ART. II.—*Report of the Cumberland Excavation Committee for 1947-1949.*

Read at Carlisle, July 9th, 1952.

1. THE ROMAN FORT AT DRUMBURGH.

By F. G. SIMPSON and I. A. RICHMOND.

THE Roman fort at Drumburgh was first examined by the Cumberland Excavation Committee in 1899,[1] when its north-west angle was discovered and found to be bonded with the Great Wall at a right-angled junction. Immediately inside the angle, leaving no room for either a fort-rampart or an *intervallum* road, lay a buttressed and ventilated building[2] which the excavators identified as a granary. In comparison with other forts of Hadrian's Wall these features were abnormal. Only the forts of Wallsend and Greatchesters are certainly known to have been bonded with the Wall, though it seems probable that Carrawburgh and the Stone-Wall fort at Stanwix also stood in this relationship.[3] Again, although the identification of the building as a granary seems beyond doubt, in no other Roman fort in Britain does a granary occupy this abnormal position. The discoveries of 1899 accordingly suggest, first, that Drumburgh was a late addition to the Wall scheme and, secondly, that its planning was crowded and unusual.

[1] CW1 xvi 80-92. The field-numbers are from Ordnance Survey, 25-inch scale, Cumberland, sheet xv, 10 (1900).

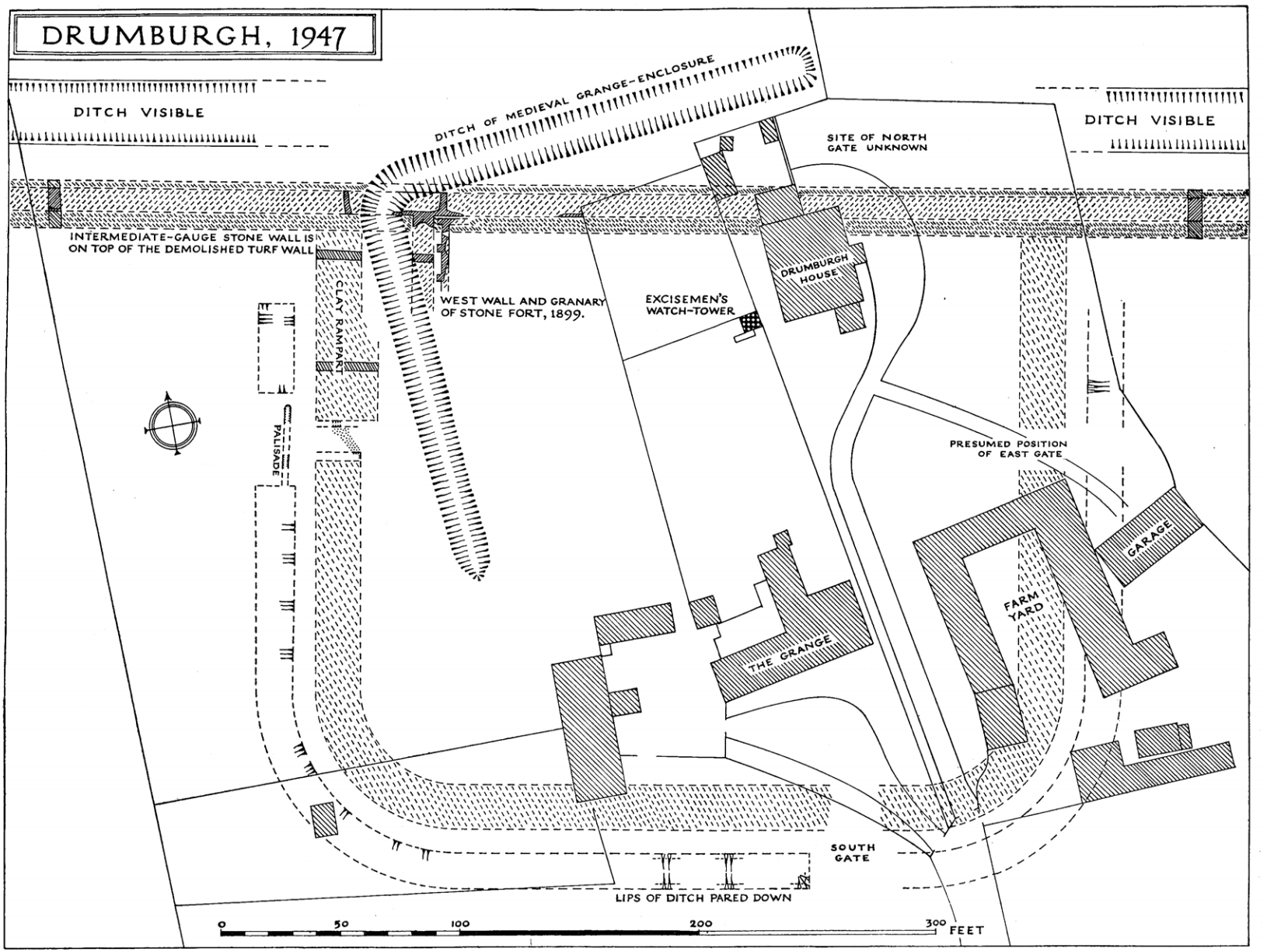
[2] Ibid., 86 and pl. ii.

[3] (*a*) Wallsend: *Northd. County Hist.* xiii, 490 and fig. 7. (*b*) Greatchesters: AA4 ii 197. (*c*) Carrawburgh: *Durham Univ. Journ.*, March 1935, 95f. (*d*) Stanwix: JRS xxxi, pl. xii (where it will be observed that the east wall of the fort, discovered in 1940, is in such a position as to suggest that a right-angled junction occurred).

In 1947, an attempt was made to ascertain whether the Vallum, discovered west of Burgh Marsh in 1934, approached the western side of Drumburgh. A trial trench in field no. 1650, just north-west of the Grange farm, at once struck ditch-filling, but further examination revealed that the feature was not the Vallum ditch. The feature was in fact a palisade-trench 2½ ft. wide and over 2 ft. deep: it blocked a causeway 39 ft. wide from north to south, which was flanked by butt-ends of rectangular plan. Beyond the causeway a ditch 15 ft. wide continued northward to a terminal butt-end, again rectangular, situated 38 ft. south of the Stone Wall. The ditch was then traced southwards to the limit of the field, where an eastward turn appeared to commence; and further trenching in the orchard to south-east revealed a turn of ninety degrees set out in a sweeping curve, 70 ft. in radius on the inner lip (fig. 1).

Immediate further progress eastward being impeded by garden beds, the next area in which an effective search for the ditch could be made was the stackyard south of the Grange. Here the ditch was in due course found, but two new features presented themselves. The ditch had been reduced to 10 ft. in width by a systematic lowering or removal of the adjacent original surface at an uncertain period, not necessarily Roman. Before this happened, however, the ditch had been deliberately obliterated by a filling of tightly-packed whitish-grey clay at a time when not much silt had gathered in its bottom, and therefore certainly during Roman times and presumably not very long after it had been dug. When the ditch was traced still further eastwards it terminated in a very neatly cut rectangular butt-end. This feature lay too near the modern access-road to the Grange and to Drumburgh House for the width of the causeway which it implies to be established. A butt-end in this position (see fig. 1) must clearly mark the south gateway of the fort.

Attention was next turned to the garden of Drumburgh



facing p. 10

FIG. 1.

House, where a pronounced eastward dip in the ground-level was suggestive of the levelled defences of a fort. Here the inner lip of a north-to-south ditch was found at the eastern limit of the falling ground, its course further southward being well indicated by settlement-cracks in the adjacent barn and garage. To west of the ditch occurred a spread of tough whitish-grey clay, foreign to the red boulder-clay of the subsoil. The full significance of this distinctive artificially placed material became clear on the west side of the newly-found fortification, where the corresponding grey clay appeared in a solid mass, forming a rampart 19 ft. thick behind the north-to-south ditch. Opposite the causeway it was interrupted by a cobbled road, 9 ft. 8 in. wide, the sides of which in passing through the rampart were bounded by timber-work, evidently belonging to a single gateway. North of the gateway the rampart was thickened by a further 8 ft. at the back for a distance of at least 24 ft., as if for an *ascensus* or stairway-ramp parallel with the rampart and comparable with those at Cawthorn and the Saalburg or milecastle 48 (Poltross Burn).[4]

An excavation undertaken with a very different object in view had thus ended by disclosing at Drumburgh an earthwork fort 316 ft. by 270 ft. over the ramparts, plainly earlier than the Stone-Wall fort. It may further be observed that if the planning of the Stone Fort at Drumburgh is to be reckoned abnormal, that of the earth-work fort is hardly less so. Neither gate is axial and the effect is to provide space for three barrack-blocks of normal size in the south-west area of the fort, a much smaller space in the south-east and room for principal buildings to north of the east-to-west street. Compared with normal castrametation such an arrangement is manifestly exceptional, and its details cannot now be more precisely deduced from present evidence.

[4] (*a*) Cawthorn: *Arch. Journ.* lxxxix, pl. viii. (*b*) Saalburg: *Saalburg Jahrbuch* iv 8, Abb. 3. (*c*) Poltross Burn: CW2 xi, 420 and fig. 12.

No further information could be gained about the Stone Fort. It was hoped that its defensive wall might be founded upon a deep bed of clay and cobbles, but this was not so. Its foundations were of the slightest, devoid of effective packing below the footing-flags. As in 1899, nothing could be found south of the point where the west wall is interrupted by a medieval ditch. This ditch may be recognized as the boundary of the grange[5] which gave its name to the farm, for while it cuts obliquely across the Roman works, its existence has governed the orientation of all the adjacent houses and fields (see fig. 1). Nor was trenching any more successful in discovering stone interrnal buildings. Their site was occupied by a scatter of broken stone and Roman and medieval pottery, indicating that stone-robbers had been at work as early as the twelfth century. The Roman pottery, however, included calcite-gritted ware of the Huntcliff type, current after A.D. 367-9, thus attesting an occupation of the Roman fort in the latest phase of the Wall's history. No conclusion can be drawn about the size or planning of the Stone-Wall fort at Drumburgh, except that it would appear to have been substantially smaller than the earth-work fort which preceded it. The west defences of the early fort were not obliterated and it was perhaps now that the causeway at the west gate of the early fort was partly blocked by a palisade, set in a deep and narrow trench. The south ditch of the early fort, on the other hand, was deliberately filled with the whitish clay from its own rampart, and it is therefore not impossible that the stone fort impinged upon it, though actual remains, if they existed, may have been destroyed in the lowering of the surface already described.

The Stone Wall both east and west of the newly-discovered fort was also examined. Its superstructure

[5] This seems to have been part of Drumburgh Castle, for which a licence to crenellate was issued in 1307 (*Cal. Pat. Roll*, 1307-13, p. 11.) It is described as part of the castle in 1829 (Parson & White, *Directory of Cumb. & Westm.*, 94).

had been extensively robbed, and only isolated blocks of a single course survived. The thin footing-flags, unprovided with adequate foundation, had almost everywhere snapped on the line of the face of the Wall, where its superincumbent weight cracked them (pl. I, 1). An examination of the area immediately behind and in front of the Stone Wall revealed also another point of importance. As at Watch Hill, east of milecastle 73 (Dykesfield), or as at turret 52*a* and Pike Hill signal-tower, the builders of the Stone Wall, here 9 ft. 8 in. wide over the foundations, had occupied the site of the 20-foot Turf Wall[6] and had left its lowest two or three courses in position on either side of their foundation. A strip of laid turf-work 3 ft. 4 in. wide lay to north of the foundation flags and a 7-ft. strip to south of them, in both of which the familiar bleaching and lamination were plainly discernible (pl. I, 2). The placing of the Stone Wall well forward in the demolished structure would bring the rampart-walks of the successive works into the same relative position.

The further fact emerges that, while the Turf Wall was here built in normal turf-work, the associated fort had a grey clay rampart. The fort was therefore not of one build with the Turf Wall but additional to it. Its small size (316 by 217 ft.) and its intermediate position between the large forts of Burgh-by-Sands and Bowness will further suggest that it does not belong, as they do, to the first series of additions but is rather to be associated with such forts as Greatchesters or Wallsend,[7] added still later in the light of experience.

The source of the grey clay used for the early fort rampart is local. Our member, Mr Robert Hogg, of Tullie House Museum, Carlisle, was able to demonstrate

[6] (*a*) Watch Hill: CW2 xxxv 214 (the one just behind the other). (*b*) Turret 52*a*: CW2 xxxiv 151 (superimposed). (*c*) Pike Hill: CW2 xxxii 146 (superimposed).

[7] *Handbook to the Roman Wall*, 10th ed. (1947), 20.

on the spot that the material is the marine clay obtainable in bulk either on the foreshore or in the marshland to north and north-west of Drumburgh. When the second writer and Mr Hogg were examining the foreshore, close to the N.E. corner of field 1659, they also observed several squared blocks of red sandstone with Roman tooling, as if the creek had been utilized by the Romans, perhaps for transport of stone from the Dumfriesshire beds. Certain it is that for ships of small draught and tonnage the Drumburgh bay offers a safer and better harbourage than Bowness, which is exposed to the prevailing gales. The development of the Drumburgh haven may well have been the reason for the foundation of the fort. Its connexion by road with the hinterland, through Kirkbride, is described in a later article (p. 41 f.).

2. TURRETS AND MILECASTLES BETWEEN BURGH-BY-SANDS AND BOWNESS-ON-SOLWAY.

By F. G. Simpson, Miss K. S. Hodgson and I. A. Richmond.

During the autumn of 1948 opportunity was taken to identify the sites of turrets 78*a* and 76*a*. The former was discovered 100 ft. north-west of the west corner of Kirkland farm-buildings, in the line of hedge bordering the south side of the road to Port Carlisle. The latter was found in the hedge 39 ft. east of the garden gate south of Drumburgh School-house. The measured position of milecastle 76 (Drumburgh), thus falls 223 yards east of the axis of the newly-discovered fort at Drumburgh, which, like every fort known to us on the line of the Wall, is additional to the turret and milecastle system.

Turret-sites west of Burgh Marsh could readily be established by measurement from the known positions of milecastles 77, 78 and 79. East of the Marsh the last securely determined milecastle, 55 (Low Wall), lay much too far away for accurate measurement to be employable.

A return was therefore made to Watch Hill, where search in 1934 had disclosed the Stone Wall near the position of a milecastle as recorded by Horsley.[8] The south face of the Stone Wall was identified and followed at five-yard intervals eastwards across fields nos. 997, 998 and 1004 until at length turret *72b* was found, 19 yards from the east hedge of the last field. Enough work was done to permit the preparation of a plan (fig. 2), which shows the

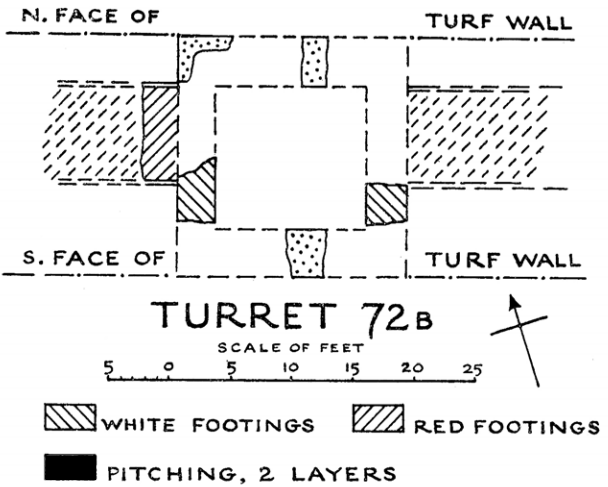


FIG. 2.

turret to have been of normal Turf-Wall type, with front and back walls thicker than the side walls, which have the later Stone Wall butted against them. The two structures were also built in different materials and style. The turret had footings of whitish-grey sandstone laid upon two courses of clay and cobble, the Wall had red sandstone footings without further foundation. The north face of the Wall lay 3 ft. 11 in. behind that of the turret, an unusual variation from the normal practice of rendering both north faces virtually flush. The measured position of milecastle 73 (Dykesfield) was then laid off

[8] CW2 xxxv 213 f.; *Britannia Romana* 156 and map facing 158. Field-numbers from *Ordnance Survey 25-inch scale, Cumberland*, sheet xv, 12 (1925).

and a trench at once disclosed the axial roadway in the milecastle's north gate. Further work revealed the side-walls and south wall of the milecastle, 6 ft. 8 in. thick over the foundation, which measured 62½ ft. from north to south and 60⅔ ft. from east to west internally. The position of Wall and milecastle is, however, 42 ft. north of the conjectural line marked on the 25-inch Ordnance Survey sheet, and has been corrected in a revision now in progress.

The accurate determination of the positions of milecastle 73 and turret 76*a* raised anew the old question of the course of the Wall across the wide expanse of Burgh Marsh. In 1899 the discovery of a slight northward turn in the line of the Wall descending from Drumburgh to the western fringe of the Marsh convinced Professor Haverfield and Mr and Mrs Hodgson that the Wall did not skirt the Marsh but ran across it.[9] It can now be said that the measured distance along the eastward line proposed by them, which runs straight across the Marsh and joins at a salient angle the line which can now be projected from milecastle 73, coincides accurately with the appropriate interval of 4,860 yards from milecastle 73 to the measured position of milecastle 76. In general, there can thus be no further room for doubt that Haverfield and his colleagues of the original Cumberland Excavation Committee were right. In detail, it may be observed that the angle in the Marsh lies so close to the measured position of turret 73*a* as to suggest that the turn may, as often, have taken place at a turret. Whether special engineering features, such as piling or an artificial raft, were introduced in this marshland in order to enable the Wall to cross it is not yet clear. But the newly-discovered treatment accorded to the Wall (see p. 27) in the flat ground threatened by high tides west of Port Carlisle must be regarded as relevant to any consideration of the problem, pending whatever future exploration may reveal.

[9] CW1 xvi 95.

3. MILECASTLE 79 (SOLWAY). By I. A. RICHMOND and J. P. GILLAM.

The site of milecastle 79 was identified in 1948 by Mr F. G. Simpson and was selected as apparently the most suitable site for a special inquiry, of which the purpose may be summarised as follows. In 1935 milecastle 50 TW (High House Turf-Wall milecastle) afforded conclusive evidence[10] that the Turf Wall had been rapidly superseded by the Narrow Stone Wall from milecastle 49 (Harrows Scar) to a point west of milecastle 54 (Randylands), probably Burtholme Beck. At the latter point the Narrow Wall came to an end and the Stone Wall in Cumberland was thenceforward built to the Intermediate gauge.[11] As for date, the Intermediate Wall was shown in 1933 to be undoubtedly earlier than the Severan reconstruction, but no more precise dating had been obtained.[12] It was, however, evident that if the duration of a Turf-Wall milecastle overlaid by a stone-built milecastle of the Intermediate Wall could be determined, this would be a valuable approach to the question; while if the levels of a Stone-Wall milecastle overlying a Turf-Wall milecastle still existed they might well provide the solution to the problem. It was also clear that for this purpose the nearer the milecastle lay to the western end of the Wall the better it might serve to date the conclusion of the work. A site west of Carlisle was thus desirable. Inspection of surface indications and excavation (see p. 16) at milecastle 73 (Dykesfield) furnished no site east of Burgh Marsh so well preserved as to be likely to furnish the archæological requirements. West of Burgh Marsh surface indications suggested that milecastle 79 (Solway) certainly stood highest and a trial trench at its north-east corner in 1948 confirmed that the remains

[10] CW2 xxxiv 132.
[11] CW2 xxxv, 240.
[12] CW2 xxxiv 142.

stood high. Arrangements were therefore made for a detailed excavation of the milecastle in 1949, undertaken by the two writers. A trial section from east to west soon indicated that, while the promise of well-preserved Stone-Wall levels was not maintained, the Turf-Wall stratum was everywhere undisturbed, and apparently

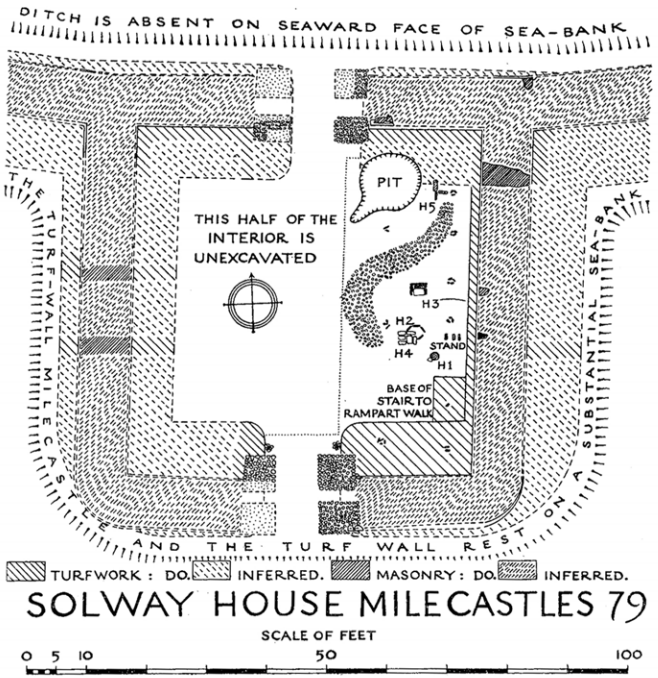


FIG. 3.

richer and better covered in the east half of the milecastle, as at milecastle 50 TW.[13] It was accordingly determined to strip the east half completely. The remains of the Stone-Wall milecastle were not, however, negligible and may be described first (fig. 3).

The Stone-Wall milecastle measures internally 57 ft. 6 in. from both north to south and east to west. Its north

[13] CW2 XXXV 225 f.

wall is 8 ft. 10 in. wide over the footing and 8 ft. 6 in. wide over the first course of masonry, but on the south face two extra offsets of 8 in. and 3½ in. respectively further reduce the total width. The side walls and south wall are 8 ft. 1 in. thick over the first course, here and there preserved. All are set upon a foundation of thin flags devoid of further packing below; and almost all the footing-flags, which come from yellow and red sandstone beds, have cracked at the edge of the superimposed masonry, in the manner observed at Drumburgh (p. 13, pl. I, 1; also IV, 1) and many other points on the Intermediate Wall. The internal corners of the milecastle are angular, the external south corners are rounded (pl. II, 1); while the north external corners bond with the Great Wall without the wing-walls and points of reduction usual at the Broad-Wall milecastles of the Narrow-Wall sector between Irthing and North Tyne.[14] The gateways were nowhere preserved above foundation-level, but their foundations were of a kind not hitherto recorded on the Wall. While the passage-walls had no foundation whatever, the piers and rearward expansions of the gateways were carried upon well-laid squares of clay-and-cobble pitching in two layers (pl. II, 2). Those of the north gate were 5½ ft. square below the north piers and 5½ by 4½ ft. below the rearward expansions: those of the south gate measured approximately 6 ft. square at both back and front.

A clue to the kind of masonry which stood upon the expansions was provided by an unexpected discovery south of the north gate. A circular pit (pl. III, 1), with a roughly cut run-way or access-slope in its south-west quarter, was found to contain 103 squared facing stones, 10 fragments of chamfered plinth, 10 fragments of footing-flags, 70 pieces of broken rubble and three chamfered jambs, from 15 to 17 in. wide, from the imposts of the gateway, two belonging to the base and one to the top

[14] *Handbook* cit., 163.

of the imposts. The pit cut through the roadway of the Turf-Wall milecastle and the earliest roadway of the Stone-Wall milecastle (pl. III, 2), which were respectively 3 in. and 8 in. thick, but the roadway of the second stone level, 10 in. thick, partly covered it, and the deposit was itself associated with a typical early third-century cooking-pot (see p. 35 below). The demolition represented by this *cache* of stones thus belongs to the third-century occupation of the milecastle. It is accordingly to be equated with the Severan rebuilding of milecastle gateways of types II and III, which involved the demolition of their rearward responds and the reduction of their portals to posterns.[15] In no previous excavation, however, has stonework so demolished been rediscovered in the pit to which a demolition-party consigned it.

Apart from this unusually curious evidence concerning the later treatment of a gateway superstructure, which had otherwise completely vanished, little remained to tell of the later history of the Stone-Wall milecastle. That late levels had once been present is, however, certain. In the plough-soil were recovered sixteen pieces of third-century pottery, representing at least nine separate vessels, a *follis* of Constantius I[16] and one piece of early fourth-century cooking-pot. Sherds of the late fourth century were not in evidence, but it would perhaps be rash to assume that their absence to-day is proof that the milecastle was then deserted. Stone-robbers have pillaged the buildings of this milecastle with very great thoroughness, no doubt because there was, as at Drumburgh, no other local source of supply. Ploughing subsequently completed the destruction, though what stone-robbers had left of the north wall, mostly tumbled core, was in slight degree protected by the hedge-bank. One or both of these destructive processes had almost

[15] CW2 xxxv 250 exemplifies milecastles 39 (Castle Nick), 40 (Winshields) and 52 (Bankshead), to which milecastle 79 may now be added.

[16] Cohen, *Méd. Imp.* vii, no. 62, with cuirassed bust, and SF and IITR in field and exergue respectively. The piece is in mint condition.

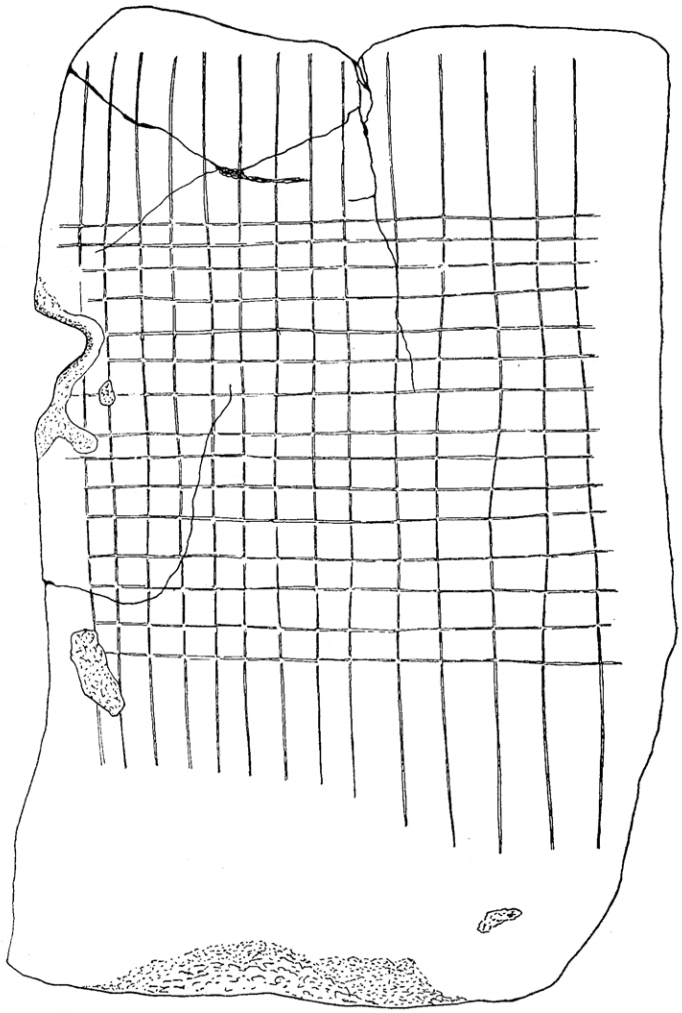


FIG. 4.—Milecastle 79: stone gaming-board, later used as a hearth-stone (⅛ approx.).

completely removed the floor of the second-century Stone-Wall level. Only in the north-east corner was a hearth (H 5) of this period preserved, below the fragments of a still later stone fire-back. The slab forming its floor had been once used elsewhere as a gaming-board (fig. 4), 14 scored lines in one direction and 15 in the other, forming a *tabula lusoria* of normal Roman type.[17] The plan of the building which had occupied this side of the milecastle was, however, in measure recoverable. It had been a timber-framed building, carried by uprights contained in stone-packed post-holes, set in a rectangle some 42 by 11 ft. This is comparable with buildings in milecastles 9, 37, 47, 48 and 54.[18] The feet of these post-holes remained, and of the fourteen which a symmetrical plan would demand five were still present on the east side of the building and four on the west, where the northernmost had certainly been removed in digging the Severan pit already described. Meagre though these remains were, they were neverthless planted in a continuous layer of gravel which served to seal securely the occupation-layer of the Turf-Wall milecastle buried below it. With this purely structural stage in the history of the Stone-Wall milecastle, can be associated one relic, accidentally lost; on the internal footing-flag of the east wall of the milecastle lay a lathe-turned leaden casing for a plumb-bob (fig. 5).

To east and west of the site enough work was done on the line of the Stone Wall to show that it formed an obtuse re-entrant angle with each northern corner of the milecastle. Apart from uncovering the actual point of junction (pl. IV, 1), the south face of the great Wall was uncovered in two points on both flanks. On the east, at a point 110 feet from the north-east external corner, a complete section of the Wall was obtained. Only one

[17] For such games, cf. R. G. Austin, *Greece & Rome* iv 24-34; for *latrunculi* 25-30.

[18] M/c 9: N.C.H. xiii 532 (timber building). M/c 37: AA4 xi, pl. xvii. M/c 47: AA4 xiii 272. M/c 48: CW2 xi 424 and pl. i. M/c 54: CW2 xxxv 241.

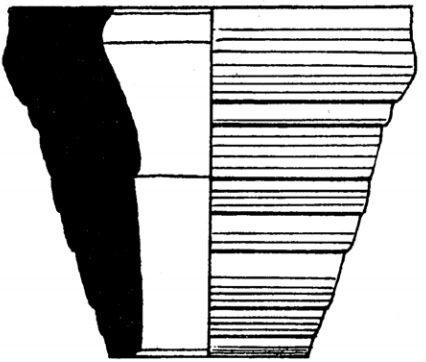


FIG. 5.—Milecastle 79:
lead casing of plumb-bob (1/1).

(10½-in.) course of a Wall 8 ft. 7 in. wide was standing above the 3-in. footing-flags, themselves extending 9 ft. 2 in. wide, but even in these an important distinction was visible (pl. IV, 2). The first course was laid and grouted in very inferior mortar, as at turret 54*a* (Garthside).[19] The core above this course, containing re-used material, was set in the very hard white mortar characteristic of the third-century repair of Severus.[20] So hard was the core thus formed that between Port Carlisle and Bowness it was customary to remove it in the nineteenth century by blasting.[21] 245 yards west of the milecastle a massive piece still stands to attest the quality of the work. Here, however, the existence of the Stone Wall before the Severan repairs is important as corroborating on a structure in position the evidence to the same effect from the demolished remains of the milecastle gateway.

The defensive walls of the Turf-Wall milecastle had everywhere been levelled by the Stone-Wall builders, but, as at Drumburgh (see p. 13) and many other points on the Turf Wall,[22] the demolition-squads had not removed

[19] CW2 xxxiv 142.
[20] *Ibidem.*
[21] *Handbook to the Roman Wall*, 3rd ed. (1885), 236.
[22] See note 6, above.

the lowest courses of turfwork, which still exhibited the characteristic lamination of turves in position, as opposed to the whitish-grey unlaminated mass of fallen or scattered turfwork. The side walls of the Turf-Wall milecastle, each 19 ft. wide, were easily found. Opportunity was taken to trace the entire internal face of the east wall; that of the west wall was observed at two points; the external face of the west wall was cut twice, that of the east wall once. The east limb of the south wall was traced completely on the internal face, while the position of the west limb was fixed at the gateway opening. The north wall was less readily accessible and had been severely damaged by the Severan pit already described (p. 19), but the internal face of its west limb was identified. The external faces of both the north and south walls must remain as inferred, the later superincumbent stonework having obliterated them. The internal dimensions of the Turf-Wall milecastle were, however, clear. It measures 48 ft. 3 in. from east to west and 40 ft. 5 in. from north to south and is thus a short-axis milecastle,[23] the first of its kind observed west of milecastle 42 (Cawfields). Indeed, the very existence of this distinction, so characteristic of the Stone Wall, only now emerges for the first time on the Turf Wall. Another difference as compared with milecastle 50 TW is the placing of the staircase-ramp of turf, 5 ft. 3 in. wide and 7 ft. 6 in. long, in the south-east corner of the milecastle as opposed to its north-east corner. The ramp lay along the east wall.

As the accompanying plan (fig. 3) illustrates, the north gateway of the Turf-Wall milecastle must have been virtually wiped out by the builders of the stone north gate (pl. V, 1) and the remains were deeply buried below a hedgerow which did not invite extensive disturbance. The south gate, on the other hand, was so situated as to suggest that, while the outer end of its passage might

[23] AA4 viii, 310.

have been irretrievably obliterated by the foundations of the stone-built gateway, the inner end stood free and could be recovered . By working round the internal face of the east limb of the south wall it was possible to arrive at the large stone-packed post-hole which had held the rearward post on the east side of the gateway passage, and the corresponding post and rampart on the west side were soon recovered, at an interval of 11½ ft. from centre to centre, giving a width of just over 10 ft. to the passage (pl. V, 2). As at milecastle 50 TW,[24] the timbering did not revet the full width of the rampart but began 3½ ft. behind the inner face. This implies a slight gateway, not intended to carry a tower, as at the north gate, but carrying only the rampart-walk across the top of the door-frame. This point, unmarked by any structural distinction in foundation-work at the stone-built milecastles, was first demonstrated at milecastle 50 TW and is now in evidence for a second time. The gateway was not quite axial, being placed some 3 ft. too far west, a minor inaccuracy of no significance.[25]

Despite very careful search, no trace could be found of an internal building at Turf-Wall level on this side of the milecastle: the whole internal surface was very carefully cleaned without discovering either postholes or trenches for timber-work. It would seem that this side of the milecastle had been an open space (pl. VI), as was the opposite side in milecastle 50 TW.[26] The space had, however, been much devoted to cooking. Three hearths and a sort of table or cupboard[27] made of three upright stone slabs carrying a horizontal slab, occupied the southern half of the space available, which was reduced by the staircase ramp in the south-west corner to only 32 ft. from north to south. The first (H 1) was made of

[24] CW2 xxxv 222.
[25] Cf. milecastle 38 (Hotbank), AA4 xiii 264.
[26] CW2 xxxv 225.
[27] The structure is reminiscent of the primitive stone cupboards at Skara Brae.

the lower half of a round-bottomed amphora,[28] tilted up so as to form hearth and fire-back combined (pl. VII, 1); its top was heavily burnt by smoke and flame, and there was a little stone hob in front of it. The second (H 2) was a raised hearth, shaped like an irregular pentagon and framed in thin upright slabs which projected above the main floor of the hearth, itself paved with thin slabs also (pl. VII, 1). The third (H 3) was a very solidly built rectangular open-fronted hearth, with thick side-slabs and built fire-back (pl. VII, 2), all of red sandstone which was burnt but not calcined. The fourth partly overlay the second, of which it was a reconstruction, and was a square hearth of small rectangular slabs (see pl. VII, 1). In the burnt material sandwiched between them was a *denarius*, which was so worn and damaged by fire as to be unidentifiable, even after most careful treatment. This was the more regrettable since it was the only coin recovered at this level. Much pottery, however, was found, of which more will be said presently.

There was no doubt at what depth the occupation-layer of the Turf-Wall milecastle ceased, but this was not the end of the archæological problem presented by the surface below it, which in normal circumstances would have been the natural ground. Mr Simpson's trial-trenching in 1948 had already revealed that below the stone-built milecastle there was a substantial depth of made ground containing turf-work, as if a Turf-Wall milecastle were here deeply buried in its own demolished remains. On the other hand, the detailed exploration of the milecastle now showed that, not only in its eastern half but throughout its length and breadth, the occupation-level of the Turf-Wall milecastle lay, as at milecastle 54 (Randylands),[29] only a few inches below that of the stone-built phase and no deeper. A careful study was therefore made of the sterile strata below the milecastle in

[28] This ingenious form of field-oven appears to be unique.
[29] CW2 xxxv 238, fig. 19, and 242.

sections outside its east and west walls, in the complete cross-section from east to west and in a series of trial pits from north to south along the east side of the through road. These revealed that everywhere, to a height of 4 ft. 9 in., the true subsoil of gravel was covered by an artificial platform built of alternate layers of gravel and turf forming the surface upon which not only the mile-castle but the Turf Wall itself had hereabouts been erected. It was not possible, owing to the state of the crops, to trace by excavation the precise limits of this artificial platform, but once the feature was recognized to exist it was possible also to see a marked dip denoting its outer edge in the surrounding field where growing crops precluded trenching. The feature ran round the sides and back of the milecastle and continued along the back of the Wall over the low sea-marsh in both directions, towards Port Carlisle and towards Bowness-on-Solway (fig. 3).

The purpose of such a bank or platform is revealed by its relation to the northward littoral. True natural ground-level at the milecastle lies only 4 ft. higher than the Port Carlisle-Bowness road, frequently covered by the sea at the spring and neap tides.[30] It was clearly the desire of the Turf-Wall builders to place their frontier barrier beyond all possible risk of ever being swamped or undermined by the sea. It is not easy to calculate the original height of the bank, for an allowance must be made for compression, spreading and settlement of the material. But if the effective height of the Turf Wall was 12 ft. it would not be unreasonable to suppose that the intention was to set it upon a broad platform of about half that height. The provision is of great interest, and it might be asked whether the three-mile flat of Burgh Marsh, where the sea in the thirteenth century levelled all,[31] was once treated in the same way.

[30] The occupier of Solway View, near by, informed us of floods which had not only crossed the road but invaded the house.

[31] For inundations at Skinburness in the early 14th century, see *Rot. Parl.* i, 161 and *Lib. Quot. Gard.* 126, also Grainger & Collingwood, *Holmcultram*, 137. An inundation of Burgh Marsh is assumed, rather than proved, about the same time.

Meanwhile it is clear that the provision of the sea-bank explains two puzzling features at or near milecastle 79. While a notable drop in the ground-level to north of the Wall suggests the presence of the Ditch, no second roll indicative of the north lip of the Ditch is observable, nor is there any differential growth of the highly sensitive grain crops such as the Ditch produces. But a ditch and a sea-bank would indeed be a contradiction in terms, the one inviting encroachment, the other repelling it. It may therefore be concluded that in this sector, as at milecastle 78 (Kirkland), no ditch existed,[32] and that the northward drop represents not the south lip of the ditch but the north edge of the sea-bank. Secondly, such an artificial platform as has been described could not be erected on the site of the milecastle without the development of soft patches or minor sinkages which would hold surface water and allow puddles or even pools of water to collect. The levelling-up of such a surface irregularity is represented by the shallow serpentine packing of large stones which, below occupation-level, wriggles across the surface of the eastern half of the Turf-Wall milecastle (pl. VI).

The date of the Turf-Wall milecastle must now be discussed. As already noted (p. 26), the single coin of silver discovered was of no help for dating, owing to its illegible condition. There was, however, a mass of pottery, described in detail below. In order to assess the meaning of this group as a whole one of the first necessities was a detailed comparison with the material from milecastle 50 TW (High House). This was undertaken by the two writers at Tullie House, where the two deposits could be placed side by side and compared piece by piece, and the following general conclusions were reached.

First, while the High House collection represents a total yield, the deposit from Solway is derived from half the milecastle only. The total number of sherds from High House is 740 while from the Turf-Wall level at

[32] CW2 xxxv 217.

Solway it is 750. This means that, since the internal area of Solway milecastle is just over half that of High House, the total bulk deposit at Solway will have been proportionately about twice as large as at High House on a low estimate, on a strict estimate two-and-a-half times. Evidently, then the Turf-Wall milecastle at Solway was not at all so rapidly replaced in stone as at High House. In other words, the Turf-Wall occupation lasted longer and the Intermediate Stone Wall came later at Solway than did the Narrow Wall at High House.

Secondly, while the High House deposit contains fragments of all the coarse pottery typical of primary deposits on Hadrian's Wall, such as debased rustic ware, carinated bowls or handled mugs, the Solway group does not contain a single example of any, notwithstanding the fact that both milecastles are within a mile or two equidistant from the same point of distribution at Carlisle.[33] This suggests that the original construction of Solway milecastle lagged behind that of High House, the latter sector being strategically more important.

Thirdly, Solway produced over three times as many pieces of the latest type recognizable at High House, and some in a slightly later stage of typological development. This confirms the first conclusion. Yet an early-Antonine occupation at Solway seems excluded, for some of the most typical early-Antonine pieces are absent. What is indicated is an occupation prolonged considerably later within the principate of Hadrian.

Fourthly, if the Turf-Wall occupation at Solway was not prolonged to Antonine times it may be logically assumed that the Stone-Wall milecastle had been built either just before the changes of A.D. 139-40, which were accompanied by a dismantling of milecastles, or at the moment when the Wall was reconstituted as a continuous

[33] It is not intended here to imply that Carlisle was the source of all supplies, but that it was the local distribution-head for all commodities, whether officially or unofficially supplied.

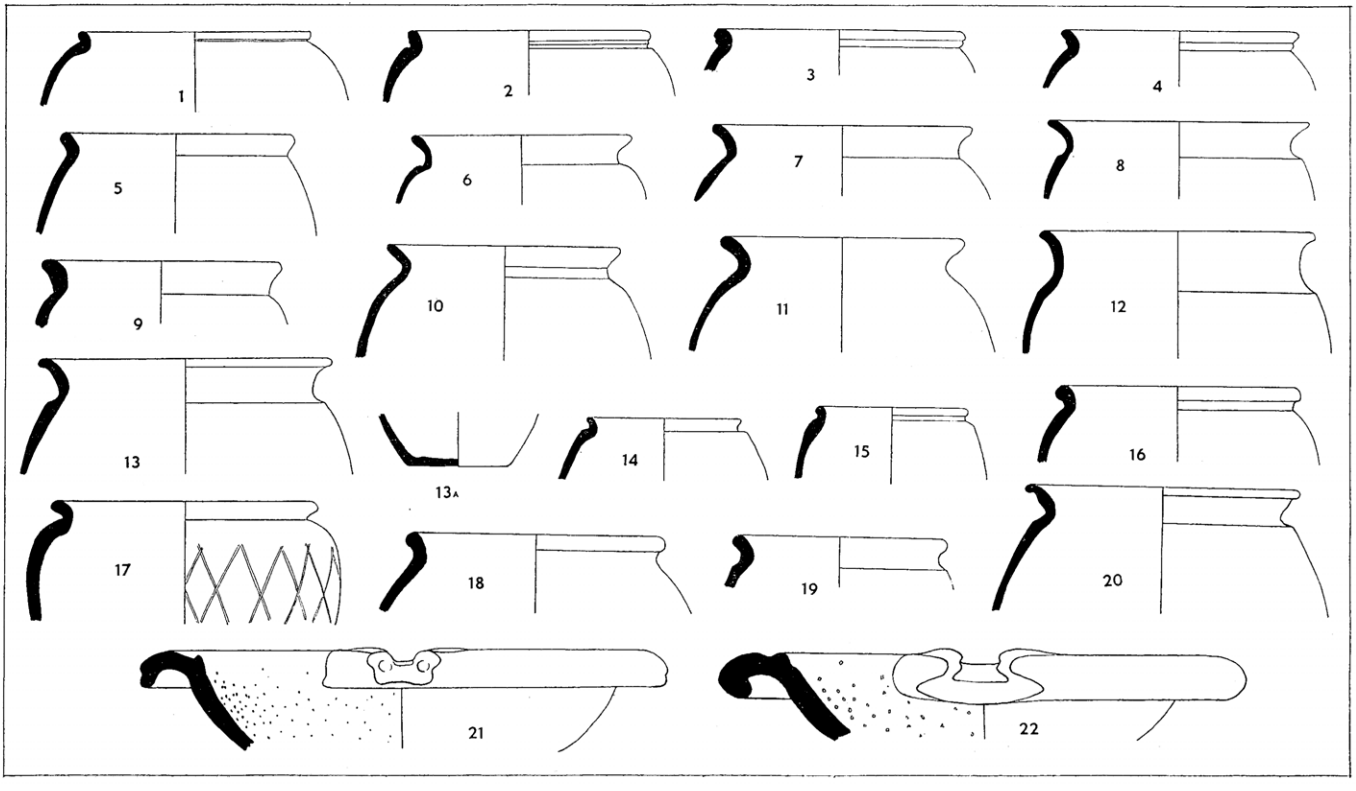


Fig. 6.—Pottery from Milecastle 79 (¼).

frontier barrier, presumably under Calpurnius Agricola in A.D. 162-163; a fragmentary bowl of figured Samian ware, discussed by Miss Grace Simpson in an appendix to this section, seems to point towards the later date, but until deposits from the earliest Stone-Wall levels in this sector have been explored, it must remain an outstanding question whether the Turf Wall in bulk was replaced in stone shortly before the first Antonine occupation of Scotland or immediately after its close.

To illustrate the comparison in the preceding paragraphs, a representative selection has been made of 28 vessels from the Turf-Wall level at Solway and of 13 vessels from High House (milecastle 50 TW). In order to ascertain as nearly as possible the actual date of the peak period of use of each type, parallels are drawn between the types of vessel represented at Solway and examples from dated deposits elsewhere; while the periods of these deposits are indicated by dates in figures, this is not intended to suggest that the dates are necessarily more than an approximation.

(a) *Individual pieces from Solway (milecastle 79).*

1-5. Rim fragments from light grey self-coloured jars, each with a short everted rim shrunk to little more than a bead lip; the rims are reminiscent of those of beakers, but the vessels are the size of small cooking-pots. No. 16, of the same form, is in the black fumed "cooking-pot fabric". Vessels of this type appear not uncommonly in Hadrianic deposits; cf. Turret *7b*, no. 6, A.D. 122-197 (the type is there discussed at length and assigned to the earlier part of the period indicated by the stratification); Turret *50b*, no. 57, A.D. 128-197; Haltwhistle Burn, no. 15, A.D. 122-128. Vessels of the same type survived into the Antonine period, for it is stated in the Balmuildy report that some of the small *ollae* with rims of this style had diameters of as much as 5 in., and that, while most examples were in black fumed fabric, a few were grey; cf. also Corbridge 1938, fig. 8, no. 15, A.D. 139-163.

6-13. Rim fragments from light grey self-coloured jars, each with a medium or high curved rim resembling that of the black fumed cooking-pots. It is probable that each of the present

vessels had a plain cut-away base, similar to that drawn as no. 13A, for all the *olla* bases in the deposit are of that type. Vessels of this type appear commonly, and almost exclusively, in Hadrianic deposits: cf. Turret 7*b*, no. 7, A.D. 122-197; Milecastle 9, no. 51, A.D. 122-140; Turret 49*b*, nos. 9-12, A.D. 128-197; Turret 50*a*, no. 37, A.D. 128-140; Birdoswald, no. 22 and nos. 22a-f, alley deposit (earlier part of period A.D. 126-197); Birdoswald Vallum filling, no. 1, A.D. 130-140; Haltwhistle Burn, nos. 14 and 16, A.D. 122-128. Vessels of this general character survived but rarely into the Antonine period: they form only one-fifth of the yield of medium-sized *ollae* at Balmuildy, as contrasted with about three-quarters at Solway and five-sixths at High House.

41 separate vessels (as opposed to fragments, which formed the basis of our comparison of total yields) of the types illustrated by nos. 1-13 were found at Solway milecastle.

14-15. Rim fragments from small beakers in black fumed fabric. Such vessels first began to be used on the northern frontier in Hadrian's reign, though they continued in use, without marked change of type, throughout the second century; cf. Milecastle 9, no. 55, A.D. 163-197; Turret 50*b*, no. 57, A.D. 128-140; Balmuildy, pl. xliv, nos. 1-4, A.D. 142-197; Birdoswald, nos. 32-35, alley deposit.

16. Rim fragment from a medium-sized, neckless cooking-pot, in black fumed fabric, with a beaker rim. Vessels of this type began to be used in Hadrian's reign: cf. Birdoswald, nos. 39-41, alley deposit; Birdoswald Vallum filling, no. 15, A.D. 130-140; Slack, nos. 8-12, A.D. 79-140. The type continued in common use in the immediately succeeding period: cf. Corbridge 1938, fig. 8, no. 15 and fig. 9, nos. 8 and 10, A.D. 139-163; Newstead 1947, no. 14, A.D. 140.

17-19. Rim fragments from necked cooking-pots, in black fumed fabric, with short beaded rims. These vessels belong to one of the earlier types in the series of cooking-pots in black fumed fabric; it first began to be used in Hadrian's reign: cf. Turret 49*b*, no. 16, A.D. 128-197; Slack, no. 7, A.D. 79-140. The type continued in common use in the immediately succeeding period; cf. Milecastle 9, no. 53, A.D. 163-197; Corbridge 1911, no. 57, A.D 139-197; Old Kilpatrick, pl. xxi, no. 14, A.D. 142-197.

20. Large fragment from a necked cooking-pot, in black fumed fabric, with everted rim. This is typologically the most advanced piece of coarse pottery from the Turf-Wall level; it belongs to a type which was commonly in use in the third

quarter of the second century: cf. Milecastle 48, pl. iv, no. 32, A.D. 163-197; Turret 50*a*, no. 43, A.D. 163-197; Corbridge 1911, no. 48, A.D. 139-197; Corbridge 1938, fig. 8, no. 8, A.D. 163-197; Corbridge 1947, no. 16, A.D. 197. On the other hand, cooking-pots which are typologically but little less advanced have been found in early Hadrianic deposits: cf. Birdoswald, no. 18f, alley deposit; Chesterholm, no. 37, A.D. 79-126; Haltwhistle Burn, no. 6, A.D. 122-128; Throp, no. 15, A.D. 122-128. It would therefore be rash to deny that the type could have been evolved by A.D. 140.

16 separate vessels of the types illustrated by nos. 14-20 were found at Solway milecastle. amounting to 28% of the *olla* class as a whole, contrasting with 17% at High House; three vessels, including no. 20, were typologically later than anything at the latter site.

21. Rim and spout of mortarium, in orange fabric with grey-brown core and cream slip; the grit is small, multi-coloured and well worn. There is a legible but unidentified stamp on the rim, apparently MATT[. . . . retrograde—the reading of the M is not quite certain. This is a typical Hadrianic-Antonine mortarium: cf. Milecastle 50, no. 96, A.D. 128-197; Balmuildy, pl. xli, no. 19, A.D. 142-197; Birdoswald, no. 1, alley deposit; Throp, no. 1, A.D. 122-128.

22. Rim and spout of mortarium, in orange fabric with traces of a cream slip; the grit is medium-sized and multi-coloured. There is a stamp in two lines, with only one letter, either F or E, now visible, in the upper line. This vessel is probably contemporary with no. 21.

23. Rim of mortarium in dark grey, vitrified stoneware, with purple core; instead of grit its interior is charged with small pebbles. This mortarium has probably been made of the same clay as nos. 21 and 22, but has been grossly over-fired (as also, presumably, the "iron grey" mortarium no. 57 from Cardurnock had been); the shape indicates a Hadrianic-Antonine date: cf. Turret 49*b*, no. 1, A.D. 128-197; Cardurnock, no. 54, A.D. 128-140.

24. The complete section of a mortarium in orange fabric with a white slip; the grit is sparse, large, and opaque white. While only Antonine parallels to the shape can be quoted, this mortarium (which may have been made by the potter who used the stamp DNC) would be equally at home in a Hadrianic or an early-Antonine deposit: cf. Balmuildy, pl. xli, no. 20, A.D. 142-197; Corbridge 1911, no. 100, A.D. 139-197.

25. A fragment from a bowl of unusual form, in soft light-grey fabric. While there are no exact parallels to the form, the

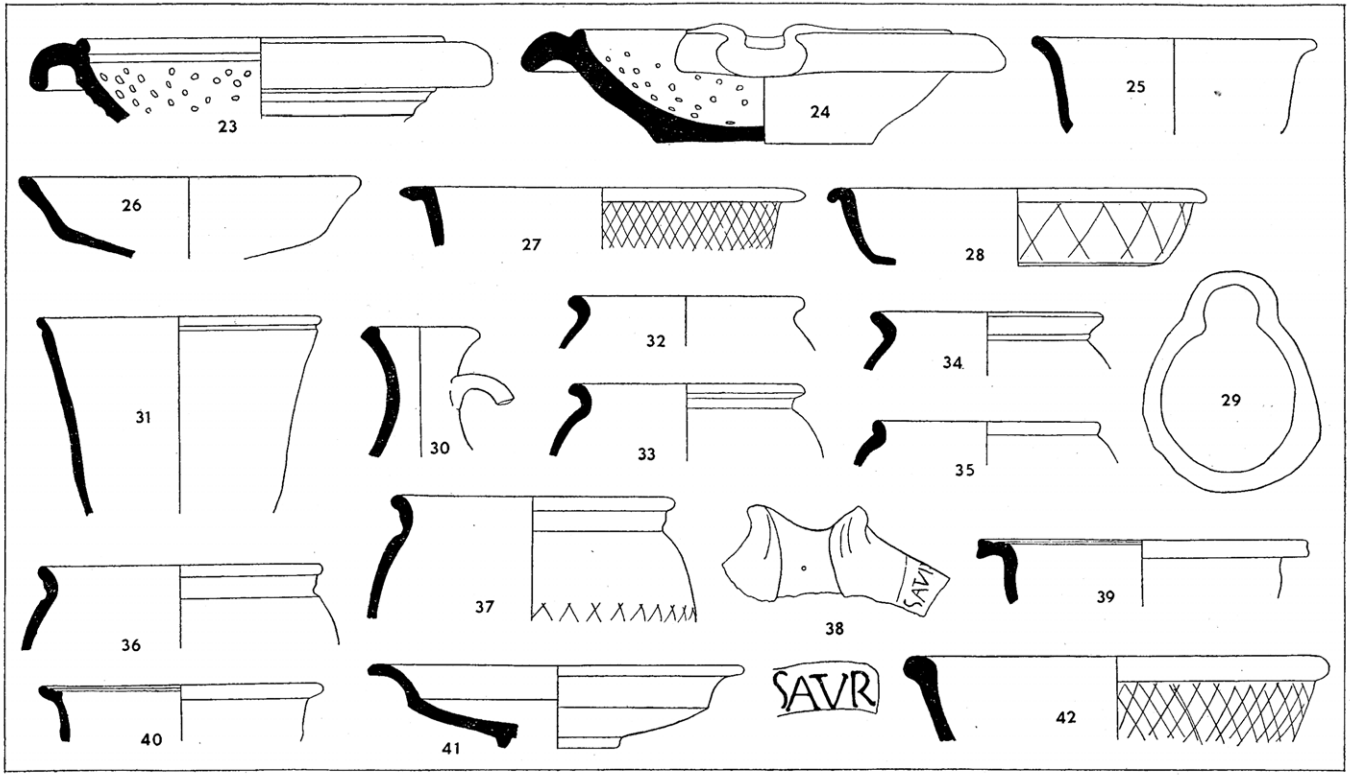


Fig. 7.—Pottery from Milecastles 79 and 59 T.W. (¼).

fabric (which resembles that of nos. 1-13 above) is consistent with a Hadrianic date.

26. A fragment from a platter in soft self-coloured orange fabric. This is possibly a debased imitation of a samian ware platter of a form approximating to Dr. 18/31; it is worthy of note that an imitation in similar fabric was found at High House (no. 41 below).

27. Fragment from a flat-rimmed bowl or platter, in grey fumed fabric. Bowls and platters with broad, flat rims, without reeding, are typically Hadrianic-Antonine: cf. Milecastle 48, pl. iii, no. 4, A.D. 122-140; Balmuildy, pl. xlvii, no. 3, A.D. 142-197; Birdoswald, no. 65, alley deposit; Birdoswald Vallum filling, no. 4, A.D. 130-140.

28. Large fragment from a flat-rimmed platter with curved side but without a chamfer at the base, in dense black fabric, fumed and highly polished. This type is one of the earliest in the series of platters and bowls in black fumed fabric, and began to be used in Hadrian's reign: cf. Birdoswald, no. 74, alley deposit; Birdoswald Vallum filling, no. 6, A.D. 130-140; Cardurnock, no. 27, A.D. 128-140; Corbridge 1911, no. 44, A.D. 79-125; Slack, no. 66, A.D. 79-140. The type continued in common use in the immediately succeeding period: cf. Corbridge 1911, no. 85, A.D. 139-197; Newstead 1911, type 49, A.D. 140-197; Old Kilpatrick, pl. xxii, nos. 6 and 7, A.D. 142-197.

29. Lamp-holder in a yellow bedded sandstone, similar to the yellow variety of the New Red Sandstone of Cumberland. The interior of the holder is neatly smoothed, while the exterior is rough; the part that held the nozzle has been blackened by smoke.

A stone pot-lid was found in the same deposit: cf. Newstead 1911, pl. lxxxiii, no. 5. It is a rough, slightly elliptical disc of yellow sandstone, $\frac{3}{4}$ in. thick, with an average diameter of a little under 5 in.; the top and bottom are smooth, as the lid has been split from the bed of the stone, but the edge is roughly chipped. On one side the perimeter is blackened by smoke, which reveals that the lid has been used on a cooking-pot $4\frac{1}{2}$ in. in diameter at the rim.

The only other pottery vessel of note was a cooking-pot in black fumed fabric, represented by several large fragments, found in the same pit as the masonry from the demolished responds of the north gate of the stone milecastle; it is of late second-century or early third-century type: cf. Carrawburgh, no. 4, A.D. 200-225.

(b) *Individual pieces from High House (milecastle 50 TW).*

30. Neck and part of the handle of a flagon in orange-pink fabric.

31. Rim and wall fragment from a mug, or beaker, with concave sides and beaded lip, in brick-red, slightly gritty fabric; no handle survives. Vessels of this type are much more common in the turrets and milecastles of Hadrian's Wall—usually in the earliest level—than published examples might suggest. They do not occur at Corbridge or on sites in Scotland, and it may therefore be presumed that the type had a very short life, falling within the period A.D. 125-139. Some of the published examples from milecastles and turrets are from deposits of the later part of the second century, but in view of the absence of the type from definitely Antonine deposits, these pieces must be regarded as rubbish-survivals from the Hadrianic occupation.

The type is not represented at Solway milecastle.

32. Fragment from the rim of a light grey self-coloured jar, with a short everted rim.

33-34. Fragments from the rims of light grey self-coloured necked jars.

48 separate vessels of the types illustrated by nos. 32-34 were found at High House.

35. Fragment from a neckless cooking-pot, in black fumed and polished fabric, with a beaker rim. It is caked with soot, showing that it has been used over a fire, and not merely as a drinking-vessel.

36-37. Rim and shoulder fragments of necked cooking-pots in black fumed fabric.

10 separate vessels of the types illustrated by nos. 35-37 were found at High House, making 17% of the *olla* class as a whole, in comparison with 28% at Solway milecastle and 80% at Balmuildy.

38. The spout of a mortarium in a soft buff sandy fabric, carrying the stamp SATVR[NINVS, with the TV ligatured: cf. Cardurnock, fig. 14, no. 6; Silchester, fig. 14, nos. 2 and 3, dated as Hadrianic-Antonine. Our rim is too fragmentary to be drawn in section.

39-40. Fragments from the reeded rims of carinated bowls in soft, bluish grey fabric. While carinated bowls with reeded rims are found in Antonine deposits in midland and eastern England, in the vicinity of Hadrian's Wall and in Scotland they never occur in deposits beginning as late as A.D. 130, except as palpable rubbish survivals on sites where there had been earlier occupation. The latest examples of reeded rims from dated structures on virgin sites need none of them be later than the middle of Hadrian's reign: cf. Milecastle 50, nos. 93 and 94; Birdoswald, no. 68.

Two such bowls were represented at High House but none at Solway milecastle.

41. The complete section of an imitation, in soft reddish-brown fabric, of a samian ware platter approximating in form to Curle's type 15.

42. Several fragments of a platter in black fumed fabric; the type of rim is unusual.

Among the pieces from High House that have not been drawn, attention may be directed to three fragments of rustic ware which, while characteristically Flavian-Trajanic, has turned up in small quantities in most of the milecastles and turrets that have been excavated; for a debased example, cf. Birdoswald, no. 23, alley deposit.

No rustic ware was found at Solway milecastle.

The complete references to the reports from which parallels have been quoted follow (the usual abbreviations have been used for periodicals):—

Turret 7*b*, Denton Hall	..	AA4 vii 151f.
Milecastle 9, Chapel House	..	AA4 vii 143f.
Milecastle 48, Poltross Burn	..	CW2 xi 446f.
Turret 49*b*, Birdoswald	..	CW2 xiii 346f.
Milecastle 50, High House	..	CW2 xiii 356f.
Turret 50*a*, High House	..	CW2 xiii 350f.
Turret 50*b*, Appletree	..	CW2 xiii 351f.
Balmuildy	..	Miller, *The Roman Fort at Balmuildy* (1922).
Birdoswald	..	CW2 xxx 175f.
Birdoswald Vallum filling	..	CW2 l 54f.
Cardurnock	..	CW2 xlvii 108f.
Carrawburgh	..	AA4 xxix 62f.
Chesterholm	..	AA4 xv 222f.
Corbridge 1911	..	AA3 viii 168f.
Corbridge 1938	..	AA4 xv 266f.
Corbridge 1947	..	AA4 xxviii 177f.
Haltwhistle Burn	..	AA3 v 264f.
Newstead 1911	..	Curle, *A Roman Frontier Post &c.* (1911).
Newstead 1947	..	PSAScot. lxxxiv 31f.
Old Kilpatrick	..	Miller, *The Roman Fort at Old Kilpatrick* (1928).
Silchester	..	Archaeologia xcii 121f.
Slack	..	Yorks. Arch. Journ. xxvi 61f.
Throp	..	CW2 xiii 374f.

APPENDIX: The figured samian ware.

By Grace Simpson.

Fragments from three bowls, all of form 37, came from the level preceding the construction of the stone mile-castle, that is to say from the same deposit as the coarse pottery described above; in my examination of them I have been able to discuss points of detail with Mr Eric Birley, who has read and approved the text of the present report.

The first two bowls are undoubtedly Hadrianic, but the third would be more in place in a deposit of the second half of the second century. Its appearance in the Turf-Wall level seems to suggest that it must have been broken and thrown away at the time when conversion from turf to stone was taking place, and that the date of the conversion was not earlier than circa A.D. 160; there can be no question of its being anything like so early as the bulk of the coarse pottery.

1. Three fragments from the same bowl, by a potter whose name is uncertain, though it is known to have ended in TVS,[34] but his style is easily recognisable. The *ovolo* consists of a double-bordered "egg" and a very thin "tongue" ending in a tiny dot; the borders of the design are of squarish and rather irregular beads, with the junctions covered by *six-dot rosettes*. A *chevron-wreath* occurs in the decoration and as a basal demarcation of it; the only figure-types are a *goat* (D. 891 = O. 1840) and a small *lion* (O. 1404a). The leafy arcade below the ovolo occurs on a bowl attributable to the same potter from Brecon Gaer (*Y Cymmrodor*, 1926, figs. 90 and 91, S. 204); other bowls from the same source have been found on Hadrian's Wall at Birdoswald (CW2 xxx p. 178, fig. 2), Benwell (AA4 xxv p. 64, fig. 2 no. 24) and Chesters (unpublished). The Hadrianic dating of his activity is self-evident; that he worked at Lezoux is shown by the occurrence of several pieces attributable to him in the portion of the Plicque collection acquired by Dr Oswald and now the property of the Department of Archæology in Durham.

[34] Cf. Knorr, Cannstatt (1921), fig. 4, no. 2; an unpublished example in the Grosvenor Museum, Chester, shows no more of the same stamp,]TI.M retrograde.

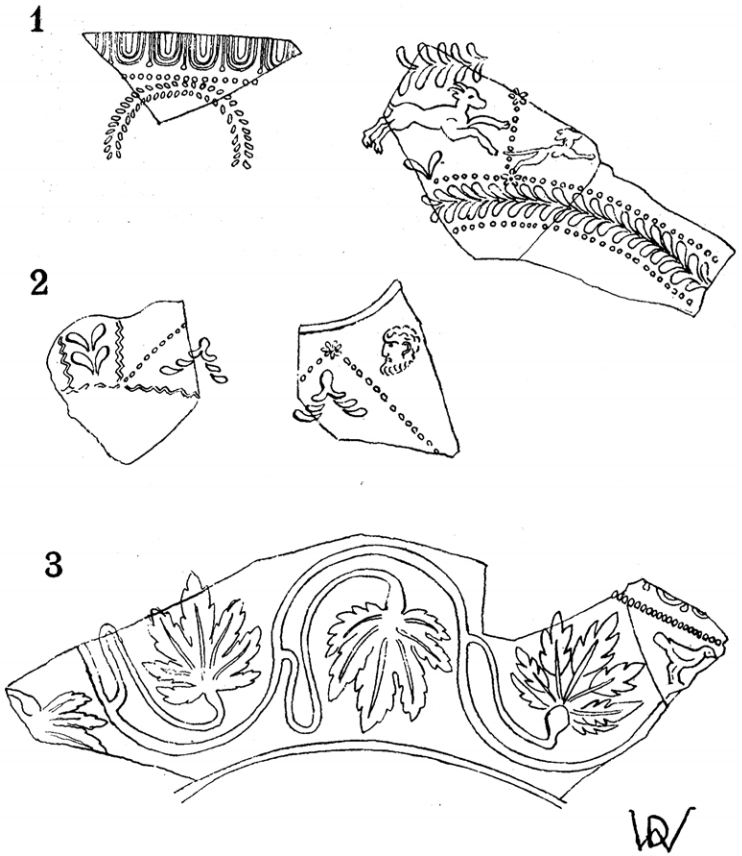


FIG. 8.—Milecastle 79: the figured Samian (½).

2. Two fragments from a different bowl by the same potter as no. 1. They show the same *chevron-wreath,* this time used as an upright panel bordered by *wavy lines,* and a triangle containing an inverted *acanthus* delimited by coarse *bead-rows* as noted on no. 1, surmounted by *rosettes*; there is part of a plain *festoon* above, with what seems to have been a *mask* to right. A somewhat similar triangular arrangement appears on the Benwell piece cited above. Wavy lines and bead-rows appear together on many of this potter's bowls.

3. Four fragments conjoined, from a small bowl decorated by a continuous winding vine-scroll; a *bird,* probably O. 2239b, appears in a space below the *ovolo,* of which, unfortunately,

insufficient remains to enable it to be assigned to any particular potter. The *bead-row border* and the vine-scroll were used by a number of Lezoux potters who worked during the middle and latter part of the second century, notably ATTIANVS, CINNAMVS, LAXTVCISSA, PATERNVS and SACER; it seems difficult to suppose that the present bowl can have been made before A.D. 150, if so early: all the stratified parallels which have been noted at Corbridge come from the second Antonine level, assignable to the period A.D. 163-197.

The warmest thanks of the committee are offered to the landowners, who generously gave permission for the work. Mr R. Robinson of The Grange, Mrs Jefferson of Drumburgh House and Mr D. Hodgson of Drumburgh Castle; Mr John Percival of Dykesfield Farm and Mr W. M. Hodgson of West End; Mr J. Atkinson of Bowness House and Mr J. Smith of Kirkland House. Finally, we would record with gratitude the help of Mr J. A. Todd of Longburgh, foreman in charge of six Ukrainian workers, who, when other labour was unobtainable, were put at our disposal by the Cumberland War Agricultural Committee for the examination of milecastle 79.