

3. ON EXCAVATIONS AT GREAT CHESTERS (*AESICA*) IN
1894, 1895, AND 1897.

BY J. P. GIBSON.

In deciding at which camp on the line of the Wall it was most desirable to commence excavations, the choice was practically limited to the camps lying between the rivers North Tyne and Tippalt ;—the long and continuous cultivation of their sites having left little worth excavating in the camps lying to the east of the North Tyne ; while the camps to the west of the Tippalt, which have all suffered much in the same way, are within the territory of the Cumberland and Westmorland Archaeological Society, upon whose domains it would be unfair to encroach.

CILURNUM, the first camp to the west of the North Tyne, has been gradually and thoroughly excavated by its former owners, the late Mr. John Clayton, Mr. N. G. Clayton and Mr. B. Clayton, and the work is now being continued by Mrs. N. G. Clayton, the present owner, Mr. William Tailford being now, as he has been for many long years, the careful excavator, and Mr. Blair, one of the secretaries of the society, frequently visiting the camp during the progress of the work. This arrangement, first carried out by the late Mr. John Clayton, and continued by his successors, has worked in a perfectly satisfactory fashion, having produced results not merely to be seen in the camp itself, but also in the interesting Roman museum erected close to the camp by the late Mr. N. G. Clayton, and maintained at the cost of Mrs. Clayton, the present proprietor of the Chesters estate.

PROCOLITIA, the next camp to the westward, had its northern rampart destroyed about 1752, by General Wade, who carried his military way along its line, and made use of its stones for road-making. Since his time the northern half of the camp has been almost denuded of its masonry to build the houses and outbuildings at the neighbouring farms of Carraw and Carrawburgh. Some excavations were made there by the late Mr. John Clayton, of which the most notable were those in 1873 of a building outside the camp, with hypocausts, of which the pillars were built with flat, tile-shaped bricks, bearing the stamp of the sixth legion ; and the clearing out in 1878 of the votive well to the goddess Coventina just outside the western rampart.¹¹

¹¹ *Vide Arch. Ael.*, vol. viii. pp. 1-49.

The southern portion of the camp has been little disturbed, and affords a good field for excavations.

BORCOVICUS has been for over two centuries a happy hunting ground for the antiquary. In 1822 excavations were made there and at the Chapel-hill to the south of the camp, where a Mithraic cave had been accidentally discovered by workmen seeking stone for field walls. These excavations were under the direction of the rev. John Hodgson, who, in 1830 and 1831, and again in 1833, made further explorations inside the camp.¹² From 1850 to 1858, considerable excavations were made and since that time occasional discoveries have been made by the late Mr. John Clayton, which were duly recorded in the *Archaeologia Aeliana*. Little of the surface of this camp therefore remains that has not been turned over.

VINDOLANA, the camp on the Stanegate, occupied by the fourth cohort of Gauls, was carefully excavated by the rev. Anthony Hedley, who was its owner from 1814 to 1835, the date of his death. As he resided at Chesterholm, just a stone's throw from the camp, he was able to superintend the work of excavation very closely. Unfortunately, his death resulted from a chill occasioned by exposure to bad weather while engaged in the work. Unluckily, no general plan of the results of his labour is in existence, as he appears to have done good and systematic work, and many of the finest altars and other objects now in the museum at Chesters were found by him, and were acquired by Mr. John Clayton when he purchased the Chesterholm estate.

At AESICA, the next camp on the line of the Wall, nearly all the south and west sides have been little disturbed, the only record of systematic excavation being that of Dr. Lingard in 1800, who then opened and described the vaulted chamber in the middle of the camp. MAGNA, the camp on the Stanegate just to the east of the river Toppalt, was barbarously destroyed as far as possible by a former owner, who was annoyed by the trespass caused on his farm by persons who came to see the Roman remains.

Of these six camps, the two most promising seemed to be PROCOLITIA and AESICA, and as permission to excavate on his estate had already

¹² Hodgson, *History of Northumberland*, part 2, vol. iii., p. 186.

been received from Mr. H. J. W. Coulson, *AESICA* was selected, and on July 23, 1894, excavations were commenced there. They were placed under the care of Mr. W. Charlton then of the Reins, Bellingham, a member of the society, who had previously excavated the interesting ruins of Dala castle, situated on the Chirdon burn, a tributary of the North Tyne. Owing to an unfortunate cycle accident, which crippled him for some time, he was unable to give



VAULTED CHAMBER, GREAT CHESTERS.

much personal superintendence to the work, and it was therefore left chiefly in charge of a foreman excavator, strange to the locality, and unaccustomed to the ways of north country workmen. The excavations were frequently visited by the local members of the committee, and considerable assistance was given by professor Pelham and Mr. Haverfield, and other Oxford members of the committee, who were in residence for some time at Gilsland and visited *AESICA* almost daily during the period of their stay.

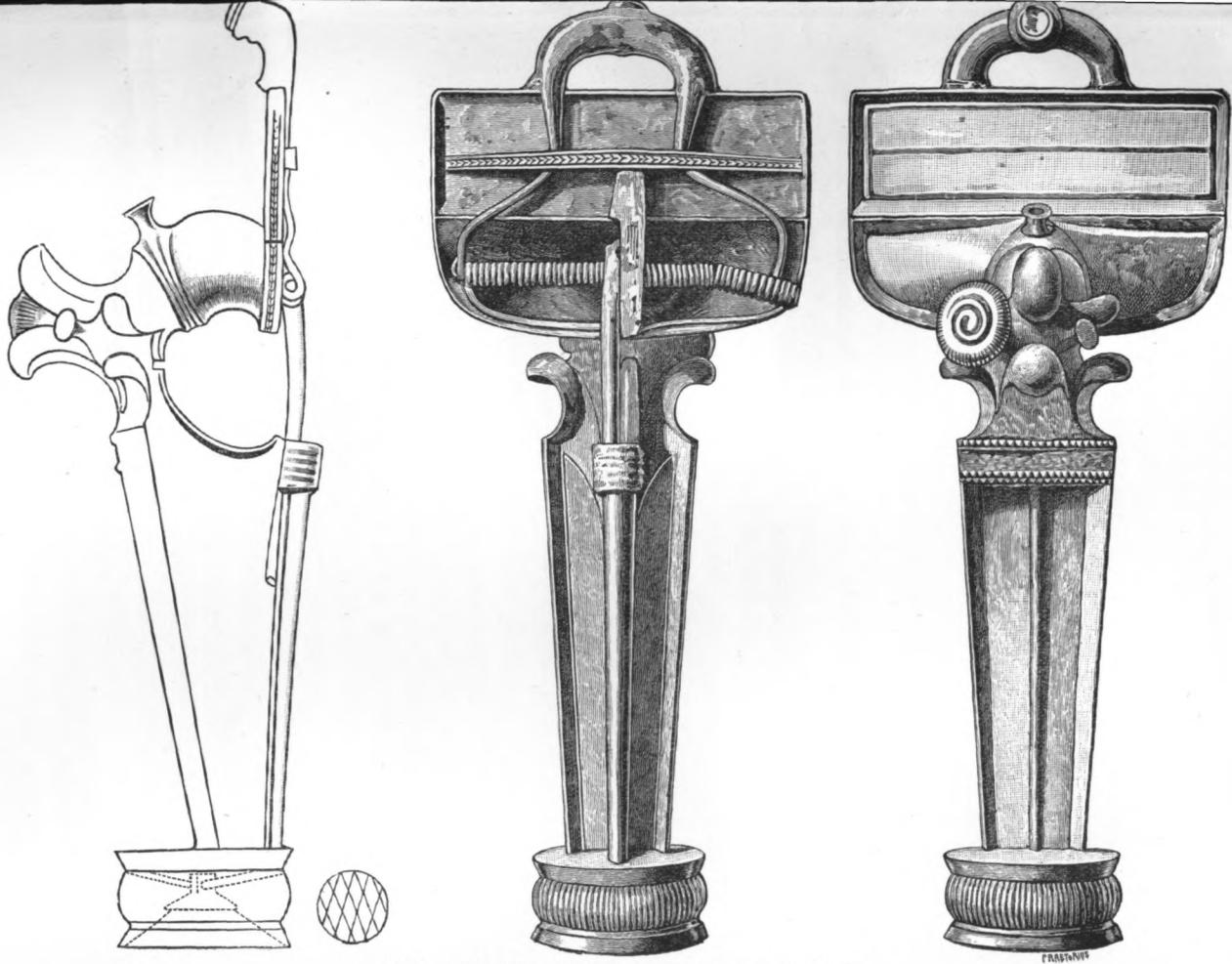
An account of the work done is given in the Report for 1894 of the Excavation Committee.¹³ The plans and elevations which illustrate this report were made by the late Mr. Sheriton Holmes, whose knowledge of practical engineering was of the greatest service to the committee during the progress of the work in successive years.

To render more intelligible the account of work done in 1895 and 1897 it is necessary to give a slight resumé of the work done in 1894. On July 23rd, 1894, the first cutting was made inside the south-west angle of the camp and revealed the existence of an angle turret in its usual position. It is rectangular, measuring inside eleven feet eleven inches by ten feet two inches. It is placed diagonally across the corner of the camp, so that it faces to the south west and its front face is gradually thickened towards its centre, so that looked at from the outside the angle of the camp appears rounded off. In other respects it differs little from the wall turret excavated at Mucklebank in 1892 (see p. 14), being of similar masonry and having the same arrangement of superimposed floors, indicating the same periods of disaster and reoccupation. A trench driven forty feet from this angle turret towards the centre of the camp showed a block of buildings of poor and late work having a south frontage on the intervallum over two hundred feet long. It contains about a dozen chambers, but nothing of any special interest was found in any of them. A trench driven eastwards exposed the foundations of a small and roughly constructed building resting against the south wall of the camp. About two hundred and eighty feet east of the angle turret was found the west guard chamber of the south gateway, and close to its western wall a find of very fine scale armour forming part of a *lorica* seemed to indicate that an officer had perished there. The excavation of this guardchamber yielded a rich hoard of *fibulae*, rings, chains, and other articles of jewellery. It is noticeable that they were not found on the floor level of the guard chamber but about two feet above. It has been suggested that the character of these objects indicates that they belong to the latter part of the second century,¹⁴ but a careful consideration of the circumstances of the find, and a comparison with the find of coins in the villa outside

¹³ *Arch. Ael.* vol. xvii. pp. xxii-xxxii.

¹⁴ *Ibid.* p. xxviii.; see also

Proceedings, vol. vi. pp. 241-245.



SILVER FIBULA DISCOVERED AT GREAT CHESTERS. (*Full Size.*)

FRANKS

the camp in 1897, seems to indicate that they could not have been placed where they were found earlier than the latter part of the third century—the reason for assigning this date to the find will be fully given, where referring to the hoard of coins found in 1897—at present it is sufficient to say that the articles found were possibly the possessions of the prefect of the cohort of Spanish auxiliary troops (*cohors secunda Asturum*) which was so long quartered at this camp, and were gathered together during one of the Caledonian raids, ready to be carried away by their owner who was doubtless overwhelmed in the destruction of the gateway tower where he had taken shelter in readiness to quit the camp.

An examination of the vaulted chamber in the middle of the camp merely confirmed the description of it given by Dr. Lingard in 1800,¹⁵ and resulted in no further discoveries. Mr. Sheriton Holmes, however, made excellent plans and drawings of it which were used in illustrating the 1894 report.¹⁶ During the course of the work about thirty coins¹⁷ ranging from the time of Mark Antony down to Magnentius were found in different parts of the camp. As the quantity of work done at ÆSICA and Down-hill seemed small in proportion to the amount of money expended it was thought desirable that in resuming work in 1895 some radical change should be made in the working arrangements. This was specially requisite as the funds at the disposal of the Committee were fast becoming exhausted, and it was thought inexpedient to again ask for further subscriptions until more satisfactory results could be shown.

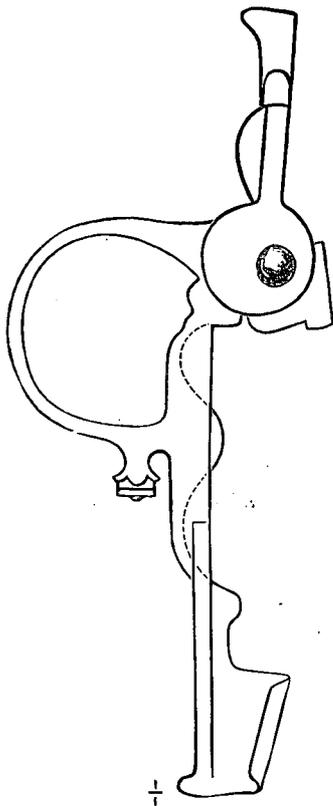
It was therefore decided to employ workmen living in the locality under the supervision of a local foreman. For that purpose the Committee employed Mr. Thomas Smith of Sunnyside, near Haltwhistle, who had previously been engaged in similar work.

As the member of Excavation Committee living nearest to the spot, I undertook the immediate direction of the work, visiting ÆSICA, during its progress in 1895 and 1897, once, twice, or thrice weekly as occasion required. Meetings of the Excavation Committee were also held on the spot at intervals, and this arrangement resulted in nearly

¹⁵ Quoted in Hodgson's *History of Northumberland*, part 2, vol. iii., pp. 203.

¹⁶ *Arch. Ael.*, vol. xvii., p. 24, plate 02.

¹⁷ Described by Mr. C. J. Spence in Appendix No. 1. See *Arch. Ael.* vol. xvii. pp. xxx-xxxī., for list of coins found in 1894.



GOLD PLATED FIBULA DISCOVERED AT GREAT CHESTERS (*full size*).

double the amount of work being done for the money expended as compared with the results obtained in 1894.

Gordon, who first described the camp of *AESICA* in 1726,¹⁸ seems to have come to the conclusion that no western gateway had ever existed there, and the absence of any visible break in the line of the western rampart led to the adoption of this theory by Dr. Bruce and even by Maclauchlan, who about 1854 spent two years in the survey of the Wall, and whose notes, published with the plans made and issued in 1857 at the cost of Algernon, third duke of Northumberland, are still by far the best authority upon matters of fact connected with the Wall.¹⁹

As distinct traces of the military road which usually issued from the eastern and western gates of the Wall camps can be seen at no great distance to the westward of *AESICA*, it seemed unreasonable that there should be a road and no gateway by which it could have access to the camps, as the road from the south gateway had been traced going due south and south only after leaving the camp.

To clear up this question, in June, 1895, work was commenced at the south-west angle turret, excavated in the previous year, and the inner face of the west wall of the camp was carefully followed northwards and cleared of debris. It was found to be of excellent masonry, and standing intact to a height of from five to six feet. About forty-five feet north from the angle turret a building was exposed close to the Wall, but not actually built against it, like the turrets found in a similar position between the angle turrets and gateway at *CILURNUM*. The excavation of this building was not at once proceeded with, but the course of the camp wall was followed northward, and at about 125 feet from the angle turret a building of very excellent and massive masonry was met with projecting about twelve feet from the inner face of the camp wall. This proved to be the base of the southern tower of the west gateway, and another week's work fully revealed the remains of a gateway far surpassing in interest any previously found on the line of the Wall. Its discovery clears up some points hitherto obscure and adds much

¹⁸ *Itinerarium Septentrionale*, page 78, plate 28.

¹⁹ *The Roman Wall and Vestiges of Roman Occupation in the North of England*, by Henry Maclauchlan, 1857.



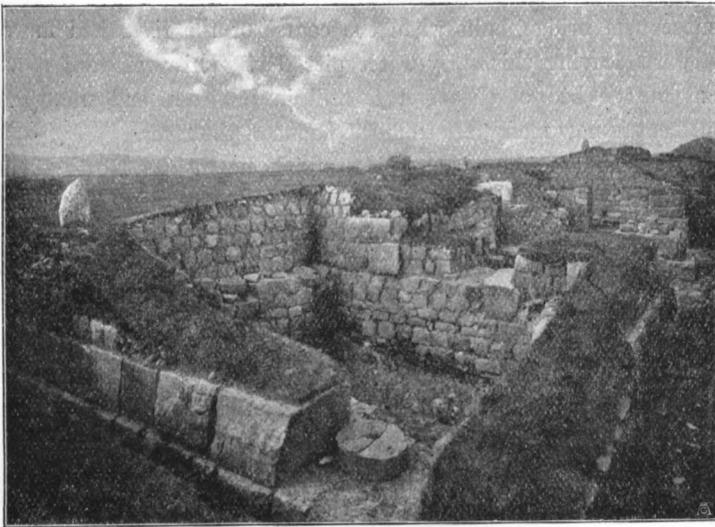
J. P. Gibson, Photo.

AESICA (GREAT CHESTERS).

West gateway from S.E., showing built up portals and northern guard chamber.



to our knowledge of the Roman occupation of the north. It is built on the usual plan, having two inner and two outer portals, separated by pillars of heavy masonry, and it is flanked to the north and south by towers, the bases of which were used as guard chambers. In this, much more clearly than in any previous excavation *per lineam valli*, can be traced the flow and ebb of the successive Roman invasions, three or four periods of building and three epochs of disaster and destruction having left clearly visible traces on the existing remains.



SOUTH TOWER OF WEST GATEWAY, GREAT CHESTERS.

The different quality and character of the masonry used in these successive periods is very marked, and indicates that long periods of comparatively peaceful occupation must have intervened to allow such great changes to have taken place, as in every case the character of the later work was not improved, but deteriorated. Had the reverse been the case, and the later work shown an improvement on that preceding it, this conclusion could not have been arrived at, as the changes for the better might have been suggested by the insufficient character of the early work when put to the rude test of barbarian assault. The earliest masonry is seen in the lower portion of the

southern guard chamber and in the portals of the gateway, and consists largely of well squared and very massive stones, many of which pass through the entire width of the walls to which they belong. The early character of the work is shown not merely by its lower situation in respect to the surrounding work, but also by comparison with similar masonry existing at other points on the line of the Wall. A notable instance may be given in proof of this. On the bank of the North Tyne opposite to the villa at CILURNUM are the remains of a water pier of the first bridge, surrounded and enclosed by a great mass of later masonry, which formed the land abutment of a subsequent bridge, built when the course of the river had moved westward, leaving this early water pier dry. This westward movement of the bed of the river is still in progress, and the whole abutment is now many feet from the banks of the river.

The bases of the bridge piers which lie in the North Tyne, and are only visible in summer when the river is very low, show two distinct kinds of masonry, each of them having a complete pier base of early masonry which has been thickened and lengthened at the rebuilding of the bridge by a facing of later masonry added to one side and one end of each. This addition strengthened the piers and also enabled them to carry a bridge of greater width than that originally built. The later masonry is similar to that of the land abutment on the east side of the river, and the early masonry in them and in the pier enclosed in the land abutment resembles that of the south guard chamber of the *ÆSICA* gateway.²⁰

A careful comparison of the stonework of the southern and northern guard chambers of this gateway and the fact that between the south gateway and the camp wall there exists a straight joint showing a distinct time of building, while no corresponding joint exists between the north guard chamber and the camp wall adjoining it, leads to the conclusion that the gateway and southern guard tower may have been built some time before the northern guard tower and the general outer wall of the camp.²¹ This might imply that in the period

²⁰ See *Arch. Ael.* xvi. 328 for the late Mr. S. Holmes's description of the bridge. See also *Proc.* ii. 178.

²¹ It has been suggested by Mr. Parker Brewis, a member of the council of the Society, that if on the south side of the gateway there was a high tower and on the north side merely a guard chamber, there might in the south side be a straight joint at the junction of wall and tower to allow for the greater



J. P. Gibson, Photo.

AESICA.

Western rampart and W. gateway, showing stonework of various periods of occupation.



intervening between the building of the southern and northern towers the camp was defended by an earthen rampart and ditch; as in making a camp, even when required only for a single night's occupation, the Romans always protected it by surrounding it with a rampart and ditch. I put forward this theory respecting the stone towers and earthen ramparts of the camp at its first building with a certain amount of diffidence, knowing that it may be used to suggest the existence of a greater earthen rampart preceding the great Wall itself and superseded by it. Had confirmatory evidence not been found in later excavation of other gateways, which will be given in due course, I should have merely recorded the facts without advancing any suggestions to explain them.

It is, however, of the utmost importance to ascertain as much as possible of the early history of the Wall and its camps, and in attempting to do this systematically, a careful examination of work that can be proved to have been done in the early part of the Roman occupation seems to be the surest means of gradually elucidating and clearing up the vexed questions connected with the subject. Let us at least make our foundations sure whatever superstructures our fancy may lead us to erect upon them.

The masonry of the northern guard chamber is of small well-squared stones exactly like those used in the outer walls of the camp. It has also continued through it the line of large flat stones, locally called 'thruffs,' which form a bonding course in the camp walls. This course is usually the seventh above the plinth. Bonding courses in Roman buildings in the south of England, and even as far north as York,²² are usually made with flat square tile-shaped bricks, but the abundance of laminated sandstones found along the line of the Wall furnished its builders with a bonding material obtained with a much smaller expenditure of labour than that required in the manufacture of bricks.

Although the change in the character of the masonry shows that the interval of time between the building of the towers was possibly a long one, there seems no evidence that during that period any over-

settlement of the heavier mass of masonry, and at the north side this precaution would not be needed. Against this Mr. Bates urges the point that Roman gateways with towers usually have both sides symmetrical.—J.P.G.

²² *Eboracum*, by C. Wellbeloved, pp. 117, 118.

throw or destruction of the camp took place. The first clay floors of both chambers, and the roadway of the gateway, were found strewn with charcoal, and showed other traces of fire. They were overlaid with debris of building materials about eighteen inches thick, on the top of which were placed floors formed of flagstones that had been laid and used during the second occupation of the camp. At this period great changes were made in the gateway, the southern outer portal having been closed, the level of the northern portal raised, and a



JUNCTION OF SOUTHERN CHAMBER OF WEST GATEWAY WITH OUTSIDE OF CAMP WALL.

new roadway made in it over the debris. A second sill had been laid in the north portal on the level of the second roadway. It is about thirty inches above the level of the first sill. The illustration from a photograph of the inside of the gateway shows both these sills. In the upper one can be seen the hole in which the lower iron pivot of one of the gates was inserted. The existence of a similar pivot hole in the lower sill was ascertained by taking out (and carefully

replacing) two or three stones of the intervening courses of masonry. In the south portal there is no second sill, but it is blocked up from a little below the level of the second sill of the north portal with masonry of a third period, differing in character from that both of the south and north guard chambers. In this some of the stones of the second period appear to have been re-used along with others not so carefully dressed and squared, but the mason work is much worse, the joints being opener and the stones not so truly laid.

The blocking up of roadways after the first period of disaster has occurred not merely at *AESICA*, but also generally along the line of the Wall, having been specially noticed at *CILURNUM*,²³ *BORCOVICUS*,²⁴ and *AMBOGLANNA*.²⁵ It may also be still seen in the northern gateways of the mile castles, many of which have been reduced in width by the insertion of later masonry within their jambs. In the guard chambers yet another floor, also consisting of flagstones, was found about six inches above that of the second occupation. It also was laid over a mass of debris, showing distinct traces of fire. The much smaller interval existing between the second and third floors appears to indicate a shorter lapse of time between the second destruction and re-occupation of the camp than between the first expulsion and re-entry of the Romans.

During the third occupation, the north portal had been entirely blocked up, and a wall connecting the north and south towers built in front of both portals. The foundations of this wall are over four feet above the original level of the gateway. The masonry of this work of the third occupation is of squared stone, but shows still further deterioration in quality. A strengthening of the inner side of the northern portal seems to have been effected, possibly at some later period, with rubble work of different character from any found during the excavations.

Dr. Bruce, describing the west gateway of *BORCOVICUS*, says: 'As usual, it had been contracted to half its width; but to expose an

²³ Traces of this still remain in the south gateway, but have been unfortunately destroyed in other gateways.

²⁴ Hodgson's *Hist. North.* part II, vol. iii. pp. 186, 187.

²⁵ See *Arch. Ael.* (O.S.) iv. 63, 141, for papers on *AMBOGLANNA* by H. G. Potter, F.L.S., F.G.S.

intending foe to greater difficulty the passage was rendered diagonal by closing up the northern portion of the outside and the southern portion of the inside portal.' A careful reading of Hodgson's description of the excavation of this gateway shows this to be wrong, as both of the outer portals were built up and a triple ditch drawn in front of them so that during the latter part of the occupation the roadway must have been effectually blocked as undoubtedly it was at AESICA.²⁶



AESICA. Exterior of built-up W. Gateway. On the left is the wall of the N. guardchamber, the plinth of the built-up portal is shown about 4 feet above the level of that of the guardchamber.

In clearing away the great masses of fallen stones which indicated the existence of towers at this gateway and at the south-west and north-west angles of the camp there were found a number

²⁶ 'The western gateway is the most perfect of the three that was opened, and probably owes its preservation to the weakness of the station on this side on which it is overlooked by higher ground; but has a triple barrier of ditches and ramparts of earth thrown up before the gateway which was probably closed as we found it when these ditches were formed. . . . Before I began to explore this gateway, the ditches before it on the outside and lines of buildings within led me to conjecture that it had been closed long before the desertion of the station, the road that led westward from it is intersected with the ditches in front of it.' Hodgson, *Northumberland*, part II. vol. iii. p. 187.

of peculiar sugarloaf-shaped stones, about fifteen inches high, which had probably been used as corner pinnacles or as merlons in the parapets of the towers. If such was their use they might easily be detached from their position in an emergency and hurled down on any foe attacking the towers.²⁷ Continuing the excavation northwards an extensive range of buildings was found erected against the outer camp wall between the western gateway and the north-west angle of the camp. Of these the most northerly appears to have been a smithy; in it close to the hearth was the stone trough to hold the water used in tempering the iron, and behind this trough was found a little hoard of about twenty *denarii* of the early emperors, some of which were in a fair state of preservation.²⁸ In the next of these buildings southward was found a quantity of charred wheat, the grains of



which still distinctly retain their shape. An important inscribed tablet now in the Black Gate museum, at Newcastle, is stated by Wallis,²⁹ who first describes it, to have been found in 1761 in the north

²⁶ 'In 536 A.D. the garrison of the mole of Hadrian, which had long been converted into a fortress (now the Castle of S. Angelo), was able to check an assault of the Goths by throwing down upon their heads the masterpieces of Greek art which still adorned the mausoleum.' Lanciani, *The Destruction of Ancient Rome*, p. 8, 1899.

²⁷ For description, by Mr. C. J. Spence, see Appendix I.

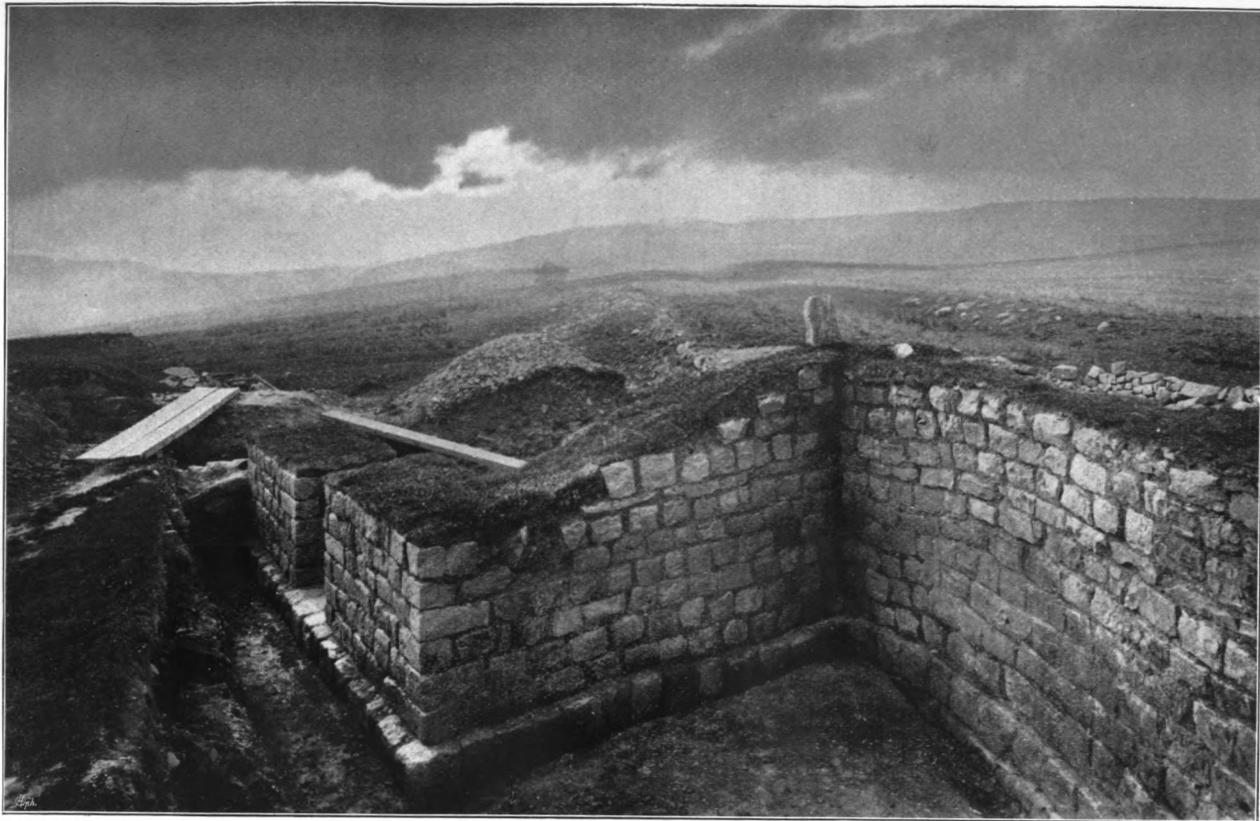
²⁸ Wallis, *History of Northumberland*, vol. ii. page 9.

part of the camp. It commemorates the rebuilding of a granary which had become ruinous through age, by the second Cohort of Asturians during the reign of Alexander Severus. Detached portions of the slab, which have since disappeared, suggest, from parts of the consuls names given upon them, the year 225 A.D. as the date of the work. It is just possible that the granary found is that referred to in the tablet. Personal ornaments found in the other buildings nearer the gateway suggest the idea that they were used as dwellings. Continuing the excavations farther northward, the north-western angle of the camp was reached. This portion of the work was supervised by one of our vice-presidents, the late Major-General Sir William Crossman, K.C.M.G., F.S.A., who took up his residence at the Shaw's hotel, Gilsland, for that purpose. His services were specially valuable as he had much experience of similar work in various parts of the world, and had made not very long ago extensive and interesting excavations at Lindisfarne.³⁰ In exploring this corner it seemed at first as if a modern field road which had been cut right through it had destroyed the angle turret, but on digging deeper the foundations of its western side were laid bare, and remains of its north, south, and east walls were found nearly five feet high. The masonry of this angle turret and that of the great Wall which here forms the north wall of the camp were somewhat similar and bonded into each other. It had been suggested that if this angle turret proved to be of the same masonry as the Wall it would certainly join it at right angles as the walls of the mile castles which were built along with the Wall invariably do—instead of the Wall striking the rounded camp angle at a tangent as it does at BORCOVICUS. This arrangement at BORCOVICUS has been cited³¹ as proving the Wall to be of later date than the camp.

It does not, however, follow, that evidence based on a rounded angle turret *alone* is sufficient to prove the camp earlier than the Wall. A little consideration of the different uses of mile castles and of camp angle turrets will show the fallacy of this argument. The mile castles are walled enclosures about sixty feet square, placed against

³⁰ *Arch. Ael.* xv. 9, and *Proc.* iii. 195, 400.

³¹ Bruce, *Handbook of the Wall*, 3rd. ed. p. 139.



J. P. Gibson, Photo.

AESICA.

North-west angle turret from E., showing junction with North Wall of Camp.



the south side of the great Wall, which always forms their northern boundary; their east and west walls join the great Wall at right angles, and are bonded into it. They are placed at intervals approximating as closely to a Roman mile as the selection of a suitable site permitted. The close proximity of mile castles to the eastern ramparts of *PROCOLITIA* and *MAGNA* tends to show they were erected without any consideration for their relative position to the camps.³²

The mile castles have had gateways in their northern and southern walls: a *voussoir* remaining *in situ* in the north gateway of that a little to the west of Housesteads proves that the north gateways at least were arched. Practically, the mile castles were fortified gateways with roads running through them, and formed, with one exception,³³ the only communication with the country beyond the Wall, except that afforded by the gateways of the camps. Inside them have been found traces of rough erections that might have afforded shelter to the guards who kept watch in them and relieved the sentries, posted on the Wall at intervals of three hours. As the sentries' roadway on the top of the Wall would be carried over the top of the northern arched gateways, it is improbable that the mile castles would be higher than the wall itself, and there would be no advantage in making any other than a simple right-angled junction between Wall and mile castle.

In the various representations of camps existing on the Trajan and Aurelian columns at Rome,³⁴ their angle towers and those of their gateways are always shown considerably higher than the ramparts connecting them. The very large accumulations of fallen masonry found at *AESICA* on the sites of the angle and gateway towers prove that the same arrangement existed there.

An engine of war placed on the north-west angle tower would enfilade not merely the north and west walls of the camp, but also a considerable stretch of the great Wall to the west of the camp. The rounded angle would give additional strength to the portion

³² There is little doubt that the building to the east of *AESICA* taken by Machlauchan and Bruce for a mile castle is a comparatively modern erection, and that the mile castle it was supposed to represent must be sought for in or close to the shallow defile just to the west of *AESICA*.

³³ The gateway in the defile of the Knag-burn.

³⁴ Bartoli *Colonna Traiana* and *Colonna Antonina*.

of the tower exposed above the Wall, and would render more easy the training of a ballista or other engine of war placed on the top of the tower, especially when it was being used at short range during a close attack. The finding of a large heap of rounded stones, suitable for use as missiles, at the base of this tower, seems to make it certain that it served as a platform for a small ballista. These reasons seem sufficient to account for the usual plan of making rounded corners to each angle of the camp having been adhered to, even if great Wall and camp wall were built simultaneously; without taking into account the spirit of military red-tapeism which might exercise an influence even in the well-organized armies of Imperial Rome.

It must be admitted that a very careful examination of the masonry, where the east side of the turret joins the great Wall, does not alone afford absolute proof that turret and wall were built simultaneously, but an examination of the inside of the turret shows that it is recessed into the great Wall. For conclusive evidence of the relative dates of great Wall, turret, and camp wall, we have to rely on the foundations of the western side of the turret. There the rounded angle of the camp wall, instead of being continued as usual around the outside face of the turret, strikes the south-west side of the turret, about four feet from the points where its western angle joins the great Wall. Evidently, therefore, the turret must have been completed and connected with the great Wall before the camp wall was brought up to it. Had the camp and its angle turrets been complete before the great Wall was brought up to them, there could have been no reason for any departure from the usual arrangement, in which the turret is placed diagonally in the angle formed by the two walls, and has only one outer exposed face, which is rounded off on the outside only.

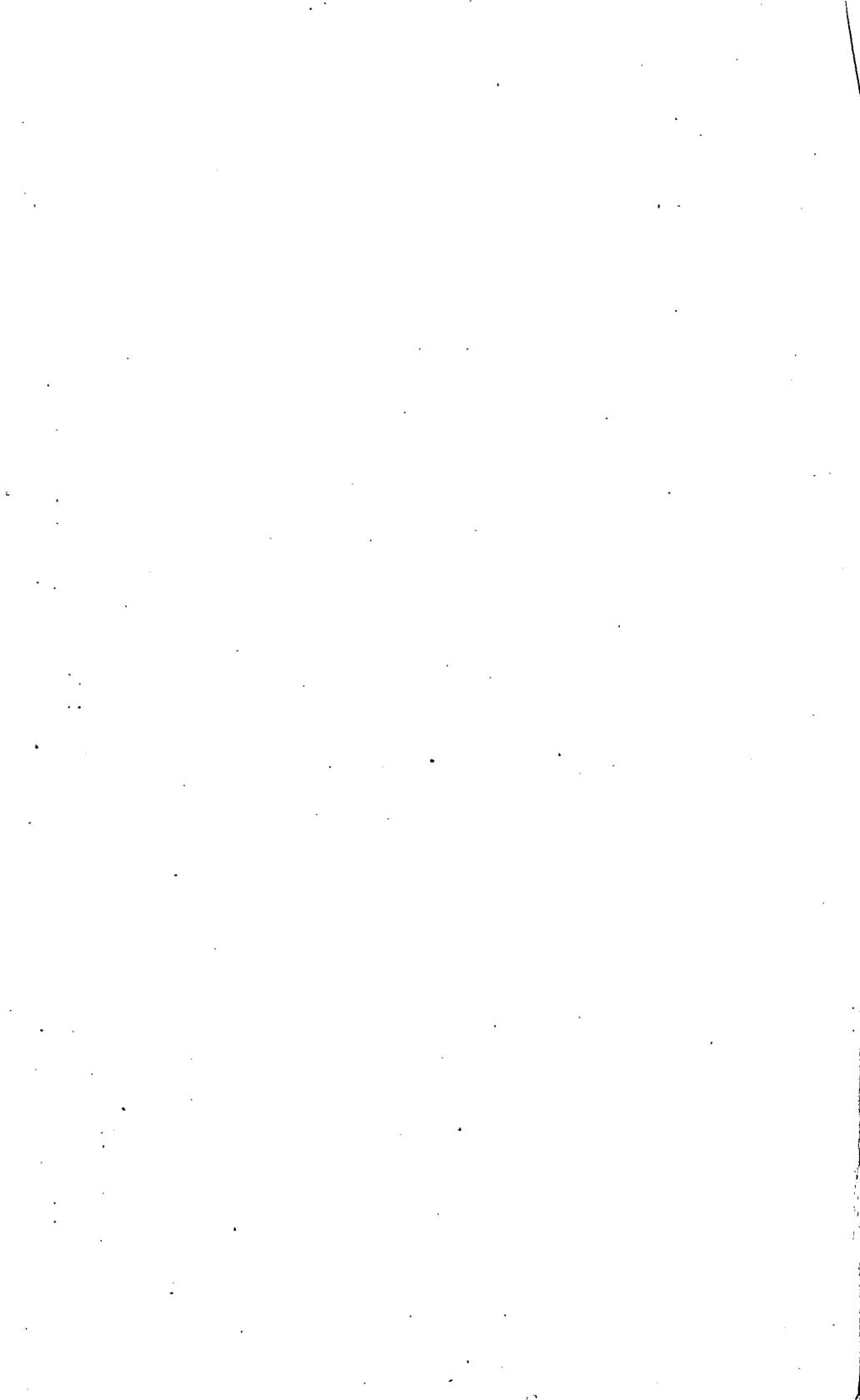
The value of this evidence is much strengthened by the fact that the arrangement is shown to exist in the original foundations. Had it occurred in the superstructures it might possibly have been merely an alteration made after some partial destruction of the camp walls or turret. An example of such an alteration occurs where the inside of the camp wall joins the southern tower of the west gateway, and might have led to a totally erroneous conclusion



J. P. Gibson, Photo.

AESICA.

N.W. angle turret from the W. The point of view is from the line of the Great Wall, the face of which is shown on the left. The foundations of the camp wall, striking the S.W. wall of the turret, are shown on the right, under the sloping plank. In the middle of the turret is a heap of ballista stones,



had it not been revealed by a very careful examination of the courses of masonry both outside and inside the junction. Assuming then that turret and great Wall were complete when the camp wall was brought up to them, the advantage of the peculiar departure from the usual arrangement becomes evident, as the two walls buttress and greatly strengthen the angle turret, and a foe attempting to force the camp at this corner would have two walls to climb instead of one, both of these walls being commanded by the angle turret.

The extensive quarrying along the north side of the camp, which took place during last century to provide materials for farm buildings and boundary walls, made it impossible to get any satisfactory plan of the north gateway of the camp, but sufficient remains were found to prove that it was directly opposite to the south gateway, and, like it, was placed much nearer to the eastern than to the western rampart.

A long trench, driven south from the north wall, through the north western part of the camp, revealed many traces of buildings of poor masonry, made from re-used materials during the latter part of the Roman occupation. As it was found impossible to keep the whole of the excavated ground permanently open, these buildings were measured, laid down on the plan, and covered up again. Gordon, writing of *ÆSICA* in 1726,³⁵ long before the destruction caused there by the building of the present farm house on the site of the camp, says in describing it:— ‘On the South End of this Fort is a very distinct regular Entry, having four or five Courses of the square Stones, the Jamm of the Door remaining pretty entire. On each Side of this Entry is a round Turret of hewn Stones something pyramidical and hollow within.’ In the plan he gives of the camp³⁶ these turrets are shown, in perspective, like two sugar loaves with their tops cut off.

Again, in writing of *AMBOGLANNA*, Gordon says³⁷:— ‘On the South End thereof I noticed two Turrets of hewn Stone,’ and on his plan of the camp³⁸ a round turret is shown on each side of the south gateway. Like those on the *ÆSICA* plan, they are shown in perspective, and rather resemble tall old-fashioned bee-hives.

³⁵ *Itinerarium Septentrionale*, p. 78.

³⁶ *Ibid.* plate 28.

³⁷ *Ibid.* p. 80.

³⁸ *Ibid.* plate 30.

Not having met with an account of similar turrets in any records of Roman remains in Britain, it was thought worth while before closing the excavations in 1895 to attempt a search for any traces of them that might remain. For this purpose a trench being driven towards the east from the south entrance of the camp, the remains of the east guard chamber were at once come upon, which proved to be similar in character to the early work at the southern side of the west gateway. It



AESICA. Eastern Guard Chamber of South Gateway with Circular Chamber beyond.

afforded still further proof that on their first construction the gateways had only one tower each, this chamber being of heavy massive masonry, while the western chamber, found in the previous year, was of smaller stones, and was built *at a considerably higher level*.

A cutting to the east of this eastern guard chamber revealed a small, circular chamber of masonry, with a flue containing soot, leading into the bottom of it, which was doubtless the interior of one



J. P. Gibson, Photo.

AESICA (GREAT CHESTERS). South gateway, and circular chamber with flue, from the east.



of Gordon's 'round turrets.' The illustration from a photograph of the south gateway which includes the bases of both towers shows the character of their masonry and the relative situation of this chamber better than any written description can do.

At BORCOVICUS two similar chambers remain, one in the northern part of the camp, and the other inside the eastern guard chamber of the south gateway.³⁹ Hodgson in describing the latter says :—

'In 1830 the rubbish was also partly removed from a room close to the outside of the wall of the station, and to the right of the south gateway, which seemed to have had an upper floor. It measured 24 feet by 15 and communicated by a dark passage through the wall of the station with a circular kiln formed of masonry without lime, within a strong square tower, and having, 2 feet above the level of its upper floor, an oven of sandstone which had been much used. The lower floor and eye of the kiln also exhibited strong marks of fire; and a quantity of strong broken freestone slates, coated with a stratum of lime mixed with broken pottery and brick, showed that the upper floor had been made of such materials. These apartments formed, I apprehend, a true Roman *pistrina*, or place for drying and grinding corn and making it into bread. It is remarkable that the eastern tower of the southern gateway of AMBOGLANNA had been converted into a kiln.'

Since 1830 this kiln in the eastern tower of the AMBOGLANNA gateway has disappeared, but Mr. H. Glassford Potter, in describing some excavations made at AMBOGLANNA in 1850,⁴⁰ says :—'Near the [west] guard-room, the remains of a kiln for drying corn, or malt, may be seen. . . . It is flagged at the bottom, and measures 4 feet 4 inches by 3 feet 8 inches.' When at AMBOGLANNA a few years ago I found traces of this western chamber, so that both of the 'hewn stone turrets' seen by Gordon are accounted for. At *AESICA* we can account for the eastern one only, but the place where its western counterpart might be expected to occur was cleared out in 1894 during a week when I was unfortunately absent, and it may have been destroyed without its existence being noted.

There have been, therefore, in each of the camps, at AMBOGLANNA, at *AESICA*, and at BORCOVICUS at least two of these circular chambers. Dr. Bruce suggests that those at BORCOVICUS were 'kilns in which some moostrooper dried his unripened grain.'⁴¹ It seems too great a

³⁹ Hodgson's *Northumberland*, part II. vol. iii. p. 186.

⁴⁰ *Arch. Ael.* (O.S.), vol. iv. p. 71.

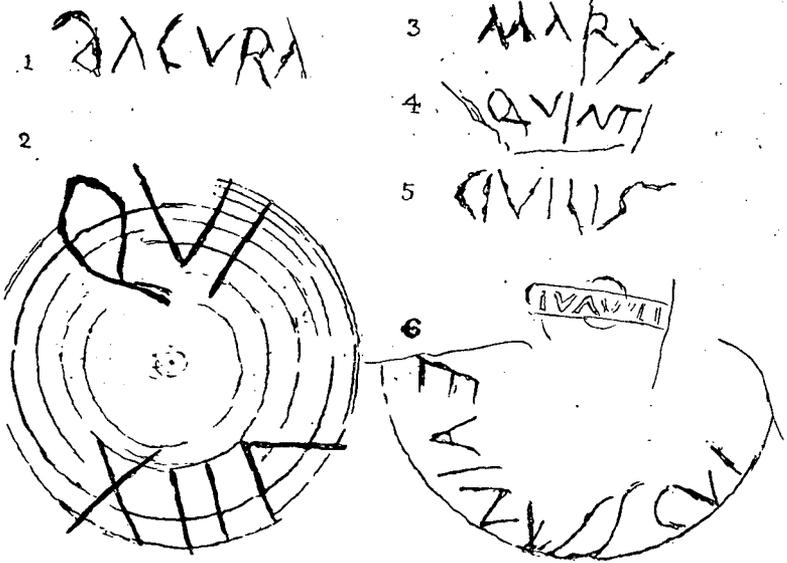
⁴¹ Bruce's *Handbook*, 4th ed. page 148.

tax on one's credulity to believe that three mosstroopers should occupy the three southern gateways of three Roman camps, many miles apart, and should erect kilns in all of them.



The shape and the small size of these chambers would make them of little or no use for drying corn, and whatever may have been their use, there is no evidence that they were not entirely of Roman origin. The suggestion made by Colonel Fagan, R.M.L.I., that they were the chambers in which the mess cooking cauldrons were set, seems to explain their purpose in the most simple and satisfactory fashion.

The work at this southern gateway terminated the excavations of 1894-95. From time to time during their course large quantities of pottery were turned up, consisting chiefly of the grey smother-kiln ware, made in the



neighbourhood of Upchurch, where an area of twenty-four square miles, covered with potters' debris, shows the extent and importance of the Roman potteries formerly existing there.

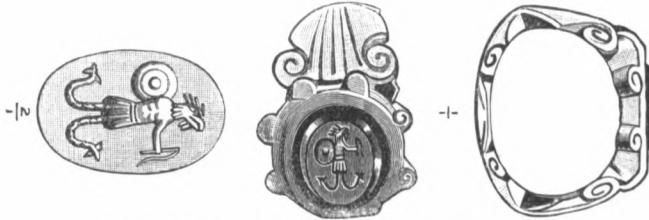
A few small fragments of the parti-coloured Durobrivian ware and much of the beautiful red Samian ware were also found. Two fragments of the latter had on them, scratched through the glaze, *graffiti* of names that have also been found on centurial stones in that



SILVER NECKLACE AND PENDANT, GREAT CHESTERS (*full size*).

district. Some potters' names and other *graffiti* discovered at Great Chesters are shown on page 40. Millstones were found, varying in size, from those that could be turned by one person up to those that would have required an ox or ass to drive. Most of them are made

of the local grits, but a few of them were 'made in Germany' of the volcanic rock found near Andernach, where an extensive manufactory still exists at which millstones are made from the same stone. Unfortun-



SILVER RING FROM AESICA WITH CARNELIAN INTAGLIO.

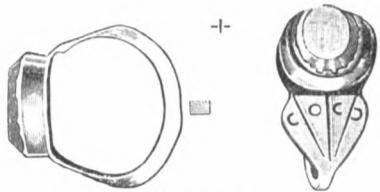
ately, no altars were discovered, and the fragments of inscribed stones turned up were few and unimportant, the portions of the camp

explored being those least likely to furnish buildings containing important inscriptions. In addition to the hoard of jewellery found in the south gateway (amongst the objects being the silver necklace shown in the illustration on page 41, and the two silver finger rings on this page), the pretty bronze figure of Mercury (shown full size in the illustration on page 43), and many bronze objects, such as brooches, buckles, studs, and cooking utensils, were turned up and



ABRAXAS GEM (3 times original size).

removed to the Black Gate museum at Newcastle; one brooch, inlaid with blue enamel, is in the form of a hare, which is almost an exact replica of one at present in Chester museum.



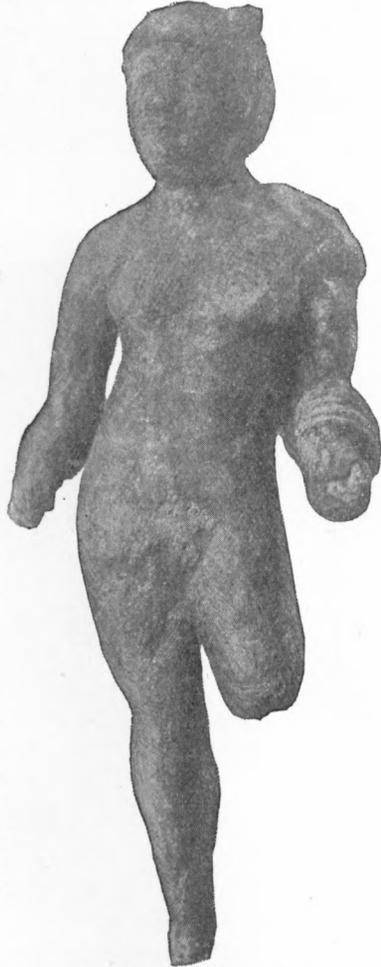
SILVER RING FROM AESICA.

The small gold earring now in the Chesters museum was found many years ago. Weapons and implements of iron, much corroded, were turned up in great profusion — among them a sickle similar in shape to those recently rendered obsolete by the use of machinery in the reaping

field—but much smaller in size. The fashion in which the Romans used their sickle is shown on the Trajan column, where a reaper is represented turning down the corn and striking it with a sharp-edged sickle.⁴² It seems odd that in Ireland, where no Roman settlements existed, this fashion should have been followed, while in the north of England the serrated sickle which was used by being drawn through the standing corn towards the reaper was most common.

At different parts of the camp odd coins were found. The little hoard of early *denarii* found in the smithy, built against the northern portion of the west wall of the camp, is fully described by Mr. C. J. Spence in Appendix No. 1.

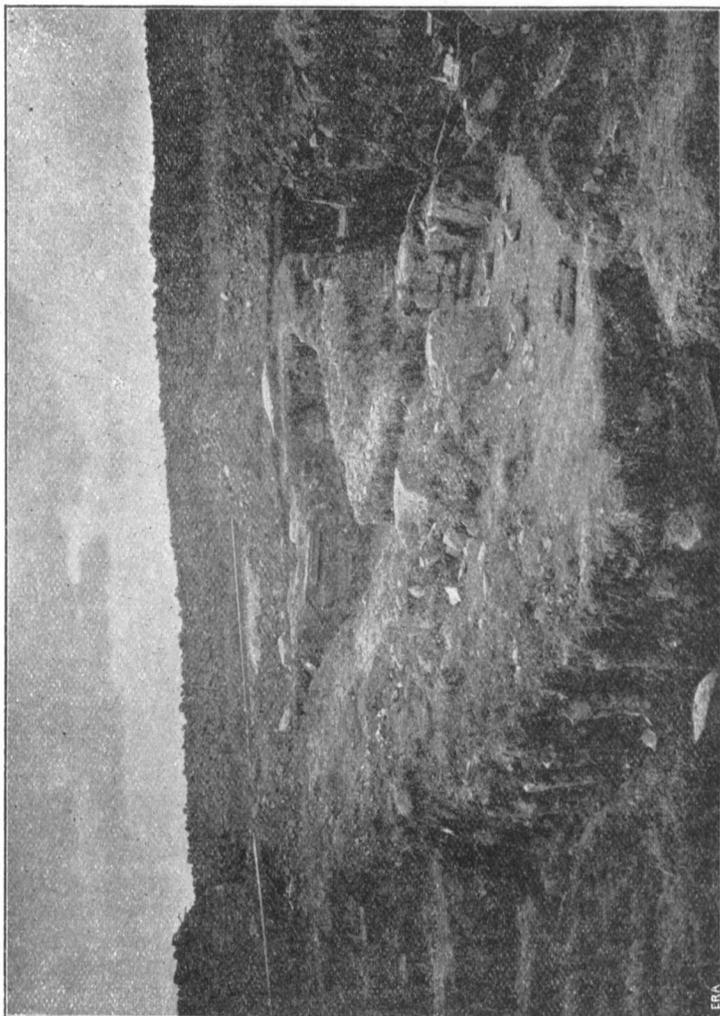
The work of excavation was resumed at *AESICA* in July, 1897, and carried on until put a stop to by bad weather in October of that year. At first arrangements could not be made to work inside the camp, and as from time to time various detached buildings of importance had been accidentally discovered in the immediate neighbourhood of many of the other camps on the line of the Wall, it was decided in the first instance to search for suburban buildings, the existence of which seemed to be indicated by surface inequalities in the pastures on the southern slopes below the camp. A commencement was made close to the outer edge of the south fosse of the camp, and a few yards to



BRONZE FIGURE OF MERCURY.

⁴² Bartoli, *Colonna Traiana eretta dal Senato e popolo Romano*.

the west of the line of the south gateway. Remains of the walls of a large building were found ; as little but the mere foundations remained, the main lines only of it were traced. Further



COMMENCEMENT OF EXCAVATION OF SUBURBAN BUILDING NO. III. AT AESICA, FROM THE EAST.

search showed another rectangular building forty-four feet long by twenty-seven feet wide, without partition walls, close to the edge of the fosse at the south-eastern angle of the camp. This is shown on the

plan, and is marked Suburban Building No. II. Nothing of interest was found in either of these buildings except some fragments of a single vase of rich, dark brown glazed ware, much thinner than what is usually found in the Wall camps.

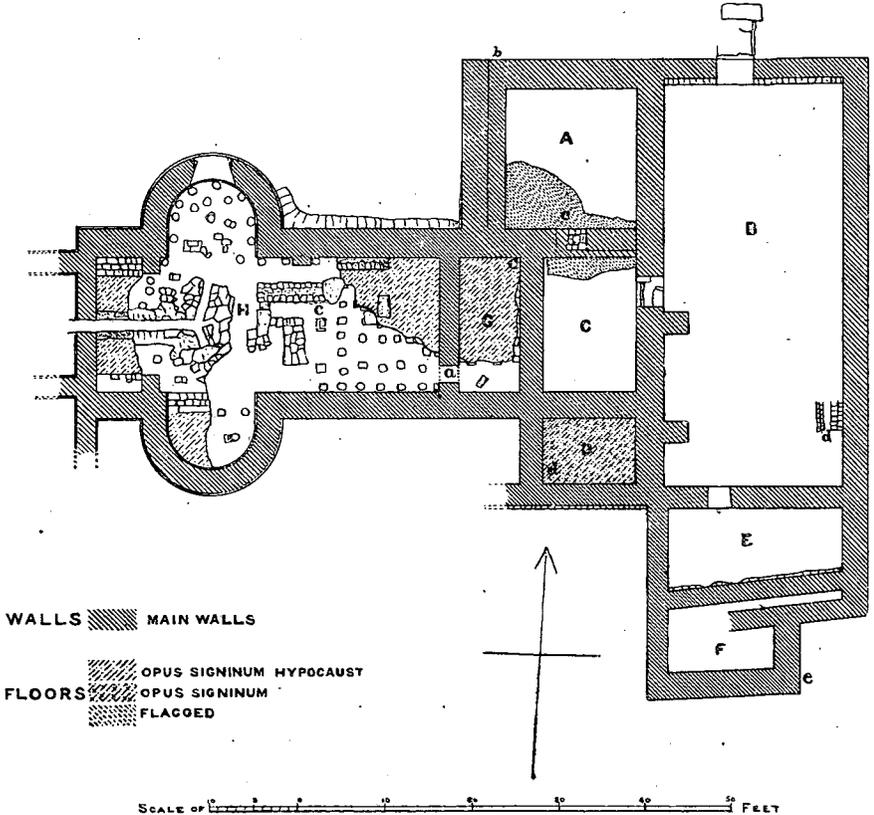
A trench commenced over a hundred yards farther south, where a hypocaust⁴³ is said by old residents in the locality to have been found in the early part of last century by workmen in search of building stones, was driven northward uphill for a considerable distance, and revealed a number of walls varying in height from one to five feet, all running east and west. On following the lines of these walls it soon became evident from the excellent character of the masonry and the existence of some hypocausts that the block of buildings discovered was one of considerable importance. The most southerly of these buildings had been quite quarried out for building stones, but further excavations showed remains of a building over a hundred and ten feet long by seventy-three feet in width, some portions of the walls of which are still standing more than six feet high. A ground plan of it is given on page 46.

It seems to have been the fashion to call almost every detached Roman building in the North of England 'baths,' if there was the least evidence that it had contained a bath, or even if it had rooms heated by a furnace connected with a series of hypocausts. In the time of the Romans, as at the present day, no important private house was considered complete which did not contain baths, it seems probable therefore that those in many of the buildings found on the line of the Wall to the south of the camps were private baths, and that the buildings themselves were the suburban villas occupied by the commanding officers of the respective garrisons.

Leaving the question open as to whether the building was a public or private one, the find at AESICA will be simply described as a building, leaving our readers to call it 'baths' or 'villa' as they choose. The situation it occupies is at once sheltered and commanding, lying below the ridge on which the camp itself stands, and being screened by it from the bitter north-east winds that blow there during the early months of the spring. Eastward it looks out on the far-

⁴³ Marked Hyp in Maclauchlan's *Survey*, Sheet III.

stretching lines of the Vallum and on the Cawfields and Whinshields ranges of basaltic trap hills, which have gradual but steep slopes to the south and break into precipices on the north. The view to the westward commands the chain of hills known as the Nine Nicks of Thirlwall, which are really a continuation of the Cawfields and Whinshields ranges, carried about a third of a mile northward

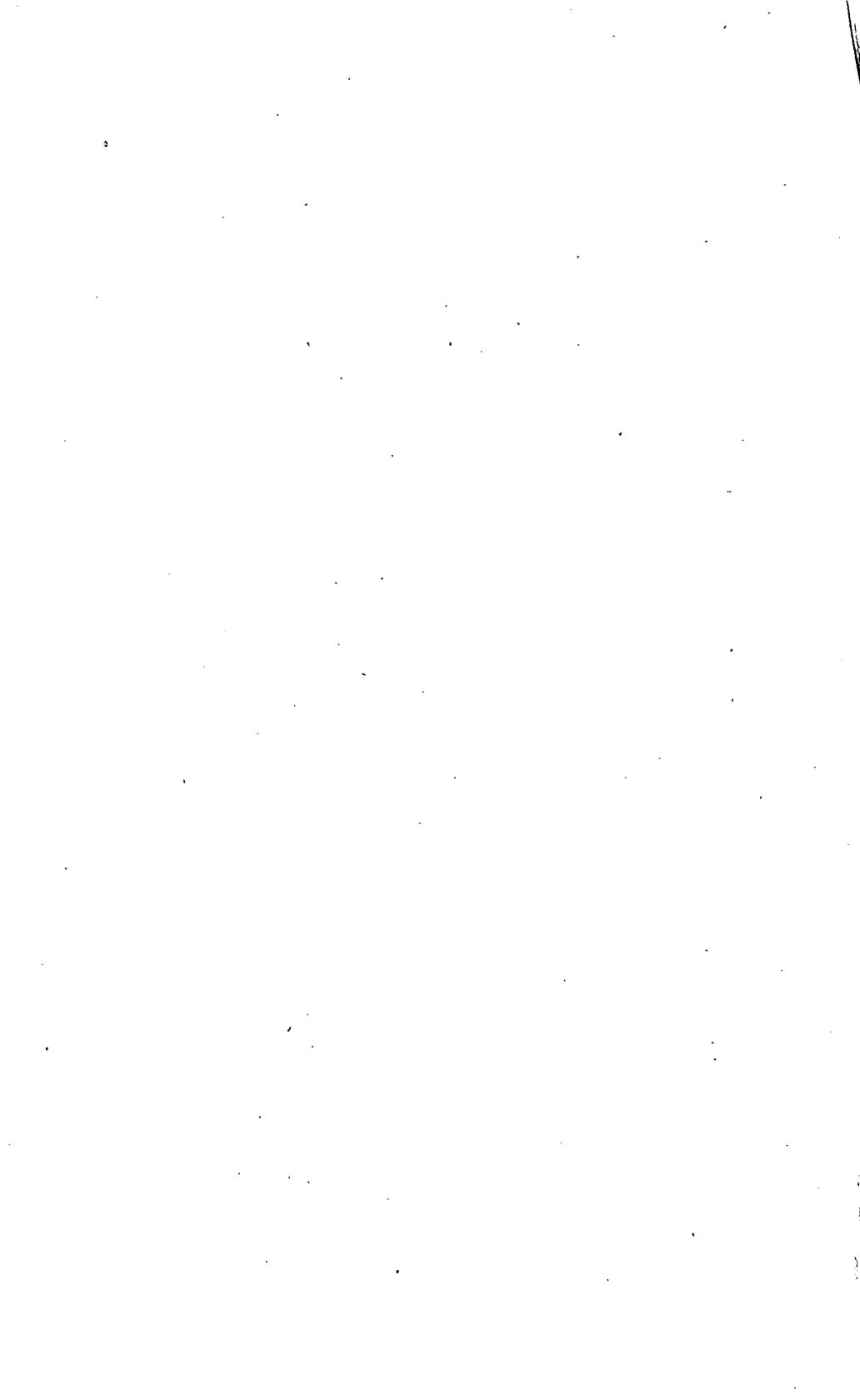


from the line of their westward course by an enormous fault that dislocates the strata in the intervening valley of the Caw-burn. There for a short distance the outcrop of trap rock disappears, leaving the defile defended by *AESICA*, and still more strongly by the older unexplored camp lying on the line of the Stanegate at the point



J. P. Gibson, Photo.

The lines of the *Murus* and *Vallum* at CAWFIELDS, as seen from the W. The *Murus* follows the face of the crags to the top of the distant hill in centre. The *Vallum* is shown by a series of lines running up to the plantation on the right; the point of view is on the line of the *Vallum*, SSE. of AESICA.



where it crosses the Caw-burn. About a hundred yards to the south are seen the almost obliterated lines of the Vallum, and half a mile beyond, along the top of the next ridge, runs the track of the Stanegate, which, although probably the first Roman road in the district, continued in use through medieval times.

The haugh below was used as the cemetery of the camp, and on the slope still further south ancient barrows show the burial places of the prehistoric tribes in possession before the coming of the Romans.

In Roman times the outlook would be on much the same landscape of green fell and heath-clad moorland as that which at present meets the eye, although from existing traces of ancient terraces we know there would be more spade and plough cultivation than at present, when the hill pasturage is stocked with Cheviot sheep and shaggy West Highland cattle, and the sod remains unturned except by the spade of the archaeologist.

At CONDERCUM,⁴⁴ CILURNUM,⁴⁵ PROCOLITIA,⁴⁶ BORCOVICUS,⁴⁷ and VINDOLANA,⁴⁸ at a short distance outside the camps but within, or on the south side of, the great Wall, important detached buildings heated by hypocausts have from time to time been found. The largest of these lies close to the west bank of the North Tyne at CILURNUM. It was discovered and excavated in 1884 by the late Mr. John Clayton of the Chesters, and it has many features in common with that found at *ÆSICA*. In these buildings, and in many others found in the north of England, the absence of an atrium seems to have caused a want of regularity in the plan, which renders it difficult to assign a definite use to each room, especially when little more than the foundations of the walls remain.

The plan⁴⁹ of this building here given is incomplete toward the west, as the excavation could not be carried farther on account of the road for light conveyances to the farm, permission to disturb which could not be

⁴⁴ Brand's *History of Newcastle*, Appendix, vol. i. p. 606.

⁴⁵ *Arch. Ael.*, vol. xii. 124. ⁴⁶ *Ibid.*

⁴⁷ Hodgson's *Hist. North.* pt. II. vol. iii. p. 180.

⁴⁸ Dr. Hunter in the *Philosophical Transactions*, No. 278.

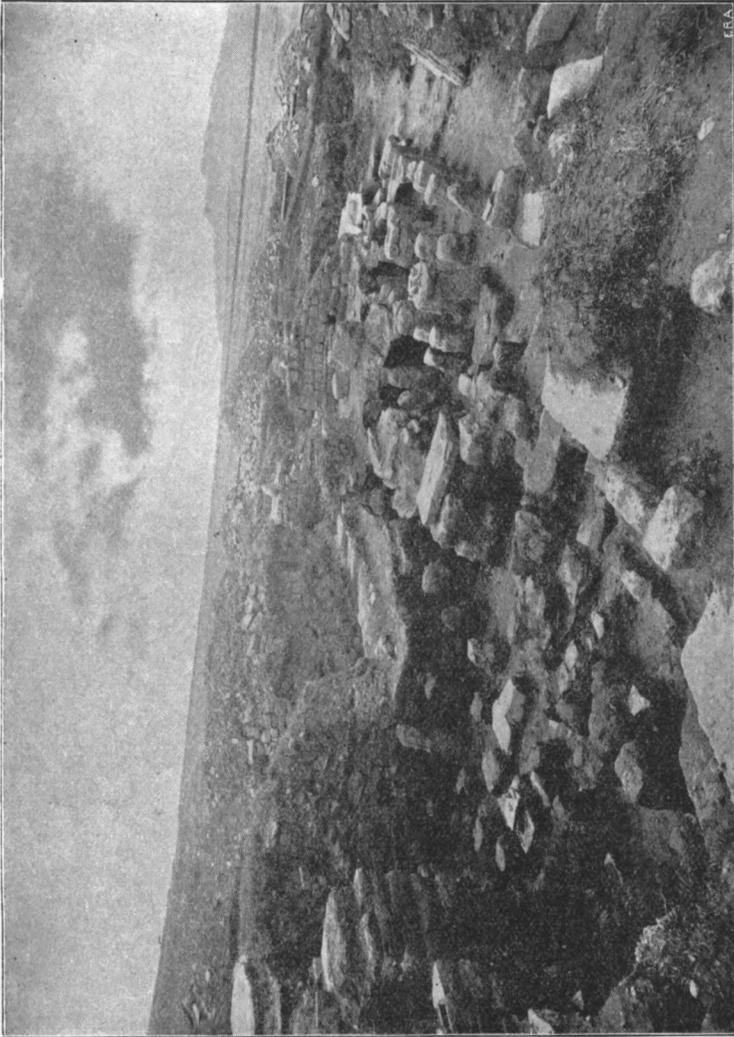
⁴⁹ The various plans which accompany this paper were made by Mr. C. Dickinson of Hexham from the drawing office of Messrs. Armstrong, Mitchell & Company, Elswick, who was on the spot for some weeks during the progress of the excavations. Most of the other illustrations are from my own photographs.
—J.P.G.

obtained. At this western end would doubtless be the principal entrance; as it closely abuts on the line of the Roman road leading from the south gateway of *ÆSICA* to the Vallum and the Stanegate. There would also be the chamber used for storing fuel and the furnace for heating the hypocausts. This is indicated not merely by the position and arrangement of the hypocaust flues, but also by the fact that they there show most the effects of the great heat to which they have been subjected. The fuel used would probably be wood, although we know coal was used by the Romans in the north, small quantities having been found during the excavations at *ÆSICA* and other Wall camps. The western chamber, marked *H* on the plan, is forty feet long by seventeen feet wide. Near its west end the walls form two apsidal-shaped projections to the north and south, each ten feet wide. The northern of these contains the lower portion of a deeply splayed window, which has a northern outlook. Pieces of Roman window glass were found near it, and also close to a similar window found at *CILURNUM*. The insecure condition of the wall made it undesirable to weaken it by clearing out the debris between the window jambs, so that it is difficult to say how the framework that held the glass had been attached to them. The southern projecting portion of this room had contained a bath made of concrete, having steps leading down into it. Probably it may have been lighted by a window like the northern projection, but the southern wall did not remain sufficiently high to show the sill of any window that might have been there.

Near the west end of this room was found a number of peculiarly shaped dressed stones about eighteen inches long by eighteen inches wide, and thicker at one end than at the other, which appear to have been voussoirs of an arch connecting the western ends of the two apses. The square projections from the sides of the thin end of these stones would form a bold moulding on each side of the soffit of the arch. Or possibly they might form a solid finish for the wall plaster to come up to.

Under the whole of this room was a hypocaust supplied with hot air by a flue coming in at the west end from the chamber containing the furnace. A series of arches under the level of the floor connected this hypocaust with another under the floor of *G*, a small room lying to the east of *H*. In the two rooms *C* and *A*, still farther east, the

floors consisted of flags only. The small room D, to the south of these, seems to have been used as a bath, as the concrete of which



AESICA.—HYPOCAUST IN SUBURBAN BUILDING NO. III., FROM THE WEST.

the floor consists is a foot thick and has been carried up the walls and finished with a bold moulding.

The rooms B, E, and F were not fully excavated, only the main walls having been traced. A flight of stone steps leads down from



AESICA.—SUBURBAN BUILDING NO. III., FROM THE EAST.

the outside to a doorway in the north end of room B. At the point marked *C* in the plan in room H, upon the earthen floor on which the

hypocaust pillars rest, more than a hundred coins of copper and a few of base silver were found. The freshest and most perfect of these are of the emperors Valerian, Gallienus, Postumus, Marius, Claudius Gothicus, and Quintillus, who reigned from A.D. 254 to A.D. 270.⁵⁰ These coins assist us in getting an approximate date for the destruction of this building, as they had not been secreted where they were found, but had been left above the upper floor of the hypocaust, as some of them were found adhering to the hypocaust pillars, while others lay on the debris which had fallen into the broken hypocaust. A few coins were also found at other places marked *C* on the plan. At each of the two places marked *D* on the plan, portions of a skull and other human bones were found, evidently not interred there, which probably were those of persons who had perished during the destruction of the building.

It is worthy of notice that in this building, as well as in all buildings hitherto found on the line of the Wall, two features commonly observed in Southern Britain and other parts of the Roman Empire are entirely absent; firstly, the bonding courses in the main walls made with thin tile-shaped bricks, and, secondly, the tessellated pavements which form such beautiful and artistic decorations of the floors.

The masonry consists of well-squared freestone, apparently rather later in character than that of the camp walls and the great Wall itself, to which it bears some resemblance, the thicker walls having, like it, squared stones on each face, filled in with a rubble core made solid by a 'grouting' of mortar poured into the interstices in a semi-fluid condition. One of the sculptures on the Trajan column at Rome shows an armour clad Roman workman stirring up this thin mortar in a receptacle, then in use for carrying it, which has been replaced by the modern hod. The shape of this receptacle is exactly that of a modern waste-paper basket.⁵¹ An excellent means of judging the comparative age of the buildings is afforded by the condition of the mortar in their walls, that in the older buildings being firm and intact, having contained a large proportion of well burnt lime, which, by gradually absorbing carbonic acid from the atmosphere, has reverted almost to its original condition when quarried, having

⁵⁰ See description in Appendix II. ⁵¹ Bartoli, *Colonna Traiana*, p. 129.

become a solid carbonate of lime, hardened by the admixture of a small proportion of silica. Of the mortar of the later buildings found inside the camp little remains except the coarse sand too freely used in its composition, which had been procured from a sand bed on the banks of the Caw-burn, about half a mile distant. The rule that the earlier work is the better holds good with the mortar as it does with the masonry. In this building and in others subsequently found inside the camp, the pillars (*pilae*) which support the upper floor of the hypocausts are usually dressed stones from eighteen to twenty-four inches in height. Examples of their various forms may be seen in the accompanying illustrations. Some are simply cylindrical, while others bear a certain rude resemblance to altars, and small altars have actually been found which have evidently been disused hypocaust pillars on which the soldier has roughly chiselled a dedication to his favourite god, thus carrying out the vow, in fulfilment of which the altar was doubtless made, at the minimum of labour and expense.

Pilae sometimes are formed of large square tile-shaped bricks about one and a half inch thick simply laid on each other until they reach the requisite height. Examples of this kind are found at CILURNUM and PROCOLITIA, but do not occur at AESICA.

In one of the hypocausts found inside the camp, which is of very late work, the *pilae* are built up of small stones. The use of different shaped *pilae* in the same hypocaust indicates that the builders were dealing with previously used material.

The *pilae* in the building being described rest on a floor of beaten clay, and support a course of flagstones about three inches thick, on which is laid a coating of about six inches of 'opus signinum,' a concrete apparently formed of the refuse of brickfields mixed with hot lime. Sometimes in the lower layers of this concrete the ground brick is replaced by small pebbles and coarse sand. Similar concrete is still used for the floors of kitchens and out-houses. Locally, in the neighbourhood of lead and baryta mines, the ground brick of the concrete is replaced by a whitish material known as 'mine cuttings,' which is the lighter portion of the vein material separated from the ores in the process of dressing, and consists chiefly of a white crystalline carbonate of lime found in great quantity in metalliferous veins. A still more durable concrete for

footpaths and other outdoor work, which has recently been extensively used, is made from the waste siftings obtained in crushing whinstone by machinery for the purpose of making road-metal. These siftings mixed in the proportion of four or five parts to one of cement form a concrete almost as enduring as granite.

A careful examination, made in 1898, of the ancient masonry of Rome itself impressed me with the fact that, during the Imperial period, concrete was the chief building material used, stone, brick, or marble, forming usually only the outer covering or veneer. The most striking examples of the quantity and quality of the concrete there used are furnished by Hadrian's villa and the baths of Caracalla and Diocletian.

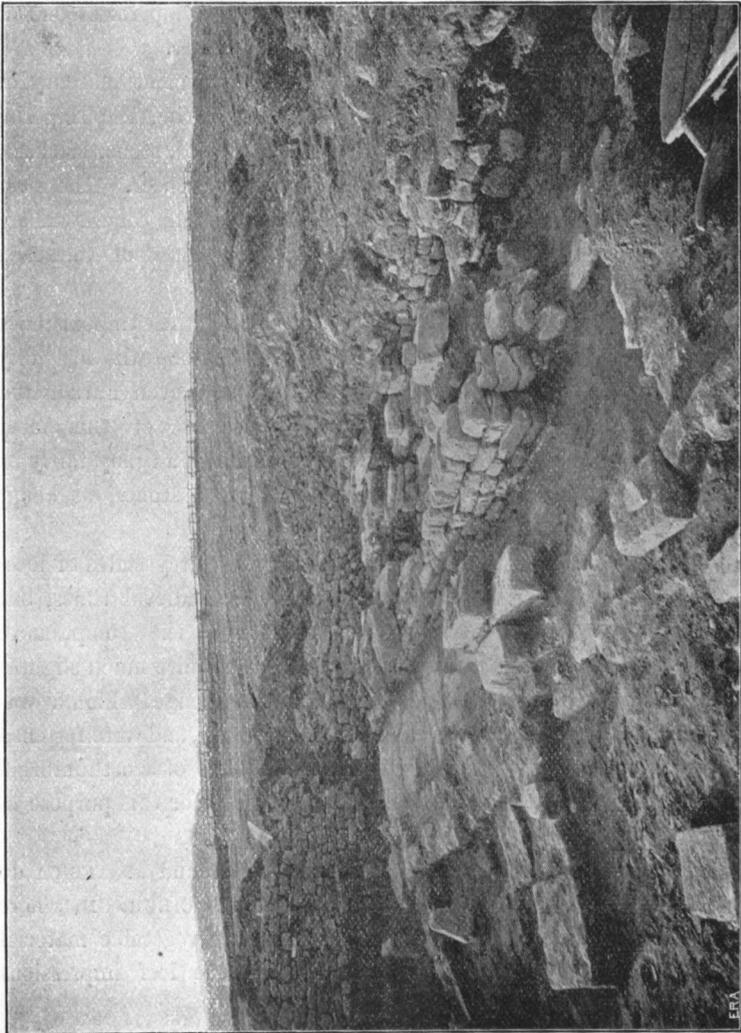
Many writers on Rome appear to ignore altogether the existence of concrete, and Middleton seems to be the only one who has fully recognized and insisted on the extent of its use, even Parker and Lanciani failing to give any adequate impression of this most important point. The Tyne and Solway Roman Wall may fairly be described as a concrete wall faced with squared stones, as about three-fourths of its bulk consists of concrete.

The roofs have been covered with rectangular grey slates of local stone which continued to be used throughout medieval times, but are now becoming obsolete in consequence of the comparative lightness and cheapness of Welsh slates, which require much slighter timber supports. They were laid square, and in lozenge fashion as was frequently the case in Roman buildings in the south, and were fastened with heavy iron nails. In later times the builders of Northumbrian pele towers made use of the shank bones of sheep for this purpose as a cheap substitute for nails.

The interior walls of the various buildings found at *AESICA* do not show so many traces of plaster as those at *CILURNUM*, where much plaster was found in which ferns and other vegetable material had been used for bonding instead of hair, the leaf impressions being distinctly visible in it when first found.

A heap of about a wheelbarrow load of what had evidently been finely prepared plaster, technically known as 'putty lime,' was found in the excavation of one of the buildings near the centre of the camp of which some account will follow. Arrangements were made

to fence and leave open this building, but it is to be regretted that exposure to the winters' frosts and the trespass of people who climb



BUILDING SOUTH-EAST OF PRETORIUM, AESSICA.

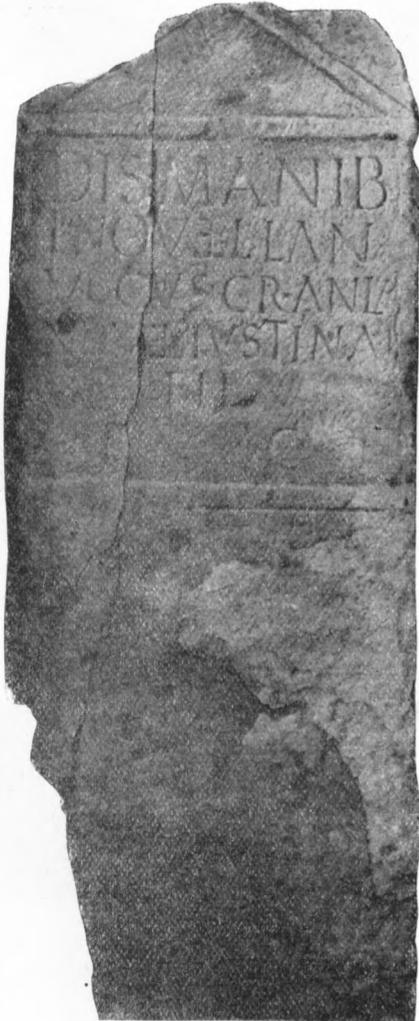
the railings and walk on the crumbling walls seem to be likely to eventuate in its total destruction.

The late Mr. Sheriton Holmes, who made a careful survey and plan

of the excavations of 1894-1895, definitely located the position of the east gateway of the camp. A cutting was made on the spot indicated by him, and the east faces of the north and south gateway towers were found and cleared, but no further exploration could be carried out on account of the farm wall which had been carried through the portals and had partially destroyed them. This excavation showed the same difference between the southern and northern gateway towers as that existing in the west gateway, the heavy, massive, early masonry being seen only in the southern tower.

Considerable disappointment was felt by members of the Committee that during the three years' excavations no inscribed stones had been found except some fragments of an unimportant character. This was to be accounted for so far as the camp was concerned by the fact that the explorations had chiefly been in the gateways and along the line of the outer walls of the camp where inscribed stones

are rarely met with. In the hope, therefore, of finding something of more special interest than had been previously got, a trench was



opened about ninety feet north of the central chamber and a little to the east of it, and driven south for over two hundred feet. It exposed the foundations of a large building to the east of the vaulted

chamber, and further excavation showed that the vaulted chamber was a portion of a block of buildings measuring seventy-five feet from north to south. The plan and position of the building showed it to be the west end of the pretorium, and the measurement nearly corresponds to that of the pretorium since excavated at BORCOVICUS. On working eastward it became evident that the pretorium had been excavated and cleared out at some previous time, probably when the destruction of the north gateway took place. Little was found remaining except traces of its main walls, which

disappeared entirely as the farm road and buildings were approached. Abutting against the south-west corner of the pretorium was found



another large block of buildings. The miscellaneous character of the materials used in its construction showed it to be work of the latter part of the Roman occupation. In the wall separating a passage in this block from the pretorium, a very large and boldly moulded altar had been used as a walling-stone, being laid on its side. The relative position of this and other inscribed stones are shown in the plan of the central portion of the camp. The shape and mouldings of this altar showed it was probably erected early in the second century. Before it was used as building material it had stood in an exposed position without any protection from the weather for a very long period, as its inscription was totally obliterated. From the hardness of the stone and the amount of weathering it showed it might have faced the storms of a hundred or a hundred and fifty years. Doubtless it was made and erected shortly after the first occupation of the camp. It has been placed in the east chamber of the south gateway of the camp.

In the room to the west of the passage where this altar was found two large inscribed funereal stones⁵² had been used in flagging the floor, the partition wall separating the room from the passage having been built on the eastern ends of both stones. The larger inscription has been partially obliterated by a rude channel cut diagonally across it. Sufficient, however, remains to show that it had been erected to 'Aurelia, a dearest sister, aged fifteen years and four months.' The formation of the letters of its inscription, its shape, and its weathering all indicate that it is the earliest of the inscribed stones discovered, and there can be no doubt that it is second century work. On the other funereal stone the inscription is perfect, and dedicates it to the Gods of the Shades, by a daughter who had caused it to be erected in memory of her father, a Roman citizen of seventy years of age. Novellinus has been suggested as an extension of the name Novel, the 'e' and 'l' being ligatured in both places where the name appears in the inscription, but Novellius, a common Roman name, seems a much more probable rendering. In the name Llanuccus, a peculiarity is the doubling of the 'l,' so common in the commencement of Welsh proper names.

⁵² See *Arch. Ael.* vol. xix. p. 263-272, for description of the inscriptions by Mr. F. Haverfield.

In the southern wall of the same room, about eighteen inches above the floor-level, was an altar which had been used as a walling-stone and laid face upwards. Its length is about four feet, and the



inscription shows it was erected in fulfilment of a vow and dedicated to the Dolichene Jupiter by a centurion named Lucius Maximus, of the Twentieth Legion, surnamed the Valerian and Victorious. Various readings of the ten letters which follow the name of Lucius

Maximus have been suggested, none of which is satisfactory. The ornament immediately above the inscription resembles one which was afterwards commonly used in late Norman work and is known as the 'sunk star.' The shape of this altar and its inscription show that it cannot be earlier in date than the third century.

Altars dedicated to the Dolichene Jupiter are not uncommon in many countries occupied by the Romans. Several have been found in the North of England and on the line of the Wall. Warburton⁵³ and Horsley describe a fragment of one found at *AESICA*, which is now in the library of the Dean and Chapter at Durham. Below are fragmentary inscriptions found on broken stones during the excavations.



Portions of a long inscription on a large 'tabula ansata' were found, but unfortunately only a few letters were legible. In this block of buildings ten rooms were cleared out, three of which were furnished with hypocausts. The illustrations given of these hypocausts show

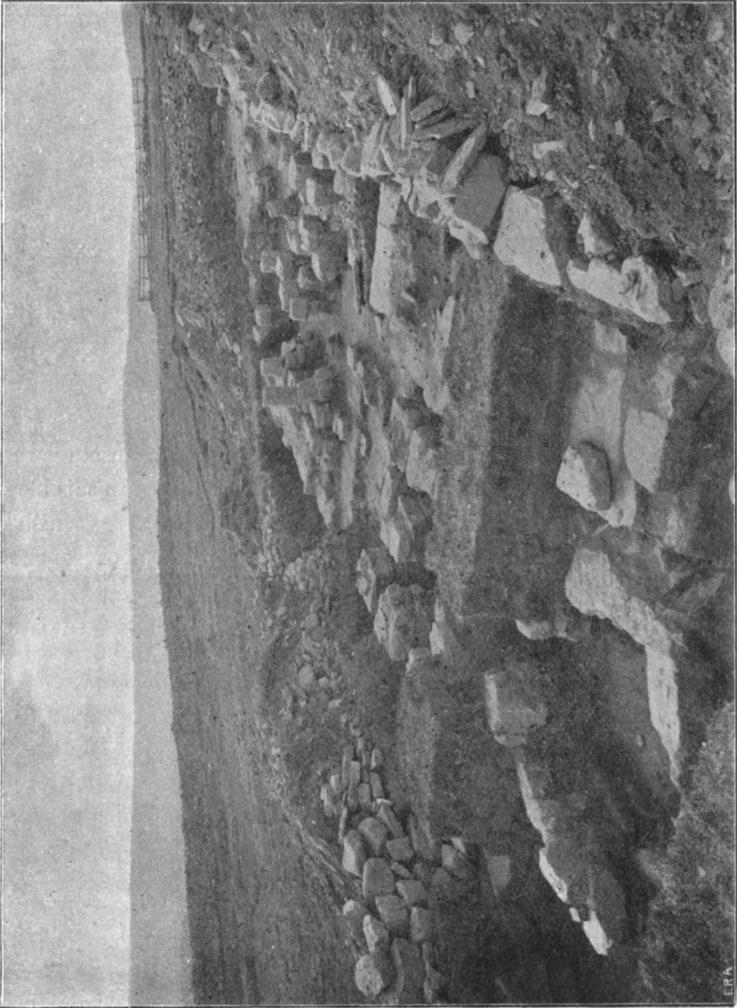


INSCRIBED TILE FROM *AESICA*.

great variety in the pilae, caused by the use of old materials. The round structures in little chambers adjoining the hypocausts appear to have been the hearths of furnaces used in heating the hypocausts.

⁵³ Warburton's *Vallum Romanum*, page 73, fig. lxi.

In one of the rooms, a number of large squared stones with square sockets cut in them seemed to show there had been a series of



AESICA.—HYPOCAUST NEAR CENTRE OF THE CAMP, FROM THE EAST.

wooden posts used in supporting the upper storey of the building, which might also be constructed of wood.

Further evidence of the occupation of AESICA by the second

cohort of Asturians was furnished by a portion of a tile bearing its stamp. Many fragments were found of the hollow square tiles used



AESICA.—HYPOCAUST NEAR SOUTH GATEWAY, FROM THE WEST.

in carrying hot air up the walls of buildings having hypocausts. Among the metal objects found were a silver fibula, about one and a

half inches long, some bronze objects, apparently studs or ornaments, belonging to armour or horse trappings, and many much-corroded iron tools. These, along with the pottery found, and the inscribed stones discovered, are now deposited in the Black Gate museum at Newcastle.

The illustration which furnishes a tail-piece to this article is from a photograph of a stone, nine inches high, which was found a little to the south of the altar and the funereal stones. This stone excited much interest among the excavators, who gave the name of 'Ould Charlie' to the figure. It seems from comparison with figures found elsewhere in Roman camps that it is intended to represent the god Mercury, the caduceus being very distinctly evident.

APPENDIX I.

In addition to the coins noted in the report made in 1895 the following have since been discovered :—

VESPASIAN (*AR.*).—1.

Obv. IMP CAESAR VESPASIANVS AVG. Head to right.

Rev. Illegible.

TITUS (*AR.*).—1.

Obv. AVG T VESP Head to right.

Rev. Illegible. Emperor on horseback.

TRAJAN (*AR.*).—5.

1. *Obv.* DES V COS VI. Head to right.

Rev. S P Q R OPTIMO PRINCIPI. In exergue VESTA.

2. *Obv.* IMP TRAIANO AVG P M TR P. Head to right.

Rev. COS VI S P Q R OPTIMO PRINCIPI. Victory marching to left.

3. *Obv.* IMP CAES NER TRAIAN OPTIM AVG GER DAC PAR Head to right.

Rev. COS VI P P S P Q R. Valour marching to right with spear.

4. AIANO GER DAC P M TR P. COS Head to right.

5. Illegible.

HADRIAN (*AR.*).—2.

1. *Obv.* HADRIANVS AVG. Head to right.

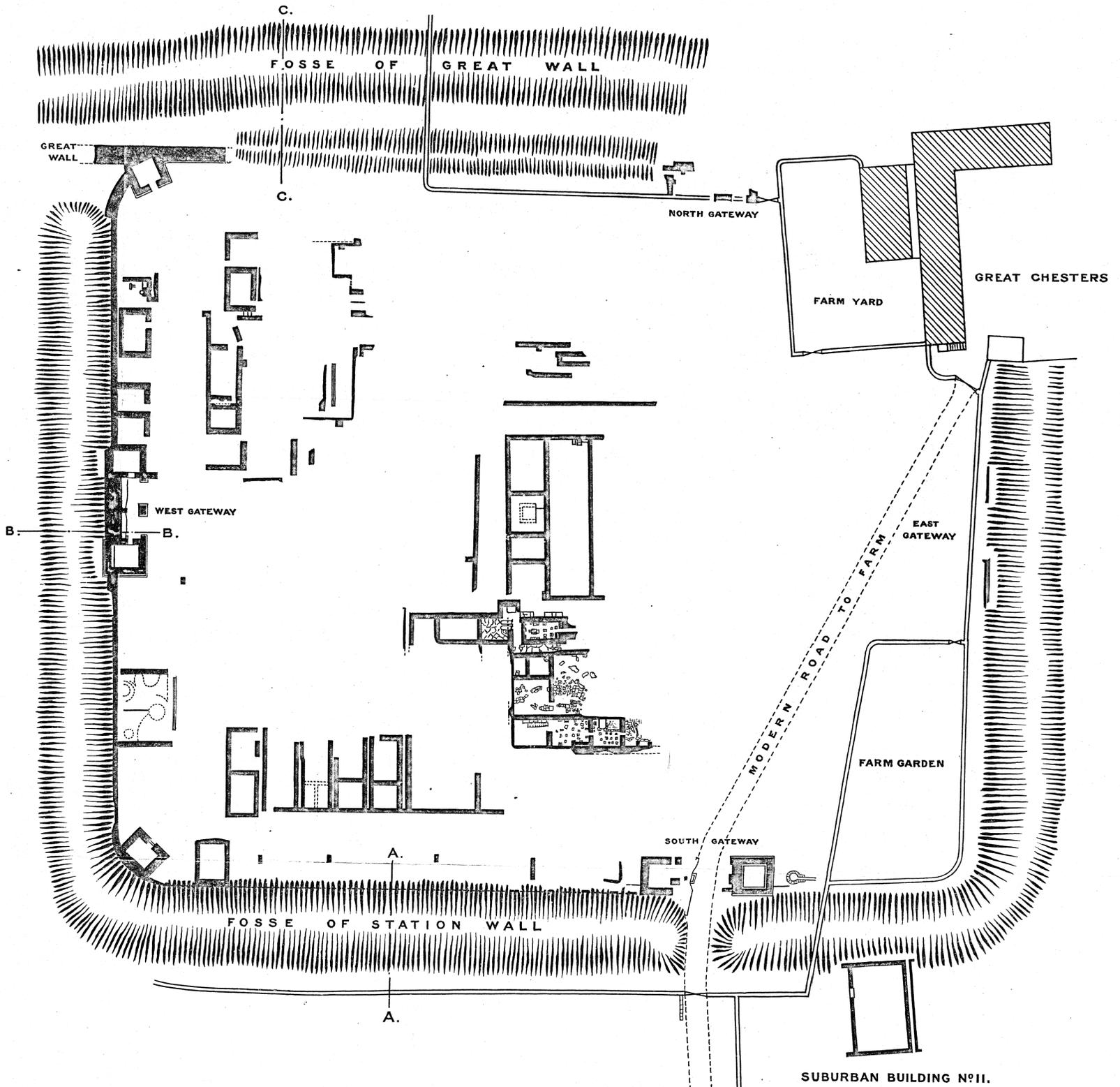
Rev. P M TR P PP COS III. In field FELIC AVG.

2. *Obv.* HADRIANVS AVGVSTVS. Head to right.

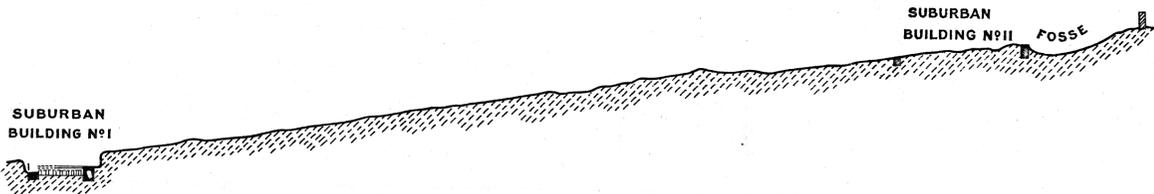
Rev. COS III.

And one which cannot be identified.

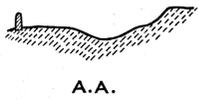
(The above *denarii* were all found together below a flag, see p. 43.)



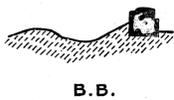
SUBURBAN BUILDING N° I



SECTION OF GROUND THROUGH BUILDINGS N° I & II



A.A.



B.B.



C.C.
FOSSE OF GREAT WALL

SECTIONS THROUGH FOSSE

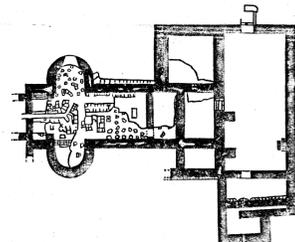
ROMAN WALL EXCAVATIONS AT AESICA

1894-95-97

SCALE OF 10 50 100 150 200 250 300 FEET

ANCIENT ROAD FROM STANEGATE STILL IN USE

SUBURBAN BUILDING N° I





MARCUS AURELIUS (*A.R.*).—Illegible.

FAUSTINA THE YOUNGER (*A.R.*).—2.

1. *Obv.* FAVSTINA AVGVSTA. Head to right.
2. *Rev.* VENVS. Figure seated to left.

VICTORINUS (*A.E.*).—2. Illegible.

TETRICUS (*A.E.*).—3, of which two are illegible.

Obv. Illegible.

Rev. LAETITIA AVG.

TETRICUS, the younger (*A.E.*).—Illegible.

CONSTANTINE (*A.E.*).—

Obv. NVS P F AVGG. Veiled head.

CONSTANS (*A.E.*).—4.

Rev. VICTORIA DD NN AVGG.

VALENTINIAN (*A.E.*).—Illegible.

Three *denarii*, three second brass, and one third brass cannot be identified.

APPENDIX II.

The hoard of coins found in hypocaust in suburban building No. III. (see p. 5).

VALERIAN (base *denarius*).— 1

Obv. IMP C VALERIANVS AVG. Radiated head to right.

Rev. VICTORIA AVG. Victory standing to left, holding out a garland, in left hand a transverse spear.

GALLIENUS (base *denarii*?).— 3

1. *Obv.* IMP GALLIENVS AVG. Radiated head to right.

Rev. DIANA CONS. Stag walking to left. In exergue XII.

2. *Obv.* *Ibid.*

Rev. NEPTVNO CONS. A sea-horse to right. In exergue N.

3. *Obv.* *Ibid.*

Rev. PAX AETERNA AVG. Peace standing to left, holding olive branch, and a spear transversely. In field A.

POSTUMUS (base *denarii*).— 5

1. *Obv.* IMP C POSTVMVS P F AVG. Radiated head to right.

Rev. HERC DEVSONIENSI. Hercules, naked, standing to right, holding a club.

2. *Obv.* *Ibid.*

Rev. [PAX AVG]. Peace standing to left, holding out an olive branch in right hand transverse spear in left.

3. *Obv.* *Ibid.*

Rev. P M TR P COS III. Mars, nude, marching to right, with a spear and a trophy.

4. *Obv.* *Ibid.*

Rev. P M TR P COS . . . Female figure standing, holding a spear and a cornucopia.

Carry forward . . . 9

	Brought forward	...	9
5. <i>Obv.</i>	<i>Ibid.</i>		
	<i>Rev.</i>	PROVIDENTIA AVG. Providence standing to left, holding a globe, and a spear transversely.	
MARIUS.—	...	...	1
	<i>Obv.</i>	IMP C M AVR MARIVS P F AVG. Radiated and draped bust to right.	
	<i>Rev.</i>	Holding a garland and a palm branch.	
TETRICUS, the elder (all illegible).—	...	...	7
TETRICUS, the younger (reverses illegible, 3).—	...	...	5
	<i>Rev.</i>	VIRTVS AVG. A soldier to left, with standard.	
	<i>Rev.</i>	SALVS. . . . Health standing.	
CLAUDIUS GOTHICUS.—	...	...	4
1. <i>Obv.</i>	IMP CLAVD . . .	Radiated head to right.	
	<i>Rev.</i>	ANNONA AVG. Abundance standing to left, holding ears of corn and a cornucopia, and placing her foot on a ship's prow.	
2.	The same.		
3. <i>Obv.</i>	IMP CLAVDIVS P F AVG.	Radiated head to right.	
	<i>Rev.</i>	FIDES MILIT. Faith standing to left, holding a standard and a spear.	
4. <i>Obv.</i>	IMP CL . . .	Radiated head to right.	
	<i>Rev.</i>	VIRTVS AVG. Soldier, helmeted, standing to left, leaning on a shield and holding a spear. In field a star and H.	
QUINTILLUS.—	...	...	1
	<i>Obv.</i>	IMP C M AVR QVINTILLVS AVG. Radiated bust to right.	
	<i>Rev.</i>	LAETITIA AVG. Joy standing to left, holding an anchor which rests on a globe. In field XII.	
		Third brass illegible	8
	<i>Minimi</i>	...	85



MERCURY; (see page 62).