

ON THE RESULTS OF THE EXPLORATION OF THE
ROMAN STATION OF VINOVIUM, IN THE YEAR 1878.

READ FEBRUARY 26TH, 1879, BY THE REV. R. E. HOOPPELL, M.A.,
LL.D., D.C.L., F.R.A.S.

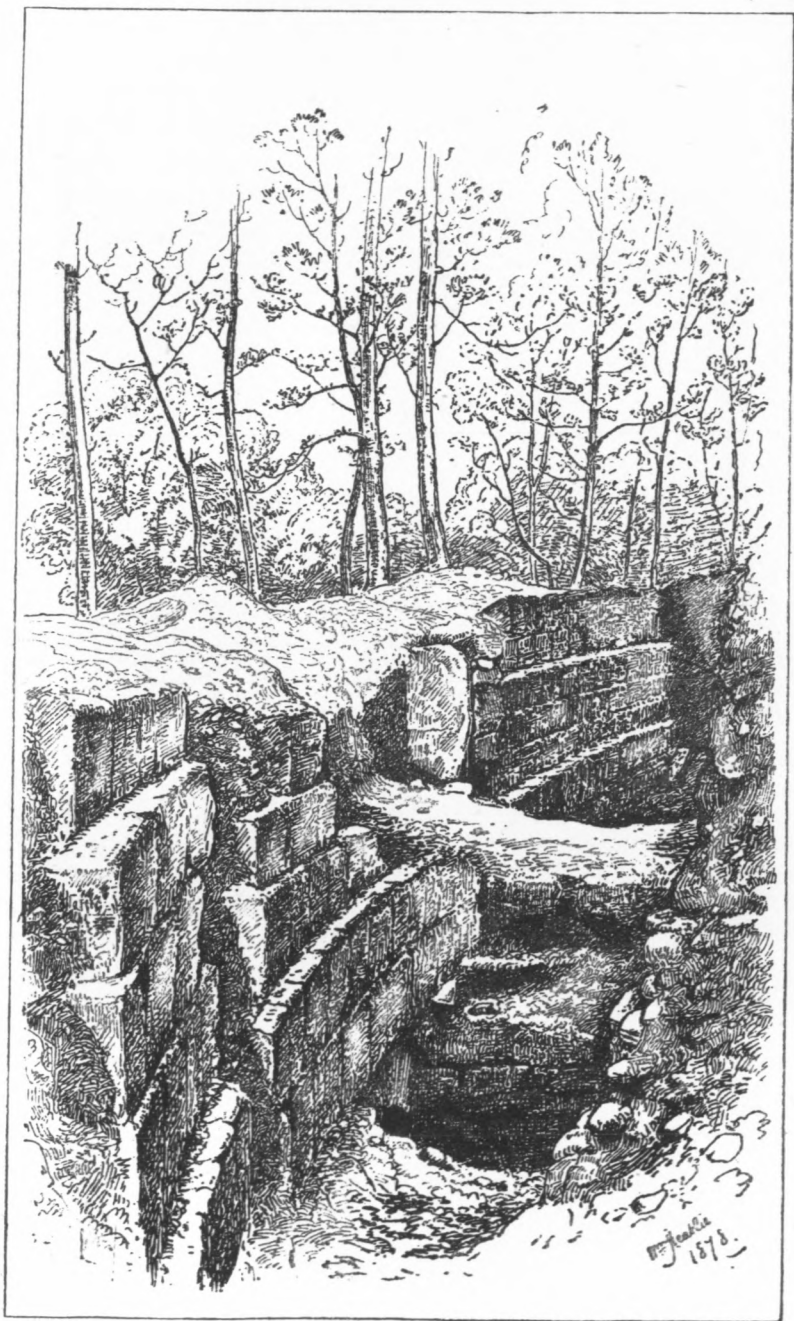
THE Society is aware that, with great public spirit and liberality, Mr. John Proud, of Bishops Auckland, undertook in the early summer of last year to make extensive explorations at his own expense on the site of the Roman Station of Vinovium. All he stipulated for was that your gifted secretary, Dr. Bruce, should first inspect the site, and give his opinion as to the mode of procedure that should be pursued, and that the writer of this paper should give his help from time to time in the superintendence of the exploration. Before, however, the work could be proceeded with it was necessary to obtain the consent of the Bishop of Durham, in whom is vested the ownership of the land, and the consent of Mr. William Proud, the tenant, who holds it of the Bishop. The Ecclesiastical Commissioners, as managers of the Bishop's estates, were also applied to. In each case cordial assent was given. Bishop Baring took the liveliest interest in the work, and, on the occasion of Dr. Bruce's visit in fulfilment of the stipulation mentioned above, met Dr. Bruce at the Auckland Railway Station, and drove him to the ground, where Mr. Proud and the writer of this paper joined them, and whence, after due inspection, the quartette adjourned to Auckland Castle. Mr. Proud's promptness in commencing the work deserves record. As the party left the ground, the man whom Mr. Proud had engaged to ply pick and spade, on what Dr. Hunter, I think, called an "inexhaustible treasury of antiquities," commenced

his work. That work was carried on without intermission for many months—till, indeed, the unexampled severity of the winter necessitated its being laid aside; but it has only been laid aside for a time. Mr. Proud purposes resuming it as the spring advances. The station has proved to be one of peculiar features, and of very great interest. The exploration has raised many questions, which, without further research, it is impossible to decide.

The first part attacked was the rampart on the east side. This was laid bare in several places. At last a magnificent length and depth was uncovered, a view of which I have here, by Mr. Proud's kind provision, and which will enable the members to realise its perfect character. This stretch of wall curves singularly. It is near the corner, but the curvature is more than that of the ordinary rounded corner of Roman ramparts.

But a more remarkable feature still is the culvert which pierces it, the arching of which is perfect and of excellent workmanship. The wall is here 8 feet 6 inches thick, the length of the culvert, which projects a little on the east side, being 9 feet 7 inches. The drawing I have already exhibited shows the inside of the wall and culvert. Another shows the outside. In this a course of massive chamfered stones is seen, similar in character, to those which appear to have run round the ramparts at South Shields. In one place, just to the south of the culvert, these stones appear worn away as though with footsteps, and opposite to those worn stones, on the other side of the wall, appear as it were the relics of a postern gate of later times; a paved footpath, too, seems to run thence into the station. This portion of the works needs greatly further exploration.

On each side of the ramparts appear the remains of a walled channel in which water flowed, and what is very interesting, the whole of the under surface of the arch was coated with a mineral deposit. This deposit was several inches in thickness, and seems to indicate that a body of water sufficient to fill the culvert must have flowed through it for long periods of time. Whence the stream came and whither it went are questions difficult of decision. Mr. A. B. Cowan of the Laboratory of the Weardale Iron Works, Tudhoe, has kindly analysed the deposit formed, and has found that 100 parts of deposit contain the following constituent elements:—









Lime	47·264
Magnesia	1·260
Iron Peroxide	4·210
Alumina	Trace
Silica	3·800
Carbonic Acid	38·250
Sulphuric Acid... ..	·514
Phosphoric Acid	1·740
Combined Water	2·500
Organic Matter	·600
	<hr/>
	100·138

It seems evident that the water must have been pure water, not sewage that is, and that it must have come from a spring situated either inside or outside the fortress. There is no difficulty in conceiving the existence of a spring, even a plentiful spring, upon this hill top, for the height abounds with water even now; and, before the extensive coal mining operations of present times, and the draining that has also been effected, a copious spring may well have existed on the spot. But the question, whether the water ran into the station or out of it, is complicated by other discoveries, and also by the nature of the ground. Naturally one would look upon the culvert as forming one of the later stages of an aqueduct for the supply of the station, but, though there is no very great difference of level, yet certainly the ground within the station would in the present day be higher than that outside the station. Yet there is a singular stone outside the rampart adjusted in rests to close partially the outer mouth of the culvert, the lower edge of which was also thickly coated with the mineral deposit. This stone appears as though intended to prevent brushwood or other *debris* from entering the passage, and so gives colour to the supposition that the water flowed into the station.

Following, however, the channel outward from the rampart, the workman came upon a square roughly walled chamber, at 22 feet distance from the culvert, with great horizontal stones apparently *in situ*, with marks of fire on them, and lumps of red clay and several massive and curiously wrought stones mingled with many others. In this square chamber were no signs of water, no mud, nor other alluvial deposit; and whether to think it had been a kiln or a mithraic quasi-cave, things wide asunder, the explorers did not know. It is much to be hoped that further exploration may throw more light upon what

seems at present a quite insoluble mystery. I may remark that in all this quarter fragments of Roman pottery, Roman coins, &c., were found, not in great abundance, but still in quite sufficient quantity to prove incontestably the Roman character of the work revealed by the spade. Besides, the depth of the masonry below the surface was considerable, no less than 9 feet to the bottom of the culvert on the inner side of the rampart. The floor of the culvert was paved with flag stones.

On the north side the rampart was found in several places, but much more of it had been removed than on the east side. Here much old glass was found. The age of it seems doubtful. I intended to bring a piece of it with me, and should have been glad to have the opinion of the members on it, as to whether it is modern, medieval, or older still. But I must, I see, defer submitting it to you till a future opportunity.

South of the culvert the rampart was found in various places, and a most interesting fact in connection with its foundation was discovered. It was found that, beneath the vertical stone wall of the Roman era, an immense bed of waterworn stones from the adjacent Wear, without mortar, extended far on each side. It would seem that this vast bed of unmortared pebbles represents the base of a British rampart, which encircled the height before the Romans captured and made the fortress their own, and that its curvature gave the curve mentioned above to the Roman Wall, which otherwise no doubt would have run as exactly straight at Vinovium as I believe it does at Procolitia and Borcovicus. There can be no doubt, I apprehend, that Binchester is the Vinovium of the Itinerary. Many have also thought it to be the Vinovium of Ptolemy. Of this, however, I do not myself feel absolutely certain; though, when the great bed of pebbles underlying the massive masonry of Rome was discovered, I thought a striking evidence of the correctness of Ptolemy's information had been brought to light.

Accident led us from the north-east corner of the station to a point far to the south-west of the spot where we had been working. I may remind the members that the station is a very large one, and that its outline as given by Mr. McLauchlan differs widely from its outline as given on the Ordnance Map. I cannot say, therefore, whether the point to which we next went was inside or outside the Roman ramparts. I imagine, however, outside. We worked from it upwards and

onwards towards the central parts of the station, and in the course of many weeks laid bare the walls of what evidently was a range of spacious buildings extending along the southern side of an important street. Further explorations afterwards led us to conclude that this street was none other than the great road, Antonine's Iter I., which, coming from Isurium and Cataractonium, passed through Vinovium and went on to Vindomora, Corstopitum, and Bremenium. The northern gate is hopeless of access to us; but I believe it is Mr. Proud's intention to endeavour later on to find the place of the southern gate, if the portion of the street we have already explored is really outside the Roman rampart. I have several views of the trenches opened along the western edge of this street, and the members will find them very instructive. Along the whole course of it, next to the buildings, was a continuous line of channelling. The depth of the channelling below the surface is on an average 6 feet. The side walls of all the buildings run at right angles to this street. Some of the buildings were very large. The outside length of one, the whole circuit of the walls of which was excavated, is 91 feet, the outside breadth 25 feet 8 inches, the thickness of the walls 2 feet.* The remains, more or less complete, of several such buildings have been uncovered. A very singular feature in them, and one which at first puzzled us exceedingly, is the existence of two cubical stones with a square hole in the centre of each, in connection with each building. The size of these stones, to take one at random as a specimen, is, in inches, $16 \times 14 \times 12$, with hole $4 \times 4 \times 4$. There are about 15 of them in all. The use of these mortised blocks was at first a great mystery. I have come to the conclusion for a long time past, however, that they formed portions of the doorways. Pillars, either of stone or wood, doubtless, stood upon them, and the hole was a socket into which the tenon of the post was inserted.

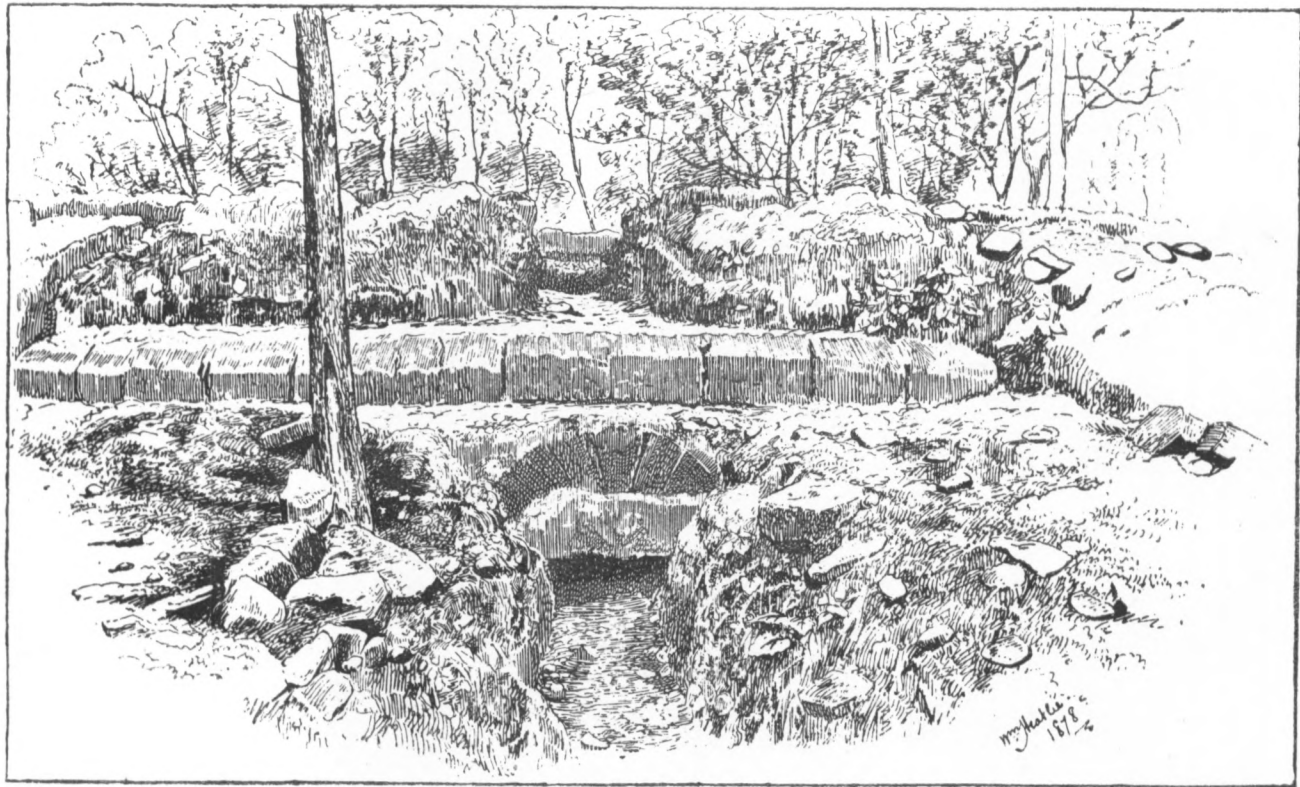
Some of these holed stones show signs of having been raised in the course of time from their original positions to a higher level. In fact, one of the most interesting features of this street is the visible indication it affords of the long period of time, amounting plainly to centuries, possibly to many centuries, that Vinovium was a place of strength and population. The street appears to have been *the* road till comparatively

* This is the building, the corner of which is shown in the engraving.

modern days. It is piled with enormous stones, the *debris* of innumerable buildings. Among them are pillars and ornamented work of many kinds. Again and again has the channelling here and there been raised: again and again have the entrances to the buildings been elevated likewise. In several places huge slabs pass from the street to the adjacent buildings, forming a door step across what may have been, when it was laid down, but a muddy gutter, the capacious stone channelling of the earlier and wealthier age being buried far beneath. Three of the drawings I have with me show these features admirably. In this one you have the continuous channelling, the piled-up road, the broken pillars, the mortised stones; in the next you have the same features, in part, and, besides them, the lifted channelling of a middle, and the door stone of a still later, period; in the third you have a further example of the same.

This last portion represents a spot which has a further interest of its own. It is situated on the extreme edge of the hill. Many circumstances conspire to show the remarkable rapidity with which the southern face of the hill has wasted away. Doubtless in a few years the objects which are now near the edge will have toppled over, and lie strewn at various points on the face of the declivity. Much of the street has already gone. Hutchinson, a hundred years ago said:—"By the washing of the bank, which consists of strata of sand and loose soil, the south-west corner of the vallum is gone;" and again:—"In the break of the bank, at the south-west corner, the foundations of the vallum are laid open, consisting of very large blocks of stone laid transversely; several pieces of stone aqueducts are on the sides of the hill, where they have shrunk down with the soil." By aqueducts Hutchinson meant the channelled stones, and we know now where they came from. These buildings once extended without doubt far to the west; now the wall adjoining the street is almost all that is left of them.

Further along the hill side the workmen found a well encased in masonry. For some time, it was impossible to divine what it could be. It was not a latrine, for no traces of such a use were found; it was not a kiln, for there was no opening below. It looked like a well; but what use could a well-like structure be on a hill side? Now we know that it must have been scores of feet, perhaps hundreds of feet, within the edge of the plateau, and that doubtless it supplied water to the









inhabitants in its locality. In it many fragments of Samian ware were found, and a curious ribbed vessel, in fragments, at the very bottom, several feet below the termination of the walling. A very interesting question is, what was the course of the street from this point? I confess I hold a different view as to its probable direction from that which is frequently expressed. I think it went through what is now the Bishop's Park, that it kept on the right side of the Gaunless river, as far as what is known as Fyland's Bridge, whence it went straight to Brusselton and Pierce Bridge.

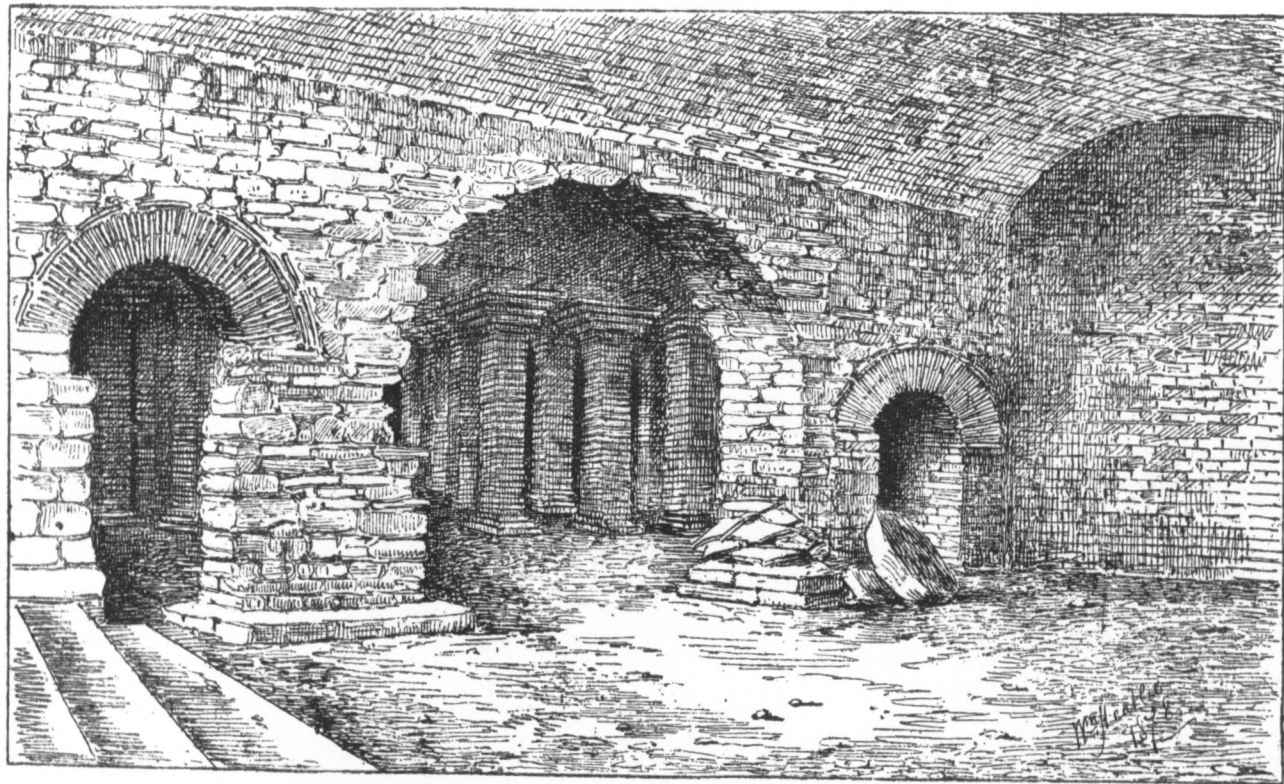
A subsidiary exploration, commenced to ascertain the determining cause of a ridge and depression on the northern side of the street, had exceedingly interesting results. A circular chamber was discovered, 18 feet 7 inches in diameter, with a wall 1 foot 10 inches thick, two doorways walled up at a later period, its walls plastered and coloured, a system of heating flues in connection with it, a line of flue tiles all round the chamber in their original positions, fastened to the wall with iron cramps,* still perfect, a hypocaust at a lower level on the south-east, and indications of various chambers in due positions around it. This building, apparently public baths, would doubtless well repay extensive excavation. It is at a great depth below the existing surface, and the remaining walls are many feet in height. The hypocaust on the south-east of it was evidently destroyed by fire. The strata of *debris* show the process. The broken brick pillars of the hypocaust, the crushed floor above them, the ashes of beams and rafters, and fragments of tiles, &c., in successive layers, record its end as vividly and graphically as a book or a painting. In the circular room is an indentation in the wall, indicative possibly of the position of the huge copper vessel in which bathers were wont to immerse themselves in the caldarium. The accompanying drawing will give a good idea of this building, and shows also a wall built at a subsequent period, and belonging to an erection that has not yet been further investigated.†

* Subsequent investigation, on the part of Mr. David Richardson, of Newcastle-on-Tyne, proved some at least of these cramps to be of steel, of most excellent quality, and not of iron.

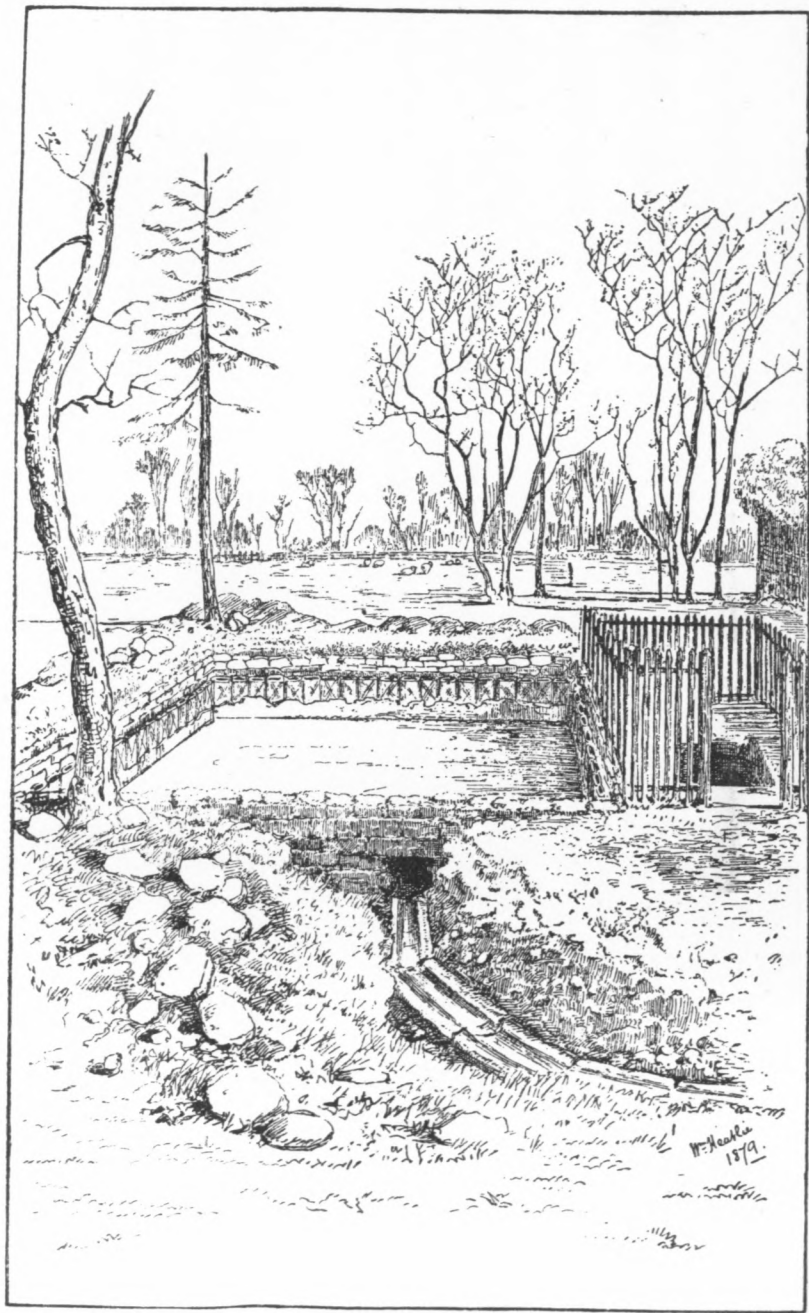
† There is an error in the drawing, in the omission of a doorway of the *middle* period, on the left hand side, beneath the later rectilineal wall. When the drawing was made a heap of earth was lying against it. The artist, knowing the earth was to be removed, and not suspecting the existence of a doorway behind it, made the circular wall continuous. The doorway evidently was made when the other doorways were walled up.

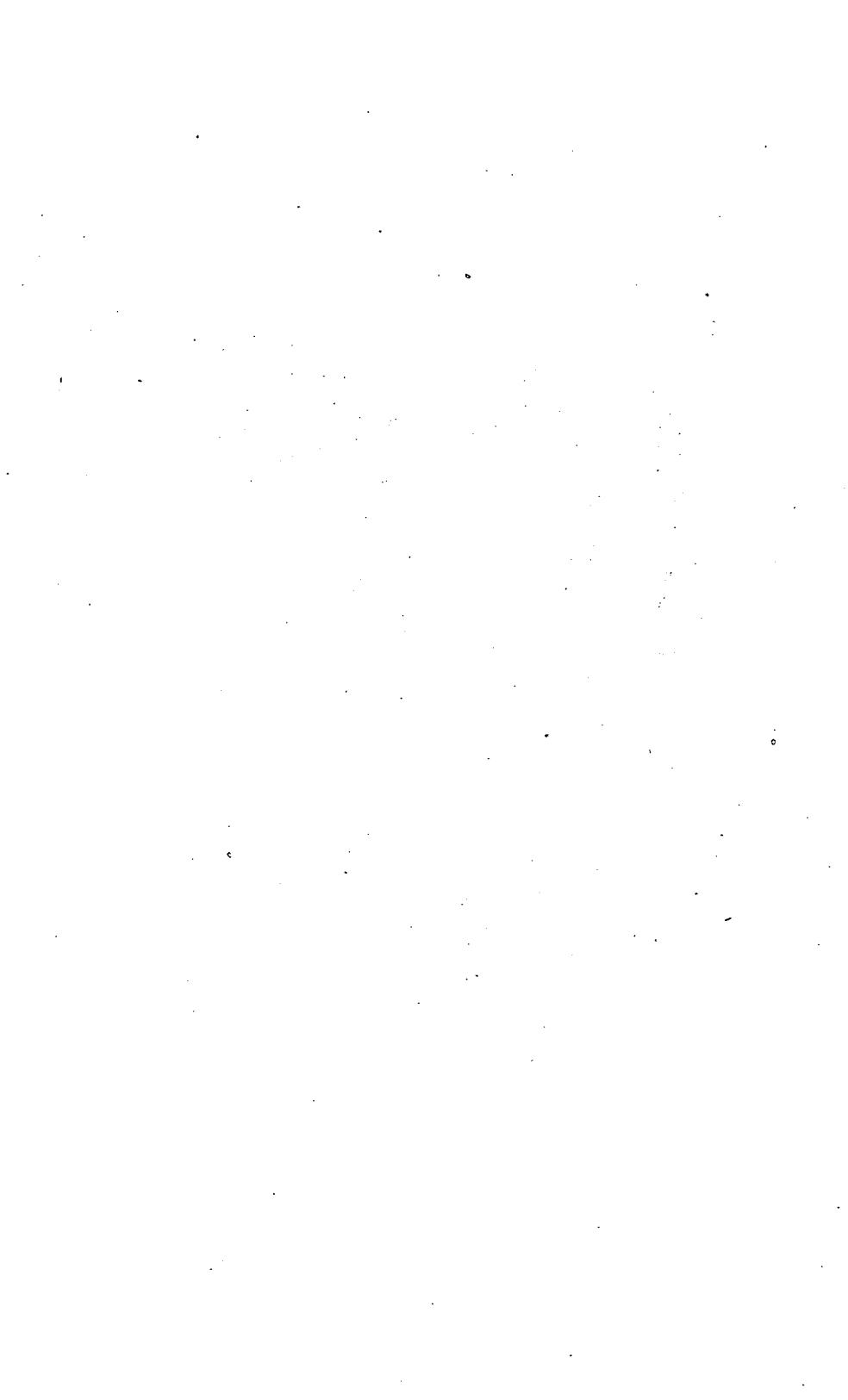
In another part of the station further interesting discoveries have been made. The members are aware that a very fine hypocaust was found many years ago by accident. A drawing I have with me gives a good view of the arched entrance to it, and of the pillars that uphold it. The perfect brick arches of the well-known Roman type, right and left of the central arch, are seen. I am told that the central arch was one of brick also, as perfect as either of the others, but that it was knocked out to give curious visitors more ready access to the clustered aisles within. The upper part, and immediate neighbourhood of this hypocaust, have been explored. A companion drawing shows the room above.* This is in a charming state of preservation. The floor is perfect, the flue tiles in position ranged around. The plaster on the walls, frescoed in many colours. The frost of this long protracted winter has sadly injured it, but a piece I have brought with me will give an idea of its character. A singular hole in the wall, roughly broken, is somewhat of a puzzle, and a line of channelled stones curving round at right angles is curious. By the side of this channelled line many coins, mainly, if not entirely, of the Constantine family, were found. Channelled stones in this locality are plentiful. We see them in various places. In this curved channel a statue of Flora, apparently, was found lying upon a stone pillar, which doubtless once had formed a portion of another hypocaust. In the immediate neighbourhood of this fine hypocaust are a number of walls and chambers which, at present, form an intricate cluster, which further exploration alone will enable us fully to comprehend. One of them abuts on the line of street I have already described. A large doorway gives entrance to this room or hall from the street, and the pavement of flags within the building still remains. Here were found numerous stone pillars of a former hypocaust, ranged in order against the wall beneath the pavement. In another part is a large brick arch, communicating with the perfect hypocaust. This has not been thoroughly uncovered, lest it should fall in, as symptoms of fracture appeared. I have little doubt this cluster of buildings is very near what was in Roman times the principal site

* A precisely similar error, to that noted in respect to the last drawing but one, occurs in this one also, and from a similar cause. There is a doorway, on the right hand side of the room, about the centre of the wall. On the threshold of it was found a bronze coin of Magnentius, in excellent preservation, bearing on its reverse the Christian Monogram and the Greek letters Alpha and Omega.









in the whole station; but speculation as to its true character must rest until further use of the pick and spade have given firmer grounds on which to base conclusions.

In the course of these explorations numberless detached objects have been obtained, though, unfortunately, no inscriptions beyond a perfect impression of the stamp of the military company employed in the manufacture of the bricks.* Imperfect impressions of this stamp exist on the tiles with which the hypocaust is ceiled. But the fragment which I produce is the only instance I know of a perfect impression. The explanation of it is yet to come. It appears certainly to be *N CON*. *N* doubtless stands for "Numerus," but what is the tribe or nation signified by *CON*? Is it *Concani* (1), *Concordienses* (2), *Condrusi* (3), *Consaburenses* (4), *Consentini* (5), *Consuanetes* (6), *Consuarani* (7), or *Convenæ* (8)? 1, 2, 4, belonged to Spain; 3, 7, 8, to France; 5, to Italy; 6, to Germany. [See note at end of this paper.]

A large number of coins have been found, mostly copper, some few silver, none gold. The fact that all that have been found have been preserved—that none have been dispersed—enables us to compare with greater satisfaction the relative numbers of the coins of each reign or imperial personage discovered. In so doing a remarkable break is found. I had wished to give a complete list, but that I cannot do to-night. But, if I could have done so, it would have been seen that while coins of Hadrian are numerous, and while a few of his immediate successors and predecessors are represented, there is a vast chasm from Commodus, A.D. 180, onward. Twenty-nine coins, out of a total of more than 320, represent the whole period from A.D. 180 to A.D. 306, when Constantine the Great ascended the throne. Then small copper coins abound. Of Constantine 38 coins have been found, and 136 more of his connections and successors. The last imperial coins in our list are two of Valentinian I., who died A.D. 375.†

* After the above was written, a very important inscription was found, on a votive tablet, to Aesculapius and Salus, which was described and discussed by the writer, in a paper read before the Society on October 29th, 1879, and which has been already printed in Vol. VIII. of these Transactions. Another inscription was found on an altar, dedicated to the Transmarine Mothers, which also was brought before the Society, in a paper read on January 28th, 1880, and which is printed in the present Vol. of these Transactions.

† The figures given above record the number of coins found to the end of the year 1881. Since then nine more have been obtained.

From these facts I gather that Roman rule was not always paramount in Vinovium. Indeed I think it probable that the Brigantes enjoyed a great amount of freedom on many occasions between the victorious career of Agricola and the final flight of the eagles from Britain. We know that Britain was never a docile province of the Roman Empire. The whole was never conquered. Again and again war broke out with the Keltic natives. Though the wall was built from east to west, and fortified at every step with garrison towns and mile-castles, I doubt if there was always peace within. I doubt if the high lands of Durham, Cumberland, Westmorland and Yorkshire were ever thoroughly subdued. Their most willing submission would probably be towards the end of the Roman rule, when the universal diffusion of Christianity, and the general extension of Roman civilisation would tend to draw them closer to those who for so long had claimed to rule them, especially in view of the threatened assaults and cruelties of new invaders, the barbarous and hated Scots, Picts, and Saxons. It was in this latter time the Itinerary of Antonine appears to have been compiled, which gives us one military road through Vinovium, and another through Bowes and Brough-under-Stainmore to Carlisle. I think it most probable Agricola did not march by Vinovium when he penetrated into Scotland, but by a line of road nearer the sea. When the Notitia was compiled, there seems to have been no cohort, numerus, or ala of soldiers at Vinovium. Among the coins is one most singular one, which seems like a base coin, a token, or a relic of a native currency, contemporaneous with the Roman rule.

A vast number of fragments of pottery have been found, many of them of beautifully embossed Samian ware, many of a degenerate type of the same, and a vast number of ordinary black ware. I have brought some of the more noteworthy specimens with me. On the Samian are many potters' stamps: LVCINA appears to be the only one possibly not hitherto found in England. On the lip of a white mortarium near the spout is the stamp LOCCR. On the under rim of a fragment of a Samian bowl is the graphitic inscription VIXILATI, denoting apparently that the bowl belonged to one of the standard bearers of the company of soldiers, which, in those days formed the garrison.

Among the other objects found I may particularise an engraved gem, jasper, with a head which appears to be one of the many

modifications of the two-faced Janus;* a small vase, which some have supposed to be a lamp, but which was probably a vessel for holding liquids; a triple vase, not of common occurrence; the upper part of a vessel of light pottery, with a female face for spout, and a mark upon the forehead, which has led some to connect the design of the head with some Eastern nation or peculiar class of persons. All these, together with the inscribed fragment of brick, are represented on a drawing I have with me.



Many bones, as is always the case, have been turned up, some human, others of lower animals. Of these Dr. Clarkson Maynard has kindly furnished me with the following list:—"Man: Several almost perfect skulls, also fragments of skulls. Horse: Two pieces of superior maxillary bone, with molars in it; large quantities of loose molars and incisors; a number of specimens of nearly all the other bones of the horse. Wild Boar (*Sus Afer*): Some fine specimens of tusks; superior maxillary bone, with incisors in it; inferior maxillary, with tusk still in it. Swine: A few teeth and bones. Red Deer (*Cervus Elaphus*): A quantity of fragments of horns; some appear to have been sawn off; a few teeth. Dog: Femur, tibia, fibula, and sacrum. Common ox: One or two specimens of horns; a quantity of bones, more or less perfect. Sheep and Goats: A few doubtful remains, probably belonging to these genera." I should also acknowledge on this occasion the help Mr. Blair has kindly given us in identifying the coins. I must now draw this paper to a conclusion. If, as I have reason to think will be the case, Mr. Proud, with the consent of Dr. Baring's successor in the bishopric, continues his researches in the approaching spring, I shall have pleasure, God willing, in laying before you, on a future occasion, a further *résumé* of results.

* This beautiful object was found by the Rev. T. C. Tatham, Curate of Byers Green. It has since been engraved in Mr. Sandys's Edition of the *Bacchae* of Euripides, published at Cambridge, as an illustration of the Roman conception of the contrast between the youthful Bacchus and the sottish Silenus. Another suggestion, made when it was discovered, was that the portraits were intended for those of Socrates and Xantippe.

NOTE.

In the stamp upon the fragment of brick, there is a distinct, and, apparently, an intentional, separation between the left hand and middle strokes of the final n. This has led Professor Hübner of Berlin, Mr. Walter de Gray Birch, of the British Museum, and our friend and Secretary, Mr. W. H. D. Longstaffe, to come, independently of each other, to the conclusion that the lettering may indicate n corv, and not n con. The first n has a horizontal line above it, and all seem agreed that that letter of the inscription, without doubt, signifies "Numerus."

ON TWO SALT SPOONS FORMERLY BELONGING TO THE
"BEEF-STEAK SOCIETY."

READ 28TH FEBRUARY, 1883, BY T. W. U. ROBINSON, F.S.A.

HAVING lately become the possessor of two silver salt spoons, which belonged to the "Beef-steak Society," the distinguished members of which disliked to hear it called a club, I thought a few remarks respecting the same would be interesting to the members of this Society.

It must be regarded as a matter of historical interest, as it now numbers with the past, that, among the numerous clubs, social and otherwise, which, from time to time, have characterized "London life," none has been more renowned than the London Beef-steak Society.

The foundation of the Club, or rather Society, in 1735, was effected in this way:—When John Rich occupied a conspicuous position at Covent Garden Theatre, he was accustomed to arrange the "business" for his pantomimes in a private room; and here it was his habit to remain to dinner, and cook his own beef-steak on his own gridiron.

On these occasions he was frequently visited by persons of note, and amongst them on one occasion was Mordaunt, Earl of Peterborough,