

ART. XXXIV.—*Report of the Cumberland Excavation Committee for 1898*, by F. HAVERFIELD, M.A., F.S.A.*

THE excavations which, for the fifth successive summer, were carried on during last August by the Cumberland Excavation Committee, had three objects, to complete the examination of the Turf Wall at Birdoswald, to trace the Vallum at Birdoswald and at other doubtful points, and to investigate the alleged "Roman camp" on Hawkthirst, near Brampton. Two roads were also examined. The results achieved are once more of very considerable importance and seem fully to justify the continuance of the excavations. It may be convenient to summarize them here.

I.—The Turf Wall—or at least its ditch—was traced in 1895-7 from the point near Wallbowers and Appletree where it diverges from the line of the Stone Wall up to the fort of Birdoswald, through it, and for two hundred yards eastwards. In 1897 we found that the line was such as, if continued directly, would coincide shortly with the line of the Stone Wall. This year we may claim to have proved that it actually does so coincide. The point of coincidence is noteworthy, for there the Stone Wall makes a slight turn, and, had it not made this turn, it would have run directly along the line of the Turf Wall. With this discovery the exploration of the Turf Wall at Birdoswald is concluded. It remains to ascertain whether the Turf Wall can be detected at any other point along the line of the Stone Wall: hitherto our researches have shewn no trace of it. Meanwhile Plate I. shews the general course of the Turf Wall as hitherto discovered.

* For the Reports of 1894-7 see these *Transactions*, xiii. 453, xiv. 185, 413, xv. 172.

II.—The

II.—The Vallum was examined at Birdoswald, near Castlesteads and at Housesteads; this last in connexion with excavations carried out by the Newcastle Society of Antiquaries. At Birdoswald, the Vallum was found to deviate from its direct course just at a point where it approached a milecastle. This is a new result and one of real value for the comparative chronology of the mural works. At Castlesteads our trenches were partly inconclusive, and partly shewed that the line hitherto assigned to the Vallum in this neighbourhood is wrong. At Housesteads, the ditch of the Vallum was found to have been cut for some small distance in solid limestone, and the line was discovered to be such as to bring the earth-work directly under crags overlooking it from the south. Both features are remarkable, though neither is unique.

III.—At Hawkthirst the alleged “camp” was found to consist of two small roughly square areas, each surrounded by a small ditch. The date of these enclosures must remain uncertain, but they certainly do not represent a “Roman camp” of any type whatsoever.

As before, the excavations were greatly aided by the kindness of landowners and farmers, who granted all necessary permissions most readily. The Society is especially indebted to Lord Carlisle, both for leave to work on his estates and for a supply of skilled labour; to Mr. F. P. Johnson of Castlesteads for leave to work on his estates; to the farmers, Mr. P. Hewitson of Town Foot Farm, Brampton, to Mr. W. Waugh of Middle Farm, Brampton, Mr. Archd. Gillespie, Newtown of Irthington, Mr. John Wright, Beck, Irthington, and Mr. L. Potts, Swainsteads, Walton, for leave to excavate; and lastly to Mr. Oswald Norman, for leave to work at Birdoswald. Mr. R. G. Graham of Beanlands Park gave much kindly help in making preliminary arrangements and forwarding our plans. All the digging was done under supervision. Mr. and Mrs. Hodgson once more laid the Society under
great

Sketch-Map of Birdoswald and Neighbourhood.

Line of the Stone Wall, and Walls of the Fort and Mile-Castles. ————
 Line of the Axis of the Ditch of the Turf Wall. - - - - -
 Line of the Axis of the Ditch of the Vallum. - - - - -

From the Ordnance Survey Map, with additions.

E. H., 1898.

SCALE:— Six inches = One mile.

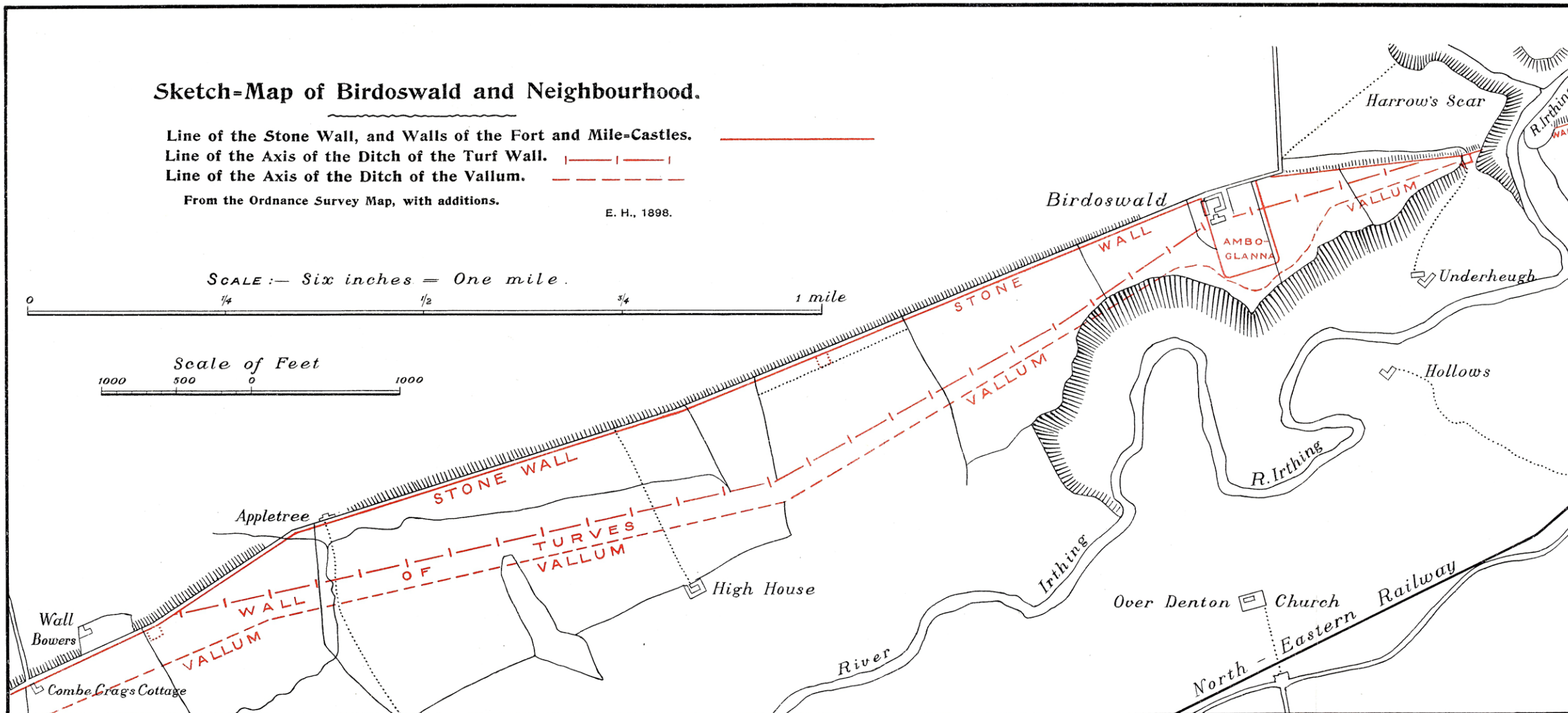
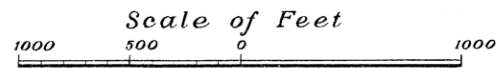
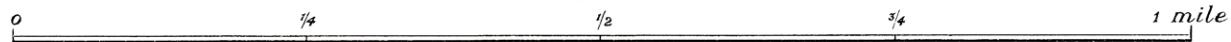


PLATE I. TO FACE P. 346

great obligations by surveying and drawing the very complicated excavations at Birdoswald. For the plan of Hawkhurst we have to thank Mr. G. B. Grundy, for that of Housesteads, Mr. A. C. Dickie. A statement of expenditure is appended to the report.

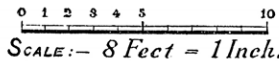
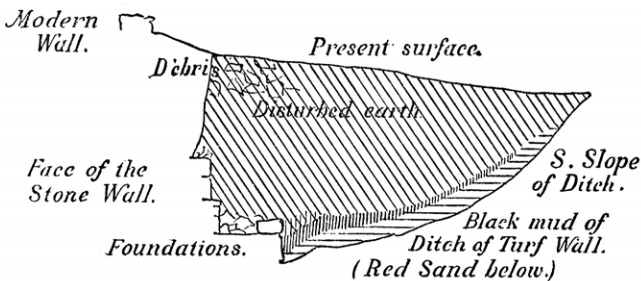
Next year we hope to be able to search further for the Vallum near Castlesteads and for the road at Birdoswald, and finally to attack some of the problems of the Wall west of Carlisle and in particular in the neighbourhood of Drumburgh.

I. THE TURF WALL.

The excavations both for the Turf Wall and for the Vallum were made this year in Chapel Field,* a roughly

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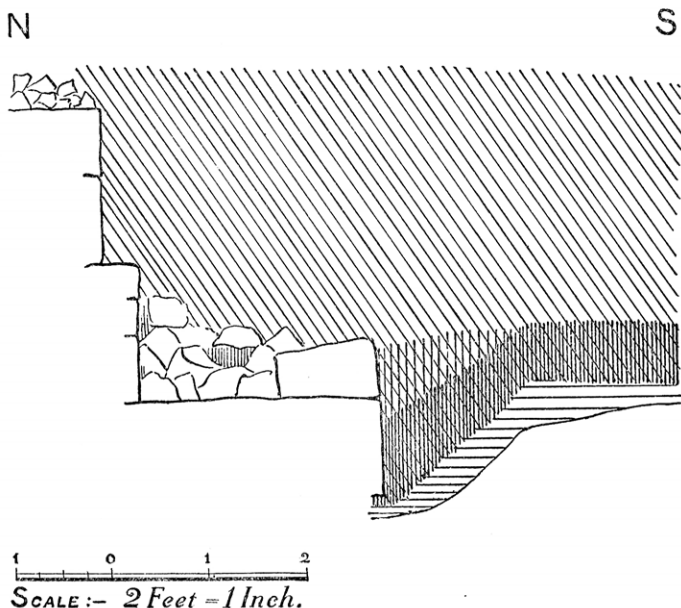
T.H.H. & E.H.

FIG. I.—THIRD TURF WALL, TRENCH, 1898.
CHAPELFIELD, BIRDOSWALD.

* Names like Chapel Field, Chapelburn, Chapel Hill are common in the north of England and southern Scotland, and appear to be applied to sites where chapels once stood, or where remains of buildings existed which were popularly taken to have been chapels: conceivably the names might also denote what was once church property, but I do not know any instance of this. Hodgson,

triangular

triangular piece of arable land, rather more than 4 acres in extent, which forms the eastern extremity of the Birdoswald estate. The northern limit of this field is the line of the Wall, its southern limit the steep cliffs which descend to the Irthing; at the east end and apex is the ruin of a mile-castle crowning a precipice some 150 feet above the river. The excavations made in this field are laid down on Plate II.



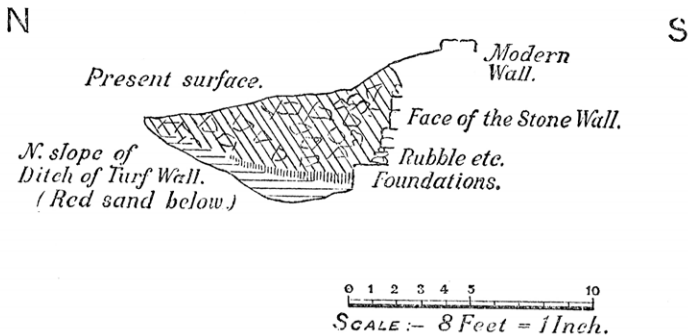
T.H.H. & E.H.
 FIG. 2.—PART OF THIRD TURF WALL TRENCH, 1898.
 CHAPELFIELD, BIRDOSWALD.

The ditch of the Turf Wall was traced in 1897 up to the western limit of this field. We commenced this year

learned and complete as ever, has a note on the names, which he restricts to sites where remains of ashlar work and carved stone were found, because in old times only chapels and castles (and not peel towers) were built of regular masonry, (*Hist. Northumberland*, 11. iii. 401). But this is perhaps over refinement. At Birdoswald, I suppose, the Milecastle originated the name Chapelfield.

at

at 260 feet from the hedge forming this western limit, and followed the ditch in six successive trenches. We found it to keep the same straight line as that shown in 1897, to approximate gradually to the Stone Wall and finally to coincide with it. In our first trench, its north slope was 45 feet south of the Stone Wall. In our third trench, (figs. 1 and 2) 265 feet further east, the Wall stood, as it were, actually in the ditch, the southern face of the Wall being about 15 or 16 feet north of the south side of the ditch. Our fifth trench, 30 feet further east (fig. 3), and our sixth trench, 68 feet further east (fig. 4) than the third trench just described, shewed the ditch on the north side of the Wall. The Wall here stood on the south and middle of the ditch, and in the sixth trench, was strongly supported by a bed of large stones, at least



T.H.H. & E.H.
 FIG. 3.—FIFTH TURF WALL TRENCH, 1898.
 (NORTH OF THE ROMAN WALL) BIRDOSWALD.

6 feet deep (we were unable to go deeper), which much resembled some foundations of the fort wall found in 1897 at Carrawburgh (report for 1897, *ante* p. 176.) As the cut of the sixth trench, on the next page, shews (fig. 4), the ditch seems to have got squeezed up in the construction of these weighty foundations; outside of them the characteristic black matter was clearly found. On the north side of the ditch we discovered a bank of undisturbed earth

earth 6 or 8 feet thick, and north of it the fosse of the Stone Wall. Here, therefore, the ditch of the Turf Wall occupies a position which afterwards became the site of the Wall and of the berm in front of it: the width of the berm here seems to have been about 18 to 20 feet. A few feet further east the Turf Wall ditch must have coincided with that of the Stone Wall. This, as has been said, is a point where the Stone Wall deflects, and the line of the Turf Wall forms, as Plate II shews, a straight line with the Stone Wall beyond the point of junction. This fact, among others, suggested to various observers the idea that the Stone Wall is here a later line than the Turf

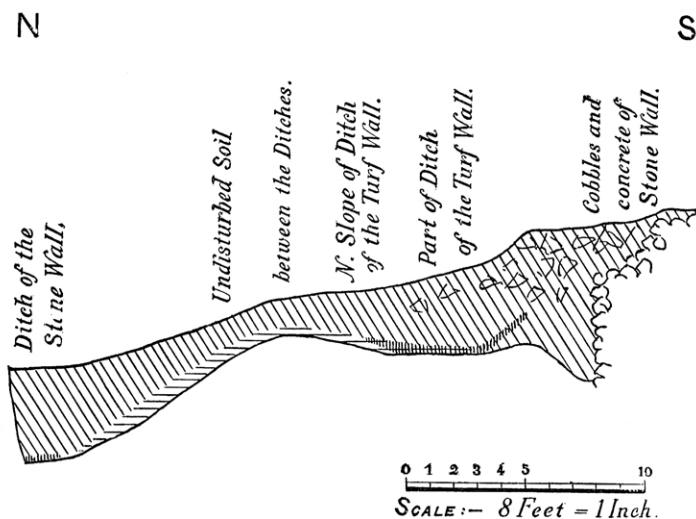


FIG. 4.—SIXTH TURF WALL TRENCH, 1898.
(NORTH OF THE ROMAN WALL) BIRDOSWALD.

T.H.H. & E.H.

Wall. On this hypothesis, the earlier work of sods was straight, while the later Stone Wall partly coincided and partly diverged from it. Since we have found the Stone Wall planted in the ditch of the Turf Wall, there can be no longer any doubt that the latter is the earlier work.

We

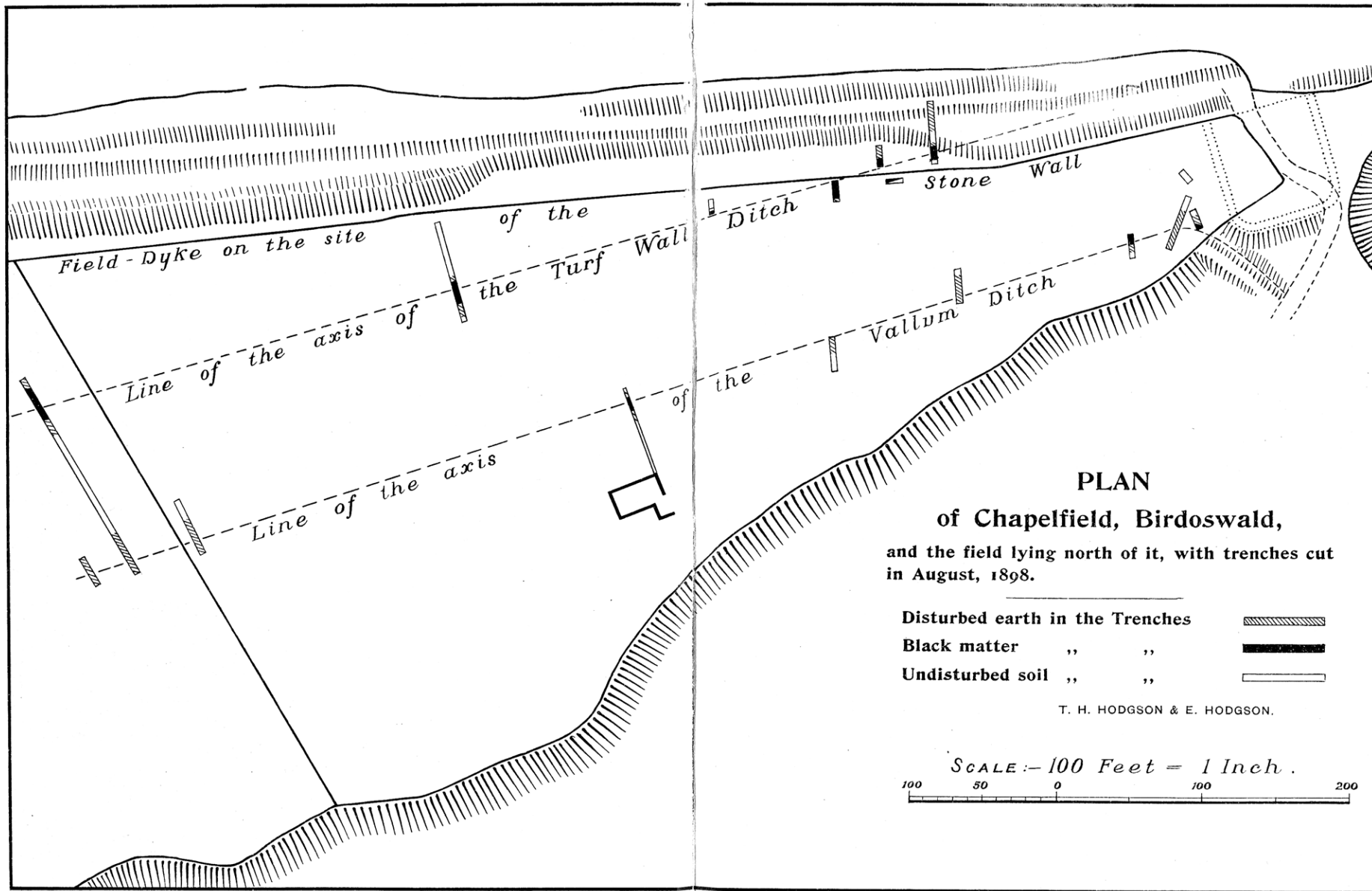


PLATE II. TO FACE P. 350.

We had hoped to obtain a complete section of the Turf Wall ditch in our first trench, but twenty-four hours of continuous rain destroyed it when almost complete and time failed for a new trench of adequate size. We ascertained, however, that here the ditch was quite 30 feet wide from lip to lip, while its profile resembled a blunted V, as it did in our Appletree trenches (report for 1895, these *Transactions*, vol. xiv. p. 187).

No trace of the Turf Wall itself was noted, nor was special search made for it as all the ground examined had been frequently ploughed.

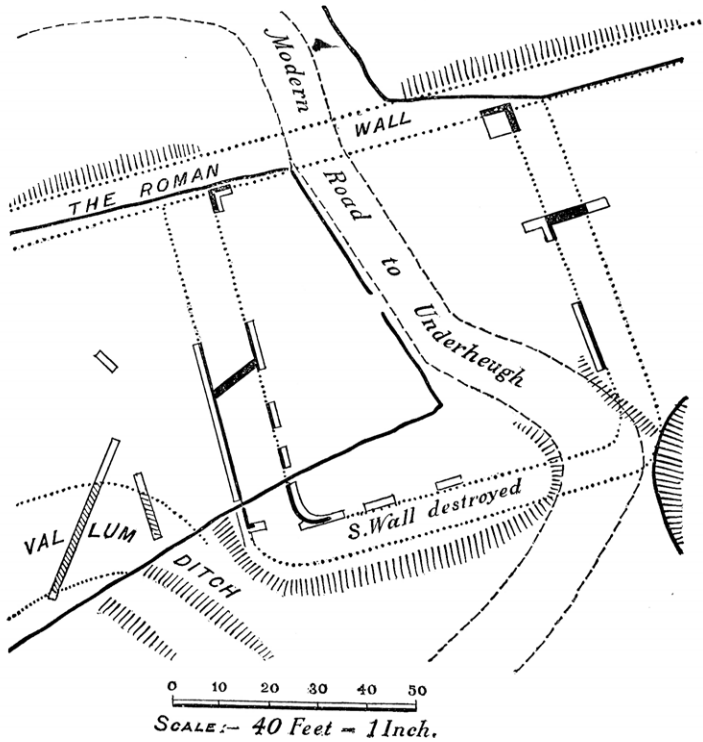
The excavation of the Turf Wall ditch was supervised by Mr. T. H. Hodgson, Mr. T. Ashby B.A., Craven Fellow of Oxford University, and the present writer.

II. THE VALLUM. (1) AT BIRDOSWALD.

The Vallum ditch, like that of the Turf Wall, was traced in 1897 up to the edge of Chapel Field. This year we traced it across the field in six trenches. Through most of this area it pursues a straight course, roughly parallel with the Turf Wall ditch, but at the eastern end of the field where the milecastle stood, it turns abruptly southwards over the cliff. The turn was shewn in our fifth and sixth trenches. The annexed plans shew clearly enough that the Vallum, by making this turn, just, but only just, avoided crossing the site of the mile castle, and the most natural conclusion is that the makers of the Vallum intended to avoid the site of the milecastle as they avoided the site of the fort. If this is so, we have a new fact to use in our mural equations. The mile-castles would seem to be either earlier than the Vallum or coæval with it, as we have already discovered the forts to be. The course of the Vallum is laid down on Plate II: its whole course from Wallbowers to the cliff may be seen on Plate I.

Incidentally

Incidentally our excavations for the Vallum ditch led us to excavate two buildings, which may be noticed here. The one is the milecastle, already mentioned. This was not thoroughly uncovered, but its exact site, walls, and corners were fixed. It is a nearly square building which

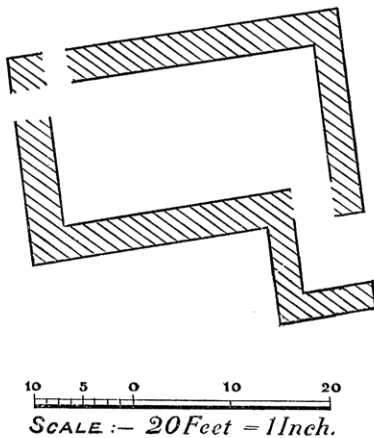


T.H.H. & E.H.
 FIG 5.—REMAINS OF "MILE CASTLE" ON HARROW'S SCAR, ABOVE THE IRTHING, NEAR BIRDOSWALD, 1898.

measures inside 65 feet from east to west, and 75 feet from north to south. Its north wall is the Stone Wall: its west wall, south-west corner and part of its east wall survive at least in their foundation courses and are about 7 feet 10 inches thick (fig. 5). The south-east corner and most

most of the south wall have been destroyed by landslips and by a cartroad which makes its way across the mile-castle down the cliff to Underheugh Farm. The south-west corner is rounded inside—the outside is gone—and traces were noticed of an interior wall, possibly Roman, near it. The examination of this milecastle may perhaps be resumed at a future date, but it is so ruined that it is not likely to yield much reward.

The other building was found in the western part of Chapel Field and at its highest point. Only foundation courses survive, placed on the subsoil of yellow clay. It measures 34 by 21 feet and has an annexe about 10 feet square: a trench taken obliquely across its interior and some trenches outside shewed neither internal partitions nor adjacent buildings (fig. 6.) No smaller objects were



T.H.H.

FIG 6.—FOUNDATIONS OF BUILDING, CHAPELFIELD, BIRDOSWALD.

found to fix its date, nor do the rough foundations give clear clue. But the masonry is not specially Roman in character and the whole is probably the relic either of an old

old cottage, as the ground plan suggests, or, as has also been conjectured, of a small Peel tower. There are some faint traditions of such a tower east of Birdoswald, but the cottage provides perhaps the safer if the less attractive hypothesis.

These excavations were supervised by Mr. Hodgson, Mr. Ashby, and the present writer.

II. THE VALLUM. (2) AT CASTLESTEADS.

The line of Vallum is unknown near Castlesteads for a distance of some two miles and a half. The earthworks appear to have been ploughed away in or before the seventeenth century, for Gordon and Horsley found no traces of it when they visited the district in the beginning of the eighteenth century. The Ordnance Surveyors and Mr. Maclauchlan laid down parts of the line on their maps, but they were guided only by surface indications.* Our excavations unfortunately proved very little except that these surface indications cannot be trusted.

(a) We commenced on the west of Castlesteads, where where the Vallum has been thought to pass south of Newtown Farm buildings. Here a "slack" can be traced fairly straight across a large grass field, formerly ploughed, called the Croft and this "slack" appears to have been taken by Mr. Maclauchlan (Survey p. 61) as the ditch of the Vallum. We trenched it in three places in the Croft. Our first trench, near the hedge which bisects the field, shewed sand which might have been disturbed but probably had not been. Our other trenches, further east, revealed that a ditch or depression 5-6 feet deep, hardly 10 feet wide at the bottom and hardly 20 feet wide at the top,

* Dr. Bruce in his *Handbook to the Roman Wall* (ed. iv. p. 222) and elsewhere says that looking westward from The Beck Farm "the fosse of the Wall and Vallum are grandly seen." So far as we could make out, this is erroneous so far as the Vallum is concerned.

had

had probably been filled in here. But the black matter usually marking the bottom of the Vallum ditch was here absent, and what is more noteworthy, the size of the depression is suspiciously small. We then trenched the "Hilly Field" belonging to the Beck Farm, a field in which the ground slopes steeply into the little Cambeck valley, and further the flat "Holmes" in that valley. The results in the Hilly Field were inconclusive: in the Holmes we met undisturbed sand and gravel wherever we dug. These trenches covered the line marked by Mr. Maclauchlan eastwards from Newtown of Irthington and their results seem to disprove that line.

(b) We then moved across the Cambeck to a grass field, formerly ploughland, on the Swinesteads Farm and known apparently as Darn Hold: the fosse of the Wall is its northern limit. Two "slacks" run up this field, one about 60 yards, the other about 130 yards, south of the fosse, and here the Ordnance Map marks traces of the vallum. We trenched both twice, but without any result, finding undisturbed red clay immediately below the surface. In the slack nearer the fosse, at about 120 yards from the north-east corner of the field, we dug (for surety) down into this clay and found in it at $5\frac{1}{2}$ feet deep a horizontal line of black matter extending across the "slack" for at least 28 feet. A specimen of this black matter was sent to Jermyn Street, and declared by Sir Archibald Geikie to be simply ferruginous. It may serve as an example of a black line which is due entirely to natural causes, is not of vegetable origin and does not mark the original surface of a ditch. We trenched further south in the same field, across the line which Mr. Maclauchlan suggests for the Vallum, and found nothing but undisturbed subsoil. Our conclusion is that the lines hitherto assigned to the Vallum in this district are mainly, if not entirely, wrong. We hope in the future to obtain some more positive results.

These excavations were supervised by Mr. R. P. L. Booker, M.A., F.S.A., and the present writer.

II.

II. THE VALLUM. (3) NEAR HOUSESTEADS.

The line of the Vallum near Housesteads was unknown to Horsley, and though confidently laid down by modern map makers, is equally uncertain still. The unknown section, formerly cultivated but now pasture, is a mile and a quarter in length, from the farmhouse of Bradley, a mile west of the fort, to the Moss kennels plantation a quarter of a mile east of it. The western part of this unknown line was examined by the present writer in alliance with Mr. R. C. Bosanquet and in connexion with the excavation of the fort carried out by him for the Newcastle Society of Antiquaries. This was not part of the Cumberland Excavation Committee's work, but like similar excavations in 1896 and 1897 at Rudchester and Carrawburgh, it may be briefly described here.

The fort of Housesteads and the Wall west of it stand on the top of a long hill of the "writing desk" kind, which has its highest part and its precipitous face to the north, and slopes more gently to the south. All over this slope the rock (sometimes limestone, sometimes basalt) is close to the surface. At the bottom of the slope is a small valley, the south side of which is formed by a low ridge of freestone running parallel to the Wall. The ditch of the Vallum was traced from Bradley farmhouse up to this little valley, and in the third field east of Bradley, the easternmost of the Bradley fields, a striking discovery was made. The ditch of the Vallum was found to be cut into the solid limestone, which here as elsewhere comes near the surface. The mounds of the Vallum were long ago removed for ploughing, and the ditch filled up, but when excavated it is unmistakable, sunk $3\frac{1}{2}$ feet into the rock. Its width at top is $12\frac{1}{2}$ feet, at bottom $10\frac{1}{2}$ feet: the bottom is flat and slopes with the surface: its average depth below the surface is $6\frac{1}{2}$ feet. Its south scarp shewed toolmarks which were not made by our workmen

workmen. A second trench, 36 feet eastward, shewed the north edge of the ditch similarly hewn out of limestone to a depth of over 5 feet : further on, the rock is deeper and our trenches shewed the ditch sunk into clay subsoil instead of rock. In all, five trenches were dug in this field and, taken with others, shewed that the Vallum ran continuously in a straight line from its last visible piece at Bradley up to the stone dyke separating the Bradley and Housesteads land. On the latter we failed to trace it : at 500 yards from the boundary wall just mentioned, we trenched 70 feet across what would have been its direct course, but no ditch was discernible. Finally we tested a point much nearer the fort, where certain terraces on the on the hill side suggested the Vallum about 790 feet west from the wood sheltering Housesteads farmhouse. We everywhere found rock 20-25 inches below the turf and our terraces are most probably due to cultivation.* We shall, I hope, be able to resume our search next year. The results of 1898 are laid down on Plate III.

Meanwhile two noteworthy facts have emerged. First, a new instance has been gained of the Vallum ditch sunk into solid rock. The long cutting through the basalt cap of Limestone Bank is famous. There are others, less known, through sandstone near St. Oswald's, east of Chollerford, and through limestone near Walltown on the Nicks of Thirlwall, and there are short pieces by the Mosskennels plantation near Housesteads, at Bleatarn (*Report for 1894, these Transactions, vol. xiii, p. 464*) and doubtless elsewhere. Such instances must affect our estimate of the Vallum: this newly found one is worthy

*The slope of the hill west of Housesteads fort, and part of that east of it are covered with such cultivation areas. Some are terraces 50-60 feet wide, which run along the hill side; others stretch down the slope and are more nearly squares, averaging perhaps three quarters of an acre in extent. They are divided by low lines of stones, apparently cleared off the land: one such line which we cut through was plainly artificial and did not seem to be necessarily of very ancient date.

of note. And secondly, the now ascertained line of the Vallum runs into the little valley mentioned above. We have not yet discovered whether it follows this valley or slopes up the hill, but it certainly enters the valley and a steep rocky ridge, 30 or 40 feet high, overhangs it here from the south. It is a good instance of the neglect shewn by the builders of the Vallum for a strong defence against the south. They could easily have taken the earthworks a little way up the slope to the north: they actually took it into the valley. Similar instances of crags overhanging the Vallum from the south may be seen elsewhere, one opposite Allolee on the Nicks of Thirlwall and another opposite Mosskennels farm and Grindon school: of the latter, the best view is from King's Hill. The theory of Hodgson and Bruce, that the Vallum was meant for defence against southern attack, has now been largely abandoned. Nevertheless, it is worth while to register plain instances of the regard or disregard of military needs shewn by the Vallum-builders.


The examination of the Vallum at Housesteads was supervised by the present writer.

III. HAWKHIRST.

Hawkhirst, locally pronounced Hawkrist, is a long low hill on the south bank of the Irthing, a mile west of Brampton and rather more than that distance southeast of the nearest part of the Wall, which is separated from it by the river. Its reputation as the site of a Roman fort dates from the beginning of this century when it was noticed by the late Robert Bell, of the Nook, Irthington. Mr. Bell's account of the place is printed by Maclauchlan (*Survey p. 63 note*) but it is rather vague: it is, moreover, largely an account of a site which was cleared when Mr. Bell was twelve years old. In effect Mr. Bell says that there was originally a rampart of Gelt cobbles on a flagstone

VALLUM NEAR BRADLEY




LIMEKILN 

LIMEKILN 


RIDGE & CLIFF OF FREESTONE

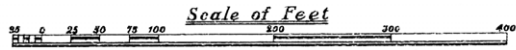
NORTH SIDE OF VALLUM DITCH

RIDGE & CLIFF OF FREESTONE

SPRING 

OPEN DRAIN

BRADLEY 



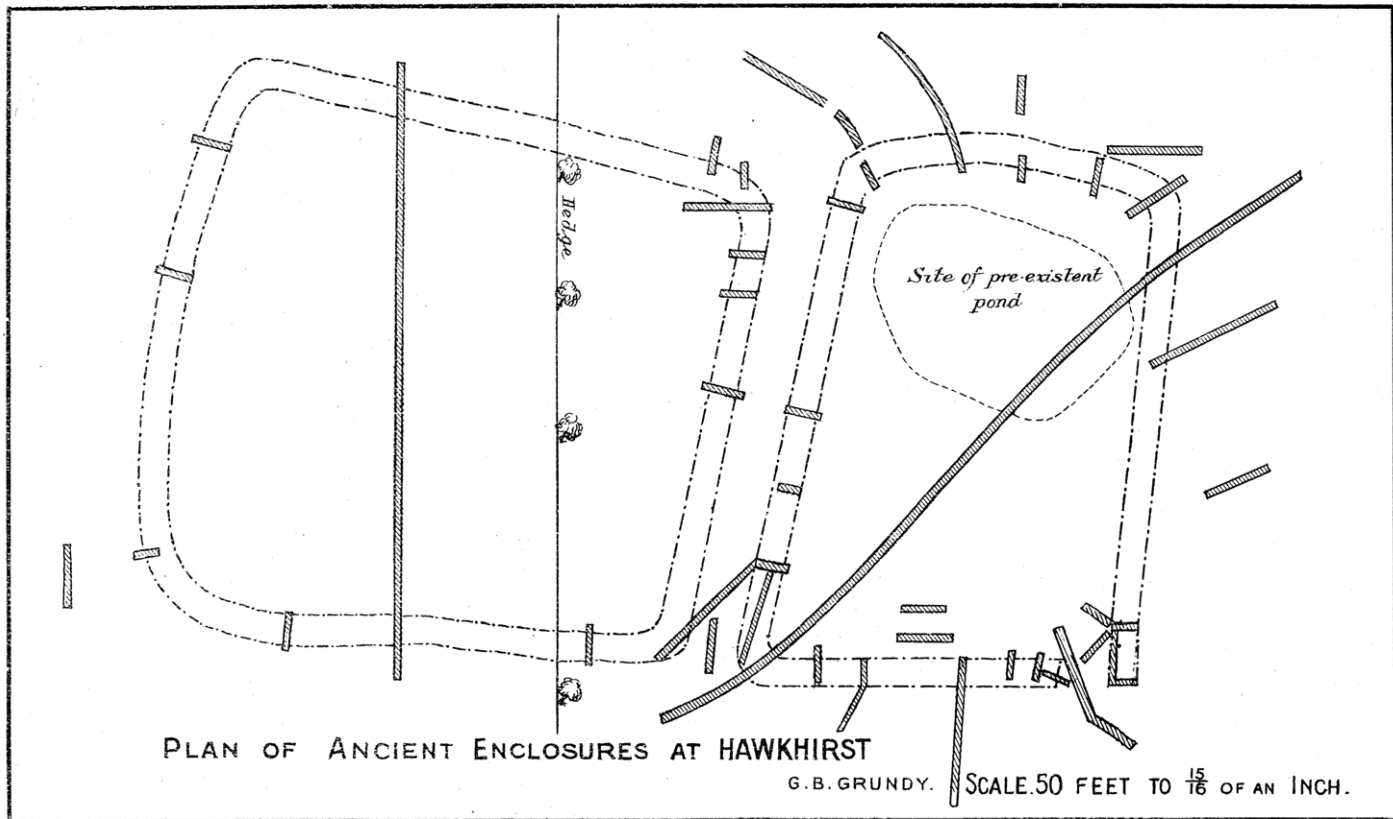


PLATE IV. TO FACE P. 359.

stone foundation, with a gate at the west end, and enclosing one and a half acres: this rampart was partly on the Nook farm, partly on Brampton Town Foot farm. The former part was cleared of stones when Mr. Bell was twelve (about 1800, I believe): the latter which contained a pond, was cleared and drained about 1826 and an urn found in the pond with a hoard of third century Roman coins. No masonry was found inside the enclosure, but some was thought to have existed north and south of it, and querns and pottery had been found near. Mr. John Hodgson, who visited the site (*Hist. of Northumberland*, II. iii. 233), mentions no ramparts but says that ashlar and flagstones, single Roman coins, and 200 horse shoes had been found as well as the already noticed hoard. Dr. Bruce examined the site with Mr. Bell, but his account is deficient in detail. However, the remains have been claimed as those of a Roman fort *per lineam valli* and the name Aballaba attached to it.

Our examination of the site was limited to the spot which is said to have been enclosed by a rampart, but was sufficient to shew that it was not a Roman fort. Our trenches, shewn on the annexed plan (Plate IV.) made for us by Mr. G. B. Grundy, M.A., revealed two enclosures, each roughly rectangular, and each surrounded by a steep sided ditch uniformly 8-9 feet wide from lip to lip and $3\frac{1}{2}$ - $4\frac{1}{2}$ feet deep. In the south-east corner of the eastern enclosure, the ditch was absent and an entrance 15-16 feet wide was found: possibly there were other such entrances on which we did not happen to light. No foundations or indication of such were noted. About the middle of the eastern enclosure we found a loose bit of brick (not Roman) and a fragment of rude black pottery; on its south side the only stone which seemed to us and our workmen really to have been dressed by man's hands—in this case, a bit of sawn sandstone; on its north side, several pieces of rude black pottery. The pottery, which seemed to us undatable

undatable, was submitted to Mr. C. H. Read, Secretary to the London Society of Antiquaries, and pronounced by him to be quite possibly, but by no means certainly, rude local Romano-British ware.

One conclusion is plain: we have not to do with a Roman military work, neither Aballaba * nor anything else. It is more difficult to say what the enclosures actually are. They have no specially Roman features, and the smaller finds made on the spot (except the hoard) need none of them necessarily be judged Roman, although some may be so. Only an extensive scheme of excavation, such as lies outside our plans or possibilities, could fully decide this problem.

The excavations at Hawkhirst were supervised by Professor Pelham, Mr. G. B. Grundy, M.A., and the present writer.

IV. ROADS.

(1) High Street is a road from Windermere over the fells to the neighbourhood of Penrith. It starts apparently up the valley of Troutbeck and Hag Gill, climbs up near to Thornthwaite Crag and thence reaches the high ridge which for six miles dominates Patterdale and Ullswater from the East. This ridge is narrow but comparatively level: the road follows it over High Street proper, Kidsty Pike, High Raise and Loadpot, attaining in two places the astonishing altitude of 2600 feet and finally descending by a fairly easy gradient across Swarth Fell to Tirril and thence to the Roman fort at Brougham, two miles south of Penrith. The name High Street is doubtless old, though I cannot quote authority for it. It seems to have escaped the notice of our earlier antiquaries. William Bennet,

* Aballaba or Aballava is known from inscriptions to have been pretty certainly at Papcastle, near Cockermouth, but these inscriptions were not rightly understood when the name was applied to Hawkhirst forty or fifty years ago.

Bishop

Bishop of Cloyne, who walked along many Roman roads in the later years of the eighteenth century, mentions a Roman road from Ambleside to Plumpton Wall, as visible at Kirkstone Hill and Gowbarrow Park Head and further on in Greystoke park, but it is not clear that he means High Street.* Britton and Brayley, however, note it in their "Beauties of England" and John Hodgson knew of it; he observes that no one had yet adequately traced it (11, iii, 239). The Kendal antiquary, Cornelius Nicholson, describes it in his "Annals of Kendal" (ed. 2, p. 7); indeed he mentions two roads which he supposes to come, the one from Kendal along Ill Bell and Froswick hills, the other from Ambleside, mounting out of Troutbeck vale by the "Scot-raik" and meeting the former near Thornthwaite Crag. He adds that he laid bare some of the paving on High Street. As the accounts of the road are in some respects conflicting or imperfect, Mr. Grundy and myself had purposed to examine it. The scheme broke down, and I was able only to identify what I suppose Nicholson calls the "Scot-raik"—a well marked road or packhorse track, which climbs very steeply up the west side of Froswick from near the point where Blue Gill joins Hag Gill: once on the top, this road runs visibly on the east side of Thornthwaite Crag and over High Street. Mr. Grundy, with the assistance of Mr. W. H. Parkin, jun., of Ravencrag, examined and trenched part of the road. He has put his results at the Society's service, and with his permission, I here summarize them.

The portion of road examined was that near Loadpot Hill and the Elder Beck. Here the road can be traced on the surface by the difference of the grass on it from the grass around, as indeed it can be traced for most of its length, but here, as elsewhere, there are few or no surface indications of paving. The line is also somewhat com-

* Quoted in Lysons, *Cumberland (Magna Britannia, vol. iv. 1816)* p. cxxxvi.
 plicated

plicated by packhorse tracks which seem now strictly to follow the road, now to diverge slightly from it, while pursuing always the same general direction. Mr. Parkin tells us that these packhorse tracks represent a trail across the fells used frequently by peat-carriers taking peat down to Windermere in the days before railways made coal abundant. Two sets of trenches were dug. One was across a straight embankment, 40 yards long, by which the road traverses a slight depression, a little to the north of Loadpot Hill. This embankment is about 32 ins. above the depression and is just on a level with the surrounding surface: it is about 10 ft. wide at top, 15-16 feet wide at base. When trenched, it was found to consist of four layers, first the surface and a layer of vegetable matter such as often occurs under old thick grass: then, a layer of gravel, like river gravel save that the stones were not rounded, 9 ins. thick on the crown of the road but tapering off at the side: thirdly, a layer of peat, 8 ins. thick, and lastly a layer of larger stones, (fig. 5) rough but obviously quarried and more than two feet thick. Apparently this was the foundation, which was coated with peat and then received the actual gravel of the road. No trace of curbstones was detected anywhere at this spot.

The other spot trenched was about two miles further north and very nearly 1200 yards south of the point where the Ordnance Map takes the road over the Elder Beck. Here curbs were visible on the surface, stones roughly square on top and sides but not below, measuring on an average 9 by 9 by 5. The curbs were 10-11 feet apart on each side of the road: the road itself had been unfortunately much worn by packhorses and its exact construction could not be determined. The stones which lay about were mostly flakes 6 or 7 ins. long and 1 or 2 ins. thick: these are the natural cleavages of the rock. I have never noticed them on Roman roads in the North of
England

England, but they correspond very closely to stones found by Mr. Grundy and myself last October in the lowest stratum of a Roman road in Blenheim Park, near Oxford.

The quarried stones visible at both spots correspond exactly in character with the stone in a quarry called Loadpot Hole, on the north face of Loadpot Hill as one descends to Swarth Fell. This quarry, 1800 feet above the sea and far removed from any house or work of men except High Street, seems almost inevitably to be the quarry from which, at some time or other, metalling was taken for this mountain road.

We hope it may be possible to examine High Street further and in particular to fix its course at its two ends, about which there is some uncertainty or at least some controversy.

(2) With the consent of Mr. Blackburn of the Gap, the road south of the vallum near Gilsland, mentioned in our last report (1897 *ante* p. 186) was examined further. It had been traced last year as far west as the boundary between the Foultown and Gap farms: this year we traced it to the present lane running from the Gap to Reaygarth, and west of that we could not find it. Even where it could be found, the remains were feeble—a bed of gravel varying in various trenches from 12 to 16 feet in width, but with no sign of curbstones. However, the field had been ploughed, and as the gravel bed was found only along one line, we must conclude this to be the line of the road. This line is a trifle north of that laid down (on no evidence, I fear) by the Ordnance Surveyors. I may add that the line laid down by the Surveyors west of the Gap-Reaygarth lane is physically impossible.

The excavations here were conducted by Mr. Hodgson and myself.

EXPENDITURE, 1898.

	£	s.	d.
Labour at Birdoswald, Castlesteads, and Hawkfirst	12	12	0
Compensation at ditto	1	10	0

Of this total £11 18s. was defrayed by C. & W. Society.
The excavations near Housesteads were defrayed by
Oxford subscriptions.

TOTAL EXPENDITURE BY THE SOCIETY IN EXCAVATION
AND COMPENSATION.*

	£	s.	d.
1894	59	19	4
1895	26	11	11
1896	7	16	0
1897	13	6	0
1898	11	18	0
	<hr/>		
	119	11	3
Off contributions from Oxford Sub- scriptions	34	14	2
	<hr/>		
	£84	17	1

thus leaving £15 2s. 11d. yet to expend of the £100
voted by the Society.

* The items are taken from the Society's Statements, duly audited, printed and published every year.