ART. I.—The Roman Fort at Low Borrow Bridge. By ERIC BIRLEY, F.S.A.

Partly read on the site, September 3rd, 1946.

THE Roman fort at Low Borrow Bridge¹ is of special interest to this Society, for at its inaugural meeting in Penrith, just eighty years ago this month, James Simpson (first Chairman of our Council, and later President) drew attention to it in his address on "The present state of Antiquarian Research in Westmorland and Cumberland,"² stressing the need for its investigation; and seventeen years later, in the autumn of 1883, it was at Low Borrow Bridge that the Society carried out its first excavations on a Roman site. For all that, however, there are few Roman forts in our district of which so little is known—and fewer still where knowledge might more easily be obtained by scientific excavation.

PREVIOUS ACCOUNTS.

Nowadays, with the L.M.S. main line to Scotland passing within a stone's throw of its western rampart, and the main road from Kendal to Tebay skirting its south and east sides, it is difficult to think of Low Borrow Bridge as a lonely and unvisited place; but lonely it was throughout the middle ages and indeed until the early years of the nineteenth century, to judge by the silence of all early writers. The great pioneers—Leland, Camden and Horsley—knew nothing of it; its earliest appearance in print (so far as I can ascertain) was as late as 1777, when

¹ CW 1, 2 . . . These Transactions, Old and New Series.

PSAL 2 . . . Proceedings of the Society of Antiquaries of London, second series.

² CW 1, i, p. 8.

Nicolson and Burn, in their Westmorland and Cumberland,³ accorded it a brief notice:

"BorrowDale hath its name from the river Borrow, which empties itself into Lune at Borrow-bridge. On the South, about 100 paces from the bridge, but within the parish of Kendal, are the ruins of a castle, which hath been moated about, and from the thickness and strong cement of the walls yet remaining, seems to have been a place of considerable strength. It is most advantageously situated, to command the whole passage through the mountains there."

There is nothing to show that they recognised it as a Roman site; the credit for such recognition goes to an anonymous contributor to the Westmorland Advertiser and Kendal Chronicle, vol. II, no. 78, of 19 December, 1812,4 whose description is worth quoting in full:

"A long square field behind the inn at Borrowbridge, is called Castlehows. This would seem to have been a Roman fortification. It is situated in the midst of an amphitheatre of mountains, which rise nearly perpendicular. The valley consists only of a narrow slip of ground, through which runs the River Lune. This place appears to have been well chosen on which to erect a fortification, as it commands the passes everyway among the mountains. From it is seen Orton Scar: and consequently it must have been a good situation for receiving or conveying intelligence by signals. This encampment has been about 135 yards in length, and 104 in breadth. The extremities of this fortified place have been surrounded with a thick and strong wall cemented with mortar. This wall may have been about three or four yards in breadth, as appears by the remains

³ Vol. I, p. 493. Hutchinson stopped at Low Borrow Bridge in 1773 and 1774 (Excursion to the Lakes, 1776, pp. 196-8), but noted no antiquities there. ⁴ I owe the reference, and a transcription of the article, to the kindness of Mr. Henry Marshall, Librarian of the Kendal Public Library; I have also to thank Mr. T. Gray for assistance in tracing it.

of its foundations; and hence it is evident, that this has been a strongly fortified place. The platform of this encampment is nearly level. The ground on the outside declines for several yards from the embankment the ascent to which is by that means rendered steep on all four sides. On the north side is an ancient fosse which is still pretty entire, with the bank on the opposite side of the ditch on the common. As on the other three sides the ground is closures, and has been ploughed, it is probable that the fosse has extended all round the fortification.

"Tradition says, that at this place were formerly found a number of small pieces of stamped leather, which are supposed to have been a kind of current coin. If this has been a Roman fortification, these stones must have been of a very hard nature to retain their marks for so great a length of time." 5

The foregoing description was laid under contribution by John Hodgson, the Historian of Northumberland (himself a Westmorland man), in his volume on Westmorland in the Beauties of England and Wales series; I cannot find that he was ever at Low Borrow Bridge himself, and his account of the site is demonstrably derived from that which has just been quoted, but he adds the point that the "Roman burgh, or fortified camp... unquestionably gives name to the stream that washes it, and which, in ancient records, is written Burough Becke"; and one sentence, adding a local detail, is perhaps derived from a personal visit (it may be, by a correspondent of Hodgson's): "Orton Scar, a place

⁵ The final sentence presupposes a reference to masonry, presumably cut out by a sub-editor when the *Advertiser* went to press.

⁶ Undated, but begun in 1811 (cf. James Raine's Memoir of the Rev. John Hodgson, 1857, vol. I, p. 79; Hodgson's visit to Westmorland in 1814, ibid., p. 152, may have been to collect further materials for the book; in any case, his use of the Advertiser of December, 1812, shows that he took longer to write the book than Raine supposed).

favourable for a signal post, is seen from it through the opening up the Lune, between Jeffery's Mount and Langdale Fells." Hodgson's account really put the site on the map of Roman Britain; a few years later, in 1823, T. D. Whitaker gave it a place in the Roman road-system, noting that it was an intermediate station on the road from Burrow to Brougham, and suggesting that it was one of the places mentioned in the Tenth Iter, either Galacum or Alone; it does not appear that he was aware of Hodgson's account, or that he ever visited the site himself, for he writes: "No antiquary has hitherto explored the place, and the name alone has hitherto prevented it from being wholly overlooked as a remain of Roman antiquity. ."

The first detailed study of Low Borrow Bridge was contributed by John Just, the schoolmaster of Kirkby Lonsdale and later of Bury, who played so distinguished a part in the tracing of Roman roads a century ago. 10 He first visited it in 1827, when the tenant of the farm was dismantling the walls of the fort to obtain stone for buildings, and on that occasion made useful notes of the method of their construction: "The foundation was secured by flags and the interior strongly cemented with lime run in among the interstices in a semi-fluid state. The lime had been burned with wood, as many pieces of charcoal were blended with it.11" Many years later, in 1853, Just contributed a paper on the Tenth Iter to the British Archaeological Association, in whose Journal¹² it was printed, and he took the opportunity to give a careful account of the present condition of the remains and of

⁷ See fig. 2, p. 17 below. On the occasion of the Society's visit to the site in September, 1946, visibility was restricted to a mile at the most, and Orton Scar could not be seen.

⁸ See CW 2, xlvi, pp. 126-156.

⁹ History of Richmondshire, 1823, vol. II, p. 267.

¹⁰ Cf. Watkin, Roman Lancashire, 1883, pp. 37, 78, 80, etc.

¹¹ Quoted "from some unpublished papers of Mr. Just," in CW 1, viii, p. 2.

their former appearance; that account was subsequently reprinted in our *Transactions*, ¹³ so that it need not be reproduced here, but it may be noted that he drew attention to the double ditches on the west side, the abutment of a bridge across the Borrow and a portion of Roman road just beyond it, and to the discovery in 1826 of a hypocaust in the northern part of the fort. He took Low Borrow Bridge to be the Alone of the Tenth Iter (in this he was followed by Cornelius Nicholson, of whom more presently, and by W. Thompson Watkin, in a paper contributed to the *Journal* of the Royal Archaeological Institute in 1871¹⁴).

In 1861 the site received its most remarkable treatment. In that year Cornelius Nicholson published the second edition of his Annals of Kendal, including an appendix "On the Roman Station 'ALAUNA,' at Borough Bridge, Westmorland. A LECTURE DELIVERED BEFORE MEMBERS OF THE KENDAL NATURAL HISTORY SCIENTIFIC SOCIETY, ASSEMBLED ON THE STATION." twenty pages¹⁵ he surveyed the history and deduced the importance of the site in Roman times; much of his survey is reminiscent of Rauthmell in its flights of fancy, and if it is ever remembered it will be as a curiosity rather than a serious contribution to the study of the Romans in Westmorland. But Nicholson deserves credit for drawing attention to the branch road from Low Borrow Bridge to Watercrook, 16 and for placing some small finds on record: four mill-stones dug up when the railway was constructed (two of which he presented to the Kendal Museum), some pottery (including samian ware), and "an undoubted Roman coin, of silver, which I conceive to be a coin of Vespasian."17

¹³ CW 1, vii, pp. 80-81.

¹⁴ Vol. xxviii, p. 120.

¹⁵ Pp. 377-396.

¹⁶ Cf. p. 15f. below.

¹⁷ Annals of Kendal, 1861, p. 390.

This Society paid its first official visit to the site on 27 June, 1883; on that occasion R. S. Ferguson (then Editor, and subsequently President of the Society) read a paper on the fort, summarising the views of Just and Watkin and quoting the former's description of the site at length, and he concluded by urging the need for excavating there, in order to seek inscriptions which might confirm Just's identification of Low Borrow Bridge as the Alone of the Tenth Iter. 18 The annual business meeting, held later the same day at Kirkby Lonsdale, approved the allocation of a sum not exceeding £20 towards the cost of excavations; 19 an excavation committee was constituted on 22 August. 1883,20 and at the beginning of October digging began (the late start being occasioned by the need to await the conclusion of the annual sheep fair held on the site in September). Only two workmen were employed, for just under two months; supervision of their work, by members of the committee travelling to the site in rotation. proved difficult to effect, and bad weather and disappointing results brought the work to a close, with the main object of the excavation unattained, for no light was shed on its Roman name. Two reports on the excavation. from the same draft but varying in detail, were printed: the first was communicated by R. S. Ferguson to the Society of Antiquaries on 17 January, 1884, and published in their Proceedings; 21 the second, slightly less full in its description of the digging, but adding useful details on one or two points, was communicated to this Society by the excavation committee on 10 July, 1884, and published in our Transactions.²² The latter report is noteworthy for its illustrations: a site-plan by A. Hoggarth of

¹⁸ CW 1, vii, pp. 78-82.

¹⁹ CW 1, vii, p. 86.

²⁰ CW 1, viii, p. 1.

²¹ PSAL 2, x, pp. 30-33.

²² CW 1, viii, pp. 1-6. The Antiquary ix, 1884, pp. 25-6 gives a contemporary (unauthorised) report, corrected by R. S. Ferguson at p. 81.

Kendal (on which fig. I below is based), and half a dozen outstandingly good drawings of the site and its surroundings, and of details of its Roman masonry, by Canon Weston, then Vicar of Crosby Ravensworth. Apart from some desultory digging in the interior of the fort-soon abandoned "as it seemed likely to destroy more pasture than was financially prudent, and to promise little in the way of inscribed stones, towards which our quest was mainly directed,23" work was confined to an examination of the ramparts, the east and west gateways, and a structure to the south of the fort and the modern road, which may be identified with confidence as the bath-house of the fort. The east gate was found to be a double one, projecting some feet beyond the line of the fort wall; its northern portal had been walled up in Roman times; only the foundation, in large slabs of slate set in clay, had escaped the attention of stone-robbers, but numerous fragments of freestone showed that the superstructure had been built of it, and the point was made that the freestone must have been brought from a quarry many miles to the north, beyond Tebay, either on Shap Fells or on Orton Low Moor.²⁴ The south rampart was found to have been removed down to its footings: "not a vestige remained to indicate the site of the southern gate, merely a continuous line of footing-stones, lying on clay."25 At the west gate some of the superstructure of the north side was found, two of its stones displaying the characteristic Roman cross-broaching; Ferguson thought that this, too, had been a double gateway, "but immediately south of this point the wall had been destroyed down to the footing-stones,"26 and the question was left open. It may be interposed that surface indications suggest that it was a single gateway, in line with the fort wall, and thus

²³ CW 1, viii, p. 3.

²⁴ CW 1, viii, p. 5.

²⁵ PSAL 2, x, p. 32; the significance of this point is discussed below, p. 11.

²⁶ PSAL 2, x, p. 32.

contrasting markedly with the east gate. Work on the north rampart was confined to a single indeterminate trench; digging on the site of the bath-house, in the kitchen-garden of the farmhouse and in the field outside it, revealed "foundations of walls, set in clay in the usual method" and "a pavement of concrete made of pounded red tile, very rich in colour, and having an edging round it raised a couple of inches in a roll."²⁷

Failure to find any inscriptions, and the scarcity of small finds of any kind, were too much for the excavation committee, and work was never resumed at Low Borrow Bridge; it was at Hardknott and Papcastle, Caermote and Ambleside that our Society won its fame in the investigation of Roman forts. There is little more to add. 1920, Percival Ross contributed a paper to Transactions, 28 demonstrating that the road northwards from Low Borrow Bridge ran to Brougham (as Whitaker had assumed) and not to Kirkby Thore (the choice of Just, Nicholson and Thompson Watkin), and pointing out that the Stainmore road joins it at Brougham on such an alinement as to prove that the latter route was later in date than the former—hence, the road past Low Borrow Bridge has a claim to be the first Roman line of advance to Carlisle, and there is a presumption of Agricolan or even earlier date for the forts along its line. On Low Borrow Bridge itself, Ross has little to say beyond noting that it is approximately 18½ miles south of Brougham, and referring to "four ditches at least, perhaps six, on the western side of the fort "-where no other observer has ever been able to see traces of more than two ditches. Finally, the Royal Commission on Historical Monuments. in its volume on Westmorland,29 printed a brief account of the site, illustrated by a plan and a detail of the east gate

²⁷ PSAL 2, x, p. 32; cf. also CW 1, viii, p. 4.

²⁸ CW 2, xx, pp. 1-15.

²⁹ 1936, pp. 99-101.

(both based on the plans accompanying the excavation committee's report in our *Transactions*); the scope and scale of the volume necessarily precluded more than the briefest of treatments.

It remains for me to mention some excavation at Low Borrow Bridge, of which no account has yet been published. In 1931 and 1933 Mr. H. Burrows, of Poulton-le-Fylde, did some digging there, examining the north gate and at least one angle tower; he found two or three superimposed levels in the latter structure, and his by-products included samian ware and other pottery and at least one coin; at the north gate, he found that the fort wall had been completely rebuilt, the gateway being obliterated.³⁰ It is to be regretted that no report on his excavations has been communicated to this Society; I have not yet been able to discover what has happened to the pottery and other objects which he unearthed.

2. SMALL FINDS.

The preceding section will have shown that there are few small finds to place on record. This Society's own excavations yielded "no coins; no tesselated pavements; very little pottery; no miscellaneous relics," though two coins were found subsequently among the soil turned over by the excavators (those coins were not submitted to the excavation committee, 22 and cannot now be traced); there are only three items which required mention in this section, only one of them from the fort itself.

(a) A tombstone. Our President, Lt.-Col. O. H. North, reports the discovery, fracture and immediate re-use as the cover of a culvert on the Roman road, about a mile

³⁰ Cf. RCHM Westmorland, p. 100; the character of the masonry, still exposed, is demonstrably very late.

³¹ CW I, viii, p. 5.

³² CW 1, viii, p. 5. Reference is made to three other coins heard of as found at Low Borrow Bridge (one of them is presumably the silver coin recorded by Nicholson, cf. p. 5 above), but no details are given.

south of the fort, of what was clearly a tombstone. informant, one of the workmen responsible for the three processes, described the stone in terms suggesting that it was one of a well known type, portraying a horseman riding down a barbarian, with an inscribed epitaph below; the workman noted that the letters included XX (reminding him of beer!), no doubt part of the age or length of service of the soldier in whose memory the stone had been set up. It is to be hoped that the precise culvert may one day be identified, and the stone retrieved from it, for the inscription might well, if it mentions a regiment, serve to give the information which the excavations of 1883 failed to obtain; in the meantime, it will be sufficient to note that the horseman was presumably one of the mounted men of a cohors equitata, such as may be supposed to have formed the garrison of Low Borrow Bridge, and that the stone indicates the location of a cemetery in a typical position, by the side of the main road some distance from the fort and its external settlement.

- (b) A stamped mortarium. The excavations of 1883 did yield an inscription, but it was merely a potter's stamp (incomplete, it would seem) on the rim of a mortarium; it is not mentioned in the committee's report, but R. S. Ferguson's report to the Society of Antiquaries records it as H.D.A.³³ I do not know of any parallels, nor have I been able to trace the present whereabouts of the stamp.
- (c) A fourth-century coin. A solidus of Valens (A.D. 364-378) was found in 1926, in draining a field at Broad Head Farm, some three miles south of the fort.³⁴ and midway between the southward road and the branch road to Watercrook; this is the latest object of Roman date known to me from the Lune valley route, and in default of further evidence may serve to suggest (what is in any case

³³ PSAL 2, x, p. 33.

³⁴ Journal of Roman Studies, xxvii, p. 219.

a priori likely) that the route was kept open into the second half of the fourth century.

The list of finds could hardly have been more disappointing; and yet two or three pieces of pottery might well suffice to show at what date the site was first occupied, and how long its occupation lasted. It is greatly to be hoped that the material from Mr. Burrows' excavations may be located and examined or, failing that, that an opportunity may arise in the near future of doing a day or two's digging on the site, with the specific object of finding further pottery.

3. THE SITE (fig. 1).

The long axis of the fort lies north and south: the side gates are rather closer to the south than to the north rampart, so that the principal buildings were on the north side of the via principalis, and the fort faced south. Such an orientation accords well with the little plateau on which the fort stands, the porta decumana at the north end marking the highest point, and the platform of the fort sloping gently down to the porta praetoria—or where the porta praetoria would normally come. But to judge by R. S. Ferguson's report to the Society of Antiquaries. 35 the existing fort had no gateway at all in its south rampart. a continuous line of footing-stones running past the point at which a gateway should have come. That reminds one at once of the situation at the fort at Bainbridge in Wensleydale, where the porta praetoria excavated by the Rev. Thomas Romans and the present writer in 1926 proved to belong to the latest phase of the occupation. prior to which there had been no gateway in that, the most vulnerable side of the fort.36 Other evidence suggests that the existing fort at Bainbridge, like that at Chesterholm, was put up by Constantius Chlorus round about the

³⁵ PSAL 2, x, p. 32 and p. 7 above.

³⁶ The published reports on excavation at Bainbridge give a very different picture, but this is not the place to enlarge on the matter.

year 300; and at that period military convenience had begun to win the mastery over symmetrical planning, so that the omission of a gateway need occasion no great surprise. And Chesterholm seems to provide another analogy to Low Borrow Bridge, for while one of its side gateways has projecting towers, the other is a single passage-way pierced through the rampart—such as the west gate at Low Borrow Bridge seems to have been. There seems a prima facie suggestion, then, that the fort now visible on the site may be a Constantian one: but it can hardly be the first fort on the site. It may be noted that the two cross-broached stones at the west gate look like reused material, and there are presumably earlier structures awaiting discovery beneath those examined in 1883—if not at the gateways (for Constantian builders believed in deep foundations for their work), below the rampart mounds.

At present, perhaps the most striking sight at Low Borrow Bridge is the western rampart mound; it still stands high above the general level of the interior of the fort, surpassing even the south rampart mound at Birdoswald in its impressiveness; a section cut through it should prove most instructive. And it looks as though there is a great depth of stratification to be found at the north end of the fort, where the contours of the surrounding ground suggest that there has been considerable raising of levels by the builders of the existing fort.

The excavators of 1883 soon abandoned digging inside the fort, concluding that ploughing had obliterated its internal buildings beyond the reach of convenient recovery. That conclusion is not necessarily valid, particularly in view of the fact that their digging seems (to judge by Hoggarth's plan) to have been done in the hall of the headquarters building; a trench across a barrack-block might be more revealing. But in any case, it may be suggested, the internal buildings on this site are

not likely to have been constructed of ashlar throughout; with good freestone available no nearer than Orton Low Moor, and nothing but the rough slate of the Lune gorge to work with on the spot, the Romans may well have been

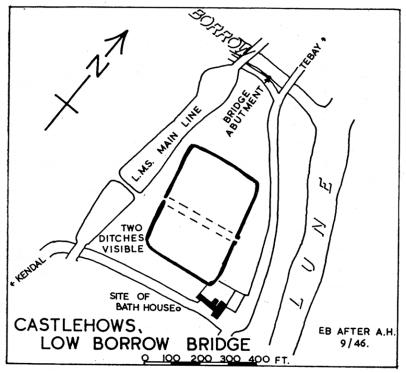


Fig. 1.—THE SITE.

content with half-timbered buildings on stone foundations. Here, too, is a point which could be checked quickly and inexpensively by a short trial excavation.

The area of the fort is about three acres,³⁷ so that it is large enough to have held a *cohors equitata*, five hundred strong, though it would have been more comfortable for a

³⁷ The recorded dimensions vary between 405 x 300 feet (RCHM Westmorland, p. 99) and 420 x 320 feet (Annals of Kendal, p. 391).

cohors peditata, of the same size but lacking horses and thus needing no stabling to fit in. But in any case, if it is in fact a Constantian foundation, there is no need for its garrison to have been organised on the same establishment as cohorts of the first or second centuries; the situation of the fort surely calls for a unit including mounted men, if not for a cavalry regiment, and the tombstone referred to above seems to attest the presence of mounted men.

The only external building so far attested is the bathhouse, partially examined in 1883. Surface indications suggest the possibility that there may have been an external settlement on the sloping ground southwards towards the bridge by which the modern road (doubtless following approximately the same line as its Roman predecessor) crosses the Lune, about a quarter of a mile from the fort; a hundred yards or so west of the bridge there is a large flat meadow which seems more suitable for a parade-ground than the small field immediately north of the fort, tentatively identified as a parade-ground in the Royal Commission's account.38 The bridge abutment noted by Just can still be identified, at least by the eye of faith, midway between the modern road and railway bridges over the Borrow, on the south bank of that river: in medieval times the bridge must have fallen into disuse. for there is a well marked hollow way east of the present road, leading down to a ford over the Borrow.

The position of the fort is a very striking one. To north and even more to the south, the steep-sided Lune gorge frowns down on one; it is not surprising that R. S. Ferguson, after braving the rigours of an unusually early winter there in 1885, should have written: "No human being, Roman or other, would come and live at this bleak spot, except under compulsion"; and to westward opens the no less bleak gorge of the Borrow. The surrounding summits are none of them very high—fifteen or sixteen

³⁸ RCHM Westmorland, p. 101.

hundred feet at most—but I know of no Roman fort in the north of England where one has so strong an impression of being shut in by mountains on every side. But then, amenities were not the first consideration when the Romans chose sites for their forts; and the decision to place a fort at Low Borrow Bridge was no doubt guided by other considerations.

4. THE SETTING (fig. 2).

Low Borrow Bridge fort is placed at the junction of two Roman roads, one of them long known in general, whatever uncertainty there may have been about its precise course in various stretches; the other has received too little attention. It is hoped that both roads will be examined in detail in the near future, and the results of their examination communicated to this Society; at the present juncture it will be sufficient to make a few general observations.

I have referred elsewhere³⁹ to the main trunk road up the valley of the Lune from Burrow in Lonsdale to Brougham and thence on to Carlisle; it was presumably the first Roman line of penetration into Cumbria, and remained the main line of communication from the western end of Hadrian's Wall to the legionary base at Chester throughout the Roman period. That Carlisle was its terminus, in the latter part of the Roman occupation, is shown by the Roman milestone found at Middleton, about midway between Low Borrow Bridge and Burrow, giving a distance of fifty-three miles-from what place, it does not say, but the distance best fits Carlisle.40 In post-Roman times this route seems to have fallen out of use, being replaced by that via Ambleside and Dunmail Raise to Keswick; antiquaries have often claimed a Roman origin for this latter route, which indeed

³⁹ CW 2, xlvi, pp. 126-156.

⁴⁰ Cf. CW 1, vii, pp. 109-110.

it is hard to believe that the Roman made no use of, but structural remains of a Roman road have never yet been found anywhere between Ambleside and Papcastle. Midway between the two routes comes High Street, the mountain road from Brougham past Ullswater to Ambleside or Watercrook or both—clearly a strategic route to enable armies to manoeuvre readily, rather than one intended to carry regular supply services. In so far as such services moved by land, to and from the Carlisle area, they must for the most part have followed the relatively easy line of the Lune valley road, and the primary local duty of the garrison at Low Borrow Bridge must have been to keep that road open, and to provide shelter and other assistance to convoys or travellers passing along it.

The branch road to Watercrook is not shown on the Ordnance Survey map of Roman Britain, nor is it mentioned by the Royal Commission on Historical Monuments in their Westmorland volume; but there is no reason to doubt its existence. Attention was first drawn to it by Cornelius Nicholson;41 and a detailed account of its course (in so far as it could be traced) and character was given by Titus Wilson in a paper read to this Society at Low Borrow Bridge on 27 June, 1883.42 Wilson's description inspires the fullest confidence. The road runs along the Borrow Beck for about a mile, and then climbs up over Whinfell, passing about a mile east of Whinfell Beacon, and on to Borrans farm by Whinfell Tarn; from that point onwards its course remains to be established, but Watercrook is obviously its goal. Wilson's closing observations deserve quoting in full:

"The road I have described is formed in a very durable and substantial manner, it is raised above the ordinary level of the surrounding ground; it has been paved, channelled, and thoroughly drained, and has

⁴¹ Annals of Kendal, 1861, pp. 382-3.

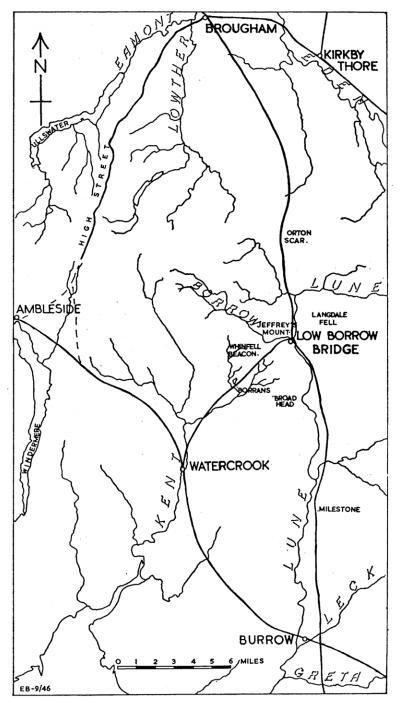


FIG. 2.—THE SETTING.

been dry and hard, and available for a rapid and heavy traffic in all weathers. The width is uniform throughout, except in one or two places where it descends rapidly round a curve, and then it widens, so as to make the ascent or descent easier and safer for laden vehicles. It is wider than an ordinary township road, a proof that it has been designed for a far more extensive traffic than⁴³ would ever have been necessary between one valley and another, and it takes the shortest and most direct route between the two points that it was designed to connect."

Such a road cannot well be anything but Roman, and its identification helps to make better sense of the Roman occupation of Westmorland; for in hill country such as this, there was all the more need for lateral links between the main lines of penetration, to enable troops to be diverted quickly from one to another, and to quarter the uplands into areas of manageable size. The planting of a fort at Low Borrow Bridge, then, ensured speedy reinforcement for Watercrook and the Lake District or vice versa, besides providing a staging point on the main north road.

It remains to note that there should logically be a further road awaiting discovery, eastwards from Low Borrow Bridge or its neighbourhood, up the Lune valley and past Crosby Garrett to Brough under Stainmore; it is to be hoped that an opportunity may arise before long of searching for such a road; here is an excellent field for air photography.

5. CONCLUSION.

The fort at Low Borrow Bridge has been robbed of almost all its freestone ashlar, but the platform of the fort still stands high, inviting further excavation as soon as conditions permit. The main needs, which excavation

^{43 &}quot;that" is printed, but the correction is self-evident.

alone can solve, are to discover the date of the existing fort, and how long it continued in occupation; in its remote valley, away from the main stream of Dark Age traffic, it may well have continued in sub-Roman hands for many years after the official abandonment of Britain. In addition, the road-system requires a good deal of field-work, before it can be regarded as satisfactorily studied; and it is particularly desirable to rediscover the Roman tombstone reused as the cover of a culvert a mile or so south of the fort; it might well be worth probing to see whether a cemetery, with further tombstones, can be located in the same area. For the rest, there are no urgent problems awaiting attention here; one day, the earliest history of the site will require investigation, but there are other forts on the Ribchester-Carlisle road where conditions will be more favourable for large-scale excavation, and where the Roman remains are less sure of freedom from disturbance than those at Low Borrow Bridge.