden handle 3 inches long, 2 inches deep.^a

The latrine (13a) now needs description. It is paved with large slabs of stone, in which is hewn a gutter 4 inches in width on the east side and 8 inches on the other two, running round the east, south, and west sides; the first two of these served simply as an urinal, while the west side was a latrine as well. Here there is a sloping channel 1 foot 11 inches wide, and 1 foot 8 inches to 2 feet 6 inches deep, paved with large tiles, over which a rail may have been fixed as a seat; this channel was flushed by the smaller drain from the south-

^a See *Archæologia*, lvi. 240, fig. 1, for a similar example found at Silchester.

east angle of the courtyard (*supra* p. 304). A good example of this arrangement, which is usual in Roman latrines, may be seen in the so-called Hospitium of the Villa of Hadrian, near Tivoli.^a A search for the pit of this latrine was made, but was unsuccessful. Some fragments of pottery, bones, etc. were found, but nothing in the way of a definite cesspit. Nor was there any indication as to how the drainage was carried away and through the city wall.

An interesting discovery was made as to the water supply of this house. Through the centre of Room 15, under the main entrance to the house, about 9 inches below the lower floor, ran a channel sloping downwards, 8 inches in width, lined in places with rough stones. In this were found five circular iron collars, $3\frac{1}{2}$ inches in diameter, 2 inches in depth, $\frac{1}{4}$ inch in thickness, obviously used to form the junction between wood pipes, as the wood still adheres to them on both sides. There is a projection inside and out $\frac{1}{8}$ inch to catch the log end. The collars were set in the middle of the solid part of the wood. The first was found close to the east wall of Room 15, and the next two were found 6 feet further west. One was found in the channel, which here had no stone lining, the other about 1 foot to the north of it, so that possibly the piping turned off northwards here. It is worth noting in this connection that another collar was found close to the south-east angle of House No. 2.^b

On the other hand, two pieces of lead pipe 5 feet 8 inches and 1 foot $3\frac{1}{2}$ inches long (diameter 2 inches) and a strip of lead were found in the corridor (No. 17), as if the line of pipes had run northward along it.

The next two collars were found at distances of 6 feet 9 inches and 11 feet 4 inches respectively from the two found together, the last being found on the west side of the west wall of Room 15, under the earth between this wall and the large stones of the lowest step. There is an aperture through the west wall of Room 15, about 5 inches high by 9 inches wide, but the exact dimensions are not certain, the stones having apparently slipped.

Besides the collars, several strips of lead were found. These apparently served as patches for the wooden pipe; some of them have wood still adhering to the nails which fixed them. One of these was found close to the easternmost collar, and measures 11 inches by 9 inches. A hole has been burst in the centre of it, possibly by the pressure of the water.

^a Compare Winnefeld, *Jahrbuch des K.D. Arch. Instituts, Ergänzungsheft* iii. (1895), Taf. ix. a, and p. 36.

^b See *Archaeologia*, lv. 422, for particulars of a similar discovery at Silchester.

Another was found close to the fourth collar, 2 feet $8\frac{1}{2}$ inches east of the west wall of Room 15, measuring 6 inches by $3\frac{3}{4}$ inches; and another in the corridor (17) to the east of the wall dividing 15 from 16, about 1 foot from the west wall of 17, measuring 18 inches by 4 inches, with two nails at one end of it, to which no wood adheres.

One of the stones used to line the channel which carried the pipes through Room 15 is a fragment of a tablet (probably sepulchral), with a swallowtail (*ansa*) at each end, on which are some scratches possibly intended for ornament. The fragment measures $7\frac{1}{2}$ inches by 6 inches by 2 inches in thickness. The letters are $1\frac{7}{8}$ inches high. The letters that remain are, unfortunately, few, and represent but a small part of the whole inscription, which probably contained six lines. Further search has not, however, led to the discovery of other pieces. It is *possible* that the numeral may refer to the second legion, part of which we know to have been quartered at Caerleon during most of the Roman occupation of Britain.

A rubbish pit was discovered in the line of the north wall of the house, which had here been removed, in the north wing of the corridor (17). Nothing of importance was discovered, only burnt material, pottery, bones, and oyster and snail shells. The earth had an unpleasant, sour smell. It is noticeable that the west face of the north end of the east wall of 17 shows no sign of a return, and it may be that the north end of 17 was open.

Not very far from the south-east corner of the house a large rubbish heap was traceable; many oyster shells were found, but little of importance except fragments of a "Samian" bowl of fine workmanship, about 8 inches or 9 inches in diameter, with figures under arches, probably twelve in number when the bowl was complete, and apparently representing Hercules with different attributes typifying his twelve labours. The sides of the bowl are at first straight, and do not commence to curve for $2\frac{1}{2}$ inches from the top, and then not very rapidly. This type of bowl belongs probably to an earlier period than does that with lower and more curving sides. The Roman ground level was here 3 feet 4 inches below the present soil.

NOTES ON THE ANIMAL AND OTHER REMAINS FOUND DURING
THE EXCAVATIONS AT CAERWENT, 1899-1900.

As usual on Roman sites, very few human bones were found during the excavations at Caerwent, but there were numerous remains of oxen, pigs, dogs, deer, and other animals, and of oyster and other shells. These were found all over the area excavated, both inside and outside the houses, from a depth of only a few inches to the ancient Roman level some 4 or 5 feet beneath the present surface of the field.

In House No. 3, outside the base of the wall to the north-east of the courtyard, some fragments of a human skull were discovered in September, 1899, which, from the thinness of the bone and the condition of the sutures, is supposed to have belonged to a comparatively young person. No remains of the teeth or jaw-bones were found.

In House No. 2, in August, 1900, at the bottom of a well about 17 feet deep, some human bones were discovered, covered by a number of large stones. These have been examined by Professor Sidney Reynolds, of Bristol University College, who reports as follows :

“ The bones are remains of two or more adult individuals of moderate height. The best preserved bones are a tibia, 13 inches long, and a humerus $11\frac{1}{4}$ inches. The incisor and canine teeth are very greatly worn down.”

The animal remains were in a very fragmentary condition, but in considerable quantity. They have been examined by Professors Boyd Dawkins, Lloyd Morgan, Sidney Reynolds, and others, and we are indebted to the last-named gentleman for considerable assistance in identifying the remains, which represent eleven quadrupeds, four birds, one reptile, and some half-dozen shells.^a

1. Ox (*Bos longifrons*, and probably a smaller species).—Numerous horn-cores, portions of skulls, jaw-bones, teeth, and other remains were found, some with remains of charcoal and burnt material at the bottom of pits, the bodies having apparently been cremated.

^a Since the account of the animal remains was written some bones found in House No. 2 have been recognised as those of a whale.

2. Sheep (*Ovis aries*).—A couple of skulls and a few other bones were found, which were probably of Roman age, but they were not common.

3. Goat (*Capra hircus*).—Several more or less perfect skulls and horn-cores of goats were found in trenches near House No. 2; also other bones which may have been either sheep or goat.

4. Stag (*Cervus elephas*).—Numerous fragments of antlers and bones of red deer were found; some of the former cut or sawn across in preparation for use as knife-handles, etc.

5. Roe Deer (*Capreolus caprea*).—The base of an antler with one tine was found outside of House No. 2.

6. Horse (*Equus caballus*).—Numerous teeth, fragments of crania, and other bones of horses were found, but nothing like a perfect skeleton or cranium.

7. Pig (*Sus scrofa*).—Bones and tusks of pigs were by far the most numerous of the animal remains unearthed at Caerwent, and turned up everywhere. As with the oxen, some of the bodies seemed to have been burnt, remains of charcoal and black mould being found under the bones. Some of the tusks were of great size, and may possibly have belonged to wild boars from the neighbouring forest of Wentwood.

8. Cat (*Felis catus*).—Among the bones submitted to Professor Reynolds he reports: "Various bones of a kitten, including the left mandibular ramus, with the milk teeth in position."

9. Dog (*Canis familiaris*).—Two skulls, some teeth, and various bones of dogs, large and small, were found. Also impressions of the feet of dogs on bricks and tiles, varying very considerably in size; in one case apparently from the feet of a small puppy.

10. Polecat (*Mustela putorius*).—Professor Reynolds reports: "One ramus of the mandible of a polecat." This came from House No. 2.

11. Domestic Fowl (*Phasianus gallus*, *Lin.*).—Some fine spurs of cocks, probably gamecocks, were found in House No. 1. Numerous other bones of fowls were also found.

12. Goose (*Anser anser*).—Some fragments of wing bones of a goose came from House No. 3.

13. Pigeon (*Columba sp.*).—Several bones of a pigeon, from House No. 3.

14. Raven (*Corvus corax*).—A cranium of a raven, from House No. 2.

15. Toad (*Bufo vulgaris*).—Several bones of a very large toad, from House No. 2.

16. Oyster (*Ostrea edulis*, *Lin.*).—Oyster-shells, mostly of medium size, pro-

bably derived from the neighbouring shores of the Bristol Channel, turned up everywhere at Caerwent. On a wall of House No. 5, which seems to have been left unfinished by the builders, a couple of dozen unopened oysters were discovered.

17. Whelk (*Buccinum undatum*).—Several whelk shells, also probably from the Bristol Channel, were found in Houses Nos. 2 and 3.

18. Mussel (*Mytilus edulis*).—Although very plentiful on the neighbouring coast very few remains of mussels were found at Caerwent, and the equally abundant periwinkle and cockle were not represented at all.

19. Limpet (*Patella vulgata*).—A few limpet shells came from House No. 2.

20, 21. Snails (*Helix nemoralis* and *aspersa*).—Shells of snails of two or three species were found in various places, sometimes in great numbers, but there was nothing to show that their contents had been eaten by the Romans. The so-called Roman snail (*Helix pomatia*), which is still found living in some of the Gloucestershire woods, near Cheltenham, for instance, has not been found at Caerwent.

Tessellated Pavements.—In consequence of the ground which has recently been excavated having long been under cultivation numerous remains of the ancient buildings have been destroyed to below the floor levels, and consequently, though loose *tesseræ* have been found in nearly every trench, few pavements remained *in situ*.

Stone Objects.—In addition to the capitals and shafts of columns already described many objects of stone were found, including an elegant little carved stone, which was probably part of a finial similar to one found in Bath. Some half-dozen hones, or sharpening stones, several querns and grindstones, one with remains of the wooden handle, and dozens of flat round stones, varying from 2 to 7 inches in diameter, probably used as pot-covers to keep out the dust, were excavated. Also a small black stone from House No. 2, 3 inches in diameter, which seems to have been used as a rubber for medicines, etc. Professor Lloyd Morgan informs me that this probably came from near St. David's and is what is known as Lydian stone. The querns, pot-covers, etc. are mostly of old red sandstone from the neighbourhood of Caerwent.

Pottery.—The pottery that was found during the excavations of 1899 and 1900, although of great variety and in considerable quantity, was somewhat disappointing, hardly anything but broken fragments turning up. A few good pieces of Samian and a couple of nearly perfect black vases were among the best finds. The few "rubbish-pits" discovered produced nothing but bones and a few broken fragments of common pottery, iron nails, etc.

Of Kimmeridge shale, some portions of bangles and bracelets, spindle whorls

and counters turned up, and a large disc $7\frac{1}{2}$ inches by $4\frac{1}{2}$ by $\frac{1}{2}$ inch, which when perfect must have measured about 50 inches in circumference, was found in House No. 2. A similar disc has been found at Silchester; but its use is unknown. Only a couple of small articles of jet were found, and it is possible that one of these may not be of Roman age.

Wood.—Some fragments of wooden beams, presumably of oak, were found in House No. 2, perhaps from the roof of one of the rooms. On the floor of a room in House No. 3 was found an oblong slab of oak $7\frac{1}{2}$ inches by $3\frac{1}{2}$ inches by $\frac{1}{2}$ inch, possibly one of the covers of a case for holding the waxed tablets for writing upon. In House No. 2 was found a segment of a circular frame of ebonized wood.

Coloured Wall Plaster.—Very considerable remains of wall-painting were discovered both in 1899 and 1900, in some cases many yards of the painted plaster remaining on the walls. Much of the best of this has been preserved, and will be described, and perhaps illustrated, later, as most of it belongs to House No. 2. Many of the colours are well preserved, and the ornamental designs are varied and interesting. Upon one piece from House No. 6 were scratched the letters TITV(s).

Bone and Horn.—In addition to a considerable number of the pins usually

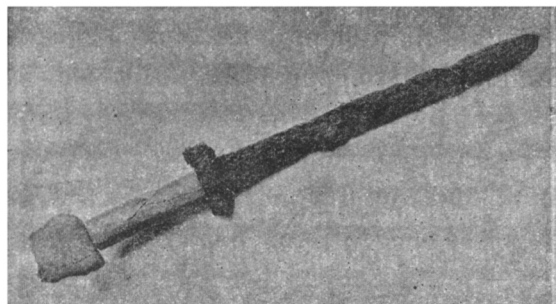


Fig. 6. Iron dagger with bone handle found in House No. 3.

found on Roman sites, and a few bodkins and needles, some interesting bone antiquities turned up. In the courtyard of House No. 3 a carved piece of bone, or walrus ivory, in the shape of a human hand, perforated for suspension, had doubtless been used as a charm against the "Evil Eye."

Mr. Elworthy, in his book on *The Evil Eye*, does not figure any charms bear-

ing much resemblance to the Caerwent relic, but in reply to a letter enclosing a sketch he informs me that he has seen similar forms, and that it was doubtless worn on a necklace; he thinks there was originally something, perhaps a bunch of grapes or flowers, held in the hand where it is now broken.

Bone spoons, cylindrical pieces of carved bone apparently used for handles of sticks, round counters of horn and bone, some marked with concentric circles others with figures x, xv, etc. were found mostly inside the houses.

Bone and Iron.—One of the most interesting of the small antiquities found in House No. 3 was an iron dagger, $13\frac{1}{4}$ inches long, found on the floor of Room 14

(fig. 6). It differs from the usual Roman type in having a solid iron crossguard 2 inches in diameter between the blade and the tang, the whole being in one piece of metal. If it were not for the distinctly Roman character of the ornament carved on the bone boss which terminates the handle, the dagger might be attributed to a much later date.

Iron.—Several interesting objects of iron were found, some of which were in fair preservation. A socketed billhook $11\frac{1}{2}$ inches long, a sickle $4\frac{1}{2}$ inches, a file $6\frac{1}{2}$ inches, and a tripod candlestick came from House No. 3, and two centre-bits of drills, several knives, choppers, styli, and door-keys of various patterns, with great quantities of nails, etc. turned up in the excavations. Remains of two iron spurs, one of the usual Roman type with blunt point about 1 inch long, the other probably of later date with five-pointed rowel, a portion of a pair of carpenter's compasses, and various iron rings and articles usually called "horse trappings," were found. Of iron covered with lead there were a couple of steelyard weights, and a curious plummet or "plum-bob," very like modern examples.

Lead.—Of lead were several portions of water pipes, uninscribed, from House No. 3, and a weight and various fragments of unknown use found elsewhere.

Articles of gold and silver were quite unrepresented among the Caerwent finds, with the exception of a few small silver coins.

Bronze.—Of bronze objects the following are among the more noteworthy finds. Two spoons of the usual Roman type, with C-shaped junction of bowl and handle, and remains of tinning. The upper part of a bronze-handled clasp knife, of good design, and part of the blade attached, from House No. 3. The lid of a locket or "seal-box," of ornamental design, with remains of red, yellow, and green (?) enamel, from House No. 3. An elegantly designed object which Mr. C. H. Read thinks may have formed part of the sheath of a knife or dagger; the ornamental design of the front, in open work, consists of two leafy S spirals, joined by a plain ring, size $1\frac{3}{4}$ by $\frac{7}{16}$ by $\frac{3}{8}$ inch, from House No. 3. An oblong ornament with two studs at the back, probably for attachment to a leather belt; the open work ornament, which may be called cruciform, consists of seven diagonal bands crossing each other, with little Greek crosses in open work in the centres of the squares thus formed, from House No. 3. A key ring $\frac{3}{4}$ inch diameter. A stylus of plain design, the only one of bronze found at Caerwent, $4\frac{3}{4}$ inches long. A bronze ring or bangle, with ear-pick and another implement attached. A small round bronze bell. An ornamental handle of a small casket or box, consisting of a couple of dolphins biting at a ball, similar to one figured by General Pitt-Rivers in his *Excavations in Cranbourn Chase*, i. plate xxi. fig. 5. Another of some-

what similar design, but with snakes instead of dolphins. A small expanding ring, of good design, the ends so twisted in spirals that the ring could be made to fit the finger of the wearer. Various remains of other rings, bangles, brooches, etc. Also bronze pins in great variety, a bronze duck from the top of an iron pin, a bronze pin with a circular head of glass, studs, tacks, hinges, etc. Two or three only of the brooches were perfect with the pins attached, most of them having been broken.

Gems from Rings.—Last, but not least in point of interest, are three engraved gems from rings. The first has a figure of a nymph or youth to the left, holding a cup, well engraved on a piece of green rock crystal or glass; it was found in House No. 3. The second, of which only half remains, has the upper part of a draped figure holding a vase (♀) in the right hand; from the south city wall. The third, still set in a portion of a bronze finger-ring, has a standing male figure, to the right; it is engraved on lapis lazuli. This was found in House No. 2.

Coal.—The whole of the site had been subjected to fire, quantities of charcoal and burnt material being found in nearly every pit and trench. There was also evidence in many places of the use of coal in Roman times, numerous small cubes, probably from the Forest of Dean coalfield, having been found in several of the Roman houses.