

IV.—HOUSESTEADS MILECASTLE.

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The following abbreviations are used in this report:

- AA *Archæologia Aeliana*.
Bruce, RW *The Roman Wall*.
Bruce, Handbook *Handbook to the Roman Wall*.
PB J. P. Gibson and F. G. Simpson, *The Milecastle
on the Wall of Hadrian at the Poltross Burn
(Cumberland and Westmorland Transactions,
New Series XI)*.
PSAN *Proceedings of the Society of Antiquaries of
Newcastle*.
The Wall=Hadrian's Wall.

Introduction.

Bruce, writing in the second edition of *The Roman Wall*,¹ says of the milecastle immediately west of Housesteads, "its ruins are sufficiently conspicuous strongly to invite use of the pickaxe and spade." In the year 1853 it received this attention from John Clayton. "A brief account of his excavation is contained in a paper in *Archæologia Aeliana*."² Further information not contained in Clayton's paper is to be found in the third edition of Bruce's *Roman Wall*³ and also in the third edition of Bruce's *Handbook to the Roman Wall*.⁴ From statements made by Clayton and Bruce, and also from surface indications at the milecastle itself, it appears that the excavation of 1853 took the form of a wide trench dug round the walls of the milecastle on the inside. It is evident from last year's excavations that Clayton's work

¹ p. 200.

² AA¹ IV, pp. 275 ff.

³ pp. 201-6.

⁴ pp. 160-2.

did not extend farther than about three feet from the outer walls towards the interior. Traces of two distinct floors, separated by a thick layer of debris resulting from the first overthrow of the milecastle, were found by Clayton, and the whole was covered with a second layer of ashes and "a mass of broken stones and earth." The results of his excavation, in so far as they throw light on some of the problems raised in 1933, will be considered below. In 1907 Mr. F. G. Simpson excavated the north gateway of the milecastle, and he has kindly allowed the results of his work to be incorporated in this report. Finally, in June 1933 the Durham University Excavation Committee, on behalf of The National Trust, undertook its thorough excavation in the hope of recovering its internal plan complete. Digging began on 23rd June and ended on 22nd July. The pottery has been examined by Mrs. E. B. Birley, and her report upon it will appear subsequently. Together with Miss M. E. Allen, she assisted in the direction of the excavations for the greater part of the time. We are indebted to Mr. Percy Hedley for the report on the coins and also to Mr. G. R. Bruce for the amount of time and care which he has spent upon the plans. We were fortunate in having with us Mr. T. J. Cahill, whose opinion on many structural and architectural points has been of great value. Mr. Basil Alderson assisted in the work for ten days till an unfortunate accident deprived us of his help. We are grateful to Mr. Simpson for allowing us to make use of his previous work on the site and also to Mr. I. A. Richmond for his helpful comments while excavation was in progress. Finally it must be said that without the generous help and advice of Mr. E. B. Birley, not only in 1933 but also in previous years, it would have been quite impossible for the present writer to have undertaken either the direction of the excavations or the compiling of this report.

Site and Surroundings.

The milecastle is situated in a strong natural position

at a height of more than 900 feet above sea-level. The ground falls away so steeply on the north side that even when free from all the rubbish which now obstructs it, the approach from that side must have been difficult for all but the lightest of traffic. To the east the ground slopes gently downwards to Housesteads fort, whose western gate is distant only 320 yards. Between the milecastle and fort the Housesteads crags, rising "in rude and pillared majesty," present a sheer face to the north. A short distance to the west the Wall descends steeply to the bottom of a gap and the ditch reappears on its northern side. Across the gap, the Wall climbs again to the top of Cuddy's Crag. On the hill slope to the south can be seen the westerly extension of that series of terraces which covers the hillside to the south of Housesteads fort. Widespread views extend in all directions except to the west, where rising ground interferes. To the north there is the wild expanse of the forest of Lowes; to the east the line of the Wall can be traced intermittently as far as King's Hill and Sewingshields, after which the ground slopes down to the valley of North Tyne. Even in the present thickly wooded state of the surrounding country it is possible, without the aid of field-glasses, to trace the line of the Wall as it makes its way up the steep side of Brunton Bank, and Stanley plantation, ten miles away as the crow flies, can be seen on the skyline. To the south the Stanegate can be followed from Grindon Lough till it disappears from view on its way down to Chesterholm. The fort at Chesterholm cannot be seen, but the Stanegate reappears across the Chainley burn and can be traced for another two miles as far as the skyline. The next milecastle to the east is King's Hill (no. 36) distant 1,688 yards, and the next to the west is Hotbank (no. 38) distant 1,604 yards.⁵

The general level of the ground inside the milecastle falls from south to north. The eastern half is level except for a dip at its northern end. The western half is badly

⁵ PSAN⁴ IV, pp. 179-87. *Hadrian's Wall. A System of Numerical References*, R. G. Collingwood.

adapted for building purposes owing to outcrops of rock, and in places the depth of soil is so slight that it has not always been possible to lay proper foundations for the walls.

Dimensions.

The internal dimensions of the milecastle are, north to south 49 feet 6 inches, and east to west 57 feet 6 inches, giving an area of 316 square yards. It therefore falls into the same class as the milecastles at Castle Nick (no. 39), Winshields (no. 40) and Cawfields (no. 42) and particularly resembles the latter in that both have their longer dimensions lying east and west and both have gateways conforming to type 1.⁶

Foundation of the Great Wall.

After a careful examination of the walls of the milecastle and of their foundations an interesting structural sequence was revealed. It seems best therefore to consider the component parts of the milecastle in the order in which they appear to have been built. The first work was the laying of the foundation of the Wall. This foundation, which consists of large flags laid on clay, is 10 feet wide; at the north-eastern corner of the milecastle it is interrupted by an outcrop of rock, but at the north-western corner it appears to pass underneath the west wall of the milecastle, and at a point 15 feet to the west of the west wall is still 10 feet broad.⁷ At the extreme northern end of the west wall, both inside and outside and partially covered by it, there is a fragment of the lowest course only of a wall both broader and earlier than the existing Wall, which at this point is only 7 feet 6 inches broad. (Plate xvi, fig. 1, and plate xviii.) The face of this broader wall projects 2 feet beyond the southern face of the existing Wall. It would seem that on top of a foundation 10 feet broad was laid the first course of a wall which was origin-

⁶ See PB, p. 398, and AA⁴ VIII, pp. 308 ff., for milecastle types.

⁷ On the crags of the Whin Sill the broad foundation has not previously been found to extend more than a few feet from the site of milecastle or turret.

ally intended to be about 9 feet broad, and, after the change of plan whereby the thickness of the Wall was reduced, the course of the broader wall was removed except where it would be covered by the west wall of the milecastle and only the foundation was left.

The Gateways.

Period 1. The gateways are built of massive and carefully tooled masonry (plate xv, fig. 1). They are similar in plan and conform to type 15,⁸ with arches at each end of the passage. The piers of the north gateway are standing complete to a height of 6 feet 6 inches above the foundations; both springers of the inner arch and one of the outer are still in position.⁹ The existing height of the passage walls suggests that they were originally taken up to the level of the rampart walk, which was probably carried over on wooden beams. The total length of the passage is 10 feet and exceeds the thickness of the wall only by a few inches; the width of the passage was originally 10 feet 6 inches, increasing to 12 feet between the inner and outer piers which project into the passage. The outer piers form the jambs of the doors. There are two pivot holes, one on each side of the passage at its outer end in the angles formed by the passage walls and the projecting gate piers. It is clear that at the end of the first period of occupation the north gate must have been violently overthrown. When Mr. Simpson cleared away the core of the secondary masonry so as to expose the original face of the passage walls, he found that on the west side, the whole northern pier had been tilted out of position so as to leave a crevice $2\frac{1}{2}$ inches wide at the bottom increasing to more than 6 inches at the level of

⁸ See note 6 above.

⁹ Four large voussoirs belonging to these arches were found, each with a well-cut lewis hole; on no two voussoirs was the position of the lewis hole the same. It may be that their position was determined by the place which the voussoir was to occupy in the arch, in such a way that when the voussoir was lifted it automatically hung in the required position. Bruce records the breaking up of a voussoir, Handbook, 3rd ed., p. 161.

the impost. Such violence had been applied that the stone beneath the impost, which extended through the full thickness of the pier and 1 foot 10 inches from the pier into the passage wall, had been snapped in two. The stones at the northern end of the passage wall had been dragged from their original beds in such a way as to open the vertical joints to $1\frac{1}{2}$ inches. (Plate xvi, fig. 2.) On the east side the northern pier had been tilted $1\frac{1}{2}$ inches out of position. The springer of this pier is no longer in place and the outer face of the impost has been fractured. The form of the fracture suggests that it may have been caused at the moment when the arch had been tilted out of position and was on the point of collapse.¹⁰ The gates had been secured on the inside by a bar, probably of wood. On the east side of the passage wall at its northern end was a slot 6 inches deep, into which one end of the bar would be inserted; on the west side a gradually deepening groove was cut horizontally in the passage wall in such a way as to enable the bar to be swung into position behind the gates: when the bar had been so swung it then dropped downwards into a slot similar to that on the east side. (Plate xvi, fig. 2.)

The piers of the gateways are founded on rock throughout or at most separated from it by an inch or so of clay. At the north gateway the rock dips sharply from east to west, the dip reaching its maximum depth beneath the western half of the gateway. To counteract the inequalities of the surface deeper foundations were laid for the western pier than for the eastern; the lowest course beneath the western pier has a maximum depth of 1 foot 9 inches on the east side, decreasing westwards as the level of the rock rises again, while it projects 1 foot 6 inches and 10 inches from the east and south faces respectively of the foundation course proper (see plan, plate xvii and elevation, plate xviii).

As compared with the northern gateway, the southern gateway shows two slight irregularities; the southern face

¹⁰ Mr. Simpson pointed this out to the writer.

of the south-western pier is 6 inches broader than the other gate piers, and the south-eastern pier has an offset of 4 inches in addition to the projecting foundation course. One stone of the doorstep and both pivot holes remain in position.

An examination of the road levels at the north gate revealed no sign of an intermediate level, 1A, between the original road surface and the surface contemporary with the restoration of period 2.

Period 2. When the north gateway was restored the northern piers were not replaced in their original positions. The crevice on the west side was loosely packed with rough material (plate xvi, fig. 2). The passage was narrowed by masonry built out from both sides of the original passage walls, while at the same time the road level was raised by 2 feet 6 inches. The narrower passage is 8 feet long and 5 feet wide.¹¹ There is a pivot hole at its northern end on the west side. Bruce thought that the southern gateway had "evidently been diminished in width as well as the other,"¹² but there is now no evidence of this.

The Walls.

Excluding obviously modern work, the north wall of the milecastle, which is also the Great Wall, is standing fifteen courses high at its highest point. East of the north gateway the tenth course and west of it the ninth and fifteenth courses, are bonding courses formed of long thin stones. This feature occurs also at Housesteads, Great Chesters and Poltross Burn milecastle.¹³ Throughout the whole milecastle the coursing of the walls follows the contours of the ground, except for the north face of that half of the north wall which is to the east of the gateway;¹⁴ the horizontal coursing here is probably due to the steep east

¹¹ One small voussoir was found: this would fit an arch spanning the narrower passage; it is shown in the elevation, plate xviii; though it is not there in its original position.

¹² Bruce, Handbook, 3rd ed., p. 162.

¹³ PB, p. 402.

¹⁴ To the west of the gateway is mainly restoration, done by Mr. Simpson.

and west slope of the ground at this point. There are two important points in connection with the north wall which throw light on the chronological relation of the various parts of the milecastle to each other. Built against the west side of the west piers of the north gateway may be seen a sort of buttress, which now forms a part of the north wall (see plate xviii); it is built of large roughly-cut whinstones and projects slightly from the southern face of the Wall. Its appearance suggests that its function was to support the arch of the gateway. The two lower courses of a similar buttress may be seen against the eastern piers of the north gateway. Secondly, it has long been known that the Wall tapers to east and west of the north gateway of the milecastle. Originally 9 feet broad, it has been reduced to a breadth of 7 feet 6 inches at the point where it meets the east wall of the milecastle; at a point 30 feet farther to the east it is only 6 feet 6 inches broad. A similar reduction takes place on the west side of the gate. But, as already noticed, the foundation retains its original breadth of 10 feet. The inference from these two points is that after the foundation had been laid and the north gate had been built there elapsed an interval of time which was long enough to require the erection of buttresses to support the arch of the gate and that when work was resumed the reduction in the breadth of the Wall had taken place.¹⁵

The west wall is 9 feet 6 inches broad at the footing course, and the wall itself is 8 feet 6 inches broad. In places the footing course is interrupted by outcrops of rock. At its northern end the wall stands nine courses high above the foundations; the top four courses, which slightly overhang the true face, are modern. The level of the rock rises rapidly towards the south, and for the greater part of its length the wall does not stand more than six courses high on the inside and four on the outside. The northern end of the west wall is of one build with the Wall. Two feet

¹⁵ For different standards of breadth see Bruce, *Handbook*, 9th ed., pp. 16-17.

from this end there is a clearly marked joint. Evidently at the time when the Wall was built just so much of the west wall of the milecastle was built as was necessary to mark the line on which it was to come, while its completion was left till later. This suggests a third stage in its building.

The east wall is 9 feet 6 inches broad at the footing with a 6 inch offset and a final thickness of 8 feet 6 inches. At its northern end the footings are much disturbed by rock; at a point 4 feet from its southern end the offset is interrupted and the footing is continued 6 inches below the level of the remainder of the footing. In the third edition of the *Handbook to the Roman Wall*, p. 161, Bruce wrote: "An inspection of the south-east corner will show that this angle has been built before the contiguous parts, and that it formed a sort of buttress for the adjacent walls to rest against." The lower level of the footing course at the southern end of the east wall seems to confirm this suggestion.

The southern wall is the least well preserved. At the footing it is 9 feet 6 inches broad, it has a 6 inch offset and a final breadth of 8 feet 6 inches. At its highest point it stands six courses above the foundations. West of the gateway there is no offset and the wall is laid on top of the rock.

The corners of the milecastle are square inside and rounded outside.

Roads.

At a point about 85 feet to the south of the south gateway, two kerbstones were found set at right angles to the north kerb of the military way. These were all that remained of the road connecting the milecastle with the military way (see point A on site plan, fig. 1).

The interior is divided by a road 10 feet wide connecting the north and south gates. Its western limit is defined by a kerb of roughly shaped whinstones set in clay and packed with freestone chippings. At its northern end the

kerb ceases 10 feet away from the north wall; at its southern end it is interrupted by rock 13 feet from the south wall. There is no kerb on the eastern side, but a limit is set to the width of the road by the western wall of the barrack building on that side. Only one road surface was found, consisting of clay with a quantity of small stones embedded in it. At first sight the presence of a millstone in the kerb rather nearer its northern end suggests that the kerb

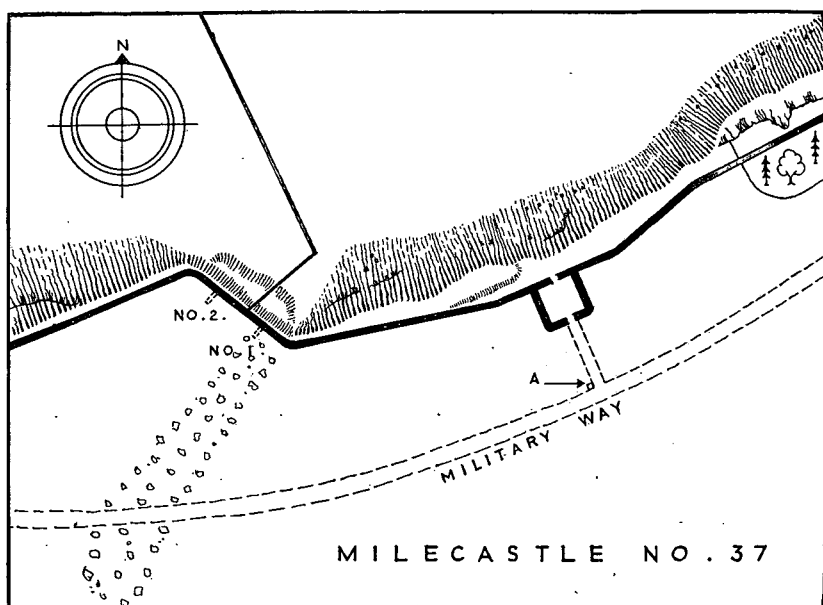


FIG. 1.

is secondary work; but it was found that all the stones forming it were resting on clean clay with no sign of previous occupation underneath. At the northern end of the road, and lying below it, was a large oblong pit, measuring 12 feet from east to west and about 3 feet in depth. It extended towards the north gate, but was not completely excavated. A part of the filling of whinstone and clay was removed; and at the bottom was found a slight deposit of wet silt. It was probably the pit in which

the mortar was mixed at the time when the north gate was being built.

Internal Buildings.

Period 1. Western half.

Structural remains in the western half of the milecastle were very slight (see plan, plate xvii). In the midst of a small patch of flagging near the northern end were a few roughly shaped whinstones set in line, one series parallel to the north wall and another parallel to the west wall, and cutting each other at right angles; these may have been the foundations for thin partition walls of wood or lathe and plaster, but they could hardly have borne the weight of anything more substantial. Underneath one of the flags in this area was found a worn legionary coin of Mark Antony. There were two small hearths, each consisting of a large central flag laid on a bed of clay and surrounded by a number of smaller flags set on edge. Both had been heavily burnt and both were slightly raised above the small patch of flagged floor which survived. The natural surface of the ground in the western half is very unlevel and much broken by outcrops of rock. At the southern end a quantity of mason's chippings was found in the interstices of the rock as if some attempt had been made to smooth out the irregularities of the surface. Close to the south wall were three whinstones set in line, similar to those nearer to the north wall. The western half divides itself roughly into two areas, of which the southern is about one foot above the level of the northern. There was a little evidence to suggest that this had been stepped; indeed if the whole area was occupied some such device must have been adopted. At its southern end the western kerb of the road is interrupted by the rock, which slopes across the area from north-west to south-east. A small triangular space between the kerb of the road and the edge of the rock was filled with clay packing as if it had been intended to give a straight edge to a downward step from south to north.

Eastern half.

On the eastern side of the road, perhaps owing to the greater depth of soil, there was much more left (see plan, plate xvii and plate xv, fig. 2). There seems originally to have been a rectangular stone building with two rooms. Of this building there survived the remains of three walls, the north, the west, and the partition wall between the two rooms. There was no trace of east or south walls. The north wall, standing three courses high at its highest point with a breadth of 2 feet 6 inches, was broken off 3 feet 6 inches from the east wall of the milecastle. It appeared to have slipped from its original position. At its junction with the west wall of the building a number of stones were missing. The west wall, also standing at the most three courses high with a breadth of 3 feet 6 inches, was broken off 4 feet 6 inches from the south wall of the milecastle. There was no sign of any return to the east. Both these walls were built with a mixture of freestone and whinstone set in clay on top of a foundation of large whinstones. The partition wall was built of smaller stones; it was bonded in with the west wall and extended for a distance of 8 feet towards the east. The west wall was divided into three parts by doorways 3 feet 6 inches wide giving access to each room. Though no threshold remained both pivot holes were in position; that belonging to the northern room was against the southern jamb of its doorway, and that belonging to the southern room was against the northern jamb.

Against the west wall of the building and to the north of the south doorway on the outside, were four flags set on edge so as to form an enclosure about 1 foot square and 9 inches deep; a fifth flag formed the bottom. The object of this is not clear; it may have been used to support an *amphora* of the tall cylindrical type with a supply of fresh water.¹⁶

¹⁶ This suggestion is due to Mr. Birley: he points out that it may also be the explanation of the similar object found at Chapel House milecastle. AA⁴ VII, p. 157 and plate xlvii, fig. 2.

Later periods.

On the west side there were no structural remains which could be assigned to the later periods, but on the east side there were fragments of two walls lying east and west. Of these one lay across the northern room of the period 1 building and abutted against its western wall; it was 2 feet broad and only its lowest course survived; it was not connected with the walls of the earlier building; beneath it was found a *dupondius* of Trajan. Both of these later walls were very coarsely built and lay on top of debris belonging to the earliest period.

With regard to the internal plan the records of John Clayton's excavations throw an uncertain light on two problems raised by the excavations of 1933. In that year no trace was found either of the ovens or of a stairway leading to the rampart. On the analogy of Poltross Burn these might have been expected in the north-east and north-west corners.¹⁷ There was much burnt matter in both of these corners, but more especially in the north-eastern corner, where the depth of disturbed soil was slight. According to Bruce,¹⁸ Clayton dug "down to the foundations of the *castellum* on the inside of the north wall," where, as already noticed, he found traces of two series of buildings. Bruce goes on to say: "Upon the chippings in the neighbourhood of the walls had been laid a flooring of rough flags. These flags were much broken, and some of the fragments had been forced into an almost vertical position, indicating that the walls of the building had been forcibly thrown down. Immediately above the flags was found a quantity of finely comminuted charcoal, as if the shed or barrack rooms, which probably were placed against the main walls of the buildings, had been destroyed by fire. The ashes were not found in the centre of the area, but only on the sides." It seems a possibility that some of those flags were, in fact, hearths or ovens and that they were removed by John Clayton, who saw in them nothing

¹⁷ PB, p. 424, plate I.

¹⁸ RW, 3rd ed., p. 203.

more than signs of the violent overthrow of the milecastle. It is difficult otherwise to understand how the fragments of flags which had originally formed a level floor could have been "forced into an almost vertical position" no matter how violently the milecastle had been overthrown.

Secondly, in the recent excavations there was no direct evidence to show whether the internal buildings of the milecastle had been connected with the outer walls or whether they had been separated by narrow alleys as at Poltross Burn. In view of the smaller area of the Housesteads milecastle it is unlikely that the latter was the case. In the second edition of the *Roman Wall*, Bruce wrote of the second or upper layer of barrack buildings found by John Clayton as being "connected with the main walls." This would give for period 1, on the east side, a building with two originally equal-sized rooms of about 17 feet square. The northern wall of the building has slipped out of position, thus making the northern room appear the larger of the two. For the west side it can only be said that the buildings there appear to have been mainly of wood.¹⁹ It is not possible even to suggest what was the arrangement of the buildings in the later periods, as the remains of secondary walls were so slight.

Inscriptions.

Parts of four inscriptions were found by John Clayton: half of the slab recording the work of Aulus Platorius Nepos, parts of two altars, one dedicated to Jupiter and the other to Cocidius, and a legionary stone commemorating the work of the sixth legion.²⁰

Pottery.

The pottery will be dealt with fully in a subsequent report. For the present a few general remarks must suffice. The site has obviously been denuded, thus while the pottery of the first period was found in large quantities,

¹⁹ It is worth noting that both Housesteads and Chapel House milecastles seem originally to have had wooden buildings on the east side: see AA⁴ VII, p. 156.

²⁰ These are described and figured in Bruce, RW, 3rd ed., pp. 204-5.

that of the later periods was only represented by a few fragments. Amongst the pottery of the former there were a few pieces of rustic ware belonging to the earliest stages of the period; the later stages were represented by a number of stratified deposits, and also by a figured samian bowl (Drag. 37), which was recovered almost complete, bearing the signature of IANUS. A few pieces of late fourth-century ware are of importance as bearing on the last period of occupation.

Objects of Bronze.

1. Bronze head-stud brooch; length, without head loop and foot, $1\frac{3}{4}$ inches: humped bow with fore-edge decorated with lozenges: foot and head stud missing: head loop originally of wire broken off: hinged pin: catch plate partly missing: traces of red and blue enamel on fore-edge of bow, and of red enamel in cavity for head stud and in remains of head loop: at low level on west side of road near its northern end. For general type see Collingwood, *Archæology of Roman Britain*, pp. 250-1: similar, except for head stud, to *Corstopitum* 1910 fig. 12.

2. Bronze trumpet brooch of degraded type; length without head loop $1\frac{7}{8}$ inches: half-round acanthus mouldings on fore-edge of bow: cast head loop partly missing: hinged pin: catch plate partly missing: small seal-like foot: close to east wall of milecastle half-way between north and south walls. For type see Collingwood, *Archæology of Roman Britain*, pp. 251-4, group R.4.

3. Small fragment of bronze brooch: in top soil on west side of road.

4. Bronze openwork scabbard chape with traces of red enamel: found near to west wall of milecastle.

Other small objects.

Spindle whorl of shale: diameter $1\frac{1}{2}$ inches: surface ornamented with crude hatching.

Spindle whorl of sandstone: diameter $1\frac{1}{2}$ inches: surface plain.

Conclusion.

The most interesting result of the excavations is perhaps in the evidence found for the structural relation of the milecastle to the Wall, and of the different parts of the milecastle to each other. The construction of the north gateway before the Wall itself was built and the close bonding of the west wall of the milecastle with the Wall, are plain indications of the original unity in plan of milecastle and Wall. There is a suggestion, too, that a skeleton plan of the milecastle, consisting of the north gateway, the Wall, a fragment of the west wall, and the south-east corner may first have been laid out. It may be that when the work which required the skill of trained masons had been done, the completion of the walls and the erection of the internal buildings was entrusted to gangs of less skilled workers. As for the periods of occupation, the bulk of the pottery of which there was in all a very large quantity, belongs to the second century, and seems to represent what would be left lying about at the time when the milecastle was first destroyed at the end of that century. When the road levels at the north gate were examined²¹ there was not the smallest sign of an intermediate level between levels 1 and 2. This is the only milecastle where complete excavation has been undertaken that has not yielded signs of such an intermediate level. Plain indications of its violent overthrow on at least two occasions were noticed by John Clayton and nothing could be more vivid than the evidence found by Mr. Simpson for the destruction of the north gateway on the first of these two occasions. Owing to the lack of structural work of the later periods—due in the first place to the very slight depth of soil over the greater part of the milecastle and secondly to the denudation of the site—and to the lack of stratified deposits other than those that belonged to period 1, it can only be assumed that the later periods of occupation coincided

²¹ By Mr. F. G. Simpson.

with the wall periods as at present accepted.²² Fortunately, however, there were found a few pieces of pottery, notably of Huntcliff ware, which belong to the latest wall period. The evidence of these, together with the evidence of the Chapel House pottery and the passage in Ammianus Marcellinus,²³ may be taken to indicate a general reoccupation of the milecastles in 370, after the troubles of the Picts war.

Coins.

Seven coins were found, for the identification of which the writer is indebted to Mr. W. P. Hedley.

1. M. ANTONY. *Denarius*. LEG. X. Cohen 38. Very worn. Found under flagging at north end of west half of milecastle. (*circa* 33-31 B.C.)
2. DOMITIAN. *As*. *Spes* walking l., as Cohen 458-462. Very worn. Top soil. (*circa* A.D. 79-81.)
3. TRAJAN. *Dupondius*. S.P.Q.R. OPTIMO PRINCIPI. *Abundantia* l. Cohen 472. Unworn. Top soil. (A.D. 103-111.)
4. TRAJAN. *Sestertius*. Illegible. Fairly worn. Top soil. (A.D. 103-117.)
5. TRAJAN. *Sestertius*. REX PARTHIS DATVS. Cohen 328. Fairly worn. Top soil. (A.D. 112-117.)
6. TRAJAN. *Dupondius*. FORTVNAE REDVCI. Cohen 166. Unworn. Under late wall in most southerly building. (A.D. 112-117.)
7. AELIUS CÆSAR. *Denarius*. TR. POT. COS. II. Cohen 54. Unworn. Top soil. (A.D. 137.)

Note on the construction of the Wall.

Three sections of the Wall footings in this area are shown in fig. 2; of these the site plan shows the positions of no. 1 and no. 2, where it was not possible to dig on the north side of the Wall, and the third is 20 feet west of Knag burn. At no. 1 the breadth from the foundation which projects 10 inches on the south side to the northern face of the Wall is 9 feet: above the foundation the Wall is reduced by four offsets of 8, 5, 3 and 7 inches to a final breadth of 6 feet 3 inches. At no. 2 the greatest measurable breadth was 7 feet 6 inches, the foundation projects 9 inches and one 6 inch offset reduces the Wall to a breadth of 6 feet 3 inches. At no. 3 both faces were exposed: the width of the foundation is 11 feet:

²² AA⁴ VII, p. 165 ff.

²³ AA⁴ VII, p. 166.

on the north side the foundation projects 4 inches and there are two offsets of 5 and 4 inches: on the south side the foundation projects 8 inches and there are three offsets of 3, 6 and 11 inches, leaving a final breadth of 7 feet 6 inches.

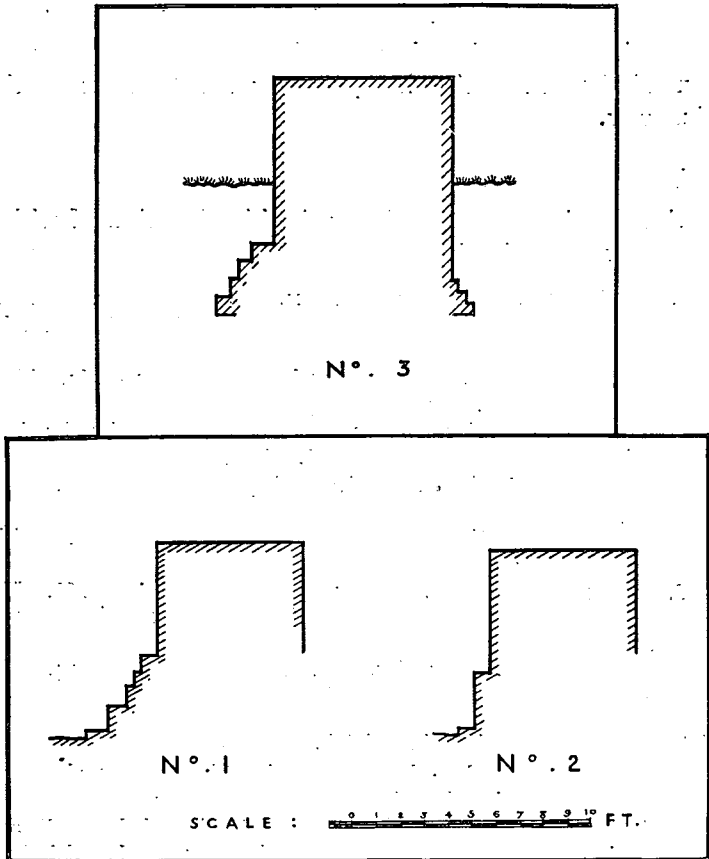


FIG. 2.

At no. 1 and no. 3 we meet the broad foundation carrying the narrow Wall, a combination usual in the gaps between the crags. The extreme narrowness of the Wall and the excessive number of offsets at no. 1 is perhaps to be explained by reconstruction during the Roman period. No. 2, whose position is on the upward slope rather than in the gap itself, reveals the narrow wall on the narrow foundation. A modern field drain passes through the Wall between no. 1 and no. 2 and the foundations there have been much disturbed.



Fig. 1. HOUSESTEADS MILECASTLE, NORTH GATE FROM EAST.



Fig. 2. HOUSESTEADS MILECASTLE, INTERIOR FROM WEST.



Fig. 1. JUNCTION OF WEST WALL WITH GREAT WALL FROM WEST.



Fig. 2. N. GATE, SHOWING DISPLACEMENT OF N.W. PIER.

