

ART. VIII. — *Excavations at Burrow in Lonsdale, 1952-1953.* By E. J. W. HILDYARD, F.S.A.

Read at Penrith, September 14th, 1954.

THE two years' digging now to be described was directed by our late Past President, Lt-Col. O. H. North, D.S.O., F.S.A., and the writer as a work of collaboration, by no means the first of its kind. It should be remembered that the original initiative for investigating this important site came from Col. North who must, of course, be accorded a full share of credit for what was achieved.

The small and inconclusive excavation in 1947¹ had only made the need for further work on this key site the more obvious, and two small grants from the Society, supplemented by a few contributions from individual members and visitors, made possible a return to the attack on a larger scale in 1952 and 1953. In 1952 the work lasted for three weeks, 5-23 May, the second two being favoured with beautiful weather. In 1953 another fortnight's work proceeded, 6-20 June, making 29 working days in all, exclusive of filling-in.

Our grateful thanks are due, above all, to the owner, Earl Temple of Stowe and to Countess Temple. In 1952, our widespread and most unsightly activities in front of Burrow Hall, as well as a constant invasion of privacy by visitors, were suffered without demur, and permission was readily given for a resumption of work in 1953, our operation this time being rather less painfully obvious. Throughout, Lord and Lady Temple took a keen interest and showed us many kindnesses.

Our thanks are also heartily extended to the many voluntary helpers, especially in 1952, who included quite

¹ CW2 xlviii 23-41.



PL. I.—The Senior Excavator and Mrs. North at the south gateway of the fort.

Photo.: Westmorland Gazette.

facing p. 66.

a number of young people of both sexes who cannot all be specified by name. Those who must be mentioned, however, are as follows. In 1952, Messrs G. L. Shearer and F. C. Adey of Lancaster Museum and Library respectively, W. J. Hodgson, J. Pierce and P. Kitchen of Bolton-le-Sands, Ian Mitchelson and the Misses Vellyn Alston and Gladys Rushforth. Our Past President, Mr F. G. Simpson, C.B.E., paid us two welcome visits. In 1953, we should mention Capt. R. Heathcote, R.N., Messrs R. Hodgkinson and Webster of Yealand, and Messrs P. Bain-Smith and G. Simpson of Sedbergh.

Our members, Capt. J. C. Maples, Dr H. Thistlethwaite and the late J. W. Shepherd assisted us both years, as did Mr Alan Wilkins of Lancaster, who led a contingent from the Royal Lancaster Grammar School in 1952 and was with us throughout in 1953 being, that year, entirely responsible for photography; and finally Mr S. Bakey, also of Lancaster, who, in both years, did more digging than any other voluntary worker.

On the technical side, besides Mr Simpson, we have to thank Mr Eric Birley, F.S.A., both for visits and for much help in the preparation of this report; Mr R. P. Wright, F.S.A., for a note on the inscriptions; Messrs E. S. Pinfold and J. P. Gillam, F.S.A., who, as in 1947, have kindly undertaken the surveying and the report on coarse pottery respectively; Mr Brian Hartley for reporting on the samian ware; Professor K. C. Dunham for identifying the marble fragment, and Mr W. V. Wade, F.S.A., for dealing with the coins.

In paid labour, we were most fortunate to enlist the services of Messrs T. Salkeld and H. Douthwaite of Over Kellet, whose really prodigious efforts were responsible for the successful work in 1952 and, to a great extent, for that in 1953.

I. THE EXCAVATIONS OF 1952.

The South Gate (fig. 1).

Although the Ordnance Survey large scale maps mark "Site of Roman Station" in the field in front of Burrow Hall, the consensus of expert opinion did not believe that the fort could extend south of the Ha-ha (fig. 4) and neither previous excavations nor chance finds had pointed to any signs of occupation in this area. Nevertheless, the Senior Excavator, who had discovered that the late Anthony Moorhouse had wanted to dig here but could never obtain permission, noticed a rather indeterminate ridge running east and west in this field and to him must go the credit for suggesting a trial trench across it running north and south, TR. I.

On the first day we struck what was clearly a heavily metalled road running the full length of the trench (37 ft.) and over it in the 2 ft. 6 in. of soil were typically squared stones in large quantities, indicating the near presence of a substantial building. These included one large block nearly 2 ft. 6 in. long with dowel holes for iron clamps at each end, and also the fragmentary inscription with three letters V I S.²

On the next day a trench westwards to find the edge of the road struck a heavily mortared wall, 3 ft. 3 in. broad, running northwards, and it was then clear that this must be the east wall of the east guard chamber of the South Gate, the opening of which had been located by our initial trench.

The plan of the gate, most of which was gradually uncovered, can be seen in fig. 1. The outer wall, of which only footings remained, was of an average width of 7 ft.³ and consisted of cobbles set in rough herring-bone fashion in yellowish clay to a depth of 2 ft., the lower courses becoming progressively heavier. The only place where any of the facing stones remained was the east wall of

² See p. 97.

³ This confirms Moorhouse's figure, see Appendix.

the east guardroom (already mentioned) where they survived at one point two courses high (pl. I). Otherwise they had been removed entirely down to a layer of red clay which acted as a damp course,⁴ beneath which the cobble footings were set in yellow clay. The masonry and rubble core were embedded in hard white mortar used liberally. The guardroom wall footings were 4 ft. 6 in. wide.

As will be seen on the plan, most of the east guardroom was uncovered and an area east of it cleared to natural clay, which demonstrated that there was no rampart at this point, the filling consisting only of disturbed brownish soil. Beneath it were found two iron holdfasts, and at one point a circular patch of stones covered by burnt ash and charcoal suggested the existence of an oven.

Across its footings from east to west the east guardroom measured 18 ft., thus, allowing for an offset of 1 ft., giving a breadth of 16 ft. over its wall. Its floor consisted of a layer of hard purple clay and on this was part of a fumed ware flanged bowl dated by Mr Gillam to the late 3rd-early 4th century and "part of a fumed ware, plain rimmed dish either contemporary or somewhat earlier." There were also a few other, indeterminate sherds.

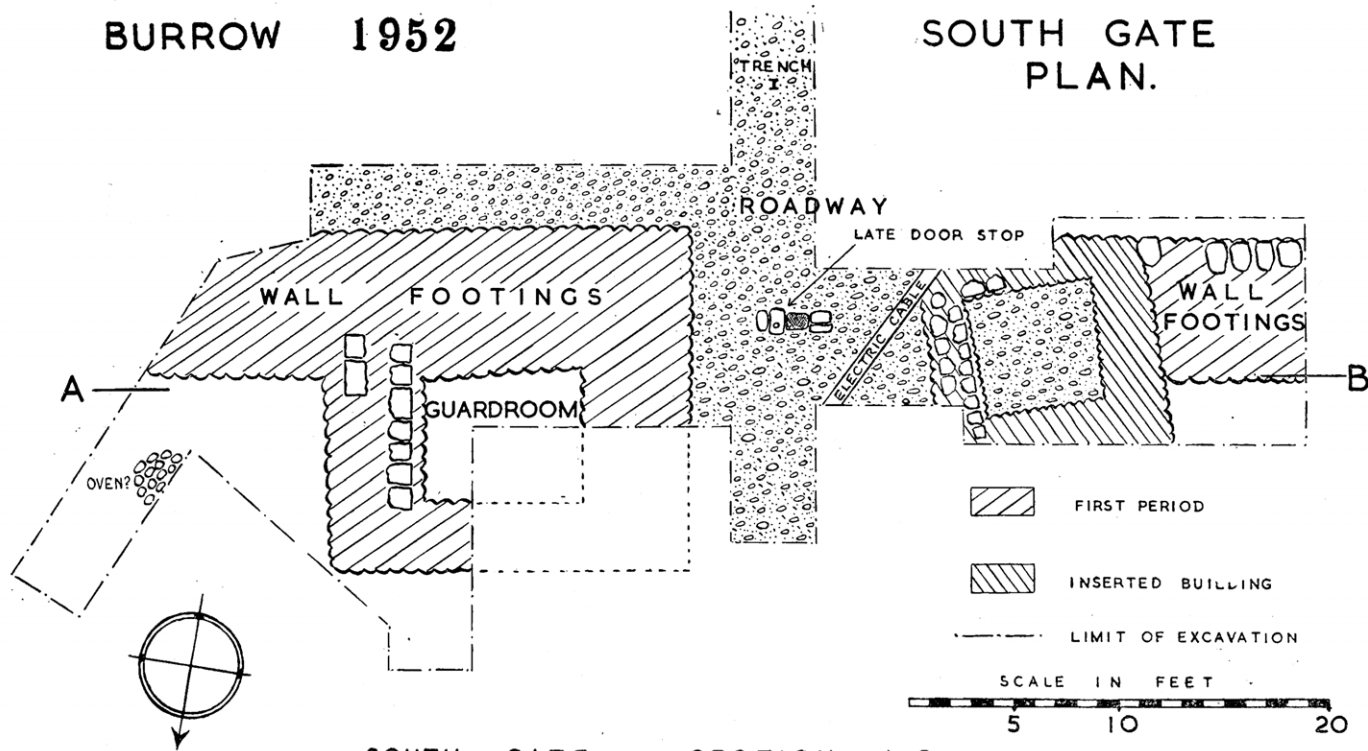
The presence of a small, railed-in clump of recently planted trees, prevented the exploration of the west guardroom and we had to be content with finding the front of the wall footings at this point. They retained a line of heavy oblong cobbles that must have served as a bedding for the plinth course.

In the hope of finding dating material below the roadway, a great deal of metalling, never less than 18 in. thick, was removed, but the results were disappointing. Apart from a few scraps of much worn samian, the only dateable piece was the rim of an early 4th century mortarium well embedded in the make-up of the roadway.

⁴ Mr Simpson tells us that this layer is a regular feature of the buildings on Hadrian's Wall.

BURROW 1952

SOUTH GATE PLAN.



SOUTH GATE SECTION A-B

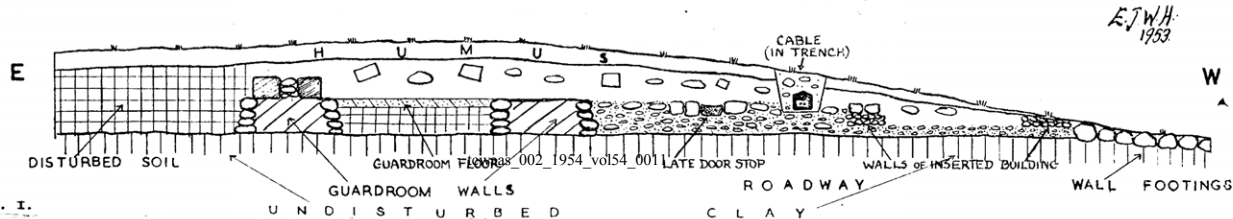


FIG. 1.

The original opening of the gateway appears to have been some 22 ft., a normal figure, but the plan was complicated by the insertion of a small square building on the west side. This was clearly a late structure built on top of the road metalling (see section, fig. 1) which acted as a floor, and showing a remarkably poor standard of workmanship. The east and south walls were built of roughly squared stones, but the north and west walls consisted of nothing but cobblestones, laid neatly in herringbone fashion. Moreover, the angles of the building were not rectangular to each other or with the gate and the alignment of the front wall.

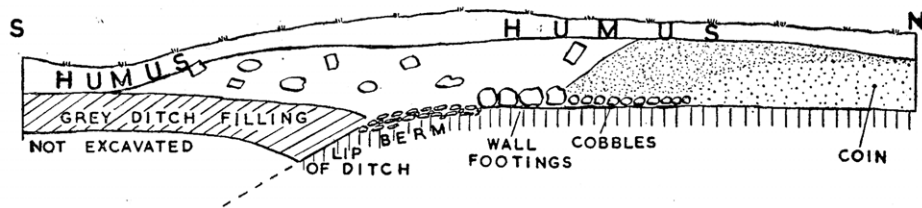
In the middle of the roadway, thus narrowed to 10 ft. 6 in., was a roughly constructed doorstep of four squared stones and a large lump of re-used concrete. In one of the stones there was a hole for the door-bolt. This doorstep stood on more than 1 ft. of road metalling and was clearly contemporary with the inserted building (pl. II, 1).

The wall and rampart (see fig. 2).

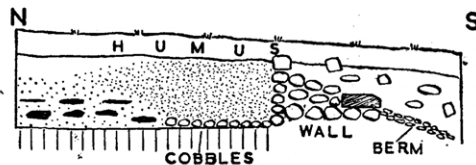
Once we had realised that we had dropped straight on to the South Gate of the fort, it was a simple matter to explore the southern defences, all the more so because, west of the gate, the faint ridge, already mentioned, indicated the line. Accordingly, while the gateway was being opened up, a series of sections were cut which found the line of south, west and east wall and rampart.

The first of these was TR. II, 40 ft. long by 4 ft. wide and 129 ft. west of the east guardroom. The section (fig. 2) shows the fall in the ground to the south, visible in the modern surface. The wall itself was found to have been robbed away entirely, leaving only a row of very heavy cobbles, set in clay, 4 ft. 6 in. wide. The robber excavation had cut diagonally down through the front of the rampart, which was composed of red-brown clay. Behind the wall footings was a paving of smaller cobbles 6 ft. in width, and the colour of the clay rampart

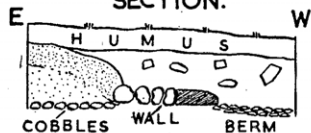
TRENCH II (S.WALL) SECTION.



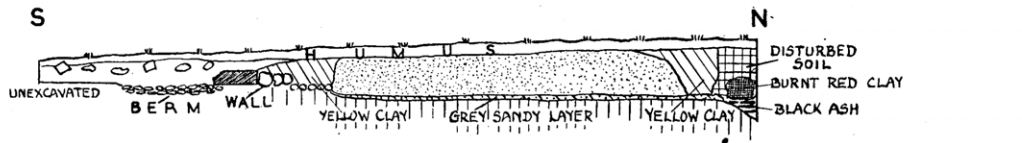
TRENCH III (SW CORNER) SECTION.



TRENCH IV (W.WALL) SECTION.









TRENCH V (S.WALL) SECTION.



TRENCH VI (E.WALL) SECTION.



-  BROWN CLAY
 -  GREY CLAY
 -  UNDISTURBED CLAY
- } RAMPART

-  DISTURBED SOIL
-  BURNT RED CLAY
-  BLACK ASH

SCALE IN FEET



E.J.W.H.
1953

FIG. 2.

behind them became much greyer and less red or brown, sloping back as shown in the section. Clay is a material that shows different colours when cut clean or merely broken and changes with drying or wetting, and it cannot be said that the line of demarcation could be shown to an inch. Nevertheless there was no doubt that the rampart was composed of two slightly different types of clay and that the difference corresponded to the line of smaller cobbled paving. At a point 8 ft. 6 in. behind the latter, at a depth of 2 ft. 6 in., was a sestertius of Faustina II, in too bad condition to be dated closer.

The trench was continued southwards to ascertain whether the slight depression in the modern surface marked the line of a ditch. Owing to the very wet weather in the first week, it was not possible to do more than prove its existence by finding its lip. In front of the wall the short berm was capped by a hard layer of gravel. The robber disturbance was very wide (as can be seen on the section), consisting of loamy soil interspersed with stones from the wall, including quite a few facing stones. The ditch itself was filled in with a grey material, a mixture of silt, soil and clay.

Though the ridge marking the line of the southern defences flattened out westwards, there was just enough surface indication to give us the position of the S.W. corner, which was sectioned by TR. III, 90 ft. west of TR. II. Here the wall was better preserved, one facing course remaining on the inside above five courses of unfaced "footings", and in front a plinth course, roughly squared stones from 18 in. to 3 ft. broad, some 2 ft. in depth and 9 in. to 1 ft. in thickness with a bevelled front edge, both sloping and vertical face averaging 5 in. each. The trench was extended eastwards to uncover three of these large stones and demonstrate the wide radius of the corner curve. In front of the wall the same gravel layer occurred as in TR. II.

Behind the wall the cobble paving observed in TR. II

was repeated, though its width was here rather less, 5 ft. The rampart was again composed of two different types of clay, the red-brown clay corresponding to the cobbles, but the grey clay behind was much lighter in colour and, especially towards the back of the trench (which extended 10 ft. behind the wall) black bands, indicating turf-work, were very distinct. This section also proved conclusively the absence of an internal angle-tower.

There was no difficulty in finding the west wall. A section taken 90 ft. north of TR. III and 96 ft. south of the fence bordering the Burrow Hall drive, found it, here too, complete with plinth course. To get its line accurately a stretch over 9 ft. long was opened along its front face, covering parts of six large plinth stones (pl. II, 2). The wall itself was again 4 ft. 6 in. broad, with the paving of cobbles behind it, but here the lighter clay seemed to overlie them and only a small insertion of brown clay was present, backing on to the wall footings and cut diagonally by the robber disturbance, as in TR. II.

East of the gate there were no surface indications whatever, due, doubtless, to the fact that the depth of accumulated soil is much less, and the remains therefore, nearer the surface. A section, TR. V (93 ft. east of the guardroom) on the line of the wall soon found it again with plinth course in position, but only 3 ft. in width and smaller cobbles, here narrowed to 2 ft., behind it. It was decided to make a full section of the rampart at this point but several new features appeared. The wall footings and cobbles were overlaid by yellow clay, then came 15 ft. 6 in. of brown clay rampart backed by another 2 ft. 6 in. of yellow clay. Under the rampart was a narrow band of grey sandy material, but apart from this there was no sign of the grey clay rampart in this section.

Behind the back of the rampart, at a depth of 2 ft. under disturbed soil, was a patch of clay, 18 in. square, burnt scarlet in colour, and beneath it several inches of

black ash and burnt material, indicating some kind of oven or hearth. Under the red clay was a sherd described by Mr Gillam as "the reeded rim of a grey carinated bowl of good quality, with all the early features, Flavian in date."

The final task of 1952 was to locate the east wall, and this was done by TR. VI, not far from the wall bordering the Walk from Burrow Hall, and forming the east boundary of the field. The wall itself was clear enough as a band of heavy cobbles of the usual width, 4 ft. 6 in., but there was no cobbled paving behind it, and for more than 7 ft. behind the wall the rampart seemed to have been somewhat disturbed, though predominantly brown, clay. Westwards of this, however, its composition was the usual red-brown clay identical with that in TR. V. The robber disturbance was very wide, and though the trench was continued eastwards for 12 ft. beyond the wall, there was no sign of the gravel layer or of a ditch. This seems to confirm that, as would be expected, there is no ditch on this side, owing to the precipitous falling away of the ground. In the topsoil of this trench occurred one of the few stray sherds found in the year, a rim and spout of a mortarium dateable to the first half of the 2nd century.

On the last afternoon two small trial holes in the S.E. sector yielded more pottery than had been found in the whole excavation. They included "fragments of an early 2nd century mortarium, an early 3rd century bowl and two pieces of a cooking-pot, with neat horizontal rilling, in a lightly calcite-gritted fabric, of a kind exceptionally rare in northern Britain, though common further south. The type series has a long life, including a very early and a very late phase; the present small pieces cannot be dated for certain but are probably not later than the latest pieces of other types present in this deposit."

II. THE EXCAVATIONS OF 1953.

The northern defences.

The work of 1952 had at last established beyond all doubt the presence of the fort (or at least of a fort) at Burrow and had given the line of the south, east and west walls and the position of the south gate, besides providing a good deal of confused information about the rampart. The two obvious needs for the second season were (a) to locate the north side of the fort and (b) to investigate the ditch-system, which was as yet practically unknown.

The most likely position (in view of the 1952 discoveries) for the north wall appeared to be the line of the beech hedge running across the site from east to west. It was growing on a stony foundation and north of it the ground fell away into what was thought to be the continuation of the depression under the terrace, it being believed that this hollow had continued under the stables and had been filled-in subsequently at some unknown date. If the beech hedge marked the line of the wall it seemed possible that the natural depression had been utilised or adapted as a ditch.

Accordingly a trench, TR. VII (see fig. 3), at right-angles was begun, running due north from the hedge (which, as it turned out, it was not necessary to disturb) reaching eventually a total length of 73 ft. The wall was, however, found 18 ft. from the hedge, almost in line with the supposed depression, which must have petered out under or in front of the stables. The wall at this point consisted of large rough cobbles and was only 2 ft. 6 in. wide, but this discrepancy in width, as compared with the wall found in 1952, can be accounted for by the absence of the plinth stone in front, evidently robbed away, which would have brought it up to the requisite size. Furthermore, there was just visible in the east side of the trench a squared stone of the inner face resting on

the footing course, and a subsequent cut eastwards revealed two more adjoining it in line (pl. III, 1).

There was no doubt, therefore, that this was the wall of the fort, even though it was found to be merely laid on 18 in. of not very hard brown filling. This filling yielded a few scraps of samian and rather indeterminate coarse pottery which Mr Gillam describes as "not closely dateable but early rather than late in the Roman period." Subsequently, TR. V (the section of the S. wall east of the gate) was re-opened and the plinth course of the wall at this point was found to lie on exactly similar material.

Behind the wall, and between it and fairly solid yellow clay "rampart material", was a depression some 3 ft. broad at the top with its south side sloping upwards over the yellow clay, filled with comparatively loose, grey filling which will be called the "grey material" to distinguish it from the grey filling found in the ditches. At the south end of the grey material was a row of large boulders embedded in the yellow clay, a feature repeated in the same position in TR. X (see fig. 3). The yellow rampart extended for a total length of some 13 ft., but in the last 3 ft. of the trench the grey rampart, very similar to that found in TRS. III and IV, reappeared again with definite marks of decayed turfwork. The only two sherds found in the yellow rampart belonged to a Hadrianic or early Antonine vessel (fig. 6, no. 7).

In front of the wall, also, unexpected features appeared. The wall was found to have been set on the very edge of a W-shaped ditch, some 20 ft. wide in all, its inner and outer sections being 4 ft. 6 in. and 6 ft. 6 in. deep respectively.

It was not possible to dig a complete section owing to a modern drain from the stables, which could not be removed, but as far as wet weather conditions allowed the profile was recovered and can be seen in the section (fig. 3).

In the inner section, the brown filling continued as far

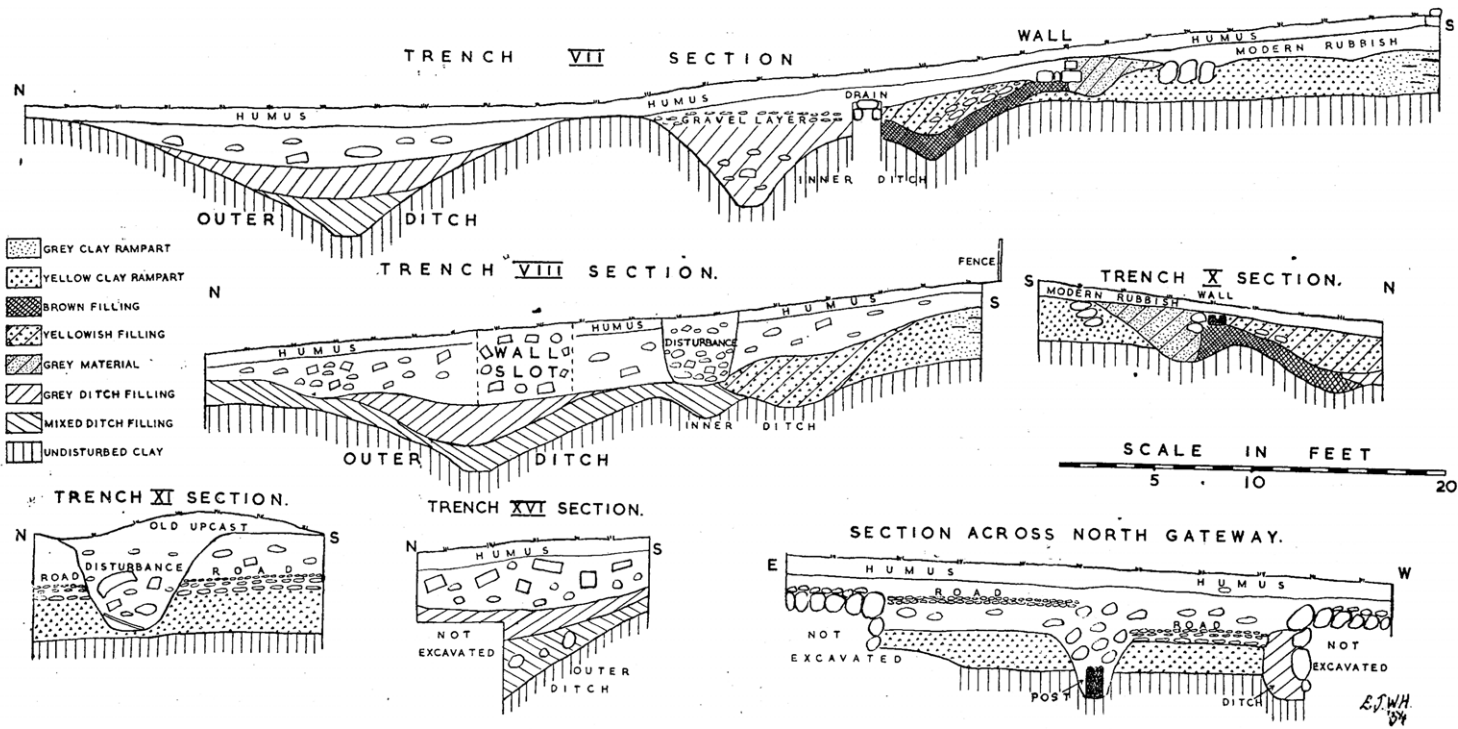


FIG. 3.

as the modern drain but must have petered out at the division, and above it was a mass of compact, yellowish clay filling (but more mixed, of course, than the rampart) reinforced by a number of large cobbles, especially numerous just in front of the wall. The few sherds in this yellowish filling were mostly indeterminate but included one dateable 2nd century fragment. It is scarcely necessary to say that this material must have been pitched in at the time the wall was built and this doubtless also applied to the filling of the outer section, which contained grey material (much of it probably silt) capped by a gravel layer. Lying on the undisturbed red clay in the hump near the modern drain were three fragments of a Castor lid (late 2nd-early 4th century, fig. 6, no. 9).

After a 5 ft. interval, the undisturbed was found to be dropping into a second and larger depression which will be called the "outer ditch". A full section of it was dug out despite wet conditions, and it was found to be a V-shaped ditch, 25 ft. wide and 7 ft. deep from the modern surface. The filling was in three layers beneath the humus, first the usual disturbed soil, with many stones including faced building-stones; below it a fairly homogeneous grey filling, very similar to that found in the ditch in TR. II (see p. 73); and below it again more mixed materials, including silt. All this filling contained little of any dating value, mostly worn fragments of uncertain date, but it included, in the upper layer, a mortarium rim of the close of the 3rd century or opening of the 4th (fig. 6, no. 10). It also contained the bronze fittings described under small objects.

The next step was to test for the presence of the wall as far westwards as was reasonably practicable (keeping, of course, within the boundary line of Lord Temple's land), and this was done by a 40-ft. trench, TR. VIII, taken from the fence which here had replaced the beech hedge. The resulting section however did not produce

a complete repetition of the features found in TR. VII. At the extreme S. end of the trench the grey rampart appeared with turf marks for the first 2 ft., with some 5 ft. of yellow rampart in front of it, followed by yellowish filling which was found to overlie the inner section of the W-shaped ditch. Its outer section again contained grey filling, but the double ditch was both narrower and shallower than in TR. VII; but this may be explained by the greater proximity of the outer ditch and the greater disturbance caused by the different position of the wall.

There was, however, no sign of the wall where it was expected, the only agglomeration of stone at the south end being a trench-like disturbance over the outer section of the W-shaped ditch and another (not shown in the section) even more clearly outlined in the western side of the south end of TR. VIII. Both of these disturbances, which are still very loose, must be filled-in trenches dug by Moorhouse.

The problem of the wall was, however, solved as the trench was extended north. The outer ditch, also rather narrower and shallower, duly appeared with the same types of filling as in TR. VII but again no dating material whatever, but over the southern half was a fairly dense agglomeration of stones, including many squared, which marked the slot where the wall had been, before being completely robbed even to its footings — not that this would have been difficult, assuming that it was the same slight structure found in TR. VII. It now became apparent that the wall and ditches were running on different lines, and that the inner and outer ditches were converging, this suggesting, as might be expected from the difference in filling, that they were not both in use at the same time. That this was the explanation was proved later on by TR. XVI (37 ft. east of TR. VIII), a short trench just long enough to find the southern side of the outer ditch, test its filling and produce an agglomeration of stones similar to that of the wall slot in TR. VIII

and in line between it and the wall, in TR. VII and, afterwards, in TRS. X, XII and XIV. From a depth of 5 ft. 9 in. and in the mixed filling came the samian base (illustrated in fig. 5, no. 11), dated by Mr Hartley to c. A.D. 140-160.

In view of the complete robbing of the wall at the western side, where it ran over the outer ditch, it was obviously necessary to investigate it again at the eastern end, and a 20 ft. trench, TR. X, was laid out 30 ft. west of TR. VII, on the same line. The wall was again found to be a very slight structure, entirely absent in the eastern half of the trench; but in the western half two squared stones, one with a slot (pl. III, 2), were found in line with the inner face in TR. VII; and a third squared stone, also slotted, was found in line with the other two when a small cut was made from the west side of the trench. Otherwise the stratification was exactly similar to that in TR. VII, revealing the same yellow rampart with heavy cobbles at the same distance behind the wall, the brown filling under the wall running down into the inner ditch, where it was overlaid again by yellowish filling, and finally the same grey material between wall and yellow rampart. In this material occurred the deposit of pottery (fig. 6, nos. 1-4) large enough to be important, and nicely consistent in date. It included the stamped rim of a Flavian mortarium, an almost certainly contemporary dish with a pseudo-potter's stamp, and a dateable rim fragment of a samian form 36 (no. 3) assigned by Mr Hartley to the late 1st or early 2nd century. The whole group falls within the range of A.D. 80-130.

TRS. VII and X were then joined by a cross trench, TR. XII, where it was hoped to find, by following its inner face, a piece of wall in better condition, but in fact it had been removed entirely (pl. III, 2). The grey material continued all the way along behind where the wall had been, and yielded another useful group of pottery, including the samian sherds nos. 4-8, all of the

same date-range as that in TR. X. In the back (south side) of the trench, about halfway along, occurred large numbers of jug fragments which were subsequently restored into two more or less complete vessels. The hole from which most of the pieces came can just be seen on the right of the trench in pl. III, 2. They were found in the grey material but mixed at this point with reddish, burnt and ashy substances. No actual bone fragments were detected, but the completeness of the vessels rather suggests that they may have been part of a cremation burial. These jugs (fig. 6, nos. 12 and 13), one in creamy white, and the other in egg-shell brown fabric, are dateable to the close of the first century or the early years of the second.

The curious ridge in the undisturbed clay (pl. III, 2) ran the full length of the trench. It suggested at first a sleeper trench on one or both sides, but the ridge itself was too rounded to allow for this and, without advancing any explanation, we must be content to note its existence. The only other trench on the line of the wall was a short cut TR. XIV, 25 ft. west of TR. X. Here also the wall had disappeared completely but there were two finds in the topsoil, the coin of Hadrian (no. 1) and the fragment of samian form 37 (no. 10).

The North Gate.

Besides our main objectives it had always been hoped to be able to devote some attention to finding the connection between the newly discovered fort and the features, especially the substantial building, revealed by our trenches in 1947. The nearest approach to this however was to begin a trench, TR. IX, which was intended to pick up the line of the road entering the fort at the north gate. The trench was sited in line with the "late road" that had been found crossing the trench in 1947. At a depth of some 9 in. road metalling, interspersed with cobbles, some fairly heavy, was encountered, and this was found

to continue the length and breadth (30 ft. by 4 ft.) of the trench. There was no sign of an edge, so it is impossible to say whether there is a large paved area outside the fort or, if it is a road, which way it is running. This area is marked *cobbles* on the plan (fig. 4). Owing to delays by weather, and the uncertainty of voluntary labour, time could not be found to go beneath the metalling.

A more important task, however, was to locate the north gate. On the assumption that it would be more or less in line with its opposite number in the south side of the fort, a point 118 ft. west of TR. VII was fixed upon by measuring off from the survey of the previous year's excavations. Here a trench 15 ft. long, running N.-S. (TR. XI) across the line of the wall, was aimed to strike the roadway entering the north gate. At this point, there was a slight hump running east and west for some 25 ft. and this proved to be the upcast from another of Moorhouse's trenches, the section of which appeared plainly on the side of our trench (fig. 3). The material was again very loose and included some large flat stones and, as can be seen, cut through the Roman stratification. The drawn section shows the east side of our trench, at the north end and on the west side there was more disturbance of the same kind. Nevertheless, there was no difficulty in identifying the roadway; a compact band of metalling with large stones as foundation underneath, 9 in. thick in all, ran up the full length of the trench. Beneath it came a layer of yellow clay "rampart material", this in turn overlying the natural clay. The road metalling contained a few sherds described by Mr Gillam as "Flavian and other early fragments."

A cut at right-angles, westwards from the south end of TR. XI (TR. XIII), was intended to strike the west guardroom, if one existed, and it duly did so. The edge of the road was found some 18 in. west of the side of TR. XI, and after an interval of about 12 in., massive

cobbles were encountered, the foundation of the east side of the west guardroom. There was no masonry left, as usual, but an important discovery was made when dropping down in front of the cobble footings. The space between the road and the yellow clay and the footings was filled with grey material, the footings themselves were found to be nearly 4 ft. deep, and the reason for this was plain. They were built over a ditch, presumably the inner ditch, the rounded end of which was just visible in the south side of the trench (pl. IV, 2). In the grey filling was a small sherd of rustic ware (where the ranging pole stands in the photograph); this is of Flavian date or a little later. Another trench on a line with TR. XIII was then taken eastwards to find the other side of the gateway. The roadway petered out after 6 ft. and there was much disturbance and many large stones for the next 3 ft. There, however, another well-defined road surface was encountered at a higher level, and this was followed for some 10 ft. before another line of massive footings proclaimed the west wall of the east guardroom. The opening was thus 22 ft., the same as the south gate before it was narrowed. The footings of the east guardroom were traced back another 6 ft., and though there was again no masonry in position there were several small pieces of broken freestone exactly similar to that used in the faced courses in the south gate, suggesting strongly that both gates, as would be expected, were of the same building-period. The upper road went right up to the footings and appears to go with them.

Time was now almost exhausted, but there seemed enough to complete the section across the N. gateway comfortably when, on the very last afternoon, the burnt stump of a large oak post, 10 in. square, appeared in the middle of the opening, in the disturbed and stony patch already noted. It had clearly been burnt off level with the ground but was embedded to a depth of 1 ft. 10 in. in puddled clay. It was only by considerable effort that

we were able to get to the bottom of it and remove it for examination.

One further point about the northern defences were discovered. In the small paddock west of the workings, in the sides of Mr Shepherd's silo (then empty), familiar rampart stratification was noted, proving by the position of the same features in opposite sides (the silo crossing the rampart line "diagonally") that this marks, as it should, the north-west corner of the fort.

CONCLUSIONS.

Such is the plain record of the excavation and the features discovered and phenomena noted, but their interpretation in terms of the history of the site is a matter of no little difficulty owing to the limitations to the work imposed by time and money. The situation of the fort wall and gates and, no less, the size of the enceinte as revealed by the work of 1952-3, were not at all as expected and did not accord with either of the alternatives suggested before excavation began in 1947,⁵ nor did they agree with the scheme for the northern defences put forward after the trial trenching in that year.⁶ Nevertheless, there seems no reason to withdraw anything stated as a fact in the earlier report, though the inferences clearly need revision. It may, however, be noted that there is nothing to show which way the ditches, investigated in 1953, faced, and the idea of another fort to the north, of a different period, though not likely, may not be impossible and there are other, perhaps more probable, explanations, such as some form of annexe, upon which it is at present useless to speculate.

On his first visit Mr Simpson⁷ remarked on the strong resemblance of the footings of the fort wall at Burrow to those he remembered at Elslack over forty years

⁵ CW2 xlvi 149-150.

⁶ CW2 xlvi 31-32.

⁷ We were fortunate in having the benefit of the opinion of a participator in the Yorkshire excavation so many years ago.

SITE PLAN
OF EXCAVATIONS AT
BURROW HALL
1947 AND 1952-3

SCALE IN FEET

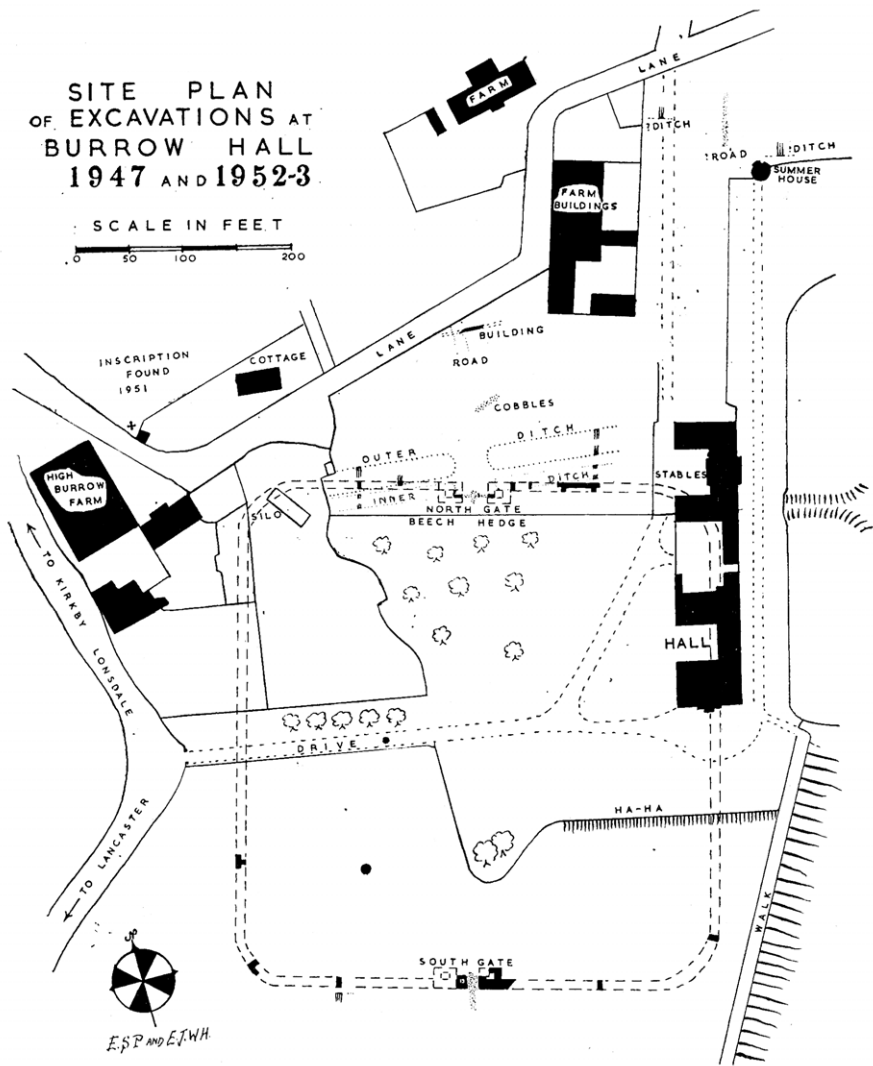


FIG. 4.

before. The analogies with that site are so remarkable that the similarities in detail must be enumerated, though it must be remembered that the differences, which also exist, are not mentioned here.

In the early fort at Elslack⁸ the south gate had been destroyed by fire, wooden stumps 10 in.-1 ft. square being present, among a layer of charcoal and burnt sandstone, dimensions almost exactly similar to the burnt stump in the north gate at Burrow. Another feature of the early fort was that the ditches joined laterally, thus giving a section very similar to the W-shaped inner ditch at Burrow.⁹

The late fort at Elslack (neither fort is, unfortunately, closely dated) also has resemblances. Its size is 603 x 406 ft., an area of $5\frac{5}{8}$ acres which compares with 445 x 470 ft. or $4\frac{3}{4}$ acres for Burrow, both, of course, larger than the normal fort in northern England. At Elslack the stone wall of the late fort was built over the early ditches on north and south sides, a feature repeated by the north wall at Burrow. The outer ditch at Elslack was continuous and it may not be without significance that the oak post in the north gate at Burrow appears to be too far forward to fit in with an early gateway built of wood (contemporary with the inner ditch), and it seems possible it may be connected with a bridge over the outer ditch, if this was not interrupted (as shown on the plan) but continuous.

The footings of the later fort-wall at Elslack were 8 ft. 6 in. wide and their description "limestone boulders of various sizes, some very large ones, closely compacted and mortared with boulder clay"¹⁰ confirms Mr Simpson's recollection of their likeness to the south wall at Burrow. Finally at Elslack, even worse robbed than Burrow, two large stones with bevelled edge were found,

⁸ *Y.A.J.* XXI, 1911, 113-167.

⁹ W-section ditches occur at Cappuck, Caernarvon and Dodderhill near Droitwich.

¹⁰ *Ibid.*, p. 128.

“the bevel being $4\frac{1}{2}$ in. with projection $2\frac{1}{2}$ -3 in.”, clearly very similar to the Burrow plinth course. Such heavy masonry is in fact typical of late forts such as Pierce-bridge, and other late features to be noted are the re-used, slotted stones; the absence of an internal angle-tower; and the nearly square lay-out of the fort.

Such are the impressions given by the main structural features, but the division into precise periods and the use of the detailed dating evidence are a matter of difficulty. There appear, however, to be four different periods. Three of these are indicated by the behaviour of the north wall, which runs over both inner and outer ditches, and of these ditches themselves, which converge and were not, therefore, both in use at the same time. A fourth phase seems to be represented by the narrowing of the south gate.

In the question of dating it cannot be said that the evidence afforded by the pottery and other factors is at all satisfactory, the only exception being the “grey material” behind the north wall in TRS. VII and X and in the cross trench joining them, TR. XII. This material provided a reasonable bulk of pottery securely assigned to the period A.D. 80-130, but it does not appear to go with any structural feature unless it is with the absence of one, the robbing of an early stone wall.

From the ditches the rustic scrap in the early (inner) ditch at the north gate is useful and accords with the Flavian fragments under the lower road passing through the gate. The 3rd century mortarium in the outer ditch in TR. VII and the Antonine samian base low down (at 5 ft. 9 in.) in it in TR. XVI confirm the assumption that the outer ditch must be later than the inner. Unfortunately the sherds from the brown filling, which might have dated the north wall, are too indeterminate to do so, but it can be taken as certain that both north and south walls are of one period as they both stand on similar material.

The rampart in its various forms provides no direct

dating evidence apart from the coin of Faustina II in the section in TR. II. Neither is the relationship of the different forts to each other at all certain. The grey rampart with marks of decayed turfwork appeared at the S.W. corner in TR. III and on the north side in TRS. VII and VIII. The material on the west side in TR. IV was also very similar. In all cases it appeared behind other rampart material and not directly connected with the stone wall. The brown clay rampart appeared in all the sections cut in 1952 in the southern half of the defences but not in the sections across the northern in 1953, where its place was taken by yellow clay, and the brown clay rampart was found fronted and backed by yellow clay in the full section behind the south wall in TR. V, and this type of clay was used for the footings of the south gate. It also appeared under the road in the north gate. The fact that yellow and brown clay rampart are found together may suggest that there is no chronological significance in this variation. Other features, such as the small cobbles that appear behind the heavy wall footings in TRS. II, III, and IV and the boulders noticed in TRS. VII and X can only now be noted but not explained.

As to the south gate the dating evidence, apart from that provided by the structure itself, is fairly clear. A late 3rd-4th century bowl found on the guardroom floor and an early 4th century mortarium rim well down in the road material suggest a Diocletianic or Constantian date.

If a synthesis of periods must now be attempted it would seem to be as follows:

(a) Flavian occupation of the site was attested by pottery in 1947 and by the carinated bowl in TR. V in 1952, and to this period can be provisionally assigned the grey rampart with turfwork, the early ditch and lower road at the north gate and possibly the wooden post.

(b) A second period may be represented by the "grey material" backing on the late wall in TRS. VII and X

and perhaps by the brown and yellow ramparts, possibly also the small cobbles underlying the former and the large boulders associated with the latter. At any rate (whether or not this is due to the accident of stone robbing) the only place in which either rampart actually backs on the existing stone wall is the S.W. corner, where the early "turf" rampart is also close behind.

(c) The third period would then seem to be that of all existing buildings, the fort wall and north and south gates, all of which are clearly contemporary and, from the evidence cited, probably of late 3rd or early 4th century date.

(d) The extremely poorly constructed square building narrowing the south gate and built over its roadway must represent another and final phase. No "post Picts' war" pottery has yet appeared on the site, but in view of the small quantity found and the almost continuous settlement since Roman times, this has really no weight, and on general grounds occupation in the latest period seems most likely.

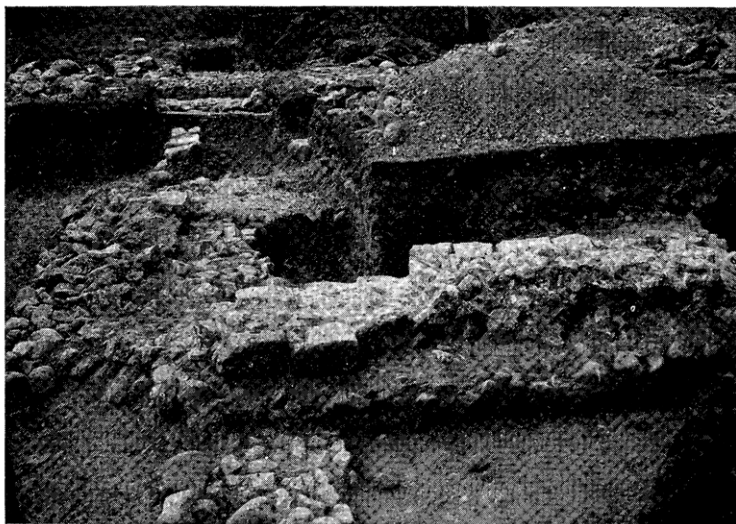
Many points about Burrow and about what was found in 1952-3 remain obscure, but the record given here may yield fruit of greater value when future work is undertaken. But the plan of a large, late fort has now been recovered and put on the map, together with its north and south gates, the existence of two ditches on the north, unconnected with the wall, and of another, probably connected, on the south, has been ascertained, as well as the absence of one on the east. With the limited means at our disposal it is hoped that more was not expected of us.

III. THE FINDS.

I. *Coins.*

There were only two coins, as follows:

(1) *Sestertius* of Faustina II (wife of Marcus Aurelius), d. A.D. 175. Legend and reverse type illegible. Found in 1952 in the grey rampart, TR. II.



PL. II, 1.—East guard-room of S. gateway, from the E.;
late door-stop behind.



PL. II, 2.—TR. IV, showing plinth-course of W. wall.

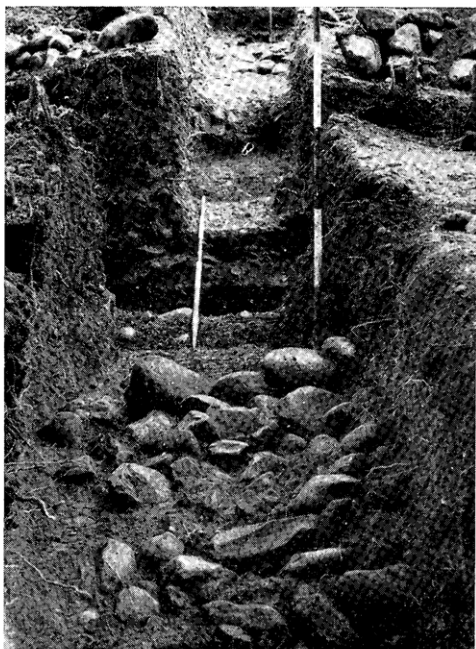
facing p. 90.



Pl. III, 1.—TR. VII: the N. wall, looking E.



Pl. III, 2.—TR. XII, looking E. along the line of the N. wall.



PL. IV, 1.—The north gateway: footings of
W. guard-room in foreground, section of roadway
and E. guardroom beyond.



PL. IV, 2.—The north gateway: rounded end of
inner ditch under footings of W. guardroom.

facing p. 90.

(2) *Dupondius* of Hadrian (A.D. 117-138) struck by Antoninus Pius (July 138-early 139).

OBV. HADRIANUS AUGUSTUS PP. Bust radiate to r.

REV. HILARITAS PR COS III SC. Hilaritas standing l. holding long palm in r. and cornucopiae in l.; on l. a small boy standing r. lays hands on palm; on r. a small girl standing l. Mattingly and Sydenham no. 974. Found in 1953, TR. XIV, topsoil.

2. Samian ware (fig. 5). By B. R. HARTLEY.

(Note. All the pieces listed come from the 1953 excavations, only a few scraps being found in the previous year.)

1. Small piece of a base of a Dr. 18/31 or 31 with part of a stamp. All that can be read is MA . . . E/. Probably Antonine Lezoux ware. TR. VII 1 ft. in front of wall on the undisturbed red clay.

2. Small scrap probably part of an Antonine Dr. 79. Found with three other much worn scraps in the outer ditch filling in TR. VIII.

3. Portion of a rim of a Dr. 36. This form is not easily dateable but the fabric, glaze and shape are consistent with a late 1st or early 2nd century date. TR. X. In grey material behind wall.

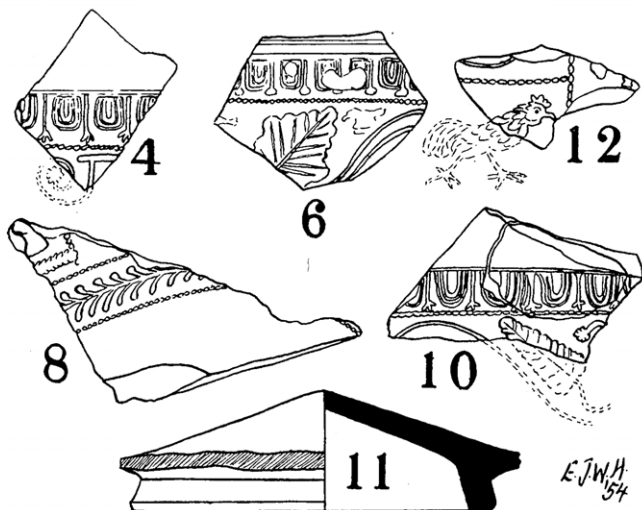


FIG. 5 (½).

4. Dr. 37. Ovolo with tridentate tongue and blurred wavy line: S. Gaulish. The decoration was probably in zones with a series of festoons containing alternate spirals and birds, as often on ware by BIRAGILLUS, MERCATOR and contemporary late 1st century potters. Traces of burning. *c.* A.D. 85-100.

5. Dr. 27. Footstand. Large cup with marked groove around the exterior of the footstand. S. Gaulish. Early Flavian.

6. Dr. 37. Blurred ovolo with wavy line below. Decoration, large vine-scroll (cf. Knorr, 1952, pl. 68 F). A.D. 75-95.

7. ? Dr. 27. Piece of wall. No dating possible but probably S. Gaulish.

8. Dr. 37. Part of a large bowl decorated in panels, one of which contains the base of a vertical ornament (Déchelette 1068 or 1069 A). The decoration is closed below by a straight wreath, bordered by rows of medium beads. This feature makes it certain that the bowl is a Hadrianic piece. I have seen several pieces by the potter of this bowl, who was probably an associate of DONNAUCUS and worked at Lezoux. *c.* A.D. 115-130.

Nos. 4-8 from TR. XII in grey material.

9. Part of a flange of a Dr. 38. cf. O. & P. pl. LXXII. 6 and PSAL2 XXI 278, no. 14.

It is claimed that bowls of this form came into use under Hadrian. This may well be so but it is quite clear that in this country the flanged bowl is a typically Antonine form. The typology within the form has not been worked out in detail and may not be of great significance. The present piece, with its similarity to the Pudding Pan Rock type, may be dated A.D. 150-170 at earliest.

TR. VIII. From grey filling of outer ditch with two other scraps.

10. Dr. 37. Ovolo with tridentate tongue and blurred wavy line below. The decoration is a large vine scroll as used by many late S. Gaulish potters such as FL. GERMANUS (Knorr, 1952, pl. 24) A.D. 85-100.

TR. XIV. On top of grey material.

11. Dr. 31. Base of dish with high central kick. (Extreme end of stamp only.) Glaze and fabric are fairly good and suggest a date not too late in the Antonine period. Probably *c.* 140-160.

TR. XVI from grey silt in outer ditch at depth of 5 ft. 9 in.

12. Dr. 37. Part of a bowl with panels divided by squarish beads. One panel contains a cock to r. (probably Oswald 2337). The general style is that of the "Small S" potter who used this

cock. His work appears to be exclusively Antonine, and is frequently found in Scotland. c. A.D. 170-190.

TR. XVII. Topsoil.

3. *Coarse pottery* (fig. 6). By J. P. GILLAM, F.S.A.

In addition to the flagons described on p. 82 and to pieces found in the topsoil, several small groups of pottery were found in stratified deposits. Eleven pieces have been selected for illustration and are described below, together with an indication of the total content of each of the deposits.

(a) *Flavian-Trajanic pottery.*

1. Fragment from a rustic cooking-pot with a short undercut rim, in light grey fabric; cf. *Chesterholm*, no. 38, Flavian-Trajanic and *Corbridge 1951*, no. 1, Flavian.

2. Large fragment from a flat-rimmed mortarium in yellowish white slightly sandy fabric with traces of white grit both on the interior and on the rim; a potter's stamp, T.IV.AF, appears immediately to one side of the spout, part of which survives. The stamp, presumably of T. Julius Af(er), also occurs at Ilkley; for the form of the vessel cf. *Corbridge 1951*, no. 4, Flavian.

3. Fragment from a bowl with a flat undercut rim without reeding, in light grey fabric; cf. *Chesterholm*, no. 17, Flavian-Trajanic and *Corbridge 1951*, no. 28, Trajanic.

Nos. 1-3 were found in trench X at a depth of 2 ft. in grey material 2 ft. east of the cramped stone of the wall: three further small fragments in light fabric from the same deposit do not conflict with the dating of the group to little if at all later than A.D. 100.

4. Nine conjoined fragments from a dish in dark grey fabric with a lighter surface now roughened and smoked. There are three concentric inscribed rings on the interior of the base, and in the centre the panel of a potter's stamp of the kind found on samian and Gallo-Belgic ware, but now quite illegible. Although there is no close parallel to the vessel from any northern site, there can be little doubt of its pre-Hadrianic date.

Found in trench X in grey material behind the wall. There were no other significant pieces in direct association with this vessel. Other pre-Hadrianic pieces include two small conjoined fragments from the rim of a mortarium of the same type as no. 2, and the edge of a lid in light fabric, found together in trench XI in the make-up of the road, and a wall fragment from a rustic cooking-pot, found in trench XIII in the end of the ditch.

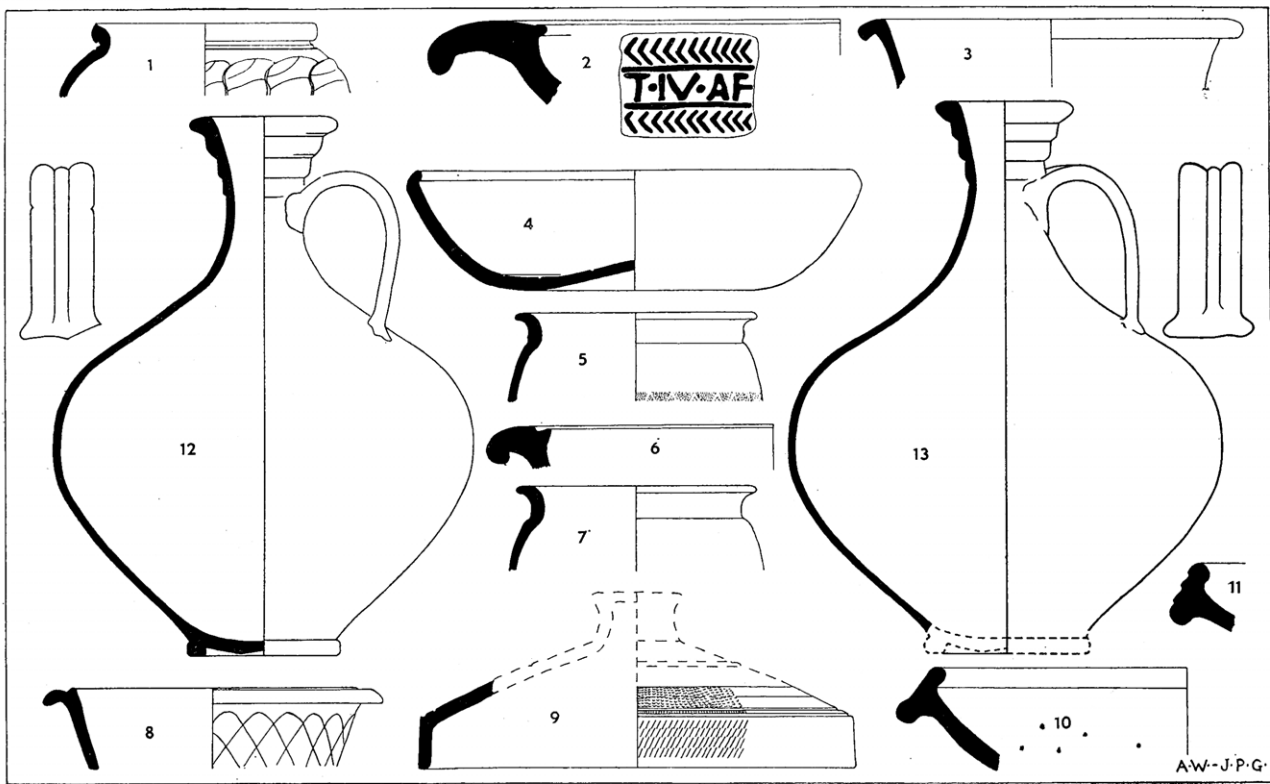


FIG. 6.—Coarse pottery (½) and mortarium stamp (½).

(b) *Hadrianic-Antonine pottery.*

5. Fragment from the rim and shoulder of a cooking-pot in dense black slightly gritty fumed fabric; cf. *Birdoswald*, no. 18b, Hadrianic.

6. Fragment from the rim of a small mortarium in orange self-coloured fabric; no grit survives; cf. *Balmuildy*, pl. xlii, no. 31, Antonine.

Nos. 5 and 6 were found in trench XII in grey material behind the wall slot; a fragment of rustic ware and three small fragments in light fabric do not conflict with the dating of the group to Hadrianic-Antonine times, as they are either contemporary with or earlier than the pieces illustrated.

7. Two fragments from the rim and shoulder of a cooking-pot in dark grey, slightly gritty fabric; of the same date as no. 5.

No. 7 was found in trench VII in yellow rampart material 6 ft. behind the front of the wall. There was no associated pottery. Other Hadrianic-Antonine pieces include the rim of a samian dish of form 18/31 found in trench VII in brown soil in front of the wall, and a wall fragment from a wheel-made cooking-pot with acute-angled cross hatching from between 22 and 30 ft. along trench VII, in yellow mixed clay above the brown filling of the inner ditch; both pieces were in association with less distinctive fragments which could well be contemporary.

(c) *Pottery of the third and fourth centuries.*

8. Fragment from a bowl with a high flange in black fumed fabric, with lightly scored intersecting arcs on the burnished exterior surface; cf. *Bewcastle*, no. 28, *Birdoswald*, no. 78 and *Corbridge 1938*, fig. 7, no. 12, all third-century.

No. 8 was found in the material between the filling of the ditches and the topsoil; the other fragments from the same deposit, five samian and one coarse, are all earlier than the piece illustrated.

9. Three conjoined fragments from the lid of a Castor box in white fabric, rouletted, and with dark brown coating. The type of box with which this lid was used has already been found at Burrow; cf. *Burrow 1947*, no. 33. The earliest dated lid is *Newstead*, pl. li, no. 15, which cannot well be later than the end of the second century, but the box and lid are commoner in deposits of the third and fourth centuries.

10. Large fragment from a hammer-head mortarium in bright orange self-coloured fabric with slight traces of small dark grit; cf. *Birdoswald*, no. 12, early fourth century.

No. 10 was found at 63 ft. along trench VII, at a depth of

2 ft. 6 in. in the filling of the outer ditch. Other fragments from the same deposit are of earlier date.

11. Fragment from a reeded hammer-head mortarium in pipeclay fabric; no grit survives; cf. *Birdoswald*, no. 11, early fourth century.

No. 11 was found unstratified. Modern and medieval pottery was found in the topsoil above the several trenches, together with Roman pottery ranging in date from the second to the fourth century, including a calcite-gritted fragment, but not including any distinctive "post Picts' war" Crambeck types.

(d) *Conclusions.*

Nos. 1 to 6, though not found all together, were all found in the same structural level. Together they form a consistent group. Though the latest pieces in the group are described as Hadrianic-Antonine this does not necessarily mean that they are of Antonine date, but that they belong to types that first emerged in Hadrian's reign and continued to be fashionable in the succeeding reign. The group taken as a whole may well represent an occupation lasting from about A.D. 80 until about A.D. 125 or 130. Later second-century pottery seems to be absent. Third and early fourth-century pottery is present. Late fourth-century pottery is absent.

References used in this section are as follows:

Balmuildy	. Miller, <i>The Roman Fort at Balmuildy</i> (1922).
Bewcastle	. CW2 xxxviii, 219 f.
Birdoswald	. CW2 xxx, 175 f.
Burrow 1947	. CW2 xlvi, 35 f.
Chesterholm	. AA4 xv, 222 f.
Corbridge 1938	. AA4 xv, 266 f.
Corbridge 1951	. AA4 xxxi, 222 f.
Newstead	. Curle, <i>A Roman Frontier Post &c.</i> (1911).

4. *Small Objects.*

(a) Two iron holdfasts or staples for knocking into wooden beams were found at foundation level just outside the east wall of the east guardroom of the South Gate. The smaller was the more complete, $3\frac{1}{2}$ in. long by 2 in. broad, one arm retaining its point. The other had been longer but had lost both its points. (Cf. Prys Field, fig. 29, no. 1).

(b) Three pieces, the longest $1\frac{1}{2}$ in., of thin hollow bronze fittings which had been attached to a wooden wand or stick, of which pieces still remained inside the bronze when found. A small circular bronze plate showed that one of the fittings had

been mounted on the end of the wand. The thin bronze had been rolled round the circular wooden wand, the ends pressed together but not actually joined and the whole attached by small rivets, the holes for which remained in all three fragments. Found in the filling of the outer ditch at a depth of 2 ft. 9 ins. in TR. VII.

(c) Small piece of green and white grained marble 2 in. long by $1\frac{1}{2}$ in. broad and $\frac{3}{8}$ in. thick, probably part of an interior facing of a building. Professor K. C. Dunham has kindly compared it with the comprehensive collection in the Geological Survey Museum and has identified it as "a unique type, which matches exactly the variety known as 'Campan Vert' from the quarries at Campan, Hautes Pyrenées, France." These marbles were well known in Roman times. Found in 1952 in the make-up of the roadway of the south gate.

5. *Inscriptions.* By R. P. WRIGHT, F.S.A.

(a) Part of a red sandstone block from a funerary monument, 16 in. wide by 10 in. high by 8 in. thick, was found in 1951 in a garden about 40 yards north-west of the north-west angle of the fort. On the upper margin there is a cable mould; the presence of two dowel-holes on the top surface indicates that the block presumably formed part of a built tomb, which was placed on the outskirts of the fort. The text reads:

. . .]TTI:M FIL

. . . VLLI PII

. . .]tti M(arci) fil(i) | [. . .]ulli Pii

'[monument] of [. . .]ttius [. . .]ullus Pius, son of Marcus'

(b) A fragment of buff sandstone, 9 in. wide by 12 in. high, forming part of the last line of a tombstone with moulded margin, was excavated in 1952 in the roadway of the south gate of the fort (see above, p. 68). It reads: . . .]VIS, presumably part of the phrase *sit tibi | terra le]vis*: "may the earth be light to thee". This phrase is usually abbreviated to the four initial letters, but it occurs in full on a tombstone from Rudchester (CIL vii 540, Black Gate Museum no. 186).

APPENDIX.

For many years it has been thought that Anthony Moorhouse left no record of his work at Burrow. Recently, however, his son-in-law, Mr F. Dickinson, came upon the documents given below, which he has

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kindly allowed us to examine and print. They clearly refer to excavations other than those at which our member, Mr J. Wilson, assisted as a boy. Nos. 1, 2 and 4 are in Moorhouse's hand.

(1) The first document appears to be the draft of a paper Moorhouse had intended to read to the Society.

“Article . . . Report on Excavations in the Roman Camp at Burrow, near Kirkby Lonsdale. By Anthony Moorhouse.

In the parish of Burrow with Burrow at the junction of the River Lune and Leck Beck, $\frac{3}{4}$ mile due west of the Roman road running from Chester to the Great Wall and upon the Roman road from Lancaster stands the site of the Roman Station, Galacum. Recent excavations, in September 1905, of a portion of the camp on the north side disclosed the foundations of buildings, and, between these, narrow paved roads. The foundation walls, which showed no trace of mortar, appeared nowhere above the present surface of the ground. Beneath the debris, which was from 2 ft. to 3 ft. 6 in. in thickness, the ground was of a hard clayey nature, this seemed to be original.

The digging disclosed a quantity of broken pottery, some of it being decorated, some was plain Samian ware of a rich red colour but the greater part of the pottery was of coarser quality and evidently comprised portions of cooking vessels, bowls, jars, etc. There were unearthened also several pieces of corroded iron, including large nails, pieces of copper and bronze, iron scoriae (?), one coin, evidently a denarius but owing to corrosion, quite indecipherable. Several bronze studs and a small finely executed cow's head in perfect preservation. There were also found several pieces of Roman bricks and coarse tiles. Within the walls and under the debris the ground was everywhere covered with a fine charcoal, which ~~fact~~ seems to suggest that the superstructures of the buildings were of wood and that the whole had been destroyed by fire. A rudely formed hearth was also discovered filled with pieces of charcoal fuel which were from 1 in. in thickness; among this fuel portions of a broken cooking-pot were seen. Many of the stones unearthened were properly punched for building but no trace of mortar appeared. One stone was the corner broken from a slab containing the letter I, 3 in. in length and $\frac{3}{8}$ in. in depth. No other stone showed any signs of inscription.

The excavations and finds appear to indicate that this part of the Station had been occupied by the artisans of the garrison. The excavations were made on the property of Miss Crofton to whose courtesy I am indebted for permission to dig.

Everywhere over the site evidences of the Roman occupation abound, and, with the exception of the necessary excavations when Burrow Hall was built and the excavation above mentioned, the ground is practically untouched.

A quern stone 14 in. across was found in June of this year near the excavation. (*A sketch and section follow.*)

I do not know whether this is necessary. The site of the Station on the S and W sides (*he must mean on the S and E sides*) rises with a steep escarpment from 30-40 ft. in height from the surrounding plain and those sides seem to have been further strengthened with a moat supplied from the adjoining Leck Beck stream, a portion of the moat is still intact. The ground on the W and N sides being comparatively low they have not these advantages and would need strong defensive walls. None of these, however, now appear above the surface.

The foundations of walls are still visible on the S and W (E?) sides."

(2) A fragment written on the back of a business circular dated 12 January 1905.

"During the year new Farm buildings were built on the NW portion of the camp and the digging for the foundations exposed the remains of several ancient walls. One, of unusual thickness, was possibly the remains of the northern defensive wall of the camp.

In a straight line from this point running due east in the grounds of the Hall walls were bared at several points and were from 7-8 ft. in thickness.

In the NE corner of the camp a part of the fosse is to be seen and the remainder has evidently been filled up."

(3) A letter dated 18 June 1911 from Mr F. A. Bruton of Manchester to Moorhouse, asking for further details and a plan and also offering to write a note on and date the decorated samian, if it could be sent.

(4) Unsigned (draft of ?) letter to Mr Bruton in answer to (3), dated 21 July 1911.

Burrow.

"Dear Sir,

I enclose plan which I made when the excavations were done (*this has not been recovered*). I believe it to be fairly accurate.

The piece bordered in green represents Shepherd's Farm out-buildings, and a small field. The shaded part is the small field where we excavated, and is entirely in Shepherd's holding and is Miss Crofton's property. The remaining parts are part of the Burrow Hall estate. Eight smaller parts in green were also excavated (Fenwick's). The four in line were made in following up the N wall through Fenwick's crow wood. These foundations were 7 or 8 ft. thick but it was disappointing that there was no mortar except in one place and only two or three courses in height of rough stones. I should not like to suggest that the moat or fosse you allude to is original. It very well may be and could only be proved by digging. I regret I did not see you, we might have discussed the whole matter thoroughly. The E and S sides could easily have been made impassable and, probably were, by tapping the higher reaches of Leck Beck.

Our excavations brought to light a fair amount of pottery, red, drab and black. I enclose photograph (*now lost*) of three decorated pieces. Two pieces of drab found together had the letters SM rudely scratched on (*here he gives a rough sketch of two joined pieces, the break bisecting the letter M*) some 8 or 9 in. square. I have lost the smaller piece. The larger piece I still have. Nails . . . (*here the edge of the sheet is torn*) pieces of bronze including a small . . . cow's head (*sketch given*) roughly thus. Full . . . a lot of charcoal was . . . under the present soil.

I was somewhat puzzled with a primitive fireplace which was filled with charcoal and the remains of a black cooking-pot and what appears to be the fragment of a knife blade."

COMMENT.

One or two comments may be made on this record.

It is clear that, in addition to his digging in the field below (west of) the road, Moorhouse's activities were also conducted near Burrow High Farm and in the "Crow Wood" (now felled) a fact confirmed by the excavations of 1953, which provided proof of the earlier work. The absence of mortar shows that the north wall had been robbed to its footings in all his trenches.

The mention of a destruction layer of "fine charcoal" "within the walls" has not been confirmed, because so far no work has been done on the interior, except by two

small trial holes, dug in the last afternoon of the 1952 excavation in the S.E. sector of the fort, in both of which a black layer of burnt material was encountered. It may also be noted that the post in the N. gateway had been burnt to ground level.

Finally, it is useful to have complete proof, including a sketch, that the interesting bronze ox-head already published (*Antiq. Journ.* XV, 1935, 79-80) came from this site and not from the native settlement beyond Kirkby Lonsdale.