

ART. II.—*Roman sites on the Cumberland coast, 1968-1969.* By R. L. BELLHOUSE, B.Sc.

Read at Kendal, April 4th, 1970.

PART I. Fieldwork and Excavation.

HITHERTO work on the Hadrianic patrolling system has been more concerned with the finding and proving of new towers and fortlets than with the wider problems of organisation and construction. Since the Solway shore is but part of the frontier defences it cannot be treated in isolation from the Wall and sooner or later an attempt must be made to allocate structures to the legions known to have been engaged on the building of the Wall. To this end I reviewed all the available information about foundations and footing courses, door and platform position in the towers which have been examined in my paper in CW2 lxix because, in the absence of building inscriptions, this is the only evidence we have of building by different legions. At that time it was impossible to say whether any of the milefortlets were "long" or "short" axis, and the only one fully excavated, no. 5 Cardurnock, although having a "short" axis, seemed anomalous. I therefore resolved to examine MF 22 Brownrigg. The excavation produced some surprises: we found a "long" axis, entrance at the centre of the front rampart and "horse-shoe" ditch. MF 5 was indeed anomalous.

The following year I planned to excavate MF 21 Swarthy Hill and seek MF 20 and MF 23 in the hope that we might, as economically as possible, quickly determine axes lengths. In the meantime I reviewed the coastal system and it seemed to me that the fort

at Maryport must have been the centre of organisation. I followed up this idea and produced a new schedule of coast sites from Maryport to Moresby which would be acceptable as a solid basis for future fieldwork if we could find MF 26 at its new predicted position. The programme we finally followed covered the recording of the remains of MF 16 Mawbray, at last revealed in yet another gravel pit, repairs to T 16b, and the search for MF 20 and MF 26. In the event MF 20 became the major excavation of the season for one reason and the proving of MF 26 on Rise How Bank a major discovery for another.

MILEFORTLET 22 BROWNRIGG.

The circumstances of the discovery and later trial excavation of MF 22 were the subject of a paper in CW2 lxiii 140 f. At that time it was important to test the new site for pottery evidence to establish the period of occupation and for other evidence which might support the idea that the fortlet might have been demolished before A.D. 140 or after A.D. 158 and which would show that towers and milefortlets on the coast suffered a like fate. Since 1962 it has become important to examine milefortlets on the coast in order to see whether, as in milecastles on the Wall, there are two distinct types with long and short axes which might one day be allocated to different legions. In planning the excavation it was assumed that MF 5 (Cardurnock) would be one type and that the published plan in CW2 xlvii 86 would be a useful guide, but in the event this was not so for we found a nearly square fortlet rather like a milecastle and only one-third the size of Cardurnock.

Two weeks' excavation was planned to commence on 10 August 1968 with three objects, to plan the dimensions of the fortlet, to find the entrance and to

examine as much of the interior as time permitted. The dig was based on a ten-foot grid expanded from the base-line established in 1962 and a pattern of sampling pits, 2 ft. by 3 ft., later enlarged to 2 ft. by 8 ft. was set out where we hoped to establish front and back ramparts and ditches. Right rampart and ditch were proved in 1962, and left rampart and ditch were assumed to lie in the next field to the south. (Front and back, left and right are terms I have adopted to refer to walls of towers and ramparts of fortlets instead of using cumbersome compass points, the reader imagines himself standing within the structure facing the "enemy".) As it progressed the work produced many problems of interpretation, most of which were resolved when we realised that the plan of no. 5 was misleading us: the fortlet entrance proved to be at the middle of the front rampart where the ditch was omitted and not towards the front of the right rampart. The entrance, 6 ft. wide, gave access to a gravelled road on heavy bottoming on the cliff edge, the fortlet ditch stopping short of the edge to left and right. The inner toes of the ramparts were identified on the D, and 80 co-ordinates and measurements showed a nearly square interior 68 ft. back to front and 58 ft. left to right, all lying within field O.S. no. 13. We had not planned to excavate in the next field, no. 14, but it was clear from surface indication that left rampart and ditch matched the proved right rampart and ditch. Also field 14 was much lower, and a trial confirmed that ploughing had removed soil to below rampart-base level.

The omission of the fortlet ditch on the cliff side means that the builders made use of the natural advantages of the site. Here and elsewhere we must imagine the inter-site patrol track as running along the cliff edge; this helps to explain why there was no path to be seen in the cliff section by MF 15 (CW2

lxii 71). I had assumed that there had been a path from an entrance in the right rampart inland towards the road which Robinson had traced southward from Beckfoot fort, and we should have seen it in section in the cliff. I was wrong in using the outline of MF 5 in my argument, but, put the outline of MF 22 in its place and draw in a cliff edge patrol track and the argument still stands. The continuing use of the cemetery site just to the north of MF 15 may indicate that the track was substantially made and that later burials were the usual wayside interments. (CW2 xlix,

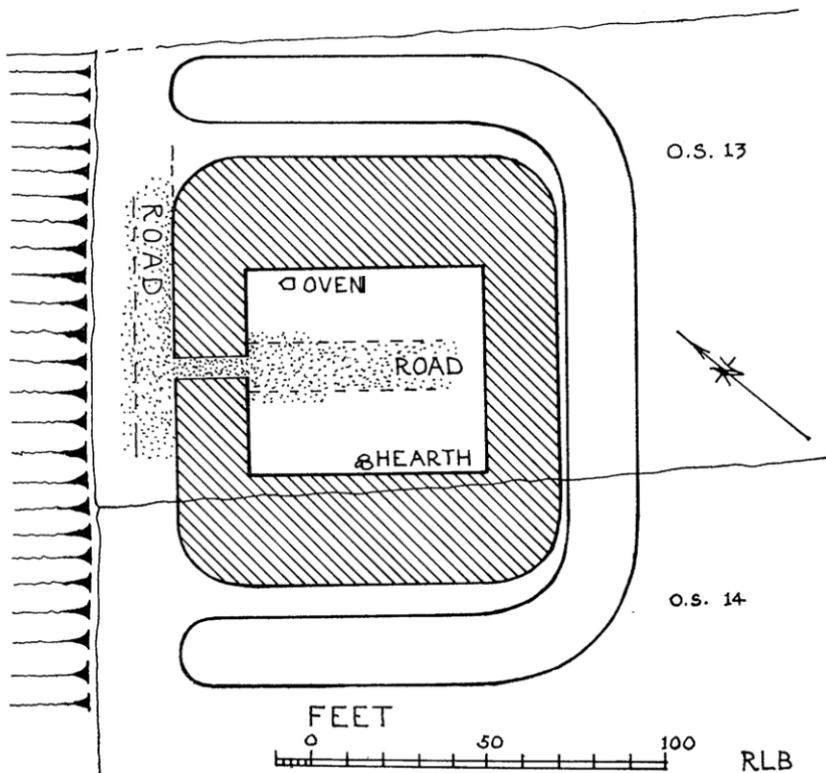


FIG. 1.—Plan of Milefortlet 22 Brownrigg.

32 f., liv 51 f., lviii 57 and 82, lxii 323 f.) It is now possible to say that MF 22 has a "long" axis and that others will be found with the same variations in dimensions as milecastles. Internal measurements giving the floor space are recorded for many milecastles; for purposes of comparison I choose to mention four:

- (1) Poltross Burn, MC 48, the most westerly Stone Wall milecastle (CW2 xi, plan facing 424).
Back to front 70 ft., left to right 60 ft. 9 in. "Long" axis.
- (2) Harrows Scar, MC 49, the first Turf Wall milecastle (CW2 lvi 18 f.).
Back to front 54 ft., left to right 50 ft. "Long" axis.
- (3) High House MC 50, second Turf Wall milecastle (CW2 xxxv 220).
Back to front 66 ft., left to right 55 ft. "Long" axis.
- (4) Solway House, MC 79, in stone replacing Turf Wall milecastle (CW2 lii, plan facing 18)
Back to front 45 ft. 5 in., left to right 48 ft. 3 in. "Short" axis. And now MF 22, back to front 68 ft., left to right 58 ft. "Long" axis.

The Excavation.

For record purposes I set down a brief account of the features examined in our trenches with our interpretation of their significance, but first some attention must be paid to the nature of the soil of the area and the clear divisions in the made soil covering the remains of the fortlet above the occupation levels.

Soil parent material hereabouts is the red sandy boulder-clay of the Scottish re-advance glaciation. Fossil soils under the Roman levels were found to be like those under the civil settlement at Old Carlisle and under the levels at Kirkbride and elsewhere, a thin black heath peat with a grey leached horizon below and then a yellow transition horizon to the red clay of the parent material. The soil profile illustrates a process of degeneration in which acid conditions

develop, probably as a result of climatic factors and low-base status, and clay in the upper horizons becomes mobile and moves downwards. Loss of clay leads to collapse of structure thereby reducing permeability, and a perched water-table results. As peat accumulates at the surface and anaerobic conditions are established in the soil, the red iron oxides are gradually dissolved and leached from the waterlogged horizons. These easily recognisable profile features make it easy to distinguish disturbed and undisturbed surfaces below the Roman levels and to identify turves cut from the site and even the places from which they have been removed.

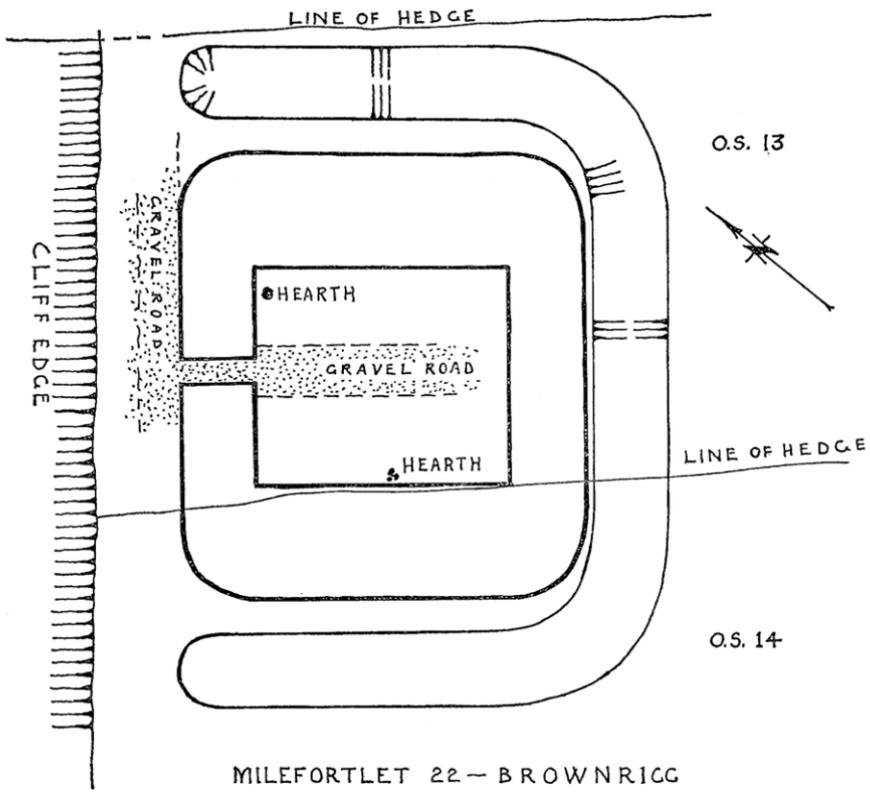
The first pits within the fortlet on line 70 provided an early opportunity to study levels and decide their significance. Five inches of stone-free plough soil indicated a long period in permanent pasture; below came a rather gravelly grey-brown loam with much coal and modern pottery throughout. As this covered the whole site and lay directly on paved and gravelled areas in C 90 and other pits, we thought at first we would find substantial remains of modern dwellings over the Roman levels. However, this was not so. Away from the gravelled areas the modern level rested on a reddish-brown clay loam which we decided was thrown down rampart filling. At its base were sandstone flags, boot-worn on one side, lying at a slight angle and some lumps of red clay. The flags lay on a fine-grained buff-coloured loam three to four inches thick, without doubt a windblown deposit, which sealed the Roman levels. It is very likely that the flagstones were at one time bedded in clay to form a rampart walk. The first task of a demolition party would be to throw the flags down the inner slope of the rampart, with some clay adhering, and then tackle the timber of the palisade. After clearing the interior of the fortlet the rampart, mainly core, would be dug

away and be spread over the site. Thus the impression gained from the 1962 trial of deliberate demolition and levelling of the rampart received further support.

The paved and gravelled areas mentioned above engaged our attention for some time. Various explanations were offered, coastguard station, fisherman's bothy, farmstead and other possibilities were all considered, but the true explanation came when pits C, D and E were explored on line 60, where we thought the fortlet entrance would be discovered; it was not there and the possibility of its being in the front rampart became a certainty when pits nearer the cliff edge were opened. A feature in A 80 gave us the needed clue; it appeared at first to be a rather slight road kerb running north-south, the stones were oval and flat and too small for effective kerbing. We saw that the kerb rested against turf and closely defined the outer toe of the front rampart, other pits extended the line and proved the entrance. Two levels of road were found of similar construction, heavy bottoming of sandstone topped off with shore stones and small gravel, separated by several inches of the windblown loam already noted within the fortlet. The same two levels floored the entrance passage through the front rampart and continued into the interior as a central road, but here there was evidence in plough scores on some of the more outstanding stones and the absence of gravel topping that the highest surface had been disturbed. The fortlet entrance was 6 ft. wide, as shown by the width of the two superimposed roads. The north-south road by the front rampart had no kerb towards the cliff edge, both upper and lower levels thinning out, but the wind-blown loam below, between, and above them, actually thickened towards the edge, and this thickening is entirely natural as a consequence of the mechanics of wind transportation. There is plenty of evidence in other cliff situations on

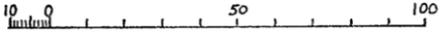
the coast for the accumulation of wind-blown soil at the cliff edge and one is tempted to wonder whether the sand blown into some of the coastal towers may not have arrived there as a result of the same "blow" which covered the interior of MF 22 with loam. In both cases we seem to have evidence of attempted and then abandoned reconstruction, and here as in towers 15a and 12a the reconstruction cannot be dated. The remade road within the fortlet was not as wide as the original road, and time would not allow any area excavation to find outlines of buildings and pathways so we concentrated on the urgent task of defining the inner toe of the front and left rampart and the extent of the fortlet ditch. Pits on the B line displayed the rounded end of the right ditch, and pits L, M, N on the 80 line gave us a complete section of the back ditch where we found not a few puzzling features. Ditch bottom was found eight feet below modern surface with the broken flagon and the sole of a military sandal; ditch slopes were odd, there was no apparent berm, water-worn flagstones overlapping like fish-scales were uncovered near ditch bottom against the outer slopes and the ditch was very wide, more than twenty feet. It was soon clear that serious slips had developed in the ditch sides; rampart had fallen in at one side obliterating the berm, and, at the other, stone revetment had failed to check an incipient slip, the bank failing in an arc, pushing the revetment to the centre of the ditch and creating a false and flatter batter.

The inner toe of the back rampart was difficult to define accurately because the slope of the ground and the hollow of the ditch had assisted the plough in its destructive work. However, a turf kerb in J 80 was satisfactorily revealed as the toe. The left rampart toe was proved in D 120 as a clear line of grey turves, resting on a grey clay rampart base 5 to 6 in. thick



MILEFORTLET 22 - BROWNRIGG

SCALE OF FEET



R.L.B. Nov '68

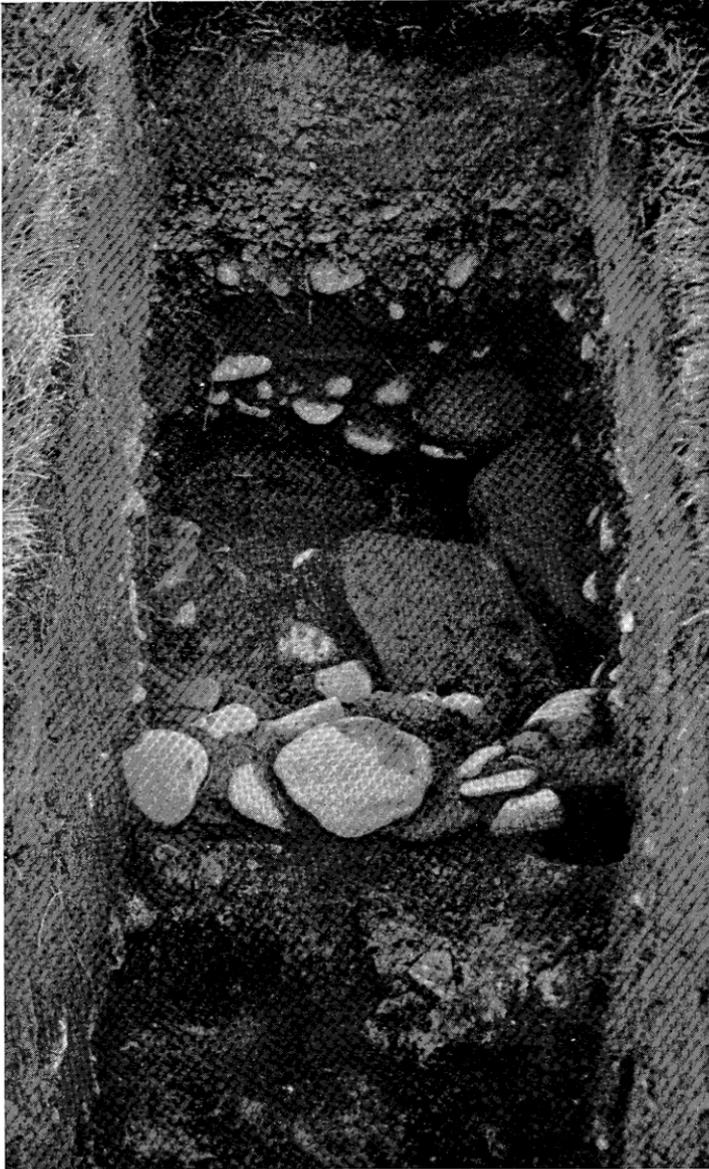


Photo: R.L.B.

PLATE I.—Milefortlet 22 Brownrigg.

Pit A 80 displaying heavy bottoming of the first road laid on the "natural" with loam and then later gravel spread above. In foreground the edge of the road clearly defines the outer toe of the front rampart.



Photo: R.L.B.

PLATE II.—Milefortlet 22 Brownrigg.
Remains of oven of sandstone flags and red clay in pit C 70.
A large boulder had been placed within the oven.

the reason for which was immediately apparent, the boulder-clay here had become very sandy, a normal local variation to be expected as we had found at Kirkbride. A similar clay base had been laid on sand for the rampart of MF 12. Rampart width at the base for the right rampart was established in 1962 as 31 ft.; front rampart was 21 ft. and back rampart 21 ft., although there was some difficulty, because of slip, in determining the correct line of the front. The width of the right rampart is not in scale with the others but the measurement is right, as is also the berm of about 9 ft. and the almost vertical line of the surviving courses of the turf of the inner toe. We did no work to establish rampart and ditch limits in field 14, so in making the plan of the fortlet I have mirrored the right rampart and ditch to complete the left side.

The 1962 trial gave us a little information about the interior of the fortlet; we hoped in the present excavation to give some of our time to an area excavation, but this work, on the scale on which it would have to be carried out to expose the outlines of barracks, was beyond our resources, both in time and labour. This will have to be attempted at some future date. In the meantime the further information we have from pits on lines 70 and 80 between co-ordinates C and J within the fortlet, and between right rampart and the central road suggests that we should expect to find features something like those shown in the photograph of the wooden barrack in MC 50 (TW), CW2 xxxv 226, fig. 9. We found lightly gravelled well trodden surfaces, flagged areas, part of a quern, a little pottery, and hearths as if for warmth rather than cooking. One such hearth in particular had a large boulder in it, and I must quote from p. 226 (*ibid.*): "The last act of the men had been to extinguish their fire by covering the embers with a stone." Some of the loose stone in greyish soil could have come from disturbed

stone platforms similar to those observed in Randylands MC 54 (CW2 xxv 240). It is certain that only one occupation level exists sealed beneath wind-blown soil and thrown down rampart and, except for the flagon in the ditch, all the pottery recovered was found either upon or trodden into this floor.

The pottery.

- (1) Build up of flagon, light red fabric with cream slip, nearest to Gillam's 4 (A.D. 90-130).
- (2) Rim fragment of grey carinated bowl with reeded rim, nearest to Gillam's 217 (A.D. 110-130).
- (3) Rim and fragment of grey jar, Gillam's III (A.D. 110-130).
- (4) Fragments of once black burnished jar/cooking-pot, no rim for exact type.
- (5) Fragments of dark grey jar/cooking-pot, no rim for exact type.

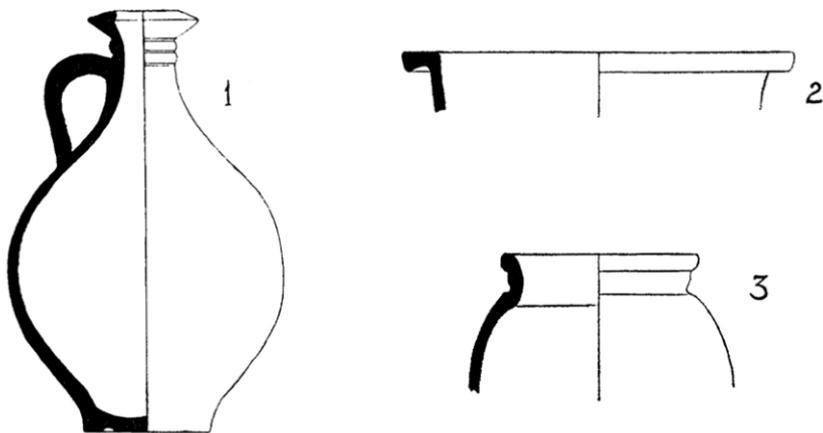


FIG. 2.—1. Flagon: nearest to G.4.
2. carinated bowl: nearest to G.217.
3. grey jar G.III.

Miscellaneous.

Stone disc $3\frac{1}{2} \times 3 \times \frac{7}{16}$ th in. thick, cooking-pot cover, wide distribution in the period.

Two conjoint pieces of rusted iron. The base would seem to have been a rectangular bar, slightly bent with two dissimilar terminals. Unidentified.

Quern. About one quarter of an upper stone in coarse sandstone very like Millstone Grit. Excessive wear is evident, reducing the thickness at the rim to $2\frac{1}{2}$ in. and near the centre to about $\frac{1}{2}$ in. The full stone was about 14 in. diameter. Part of a square tooled groove appears in the flat upper surface at the break, probably to take a cross bar with handle and central pivot hole which would position the stone over a fixed spindle in a lower stone. Find spot, lowest level in C 80.

Perforated stone. A diamond-shaped thin flagstone with central drilled hole $\frac{3}{4}$ in. diameter; it was found in D 120 leaning at an angle of 40° against the turf toe of the left rampart. Measuring 10 in. by 8 in. it looks like a roof stone but is clearly a pot lid.

The small amount of pottery found falls into the period A.D. 90-130 and considered with that found in 1962 supports A.D. 140 as the terminal date of occupation, and also the idea that the basic patrolling units of both Wall and Coast were founded as part of one plan at the very beginning of the building of the Wall.

Miss Christine Robertson took the pottery to Durham for me and prepared the report, under the guidance of Professor Eric Birley. Mr Wilf Dodds made the drawings.

MILEFORTLET 16 MAWBRAV.

The measured position of MF 16 is marked by a little hill, too small to enclose all the remains of a fortlet and showing no signs in rabbit burrows or

other small excavations of any turf or occupation material. For some years sand and gravel have been dug from the land on the seaward side, but it was not until early in 1969 that the workings began to cut into the hill. A fortunately timed visit on 7 March enabled me to identify rampart exposed rather high up in the sand of the hill and recover pieces of amphora, samian ware, cooking-pot and burnt clay with wattle holes.

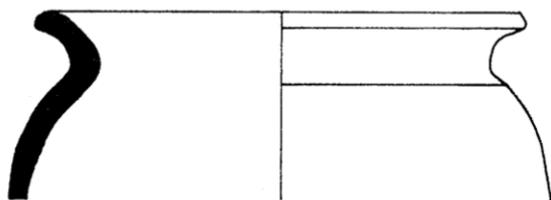


FIG. 3.—Milefortlet 16, Mawbray.
Significant rim fragment of cooking-pot in hard grey self coloured fabric. A.D. 120-160.

The height of the remains in the hill in relation to surrounding levels indicate that wind erosion must have severely damaged the greater part of the fortlet long before gravel winning began. Arrangements were made for the remains to be examined and recorded as part of the summer's excavation programme. Work began on 10 August and occupied us for two days. We cleaned up and extended the visible section of rampart; it petered out to the south on a fairly level base, but to the north dipped a little before coming to a clear edge. The line of the section was a few degrees east of the line of the system in this sector. The greatest thickness of rampart was 26 in. at a point where the top appears to have been levelled off and covered with a thin layer of gravel 9 ft. wide. Grey clayey turf had been used and this was seen to rest directly on clean sand, the original turf having been removed. This observation has diagnostic value:

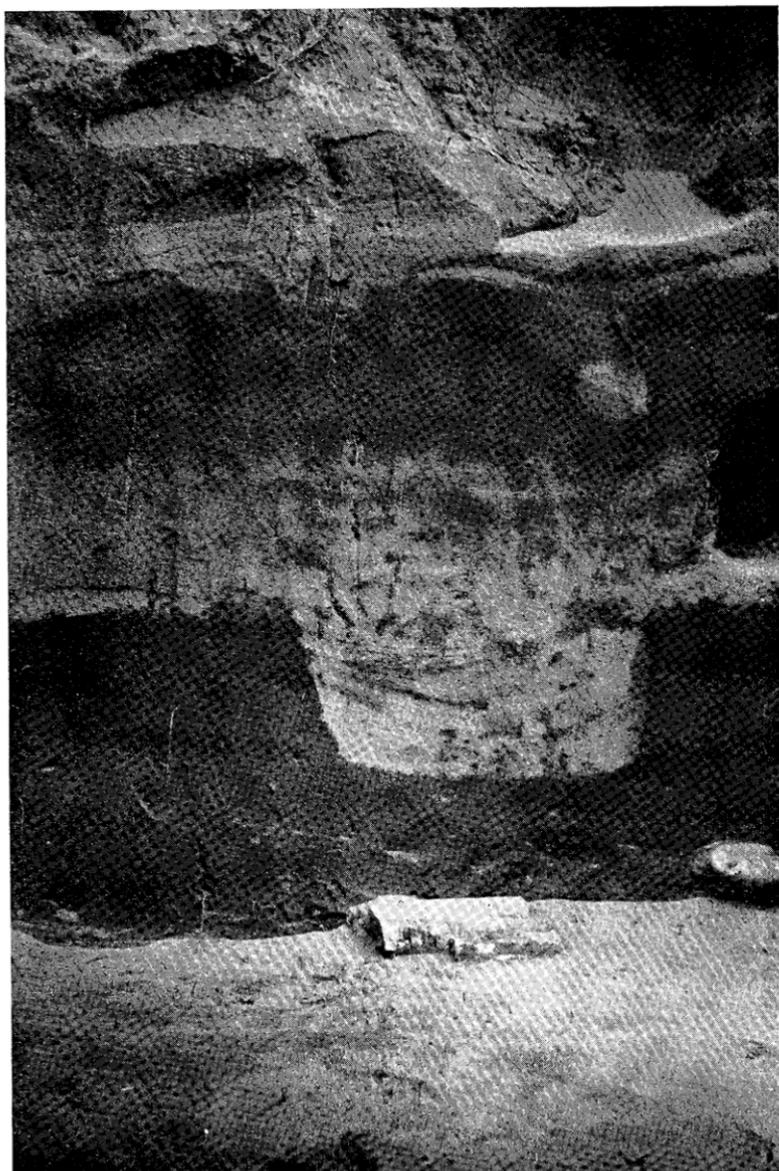


Photo: R.L.B.

PLATE III.—Milefortlet 16 Mawbray.

“Lockspit” visible in section on the north side, probably marking the outer lip of the fortlet ditch which was never dug. The clear edges of the trench and the clean sand within must suggest a period of sandstorms and erosion during the construction of the fortlet.

at MF 12 rampart base lay on clean sand, at MF 22 rampart lay on subsoil, here, and subsequently at MF 20, rampart toes could be identified by the reappearance of "Roman" soil beyond the limits of the laid turf.

It soon became clear that only a stump of rampart remained and since it could be traced over a distance of 45 ft. it must have formed part of the back rampart towards the right. Beyond rampart on the north side the Roman level appeared as an earthy dark-brown sand dipping slightly and interrupted by a feature 21 in. wide and 10 in. deep. When we dug a trial on the east side of the hill we found the same level and a similar feature, this time 36 in. wide and 12 in. deep with its direction parallel to the axis of the system. Since we found no trace of a ditch it seemed likely that we had found a trench or "lockspit" intended to define the site of the ditch, which, for some reason, had not been dug. We examined the trench seen in section and found that its direction was at right angles to the other trench. While clearing its edges we found an iron and bronze object lying on the Roman surface close by its south edge; it appeared to be a leg from dividers or compasses.

Levels towards the south end of the section petered out in a way which confirmed my first impression that wind and weather had taken away most of the mile-fortlet. Unfortunately we shall never be able to say whether MF 16 was a "long" or "short" axis fortlet. All we can say is that it has been found at its correct measured position and that its ditch was never dug.

Tower 16b.

On 12 August we went to T 16b, Mawbray Sandpit, with the intention of repairing damage by wind and unauthorised digging. After our work in 1954 I thought the remains were reasonably safe until a small boy

from Maryport some years ago dug out the interior, exposing the clay of the foundations to the weather. As the clay disintegrated, the inner edges of the footing courses began to sink. We built up the loosened walls, filled the interior with stones and sand and turfed the area, leaving the walls just visible. Our attempts at landscaping were rewarded by our finding a roughly built wall of sandstone and clay in line with and a little to the left of the line of the robbed left wall of the original tower, thus confirming my guess that the troublesome clay spread found all over the site in 1954 was debris from a later tower like that above T 12b. The later wall was 5 ft. wide and very solid. We saw no evidence of trodden surfaces or occupation levels on either side; it is possible that the wall is really a foundation and that bulldozing in 1954 removed associated levels. A few inches of sand separated the wall from the top of the Hadrianic foundations. We examined the entrance of the first tower hoping to prove either a "straight end" to the right wall or a "short turn"; we found the gravel path outside, some gravel on the step, but only clay filled gaps where the facing stones had been. The type of doorway is therefore still uncertain. Our trench displayed the levels across the robbed wall to left of the tower entrance. There were two clear demolitions separated by blown sand, so the later tower was not a rebuild of an earlier stump.

As I was preparing to write this paper I received a letter from our member Mr G. M. Leather with some comments on tower/turret construction. "The roof must have been covered with something to keep out the rain, I suggest lead which would, until recently, have been regarded as the most usual. It would, of course, have been taken away with the demolition." Indeed, I recorded from the builders' level within the tower in 1954 some sheet lead trimmings folded

together. "The other thing is this, when you took us to 16b I there picked up a piece of stone with a chamfer (45°) on the two sides. The three possible locations would be (a) plinth corner, (b) string corner, (c) merlon cap."

I am most grateful to Mr Leather for his pertinent observations. The chamfered stone matches the one from T 16b and I am quite happy to accept it as being part of a merlon cap. Mr Leather's drawing shows the stone $2\frac{1}{2}$ in. thick, 6 in. by 8 in., $\frac{1}{2}$ in. vertical to the chamfer, a straight cut opposite one chamfer and a break opposite the other. The tooling on one chamfer is unworn and has been done with a $\frac{3}{8}$ -in. gouge. The top is smooth, the underside rough.

MILEFORTLET 20 LOW MIRE.

The discoveries of 1962 which fixed the positions of a number of new sites in a new sector of the coast enabled me to plot the probable position of MF 20 close to the farm Low Mire, now called Heather Bank (CW2 lxii 140 f. and fig. 1). On 16 August we prospected a flat-topped hillock with a suspiciously steep slope on the seaward side just over the fence on the left side of the entrance to Heather Bank. We did not intend to do more than dig a few trial pits and hoped to find laid turf and, with luck, some pot. We opened a line of pits at right angles to the general line of the system hereabouts and within an hour we had found rampart, Roman glass, nails, Hadrian-Antonine cooking-pots and a gravelled surface. At that point I would have been content to fill the pits and record "MF 20 proved at measured position" if we had not found some 4th-century sherds. The next day we decided to link our exploratory pits to make two substantive trenches at right angles to each other, and to attempt an area excavation where the late pottery

had been found. Again previous experience was no guide for we expected a front entrance, and efforts to find it were inconclusive. On the third day we had a visit from Mr J. R. Slack, by whose kind permission we were digging. We accepted his offer to fill in for us and decided to make this our main task of the season and try to recover the plan of the fortlet. Progress was slow over the next few days, for the promise of an "easy" dig from our first trial was not fulfilled; we had, quite by chance, found the inner angle of the front and right ramparts with fallen walling on a gravelled surface all not too far down. Elsewhere we had to dig through four feet of sand before we found levels which at first we were quite at a loss to interpret. The site itself helped us to resolve some of our difficulties; founded on loose sand the fortlet had suffered badly from wind erosion on the south and west and there had been extensive repairs with a very peaty turf to the left and part of the front rampart.

Brilliant red and orange colours and "brick-dust" within the rampart show the characteristic signs of a peat-moss fire. The right rampart was original grey clayey turf lying on clean sand and we derived a most useful rule based on MF 16, "clay on sand=rampart, clay on earthy brown sand=fallen rampart" which helped us to define its edges.

Apart from the problem of tracing the outlines of the interior of the fortlet, work was progressing slowly on the clearance and recording of the levels already exposed in our trenches. One period of occupation was clear within the Wall Period Ia as might be expected; careful examination of the area from which late sherds came, revealed only a rough hearth unrelated to any structure lying on blown sand sealing the lower levels. By 23 August we were ready for "surgery", Mr Slack having offered us the use of his digging machine because of the slow progress of our small labour

force. Controlled by his son Michael, it quickly made trenches four foot wide where my appreciation of the site suggested we might expect to find significant features. We sectioned the right rampart in two places and then tried for the back rampart, finding only cobbles and gravel; this was the entrance, our trench having gone clean through it into the fortlet. We now were able to identify gravel previously exposed near the front rampart as part of the internal axial road.

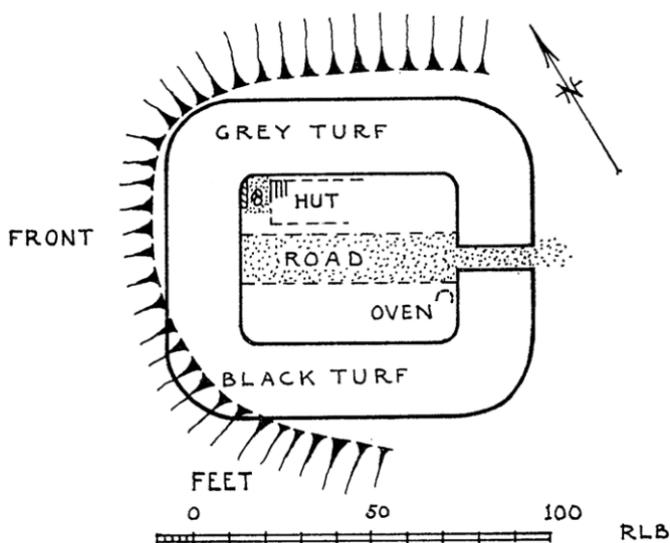


FIG. 4.—Restoration of Milefortlet 20 Low Mire.

Another cut across the back rampart to left of the entrance showed its inner edge and part of an oven formed of small flagstones set on edge. The last trench crossed the left rampart towards the interior and found the axial road again. I must reassure those who may be alarmed by the use of machinery for excavation and state that the greater part of the inside of the fortlet remains undisturbed, and that it was quite easy to

direct the operator by signals because of the clean nature of the overburden. We occupied ourselves over the next four days examining and cleaning up the features so quickly unearthed. The fortlet measured 48 ft. left to right and 60 ft. front to back, thus a "long" axis. The entrance path was 6 ft. wide and made of cobbles topped with gravel; the trodden surface was clean and identified by cooking-pot trodden into it. The road within the fortlet widened to about 10 ft. and was 15 in. thick, but as it had no kerbing the gravel had spread on either side and could not be distinguished from any light spread there may have been between road proper and the front of the wooden hut, the traces of which were being revealed in our first trench.

The estimation of the original width of the rampart was difficult because of erosion at its outer edge; the right rampart was certainly 21 ft. wide at its mid point and this measurement may be taken as a minimum and safely applied to the other sides of the fortlet. The internal angles were rounded, this meant that the buildings could not be placed right in the corners and consequently the space could be used for some purpose. In the front right corner the space had been gravelled and had a hearth in the middle overlaid by a tumble of sandstone which must have come from a short retaining wall at the inner toe of the front rampart. Much pottery and many nails in this area indicate meal preparation, probably under a wood lean-to shed. The straight line where the gravel ended clearly marked the end of a hut, and as we scraped away the dark sand of the occupation level the dark parallel marks left by the floor beams showed plainly in the light-coloured sand below.

We should have made an effort to find the ditch round the fortlet when Mr Slack's digging machine was on site, and it would have been easy to extend

an existing trench to one side or the other of the gravelled road to the entrance. A few small pits dug later in this area were inconclusive, and after considering the whole area round the fortlet, the extent of past erosion, the deep modern ditch now culverted on the right side, and the relative levels inside and outside, I had to decide that this task for the present would be too expensive in time and effort, especially if the ditch had never been dug, while the problem of fixing the internal dimensions of the fortlet needed all our attention. We know that the ditch for MF 16 was marked out but not dug, and if the ditch for MF 15 was not dug either, then the remains of turfwork seen in the cliff section must have been the last fragments of rampart and not a turf kerb to retain ditch upcast (CW2 lxii 71). Likewise, if the entrance of MF 15 had been at the centre of the back rampart it should have been visible as a layer of gravel and stones: it was not, therefore MF 15 was like MF 22, it had a front entrance. There may have been a "lockspit" marking the ditch but not at that time recognised as such and interpreted then as something to do with cremations.

The finds.

Considering the area exposed we found more pottery in MF 20 than at MF 22 and, except for the late sherds, all are datable to Wall Period Ia in a single level, strongly suggesting a relatively short period of occupation.

MILEFORTLET 20 : POTTERY AND GLASS.

By GEORGINA PLOWRIGHT, B.A.

The pottery from the 1969 excavations of Milefortlet 20 included one sherd of samian and fragments of at least twenty-two different coarse-ware vessels, there

being eighty-two sherds altogether. Part of a square glass bottle was also found. Professor Birley notes that with the exception of part of a cooking-pot (no. 9), which is probably early 4th century, the pottery falls within the Hadrianic period.

The pottery types referred to are from Mr J. P. Gillam's "Types of Roman coarse pottery vessels in Northern Britain" (2nd ed., 1968).

I would like to thank Professor Birley and Mr Wilfred Dodds for help in preparing this report.

Samian.

One fragment of part of the footring and floor of a plain samian dish, form 18/31. Unstratified. Not drawn.

Coarse pottery.

- (1) Six (four + two conjoining) rim-fragments of grey self-coloured cooking-pot, with two bands of smoothed decoration below the rim. Distortion of the rim has occurred in two places before firing — similar to Gillam type 117 (A.D. 120-150), cf. Birdoswald,¹ fig. 14, no. 22a (except that the fabric of the MF 20 sherd is hard). From disturbed level under blown sand.
- (2) Rim fragment of cooking-pot of sandy-grey fabric with traces of burning. Similar to Gillam type 120 (A.D. 120-160) but without the wavy line. Unstratified.
- (3) Rim-fragment of black-burnished cooking-pot burnished on the exterior and inside of the rim. Similar to Gillam type 122 (A.D. 120-160). From the "oven" to the left of the entrance in the back rampart.

¹ "Excavations on Hadrian's Wall in the Birdoswald-Pike Hill sector, 1929", by I. A. Richmond and E. B. Birley (CW2 xxx).

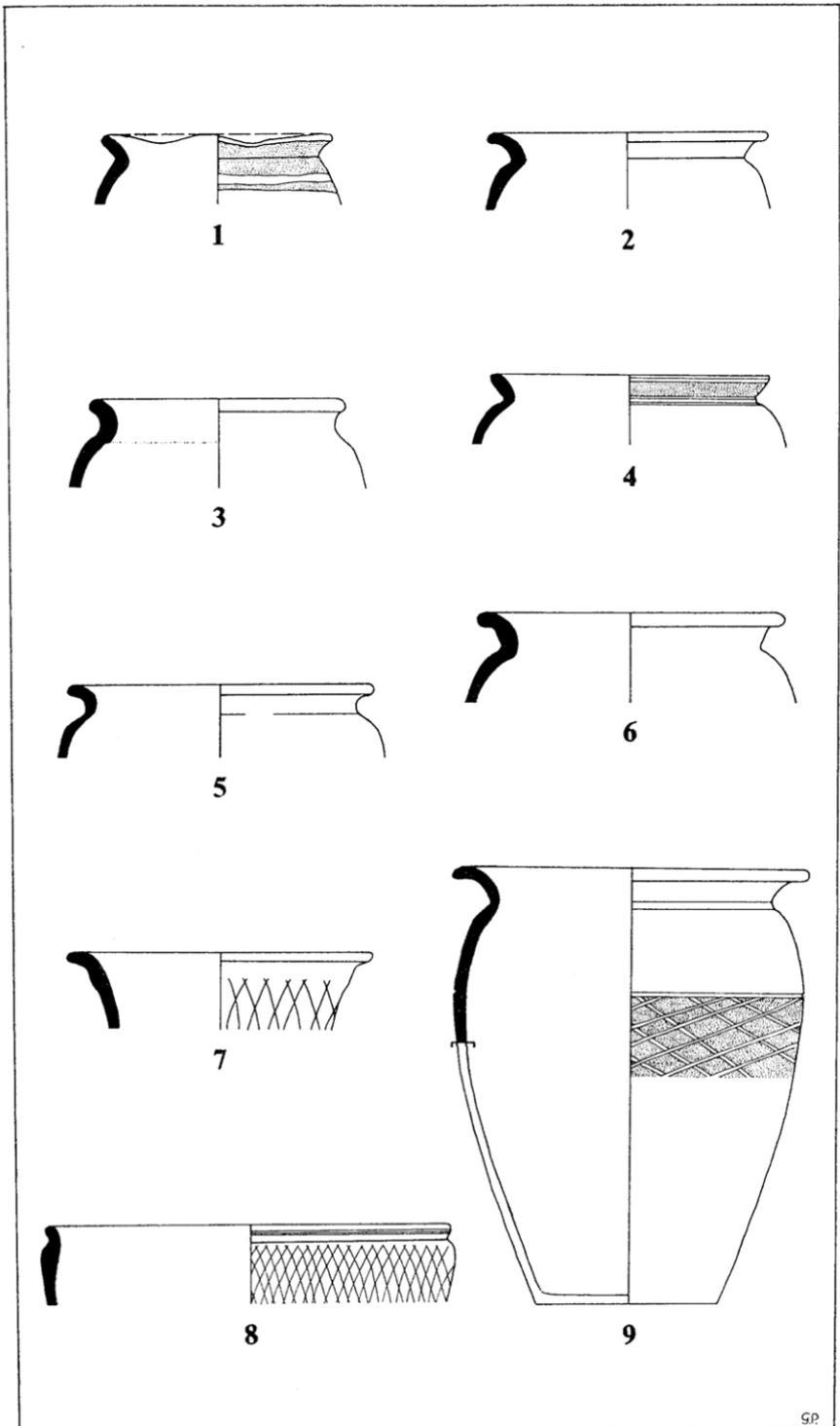


FIG. 5.—Coarse pottery from Milefortlet 20 Low Mire.

- (4) Five fragments, two conjoining, of grey cooking-pot in hard fabric, similar to Gillam type 121 (A.D. 120-160). The outer surface and the rim have been burnished. Unstratified.
- (5) Rim-fragment of cooking-pot of grey fabric with traces of burning. Similar to Gillam type 124 (A.D. 120-160). Unstratified.
- (6) Five rim-fragments, two conjoining, of black-burnished cooking-pot, burnished on exterior and inside of rim. Similar to Gillam type 125, but without the wavy line (A.D. 120-180). Unstratified.
- (7) Rim-fragment of bowl in black-burnished fabric with acute-angled lattice decoration. Nearest Gillam type 221 (A.D. 140-180): however, the slightly inward sloping rim suggests a slightly earlier date than this. Unstratified.
- (8) Four conjoining fragments of a latticed bead-rim dish of a fabric that was originally black-burnished but which now has a rough white-grey surface due to burning. The bead has a discontinuous groove on it and the latticing is acute-angled. Nearest to Gillam type 318 (citing two unstratified examples from Balmuildy and one from Milecastle 48, "A.D. 160-200").
Two fragments from the disturbed surface inside the right rampart and two from the disturbed level under blown sand.
- (9) Seven (five plus two conjoining) rim-fragments of black-burnished cooking-pot with everted rim. Burnished on the inside of the rim and on the exterior, except for a rough zone (due to wear in use) on the underside of the rim, and on the decorated zone of obtuse-angled latticing. The decorated zone is bounded above by a scored line. Similar to Gillam type 148 (A.D. 290-370),

cf. Carrawburgh,² fig. 10, no. 29. Three body sherds with similar fabric and decoration could also belong to the same vessel. From higher level under blown sand.

(Not Drawn).

- (10) Two fragments of light buff self-coloured flagon. From the disturbed level under blown sand.
- (11) Base of a cooking-pot in soft, light grey, self-coloured fabric. From the lowest level hearth in the north-west corner.
- (12) Part of the base of a cooking-pot in soft, light grey, self-coloured fabric. From the disturbed surface inside the right rampart.
- (13) Small fragment of the base of a cooking-pot in soft, grey, self-coloured fabric. From the lowest level hearth in north-west corner.
- (14) Small fragment of base of a cooking-pot of hard, dark grey, granulated fabric. Carbonised. From lowest level, hearth in north-west corner.
- (15) Small fragment of cooking-pot base in sandy self-coloured fabric-reduced grey on surface, sandy in section. From the disturbed surface inside the right rampart.
- (16) Eighteen body sherds of jar/cooking-pot of soft, light grey fabric.

Fourteen unstratified, two from disturbed level under blown sand, one from lowest level hearth in north-west corner and one from the disturbed surface under right rampart.

- (17) Eighteen body sherds of dark grey jar/cooking-pot; two are plain and burnished, and sixteen decorated with acute angled latticing, which would seem to indicate a comparatively early date (i.e. 2nd rather than the 3rd century.): eleven

² "The Temple of Mithras at Carrawburgh", by I. A. Richmond and J. P. Gillam (*Archaeologia Aeliana*, AA4 xxix).

are from the lowest level hearth in the north-west corner and seven from the disturbed level under blown sand.

- (18) Body fragment of a hard grey, self-coloured jar/dish marked with an incised, horizontal line. Trodden into the surface inside back wall.
- (19) Two fragments of wall/shoulder of dishes, similar in fabric and laticing to no. 17 above. From disturbed level under blown sand and the disturbed surface inside the right rampart.
- (20) Fragment of amphora rim in orange self-coloured fabric, lightly gritted — similar to calender rim form 9. Fig. 19.³ From the gravel of lowest level, north-west corner.
- (21) Fourteen conjoining fragments of neck handle and body of flagon in red slightly gritty fabric with traces of buff-coloured slip (?). Nearest to Gillam type 4 as found at MF 22 (Fig. 2, no. 1).

Glass.

Fragment of base/wall of square glass bottle with geometric pattern of at least three raised concentric circles on the base. Base would be approximately six inches across on at least one side.

MILEFORTLET 16 : FINDS.

- 1. One fragment of a plain samian dish, consisting of part of a footring, floor and the beginning of an angle of a Dragendorff 18/31 dish.
- 2. Rim fragment of cooking-pot in hard light grey self-coloured fabric. Lightly and finely gritted, especially on the surface of the rim. Nearest Gillam type 122 (A.D. 120-160).

³ M. H. Callender, *Roman Amphorae* (O.U.P.).

MILEFORTLET 20 : THE IRON KNIFE.

By WILFRED DODDS.

The iron knife is approximately three and a half inches long and one and a quarter inches in breadth. It is rusted and damaged but the form is still obviously of a basic triangular single-edged type with a plain tang to accommodate the haft. Knives of this general shape and type are recorded in either bronze or iron from as far back as 5th Dynasty Egypt. Iron forms, however, are recorded from the site at La Tène and are widespread in other native and Roman sites in north-west Europe. In the immediate context they are recorded from many sites in the Wall area, cf. Cardurnock, and are preserved in museums as at Carlisle, Corbridge, Newcastle, York, etc.

Objects of iron. MF 20.

Forty-six corroded nails or parts of nails of common types were found within the area of the right-hand hut and the gravelled space between the end of the hut and the front rampart. The sizes of parts of nails could be assessed by measuring the cross-section in relation to the position of the nail head.

Large nails, more than 3 in. long	. 9
Medium nails, 2 in. long	. 9
Small nails, 1¼-1½ in. long	. 14
Hob nails	. 5
Nail points	. 5
Nail heads	. 4

The nails are all square in section and many are hollow. This happens when they are driven into timber, particularly oak, and iron as ferrous iron complexes with tannins to form a very stable compound which inhibits rusting; the iron rusting away within the protective shell.

D

Four pieces of "nail" when examined more closely were found to fit together and make another knife like the one described by Mr Dodds. The tang in this case had survived, 3 in. long and slightly clenched. at the end.

Pot lid. MF 20.

One of the earliest finds was a stone pot lid which must originally have been about 8 in. square with a drilled hole 1 in. diameter at its centre; half remains, broken diagonally across the hole. It matches one from MF 22.

MILEFORTLET 16 : A BRONZE-PLATED IRON OBJECT.

This find first appeared as a lump of iron-stained sand lying on the surface of the "Roman soil" at the edge of the "lockspit". George Richardson cleaned it carefully and discovered it to be of steel plated with bronze; overall length 3 in., tapering from $\frac{1}{2}$ in. to $\frac{1}{4}$ in. and tapered in section from nearly $\frac{3}{16}$ th in. to about $\frac{1}{16}$ th in. Each end had been decorated by engraving a pattern of diagonal lines within a square. Very probably a part of one leg of a pair of dividers.

Discussion.

It will be worthwhile to summarise the results of two seasons' excavation and, in the light of the new facts we have about the milefortlets, see whether we can infer anything significant about those as yet unexamined. We have examples of two types of fortlet, apart from the question of "long" or "short" axis, which may have been designed for different situations; front entrance in cliff situations, rear entrance in open situations. It is possible also that plans were modified to suit stable and unstable sites, and the omission of

the encircling ditch may not so much represent a triumph of common-sense as a lesson hardly learnt on the dangers of initiating wind erosion by destroying natural cover.

Stable situations.

- MF 1. Biglands. Raised beach. Detail visible in air-photograph of ditch and rampart. "Long" axis and back entrance inferred.
- MF 5. Cardurnock. Raised beach. Detail from excavations of rampart, ditch, and entrance to front of right rampart. Anomalous, a small fort rather than a milefortlet.
- MF 9. Skinburness. Raised beach. Detail from air-photograph of ditch and rampart. Overall size difficult to assess, but could match MF 5. Position of entrance not certain.

Unstable situations.

- MF 12. Blitterlees. Sand-dunes on raised beach, part of rampart only, grey sandy-clay turf, severe wind damage.
- MF 16. Mawbray. Part of rear rampart only, ditch not dug, no evidence of position of entrance.
- MF 20. Low Mire. Sand-dunes on raised beach, grey sandy-clay turf repaired in peaty turf, entrance in back rampart. Probably no ditch. "Long" axis.

Cliff situations.

- MF 15. Beckfoot Beach. Sand-dunes on raised beach, last traces of turf now gone from cliff section. Front entrance inferred. Ditch not dug. Site may have been unstable in Roman times.

- MF 21. Swarthy Hill. "Horse-shoe" crop mark visible August 1968, front entrance inferred. Could be "long" axis.
- MF 22. Brownrigg. "Horse-shoe" ditch, entrance in front rampart, "long" axis.
- MF 26. Rise How Bank. "Horse-shoe" ditch, entrance in front rampart. Could be "short" axis.

Exactly how the picture on the coast will develop in years to come is anyone's guess; it is a discouraging thought that fortlets on unenclosed land may be so damaged by wind erosion that their axes cannot be determined and that others may be almost ploughed away, so that axes may only be inferred if the fort ditch can be traced.

Front and rear entrances suggest two types of fortlet and building by different legions, there may be another explanation; watch must have been kept from MF as well as towers, and in cliff situations the view from rampart and cliff-edge path must have been adequate without further height. In low open situations a tower on the front rampart would have been essential, and unless we imagine a gate tower, as in a Turf Wall milecastle, a rear entrance leaves the front clear for a tower. Even the anomalous MF 5 could be regarded as an extra large "long" axis, rear entranced milefortlet with entrance, axial road, and watch-tower, offset to the right and the whole turned through 90°.

The new information we now have enables us for the first time to compare the internal dimensions of milefortlets and milecastles, with one significant difference, milefortlets have but one entrance. On the Wall, milecastles were key points where traffic could cross the frontier, they were intended to be continuously manned as customs and control points and they had two gates. The addition of forts to the line of the Wall

did not at first alter this arrangement, but the "vallum decision" isolated the milecastles within the military zone and denied access to the civilian population so that the frontier could only be crossed at the forts. On the coast, control could not be exercised in this way; even if there had been back and front gates the absence of curtain and the barrier of the Solway makes the idea of traffic control through the milefortlets ridiculous. The addition of forts to the line on the coast must have diminished the role of the milefortlets, and this, perhaps, is the explanation of the comparatively small amount of occupation debris within those so far examined; it may well indicate that they were abandoned soon after the forts were built, that their garrisons were concentrated in the forts, and that it was from these that patrols were sent to bivouac in selected towers which experience had shown to provide the best look-out points. Hence the thick debris in, for example, Towers 12b and 16b, both equi-distant from Beckfoot fort, and the lesser signs of use in other towers. It is now established beyond doubt that the coast units suffered severe damage by wind either stripping the sand away and exposing foundations or by blowing sand over all. The problem of coping with widespread damage may have been an important factor in their early disuse.

It seems to me that we really have to consider the evolution of a frontier. Dr Jarrett writing in *Germania* (Dr M. G. Jarrett, "Aktuelle Probleme der Hadriansmauer", *Germania* 45, 1967, p. 97) makes the point that there were so many changes during the building of the Wall that there could not have been any clear plan from the start. On the coast the position is much simpler: there is the basic patrolling system, the "fort" decision, no complicating "vallum" decision, and then the abandonment of many of the units. The Stanegate frontier as the precursor of the Wall is all very well

between Corbridge and Carlisle and even on to Kirkbride where there was a large military site with pottery of the right date. But if it was a frontier in depth then towards the western end I think we ought to look a little further inland for the logical extension of the Stanegate from Carlisle via Old Carlisle and Papcastle. The Roman road is a fair distance inland but roughly follows the curve of the coast with Maryport fort now appearing as a sort of outpost. Taking another view, if we regard Carlisle as a hinge, the fixed part is represented by the Eden, the Solway shore and the coast, and the other moving part can sweep the country from Forth to Tyne. In other words nature had already determined, by the meeting of sea and land, the exact line of part of the emerging frontier at a time when forts in the North were gradually being given up and forts in the South were being rebuilt in stone. The Hadrianic frontier did not suddenly appear at a wave of the Emperor's staff in A.D. 122; there must have been many ground surveys made and tentative plans drawn up long before his visit in that year. Indeed, even before his accession in A.D. 117 someone could have been given the task of drafting a frontier plan; one would look for natural defensible features where the line could not be outflanked, backed up by good lines of communication, and the coast is just such a feature. Moreover it keeps a close watch on Galloway, from whence a Tyne-Eden line could be outflanked.

The fort at Maryport is well placed to command the Solway, and the way in which the coast units are laid out on either side of the fort might imply that the patrolling sites were planned in order to watch Galloway, and this pattern was subsequently adopted when the "Wall" line was fixed. I would like to believe that the Wall was begun in A.D. 120, during the governorship of Pompeius Falco, and that the very

costly "fort" decision was made by Hadrian himself during his visit of inspection in A.D. 122. I have already discussed the effect of the "fort" decision on the coast and I feel we need more time to allow for the coast units to be built and then to be made redundant by the "fort" decision than is provided by starting the Wall in A.D. 122 and finishing the forts by A.D. 124. Starting the Wall in A.D. 120 gives us two more years, enough to account for the occupation evidence from the coast MF and towers. I am aware of the *pater patriae* inscription from the fort at Moresby, dating it to A.D. 128, but the fort may be a later addition, and, in any case, we need first-class evidence when faced with the problem of deciding the proper sequence of events during such a short period of time as eight years; as yet the evidence is scanty.

As to later periods there is even less evidence. The sherds from MF 20, A.D. 290-370 (no. 9 in Miss Plowright's report), and the matching rim fragment from MF 12 were not clearly associated with any structures. At Cardurnock and Burrow Walls the late pottery indicates re-fortification at some time during the same period.

Acknowledgements.

It is my pleasant duty to thank the almost countless friends who contributed in varying ways to the success of the excavations: Brian Ashmore, George Richardson, Anthony Whitehead, Joe Kelly, Billy Crellin, Alan Winship, Rupert Ashmore, Charles Sydney, Graham Hislop, Eric Bardsley, Stan Smith, Dorothy Morgan, Jim and Natalie Griffiths, Christine Robertson, David Kemp, Julia Mendus, Georgina Plowright, Felicity Allbrook,

I thank Mr Stephenson for permission to dig at MF 22, Mr Hurst and Mr Greggains for permission to examine MF 16 and T 16b, Mr Perceval for permission

to look for MF 26, and Mr J. R. Slack of Mealo House, Allonby, who not only allowed us to examine MF 20 in his field, but lent us much needed electric fencing and the use of his digging machine, very ably operated by his son Michael. Council of the Society made grants of £30 and £10 towards the cost of the excavations, and Mr Robert Hogg provided tools from his store in Tullie House.

PART II. A new schedule of the coastal sites.

When I wrote my paper *Moricambe in Roman times* (CW2 lxii 56 f.) I had the feeling that Milefortlet 5 at Cardurnock was somehow anomalous. The sea inlet called Moricambe without any doubt interrupted the coast in the Roman period, and a more or less rigid patrolling system could not have been laid out from Bowness to St Bees Head. The discoveries of 1962 established a new sector of the system within two miles of Maryport thus making it possible for the first time to measure off tower and fortlet positions close to the fort. Some rather inconclusive fieldwork was attempted, not only because I was anxious to identify more sites, but because I was wondering how the Romans had modified their layout of the units in the neighbourhood of the pre-existing fort (CW2 lxvi 41). Evidence from MF 22 and MF 20, as well as the air-photographs of MF 1 and MF 9, shows that it is right to consider MF 5 as exceptional because it is three times the normal size. MF 5 is not a typical milefortlet; we must regard it as a small terminal fort on the north shore of Moricambe, established and maintained through the centuries for a special purpose and marking the western end of Wall organisation proper. While it is clear that the the coastal series is an integral part of the Hadrianic frontier, the very existence of Moricambe offers difficulties in the conception of a

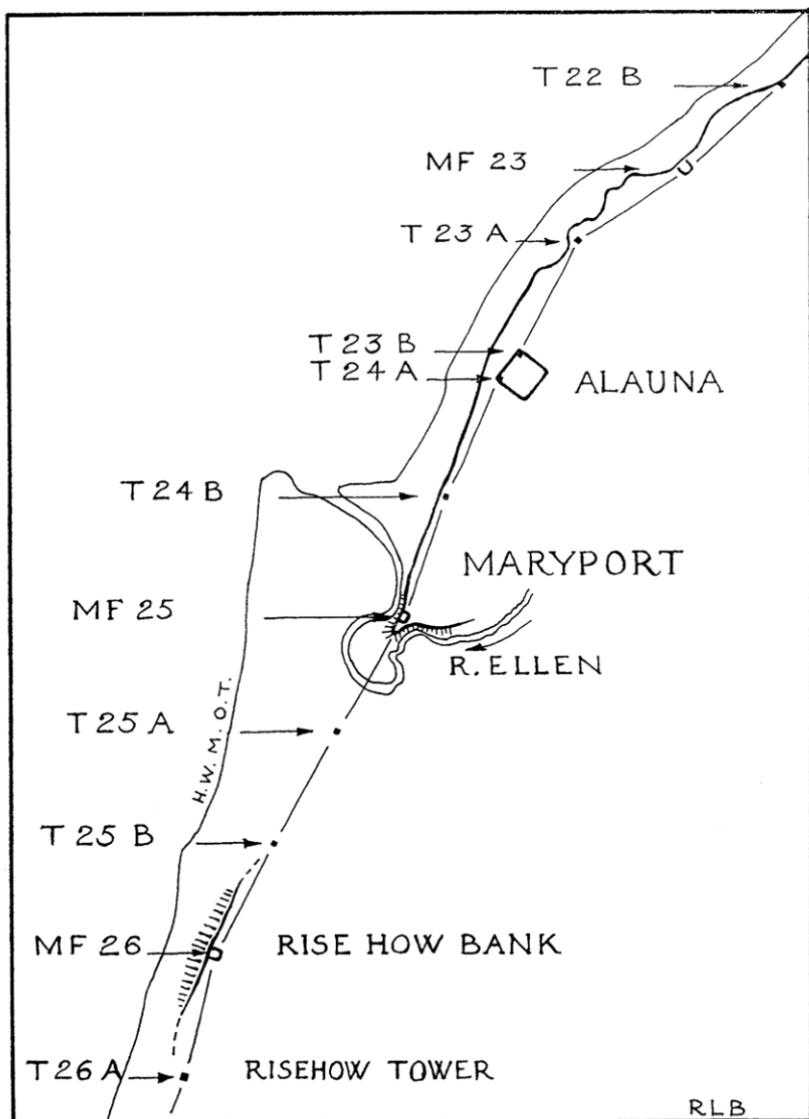


FIG. 6.—Outline plan of part of the Cumberland coast illustrating the symmetry of the coastal units to north and to south of the fort at Maryport which led to the identification of the remains of Milefortlet 26 Rise How Bank.

continuous patrolling system from Bowness to St Bees Head, and it seemed to me that it was time to explore the possibility that the coast south of Moricambe had been organised from the fort at Maryport. My first thought was to expect anomalies in the system on either side of the fort, and indeed Risehow tower, known since 1880, has never seemed to be in quite the right place. However, marking out the units as accurately as possible on the 6-inch Ordnance sheets along the coast from MF 22, I found T 23b to come exactly at the north-west angle of the fort, and starting from Risehow tower and measuring as the crow flies six units of 540 yards towards the fort from the south, I arrived at the south-west angle. If there had been a second site south of Maryport so that I could have been reasonably certain as to the positions of MF, some anomaly might have been immediately apparent. However, this preliminary exercise showed exciting possibilities as it seemed to suggest that it was possible to present a case for the fort as the origin and centre of the system. With the fort already there one must look for a logical and practical starting point for measurement, and it looks as though the corner turrets were used. If we continue the system of numbering already in use and regard the fort as "notional MF 24" with the corner turrets as towers, then, on the north side, everything fits in splendidly, and if the system is symmetrical, positions of MF and towers on the south side may be forecast. Indeed the measured position of MF 25 placed it at Castle Hill, a prominent headland with a loop of the Ellen at its foot, a fine place for a fortlet guarding the crossing and a very good look-out point. So far so good.

The original schedule of coastal sites in RHW was at best merely an extension from the then last known site T 16b along a reasonable line along the coast, making no allowance for post-Roman changes. While

clearly Beckfoot fort stood at T 14b and Risehow tower seemed to fit the system, the farther the line was extended the greater was the probable error, and the significance of any apparent anomalies near Maryport reduced. Happily, subsequent discoveries allow more accurate plotting and a revised schedule may be prepared, but even so it is only the section south of Maryport that needs attention. Thus, having found a logical basis, in the absence of evidence on the ground, for the siting of MF and towers I got out the maps for the rest of the coast and started measuring. We know from the Swarthy Hill-Brownrigg sector that the Romans took advantage of the low cliffs for siting the units; they must have done so south of Maryport also. In the new schedule MF 26 sits at the edge of a little cliff, miraculously untouched by modern industry, called Rise How, an ancient sea-cliff; farther south these ancient cliffs are fairly well defined and provide a reasonable line for the system until we come to Burrow Walls where obvious coast changes since Roman times are a problem. (See discussion in CW2 lv 42 f.) At first sight the fort is not at a tower position as if it had been sited for more urgent reasons — the presence of a convenient headland like that at Moresby — and the direction of its long axis seems wrong. The long axes of Beckfoot and Moresby forts are square to the general line of the coast; if the same rule applies to Burrow Walls then T 29b may have been a turning point for a new line making for the cliff on the other side of the mouth of the Derwent some way to the north of Chapel Hill (St Michael's Mount, see CW2 xvi 52). At T 29b the necessary turn is through 23 degrees and the long axis of the fort is at right angles to the new line. In any case, a realignment is needed here to bring the system back to the sea cliffs south of Workington, and it is satisfying to find more than a hint that Burrow Walls stands on a tower position, 29b.

Continuing the exercise, I plotted MF and tower positions along the edge of the cliffs to Moresby. For various reasons I hoped to find an anomaly in the siting of the fort as a consequence of the unsoundness of extending a rather theoretical line too far from the last certain site. The fort sits on such a splendidly strong site that I felt it was more than a very remarkable coincidence that it could also be a tower position, but T 36b fitted in exactly on the centre line of the fort. The question of further structures beyond Moresby is a difficult one, bearing in mind the Collingwood dictum that St Bees Head is the true end of Hadrian's Wall. I had wondered whether Moresby had been made a terminal fort since the cliffs rise higher and higher towards the Head, and the need for close watch and patrol must diminish with distance from Bowness. The *pater patriae* inscription from Moresby may mean no more than that it dates the stone to A.D. 128, the fort having been added to the line at the time of the "fort" decision, but it could indicate later addition in the light of experience. Perhaps it defined more closely the end of the coastal system at a time when experience had also shown that close patrolling was not essential and MF and towers were largely redundant. Burrow Walls is still the ghost at the feast, we know so little about it that its place in coast organisation may never be satisfactorily determined.

The new schedule I propose is as follows:

- 22 Brownrigg
 - 22a Golf course
 - 22b Club House
- 23 Bank End
 - 23a
- Maryport fort {
 - 23b north-west angle tower
 - 24 "notional MF"
 - 24a south-west angle tower

- 24b "101 steps"
- 25 Castle Hill
 - 25a
 - 25b
- 26 Rise How Bank (1969)
 - 26a Risehow Tower (1880)
 - 26b
- 27 Flimby
 - 27a
 - 27b
- 28 St Helens
 - 28a
 - 28b
- 29 Siddick
 - 29a
 - 29b superseded by Burrow Walls fort
- 30 North Side
 - 30a
 - 30b
- 31 John Pier
 - 31a Chapel Hill
 - 31b
- 32 Steel Works
 - 32a
 - 32b
- 33 Walker's Brow
 - 33a
 - 33b
- 34 Harrington Parks
 - 34a
 - 34b
- 35 Cat Gill
 - 35a
 - 35b
- 36 Lowca
 - 36a
 - 36b superseded by Moresby fort

At this point I choose to leave the schedule, as it were in mid air, although there must remain at least one more MF beyond Moresby, but the coast becomes very difficult and much built upon and any programme of study in this sector must have, as one of its main objects, the coast itself. It would be an interesting exercise to put oneself in the shoes of a Roman commander and make an appraisal of the coast and then draw up a plan for the patrol and control of this sea frontier. Rigidity is implicit in any plan until experience forces modification and the terminal MF on St Bees Head which logic requires may well have been planned, but the end of the system could equally well have been some reasonable compromise, perhaps the hill above Redness Point close by Whitehaven.

After preparing this schedule it was some months before I had the opportunity to spy out the land south of Maryport. What was needed was either a tower or, better still, a milefortlet at one of the new predicted positions. On 28 May 1969 I prospected Rise How Bank, the measured position of MF 26; at the cliff edge the soil was very stony and some slight mounds and hollows could be seen in the growing barley; this then was the place to dig and I included it in my plans for the coming summer excavations. On Saturday, 6 September 1969 I dug a trial pit near the cliff edge at the summit of the hill and found a solid gravelled road with Roman pot trodden into it; another trial found the edge of the road, a drain and more Roman pot. MF 26 had been found. After the Pilgrimage I organised a small digging party for 13 September and we found the left ditch in two places, but signs that the fortlet had been severely damaged by the plough. Until more work can be done it looks as if MF 26 will prove to be like MF 22, but perhaps a "short" axis milefortlet.

The new schedule of coastal sites south of Maryport

provides a much better basis for fieldwork than the published one and I hope my many friends in the area will be encouraged to go out and search the measured positions for this is a task I am not able to undertake from so far afield as Lincoln.

The results of research force one to revise ones ideas; MF 5 at Cardurnock is not a true milefortlet; Moricambe must be accepted as an awkward fact in Roman times, breaking the continuity of the system and making an irrational mess of the established system of numbering; south of Moricambe the units were measured north and south of the fort at Maryport; milefortlets 6, 7 and 8 never existed. As a consequence I seriously considered working out a more logical system of numbering but it is now too late because far too much is already in print and any attempt at alteration now would result in chaos.