

# ARCHAEOLOGIA AELIANA.

## I.—EXCAVATIONS ON THE LINE OF THE ROMAN WALL IN NORTHUMBERLAND.

### 1. INTRODUCTION.

BY THOMAS HODGKIN, D.C.L., F.S.A., ETC.

No member of the Newcastle-upon-Tyne Society of Antiquaries needs to be informed of the nature of the objects aimed at by the excavation of a Roman camp, but as this report may fall into the hands of some who are strangers to the district, it seems desirable to preface the detailed account of our labours by some remarks of a general kind.

The history of our island during its occupation by the Romans has been practically left unwritten by the pen, and if it is to be told at all, must be recovered for us by the labourer's spade. The *Agricola* of Tacitus and a very few pages in the *Historia Augusta*, in Xiphilinus's abridgement of Dion Cassius, and in the history of Ammianus Marcellinus are all the materials that antiquity has left us wherewith to construct the story of Roman Britain, a story which occupied four centuries in the original telling. This being so, we are compelled to supplement the paucity of our literary information by examining the vestiges of the handiwork of our conquerors which still remain under the soil of our country. That this work has been undertaken with a fair measure of success is evidenced by the proceedings of our various antiquarian societies, and by such works as General Roy's *Military Antiquities of Britain* and the late Mr. Roach Smith's *Roman London* and *Collectanea Antiqua*.

In the north of England we are practically destitute of materials for the *political* history of our country in Roman times, the *Municipium* and *Colonia* having been entirely unknown in this region. But for the *military* history of the province, we have a magnificent, an almost unrivalled treasure-house of information in the Great Wall which stretches from the Tyne to the Solway, and the camps and guard-houses which stud its course. The admirable *Memoir on the Roman*

*Wall*, which was prepared more than forty years ago by Captain MacLauchlan at the expense of the fourth duke of Northumberland, had the great advantage of being written by a man who was practically acquainted with the problems of defensive warfare; and an ideal excavation commission should perhaps always number among its members such a military expert, as well as an architect, a practical mason, and a scholar well versed in the text of the Roman writers on strategy and fortification. Exactly such a combination we have not been able to procure for our present operations, but the want of it has been in great measure supplied by the services of explorers who have already had large experience of excavating work in other regions, especially of Mr. R. C. Bosanquet, of the British Archaeological School at Athens, and Mr. Dickie, of the Palestine Exploration Fund.

Whenever a Northumbrian antiquary accompanies a stranger who is visiting one of our great Roman camps, he is sure to be asked what was the destination of the various buildings whose foundations are there visible. To such questions, if he has any regard for scientific accuracy, he must often return an evasive answer. It is true that we can safely decide as to the object with which the 'guard-chambers,' one on each side of the great gateways, were built. So, too, if we find a large hall, the floor of which was covered with grains of corn, we may safely assume that it was used as a grain warehouse; and when we see certain rooms underlaid with the elaborate heating arrangement known as the hypocaust, we cannot be far wrong in supposing that these formed part of the officers' quarters. But much further than this we have not as yet been able to go. In order to speak with any certainty as to the uses of the various buildings which once existed on our Northumbrian moors, we must study what may be called the comparative anatomy of Roman camps. We must carefully explore, not one, but, if possible, all of these strongholds. We must have every line of wall that we can trace carefully laid down on a scientifically prepared plan. Above all, we must be quick to observe the slightest traces of old destructions followed by subsequent rebuildings, since the determination of these successive strata of architecture is at once the most perplexing and the most interesting of the various questions which will come before us. It is only by a careful induction from all these various particulars that we shall be

able with any certainty to reconstruct the history of our county in Roman times, to say during what periods it was at rest under imperial rule, at what times the legions were driven far to southward and the Caledonians and the Maeatae trampled on the charred embers of Roman civilization.

In some respects we are less fortunately situated than the explorers of earlier days, who, when at work in such a camp as Housesteads, which Stukeley called 'The Tadmor of Britain,' had only to scratch beneath the surface to find statues, coins, and important dedicatory inscriptions. But though these are not now to be had in such numbers or on such easy terms as a hundred years ago, there are, doubtless, still some of them waiting to reward the excavator's toil; and even without them, if we can by scientifically conducted excavations recover *the plan of the camp*, we shall have done as much for the cause of archaeology as any of our predecessors.

Happily in this matter we are by no means left to depend on conjecture alone. Two authors, Polybius and Hyginus, have left us very valuable and full information as to the castrametation of the Roman armies; and though the camps which these authors describe, being only of a temporary kind, differed greatly from the *castra stativa* or permanent camps, among which ours in Northumberland must be reckoned, still there cannot be much doubt that a certain general analogy existed between the two classes, and that the permanent camp, though a more substantial erection than the *castra aestiva*, and affording much more roomy quarters to its occupants, was constructed on certain broad lines of similarity thereto.

The Roman camp described by Polybius was a square, each side of which measured 2,150 Roman feet. A wide *intervallum*, however, of 200 feet ran all round inside the ramparts of the camp. The space therefore actually available for the quartering of the soldiers and their officers (inclusive of the streets) was a square of 1,750 Roman or about 1,690 English feet, which gives us a total superficies of about sixty-five acres. This space was meant to accommodate two legions and their proportion of allied troops, amounting to about 18,000 infantry and 2,400 cavalry, in all 20,400 men, besides the horses of the cavalry. (See Marquardt's *Römische Staatsverwaltung*, p. 390.)

Polybius, I need hardly say, was a contemporary of Scipio Africanus Aemilianus, the destroyer of Carthage, and flourished in the middle of the second century before Christ (*circa* 203-121). Our next authority, Hyginus the surveyor (Hyginus Gromaticus), is believed to have lived in the reign of the Emperor Trajan (98-117 A.D.),<sup>1</sup> and he evidently describes a somewhat different state of things in the Roman army.

The camp of Hyginus was 2,320 feet long by 1,620 broad.<sup>2</sup> These measurements correspond to about 741 by 524 English yards, or about eighty of our acres. We must, however, make some abatement from these dimensions in order to allow for the fact that the camp of Hyginus, unlike that of Polybius (but like our own Northumbrian camps) had the corners rounded off; and also in order to allow for the *via sagularis*, a road thirty or forty Roman feet wide, which ran all round inside the boundary wall of the camp. It will thus be reduced to something less than seventy acres, as against the sixty-five acres of the Polybian camp. But then the camp of Hyginus was calculated to hold at least 40,000 men, instead of the 20,400 of Polybius,<sup>3</sup> and a much larger proportion of horses. From this comparison it is plain that the Roman soldier in the time of Trajan had far less space allotted to him than his predecessor in the time of the Scipios. Probably scholars are justified in concluding that this difference is partly due to the altered *status* of the soldier, who, in the second century B.C., was still the citizen of a free republic, voting in the forum as well as mounting guard in the camp; but in the first century A.D. was practically the paid servant of an autocratic master.

It has seemed worth while thus to glance at the information which is afforded us as to the plan of both these camps, the Polybian and the

<sup>1</sup> It should be stated, however, that our authority for ascribing the book 'de munitionibus castrorum' to Hyginus is not unquestioned, and that while the majority of scholars assign to the author a date contemporaneous with Trajan, Lachmann will only admit that he is 'earlier than Constantine,' and Marquardt (*Die Römische Staatsverwaltung*, ii. 579) puts him in the beginning of the third century. But in any hypothesis he is a valuable witness for the period of the construction of the Roman Wall.

<sup>2</sup> See note by Lange on Hyginus, p. 183.

<sup>3</sup> General Roy makes the three legions of Hyginus, with their proportion of auxiliary troops, amount to 42,626 men. Marquardt (p. 584) makes the legionaries about 20,000 men and the *auxilia* 21,790.

Hyginian ; but it will be at once obvious that it is only by analogy that they can throw any light on the precise problem presented to us by the camps in Northumberland. The Polybian camp of sixty-five acres for 20,000 men, the Hyginian camp of eighty acres for 40,000 men : we can of course look for no precise correspondence between these edifices and such camps as those between Wallsend and Solway, the largest of which (*AMBOGLANNA*) is not quite six acres in extent, and none of which was meant to accommodate more than 1,000 men with their horses. But while it is therefore clear that we must not look for the precise measurements either of Polybius or Hyginus in our Northumbrian camps, we may derive some useful hints from them as to the general arrangement of the troops and the destination of the chief buildings.

And first we may consider to which form of camp our own structures most nearly correspond ; and here, as we might reasonably expect, the later Hyginian form is much more *en évidence* than the Polybian. Like the camp of Hyginus, our camps have rounded corners ; and the soldiers' quarters in all those, I believe, that have yet been examined, came up much closer to the bounding wall than they do in the camp of Polybius.<sup>4</sup>

One great distinction between the Polybian and Hyginian camps is that in the former the allies are placed (as they were in order of battle) on each flank of the legionaries, while in the latter the legionaries are quartered close under the boundary of the camp, and the *alae* of the allies are ranged behind them. But as to this difference our camps will of course tell us nothing, as they were all occupied by auxiliary troops.

The camp of Hyginus is oblong, the proportion of the length to the breadth being about 11 to 8 : that of Polybius is square. Most of our camps are oblong, but with varying degrees of elongation. Another difference between the two is that in the Polybian camp the *Via Quintana* (one of the two streets running from right to left of the camp) is nearest to the *Porta Praetoria*, and the *Via Principalis* to the *Porta Decumana*. In the camp of Hyginus the position

<sup>4</sup> The *Intervallum* of the Polybian camp is two hundred feet wide ; the corresponding *Via Sagularis* of the Hyginian only thirty, or in some cases forty. Our camps generally show a space of thirty or forty feet between the soldiers' quarters and the limiting wall.

is reversed: the *Via Principalis* looks towards the Praetorian, the *Via Quintana* towards the Decuman Gate.

The chief interest, however, of the excavation of a Roman camp will always attach to the buildings near its centre, which formed the headquarters of the general and his staff. Notwithstanding the well-worn quotation from *The Antiquary*, 'Praetorian here, Praetorian there, I mind the bigging o't,'<sup>5</sup> all students of Roman encampments must give their best energies to the discovery of that most important edifice, wherein was lodged the very brain of the whole marvellous organism.

It was from the Praetorium as a central cell that all the rest of the camp was developed. As Polybius says: 'The Roman method of laying out a camp is as follows. The place for the camp having been selected, the spot in it best calculated to give a view of the whole and most convenient for issuing orders is appropriated for the Praetorium (general's tent). Having placed a standard on the spot on which they intend to put the Praetorium, they measure off a square round the standard in such a way that each of the sides is one hundred feet from the standard, and the area of the square is four *plethra* (forty thousand square feet).'<sup>6</sup> Polybius then goes on to explain that in the camp prepared for the occupation of two legions, the twelve Tribunes (corresponding to our Colonels) had their tents pitched in a straight line between the Praetorium (and adjoining buildings) and the *Via Principalis*. 'The space behind the tents of the Tribunes is thus used. On one side of the square of the Praetorium is the Forum (market), on the other the office of the Quaestor (Paymaster-General) and the supplies which he has charge of. Then, behind the last tent

<sup>5</sup> From Scott's *Antiquary*, chapter iv. (Mr. Oldbuck speaks):

'Yes, my dear friend, from this stance it is probable—nay, it is nearly certain—that Julius Agricola beheld what Mr. Beaumont has so admirably described! From this very Praetorian——'

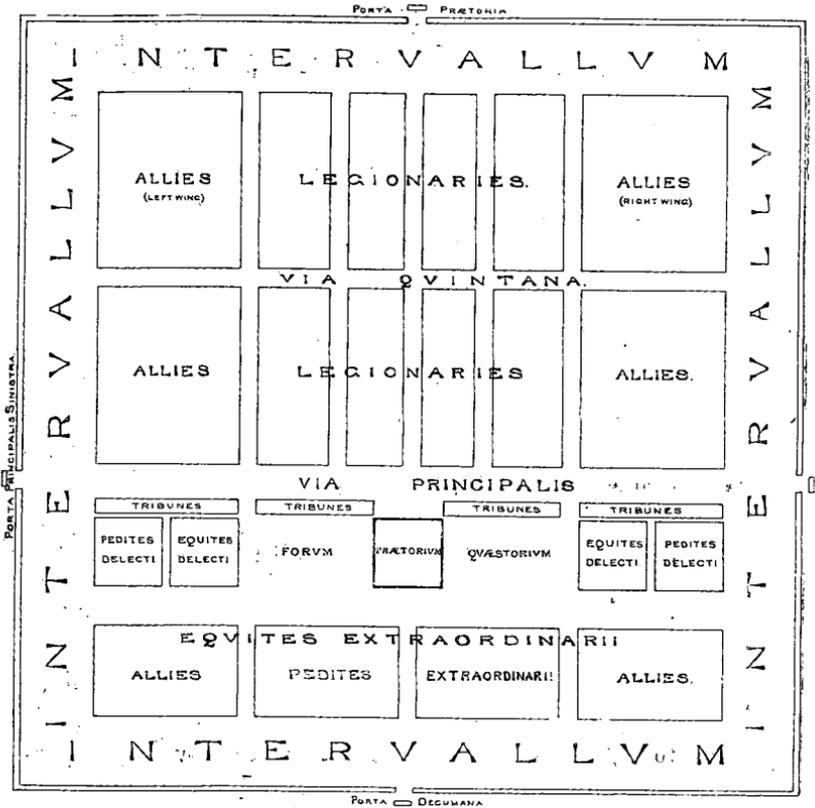
A voice from behind interrupted his ecstatic description. 'Praetorian here, Praetorian there, I mind the bigging o't.'

Both at once turned round, Lovel with surprise, and Oldbuck with mingled surprise and indignation at so uncivil an interruption.'

Eddie Ochiltree, a professional 'beggar, who thus suddenly appears upon the scene, describes to the grieved antiquary how about twenty years ago he and some fellow beggars and 'the mason lads that built the lang dyke that gaes down the loaning,' and two or three shepherds 'built this bit thing that ye ca' the—the—Praetorian, and a' just for a bield [shelter] at auld Aiken Drum's bridal, and a bit blithe gae-down [frolic] we had in 't some sair rainy weather.'

<sup>6</sup> vi. 27 (Shuckburgh's translation).

of the Tribunes on either side, arranged at right angles to these tents, are the quarters of the cavalry, picked out of the *Extraordinarii*, as well as of some of these who are serving as volunteers from personal friendship to the Consuls (*Equites Delecti*). All these are arranged parallel to the side aggers, facing the Quaestorium on the one side, the



### CAMP OF POLYBIUS

Forum on the other. And, generally speaking, it falls to the lot of these men not only to be near the Consul [or General] in the camp, but to be wholly employed about the persons of the Consul or the Quaestor on the march and on all other occasions.' In other words these are the officers of the general's staff. 'Back to back with these again, facing the agger, are placed the infantry, who serve in the same

way as the cavalry (*Pedites Delecti*).<sup>7</sup> A reference to the plan on the preceding page will at once make this arrangement clear.

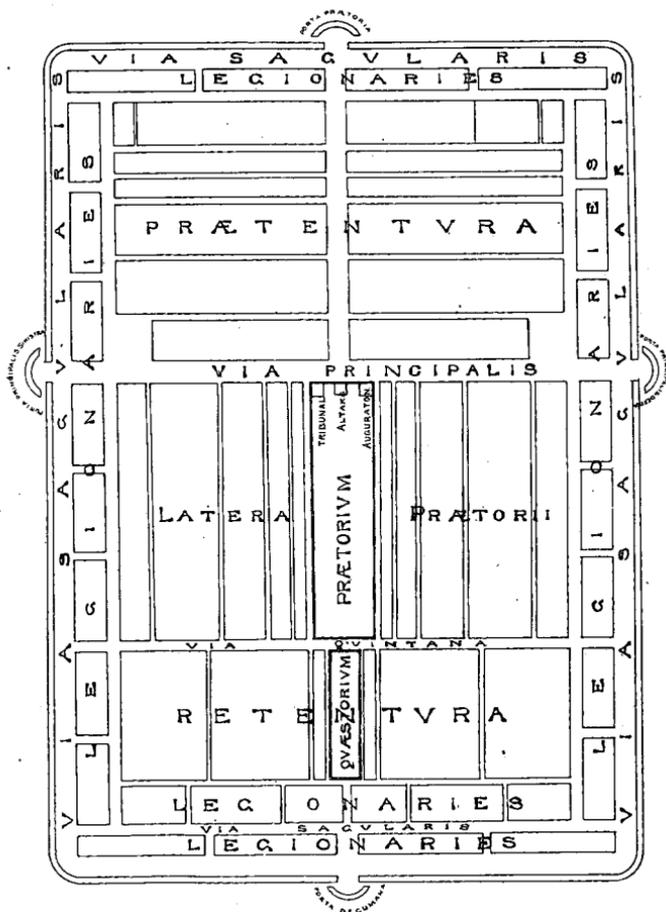
If we now turn to the Hyginian camp we find a considerable unlikeness to the Polybian as to the arrangements for the general and his staff. In the first place, the Praetorium, instead of being a square whose sides were 200 feet long, was an oblong, 720 feet long, with a varying breadth of 160 to 220 feet, according to the number of legions contained in the camp. Even with the narrowest dimensions it would contain 115,200 square feet (Roman) as against the 40,000 of the Polybian Praetorium. We see, therefore, that if the common soldier's accommodation had deteriorated since the days of Polybius that of his officers had improved. The troops in camp are only about twice the Polybian number, but the officers' quarters are nearly three times as roomy.

It is to be remarked, however, that part of the space allotted to the Praetorium was probably devoted to public purposes. Hyginus nowhere expressly informs us where the Forum of the camp was situated, but he tells us that the altars were erected at that end of the Praetorium which abutted on the *Via Principalis*; that close to them were in one set the *Auguratorium*, the place at which the general took the auspices, and on the other the Tribunal, a kind of pulpit which the general ascended in order to declare the fortunate result of the auspices and harangue his soldiers before the battle. From these hints Lange, one of the latest editors of Hyginus, infers that the end of the Praetorium looking towards the *Via Principalis* was virtually a Forum, and he assigns to it conjecturally a space 180 feet square. If this deduction be made the Praetorium proper is reduced to 82,800 square feet. It will be still, however, more than twice as large as the Praetorium of Polybius.

Behind the Praetorium, on the other side of the *Via Quintana* lay the Quaestorium, or paymaster's office. The exact dimensions of this building are not given by Hyginus: only he tells us that it should be of a less width than the Praetorium.<sup>7</sup> In length it probably extended

<sup>7</sup> Lange, from the measurements for the soldiers' quarters on each side of the Quaestorium, deduces the conclusion that its usual width was 150 feet. Roy, whose plan I have copied, does not extend the length of the Quaestorium to the rearward as far as the *Via Sagularis*. Lange deducts from the front part of the Quaestorium a quadrangle, 110 feet square, to serve as a second forum. However probable this may be, it does not seem to be vouched for by the text of Hyginus.

from the *Via Quintana* to the *Via Sagularis*, and thus its other end fronted the *Porta Decumana*. Here, Hyginus tells us, were kept any ambassadors or hostages from the enemy's camp, as well as the booty which had been captured. Obviously, the motive was to prevent



CAMP OF HYGINVS

hostile eyes from seeing what was going on at the front as well as to lessen the chances of recapture of provisions or of spoil.

The whole effect of the Hyginian division was to give the general's

quarters more importance than heretofore as compared with the rest of the camp. The camp was divided into three segments, of which the *Praetentura* was in front and the *Retentura* behind. The middle segment, equal in size to the former and considerably larger than the latter, was entirely occupied by the *Praetorium* and the *Latere Praetorii*, the troops quartered in these 'wings of the Praetorium' being all in the nature of body-guard to the occupant of the Praetorium, who of course in the expedition of a Trajan, a Hadrian, or a Severus would be the emperor himself.

Thus, in the Hyginian camp the Praetorium was moved towards the centre of the camp and away from the Decuman Gate: and carrying the *Via Principalis* along with it, it effected that transposition between the *Principalis* and the *Quintana* which has been alluded to above.

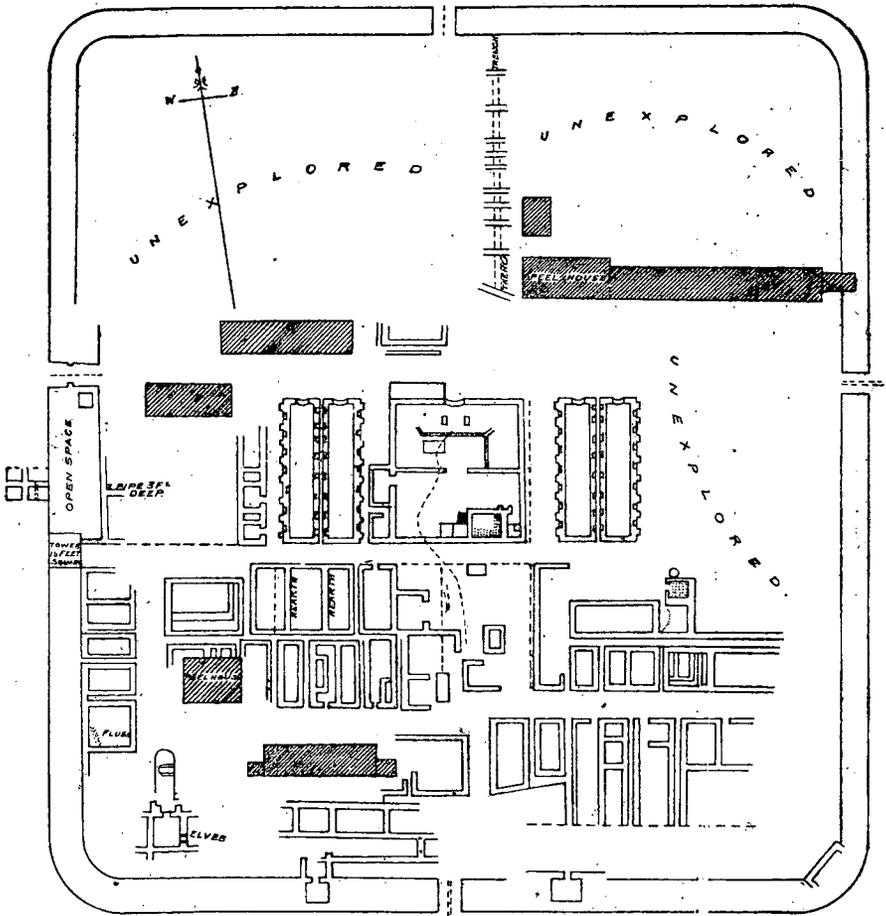
Having these details as to the arrangement of these two kinds of camps firmly fixed in our minds, we shall watch with interest to see to which of them the officers' quarters in our Northumbrian camps seem more closely to correspond. We have not yet, it seems to me, a sufficiently broad basis of induction upon which to rest any safe conclusion. We can almost always trace the outlines of a building, generally in the centre of the camp, which seems to represent the Praetorium, but it does not seem to be always in the same relative place nor always surrounded by the same kind of buildings. Judging from the plans already published, I should say that the shape of the Praetorium is generally Polybian and its position Hyginian, but, as I have said, it is too soon as yet to formulate a conclusion. Nor can we yet certainly identify any lines of wall as representing the Forum<sup>8</sup> or the Quaestorium.

Thus it will be seen that we have some very interesting questions waiting for a solution at the hands of our sturdy Northumbrian labourers. All that is required is that they should be directed by skilful and scientific archaeologists, and that those who cannot themselves either dig or superintend the diggers, but who are interested in the history of the Roman occupation of Britain, should contribute according to their ability to the funds of the excavators. Most forcibly

<sup>8</sup> Except perhaps at CILURNUM.

has professor Gardner pointed out (in reference to the antiquities of Cyprus) that the British government, almost alone among the

B R E M E N I U M .

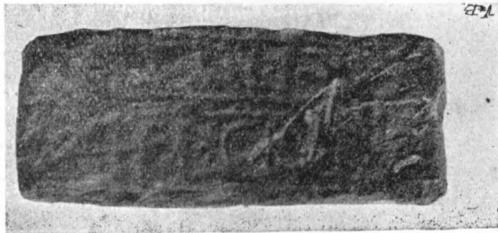


governments of civilized states, refuses to recognize any obligation towards archaeology by the grant of a small pittance out of the vast

national store to assist the work of excavation.<sup>9</sup> But as this is so, the obligation evaded by the state must be pressed on the attention of individual citizens. Let us hope that they will not imitate the meanness of their rulers.

I append (on p. 11) a copy of the plan of the camp at BREMENIUM (High Rochester), one of the few which may be said to have been scientifically examined. This was done at the cost of the fourth duke of Northumberland, and the results are recorded by Dr. Bruce in the *Proceedings of the Royal Archaeological Institute, Newcastle Meeting, 1852.*

<sup>9</sup> 'We are bound to stop a moment to make the reflection, however distasteful it may be, that perhaps the only civilised government which would have tolerated such proceedings' [as the unmethodical, unscientific excavations by amateurs in Cyprus] 'is the English. All the other states of Europe are alive to the fact that the remains of antiquity are a valuable source of knowledge and culture, and require to be protected from cupidity. France, Germany, Italy, Russia, Greece, pay annually large sums to promote systematic excavations, and to secure a worthy record of them. Italy, Greece, and now even Turkey, assert the right of the state to appropriate and preserve not merely ancient buildings, but all ancient works of art and records of history. England alone in her care for government and commerce takes insufficient care of historic remains: only the English proconsul cares nothing for these things. . . . Thus, while established institutions like the British and South Kensington museums are fairly well supported, any suggestion to give a grant to a new institution such as the British school of Athens, or a new cause such as that of excavation at home or abroad, is referred to the generosity of a public, out of which it seems impossible to extract money for archaeological purposes, except on the smallest scale.'—Percy Gardner: *New Chapters in Greek History*, pp. 176-177.



CENTURIAL STONE FROM MUCKLEBANK WALL TURRET (see p. 15).