

## V.—ON A BUILDING AT CILURNUM SUPPOSED TO BE ROMAN BATHS.

BY SHERITON HOLMES.

[Read on the 28th July, 1886.]

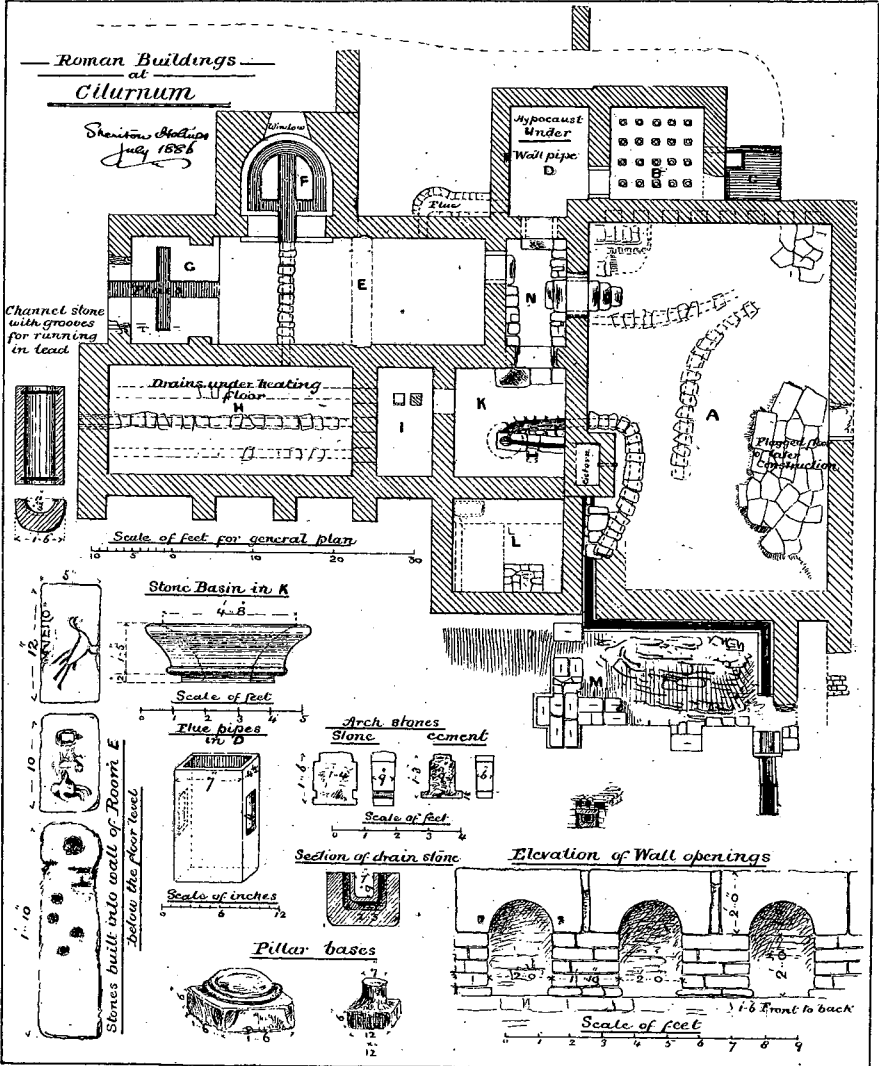
AT the Station of CILURNUM, on the line of the Roman Wall, there has recently been discovered a building, consisting of from twelve to thirteen rooms. It is situated between the eastern side of the camp and the river North Tyne, and the walls remain from 2 to 12 feet high. Generally, the doorways communicating between the rooms can be seen, and at some of them the stone slabs which lined the walls at each side remain intact; there is only the lower portion of one window remaining.

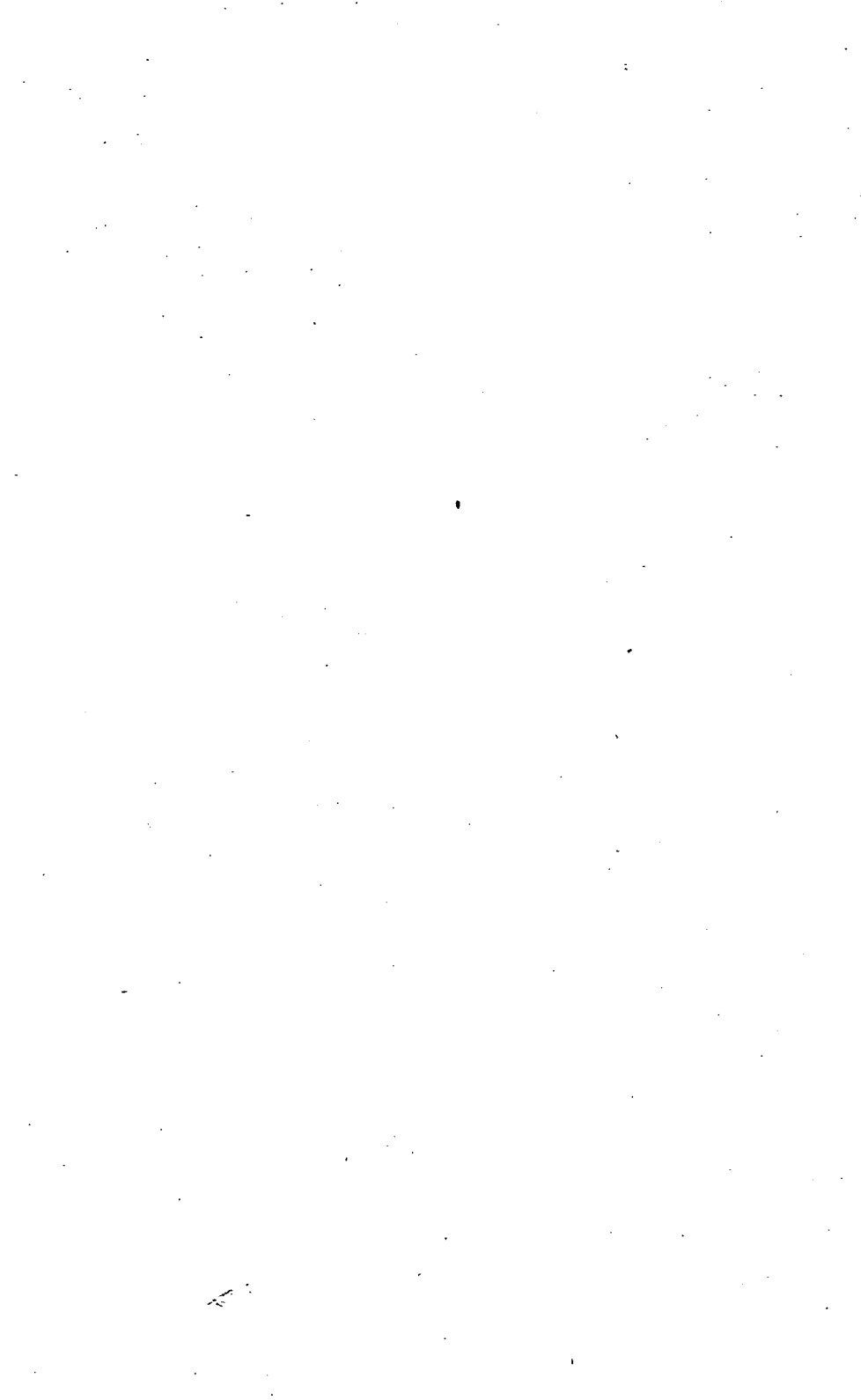
I have made a survey of the ruins from which the accompanying plan has been prepared, and upon it are also shown the special stones found in making the excavation. Upon the plan the various rooms have been distinguished by letters for ease of reference.

As the buildings have, apparently, been erected at different dates, and out of previously used materials, and have been otherwise altered in many ways, it is probable that after the Romans ceased their occupation they were used for shelter by the inhabitants of the country, who had lighted fires against the walls at points below the level of the original hypocaust or flued floors. At the places where these fires had been, the wall stones have been deeply burnt, and have crumbled or fallen away to the depth of a foot or fifteen inches.

Before stating what I conceive to have been the use of the building, it will be well to describe the various rooms, giving (so far as can be ascertained) the condition in which they were when excavated, and the articles found in them.

Commencing with the room marked A, which occupies the greater portion of the northern side of the building, and which is much larger than any of the others, being 45 feet by 29 feet inside of the walls. The entrance to this room has been about midway along the northern





wall, as indicated by a portion of one of its door slabs yet remaining in position, and along its western end wall there are seven arched recesses formed in the thickness of the wall, these are 1 foot 6 inches, back to front, 2 feet wide, and 3 feet high to the inside of the arched top, which is formed of one stone over each recess.

When first excavated, this room had a stone flagged floor placed upon a thick bed of loose rubble, which was about 2 feet 6 inches above the level of the original floor. There are no signs of this room having had a hypocaust or other means of heating, but there are some ventilating drains which must have been immediately below the original floor. Near the south-west corner of room A a doorway leads into a cross corridor, which communicates at its western end with the rooms D and B, on its southern side with the room E, and at its eastern end with the room K and others adjoining. It is thus quite enclosed in the building, and must have been very dark, unless it had been lighted from the roof or the walls carried up higher than those adjoining, so as to admit of lighting above the level of the other roofs. The rooms B and D being in direct communication with the firehole C, would be more highly heated than any other portion of the building. The hypocausts underneath these two rooms remain in good order, and, in addition, the room D has a flue pipe embedded in the wall, which communicates with the hypocaust at its lower end, and has side openings to allow the heat to circulate within the walls, though it is not clear that the walls have been specially flued for the purpose. The pipe reaches up to about 3 feet above the level of the floor, and there may have been means of opening it and letting the heated air direct into the room when proper incandescence had been obtained at the furnace, in a similar manner to that adopted in Russian houses, where, after the stove has ceased to emit smoke, a flap opening in the flue allows the heated air to come freely into the room.

The doorway between rooms B and D has the side slabs remaining in position. These are 6 feet 2 inches long by 2 feet 7 inches wide and 7 inches thick, and on one of them there appears to have been some letters cut, but excepting the initial S they are doubtful. It is curious that this letter S seems to have been cut in the stone in several places, sometimes it is upright, at other times leaning or across.

From the hypocaust, under room D, a flue passes to the outside of

the building, and swells out to form a small hot air chamber, from which the flue is continued through the wall into the room E, and from it into the other rooms which have had heated floors.

In the room K, at the eastern end of the corridor, there is a stone with a circular hollow cut in it, which seems to have formed the base of a fountain basin. Two portions of the basin remain of a somewhat elegant form, and I estimate from these that the basin, when whole, would be about 4 feet 8 inches diameter within the rim. The water arrangements for supply and discharge in relation to this basin are not very easy to understand from what remains of them. In all probability the supply would be drawn from a cistern adjoining, which is formed by a jutting-out of the wall separating K from A, and which has a leaden pipe leading out of the bottom into the room A. A channel, deeply cut in large stones, leads by a considerable declivity from underneath the cistern to the fountain base, and must have had communication with the cistern, though at present it is difficult to see how. From the fountain basin there is a built waste drain, running through the wall into the room A, then curving round the tank, and discharging above the main stone drain of the building. There is a clumsiness about this arrangement of waste drain, which seems to be the result of an afterthought, or an alteration from the original design of the building.

Adjoining room K, on the east, is the room L, which has cemented floors, as though it had contained baths. Against the eastern wall is a square block of masonry, which appears to have formed a base upon which some object might have stood.

Leading out of room K towards the south there is a small room I, which has been under-heated by a flue leading through the wall from the room E. When excavated there was about 2 feet depth of sand in this room, and at the bottom two red tiles, with figured patterns upon them. Beyond this is a large room H, which has also had a heated floor, communicating by three openings with the hypocaust under I, and having one opening in the centre of its southern wall leading to the outside of the building. Underneath the hypocaust floor of this room there are three ventilating drains, and its eastern wall has counterforts against it on the outside.

The room E, on the southern side of the corridor, may have been

originally divided into two almost equal portions by a cross wall. There is nothing of this wall remaining, but the side walls show where it has been torn away from them. Jutting out from this room is an apartment with a circular end, in the centre of which is the lower portion of a window with splayed jambs, and at the southern end of E there is another apartment; both these have been heated by flues, which remain intact, excepting that the covers have been removed, and they seem to have been connected with E by arched openings, the arches springing from pilasters.

A number of arched stones and arch voussoirs, seemingly formed of concrete, were found in the room E. Their shapes are peculiar, and favour the belief that they have been faced with some better material.

At the eastern end of the room A there has been added some masonry of a totally different character from any in other parts of the building, consisting of a casing wall, with counterforts composed of large stones, similar to those of which the two bridges have been built, and which have lewis holes cut in them. The foundation of this portion of the building is on quicksand and deep loam, and it is probable that shrinkage of the building had taken place in consequence, and that this additional masonry had been built to support it at the time when the later bridge works were in progress, or with some unused material prepared for that structure.

The steps leading from the doorways into the rooms are very heavily worn, and the peculiar manner in which the step leading from the corridor to the room K is worn, shows that the people entering had to turn sharply to the right to avoid the fountain basin.

The floor of the room G had been at a higher level than any other portion of the building.

The construction of the main drain of the building is elaborate, the channel, 7 inches wide by 9 inches deep, is cut in large rectangular stones, and each stone, at its end, has grooves, into which cement had been run to form a watertight joint. There are other channel stones of a different description, in these the channel is semi-circular, and there are grooves cut across the channel near each end of the stone, into which lead has been poured to cover over the joint between the stones. The lead and cement yet remain in some of the channel stone grooves.

After carefully considering the relation of the various apartments and their heating arrangements, I have come to the conclusion that they had been a set of baths, and I am strengthened in this belief by the assurance of a gentleman who has on various occasions visited the ruins of Pompeii and studied the bath arrangements there, that the wall recesses in the room A are similar to those at the Pompeian baths, and that their use had been to hold the clothes of the bathers. And as the end opening nearest the corridor has holes in the stone, indicative of its having been closed by a door, it is probable that in it were kept the olive oil and spices used in the anointing before bathing.

In the ruins of the *Thermae* of Titus, at Rome, was found a wall painting, representing a section elevation of a Roman bath. In the first room named upon the drawing, the *Eloeothesium*, or room for anointing, the wall is depicted with similar recesses, in which there appear to be jars, but these cover the whole wall up to the springing of the arched roof. The room A would be the *Frigidarium*, or, possibly in this case, the *Frigidarium* and *Tepidarium* combined, where the bathers would undress, and probably also be anointed.

From this they would pass into the corridor, which, being in connection with the heated chambers, would form an intermediate stage between the hot and cold rooms. They would then pass into the heated rooms D and B, where they would undergo the sweating process, returning into the corridor to cool preparatory to going into the cold lavatory room K, where water would be laved over them from the stone basin, and then into the further room L, where there appears to have been cold baths. The floor of this room K has had drains to lead away the waters thrown about the room. These drains have been cut out of the floor stones, one of which remains in position, sneaked into the inlet channel.

It is not easy to assign special uses for the other rooms, but, supposing the wall across E restored, the remaining southern portion of that room would be symmetrical with the circular-ended room F, and might have been a music room, or a place where poems were recited.

It is likely that the walls of the rooms would be cased with slabs of stone or other material, as was commonly done in Roman baths, upon a coating of cement mixed with broken tile, portions of which yet adhere to them. There are none of these slabs remaining in posi-

tion, but it seems probable that the flags forming the later floor of the room A had been used for the purpose. In the room E a number of the holdfasts yet remain in the wall, by which the wall slabs had been secured in their position.\*

In making the excavations an altar to Fortune was found,† and a number of female trinkets. The latter were found in the room A, and consisted of beads, brooches, and a jet ring. In room I was found a piece of delicate gold chain, about 4 inches long, and hair pins were scattered about over the rooms generally. There is just one circumstance which militates somewhat against the use of the rooms as baths, and that is the excessive wear of the stone steps at the entrances to the various rooms; for the bathers and their attendants would likely be either barefooted or have their feet clothed with soft sandals. But it is quite possible that if the buildings were erected during the early period of the Roman occupation, they might have been used for many purposes before being finally abandoned by that people. The wearing of the steps leading from the corridor into the room A had taken place before the floor of that room had been altered and raised to a higher level, indicating that the building must have been in use for a very long time before the floor had been altered.

\* A little distance west of these buildings are the remains of a Roman house, the bath rooms of which have yet the wall slabs remaining in position.

† For description of this see *Arch. Ael.*, Vol. XI., p. 117.