

ART. XXXIX.—*Report of the Cumberland Excavation Committee 1894.* BY F. HAVERFIELD, F.S.A.

INTRODUCTION.

THE Roman frontier-lines which join the Solway and the Tyne consist, as is well-known, of two parts, (1) a stone wall with large and small forts and connecting road, and (2) an earthen Vallum (as it is commonly styled) which runs south of the Wall at a distance varying between thirty and a thousand yards. The relation between these two works has been differently explained. The Rev. John Hodgson and Dr. Bruce held them to be contemporary, the one providing defence northwards, the other to the south. Prof. Mommsen has more recently suggested that the Vallum marks the southern or inside edge of the *limes* or "frontier strip" of the empire: the two works (as he thinks) are contemporary but the Vallum is a legal, not a military object. Other writers consider the Vallum older than the Wall: it was, in their judgment, a great frontier mark which was subsequently superseded by the military defences of the Wall. The most hopeful plan for solving the problem and deciding between the various theories is an enquiry whether Wall or Vallum possess any features indicating that they were or were not contemporaneous. If we could point, for instance, to places where the Wall, or its forts, or its road impinge and override the Vallum, we should have proof that the Vallum was the older work. If we could find north of the Vallum any such frontier-ditch as has been found on the German *limes*, we should again have proof that the Vallum was once an independent frontier line. The excavations commenced last summer under the auspices of the Cumberland and Westmorland Antiquarian

Antiquarian and Archæological Society aim at elucidating these and similar questions and simultaneously at collecting evidence about all the features of both Wall and Vallum. For these purposes sections were dug through the Vallum and from the Vallum to the Wall, search was made for a couple of milecastles, and the road was carefully examined.

It may be convenient here to summarize the chief results, with the premise that they represent a tentative campaign of barely five weeks. (1) The *Vallum* was cut at several points. At Brunstock it shewed the normal profile which it exhibits throughout most of its length, a mound and berm on the north, two mounds on the

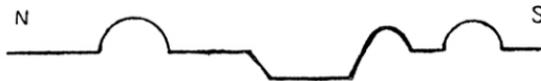


FIG. 1.

south, with a broad flat ditch between (fig. 1). In the boggy land at White Moss, the remains suggested a narrower ditch with two mounds on each side. At Gilsland the northern mound contained a curious stone "core." (2) The space between Wall and Vallum was found to contain nothing beyond the road. Apart from some probably accidental indications at Brunstock, nothing in anyway suggested any ditch resembling the German *frontier-ditch*. The results of the search in Cumberland and of four trenches near Aesica seem to shew that we are, so far, without any traces of such a ditch immediately north of the Vallum.

(3) The *road* was noted everywhere except perhaps at Gilsland; it nowhere impinged on the Vallum. The roadway consisted not of the 'flag' pavements so common in many places but of gravel laid on larger stones, raised in the centre, and kept firm by large stones in the centre and along the kerbs. The agger of the road was about
22 feet

22 feet wide and flanked by two small ditches. This is, no doubt, its normal character throughout its length (Bruce's *Handbook* p. 29) but it is probably more perfect at White-moss than at any other place where it has been examined.

(4) On the south face of the Wall a projecting course was noted at Brunstock, at Cragglehill and Harehill near Lanercost and at Gilsland Station: it is either a footpath or an extra foundation course. (5) At Bleatarn an important discovery was made of quarry rubbish and tool marks on the sandstone rock more than five feet below the surface. The rock may have been cut away, as at Limestone Bank, to accommodate the Vallum, or there may have been a quarry here. Further investigations will probably throw considerable light on this question and on the whole relation of the Wall and Vallum.

The excavations were very greatly aided by the kindness of landowners and farmers who gave all necessary leaves with great readiness. The Society is especially indebted to the Earl of Carlisle for permission to dig near Lanercost, to the Ecclesiastical Commissioners and their steward Mr. A. N. Bowman, to Mr. S. G. Saul of Brunstock House for leave to dig at Brunstock Park and at Bleatarn, and to Miss Bell of Irthington. The committee which controlled the excavations consisted of Chancellor Ferguson, Mr. T. H. Hodgson of Newby Grange, and the Rev. W. S. Calverley, F.S.A. The latter made a careful preliminary survey of the course of the Wall in Cumberland in order to select places suitable for the work of excavation. All the work was done under full supervision: the names of those who supervised each set of sections is given below. The sections were surveyed by Mr. T. H. Hodgson and Mr. Calverley, and by surveyors from the office of the City Surveyor, Carlisle, and were also carefully sketched and described by Mrs. Hodgson. The following accounts are based on those surveys and drawings and on the notes of the various

various supervisors. It is right to acknowledge special obligation to Mrs. Hodgson, without whose skilful and ungrudging aid both descriptions and illustrations would have lacked whatever completeness they possess. A statement of expenditure will be found at the end of the report.

I.—BRUNSTOCK.

The first excavation was undertaken at Brunstock, three miles east of Carlisle, on the property and near the residence of Mr. S. G. Saul. The exact spot selected was in Brunstock Park adjoining the high road from Carlisle to Newcastle (Wade's Road): here the lines of Wall and Vallum are distinct, the two works are barely a hundred yards apart, and the subsoil, a stiff dry clay with occasional patches (apparently) of blue, is such that the *strata* in sections are easily detected. The Park was at no distant date traversed by a modern road, the continuation of the lane which runs close to the Wall from Bleatarn and Wallhead, and part of the area was once occupied by cottages which were removed when the Park was laid down to grass some forty or fifty years ago: our trenches revealed the road but did not, as it seemed, cross the site of the cottages. The work was supervised by Mr. Hodgson, the late Mr. J. Mowat, M.A., F.S.A., Mr. A. H. Smith, M.A., F.S.A., and the present writer. A plan is given with this paper, Plate I.

The main part of the work was the excavation of a trench 2—3 feet wide, and reaching in depth to the subsoil, from the south of the Vallum to the north of the Wall: parallel trenches were dug in various parts of the Park as seemed desirable. It will be convenient to describe the results continuously from south to north. A section is given in Plate II.

i. *The Vallum.* The section through the *southern mound* of the Vallum shewed, above the undisturbed subsoil

PLAN OF BRUNSTOCK PARK

AND OF TRENCHES CUT.

JULY, 1894.

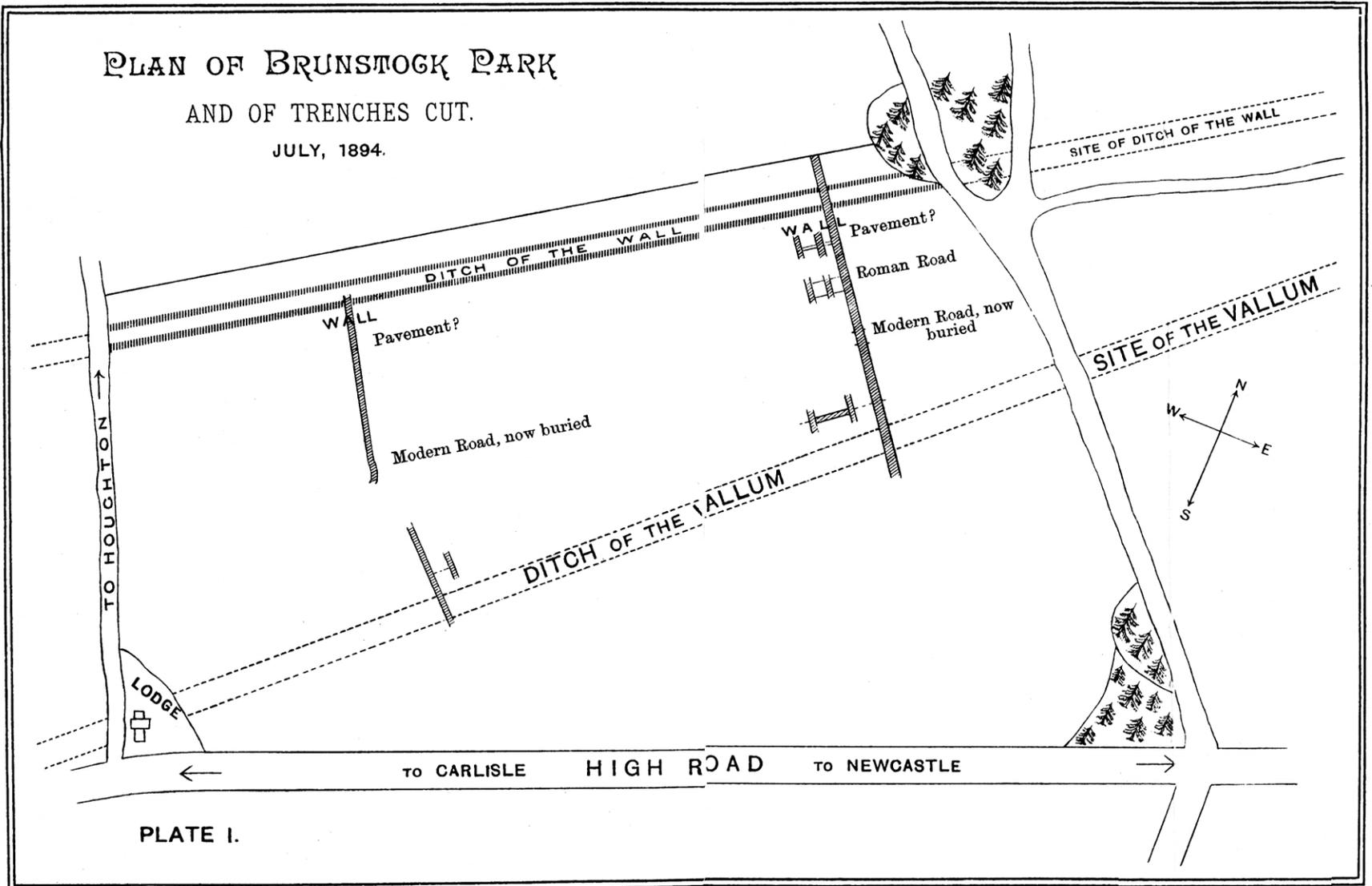
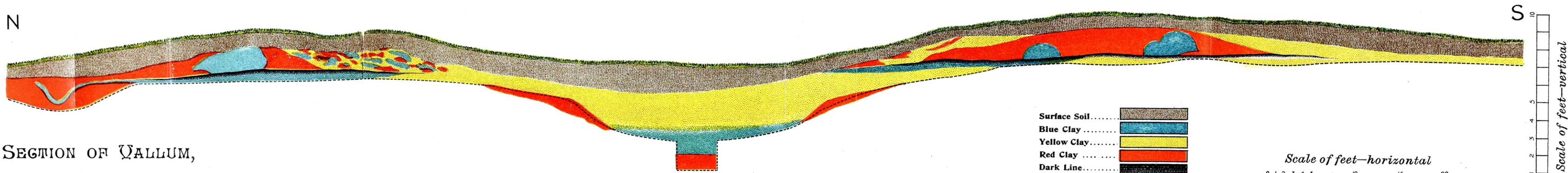


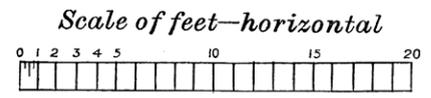
PLATE I.



SECTION OF VALLUM,
BRUNSTOCK.

T. H. H. & E. H. July, 1894.

- Surface Soil.....
- Blue Clay.....
- Yellow Clay.....
- Red Clay.....
- Dark Line.....
- Bottom of Trench.....



subsoil, a layer of dark blue matter, and above that was disturbed earth. This dark blue line was about two inches thick, 28 inches below the present surface in the centre of the mound, and 65 feet long. It reappeared in a similar position in the northern mound of the Vallum and elsewhere, and we took it to represent the original surface line. A piece of it was analysed and microscopically examined, but the results were not quite conclusive. The earth above it was undoubtedly disturbed earth, representing the remains of the southern part of the Vallum. For the most part it consisted of *debris* of red clay from the subsoil, but two ridges of blue clay were distinct, each based on the dark blue line. The southern and larger of these ridges was about 7 feet wide at its base and 14 inches high; a little red clay lay between it and the dark blue line on its southern side. The other ridge was 4 feet wide and 14 inches high. At the end of the dark blue line the *ditch* of the Vallum began; we followed the sloping line of undisturbed red subsoil both on its downward slope and on its rise to the northern side of the Vallum. The ditch was filled with a yellowish grey clay; a piece of stick and a bit of brick shewed that it was a comparatively recent deposit. Water hindered a thorough excavation of the ditch; it appeared to be flat-bottomed with sloping sides (angle of 30°), 15 feet wide at the bottom, 30 feet wide at the top and 8 feet deep. Its north bank was marked by the rise of the red clay subsoil: eight feet north of this the dark blue line reappeared and continued underneath the whole *northern mound* for 40 feet, coming (as before) between the disturbed and undisturbed earth. Above it, in the centre of the mound was another blue clay ridge 8 feet wide by 16 inches high; on the north side a wedge of red clay came between it and the dark line. The subsoil here seemed to contain some blue clay lying above the ordinary red clay. Another trench cut 250 yards westwards, shewed that

that the Vallum there presented the same characteristics as those described.

The features of the Vallum, as shewn by these sections, seem to be normal. The ditch agrees in shape with the ditch excavated in Northumberland at Heddon-on-the-Wall and Down Hill (*Arch. Ael.* xvi. p. xxvi.), though it is somewhat broader and deeper. We may now regard it as certain that the ditch of the Vallum was flat bottomed and not V shaped. The materials for the mounds of the Vallum appear, as at Heddon, to have come out of the ditch; they are not, like the *agger* of the Antonine Wall in Scotland, composed of regularly laid sods. The origin of the blue clay ridges may be doubtful, but the similarity between the up cast on the north and south sides of the ditch shews, again in agreement with the Northumbrian results, that the whole of the earth works were constructed at once. Probably the blue clay came from a patch in the ditch; we may then recognize in our three ridges the three mounds of the normal Vallum. The wedges of red clay between the old surface line and parts of the blue clay ridges find a parallel in the *strata* of the upcast at Heddon, where the fire clay from the bottom of the ditch was found partly below, partly above, the rest of the upcast.

2. *The space between Vallum and Wall.* Immediately north of the Vallum a puzzling ditch was found. It was of rounded profile, two-and-a-half feet deep, and was filled with a yellowish grey clay like that in the Vallum ditch; it was undoubtedly of later deposit than the red clay subsoil into which the ditch was sunk. At the bottom were two stones, one on each side of the ditch, and a piece of stick: a longitudinal trench and three parallel sections shewed similar features. The ditch does not appear to have been quite straight, but it was found in about the same position relative to the Vallum 250 yards west of the main section. It has a vague resemblance to the *Grenzgrübchen* found on the German *Limes* at Heftrich, (*Limesblatt*

(*Limesblatt* 1894. 106), but the stones are few and possibly local; the ditch may have been made in the period before the Park was laid down to grass. For 50 feet north from this ditch the section shewed only an undisturbed subsoil of first blue, then red clay, 13 inches below the present surface. Then we found a road, 21 feet wide, of well rounded profile, constructed of large pebbles laid on the clay; this road was traced at 250 yards to the west and is the modern road mentioned in the first paragraph. For 85 feet the section again shewed only undisturbed subsoil, with a dark clay line on the top, the origin of which is not clear; at the end of this was found *the Roman road* which ran behind the Wall. The road was very much ruined; it was recognised in some parallel sections, but 250 yards to the west no traces were found. It consisted of sandstone and clay, with large stones in the centre and at the kerbs, the centre being highest; the width was about 21 feet. Indications of small ditches were noticed on both sides.

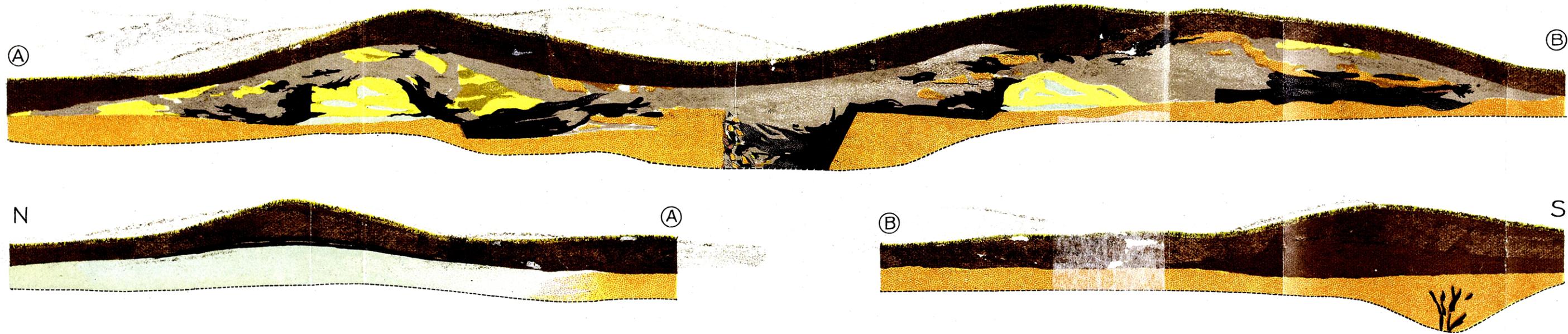
3. *The Wall.* The space between the road and the Wall, about 20 feet, shewed no trace of disturbance; it was partly filled with a deposit of black decayed matter, perhaps from the ditch of the road. The *Wall* itself, though much ruined, shewed one interesting feature. Nine feet south from its front we found, 30 inches down, a rough platform nearly three feet wide. This reappeared in a section 250 yards to the west and in the sections near Lanercost and at Gilsland. The bedding of the Wall was seemingly composed of cobbles; it was itself built of red sandstone with a little cement. In front the berm of the Wall was covered with debris, under which was a dark line above the undisturbed subsoil. The *ditch* was not excavated, owing to the water: the dip and rise of the red clay subsoil suggested that it was about 32 feet wide at the top. North of it the section was carried 47 feet to the fence, and shewed, 23 inches below the

the present surface, a dark blue line, 2 inches thick, resting on undisturbed red clay, with disturbed red and a little blue clay above. This resembled the line under the vallum, and suggests that, as on the Antonine Wall, the earth from the ditch was thrown up on the north side. A section north of the wall at Bleatarn gave the same result.

II.—WHITE MOSS.

For about $2\frac{1}{3}$ miles east of Brunstock, Wall and Vallum have almost wholly vanished before the plough. At White Moss near Wallhead Farm there is, however, a tract of moor which has hardly been touched except by peat and gravel diggers. The ground is peaty, with a subsoil of white sand, and, as at Brunstock, the *strata* of the sections are clear. The work was supervised by those who had helped at Brunstock, with the addition of the Rev. W. S. Calverley, F.S.A. See Plate III.

The surface shews four mounds for the Vallum, but one, if not both, of the two outer mounds may be accidental. The southernmost mound contained no traces of an old surface line or of disturbed earth; the interval of 14 feet between it and the next mound revealed only surface peat lying on undisturbed sand. The second and third mounds were composed of mixed sand and peat lying on an original surface-line, 2 inch thick, of black peat, with the original sand below. In the second mound the disturbed soil contained a ridge of white sand, with peat heaped on its north side and the whole capped with sandy peat: in the third, the ridge was wedged up on both sides with peat. Between these mounds the old surface line stopped and the sandy subsoil gave place to greyish and black peat, the filling of a *ditch*. Water prevented us from finding the depth of this ditch: it went below the general surface level. Its width, hardly 15 feet, does not suit the normal width of the Vallum ditch. North of the third mound
for

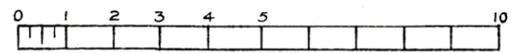


SECTION OF VALLUM

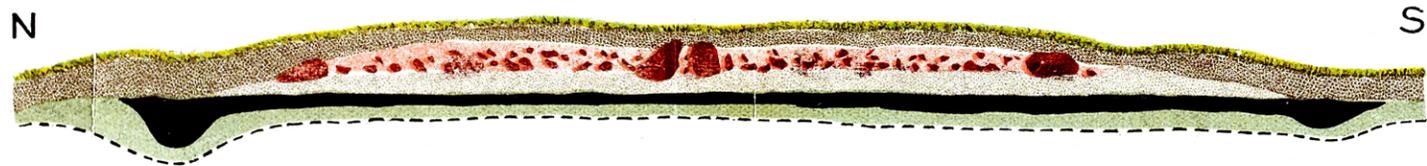
WHITE MOSS, CROSBY-ON-EDEN.

JULY, 1894.

Scale of feet



- Brown Surface Peat
- Whitish-grey Sand—melts into yellow sand.....
- Reddish-yellow Sand—melts into grey sand.....
- Yellowish-white Sand
- Dark-grey Peaty Sand
- Black Peat, "black line," and tree imbedded in subsoil....
- Bottom of Trench



SECTION OF ROAD,
 WHITE MOSS, CROSBY-ON-EDEN.

July, 1894.

- Surface Peat 
- Grey Sandy Subsoil ... 
- Grey Clay 
- Gravel and Sandstone . 
- Black Matter 
- Bottom of Trench ... 

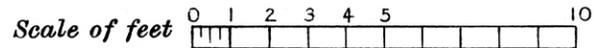


PLATE IV.

for 15 feet, was undisturbed ground and then the fourth mound, shewing a black line, with mixed sand and peat above, and beneath it, in order, a thin layer of dark sand, a second black line and the whitish sand of the subsoil. The interval between the north side of the fourth mound and the Wall, 247 feet, was left partly untouched, owing to water: in the middle of it, 110 feet from each side, is the road, singularly well preserved. On either side is a V shaped ditch, on the south 15 inches deep by 18 inches wide at the top, on the north 2 feet deep by three feet wide. The road itself rests on a 4-inch layer of black peat, the original surface line, and consists of (1) a bedding of sandy clay, 6 or 7 inches thick and 27 feet wide, probably a slight extension of the original width; (2) a layer, 10 inches thick and 22 feet wide, of flat stones and gravel, the latter being above the stones and forming the actual roadway, which is raised in the centre; (3) a double row of large stones in the centre, some 2 feet long, and a single row on each kerb, serving to keep the road together. See Plate IV. Parallel sections shewed the same features which seem to be characteristic of the road throughout its whole course, so far as one can judge from recorded observations. From the north ditch of the road an interval of 110 feet brought us to the Wall, which lies under the modern road from Wallhead to Bleatarn: the Wall, like the road, is constructed with the local red sandstone.

Beside these sections, trenches were dug in two fields, one to the west, the other forming an enclosure on the east of White Moss: both fields had been much ploughed and little could be ascertained. In the eastern field Mr. Calverley observed that the indications agreed with the Brunstock results.

The sections of the road are the most satisfactory part of the White Moss excavations. The Vallum is puzzling: in the number and grouping of its mounds and the width
of

of its ditch, it differs from the normal scheme of the Vallum. The same difference recurs at Bleatarn (III. i.) and suggests that this normal scheme was not rigidly followed on difficult ground, such as a boggy moss. No certain trace was noted of any mile castle, though, if we may judge by the distance there was one somewhere between Bleatarn and Wallhead (Bruce's *Handbook* p. 222). Near Wallhead, however, the Roman Road slopes away from the Wall, and this divergence would be quite intelligible if a mile castle stood near the present farmhouse. Mr. Calverley noted what he took to be faint traces of foundations a little eastwards, just where a modern road diverges north to Highfield moor.

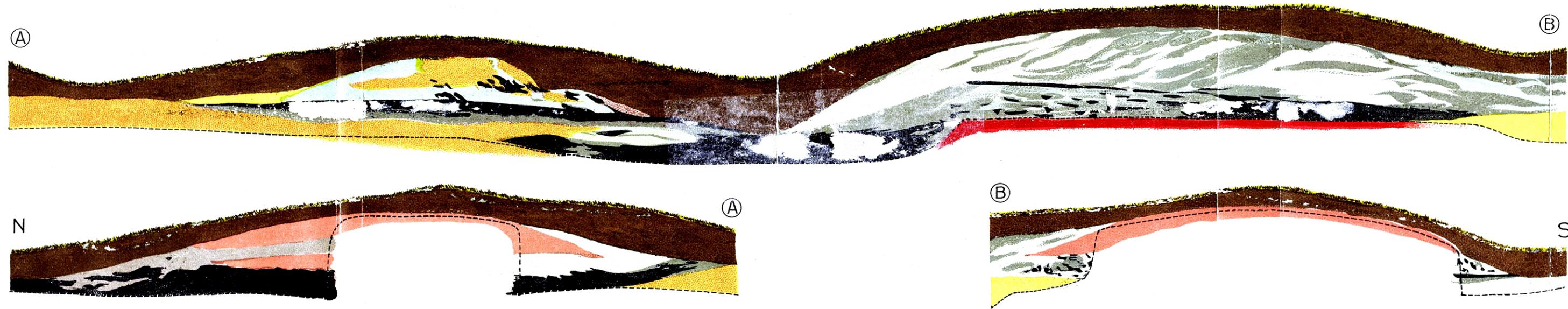
III.—BLEATARN.

Bleatarn field lies immediately east of Whitemoss, from which it is divided by the Bishop's or Baron's Dyke* The field is pasture, in the lower western part boggy like Whitemoss, but rising eastwards as the red sandstone rock comes near the surface. The chief excavations here consisted of (i.) a trench near the Baron's Dyke from the south side of the Vallum to the Wall (see Plate V.) and (ii.) a deep cutting 285 feet from the Dyke on the rising ground. The supervision was the same as at Whitemoss; the eastern section, which produced some remarkable results, was mainly under the direction of Mr. Calverley.

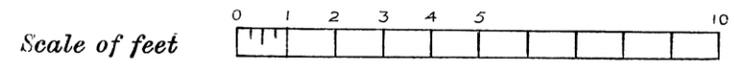
(i.) The first trench was 41 feet east of the Baron's Dyke and commenced south of the Vallum. As at Whitemoss, the present surface of the ground suggested four ridges in the Vallum, extending in all over 106 feet. The southermost ridge seemed plainly to contain made earth; the section shewed the black line of the old surface; under it was undisturbed subsoil of grey sand and gravel,

* Boundary between the Bishop of Carlisle's Manor or Barony of Linstock and the Earl of Carlisle's Barony of Gilsland.

above



SECTION OF VALLUM
 BLEATARN, IRTHINGTON.
 JULY, 1894.



- Surface Peat
- Old Black Peat
- Grey Sand
- Yellow Gravel
- Grey Clay
- Yellow Clay
- Gravel of the ridges
- Red Sandstone Rock
- Bottom of Trench

above the upcast of sand with a gravel capping from the subsoil in a ditch, the whole being 14 feet wide. North of this is a small depression filled with a layer, 12 inches deep and 9 feet long, of yellowish clay; whether this was a ditch is doubtful. The depression is succeeded by the second ridge, resting on red sandstone bed rock about 3 feet 6 inches below the present surface. This rock was traced for 16 feet; on it lay mixed sand, clay and peat, 14 inches deep, and above that was a black line resembling an original surface line; the above ridge was made of mixed grey sand and grey clay. The ditch north of this ridge was more distinct than the other ditches, being filled with at least 3 feet of peat; it was, however, hardly 7 feet across. The third mound was based on a black line shewing the original surface, which rested on peat on the south and yellow sand and gravel on the north; above was light yellow sand from the subsoil, with a little gravel, flanked with clay. The third "ditch," 16 feet wide, consisted of modern peat lying on the subsoil of sand and gravel; it is simply a depression and not an ancient ditch. Beyond it came the fourth mound which closely resembled the first, being built of clayey sand with a gravel cap, on top of an old surface line; this mound was not cut through. This practically completed the section; we continued the excavation 250 feet to the Wall, here covered by the modern road, but without finding traces of the Roman road. The ridges of the Vallum in this section consist apparently of subsoil cast up out of ditches, but they differ from the normal scheme in number and in nearness; in these points, as in other features, the ridges on Whitemoss and in the lower (western) part of Bleatarn field are very similar.

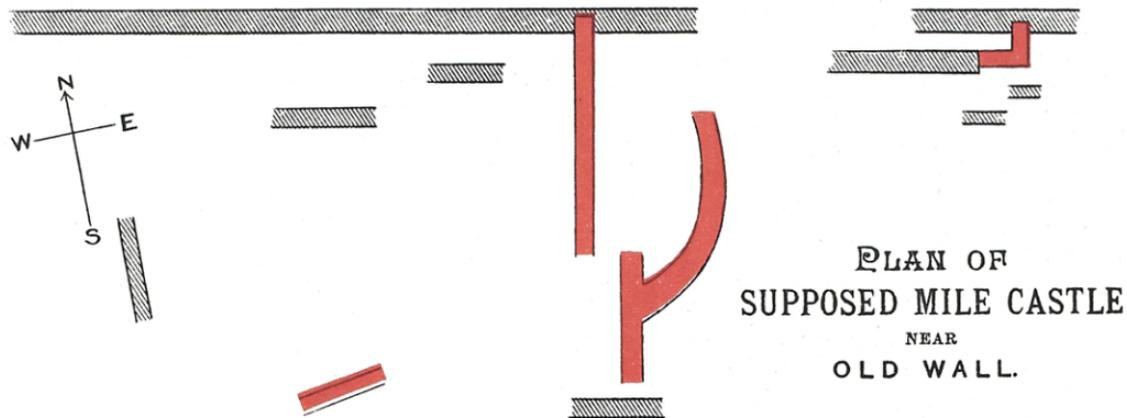
(ii.) East of this trench the ground rises towards Bleatarn farm-house and hillock, and the Vallum alters with the rise. The four ridges coalesce into two larger mounds with a marked depression between; at the top of the

the rise, where the ground has been ploughed, mounds and depression alike disappear. A section was cut by Mr. Calverley just below the top of the rise with remarkable but puzzling results. The trench, 100 feet long, reached from the edge of the southern mound to beyond the north side of the northern mound. In the southern mound was discovered, 5 feet below the surface, the corner of a bed of red sandstone, the top being overlaid with mixed clays and sandstone *debris*, and the whole coated with blue clay. This sandstone ended abruptly at the south edge of the depression but reappeared 13 feet further north. The depression itself contained a modern stone drain, 3 feet 6 inches below the present surface, and below that 4 feet of black peat with large stones; the peat seemed to be natural accumulation, the stones to be a rough foundation made for the drain. Below the peat was greyish clay and finally, 10 feet below the surface, a bed of light sand-water stopped further search. The north mound, which we could not fully examine, seems to consist of sandstone rubble mixed with blue clay, the whole resting on a bed of sandstone 45 feet broad; on the two sides both rock and rubble are coated with blue clay. The rock has been cut in steps and bears marks of quarrying tools. North of the mound is a small depression, in which peat overlies light sand (as before); beyond is a low heap of rubble. It seems probable either that the sandstone rock has been cut away to suit the Vallum or that there has been a quarry on the spot. Mr. Calverley suggests that this quarry supplied the red sandstone of which the Wall was built in this district, and that, when stone enough had been extracted, the Vallum was carried across it. It is, however, not quite certain that the mounds above the quarried sandstone are those of the original Vallum, nor is it certain that the quarry (if quarry it be) is older than the supposed mounds of the Vallum. It is, therefore, better to withhold judgment till the spot has been fully examined.

The

Lane covering foundation of Roman Wall

North dyke of field



PLAN OF
SUPPOSED MILE CASTLE
NEAR
OLD WALL.

Foundations.... 
Trenches..... 

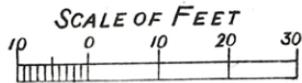


PLATE VI.

A small section, north of the Wall, shewed that the upcast from the ditch had been thrown out northwards.

IV.—OLD WALL, CHAPEL FIELD.

From Bleatarn to Chapel Field, the line of the Wall can be traced along lanes and hedgerows but there are no actual relics of it or of the Vallum. Traces of building have been noticed between Old Wall and Chapel Field and in Chapel Field, the former supposed to be traces of a mile castle, the latter of a turret. Both sites were examined, unfortunately with little result.

(i). In December Mr. Hodgson trenched a field half-way from Old Wall to Chapel Field. Fragmentary foundations of rough concrete (large and small stones embedded in lime mortar, loose pieces of good stone and bits of pottery testified to occupation. But the foundations were undatable—except that one curved piece was differently made from the rest. The pottery was certainly Romano-British. For plan see Plate VI.

(ii). At Chapel Field the Wall makes a turn and a turret has been suspected. In July Mr. Calverley found large flag stones laid on clay, as it seemed, on the north side of the Wall. The character of these remains is uncertain; Mr. Calverley thinks they belong to the Wall.

V.—HIGHFIELD.

Highfield is the next field eastwards from Chapel Field. Mr. Calverley trenched its eastern end, where Wall and Vallum seem to approach very closely and the sub-soil is such as to shew disturbance very clearly. The results, however, were disappointing. The foundations of the Wall and, $60\frac{1}{2}$ feet south of its inner face, the south edge of the Roman Road (A) were traced: the traces of the Vallum were less clear. A ditch, 8 feet wide and at least 4 feet deep (B), was found to have been dug 44 feet

feet from the south edge of the Roman Road, and the upcast on each side corresponded to the strata of the subsoil, lying in inverse order on a thick bed of peat which might be an old surface line. South of this, the ground rises in a bank (c) 10 feet higher than the average level of the ground, and the south mounds of the Vallum seem to have been placed on this bank ; (fig. 2).

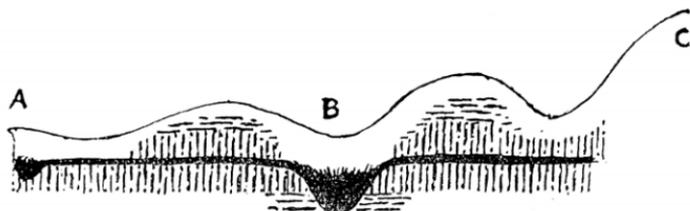


FIG. 2.

VI.—CRAGGLEHILL, HAREHILL.

Cragglehill and Harehill are the western and eastern ends of the high ground, about a mile in length, immediately north of Lanercost. The Wall crosses the top of this high ground : the Vallum runs lower down along the slope about 400 feet from the Wall, and shews at some points an admirably preserved profile of the normal type. The subsoil is, for the most part, red clay. The trenches were supervised by the present writer.

The chief trench, 55 feet from the western hedge of the middle field on the hill side, ran from the north mound of the Vallum to the south face of the Wall. The mound shewed the usual section, upcast corresponding to the subsoil below with the black line of original surface between. About 290 feet from the Vallum and 100 feet from the Wall were indications of the Roman Road about 21 feet wide, constructed as at Whitemoss. Close to the Wall was a flagstone pavement, as it seemed, 28 inches wide, like that suspected at Brunstock. Sections were also dug through the Vallum near Harehill, and north of it at several points : the results resembled those obtained elsewhere.

VII.

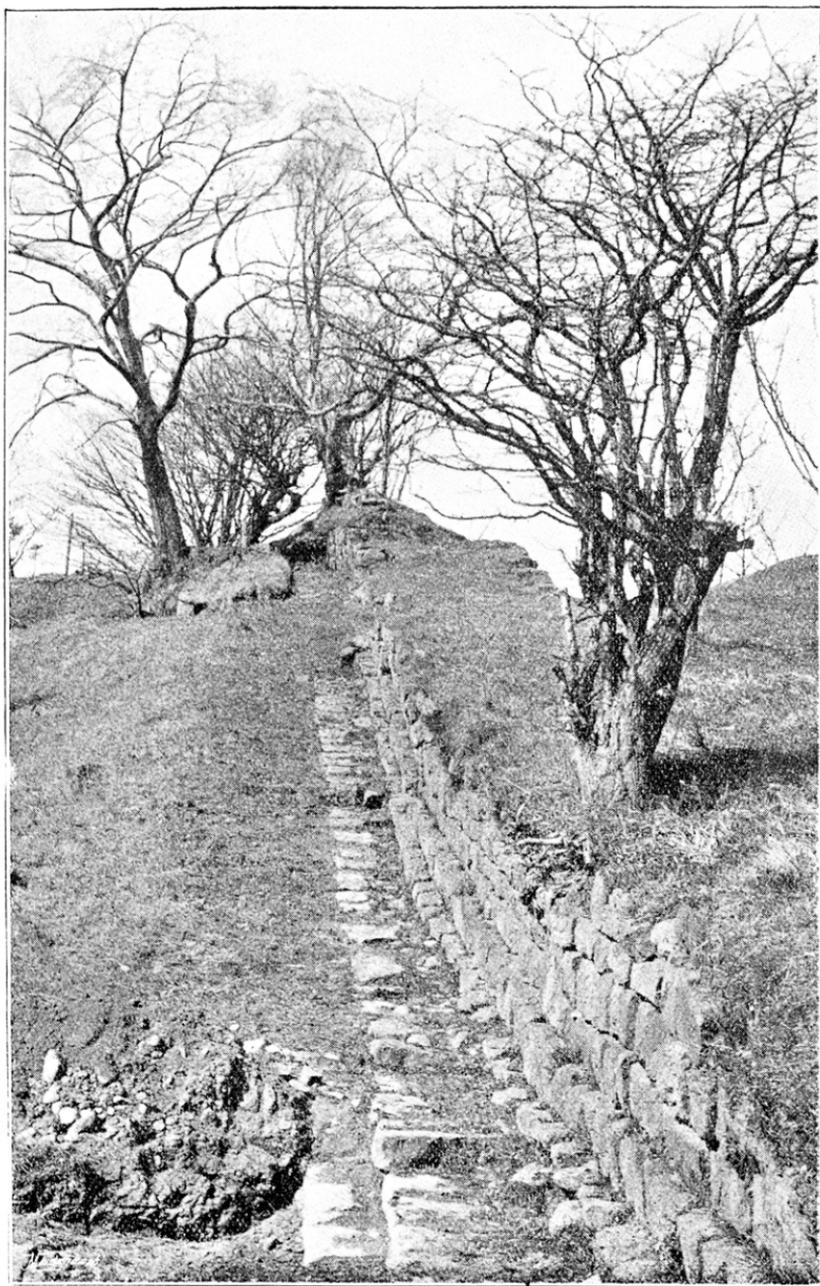


PLATE VII.

GILSLAND VICARAGE.

VII.—GILSLAND VICARAGE.

Wall and Vallum pass through the grounds of Gilsland Vicarage scarcely 100 feet apart. The Wall is admirably preserved; of the Vallum the north mound, with traces of a berm, and the ditch run straight down the steep slope of a little hillock and are plain: the south mounds are fainter. The hillock, like others in the valley near Gilsland, is mainly rough sand and gravel and may have arisen from glacial action. The trenches cut here were supervised by the Rev. A. Wright, Vicar of Gilsland, Mr. F. G. Hilton Price, Director of the Society of Antiquaries, and the present writer.

(i). One section was devoted to exposing the inner face of the Wall (fig. 3). Four courses of walling stone (in all 29 inches high), rest on four* projecting layers, each about

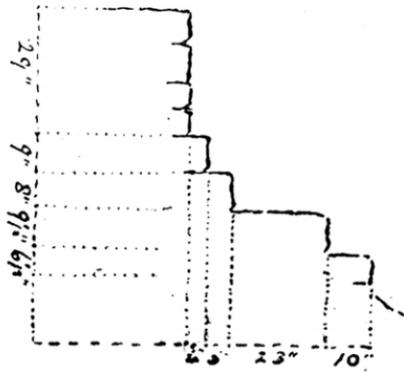


FIG. 3.

9 inch thick: of the latter, the lowest but one, 23 inch wide, recalls the pavement noticed at Brunstock and Lanercost. See Plate VII. The thickness of the Wall, above the projecting layers, is 7 feet.

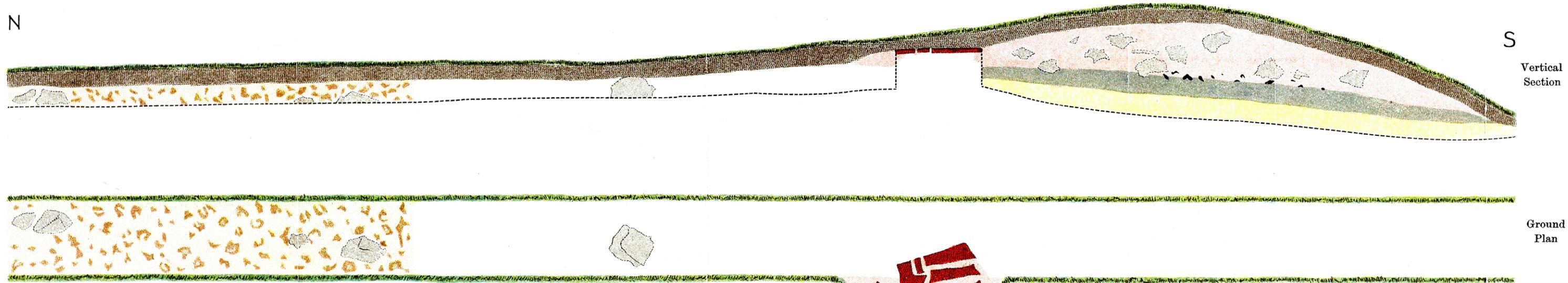
(ii). Six sections of various lengths exposed the Vallum

* The uppermost of these layers *may* be a course of ordinary walling stone slightly bulged out.

and

and the ground between it and the Wall. The Roman road was not found ; some stones, large and small, noted in several sections were at first thought to indicate it, but they may be accidental, as stony *debris* from the Wall and subsoil was found here on the berm of the Vallum and elsewhere. Mr. Price thinks he saw indications of a roadway 32 feet from the Vallum ; it was 15 feet wide, edged with large stones and filled in with gravel and cobble, but this differs from the road found elsewhere. On the other hand a stone core or foundation was discovered in the mound of the Vallum. (i.) In the first section, at the top of the slope which the earth work here descends, the mound, 20 feet broad at its base, consists of mixed gravel and large stones on a bed of reddish clay ; one foot from its northern edge, Mr. Price found a sort of floor or platform, 6 feet by 5 feet, of flag stones about 3 inches thick, and lying on it, some well-dressed stones which might have come from the Wall. Plates VIII. and IX. (2) Twenty-three feet eastwards (i.e. down the slope) a more definite accumulation of large stones was found in the heart of the mound ; there was no platform, but a layer 5 feet long of black matter—sand and sandstone fragments stained by peat vegetable decomposition, the sort of mixture (as Prof. A. H. Green tells me) which constitutes much moorland soil. Beyond this black matter was a second, smaller heap of stones. Plate X. (3) Trenches 22 and 50 feet further east shewed heaps of large stones in the centre of the mound, corresponding to that in the second section. (4) A fifth section on marshy soil at the bottom of the slope, 137 feet east of the first trench, shewed seven large stones laid so as to overlap, with clay bedding below. A final trench, 250 feet eastwards across swampy ground, shewed no trace of any stones. These stones are obviously not isolated heaps, nor do they seem to be (as has been suggested) moraine stones. It is possible that a core was used to strengthen the Vallum

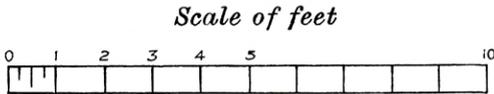
on



SECTION AND PLAN OF VALLUM, PLATFORM, &c.,

VICARAGE FIELD, GILSLAND.

T. H. H. & E. H. December, 1894.

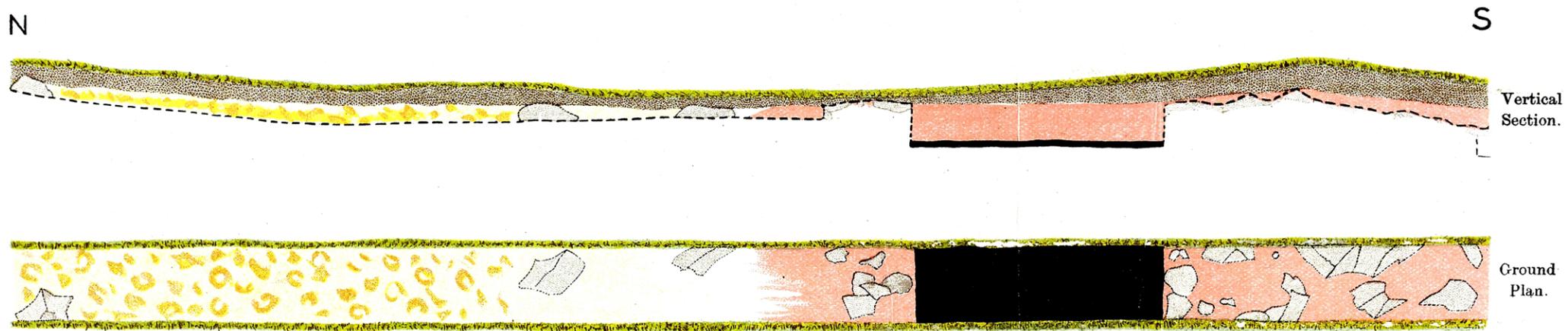


Surface Soil	
Large Stones, various	
Reddish Grey Gravel	
Sandy Gravel, with stones	
Reddish Clay	
Yellowish Sand	
Red Sandstone Blocks	
Black Matter	
Bottom of Trench	



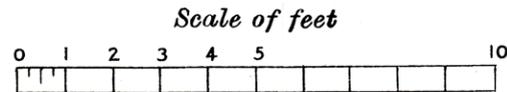
PLATE IX.

GILSLAND VICARAGE.



SECTION AND PLAN OF VALLUM, &c.,
VICARAGE FIELD, GILSLAND.

T. H. H. & E. H. December, 1894.



- Surface Soil.....
- Large Stones, various
- Gravel, with stones
- Sandy Gravel, stony
- Black Deposit.....
- Bottom of Trench

on the slope. There were no traces here, any more than elsewhere, of anything like the German "boundary-ditch."

EXPENDITURE.

	£	s.	d.
Labour, include board and travelling expenses of workmen.	36	16	3
Compensation	8	0	0
Surveyors	10	0	0
Miscellaneous, Printing, &c. ...	2	5	9
	<hr/>		
	57	2	0
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This expenditure was defrayed partly by a grant from the Cumberland and Westmorland Antiquarian Society, and partly by subscriptions collected in Oxford.



