URICONIUM. [WROXETER].

NORTH

PLAN No. I.

NOTE. ALL COLOURED RED IS ROMAN

URICONIUM.[1]

By GEORGE E. FOX, Hon. M.A. Oxon., F.S.A.

In the following paper it is not proposed to enter into the history, legendary or otherwise, of the Roman city usually known by the name of *Uriconium*, though doubtless written with more correctness, *Viroconium*.[2] The site is now called Wroxeter from the village of that name in Shropshire, five miles from Shrewsbury, which occupies a small portion of the area enclosed within the line of its ancient walls. Nor will any space in the following account be devoted to the speculations based upon the inscribed stones dug up in the cemetery which lined the road to one of its gates.

This paper is intended to serve solely as a record of all the discoveries having a bearing upon the fabric of the Roman city; to trace its area and defences; to describe, as far as they are yet known, its public and private buildings, and to give as faithful a note as possible of such of the architectural detail which formed part of them as can now be found either on the site or dispersed in the vicinity.

First, as to the site, which lies between three and four miles from the foot of the Wrekin, the well known mountain of Shropshire, and in the valley of the Severn, at half a mile from the spot where that great river receives the waters of the Tern.

The area of the Roman city, which is about 170 acres in extent, is enclosed by a mound and ditch, the direction of whose line can only now be vaguely made out, except at a few points where the depth and width of the fosse and the elevation of the mound (covering the remains of the destroyed wall) are very clearly to be seen in the fields, notably at B1 and A1 on the general plan (No. I).

[1] Read at the Monthly Meetings of the Institute, November 4th, 1896, and February 3rd, 1897.

[2] The better known form of the name is adopted here to avoid confusion in matters of reference.

Though the line of circumvallation is not easily traceable, the direction of the hedges separating the fields around the site of the city on the east, and more especially on the north, show its boundaries on those sides with considerable distinctness, the limits of these fields having evidently been governed by a barrier (the city wall and ditch) existing when they were first laid out.

The circumference of the area is about three miles. It may be described as pear-shaped in form, the broadest part being on the north and the greatest length from north to south. A rivulet, called the Bell Brook, traverses the northern end, to fall into the Severn, cutting it off from the rest of the site. The valley of the little stream gives a marked and strongly undulating character to the upper part of the enclosed area, which otherwise slopes gently from the centre towards the west. Where, however, the river Severn, making a great bend to the south, strikes the western side and divides into two branches (enclosing a long, flat island), the ground is of considerable height, and falls steeply to the stream, forming a long, low cliff for some distance on this side. At the lower end of the island mentioned is a ford, which was the probable cause of an early settlement here on the river.[1]

The village of Wroxeter, with its church dating from Saxon times, lies in the extreme southern end of the area of the Roman city.

From the peculiar shape of the enclosing lines of the city (A.A. in Plan No. I) two theories suggest themselves—(1) that the walls of the Roman town were built on the lines of a Celtic *oppidum;* or (2) that the town, having gradually grown up beside a line of ancient roadway leading to a well-frequented ford over the Severn, a wall was afterwards built to enclose as nearly as possible the straggling town and its suburbs.

Either theory might be supported from the remains; but there is no evidence to be derived, either from the shape of the enclosing barrier or from the material or arrangement of the buildings as yet found within it, that the city

[1] Camden speaks of the Severn as more easily fordable here (*i.e.*, at Wroxeter) than in any other part of its course between this point and its mouth.

owed its origin to the sojourn here of any division of the forces of Rome.[1]

It will be seen, by reference to Plan No. I, that a modern road traverses the site issuing from the walls near K on the north, where traces of a Roman street were found in 1859,[2] and near C on the south, at which point was probably situated the south gate of the Roman city. It seems in all likelihood that this road, though diverted from the straight line at its southern end, fairly represents the ancient main thoroughfare through the city, especially as the more important discoveries have been made not far from either side of it. As nearly as possible half-way between the two points mentioned, C and K, occur the principal buildings of the Roman town, the *basilica*, Baths, &c., together forming a square or *insula* of buildings probably facing one side of the *forum*, of which more will be said later on.

As to the other streets or roadways of the ancient city, it appears to have been ascertained that the Watling Street, one of the four great Roman ways, entered the town at or near the point B (Plan No. I), and that it was lined on each side by cemeteries before reaching the city gate. Its continuation within the walls, if represented by the modern road, struck the main street at an acute angle shortly after crossing the Bell Brook.

Arguing from the analogy furnished by the plans of Silchester and St. Albans, it is probable that Uriconium was, like the towns named, laid out in squares formed by the streets crossing each other generally at right angles.

Other main streets of the Roman town than those already named may perhaps be traced in the road running from the north wall of the *basilica* to the wall of the city, and in the next road south of it and parallel with it, also running to the wall; but this is mere conjecture. It is only by extensive excavation that the plan of the ancient city can be recovered.

There are some indications of the construction and width of the roadways. Parts of the roadways bounding

[1] No tiles bearing the stamp of either legion or cohort are reported to have been discovered at Wroxeter, nor is there a trace to be found on the site of any quadrangular enclosure formed either by walls or mounds such as would indicate a regular camp.

[2] Thomas Wright, *Uriconium*, 1872, p. 106.

on the north and south the square or *insula* just mentioned have been found and examined. The sections made on the south side of this *insula* showed the pavement of a street "formed of small stones such as might be gathered from gravel, well put together and hard beaten in, and presenting an appearance not much unlike that we call macadamising."[1] This paving was bounded by what appeared to be side walks on one, if not both, sides, laid with concrete and edged with kerb stones. The side walks may have been respectively 9 feet, the roadway 24 feet wide, thus giving a total width of 42 feet for this street, no doubt one of the principal thoroughfares of the city.

There is yet little or no evidence to show what system of drainage was employed for the roadways, but it may have been by gutters at the sides either against the houses or lining the kerb stones of the side walks. This short description exhausts all that can be said as to the position and plan of the Roman town. We will now turn to examine what remains of its defences.

The first mention of them seems to be that in *Magna Britannia* in 1727, where it is stated that "it (the city) was encompassed with a wall, built upon a Foundation for the most Part made of Pebble stones, about three yards thick, and a vast trench round it, which in some places appears exceeding Deep at this Day." This statement received a general confirmation in the excavations made in the year 1861–2 at various points of the south east and north sides of the city. In each of the cuttings then made,[2] the foundation only of the wall was found (except in one spot at K), consisting of cobble stones and broken quarry stones bedded in clay. This bed was from 7 to 8 feet wide, but was probably originally about 3 yards wide, as stated in *Magna Britannia*.

The excavations made at A1, Plan I, in these two years uncovered the traces of a berm and ditch in front of the foundations of the wall. The berm was perhaps 11 feet wide; the ditch had a width of 95 feet, with a flat bottom. On the inner side it sloped from the edge of the berm to the bottom at an angle of 45 degrees; on the outer it had a rather steeper inclination. Both inner and

[1] T. Wright, *Uriconium*, p. 185.

[2] See plans by Mr. Hillary Davies, preserved in the Museum at Shrewsbury.

outer sides of the ditch were formed of a mass of clay. In the account followed here of these discoveries,[1] the measurements given for the depth of the ditch are 3 feet at its outer, and 9 feet at its inner, edge. These can only refer to the level of silting of the ditch, and have nothing to do with its original depth. There is no doubt that wall and ditch were carried round the city, although the writer on whom we have so often to rely (Mr. Thomas Wright) supposes that the steep bank of the Severn alone formed a sufficient defence on the western side.[2]

With respect to the gates of the great enclosure thus defended, next to nothing is known. There certainly must have been an entrance near K (Plan I) at the north end of the main road traversing the city from north to south. Excavations were made at this spot in 1862; but although a portion of the wall deprived of its facings remained to a height of 4 feet above the foundations, no gate seems to have been noted here. The search carried on at the point B (Plan No. I), where the Watling Street entered the city, showed a sudden discontinuation of the wall at that point, but nothing more.[3]

Scarcely better luck attended an endeavour at an earlier period (in 1859) to discover the south gate. This was an important gate, as the main thoroughfare of the city from north to south issued from it to continue on its way to *Magna*. It is a question whether this road passed from the south gate to the ford across the Severn previously referred to, or whether, taking a more direct course from the gate in a line with the principal street of *Uriconium*, it struck the river some way south of the ford, and was carried across it by a bridge. Remains of this bridge are

[1] T. Wright, *Uriconium*, Chap. II, p. 94 *et seq.*

[2] *Op. cit.*, p. 95. The supposition that a steep bank with a river or sea at its base was considered a sufficient substitute by the Romans for a wall, can scarcely now be maintained, as far as Roman remains in this country are concerned. In all three instances cited by Mr. Wright in support of this theory, viz., the stations of Burgh Castle in Suffolk, and of Richborough and Lympne in Kent, the foundations of a wall next the waterside of each station have been found.

[3] Lately, however (in 1896), at the spot marked B 1, Plan No. I, large stones have been uncovered by the plough, and it is possible they may indicate (for they lie on the line of the wall) the position of the gate sought for in vain in 1861. At this point the ancient defences of the town can be very plainly observed as they descend into the valley of the Bell Brook and cross the Watling Street. The width of the ditch fully justifies the description given in *Magna Britannia* of its being a "vast trench, exceeding deep."

said to have been found. That the road ran to a bridge is the view put forward by Wright, who says: "It (the bridge) may have been built at this point (a point south of the ford) as less exposed to the violence of the water in great floods, than under the city, where the force of the stream would be increased by the resistance of the hill on which it was built. If the paved ford be Roman, it was probably used as a convenient passage of the river when the season allowed. In this case, perhaps, at the time of the ruin of the city, the bridge also was destroyed, and afterwards in the middle ages people made for the ford to cross the river, and the old road was abandoned altogether."[1]

The excavations of 1859 which were made on a knoll at the foot of the roads somewhat above C (Plan No. I) brought to light no trace of the south gate as expected, but they uncovered the remains of a small square tower with a wall attached to it. These remains showed no decided Roman character, and may have belonged to some small post built in the middle ages to command the ford; and this appears the more likely, as it is believed that the Earls of Arundel had a stronghold at Wroxeter in the fourteenth century. At the same time, it must be remarked, that only Roman objects were found in digging here, amongst them being, according to Wright, a sculptured head in stone from some Roman building.[2]

All that is yet known regarding the general plan and defences of the city having now been treated of, the details of discoveries relating to public and private edifices made within the walls will next engage our attention. Mosaic pavements are included under this head, as they indicate the presence of dwellings, and are often the only remains noted of such dwellings. The discoveries will be given as far as possible in chronological order.

The only relic of the Roman town to be seen above ground (save scattered architectural fragments) before the extensive excavations were commenced in 1859, was a long mass of masonry standing in the centre of the site

[1] *Uriconium*, pp. 100–101.

[2] *Op. cit.*, p. 101. With respect to sculptured head mentioned, if it be the one preserved in the Shrewsbury Museum, it is unquestionably mediæval.

(at D, Plan I). It was 21 feet high, 72 feet in length, and 3 feet in thickness. Camden spoke of it as known in his time by the name of "the Old Worke." It still stands a rugged and conspicuous ruin in view of all passing through the ancient site. It will be seen further on that it formed part of the *basilica* of the Roman town. It is mentioned here as the earliest recorded fragment of Roman work at Wroxeter, and also because it is a point from which the position of other remains have been determined, as, for instance, in the following case, which is the first discovery to be mentioned.

This occurred in the year 1701, and is thus described in *Philosophical Transactions:* "About 40 Perches distant North from a ruinous Wall (the one just spoken of) call'd the *Old Work of Wroxeter*, once *Uriconium* a famous city in *Shropshire*, in a piece of Arable Land, in the Tenure of Mr. *Bennet*, he observed that altho these Fields had formerly been fertilized and made very rich by the Flames and Destruction of the City, yet a small Square Parcel thereof to be fruitless, and not to be improved by the best Manure. He then guessing the Cause of Sterility to be underneath, sent his Men to dig and search into it; but the Soil being then unsown, caus'd them to mistake, and search in a wrong place; where they happen'd upon Bottoms of old Walls, buried in their own Rubbish (being such as are often found in those Fields;) and the Inhabitants digging one of them up for the benefit of the Building Stone, were thereby guided to the Western corner of the said unprofitable Spot of Land: Where they found (near the Foundation) a little Door place, which when cleansed, gave Entrance into the vacancy of a square Room, walled about and floor'd under and over, with some Ashes and Earth therein.

This was built in times past (as some suppose) for a *Sudatory* or *Sweating-house* for Roman Souldiers; set with 4 Ranks of small Brick Pillars 8 inches square and laid in a strong sort of very fine Red Clay; each Pillar being founded upon a foot square quarry of Brick; and upon the head of every Pillar was fixed a large quarry of 2 foot square, hard almost as Flint, as most of those *Roman* Bricks are, and within as Red as Scarlet, and fine as Chalk. These Pillars were to support a double Floor,

made of very strong Mortar, mixed with coarse Gravel, and bruised or broken Bricks: The first of these Floors was laid upon the large quarries, and, when dry, the second Floor was laid upon it.

But first there was a Range or Rank of Tunnel-Bricks, fixt with Iron cramps up to the Wall within, with their lower ends level with the under sides of the broad quarries, and their upper ends with the surface of the upper Floor; and every Tunnel had alike 2 opposite Mortice-holes, one on either side, cut through for a cross passage to disperse the Heat amongst them all."[1]

The spot where the hypocaust here described was found may be taken to be somewhere in a large field near the letter E in Plan No. I. It evidently served to warm a small room which may be guessed at about 10 feet square, appertaining no doubt to the winter apartments of some house at this spot, especially as in the account quoted mention is made of foundations dug up in its close vicinity. Wright also speaks of a report that buildings had been found under a smith's forge at the corner of the cross ways at the angle of the field (*see* F, Plan No. I), and that a large Roman capital forms the foundation for the smith's anvil. He also mentions that tessellated pavements were known to exist in this same field.[2]

The next discovery in point of date seems to have been that of a mosaic pavement, which possibly was uncovered in 1706, and may have come from the same field as that in which the hypocaust was found in 1701, but this is a matter of conjecture. It consisted of a square of fine tessellated work set in a ground of coarse blackish-green tesseræ, the finer work showing a large rude flower in red and black surrounded by a narrow braid-work border the strands of which were black, red, and white. The panel thus formed could only have been of small size, and probably ornamented the centre of some

[1] *Philosophical Transactions*, Vol. XXV, pp. 22, 26, 27, 1706. "A Description of a Roman Sudatory or Hypocaustum, found at Wroxeter in Shropshire. Anno 1701." By Mr. John Lyster. Communicated to the Royal Society by John Harwood, LL.D. and F.R.S.

An engraving of this hypocaust is given.

In the eighteenth century the presence of a hypocaust was supposed to imply the presence of a hot bath or sudatory, which was not always the case by any means.

A curious little model of this hypocaust made at the time of its discovery is still to be seen in the Museum at Shrewsbury.

[2] *Uriconium*, Chap. II., pp. 105–6.

chamber whose floor was composed of a ground-work of common material. Such arrangements of squares of fine work in coarse grounds are sufficiently well known in the remains of the floors of Romano-British houses.[1]

Another pavement, but of rougher character and of larger size than the preceding one, was found in 1734. It probably was the floor of some small, long chamber with a semi-circular end. The pattern consisted, for the most part, of a series of rudely planned semi-circular lines in black on a white ground down the sides and across the ends of the floor, with an outer margin of blackish-green tesseræ next the wall.

It is not possible to ascertain from what part of the site this pavement came.[2]

A far more important discovery than any hitherto named was made in the year 1788 in the field marked G in Plan No. I at a point a quarter of a mile from the banks of the Severn on ground sloping towards the south. Here the tenant, a farmer named Clayton, "having occasion for some stone to rebuild a smith's shop lately burnt down, and knowing by the dryness of the ground that there were ruins at no great depth beneath the surface of a field near his house, began to dig and soon came to a floor and a small bath. Application was made to William Pulteney, Esq., then the proprietor of the soil, for leave to open the ground farther, which was readily granted."[3]

It is well to note here the process of destruction of the Roman town. All the material above ground having been cleared away, even what the earth yet conceals is sought for and rooted up, and no doubt the process still goes on. But to return to the history of the discovery.

The investigations resulted in the uncovering of four contiguous chambers of varying size, together with traces of others. The first of these (No. 1, Plan II) was 10 feet

[1] This pavement is figured in colours, but not to scale, in a MS. volume by Thomas Farmer Dukes, entitled *Uriconium*, in the Library of the Society of Antiquaries of London. The volume bears date 1829.

[2] Figured in Dukes' volume, but also, like the former, not to scale.

[3] For all relating to this discovery see *Archæologia*, IX, 323. *Memoir concerning the Roman baths discovered in the year* 1788 *at Wroxeter, the ancient Uriconium or Viroconium. In a letter from the Rev. Mr. Leighton of Shrewsbury to Mr. Gough, Director*, Plates XXI, XXII, plan and sections by Telford. Plan No. II, with the accompanying sections, in this paper, is a copy from that of Telford.

wide by about 19 feet 3 inches long; the length, however, was somewhat doubtful, owing to the southern wall having been entirely destroyed. The floor was paved with tiles each 16 inches by 12 inches and 1 inch thick, laid on a bed of mortar with a mass of rubble beneath it. At the north end of the chamber was a bath (*a*), the floor of which was 7 feet 3 inches long and, on the average, 2 feet 5 inches wide, with a depth of 2 feet 4 inches from the floor of the room. This depth was increased by a dwarf wall 1 foot 2 inches high, forming a seat, which parted off the bath from the rest of the room, a usual arrangement. Two steps, respectively 1 foot and 1 foot 4 inches deep, descended into it. Through the north wall, at the bottom (which was paved with tiles), was a drain (*b*) for carrying off the waste water. The sides and steps were covered with a coat of *opus signinum*, of great smoothness, and very hard.

The next chamber, No. 2, west of that just described, had the same length, and was 12 feet wide. It had been warmed by a hypocaust. The greater number of the *pilæ* took the unusual form of fragments of columns from some ruined edifice, supplemented where not of sufficient height by tiles placed upon them. These drums of columns were arranged in irregularly spaced lines. Some of the largest were close to the walls. "Some were apparently," says Mr. Leighton, "of a kind of granite, one foot six inches and one foot two inches in diameter."[1] Three of these *pilæ*, if not more, seem to have been complete columns of the dwarf variety not uncommon amongst the ruins of Roman buildings in this country. These had shafts 10 inches in diameter, and were all 3 feet 9 inches in height, which was the full height of the hypocaust. These columnar *pilæ* rested on a floor of mortar based upon rubble, and they were forty-eight in number. They did not, however, entirely fill the hypocaust. At the southern end a space 4 feet by 6 feet had been occupied apparently by pillars of the usual square tiles, only four of which remained at the south-west corner; and in the south-east corner stood a bath (*c*) supported on similar *pilæ*, which

[1] The "granite" mentioned was probably a sandstone grit. Architectural fragments, principally of shafts of columns, in this latter material, are still to be seen at various places on the site.

were 1 foot 7 inches high. The bath was a very small one, the floor being only 2 feet 4 inches by 3 feet 4 inches, and it was not more than 1 foot 10 inches deep, with a step down into it on its eastern and northern side. A leaden drain pipe was found passing southward from it at *d*, with a fall of 3 inches in 12 feet. The join in the pipe was made by hammering the edges together, and the seam was stopped with a kind of mortar. The pipe was laid in a channel cut in large stones.

The southern wall of the room close to this bath had been pierced by the furnace flue (*e*) 1 foot 6 inches wide, which accounts for the presence of brick *pilæ* at this place, always employed in like positions, from the fact that stone will not stand direct and intense heat. In the west wall near the south-west angle, and at a point further north, were also openings to the hypocaust (*f*, *g*) only 9 inches wide. These, though filled with ashes when uncovered, were small for furnace flues to such a hypocaust, and were probably only used for raking out the ashes from the spot where they would most accumulate.

To complete the survey of this room it must be mentioned that its walls were in all likelihood jacketted with flue tiles, as the traces of such an arrangement were found close to the bath, and that the *suspensura*, which had completely disappeared, could not have been more than 6 inches thick.

The rooms at 3 and 4, adjoining those just described, had apparently at first formed only one large chamber warmed by flues in the floor. These flues took the shape of a cross, the ends of which joined other flues running at the foot of the walls, all round the chamber. The flues were 10 inches wide, with the exception of the one lining the north wall, which had a greater width, and were from 3 feet to 3 feet 9 inches deep. The furnace opening was at *h*.

Subsequently, this large chamber seems to have been divided by a wall at *i i*.[1]

The floor of the additional room thus obtained was

[1] An error in the original plan, from which Plan No. II is copied, must be noted. The somewhat irregularly marked spaces on the west side of wall *i i* were said to "appear like single baths." They were, in fact, only holes made by digging out the earth behind the retaining walls of the floor flues at this spot. Also, in no place do any indications of the wall flues appear in this plan. In all likelihood they were not looked for, or, if seen, were not understood.

lowered to the level of that of the old flues, and in this area a pillared hypocaust was constructed, the *pilæ* (of brick) being built on the lines of foundation of the retaining walls of the old flues, which flues ran in two places into the new hypocaust. At the same time, a new furnace opening was pierced in the east wall at *k*.

The original chamber may have been further divided, for, in the sections given by Mr. Leighton, there is a difference of 9 inches in the level of the floor of Room No. 3, this difference occurring at the edge of the flue, parting the room into unequal halves. It may be that the retaining wall *l l* of the floor flue was carried up as a partition, and thus the original chamber came to be divided into three smaller ones.

Traces are to be seen in No. 3 showing that it was floored with the tile tessellation common on many Roman sites, the tesseræ being described in Mr. Leighton's account as pieces of brick $1\frac{1}{4}$ inches square. In the northern portion it was perfect, except where it had covered the tops of the walls of the flues and the flues themselves, which were exposed everywhere.

In the hypocaust of No. 4, says Mr. Leighton, "were found . . . several pieces of painted stucco, some of which were in stripes of crimson on a yellow ground, some in a decussated checquer of the same colours, others plain red, and others plain blue. There was found in this place a tile 2 feet square, pierced with many holes, which holes were wide at the lower side, and ended almost in a point at the upper side." This tile was probably one from the *suspensura* of the hypocaust, the holes in it having been made in the course of its manufacture to facilitate its more thorough baking.

To the east of the range of chambers described ran a corridor (No. 5) 7 feet 6 inches wide. Between 7 and 8 feet from the boundary wall of these chambers on the north it appears to have ended in a mass of masonry (*m*), possibly the support of a water-tank used for supplying the baths.

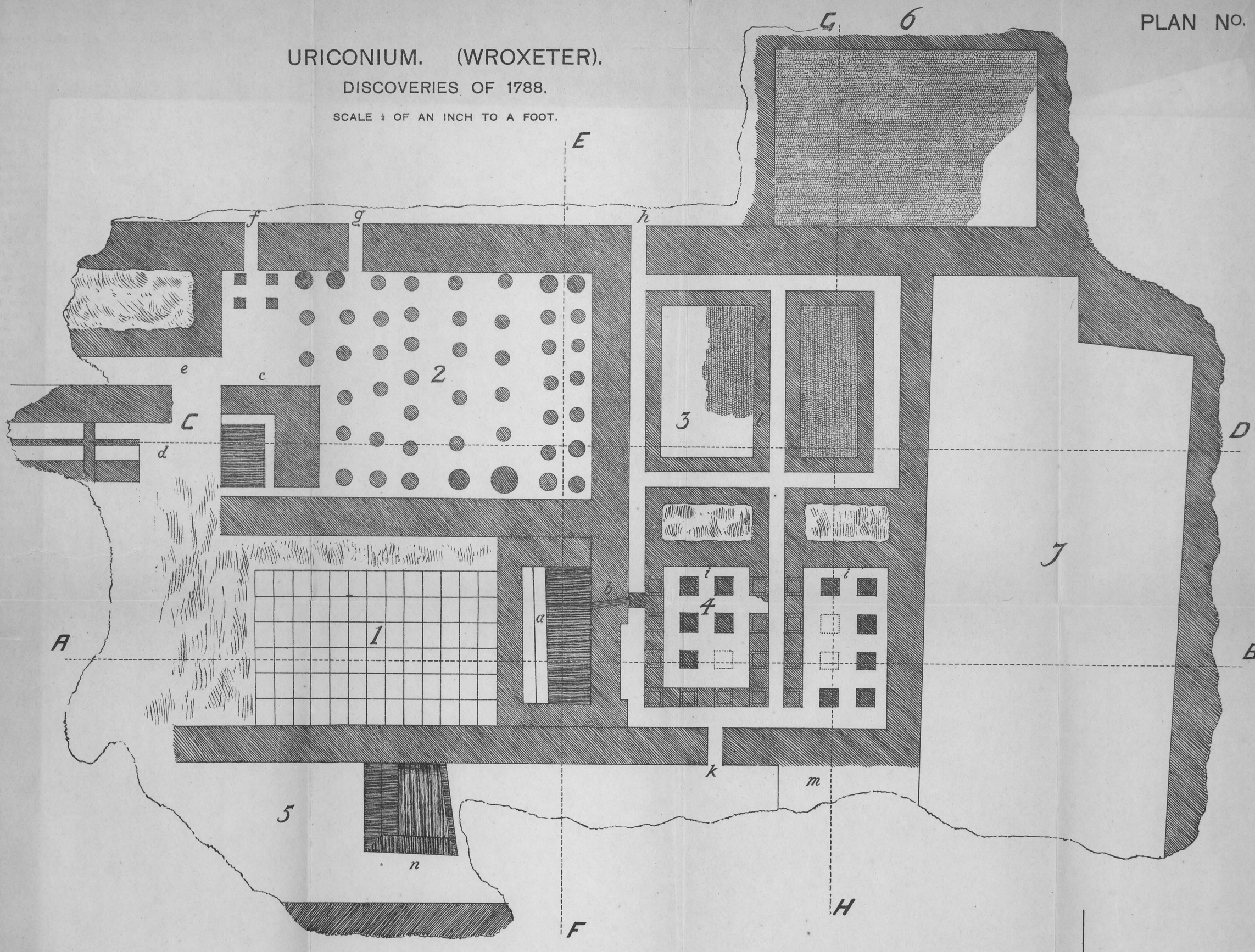
Some 3 feet further south, in the same corridor, is situated the furnace opening of the hypocaust of chamber No. 4 at *k*, and some way still further south a construction (at *n*), called by Mr. Leighton "a place 4 feet

PLAN No. II.

URICONIUM. (WROXETER).

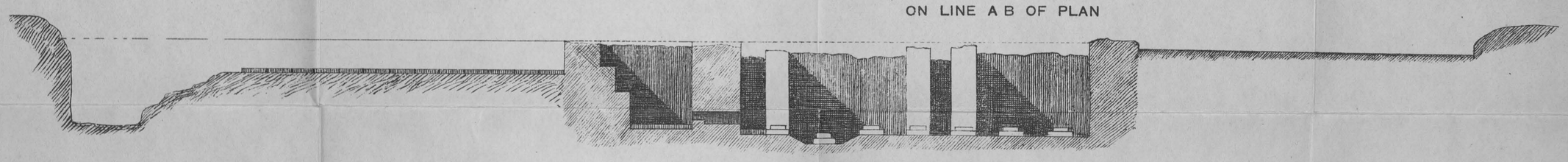
DISCOVERIES OF 1788.

SCALE ¼ OF AN INCH TO A FOOT.



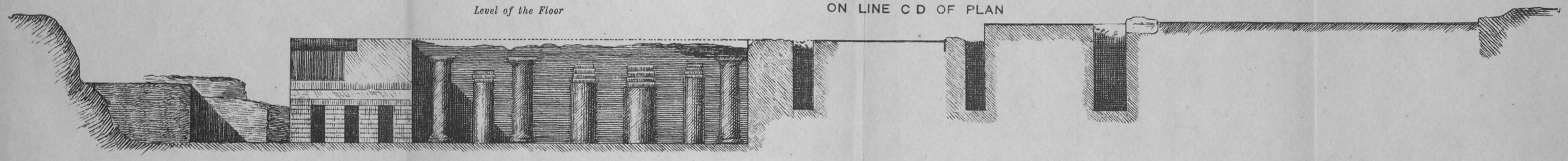
SECTIONS.

ON LINE A B OF PLAN



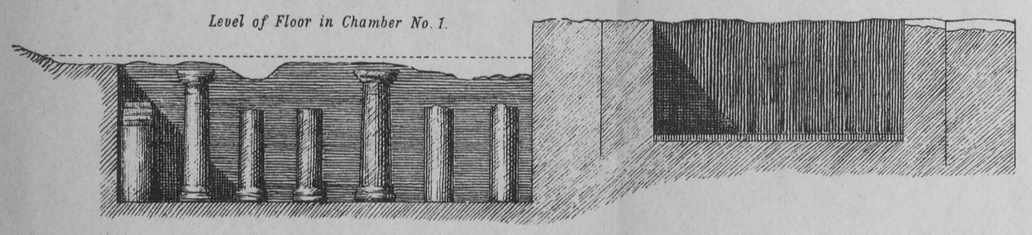
Level of the Floor

ON LINE C D OF PLAN

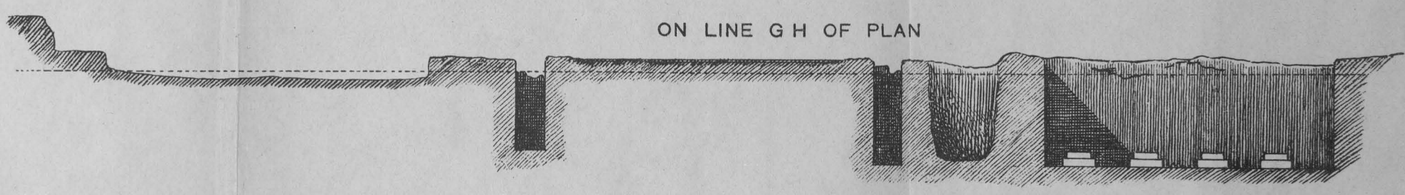


ON LINE E F OF PLAN

Level of Floor in Chamber No. 1.



ON LINE G H OF PLAN



0 10 20 30 FEET.

From "Archaeologia," Vol. IX., Pls. XXI-XXII.

deep below the level of the floor. It has a paved bottom; and is formed by large granite stones on the southern and eastern sides, on the north by a large thin red stone set on edge."

To the west of chamber No. 3, and adjoining its north-west angle, the floor of another (No. 6) may be traced. It measured 14 feet by 9 feet 6 inches, and was composed of the usual coarse red tile tesseræ. Abutting on the north end of the range of rooms extended a considerable area (No. 7) with a floor "formed of a thin layer of mortar, upon a thick one of pounded brick."

It is evident enough that these remains formed the bathing establishment of some mansion on this spot, but one or two circumstances would suggest that the chambers had not originally been built for the purpose.

The manner in which the hot bath is built up in a corner of No. 2, and the fact that the drain from the cold bath in No. 1 runs directly into the hypocaust of the adjoining chamber and appears to empty itself there, would seem to imply that the baths were intruded into a group of winter rooms; the hypocaust of one, if not of two, of which (Nos. 3 and 4) had been sacrificed in the rearrangement. It is to be regretted that the excavations were not carried further, and the whole house disclosed; but as so often happens with Roman remains in this country, they were left incomplete.

In 1827, in a stackyard at H (Plan No. I), the best and most important of the mosaic pavements yet found on the site was discovered. It was destroyed by people from Shrewsbury, says Mr. Wright, who came to see it, and carried away the tesseræ, not however before a sketch had been made of it.[1]

It was an elaborate composition of geometrical figures, the arrangement of which will be best understood by a reference to the illustration on Pl. II. The tesseræ were of two dimensions, as usual: those of the ground in which the ornamental forms were set being of large, coarse cubes of a dull blackish-green stone. The colours, beside the blackish-green, were black, white, and red, resembling in this respect the pavements previously found. This mosaic floor probably adorned one of the

[1] *See* Mr. Dukes' MS. volume previously cited, p. 70. No scale.

principal chambers of a considerable house lying upon the main way through the city.

A period of twenty-eight years intervened between the discovery made in 1827 and the next recorded one. In 1855 Mr. Stanier, a farmer, at that time tenant of the land which contains the principal relics of the Roman city, caused some farm buildings to be erected in a stack-yard fronting the main road through the site. (*See* the point marked I, Plan No. I.) During the work then taken in hand, a row of four bases of piers averaging 1 foot 9 inches square by 1 foot 8 inches high, and equally spaced at 12 feet from each other, was uncovered. These piers stood in a line from north to south, and at the southern end of the line a fifth base lay out of position with the rest, together with another stone. Behind this line of bases at about 80 feet to the west, at a depth of 6 feet, lay fragments of a paving of flagstones; and a concrete floor 5 feet below ground extended along the south side of these remains. Large stones, iron cramps, and lead were scattered about in different directions, evidently materials of a ruined structure.

Each base had a chase cut through its mouldings on either side, with the exception of the fifth. In this the chase was only on the north side, while the mouldings through which it was cut died away on the opposite side in a chamfered plinth, the large stone found near it being presumably a continuation of this plinth. The bases rested, in all probability, on a continuous stone foundation, a portion of which, 3 feet square, remained under one of them. When found, the four in place were each capped by a square stone, with the upper part boldly chamfered, which stones were evidently so placed at some comparatively modern period when the bases may have been utilised as they stood for farming purposes.[1]

The whole of these stones were taken up and deposited in the garden of the late Mr. Stanier's house,[2] where they are still to be seen, with the exception of two, used as bases to the Roman columns forming the piers of the churchyard gate erected in 1859.

[1] *See* for a plan of these remains *Journal of British Archæological Association*, Vol. XVI. p. 205, Plate 18.

[2] The house marked as "The Cottage" in the 25-ineh Ordnance Survey Map, now the residence of Mr. Everall.

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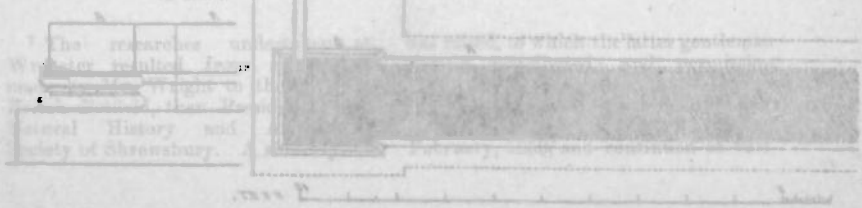
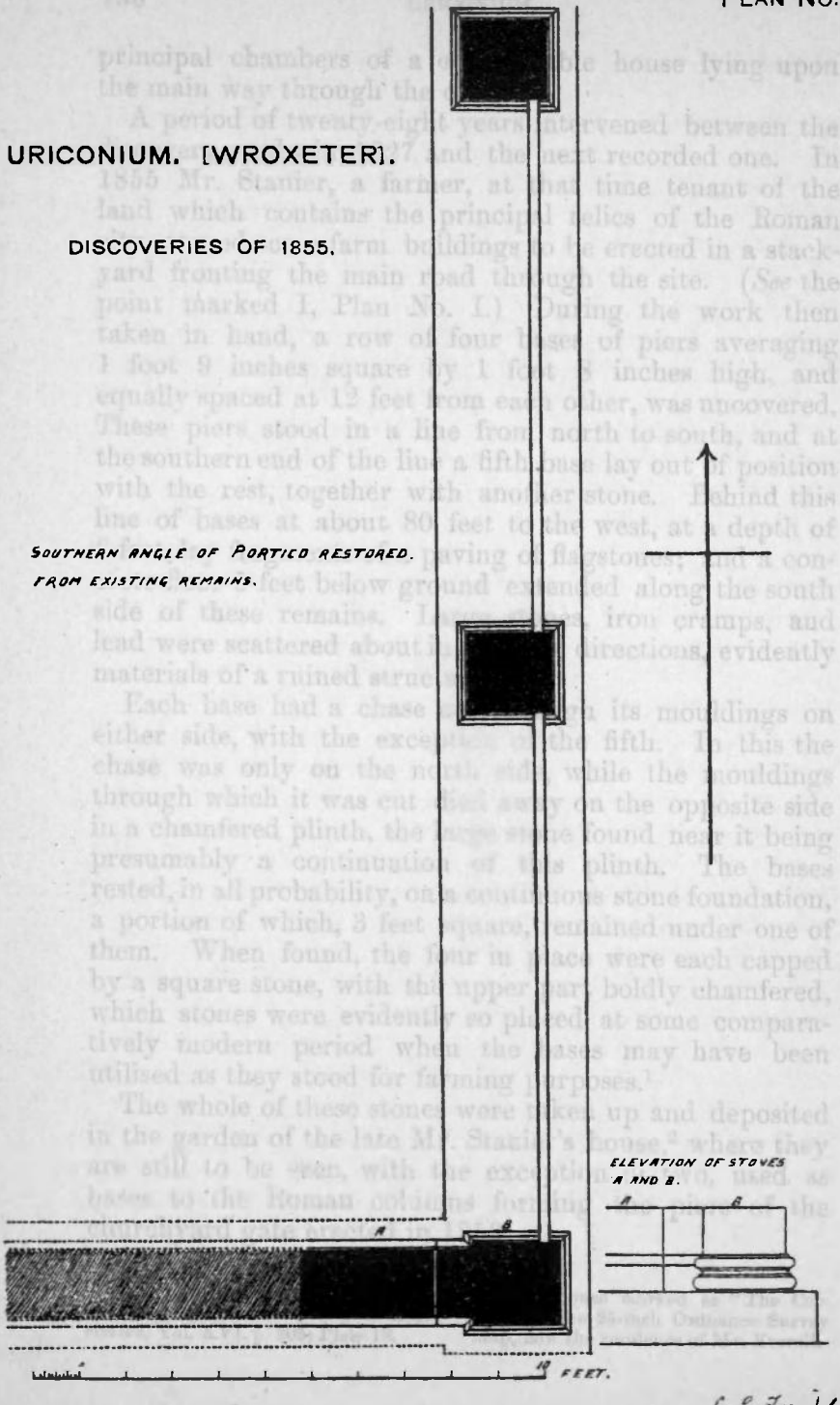


URICONIUM. [WROXETER].

DISCOVERIES OF 1855.



S. E. For del 1896.

A reference to Plan No. I at I will show the position of these remains in relation to the more important discoveries made at a later date, and in Plan No. III a partial restoration exhibits the southern end of the line of piers. These piers had constituted a part of the portico of a building looking on some street or open place. The plinth attached to the fifth base, with one stone in continuation of the same, and the chase cut through the mouldings on its northern side, as shown in Plan No. III, reveal the fact that this base stood at the end of the south wall of the edifice of which the portico was the front. The grooves in all the bases proved that the portico had been closed by screens of woodwork, a not uncommon arrangement in the porticoes of Roman buildings in this country. The paving also, uncovered at some distance behind the line of bases, showed that the building of which they were part was one of some size. (*See* for section of these bases Fig. 3, Plate IV.)

Nothing further than is here stated can be made out with respect to this structure, as the whole of the remains found were removed from their place, and the site completely covered by the modern farm buildings.

So far, the discoveries made at different times and described in this account, had, unless otherwise indicated, been purely the result of accident. Up to the year 1859 no excavation for the purpose of the most partial exploration of the site had ever been undertaken. But in that, and in the two succeeding years, work was taken in hand the result of which was to bring to light the remains of the principal public buildings of the Roman city.

These buildings formed a group occupying what was apparently the central block or *insula* of the ancient town. (*See* Plan I, at D.) The excavations carried on in this *insula* and in other parts of the city during the period 1859 to 1861 were under the superintendence of the late Mr. Thos. Wright, F.S.A., whose record of the discoveries then made is to be found in his work entitled *Uriconium*.[1]

[1] The researches undertaken at Wroxeter resulted from suggestions made by Mr. Wright to the late Mr. Beriah Botfield, then President of the Natural History and Antiquarian Society of Shrewsbury. A subscription was raised, to which the latter gentleman largely contributed; and permission having been obtained from the owner of the soil, the late Duke of Cleveland, the work was begun on the 3rd of February, 1859, and continued at vari-

It is not the intention here to follow the progress of the excavations in this *insula* from point to point, but, consulting the plan (No. IV),[1] of as much of it as has been uncovered, to describe—first, its surroundings; and, second, the edifices it contained.

With respect to the former little can be said. On the north the *insula* appears to have been bounded by a street, and presumably such was the case on the east. On the south the roadway forming its southern limit was clearly to be traced. It was bordered by side walks, and on the southern side ruins of various constructions were uncovered. On the west, however, though the line of the buildings is definite enough, what lay in front of it has not been ascertained. The main roadway or street of the town coming up from the south and bordered for some distance along its course, on its eastern side by a stone gutter *k-k*, does not touch the western line of the *insula*, but, passing a group of foundations, those of a house without doubt, near the south-west angle of the *insula*, seems to enter an open space, which Wright conjectured might be the *forum* of the Roman city. If so, this same street probably started again from the northern

ous points until 1861, when, owing to failure of subscriptions, it was discontinued. In 1867, previous to the meeting of the Congress of the British Archæological Association at Ludlow, the late Mr. Joseph Mayer, of Liverpool, gave a donation of £50 to be employed on the site. The results of the excavations then made are given in a supplementary chapter of Mr. Wright's work on *Uriconium*. When the subscriptions failed Mr. Wright appealed to the Government for aid. He says in the preface to his book, "I myself made an appeal to Sir George Cornwall Lewis, then Chancellor of the Exchequer, for assistance from the Government, but received for answer that the Treasury was not accustomed to give money for such purposes. This was not strictly true, as money had been given for excavations on the site of Carthage and in several localities in the east, which were of far less interest to our national history and antiquities than those of Uriconium," and, he continues, "almost every country in Europe furnishes examples of the readiness with which the national government comes forward to assist with the necessary funds the exploration of an antiquarian site, though far less important in its character than that at Wroxeter."

Since the year 1867 nothing further was attempted at Wroxeter until the meeting of the Archæological Institute took place at Shrewsbury in 1894, when a small grant made by the Council of the Institute was expended in partial excavations for clearing up one or two doubtful points in the construction of the Baths, other points also being examined in 1896 by means of the same grant. It should be mentioned that the Natural History and Antiquarian Society of Shrewsbury still hold the portion of the site containing the remains of the Baths by the payment of a rent to the owner of the soil, such portion being kept open for public inspection.

[1] This plan is taken from one in the possession of the Archæological Institute made by Mr. Hillary Davies in 1861, but with additions and corrections resulting from later excavations, &c. &c.

end of the *forum*, and in this street on its western side occurred the building, the portico of which was found in 1855.[1] The question whether this space be the *forum* or no is one which excavations alone can solve, and those only on a large scale.

Turning now to the *insula* itself, it will be well to note the order and character of the buildings it contains. Along its northern side lay the *basilica*, with an annexe to its eastern end, and beyond again, at the north-east corner, an open area. Neither the annexe nor this space have, as yet, been thoroughly explored.

At the eastern end of the *basilica* on the south side was a large hall, originally vaulted, communicating with the *basilica* by a wide doorway, with two, if not four, chambers, also vaulted, to the left and right of it. Possibly this hall was originally the *curia*, the council chamber of the governing body of the city, with other chambers attached to it, serving as the treasury, the record office, &c., &c., the whole group at a later period being converted to other uses, as will be explained later on.

The western face of the *insula*, that fronting the supposed *forum*, beginning from the north, showed, first, the façade of the *basilica* with its two entrance doorways; next, two shops, at the back of which were situated the latrines serving the *basilica* and the public baths; then a wide corridor, the main entrance to these baths; and, last, a paved court with a row of cells on three sides, and a corridor lining the southern range. Behind the line of buildings just mentioned the rest of the *insula* was filled by the remains of the public baths of the city, of which unfortunately scarcely more than half have as yet been uncovered.

Proceeding now to an examination in detail of the buildings whose various positions have been thus briefly sketched, the largest and most important must first claim our attention.

This was the *basilica* which, lying in a direction east and west, occupied nearly the whole width of the upper part of the *insula*. (Plan IV, A, A.)

[1] Wright supposes the *forum* to extend as far north, or even further than this portico, which he considers may have been situated on the western side of its area; but the proportions for the area which such measurements would give are quite inadmissible.

It consisted of a great quadrangular hall, 229 feet long by 67 feet wide, with walls from 3 feet 4 inches to 3 feet 6 inches in thickness. The huge fragment of these walls remaining above ground referred to previously in this paper (p. 129), and known as the *Old Wall* or *Old Work of Wroxeter* (*see* D, Plan I, and 1–1, Plan IV), formed a part of the south wall of the *basilica* at its eastern end. It shows in its faces and fractured ends the usual methods of Roman construction, viz., the core of rough stone and mortar, and the faces of small carefully-squared stones laid in regular courses, with bonding courses of bricks at intervals. The foundations of these walls were found to have been laid at a uniform depth of 7 feet below the floor of the building.[1]

The façade of the *basilica,* at its western end, as already mentioned, contained the principal entrance—two doorways set close together, and giving access to the central portion of the building (2–2). From pieces of the stonework found it may be inferred that they had some architectural pretensions. In the centre of the northern wall a considerable break probably marked the place of a doorway there also (3). In the southern wall were two entrances (4–5) to the peristyle of the Baths, each with a large step; and near the eastern end of the same wall a large breach in the mass of masonry named "the Old Wall," indicated a doorway of some importance (6), the means of access to the large vaulted hall already spoken of, of which more presently. Finally, an entrance with a step in front of it (7) afforded a means of communication between the *basilica* and the long annexe east of it.

The interior of the *basilica* was divided into a central nave 30 feet wide (A–A) with an aisle on either side of it, each aisle being 14 feet in width. These aisles (B, C) were parted from the nave either by colonnades or by arcades. The foundation walls, 4 feet to 4 feet 6 inches wide (8–8), on which the colonnades or arcades rested, were discovered during the excavations, but wherever found appeared very ruinous. Probably the course of large flat stones, at the floor level, forming a continuous bed on which the columns were erected, offered too-

[1] *Uriconium*, p. 189.

tempting a prize to early seekers for building materials to be left intact.

In the plan it will be seen that these foundations, or sleeper walls, run from end to end of the great hall; but it may be conjectured, if further investigation were permitted, that sleeper walls would be found crossing each end, and that thus, the colonnades based on them, would have made a continuous aisle all round. Supposing such were the case, the *basilica* of Uriconium would then have strongly resembled in plan that of Pompeii, though with a longer and narrower central nave. It may also be considered that, as part of the scheme of arrangement, the aisle at the east end was used, like that in the Pompeiian example, as a law court, with its usual tribune.[1]

Like many other Roman buildings, the *basilica* seems to have been very carelessly laid out.

The northern aisle (B) is wider by 2 feet at its eastern than at its western end, and the eastern wall of the edifice is more than 6 feet out of square. There must, however, in the latter case have been a rebuilding; and, what at first sight might appear the effect of carelessness in the setting out, may have been done with some intention still unknown to us, but which may be guessed.

Thus far, judging from the plan, it may be taken for granted that the *basilica* consisted of a very long hall divided into a nave, with an aisle on each side of it. But what was the nature of the division between nave and aisles, whether columns carrying an entablature or piers joined by arches, has yet to be discussed.

Looking to the usual basilican arrangement, it might be inferred that the sleeper walls supported a colonnade, but where are the columns? Some fragments of them may still be buried beneath the four or five feet of earth covering the floor of the building, and, as will be seen presently, portions of shafts are to be found on the site which might have belonged to such a colonnade; but all, with the exception of the few fragments named hereafter, have been either carried away or broken up in the lapse of the thirteen centuries or more since the destruction of the city.

[1] J. Overbeck, *Pompeji*, 143.

It should always be remembered that as soon as land comes under the plough, every effort is made to clear and render the surface even, and to remove such obstacles as broken drums of columns, and fallen walls. The value also of stone, already quarried and dressed, for use as building material, or which, as regards the larger fragments, could be re-worked for the fabrics of the churches and monastic houses rising near the site in the early middle ages, must not be overlooked when the scarcity of the architectural remains of the Roman city are considered. After so many centuries of ruin, neglect, and active destruction, it is perhaps rather a matter for wonder not that so little is left, but that anything has been preserved.

Still, we may take it as more than probable that the *basilica* possessed colonnades, and such evidence of their existence as can be adduced will now be brought forward.

The width of the sleeper walls (8) would permit of columns being erected upon them measuring 3 feet in diameter, and an examination of the site will show that portions of drums of columns approaching or equalling these dimensions are to be found amongst the ruins, and elsewhere. In the southernmost of the two shops, Z, is part of a shaft 5 feet 6 inches long by 2 feet $8\frac{1}{4}$ inches in diameter. Another section, lying in the court south of the shops, has a diameter of 2 feet 7 inches. In the Museum at Shrewsbury can be seen another fragment 3 feet in diameter, brought from Wroxeter.

But a far more interesting relic is the font in the parish church of Wroxeter, formed in all likelihood from a much reworked Roman base, with a portion of shaft attached to it.

The members of this base appear to have consisted of the usual roll or torus mouldings, with a small flat hollow between them, the upper torus being united with the shaft by a long and large cyma reversa moulding. What remained of the shaft showed a diameter of 3 feet.

The church of Wroxeter dates from Saxon times, and it may well be that this font carved out of a Roman base is of the Saxon period. The method by which it was made is easily understood. When the big mass of stone came under the hands of the Saxon carver both the roll mould-

ings must have been much battered, and the lower one probably badly broken (as is often the case with Roman bases), whilst the fillet between the large hollow moulding and the upper torus was completely worn down. The carver, therefore, proceeded in this manner: he turned the base upside down, worked the upper roll moulding into two, boldly struck off what remained of the lower, making a flat sloping face instead, and carved four concentric rings round the basin, which he hollowed out of the bed of the base, and thus formed the font out of the reversed Roman base, which stands in the church to this day.

The accompanying section will explain the way in

SECTION OF FONT, WROXETER CHURCH.
$\frac{1}{18}$ LINEAR.

which this base has been converted into a font, the dotted lines showing the Roman mouldings as conjectured.

Now, if all the fragments just named be taken to be portions of columns from the *basilica*, as from their size would seem most probable, this base, with the frustrum of shaft attached, is of especial interest; for from the diameter of the shaft where it joins the mouldings, the height of the column to which it belonged can be obtained within certain limits. The measurement given by this diameter would indicate a column some 27 feet in height if the column was of the Corinthian order, and it may be asserted that a column or columns of such a height and diameter as indicated by the fragments cited could only have come

from what was doubtless the largest building in the city, *i.e.*, the *basilica*, such an edifice, in fact, as that near which they were dug up.

The opinion that the Corinthian was the order to which these columns belonged seems to be confirmed by the fact that a mass of stone carved with acanthus leaves, from the ruins, now in the museum at Shrewsbury, and clearly a portion of a large Corinthian capital, would, if perfect, accord with the dimensions of the pieces of shafting just described. (*See* Plate I, Fig. 2.) Thus it will be seen the dimensions of a complete column of the Corinthian order can be deduced from these fragments. Taking it, therefore, as a fair conjecture that the order and measurements of the columns of the *basilica* have been obtained from actual fragments, the next point to be ascertained is the spacing of these columns which formed the colonnades.

During the course of excavation in 1859, the floor of the eastern half of the north aisle of the great building was uncovered (B, Plan IV). It had been laid with a coarse mosaic of different geometric diapers in quadrangular panels varying slightly in width, but with an average of 8 feet 6 inches. What is of importance to note here is, that the width of the panels is strongly suggestive of the idea that when the mosaic was planned and laid down, the dividing lines of these panels were made to coincide with some already existing structural feature of the building, and that that feature could only have been the columns of the colonnade between this aisle and the nave. Thus the dividing lines between the panels would accord, as far as the exigencies of each pattern allowed, with the centres of the columns.[1] We may therefore find in the width of these panels a guide to the spacing of the columns of the colonnades, and shall be thus enabled to calculate the distance between centre and centre of each at 8 feet 6 inches, which is the average width of the panels.[2]

[1] See for arrangement of panelling, 9-9, Plan IV, and supposed positions of the columns of the colonnade, 10–10. For the sake of clearness the patterns filling the panels are omitted in the plan.

A very full account of all the mosaic pavements found in the excavations at Wroxeter in 1859–60 is given by Mr. George Maw, F.S.A., in the *Journal of the British Archæological Association*, Vol. XVII, 1861. Plate 9 of this volume gives an admirable restoration by him of the portion found of the pavement of the north aisle of the *basilica*.

[2] An example of the treatment of floor mosaics to accord with the archi-

FIG. 1

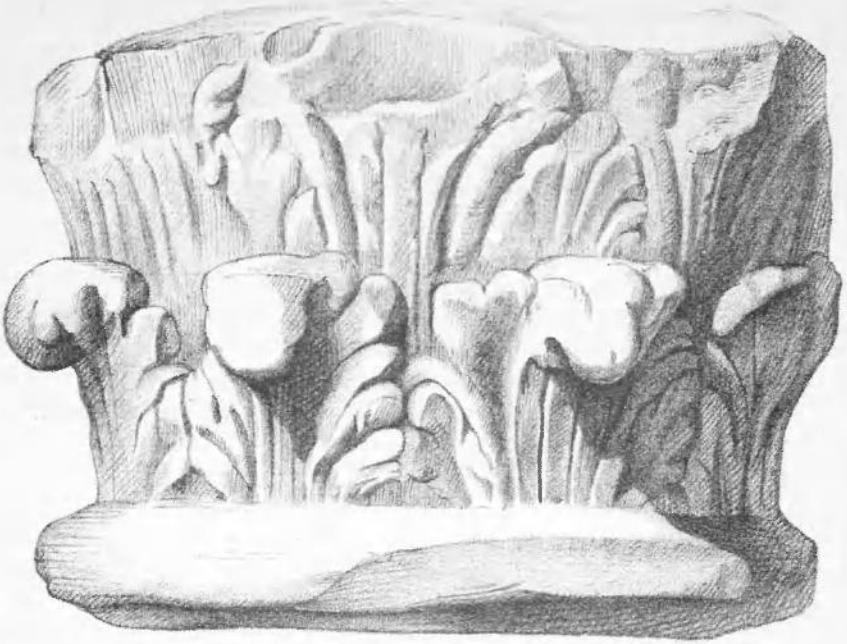
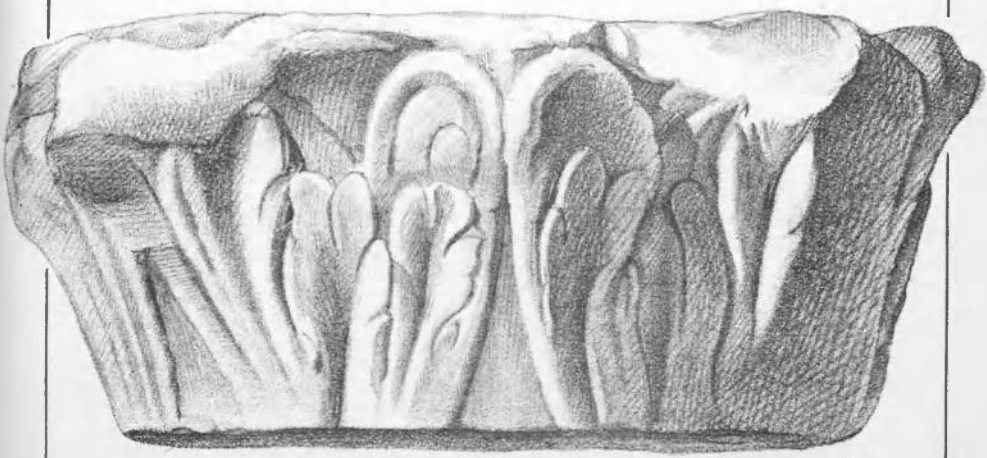


FIG. 2



G. E. Fox del 1896.

WROXETER. ROMAN ARCHITECTURAL REMAINS.

Nor is this all that the mosaic floor may be made to tell. A break (3) in the north wall near the centre of its length was spoken of when mention was made of the doorways of the building. It happens that one of the panels close to this spot is wider than the others by a foot, thus making a wider intercolumniation, and possibly indicating an important entrance.

Again, the last panel of the range at the east end is larger than the others, being nearly square instead of oblong, and the next west of it has borders which cross the green enclosing bands. This arrangement suggests that the two panels, taken together, show the width of an eastern aisle, if it be supposed that the aisles were returned across each end of the *basilica*, as is the case in that of Pompeii.[1]

Traces of a mosaic pavement, presumably similar to that of the north, were discovered in the south aisle, but the nave of the building seems to have been paved with small tiles set in herring-bone fashion, *opus spicatum*. A patch of this paving was uncovered near the eastern end, and, as but little of the flooring was seen, it is not impossible that this *opus spicatum* may have only formed a ground for compartments of tessellated work.

The width of 8 feet 6 inches from centre to centre of the columns, possibly indicated by the remains of the panelled floor of the north aisle, would only give an intercolumniation of about two diameters. From its narrowness it may be concluded that the entablatures, supported by the colonnades, were of stone, though no remains of them have been observed. Like the columns, they have been carried away, but some fragments might possibly still lie in the earth covering the floor of the *basilica*.

tectural divisions of a structure has been found elsewhere, as in the following instance. A plan preserved in the Cirencester Museum shows a portion of a peristyle of some Roman building discovered in the year 1864 in the garden of Mr. Daniel Smith, at Watermoor, Cirencester. The mosaics with which the floor of this peristyle was adorned were divided into panels, which accorded with the width of the space between the columns—10 feet. Each panel, however, was parted from the other by an interval equal to the diameter of a column, and, in consequence, the disposition was not so crowded a one as in the floor treated of above. The portion excavated of the peristyle in question had a length of 38 feet, and was certainly longer; but as the building of which it was a part continued into a neighbouring property, it could not be traced further.

[1] The divisions of the mosaic floor of the north aisle of the *basilica* have been laid down on Plan No. IV from the illustration of this floor in Mr. George Maw's paper already referred to, and the columns are indicated conjecturally to accord with these divisions.

Thus, from the preceding description of the ground plan and from the facts derived from existing detail, the inference may be drawn that the *basilica* of Uriconium was a building consisting of a nave with aisles on each side parted from the nave by colonnades, the columns of which were of the Corinthian order, 27 feet perhaps in height, 3 feet in diameter, with an intercolumniation of $1\frac{5}{6}$ diameters, and that they carried a stone entablature. Above this, it may further be conjectured, walls rose to a height sufficient to permit of windows forming a clerestory, and at some 60 feet from the floor a wooden roof covered the nave, which may or may not have had a panelled ceiling. The aisles were also roofed. The covering of all these roofs was either formed of the hexagonal stone slabs so common on Roman sites or of the well known Roman tiles. The floors of the aisles were paved with tessellated work in panels of geometric diapers, and the nave with *opus spicatum*, and finally the plastered walls were covered with decorative colouring, many traces of which were found in the excavations.

All that is positively known at present concerning this chief building of the Roman town is here summed up, but it is quite within the range of possibility that more might be learned, not only about the superstructure, but also concerning the plan, by a careful uncovering of the area contained within its walls. In February, 1859, the exploration was begun, but owing to some misunderstanding was soon interrupted and finally abandoned, and so the work was left in a very incomplete state.[1]

Leaving the *basilica*, the next point to which attention must be directed is the hall D with the two chambers E and F to right and left of it, those marked G and I, and a second hall H, south of and adjoining D, which seem to form a group complete in itself, to which other buildings have been added.

Of these six chambers the central one, D, is by far the most important, if only for the reason that it is the only

[1] *Uriconium*, p. 114. The internal disposition of the great edifice just treated of, as described by Wright in this work, is quite inadmissible if judged by any comparison with similar remains of the Roman period either in this country or elsewhere; and this writer's evident want of acquaintance with Roman architectural remains, or with the principles of Roman construction or planning, has led him into errors and omissions of important details in his explanations of the other buildings on the site.

Roman building of any size in this country in which the remains of vaulting are to be seen. It was 49 feet long by 33 feet wide, its length ranging with the *basilica*, which it adjoins—that is, from east to west. Its northern wall, which is the huge fragment of the southern wall of the *basilica* at its eastern end, called the *Old Wall*, bears on its face traces of the vaulting spoken of in the shape of three arches—the central one, the largest in span, being segmental, and those on each side of it semi-circular, though the crown of each arch is at the same height from the floor of the hall.

It was imagined by Wright[1] that these indications of vaulting showed that three parallel chambers with barrel vaults, running north and south, existed here, instead of a single spacious one, but nothing was done under his direction apparently to ascertain the correctness of this view. Excavations made in September, 1896, however,[2] have proved that the area D was one large chamber, and by the same excavations it was also shown that in the great breach, in the "Old Wall," beneath the central arch of the vaulting a doorway formerly existed of considerable pretensions, leading from the *basilica* into this vaulted hall. Of this there could be no doubt, for on digging out the earth from the whole space of the opening (6), traces of a mortar face could be seen on each side against which the large stone jambs of the doorway, perhaps monoliths, had been set. The bed of the sill also was uncovered, the holes in the wall at the foot of each jamb showing that it must have been made of stones having a thickness of 15 or 18 inches. The stones of both sill and jambs had been torn out and carried away.[3]

At the same time that this breach was examined (in 1896), the digging was carried further on each side—inside—and revealed the remains of two square piers (11–11), each about a foot from the broken edge of the doorway. Very little remained of the western, but the eastern one was standing to a height of 4 feet 6 inches.

[1] *Uriconium*, p. 120.

[2] By Mr. Herbert Jones, F.S.A., and by the writer of this paper.

[3] The excavations of 1859 were begun in the south aisle of the *basilica* near this breach, and a capital, which may have been of the Doric order, was then dug up. It is possible that it was part of the adornment of this entrance, but as unfortunately all details are lacking, nothing further is known respecting it. *See Uriconium*, p. 110.

It was bonded into the wall to that height, but there seemed no traces of bonding any higher. Possibly this die of masonry may have served, with its companion, as a pedestal to solid stone pilasters supporting the springing of the vaulting, which was in line with them above. It was perfectly clear that those masses of masonry, which were each 3 feet on face and something over 3 feet in projection from the wall to which they were attached, could not be the offsets of walls dividing the hall D into three parallel compartments, for on the southern face and on the sides of the more perfect one pieces of finished wall plastering of pink cement were distinctly to be seen.

The problem remains to be solved with what kind of vaulting this hall was covered. In 1894, shortly before the visit of the Archæological Institute to Shrewsbury, a search was made in the much-encumbered area,[1] (which, with that of chambers E and F, has never been properly dug out); but although two trenches were carried from the south wall in line with the piers uncovered last year, for more than half the distance across the hall, only the western trench showed any trace of such supports as must have existed to carry the vaulting. There were, however, in this trench some indications of what might have been the footings of a pier, but the spot required more examination than could be given to it at the time. Incomplete though this examination was, it led to the conclusion that supports, probably in the shape of square or oblong piers, had existed at central points between the south wall and each of the piers to right and left of the great doorway, and that the hall had been covered by an intersecting vault in six compartments.

From fragments of the vaulting dug up in 1894, it would seem to have been constructed partly with box, partly with flanged, tiles, the latter, with their flanges upwards, lining the rubble concrete like a skin and forming a surface on their under sides for the plastering of the vaults.[2] The box tiles are 11 inches by $8\frac{3}{4}$ inches, and 6 inches thick; the flanged tiles are 6 inches by

[1] By Mr. Herbert Jones, by means of a small grant from the Council of the Archæological Institute.

[2] The materials and method of construction here described are very similar to those employed in the Baths of Caracalla at Rome.

7 inches. The rubble concrete of the vaults had probably a considerable quantity of tufa in it, as fragments of this material are to be found on the site.

The southern wall of the hall, which remains to a height of over 5 feet, has a foundation course of stones of considerable size. At each end is a doorway or opening into the chamber H to the south of the hall, and two breaches in the wall, one close to each doorway. It is most likely that the windows of the hall were pierced in this wall, that they were semi-circular, following the line of the vaulting in shape, and, probably, three in number. This seems the only possible arrangement, as, on the other sides of the hall, the height of the surrounding buildings would have prevented any openings for light being made. The windows in question would have opened above the roof of chamber H, and that chamber, in consequence, must have been a comparatively low one. Its original floor, however, from the slope of the ground was at a lower level than that of the hall D.

The floor of this hall (D), as far as it could be examined in 1894 and 1896, showed many traces of repair. Originally it appeared to have been laid with tesseræ, for in the corner behind the western pier beside the great doorway (11) a very small fragment of the tessellation remained, consisting of some few cubes of cream-coloured stone with others of a larger size of the dull green kind so frequently used as a ground or bordering in the mosaics on this site. Lining the foot of the pier at the same spot could be traced the quarter-round plaster moulding, which is the usual edging of floors in Roman buildings in this country.

Another detail also merits notice. Against the southern wall, at about 6 feet from the eastern doorway, was a stone foundation (12) running at right angles to the wall, and showing a returning angle at 5 feet from it. A row of tiles lay close along the wall, the last one being partly laid in a chase of the stonework. Whatever the construction had been of which these faint traces formed part, it had evidently been destroyed at some period and floored over with *opus signinum*. If the hall D had originally been the *curia* of the governing body of the city, the foundations in question might possibly be those of some platform or tribune facing the principal entrance.

Little can be said respecting the other chambers which composed this group.

The chamber H, into which opened the wide doorways from the hall D, has lost its southern wall, which may have been on the line 13–13, where a foundation seems to have existed. The chambers E and G, from the thickness of their side walls, had no doubt barrel vaults. There is a break in the northern wall of G, perhaps a doorway from the *basilica*, but more probably the doorway was in the wall between it and the hall D. One of the corresponding chambers to the two named, F, appears to have been rebuilt. That marked (I) may retain its original plan in the foundation of its western and southern wall, though the eastern one may also be a rebuilding.

It may be well to consider here the reasons for separating the group of chambers just described from the rest of the buildings with which, as may be seen on Plan IV, they are so closely connected.

In the only *basilica* of a Roman town in this country as yet thoroughly examined, that at Silchester (*Calleva Attrebatum*), one whole side of the structure is lined by a series of chambers, having in the centre of its length a large apsidal hall, opening upon one aisle of the *basilica*. There can be little doubt that in this range, with its central hall, may be seen the offices and council chamber of the governing body of the city. It would be natural to expect something of the same arrangement, or at least a modification of it, attached to the *basilica* of Uriconium. At first sight, however, this does not appear to be the case. A street runs along the whole length of its northern, and the public baths adjoin its southern, side. Yet if similar public offices to those lining the north side of the *basilica* of *Calleva* be looked for in the *basilica* of *Uriconium*, they may perhaps be found in this group of chambers, in which the hall D would represent the *curia*, and E, F, G, H, I subordinate offices. An examination of Plan IV will show that this group detaches itself from the adjoining constructions by the thickness of its walls (probably from the fact that five out of six of its chambers were vaulted); and the main division D, on account of the wide entrance from the *basilica*, appears to appertain more to that edifice than to the buildings south of it.

Again, the chambers E and G, if not F and I, as noted, may be taken to have been vaulted. When discovered they clearly constituted part of the Baths, though only subordinate parts, and it seems strange that they, rather than the main chambers of that establishment, the *caldaria*, should have been roofed in this way, which is a method more likely to have been adopted for these latter. The fact might imply that the compartments E and G, if not F and I, had been incorporated in subsequent constructions, and diverted from their original use.

The evidence may be somewhat scanty; but if the theory put forward be accepted respecting the chambers named, it may possibly help to elucidate the puzzling arrangement of the eastern end of the *basilica*.

It may be taken for granted that the civil *basilicas* of the Roman towns contained a court for the administration of the law, with its tribune, usually at one end of the building, but sometimes, as at Calleva, at both ends. In the most notable example remaining of such a basilica, viz., that of Pompeii, the tribune for the presiding magistrate is situated in the aisle at the end of the building furthest from the main entrance, which is at the opposite end.[1] This same arrangement possibly prevailed in the *basilica* of *Uriconium*.

It may be, that when the citizens determined to erect the fine Public Baths whose ruins still remain but partially revealed, the *curia*, with the adjacent offices, were given up to form part of the new establishment, and at the same time the eastern end of the *basilica* was remodelled, the long hall K being added to it, in order that the law court might be removed from its old position near the entrance to the *curia*, now the main way to the Baths. By this means, the noise and interruption to business in the court by the change of the *curia* to other uses would be obviated. Very possibly the public offices were transferred to some position in the *forum*, and thus the strange arrangement of the eastern end of the *basilica* can be explained.

Whatever alterations may have taken place—and alterations there have certainly been—in the buildings near its eastern end, they ultimately became part of the

[1] J. Overbeck, *Pompeji*, 143.

Public Baths of the city, to which attention must now be directed.

It should be premised that, owing to the incomplete state of the excavations, only half of the constructions of this interesting establishment is to be seen. It is probable that the body of chambers on the west of the great central division was repeated, with modifications perhaps, on the east of it. The entire mass of buildings stood within an open courtyard presumably surrounded by ambulatories, except at one point, where the ambulatory on the north side was interrupted by the compartments E, D, and F. The courtyard, with its ambulatories L, L, L, took up the width of the *insula* all but a space on the west side 63 feet wide by 176 feet long, filled with other structures, to be treated of presently. On the north it was bounded by the *basilica*, the end of the long hall K, and the limit, whatever that may have been, of the space at the north-east corner of the *insula*. On the south its southern ambulatory lined the street which bounded the *insula* in that direction.

The northern and southern ambulatories had a width of 12 feet, the one on the west being wider by 2 feet than the others. The foundations next the courtyard, 3 feet in width, are doubtless the remains of a sleeper wall, the base on which stood the columns supporting the roof of these ambulatories. Apparently no attempt was made, in 1860 or later, to ascertain if these foundations showed any signs of the positions of the columns. A shaft is said to have been discovered lying across the stairway to the hypocausts at 17,[1] which may have been a portion of one of these columns; but unfortunately the mere fact of its discovery is all that is known respecting it. At the present time (1896) portions of shafts showing a diameter of 1 foot 6 inches are to be seen at Wroxeter,[2] which may have been removed from the site of the baths and may be fragments of the columns of the ambulatories.

Nothing is recorded as to the flooring of the ambulatories, but the area of the courtyard appears to have had a flooring of cement. At the south-west corner considerable traces were discovered of a reservoir, 4 feet deep, paved

[1] *Uriconium*, p. 116.

[2] At the churchyard gate and in the gardens of Mr. Everall's and Mr. West's residences at Wroxeter.

with flag-stones (14). How this was supplied with water was not ascertained.

The buildings of the baths situated within the great courtyard, with its ambulatories, comprised one considerable body of constructions lying from north to south across the courtyard, with a western wing, and, presumably, a similar eastern one, which is still unexcavated.

Beginning from the north, the first section of the main division or body of constructions to be noted is the hall D. This, changed from its original purpose and afterwards used probably as the *Apodyterium* of the baths, has been already treated of in detail, but something more must be said concerning the chambers E and F. Neither of these were warmed by hypocausts, and F had a bath 10 feet 6 inches long by 6 feet wide sunk in the floor at the southern end. This bath was floored with small cream-coloured tesseræ in very perfect condition when uncovered. On the southern wall above it traces of a braidwork border in mosaic showed that the walls of the chamber had been adorned with tessellated work up to a certain height, at least in the vicinity of the bath. A similar adornment on the corresponding wall of chamber E seems to have been found, but the earth was not dug out to a sufficient depth at that spot to ascertain whether a bath existed there also. If it did, then these two chambers may be taken to be *frigidaria*, one attached to the western, the other to the eastern, wing of the establishment.

Passing from the hall D, which may be designated the *Apodyterium*, into the long apartment H, signs of various alterations are to be noticed. The floor of the hall D was between four and five feet higher than that of H, and a retaining wall or foundation ran at the foot of its southern wall along the north side of chamber H. This retaining wall has been removed for some distance in the centre of its length, and in the space thus obtained a substantial dwarf wall of brick was built up to form, it would seem, a narrow enclosure at least 15 feet long by 6 feet wide, which might have been intended as a cold bath. The western end of this brick wall remains, and a conduit 1 foot wide runs in at the north-west corner, at 15. The conduit passes under the floor of the hall D in a northerly direction, as indicated on Plan IV.

Steps must have led down into chamber H from the doorways in its northern wall. Either a much-worn fragment of one such step, or a portion of the sill of one of the doorways, is lying in the south-east corner of the hall D, and a piece of another at this spot looks as if it had been worked up as a footing in the wall at this corner when, as seems likely, the west wall of chamber I was rebuilt.[1]

In the condition of things just described, chamber H may have been the original *frigidarium* of the baths, especially if the enclosure formed by the dwarf brick wall be taken to indicate the presence of a cold bath. Very material changes, however, must have been afterwards made in this chamber, as will be seen, for the pillars of a hypocaust were raised on the floor and the suspended floor constructed at a height equal to that of the hall D. The *suspensuræ* of this hypocaust received a paving of mosaic, a fragment of which may still be seen at the foot of the wall near the eastern doorway, showing that the bath, if bath it was, had been completely covered over and obliterated by the later alterations.[2] Nor was this the only change made in the chamber H. The trace of its supposed southern wall at 13–13 had, south of it again, lines of *pilæ* of another hypocaust, showing either an extension of H, or a second and similar chamber M, to the south of it. Where the south wall of this second apartment was placed it is impossible to say, perhaps somewhere just below the letter M in the plan; but the whole of the ground in this part of the site is heaped with earth dug out from the uncovered west wing: thus examination is rendered at present impossible, and all is left in uncertainty respecting the internal arrangements of the lower half of the main body of the baths.

If, however, a conjecture might be ventured upon concerning the arrangement of the divisions marked M and H on Plan IV, it would be as follows: Instead of two parallel chambers, the whole space from H to M probably formed one great hall, the roof of which may have been supported by a row of columns standing upon the

[1] A good illustration of these remains is to be seen in Plate 17, Vol. XV, of the *Journal of the Brit. Archæol. Assoc.*

[2] A trace of this floor is shown on Plan IV, just above the letter H. Even this floor was covered at a later time by a layer of *opus signinum*.

original south wall of H, pulled down to the level of the raised floor of the newly-constructed hypocaust for the purpose of forming a base for such supports. The disposition of the space thus shadowed forth would have afforded a very fine hall divided across the centre by a row of columns and warmed by an extensive hypocaust. It would have constituted a *tepidarium* worthy of the establishment of which it would have been the central chamber.

The third and southernmost section of the central division of the baths has, in part, been outlined. The walls, east and west, were continuations of the walls of the *tepidarium* just mentioned, with a considerable rectangular projection in the middle of one, if not of both, sides. The south wall had two entrances in it, and a space of 11 feet occurs between it and the southern ambulatory of the courtyard.

The exact position of the northern wall is uncertain. Trenches cut in the areas enclosed by these walls showed a floor of large tiles 12 inches by 18 inches, and a space paved with them was uncovered which was 10 feet wide by 30 feet long. This floor (16) was found to be sunk 3 feet (perhaps more) below the level of other cemented portions of the area, and it was surmised that the tiling formed part of the bottom of a swimming bath.[1]

Looking to tne nature of these remains it is possible to imagine that the centre of the space N was filled by a large swimming bath surrounded by an ambulatory, the roof of which was supported on columns. The two covered recesses, O–O, of which the walls of one remain, opened on this ambulatory and were for the accommodation of bathers. They doubtless contained seats, and niches in the back walls, in which the clothes of the bathers could be deposited. There would, of course, be one or more doorways in the north wall of this swimming bath communicating with the *tepidarium*. Such was probably the method adopted for laying out this space, although, as in division M, all is conjectural until, by some fortunate chance, the most interesting part of these baths shall be properly examined.

If the disposition of this central portion of the baths

[1] *Uriconium*, p. 122.

remains conjectural, the same is happily not the case with that of the western wing. Here all, with slight exceptions, is clear enough.

Returning to the *tepidarium* H, the two next chambers claiming notice are the two *sudatoria* G and I. These are alike in plan, though the latter (I) is of somewhat smaller dimensions than the former, being 11 feet by 26 feet, as against 13 feet by 25 feet. In both, the walls were jacketted with flue tiles, the imprints of which in the mortar holding them to the masonry can still be seen on the north wall of I.[1] The furnace opening of the hypocaust of this chamber is in the south-east corner; chamber G received its heat, it may be conjectured, from the caldarium R by an arch in the party wall now obliterated by the destruction of the southern half of that wall. In the north-east and north-west corners respectively of these *sudatoria*, and opening upon them by wide doorways, are two small cells, P and Q, floored with *opus spicatum*. They were evidently intended as repositories for the different articles required for use in the baths.

Next to the sudatorium G was the caldarium R, entered from the former by a doorway in the wall dividing the two chambers. The arrangement of the hypocaust under the caldarium R, and of that of the chamber next to it, S, is of some interest, as from it may be learned the disposition of such hypocausts as were in continual use in public buildings, and therefore requiring more frequent cleaning and inspection than those of private houses. Adjoining the north wall of chamber R was a small enclosure (17) containing a stair of three steps leading down to a low doorway in the wall with relieving arches over it. It was originally closed by a door, and it led into the hypocaust under the chamber just mentioned. From this door, in a southerly direction, a broad passage way pierced the mass of *pilæ* as far as a point just beneath the centre of the chamber above (R), and then, turning at a right angle, continued westward, through an opening in the partition wall between R and S, and crossed this latter chamber (S) to end at the furnace

[1] A view of this wall, taken soon after it was uncovered, is given in Plate 17, Vol. XV, of the *Journal of the Brit. Archæol. Assoc.*

which heated it. The floors of all the hypocausts to be found in the ruins of the baths appear to have been at the same level, and the *pilæ* of the same height throughout—something over 3 feet. This passage, therefore, among the pillars of the hypocausts of the two chambers, the *caldaria* R and S, was of a sufficient height, as well as width, to allow room for the work of cleaning and repairing. It was of use also in creating a strong draught in the furnace of the *caldarium* S, and thus causing a general diffusion of heat beneath the floors of the two chambers in question.

It cannot be ascertained whether the walls of either *caldarium* were jacketted with flue tiles, like those of the *sudatoria* G and I; but the probability is, that this method of heating was adopted for chambers R and S as well as for G and I.

The stokehole of the furnace of the *caldarium* R was at 18. On this side of the western wing of the baths the courtyard was on a level, or nearly so, with the floor of the hypocausts, so that one step only descends to the stokehole at 18, whilst it may be remembered that a short flight of these steps at 17 descended to the same level on the north. The space 19 between the stokehole and the south wall of the *caldarium* R was probably the furnace, with the boilers and water tanks above it for the supply of the hot baths, whose place is marked by the figures 20–20. The heat from the furnace 19 passed into the hypocaust of the chamber R through the aperture in the south wall, opposite to the furnace opening in the stokehole 18. A projection of stonework close beside the opening in the south wall, together with the pillars of the hypocaust, supported the floor of the baths mentioned, and these baths probably took up the entire width of the chamber and had a breadth of not less than 6 feet.[1]

The next and larger of the two *caldaria* (S), which form the wing of the baths under description, was some-

[1] Another theory may be broached with respect to the space 19. Supposing that no baths existed at 20–20, it is possible that 19 may have been a small chamber lying directly over the furnace here, and communicating with the chamber R by a narrow doorway. In this way it would have served as a *laconicum*, a chamber of the baths in which the heat could be raised to the highest pitch attainable by Roman methods.

what irregular in shape. Omitting its various adjuncts it was a square of 24 feet. On the south a recess 12 feet wide by 6 feet deep was probably intended to hold a seat; on the north a second one, semicircular in form, with a diameter of 12 feet, no doubt contained the *labrum*, a basin of stone or marble, filled with cold water for the use of bathers; and on the west side a third, and largest of all, taking up, in fact, nearly the whole width of the chamber, held, there is little reason to doubt, a large hot bath. The width of this recess was nearly 16 feet; but its depth could not be ascertained, as all trace of the back wall has disappeared. This wall must, however, have stood on the line of the opening of the furnace of the hypocaust at 21, the opening of the furnace being pierced at the base of the wall.

The furnace itself, of which the opening was in the stokehole T, consisted of two parallel walls with a width between them of 2 feet. They were 12 feet in length, and lay directly under the floor of the bath, which they helped to support. The stokehole T appears to have contained the tanks for the supply of the adjacent bath. The bases supporting them were to be seen on either side of the mouth of the furnace.

All traces of the baths themselves, other than a few remains of the supports of their floors, have vanished, and the suspensuræ of the hypocausts, of every chamber also, with trifling exceptions. But there can be no doubt that the *caldarium* S contained a bath, and that in all probability the *caldarium* R was furnished with one or two in like manner. The position of the respective baths over or near the furnace of each hypocaust may be taken as certain, as it is the usual arrangement both in public and private buildings. They were constructed, in all likelihood, in the same way as those to be found in the *caldaria* of all the public baths in Pompeii, viz., by parting off a space at the end of a chamber by a dwarf wall between 2 and 3 feet high, built upon the floor. This wall had a step or two on its outer and one on the inner side, the one on the inside serving as a seat for the bathers. Such, it is to be presumed, would have been the method of construction employed in the *caldarium* R; in S the dwarf wall, to form the bath, would have run

across the large recess in the western side of the chamber.[1]

As has been mentioned, the upper floors of the hypocausts have everywhere disappeared, save a fragment or two. This may partly be accounted for by the height (over 3 feet) and slenderness of the *pilæ*, which "were formed of square flat bricks placed one upon another without mortar,"[2] and also by the thinness of the floors themselves, which, judging from a fragment remaining in the north-east corner of chamber S. were not more than 8 inches in thickness.[3]

The walls of the buildings just described, as well as those forming the enclosure N, may be taken to have had an average thickness of 3 feet. The size of the stones employed in some of the details is worthy of remark. For instance, a stone was found lying outside the ruined walls of the apse of the *caldarium* S which had been worked to fit a considerable portion of the curvature of the semicircle. It was probably part of the cornice of the apse. Further may be noted, as exemplifying the care with which the Roman builders sought for the most massive material available for their constructions, the sills and jambs of the doorways of chambers Q and R.

It should be noted also that fragments of window glass[4] were dug up in the excavations, proving that the various apartments of the baths were lit by glazed windows, and that the external walls of the different groups of buildings were plastered and treated with colour, for the ruined walls of the apse of the *caldarium* S, when uncovered, were seen to have been painted in stripes of red and yellow. Altogether the external aspect of the buildings, as seen from the ambulatories of the courtyard, must have been bright and gay.[5]

Having now recorded all that can be discovered respecting the *basilica* and the public baths, certain structures, apparently depending on one or other of those edifices, have yet to come under examination.

It has been noted that between the western ambulatory of the baths and the supposed forum bounding the *insula*

[1] For the arrangement of Roman baths as indicated, see J. Overbeck, *Pompeji*, 209, 217, 234.
[2] *Uriconium*, p. 115.
[3] *Ibid.*
[4] *Ibid.*, p. 214.
[5] *Ibid.*, p. 114.

on the west occurs a space of some size filled with various structures. The first of these to be spoken of here is the group of constructions occupying the lower half of this space. It formed a small court U,[1] about 46 feet square, with a flooring of *opus spicatum* laid at a level from 2 to 3 feet above that of the neighbouring ambulatory of the Baths and the external roadway. The court was bounded on the west by a wall in which were two openings: the one to the north, 10 feet wide, had originally a sloping way to it permitting the entrance of carts and horses; the other at the south corner, 6 feet in width, was intended for people on foot, as it had two very much worn steps in front of it. In the centre of the court were some traces of constructions, but too slight for anything to be made out from them. On the north side was a range of small compartments, four in number, and on the south a similar range of three. On the east was another range of three, with a fourth occupying the north-east corner. All these compartments were, roughly speaking, 9 feet square, and the wall bounding them towards the court stood 2 feet high above the floor. Those on the east side had the peculiarity that their dividing walls were incomplete, leaving a passage between their ends and the wall at the back, which was the back wall of the western ambulatory of the Baths. Also, at the south-west corner, the continuity of the ranges of compartments was interrupted by a break in which steps to a lower level, that of the ambulatory just mentioned, are said to have been found, this lower level showing fragments of a floor of *opus spicatum* similar to that of the court.

The court was probably an uncovered one, the ranges of cells being roofed, but each compartment open, in all likelihood to its fullest extent, on the uncovered area. From the fact that in two of the divisions were found a great quantity of bones of animals and horns of deer, partly dressed, and also from weights having been dug up on the spot, Wright came to the conclusion that the building was a market place. This may have been so, but a discovery made in digging out the first cell on the north side (22) perhaps throws some light upon the uses

[1] Called by Wright "the little market place." See for an illustration of this court, Plates 18, 19, Vol. XV, *Journal of Brit. Archæol. Assoc.*

to which the place was put, at least for the greater part of the accommodation it afforded. The cell or compartment in question "was found," says Wright, "to be on less than ten feet deep, with a low cross wall at the bottom. In it was found a quantity of unburnt charcoal, with some remains of mineral coal."[1]

Now it is quite certain that a considerable quantity of fuel must have been required for the heating of the hypocausts of the Baths which were in use throughout the year, but in all the various parts of the establishment there has not been observed any adequate place for the mass of fuel which would be required. That fuel evi dently consisted not only of charcoal, but of mineral coal as well, cinders of the latter having been found in the hypocausts and in the stokehole T.[2] It seems therefore not unlikely that this court, with its many compartmetns, may have been used principally as a fuel store for the Baths, some, at least, of its compartments being coal bins. The fuel actually required was probably stacked in those of its eastern side, where a way at the back gave access to their contents. The corridor V, with a door at its north-east corner, would allow of this store being replenished perhaps without entering the court, if need were, and doorways in the wall of the western ambulatory of the Baths, but certainly at the north end of this eastern range (at 23), would permit of fuel being readily supplied to the requisite points at no great distance. This suggestion might be deemed worthy of consideration; and if all the cells of the court U were dug out, as does not seem to have been the case, some confirmation of this opinion might be obtained.

Crossing the passage L L, affording entrance to the court-yard of the Baths, the *latrinæ* will be found which served both the bathing establishment and the *basilica*. These occupy a court or enclosure 65 feet long by 19 feet 6 inches wide, lining the northern end of the western ambulatory of the Baths. There was a means of communication with them from the *basilica* by the doorway at 4, and an entrance to them from the ambulatory just mentioned, at 24.

The enclosure W was floored with *opus spicatum*, and

[1] *Uriconium*, p. 151. [2] *Ibid.*, p. 115.

against its eastern wall lay a trench (25) 2 feet 6 inches wide, with a slight retaining wall. This trench extended along the foot of the main wall to a point just beyond the entrance doorway, where a wall, projecting at right angles to it, appeared to cut off a portion of the northern end of the enclosure. A similar trench (26) against the western wall, but 1 foot wider, extended the whole length of the court and terminated at the northern end in a cesspool (27) lying against the southern wall of the *basilica*. This was about 9 feet deep, and there was a drain, apparently going either way, large enough for a man to creep up it.[1]

In the main walls, over each of the trenches named, are a series of chases implying wooden constructions covering them.

To the west of the *latrinæ* is a space (X) between solid walls, 5 feet wide at one end and 6 feet at the other, and extending the whole length of the enclosure. At 15 feet from the southern end an aperture (28) occurs in the western wall, 10 inches high and 6 inches wide opening into the western and larger trench of the latrines, at 2 feet 6 inches below the level of the pavement, which was the probable depth of the western trench. The soil in this enclosure showed "traces of ammonia and phosphates," and was taken, when excavated, to have been a cesspool; but seeing the smallness of the aperture, and that a cesspool with a drain existed at the north end of the adjoining court, the supposition might rather be entertained that X was a reservoir containing water for flushing periodically the trenches of the *latrinæ*, the opening mentioned being fitted with a sluice gate for the purpose. How this reservoir could have been supplied with water can only be ascertained by a further and thorough examination of the spot.[2]

The two quadrangular chambers to the west of the latrines, and between them and the supposed *forum*, were considered by Wright to have been the workshops of workers in metal. The western wall of each chamber had two wide openings on the roadway (that of chamber Y

[1] *Uriconium*, pp. 366, 367, Report of Dr. Johnson, 1867.

[2] See the arrangement of the latrines in the Roman baths at Silchester. *Archæologia*, Vol. 54, 228–9.

PLAN No. IV.

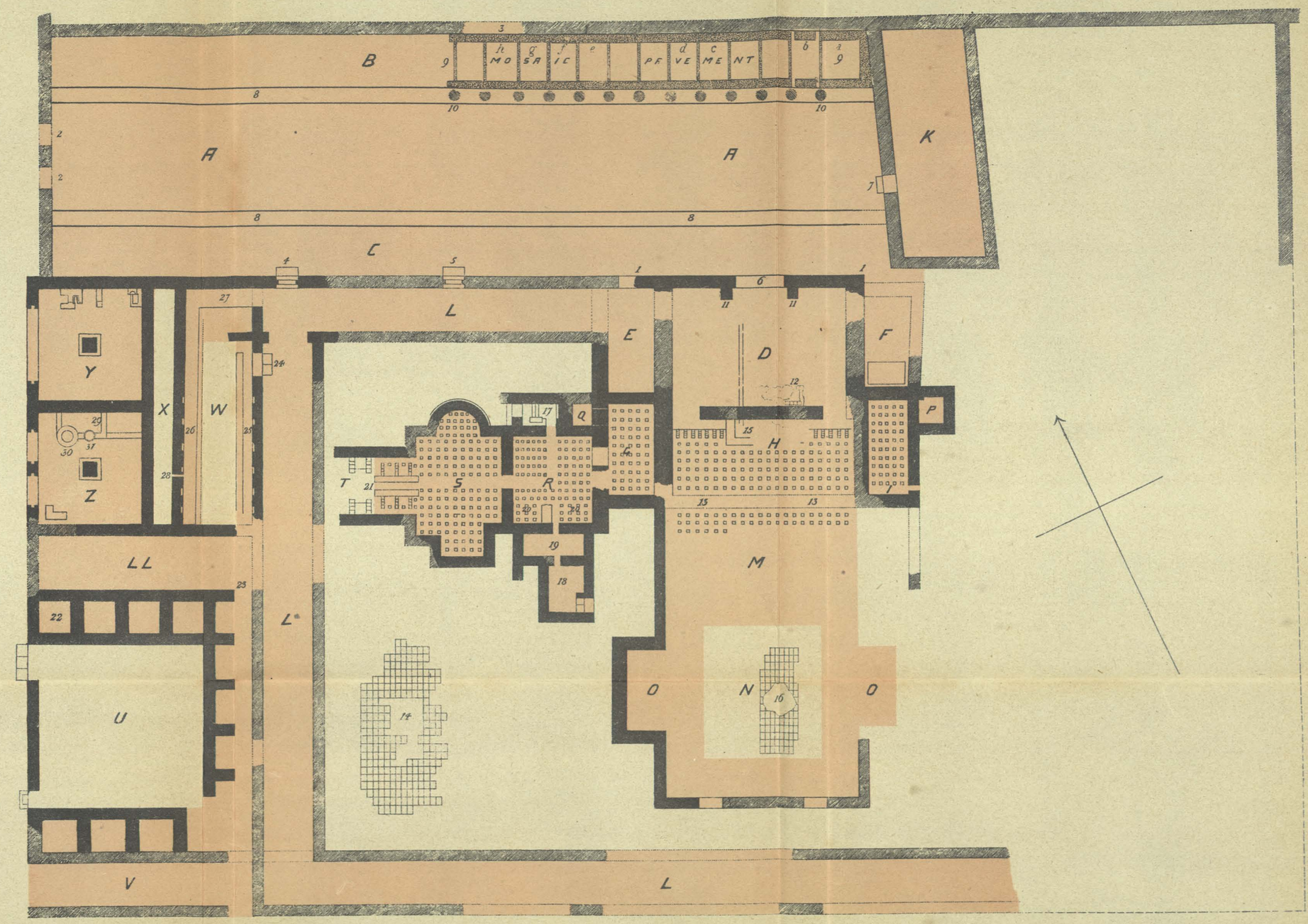
STREET

SUPPOSED

SITE

OF

FORUM



URICONIUM. [WROXETER].

DISCOVERIES 1859 TO 1896.

FEET.

has lost its central pier), each formerly filled, as shown by the stonework of the jambs, by a framework of wood on which doors were hung. In the centre of each area was a mass of masonry, which might have been a table, but was more probably the base of a pier supporting the roof. On the northern side of chamber Y were various remains of masonry, two of which appeared to have contained small furnaces. Many pieces of scoriæ were scattered about, and amongst them lay the bowl of an iron ladle.

The floor of each chamber was of cement laid nearly flush with the door sills, but the floor of Z had the peculiarity that it showed a surface of cement spread over less than half the western half, the rest of the area being filled, at a lower level, by a bed of sand, said to have been brought from a distance and perhaps used for moulds, for casting. Pounded granite was also found on this bed of sand, and "many fragments of fine glass were also scattered about."[1] On the northern side of the same chamber was a kind of bin (29) formed by a dwarf wall with a cross one about the middle of its length. In this was found a quantity of scoriæ and other refuse. At the corner of this bin nearest the door stood a cone about 6 feet high, built of various materials—clay, stones, and, here and there, pieces of mineral coal (30). In one side of the cone was a furnace "whose internal surface was vitrified to some depth. From the form and position of this little furnace it is quite evident that it must have been heated by a powerful blast." . . . "Remains of burnt charcoal were found in it, and on the ground near it."[2] On the wall of the bin close by, and to the right of this furnace, was a cylindrical mass of stone, still lying in the ruins, which was probably the base of an anvil (31). Scoriæ were scattered about everywhere, and in chamber Z many fragments of worked metal were turned up.

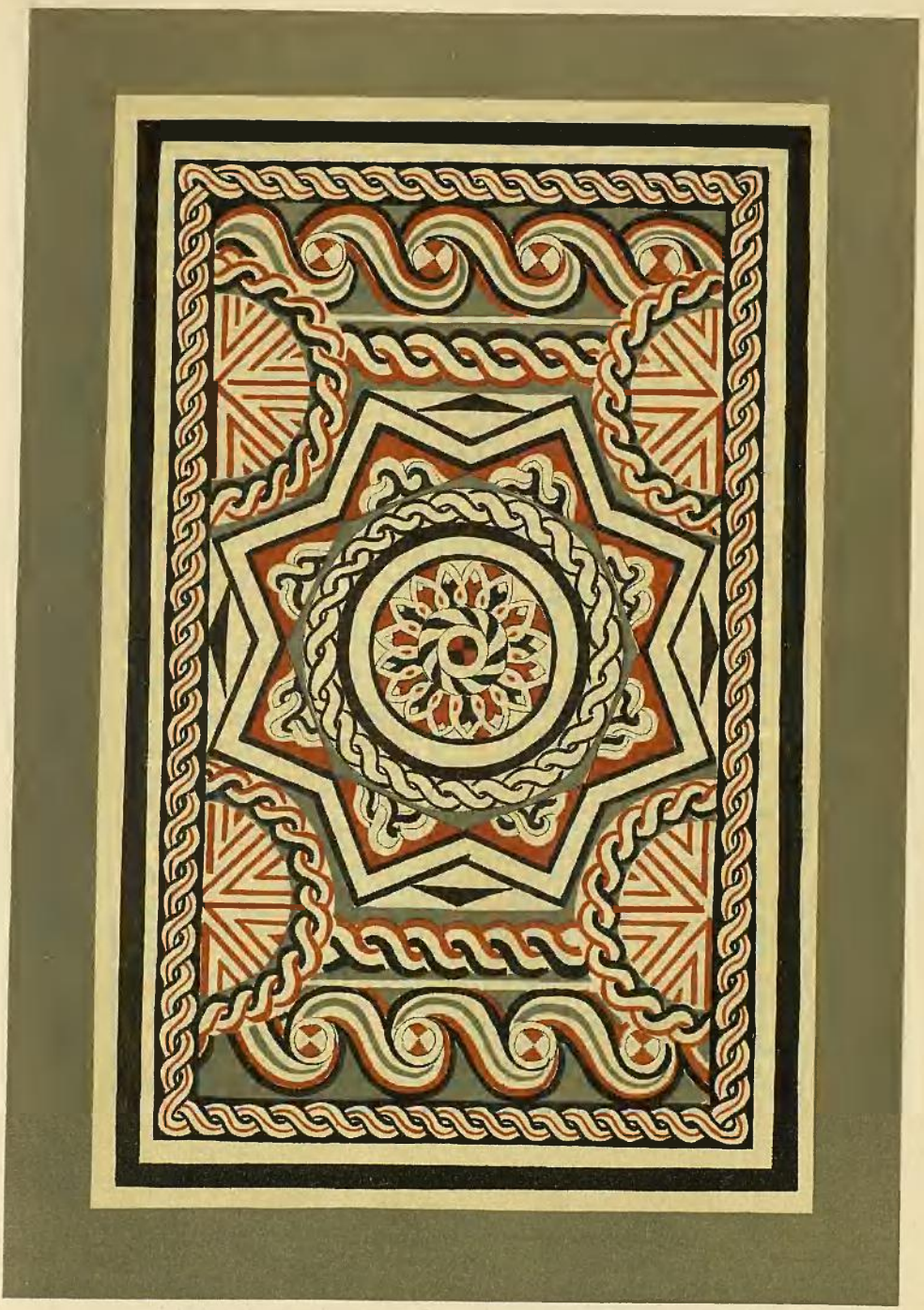
This is practically all that can be said concerning these workshops, and with these remarks upon them may be brought to a close the review of the various buildings whose ruins are or were to be found not only in the central *insula* of the Roman city, but within the circuit of

[1] *Uriconium*, pp. 161-2.
[2] *Ibid.*, p. 159. On the same page and on p. 162 may be seen illustrations of these remains.

its walls. Yet something more has to be added before this summary of discoveries on the site can be considered complete. Some further observations must be devoted to the mosaics and to such architectural fragments as have been preserved either within or in the neighbourhood of the city.

The few mosaic pavements found on the site have already been mentioned in this paper under the dates of their discovery. The only one of these of any importance is figured on Pl. II. Although an elaborate composition it has little interest in itself. This, however, cannot be said of the mosaic floor, fragments of which occupy the eastern half of the north aisle of the *basilica*. Its original plan may be seen on Plan IV, but with the details omitted for the sake of clearness, which omission is supplied in Pl. III, where every pattern is distinctly given.[1] A reference to either plan will show the disposition of the panels of which it is composed. The designs of eight of the panels could be made out. They consisted of geometric diapers made up of varying arrangements of square forms in the panels *d*, *e*, *f*, *g*, and *h*, and, in *a* and *b*, of triangles and squares set diamond fashion. Round *a*, *b*, *c*, and *e* are borders, whilst in the other spaces only a broad plain band outlines the diapers next the ground in which they are set. If we may judge from the existing fragments, it would appear that it was only every fourth panel which had a border, thus giving a variety to a composition which would otherwise have been somewhat monotonous in effect. The borders were varied in design. In *a* (the square end panel) the border is double, the outer one being a simple fret, the inner a line of triangles within broad plain bands, and this border crosses the field of the panel, taking the shape of a St. Andrew's Cross. In *b* a double row of triangles with broad plain bands surrounds the field, and the panel is bounded on either hand by a band of fretwork passing quite across the floor from side to side. Panels *a* and *b* are, as has been noted elsewhere, exceptional in arrangement. In

[1] The Institute is indebted to the courtesy of the council of the British Archæological Association for the loan of this illustration, made by Mr. George Maw, for his paper on the *Mosaics of Uriconium*, published in Vol. XVII of the *Journal of the Brit. Archæol. Assoc.*, and frequently cited in the present account.



WROXETER. PAVEMENT DISCOVERED IN 1827.

(From a drawing in a MS. volume by T. F. Dukes, entitled "Uriconium," in the library of the Society of Antiquaries of London).

c the border consists of a simple braid, the only curvilinear form to be found in this floor. The area enclosed by it appears to have been divided into three long compartments, but what they contained has entirely vanished. In *e* a band of fret of considerable size borders the field.

A reference to Pl. III will show that between the panels *b* and *c* there is a gap, from which the mosaics have disappeared, and that the same is the case between *d* and *e*; but, as in each instance the interval, if divided in half, would give spaces corresponding to two of the neighbouring panels, the conclusion may be safely drawn that the vacant intervals were originally filled by panels corresponding in size with those still traceable. Beyond *h* there are no further remains of the floor; but if a further panel be imagined, its western boundary would just show half the length of the aisle of the *basilica* in which these mosaics are laid. The patterns of the diapers suggest an imitation of floors of *opus sectile*—that is, of thin pieces of differently-coloured marbles or other material cut into various geometrical shapes and fitted together. In this floor such figures are formed with tesseræ, averaging $\frac{5}{8}$ of an inch square, of two colours—brownish-black and cream colour, the ground in which the patterns are set being also of tesseræ of somewhat larger dimensions, perhaps $\frac{3}{4}$ or $\frac{7}{8}$ of an inch square, and of a dull blackish-green hue. The only addition to these three colours is that of a red, in the braidwork border of panel *c*. These tesseræ are of brick, as is always the case where a bright red is required.

It has been supposed that some of the materials of these mosaics were of foreign origin,[1] but a careful examination of specimens of the various kinds does not bear out this notion. The idea that Romano-British mosaics were composed of imported marbles is a common one, but in no case where the attention of experts has been drawn to the subject has this been proved.[2]

[1] Maw, *Journ. of Brit. Archæol. Assoc.*, Vol. XVII.

[2] The following note, kindly contributed by Mr. Horace Woodward of the Geological Survey Office, gives the districts from which the materials of the Uriconian mosaics were in all likelihood derived. He says that the tesseræ of blackish-green hue "are probably bits of Caradoc sandstone, which might be matched in one of the quarries in the region of Caer Caradoc"; the black tesseræ "are probably carboniferous limestone, which occurs north of Little Wenlock, near Oswestry, &c.," and the cream-coloured "are also probably car-

In all the mosaic pavements yet found at Wroxeter these four colours, viz., greenish-black, reddish-black, cream colour, and brick red appear to be the only ones employed. Further afield, a pavement dug up at the Lea, near Shewsbury, in 1793, exhibited the same limited range of colouring.[1] The fact is interesting, as giving support to the conjecture that the materials of the mosaics which adorned the buildings in the Romano-British towns were often procured within the districts in which these towns occurred, or at no great distance from them.

With respect to the floors of the different chambers of the public baths of Uriconium, it may be surmised that, for the most part, they were of *opus signinum*, though traces of tessellation were found in the vaulted hall D and the chamber H. Mr. George Maw, who saw what remained of them in 1861, says, in his paper on the pavements of Uriconium,[2] "The floors . . . resting on the flues of the hypocaust that were not tessellated, were composed of a very hard concrete, formed of lime and burnt clay, rubbed down to a smooth face and closely resembling the 'Lime Ash' floors used for barns and cottages in Devon and Somersetshire, made of the refuse of the limekilns, moistened and well rammed down. This refuse consists of nearly equal parts of lime and the burnt earth (adhering to the stone), mixed with a little coal ash, and would therefore be almost identical in composition with the artificial concrete used by the Romans." . . . "Some of the lime ash floors I have seen in Devonshire are as hard as any stone and of so close a texture as to receive by wear and washing quite a smooth and polished surface." This description, as will be seen, has reference only to the *suspensuræ* of the various chambers, but the floors of the hypocausts throughout the baths appear to be of a similar cement to that here described.

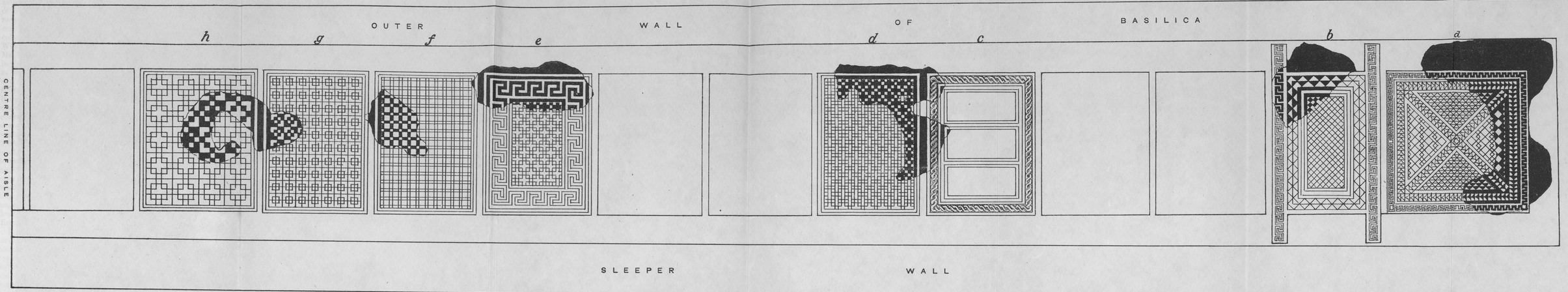
Passing from the consideration of the mosaics to that of the remaining architectural fragments on the site, it may

boniferous limestone." He adds, "for these particulars I am indebted to my colleague, Mr. W. W. Watts, M.A., who knows the Uriconian region well."

[1] Fowler's *Mosaic Pavements* contains an over-coloured representation of this pavement. A better one was published by Haynes of Shrewsbury, March 30th, 1794, from a drawing by Telford. It is of larger size than that published by Fowler, and gives the colours with apparently greater accuracy. Both illustrations have the advantage of being to scale.

[2] *Journal of Brit. Archæol. Assoc.*, Vol. XVII.

WROXETER. REMAINS OF TESSELLATED PAVEMENT, NORTH AISLE OF THE BASILICA. 1 INCH SCALE.



From Pl. 9 Vol. XVII. Journal of Brit. Archaol. Association.

be mentioned that such as could, with any probability, be identified as forming part of any building have already been dealt with in the account of the *basilica* and other structures. But a certain quantity of worked details, yet unnoted, claims attention. Although of importance in assisting us to form a judgment of the character and size of the buildings of the Roman city, these details have never as yet been examined with any accuracy. They consist almost exclusively of capitals, bases, and shafts of columns of which the greater number are to be found at Wroxeter, in the ruins of the Baths, and in the gardens of Mr. Everall and Mr. West; a small quantity is preserved in the Shrewsbury Museum, and scattered specimens are to be seen in the villages at no great distance from the site. At Uppington-on-Severn are two fragments of Corinthian capitals, together with an uninscribed altar lying in the churchyard—all three taken from the walls of the church when it was restored eleven years ago. This church dates from Saxon times. In the neighbouring garden of Mr. Ashdown's residence is a fine base of a column, which, judging by its size, must have come from the Roman city. At Withington, in the vicarage garden, is a small base also like the fragments at Uppington, taken from the walls of the village church when it was rebuilt. A much battered portion of a capital is to be found in the churchyard at Condover, and much ashlar from the city is worked up in the walls of Atcham Church, the same being the case with the church of Wroxeter itself. In fact, materials from the ruined town were evidently employed, doubtless to a considerable extent, at an early date, in the district surrounding it.

It is a fact worthy of notice that whenever architectural details are discovered on Roman sites in this country, they generally consist of bases, shafts, or capitals. This may arise from the forms of such fragments not being so adaptable for re-use as the more or less rectangular shapes of the remains of architraves and friezes. The former were therefore left on the site, while the latter were carried away to be worked up again. The way in which small shafts have been used up in recent times may be seen in a bye-road at Wroxeter, where for some yards the coping of the stone wall bound-

ing it is formed of columns split in half longitudinally.

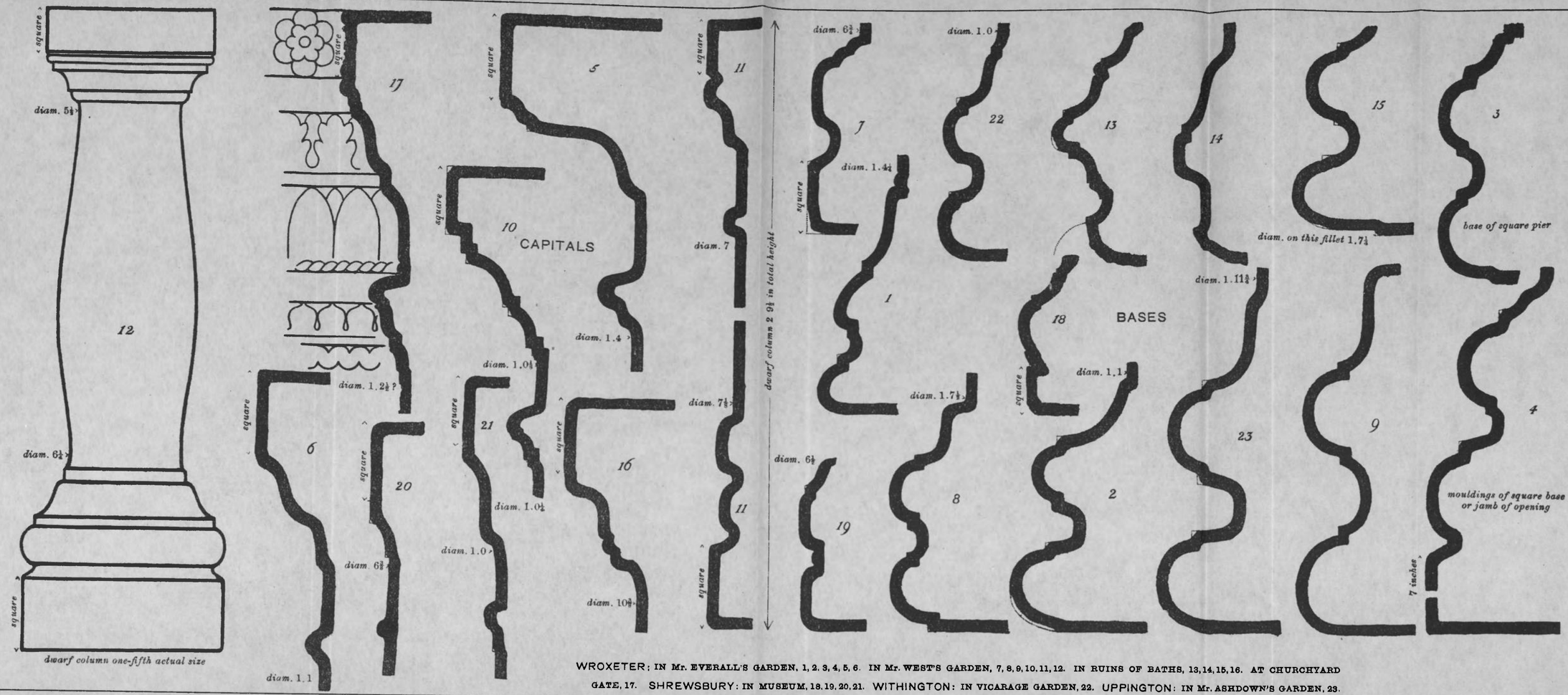
The bases vary considerably in size. The diameters of the columns to which they belonged may be classed thus: (1) some from 5 to 7 inches; (2) some from 1 foot to 1 foot 7 inches; and (3) a few over 2 feet. The mouldings of these bases show varieties of what is usually called the Attic base. A marked feature is the use of a very large hollow or a cyma reversa moulding to unite the upper torus with the shaft.

The capitals are more varied in arrangement than the bases, as is usual. One capital especially is worthy of note (*see* Section 5, Plate IV).[1] They are mostly varieties of Doric, but there are some few examples of the Corinthian, order. The amount of variation of both classes of capital from the usual classical types is remarkable, and this is not only so here but on most other Roman sites in Britain. Two specimens of an enriched Doric are to be seen placed on portions of shafts at the churchyard gate at Wroxeter. They are said to have been fished up from the Severn where it flows past the residence of Mr. Everall (called "the Cottage" on the Ordnance map and on Plan I). These capitals are good in style; but as they are much degraded by exposure to the weather, which has effaced all the sharp edges of the carving, they have the appearance of being ruder than they were when perfect. They are carved also in an intractable material, a grey sandstone grit, which precludes delicate finish in the workmanship (*see* No. 17, Plate IV of sections, and Plate V, Fig 2).[2]

Besides the fragments of Corinthian capitals already named—viz., the large one, presumably part of a column from the *basilica*, and two small ones in Uppington Churchyard—there is another of some size preserved in the Shrewsbury Museum. It measures 1 foot 9½ inches in diameter above the astragal, and shows the first range of leaves and part of the second. The upper half is

[1] A sketch of this, but showing it reversed, as a base, and not to scale, is to be found in J. C. Anderson's *Uriconium*, Plate VIII, Fig. 6.

[2] An indifferent illustration of one of these capitals may be seen in C. Roach Smith's *Collectanea Antiqua*, III, Plate VIII. Somewhat better representations of them are given in Wright's *Uriconium*, p. 209, and in J. C. Anderson's *Uriconium*, Plate VII. None are to scale.



WROXETER: IN Mr. EVERALL'S GARDEN, 1, 2, 3, 4, 5, 6. IN Mr. WEST'S GARDEN, 7, 8, 9, 10, 11, 12. IN RUINS OF BATHS, 13, 14, 15, 16. AT CHURCHYARD GATE, 17. SHREWSBURY: IN MUSEUM, 18, 19, 20, 21. WITHINGTON: IN VICARAGE GARDEN, 22. UPPINGTON: IN Mr. ASHDOWN'S GARDEN, 23.

S. E. Fox del 1896

wanting[1] (Pl. I, Fig. 1). It was found in the court marked U, Plan IV, but could not have belonged to that building. The other large fragment of a capital in this museum, just referred to as from the *basilica*, was discovered in the same place (*see* Plate I, Fig. 2). This scattering about of details of the ruined buildings occurs whenever Roman sites have been examined.

Two other almost formless portions of Corinthian capitals are also to be found at Wroxeter in the gardens previously named.

With the exceptions already treated of (p. 142) the shafts of columns are of no great size, and have come from houses rather than from public buildings. There are however two, if not three, fragments to which some interest attaches from their having rare surface ornamentation upon them in the form of scale work. The larger fragment shows also at the lower end a broad band of a diamond or trellised pattern; and set in a long oval-shaped hollow in this scale work, about 7 inches above the trellised band, is a figure of Bacchus, in relief, nude but for a slight piece of drapery, with the thyrsus in the left hand and possibly a bunch of grapes or a cantharus in the right, the object being too worn to be made out. A panther beside him looks up at this object. The group is much worn from exposure and bad treatment, and from this cause appears more barbarous in execution than was really the case. The whole treatment recalls that of a gem, as if the subject might have been copied from one. The hollow in which the figure is set is 1 foot $3\frac{1}{2}$ inches high, and the figure nearly fills the whole height. The diameter of the portion of shaft, which unfortunately is fractured across the figure, is 1 foot 1 inch. This fragment is at present preserved in the ruins of the Baths (*see* Plate V, Fig. 1).

The second one, carved in very low relief upon the scale work with which it is covered, represents a figure of a winged genius kneeling upon a basket and holding in his left hand what appears to be a bunch of grapes. The figure is of inferior workmanship to that first de-

[1] This capital is figured in Wright's *Uriconium*, p. 157, and in Anderson's *Uriconium*, Plate VII, the former illustration being the more faithful of the two. No scale is given in either work.

scribed, and the diameter of the shaft on which it is carved is smaller, being only $10\frac{1}{2}$ inches; but both these shafts probably belonged to the same structure. This second fragment is incorporated in the summer house in Mr. West's garden. Both were found built up in a wall, and removed and taken care of by the late Mr. Oatley, of Wroxeter, before any excavations for purposes of discovery had been made on the site. These shafts are of greyish sandstone.[1]

The small bases of shafts named first in classifying the diameters of columns on this site belong to members of a class of dwarf columns the uses of which it is not easy to define. Those of small size were certainly occasionally employed as the supports of stone tables,[2] others of larger dimensions, placed on a dwarf wall, upheld the roofs of peristyles in domestic buildings.[3] It seems doubtful, however, if this was not a somewhat exceptional arrangement, as these columns are seldom found on any site in numbers sufficient to indicate such an employment of them. Possibly they may have served, like the shafts in Saxon belfry windows, as dividing shafts to large window openings in gables. The small columns figured on Plate IV, Nos. 11, 12, are very like those used in Saxon work, but, from their mouldings, they must be judged Roman, as must be the bases Nos. 7, 19, on the same plate. If all the shafts used in belfry windows in Saxon times could be examined, it is possible that some of them at least would be found to be Roman brought from ruined buildings in the neighbourhood of the church into the fabric of which they were worked up. Besides the architectural details here described there is little else of the kind to be mentioned. Some few—two or three—shaped stones still lie where

[1] C. Roach Smith, *Collectanea Antiqua*, III, where on Plate VII is a very rough sketch of the lower half of the shaft comprising half only of the figure of Bacchus, together with that carved with the winged genius. A better, but equally inaccurate, representation is given of the Bacchus in J. C. Anderson's *Uriconium*, Plate VIII, Fig. 7. No scale is given in any of these representations. C. Roach Smith calls the figure in the oval on the larger shaft Bacchus or Atys. Wright, in his *Uriconium* (p. 210), considers it the latter, an opinion based apparently on a misunderstanding of the arrangement of the scanty drapery.

[2] *See Notes on the discovery of a Roman villa at Holcombe Downs*, by Captain J. Sackville Swann, *Archæologia*, LV, 462.

[3] *See Account of the Remains of a Roman villa discovered at Bignor in Sussex*, by S. Lysons, *Archæologia*, XVIII, 218, and a paper *On a Roman villa in Spoonley Wood, Gloucestershire*, by Prof. Middleton, *Archæologia*, LII, 651.

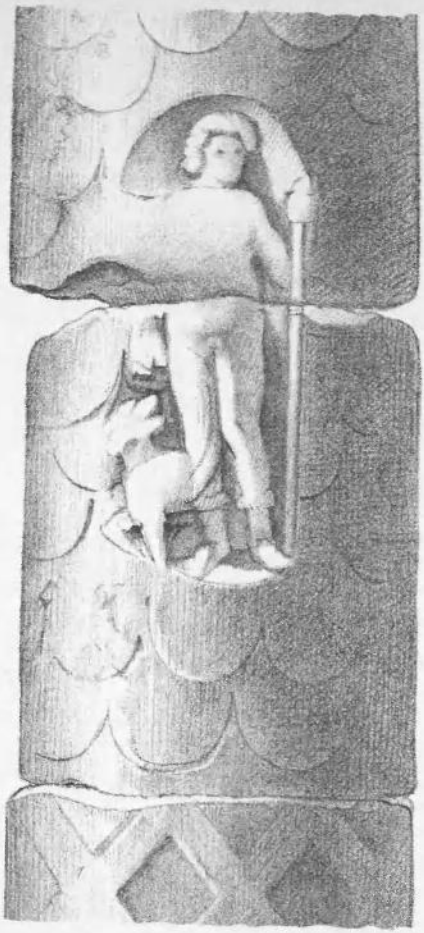


FIG. 1

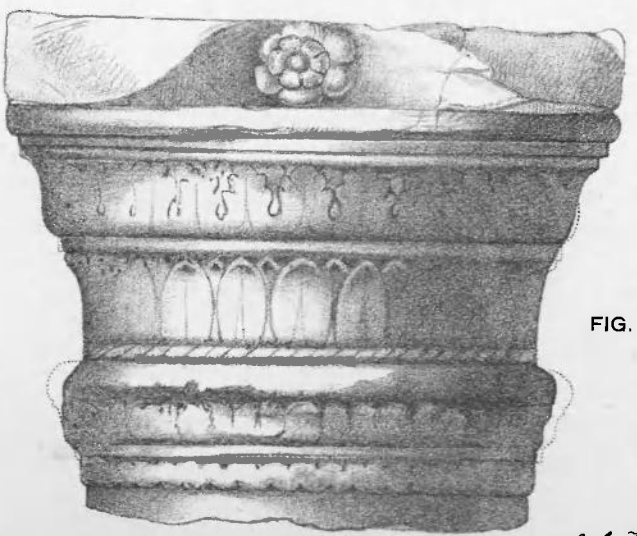


FIG. 2

G. E. Fox del. 1896.

WROXETE . ROMAN ARCHITECTURAL REMAINS

they were found—close to the stokehole of the baths (18, Plan IV). They are perhaps the stones of which Wright says, "They appear to have been designed to form the top of the arches of doorways or windows."[1] They are, in fact, coping stones from the tops of walls.

The material of these architectural fragments is the sandstone of the district, ranging in colour from deep red to nearly white (the small shaft No. 12 figured in Plate IV is partly red and partly white), and a sandstone grit which is always grey, a coarse intractable stone, although it has been employed for some of the capitals with delicate carving upon them. This stone is still drawn from quarries at Hoar Hill, not far from Wroxeter.

In concluding this review of such of the ruined edifices of Uriconium as are yet known, it may be said, without fear of contradiction, that no Roman site in Britain offers a better promise of important discoveries than Wroxeter. The violent destruction which appears to have overtaken the city has done more than anything, paradoxical though it may seem to say so, to preserve its remains for the investigation of future ages.[2] The fallen masses of roof and wall buried deeply the lower portions of the buildings to which they belonged, and the growth of brushwood, in all likelihood, over the heaps of rubbish, kept the site waste longer than would otherwise have been the case had the town perished by gradual depopulation.[3] Though the plough—that universal leveller—has been at work for some hundreds of years above the ruined dwellings, it has less chance, from the cause assigned, of creating such havoc as in other sites. For instance, in the exploration of the Roman town at Silchester (a town which appears to have slowly died out, and, unlike Uriconium, was not over-

[1] *Uriconium*, p. 140.

[2] Evidences of this destruction and of the massacre of the inhabitants were everywhere visible in the explorations of 1861. Maw speaks of the pavements of the *basilica* as showing traces of the conflagration of the building, and Wright, in his *Uriconium* (p. 68), says, "Our excavations have proved, beyond a doubt, that the town was taken by force, that a frightful massacre of the inhabitants followed, and that it was then plundered and burnt. Remains of men, women, and children, are found everywhere scattered among the ruins, and the traces of burning are not only met with in all parts of them, but the whole of the soil within the walls of the ancient city is blackened by it to such a degree as to present a very marked contrast to the lighter colour of the earth outside. (*See* also pp. 114, 118, 119, 163).

[3] From *A Rental of Wroxeter* A.D. 1350, it would seem that a considerable portion of the land contained in the parish at that date was waste (*Uriconium*, *Appendix No. III*, p. 402 *et seq.*).

whelmed by sudden catastrophe) its destructive agency is visible wherever the remains of buildings are uncovered.

A rich field awaits the future explorer if ever further excavations are attempted at Wroxeter. The central *insula* has only been partially dug out, and what has been found gives promise of an ample harvest of discoveries to come. The *forum* of the town has yet to be found, and the various edifices by which it was surrounded. On the site of this city also, if anywhere in Britain, the foundation of Christian churches are likely to be revealed; for it has been conjectured, with considerable probability, that the destruction of the city did not take place till late in the period of Teutonic conquest.

The central *insula*, as has been said, is but half explored, and even something still remains to be done amongst the ruined walls already disclosed, for those who excavated them left certain important points doubtful which with little labour could be cleared up. It is earnestly to be hoped, if a time ever comes for further investigation of the site, that those who undertake it will have the technical qualifications necessary for the task. It has been only too often taken for granted that literary knowledge, or an intimate acquaintance with the minor antiquities of the Roman period, are sufficient qualifications for an investigator of the sites of Roman towns or villas. No view could be more erroneous, and yet no view has been so frequently acted on. Neither the one nor the other department of knowledge, without a certain amount of familiarity with the art of building, and some acquaintance with the methods of Roman construction, and the plans of buildings of the Period, will be of use to the explorer, and without such technical knowledge his researches will be costly and inadequate.

The path of the future investigator is clearly marked out for him. The first task to be undertaken should be the careful working out of the *basilica*, as yet but very insufficiently examined, and after that the remainder of the public baths still beneath the soil. Subsequently, owing to the nature of the site, it will be necessary to proceed with the labour of excavation from the centre

already disclosed. In this way only can the general plan of the city be ascertained. Random digging is as likely as not to prove disappointing, and, even if successful, would help but little towards a conception of the city as a whole.

Finally, acknowledgments and thanks are due to the Natural History and Antiquarian Society of Shrewsbury for permission to excavate in their grounds; to all who, either at Wroxeter or in its neighbourhood, have with ready courtesy allowed examination and study of the Roman remains in their possession; and also to the Society of Antiquaries and to the British Archæological Association for permission to use illustrations, published or unpublished, having reference to the site.