ART. XVIII.—Report of the Cumberland Excavation Committee for 1931.

### EXCAVATIONS ON HADRIAN'S WALL.

#### BIRDOSWALD.

By F. G. Simpson, M.A., Hon.F.S.A.Scot., Director of the above Committee, and I. A. Richmond, M.A., F.S.A., Director of the British School at Rome.

IN 1930, it was revealed that a morass had occupied much of the area between the via quintana and the via principalis of the Stone-Wall Fort at Birdoswald. excluding an earlier occupation of that part of the site and explaining its subsequent wetness. But the course of the Vallum still seemed to demand an occupation south of the morass contemporary with its lay-out, and so, in 1931, the south-east area was examined by two cross-trenches, from the Decuman Gate to the east Quintan Gate, and from the centre of the first to the south-east angle-tower. The Stone Fort occupation was heavy but not crowded: it was most intensive after Constantius I. whose short barracks, divided by drainage-alleys, closely resembled those of 1929. Below them occurred Severan and Hadrianic levels, much reduced, the latter founded upon clean boulder-clay. Below this, near the junction of our trenches, unequal ground, now slopes and now shallow pits, yielded thick rubbish, including, in Samian, form 37, decorated by Trajanic Butrio, and delicate form 27, stamped L.COIV; also much leather, being shoes and a short-sword scabbard. All this looked like spread rubbish rather than traces of habitation, for which evidence only appeared further south up the slope. The first sign was a

long foundation, II feet 6 inches wide and kerbed to north, but considerably destroyed by later builders. It lay obliquely beneath the heel of the Stone Fort's south rampart, and was cut by the north-east corner of the east tower of the same Fort's Decuman Gate. One section, just east of the guard-chamber, revealed that the north heel of a clean yellow-clay rampart still stood on this foundation, which curved northwards behind the southeast angle-tower, sweeping under a large Hadrianic oven. It is still unknown where the curve finished, but just before it began the foundation contained a ruined cross-drain, with two cover slabs in position, and, a little further west, a little oven or fire-place, partly inside and partly outside the north kerb. The position of this oven and the curve of the foundation show that the area contained thereby is on the north, and that the foundation represents the south rampart of a fort, lying between the rampart and the morass and therefore small. Throp or Haltwhistle Burn would nicely fit the space, and the fire-place and drain are, indeed, reminiscent of both. But the foundation, with kerbed back and irregular inner edge has more in common with Ilkley (Y.A.J., xxviii, p. 156) or Slack (Ibid., xxvi, p. II). No ditch was found anywhere near this rampart but further search is required.

The Stone Fort's south rampart had thus preserved, below its earth backing, traces of the earlier Vallum Fort's rampart, of clean well-puddled yellow clay. But, at the best, only a heel of this clay remained, while the earth-backing, which covered it, was composed, as nowhere else in the Fort's circuit, of rubbish representing a extensive pre-Fort occupation. From our two sections came two mortaria, stamped Annius F, fragments of two late cups, form 27, and an 18/31 bowl, stamped BITURIX F. These pieces are not early, but their date is not the question here. It is their presence in the rampart backing of the Stone Fort that is presumptive proof of an

occupation coming between the Vallum Fort and the Stone Fort. For had the latter immediately superseded the former, the clean south rampart of the former must have been used to form the new earth-backing, whereas the material actually employed was occupation earth from The rampart of the Vallum Fort must therefore have been moved already, either by demolition on evacuation or by new occupants of the site who came before the builders of the Stone Fort. This second alternative would, indeed, meet a long standing want. providing us with an occupation contemporary with the Turf Wall, which at Birdoswald precedes the Stone one. But proof had to be obtained that such an occupation existed, and that it rendered the Vallum scheme obsolete. Both these points were, however, ascertained by finding traces of new wooden buildings, alined with that which was proved in 1928 earlier than the Stone Fort, since it was cut through by that Fort's multiple ditch. sleeper-foundation-trenches of these buildings vanished over the escarpment; but one was traced to where its north-west angle lay over the centre of the filled-in Vallum ditch. Thus these buildings are indeed later that the Vallum, over which they lay, and earlier than the Stone Fort, by whose ditches they were destroyed; and they are a distinct occupation, going with the Turf Wall and nothing else, though their true character can only be revealed by further exploration.

Finally, yet another distinct occupation was revealed, definitely antedating the Vallum. Made ground, just west of the wooden building of 1928 and below further buildings in the same alignment, was discovered to be filling a small ditch, running towards the escarpment at an angle of 40 degrees to the Stone Fort, and twelve feet further back a second parallel ditch was found. Both ditches were cut through by the Vallum ditch, and, while filled with silt elsewhere, were at that point carefully

packed with clay, as an artificial side to the Vallum ditch. The Stone Fort's defences prevented us from following the outer ditch westwards; but the inner one was traced sweeping round the promontory south of the Fort in five straight sectors, though much reduced by levelling towards the west. At the east, both ditches stopped just before the present line of the escarpment with butt-ends, probably for a gate, since it had already been shown that there was more ground here until the wooden-building occupation at least. For the moment it is idle to speculate what these earliest ditches enclosed. But their Roman date is proved by their parallelism and point-to-point lay-out and by finding, in the extreme bottom of the inner one, large fragments of a Roman soldier's calf-skin jerkin and trousers.

The season's work may, then, be summarised as follows. Three occupations preceded the Stone Fort, all lying south of the morass and close to the river. The first, still indeterminate, is the southernmost, occupying the top of the south slope and in the best position for signalling to the Stanegate. The second is forced down the slope by the Vallum, which is designed to run behind it, and consists of a small fort with clay rampart, not dissimilar to Throp. The third occupation, of wooden buildings whose defences await discovery, returns to the dry hill-top, the morass lying between it and the Turf Wall just as a marsh separates Carvoran from the Stone Wall, and the Vallum ditch being filled up to accommodate it, just as the Turf Wall's ditch was soon to be filled up to carry the Stone Fort. Thus the Vallum is rendered obsolete, together with its fort, one stage earlier than had been surmised, and its completely separate existence and priority to the Stone Wall schemes, even in their earliest form, is now conclusively proved. It must, however, be emphasised that the present discoveries have revealed only the substance and order of these early occupations.

Their form, which alone can enable us fully to estimate their significance, must be the object of next season's work.

### 2. PIKE HILL.

## By F. G. SIMPSON AND JAMES McINTYRE.

After an interval of fifty-seven years, attention was re-directed to the Roman building on Pike Hill, near Lanercost, by the work of the Durham University Excavation Committee in 1927.

Quoting from the report of that work in these *Transactions*, N.S. xxviii, Pike Hill "had remained so long in obscurity owing to our ignorance until 1911 of the number and disposition of the turrets between the milecastles. Up to that time, Pike Hill was not too near the known site of Bankshead Milecastle [No. 52] to be that of the next turret, possibly of abnormal size because of its wonderful position as an observation point" (pp. 381-2).

When in 1927 the uniformity of their disposition in the immediate neighbourhood was demonstrated by the discovery of Nos. 51a, 51b and 52a—"It was then seen that Pike Hill fell about half-way between the third turret [No. 52a] and that milecastle [No. 52], and must therefore be outside the milecastle and turret system" (*Ibid.*).

The special significance of the site was further emphasised by the record, in these *Transactions*, o.s. i, pp. 214-5, of its discovery in 1870. At that time, the remains appeared to Dr. Bruce to be those of a building of the milecastle type, but with rounded *northern* corners and therefore presumably constructed before the Wall. Further, the 1927 report called attention, as follows, to the course of the Vallum, as lending support to the hypothesis of a pre-Wall signal station. "It takes a course to the south across ground which, for the Vallum, slopes uncommonly steeply sideways, that could have been entirely

avoided had it been carried over the hill. Was this post [on Pike Hill] there first? " (*Ibid.*).\*

The masonry partly exposed when the road surface was lowered in 1870 was fully excavated in September, 1931. It proved to be the southern corner of a building the greater part of which had been destroyed by the alteration of the road. The corner was square and the two side walls quite straight. At the south end of the south-west wall was a doorway. The Stone Wall was found abutting upon the south-east wall at an angle of about 45 degrees, and between the junction and the corner the familiar lamination of the Turf Wall,† nearly a foot in thickness, had survived the building of the Stone Wall and remained to prove that it had preceded that Wall on the same line, thus far westwards at any rate. (*Ibid.*, p. 380).

We now observed for the first time that the ditch of the Wall makes a double turn—about 45 degrees to the right from its normal course and, after an interval of only about 20 feet, about 45 degrees to the left, i.e. back again to its normal course—directly opposite the remains of the building. The space between this unique deviation of the ditch and the remaining corner of the building proved to be just sufficient for a structure about 20 feet square, with its north-east wall fronting upon the short length of the ditch between the two turns, and set back six feet from its edge, i.e. at the berm-width of the Turf Wall. (*Ibid.*, p. 383).

It may therefore be reasonably concluded that the remains are those of a square tower of normal dimensions, built before and independently of either Turf or Stone Wall, upon which both in turn abutted. Such a building probably represents a signal-tower upon the patrol-track

<sup>\*</sup> Dr. Bruce's opinion was that the Vallum hereabouts had been forced down the slope not by a pre-Wall signal-station, but by the Wall itself. J. C. Bruce, Roman Wall, 2nd edition, 1853, p. 258, quoted by Maclauchlan, Memoir, p. 58, footnote 3.

<sup>†</sup> Mr. Richmond made this discovery.

associated with the Vallum frontier scheme, and is the first of its kind to be discovered.

It is clear that both Walls approaching from the east abutted upon the south-east wall of the tower, and from the west upon the north-west (i.e. the opposite) wall, in conformity with the course of the ditch—which served both Walls.

Attention was then directed to the Vallum and it was found that a change in direction, hitherto unobserved, takes place at (i.e. south of) Pike Hill. As it was impossible to determine the exact course of the earthwork without excavation, and such work being then beyond our powers, we have decided to present this interim statement as an introduction to a fully illustrated report to follow the investigation of the course of the Vallum next season.

## 3. STANWIX.

# By F. G. SIMPSON.

In connection with the widening of Eden Bridge, the Carlisle Corporation during 1931 widened Scotland Road, Stanwix, by the inclusion of a portion of the island site bounded by Church Street, Church Terrace and Scotland Road. The remainder of the site was cleared of buildings and converted into a car park.

The conjectural outline plan of the fort at Stanwix given by Chancellor Ferguson's Committee in these *Transactions*, o.s. ix, facing page 168, and followed by successive editions of the Ordnance Survey, shows the west rampart crossing the island site roughly parallel to Church Terrace. In that case the whole site would have been within the area of the fort, or of its outer defences.

In July, a trench was carried across the full width of the site at right angles to the supposed line of the rampart. It disclosed no sign of a fort ditch, nor a trace of ancient

stone-pitching, road-metalling, or masonry; nor could such indications of occupation have been totally removed, for immediately above the undisturbed subsoil was a thin layer, light coloured but practically continuous, of occupation earth, that produced a small quantity of Roman pottery without any modern admixture.

The result seemed unmistakably to indicate that the island site, though in the neighbourhood of Roman occupation, had not formed part of the area of the fort, which is probably situated further east.

In mixed filling below a modern floor, and entirely unconnected with other objects of Roman date, was found the fragment of inscribed stone (Fig. 2), described below by Mr. Birley.

The trench was carefully watched by Mr. R. Hogg, assistant curator at Tullie House Museum, and from time to time inspected by Mrs. Hesketh Hodgson, Mr. T. Gray, secretary of this Committee and Director of Tullie House, and by myself.

#### THE STANWIX INSCRIPTION.

By Eric Birley, M.A., F.S.A.

The stone is the rather soft local red sandstone, and now measures some 10 inches by 9 inches; some of the letters of the inscription are partly flaked away, and part only of the last letter of each line survives, whilst the lower half of the last line is missing; but the reading is nowhere in doubt.

Dedica[tam] imp. Vero [III et] Um < m > idio

[Quadrato cos.]

IMP VERO

'Dedicated when the consuls were the

Emperor Verus, for the third time, and

Ummidius Quadratus'' (i.e. A.D.167).

The inscription appears to have been on the side of an altar, the date of whose dedication it gives. The practice is commoner on the Continent than in Britain, but other

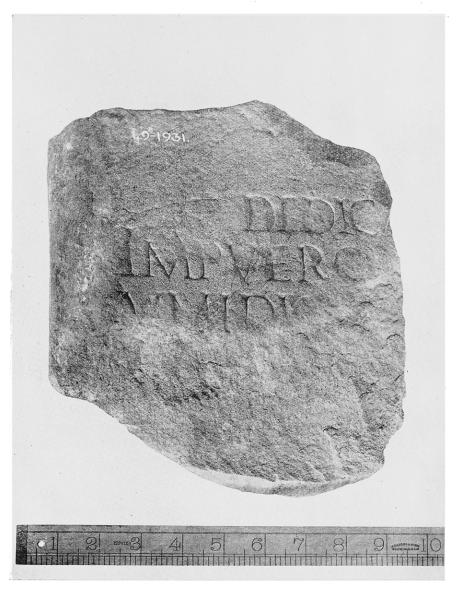


FIG. 2.—THE STANWIX INSCRIPTION.

FACING P. 148

instances could be cited. Since the face of the altar, and its inscription, are missing, the chief interest of the new fragment is epigraphic; dated examples of lettering may at times be of some use in determining the period of undated inscriptions.

Whether through carelessness or ignorance, the stonecutter has left out an M from the second consul's name.

# 4. THE WALL AT THE SEWAGE DISPOSAL WORKS, CARLISLE.

By F. G. SIMPSON.

In 1854 the Carlisle Corporation constructed a main outlet sewer from the Racecourse, across the Sauceries and the Willow Holme, to an outfall just above the junction of Parham Beck with the Eden. In the course of the work what appeared to be the Ditch of the Vallum was crossed north-east of the Castle and further west the remains of the Wall were exposed about a quarter of a mile east of the outfall.\*

At this point stood the most westerly (A) of the four inscribed stones erected by Chancellor Ferguson's Committee to mark the course of the Wall eastward towards the Eden traced by excavation in 1886.† When the Sewage Disposal Works were constructed in 1908, stone A was moved eastwards to its present position.‡

In 1931 a new main sewer was begun, parallel to the first and 10 feet to the north of it. When the supposed line of the Vallum was crossed in February the evidence was inconclusive. The line of the Wall was not reached until February, 1932, 55 yards west of the present position of stone A.

Travelling from Hyssop Holme Well at Stanwix towards the L.M.S.R. engine sheds, the Wall, at the point

<sup>\*</sup> H. Maclauchlan, Memoir, pp. 75 ff.

<sup>†</sup> These Transactions, o.s. ix, pp. 168 ff.

<sup>1</sup> On the O.S. Map, Edition 1925, Stone A is shown in its original position.

of crossing, made an angle of about 20 degrees with the sewer, which runs nearly east and west. At the point marked by the pick in Fig. 3, the Wall turned about 5 degrees northwards.

When the Wall was reached, Mr. Birley at my request sent Mr. T. Hepple to uncover the stonework (Fig. 3).

In detail the section corresponded very closely to the description of the adjoining section exposed in 1854, and confirmed the change from "narrow Wall on broad foundation," which existed at least as far west as Brunstock,\* to "narrow Wall" hereabouts.† The foundation was 8 feet 10 inches wide and consisted of a layer of rough flags about 4 inches thick, bedded in a layer of puddled Clay, which had been laid upon the natural gravel subsoil without the provision of a stone-filled foundation trench. At the north face, within an offset  $6\frac{1}{2}$  inches wide, were two facing stones of the first course of masonry, 14 inches deep. Not a stone of the south face nor of the core remained.

Allowing for the same offset at the south face the thickness of the Wall would have been 7 feet 9 inches above the foundation. Normally the thickness was further reduced by offsets at both faces above the first (or third) course.‡ There is, however, a notable exception to this rule. Throughout the Turf Wall sector, the Stone Wall is carried up from the first course without further reduction by offsets at a thickness of 7 feet 7 inches.§ It should further be noted that the "narrow Wall" in the Turf Wall sector, like that at Carlisle, has no stone-filled foundation trench below the footing-flags.

As at Stanwix, the work was watched by Mr. Hogg and

<sup>\*</sup> These Transactions, o.s. xiii, p. 459.

<sup>†</sup> As also at Beaumont (1928), R. G. Collingwood, Archæology of Roman Britain, p. 81.

<sup>‡</sup> Arch. Aeliana, 4th ser. ix, pp. , ff.

<sup>§</sup> These Transactions, N.S. xiii, p. 301, and plate xiii.

<sup>|</sup> Ibid.



Fig. 3.—THE WALL AT THE SEWAGE DISPOSAL WORKS, CARLISLE, Looking east.

inspected from time to time by Mrs. Hesketh Hodgson, Mr. Gray and myself. After the remains had been inspected by Mr. C. E. Clouting of H.M. Office of Works, they were removed. The two facing-stones and a complete section of the footing-flags have been re-erected in the grounds of Tullie House Museum.

Neither the ditch of the Wall nor the Military Way were observed in 1931-2, nor in 1854.

The cost of the work at Stanwix and Carlisle was borne by the Carlisle Corporation.