

ART. IX.—*The Roman Fort at Watercrock, Kendal.* By
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Read at the Site, September 12th, 1929.

POSITION AND PRESENT STATE.—The fort lies a mile south of Kendal, in a flat meadow enclosed on three sides by the river Kent, sweeping round it in a great bow. The space thus enclosed by the river is 450 by 300 yards in extent, and forms a peninsula with an isthmus only 250 yards across, on which stands Watercrock farm house. To the west, the ground on the other side of the river rises in a commanding bluff, but elsewhere the ground in the neighbourhood is low. The river is deep at present, but this is due to the mill dam close beside the house; anciently, the river must have been fordable except when in spate, and cannot have been a very serious obstacle to assailants.

The fort is visible as a platform slightly raised above the general level of the meadow, measuring 390 by 350 feet, with its longer axis pointing nearly north-east and south-west. Ploughing in the past, traces of which are still visible, has smoothed the forms away to such an extent that little can now be seen, except the general shape, and the fact that the south-west side stands up boldly in a bank about 5 feet high. Along this side and the adjacent parts of the sides nearest to it, a ditch is traceable, and also along the north-east side, but not along the north-eastern portions of the south-east and north-west sides. In the middle of the fort a very slight elevation may represent ruins of the central buildings.

PREVIOUS ACCOUNTS.—Only two published accounts are worth consulting, namely Horsley's, in the early years

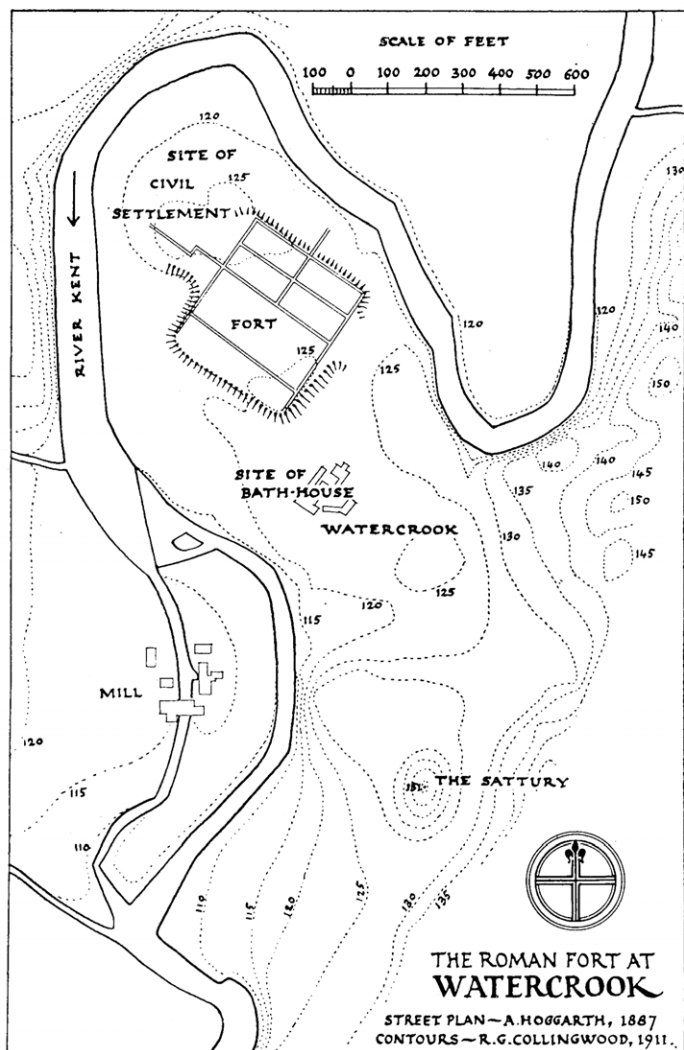


Fig. 1.

of the eighteenth century, and W. G. Collingwood's, two centuries later. The former, because Horsley's book is very rare, is given in the annexed footnote *; the latter, in these *Trans.* N.S. viii, 102-108, is generally accessible and gives numerous details which need not be repeated here. The site was, apparently, first recognised as Roman in the seventeenth century by Machell, whose MSS. were drawn upon by Nicolson and Burn, but have never been printed, and as his description of the place is far the most important in existence, and is hitherto unpublished, I reproduce it here.

After saying that brick, Roman plaster, walls with cement and rubbish cores, and an oven underground, have been discovered, Machell goes on:—"A floor of stone flaggs supported with columns made of artificial stone" [marginal sketch here, showing a hypocaust *pila* 2 ft. 6 ins. high and 7 ins. wide, with projecting capital and base 9 ins. wide] "and set upon an under floor of Romane Cement made with pounded brick. Walls about 3 foote thicke. Then another Roome with a Rom. Floore—layd in three course—the first cement of Lime and sand with som pounded brick about 9 ins. Then a course of gravel and pebbles, about 4. Then a course of True Rom. Cemt. with great store of pounded brick in it—about 3 ins. And from hence went a Sinke of the same materials being good Romane cemt. wh held water in it, as it were stone. And from that, turneing square, a trough or spoute made of Hewn stone to another Roome in the second course, where was discovered a Row of Ovens as they termed them: but

* "There are undeniable evidences of a Roman station yet to be seen at this place . . . Urns have been found in a bank that was laid open by the river. Stones and pieces of *Roman* bricks continue to be thrown up by the plow in abundance. Several *Roman* coins and seals have been found here, some of which are yet in the possession of Mr. Gay, the present proprietor. One of them, which is very curious, I take to be *Janus Quadrifrons*. There is also a medal of *Faustina* in the same gentleman's hands. The ramparts of the fort are very discernible, and there is a faint appearance of the ditch, though now much levelled. The station has been of the larger size, measuring about six chains from north to south, and eight from east to west, and so must have contained almost five acres of ground. The town, I believe, has chiefly stood between the fort and the water on the west side; for here they still plow up cement and stones. These are of free stone, such as the *Romans* always made use of . . . There are also two or three *tumuli* within sight of the station and not very far from it." *Britannia Romana*, p. 484.

were only Holes with Mouthes like to Ovens, divided by a thin brick betwixt them; and stood in the forme of a cemicircle wh I take to be rather to have been Repositories for the Urnes and monuments of the Deceased though there was nothing at all remaind in them. There were also several fragments of Urns and earthen Platters, one had writ on thus SILLA." [A description of the site of the fort follows, and then]: "Near the N. corner at 70 yards distance are lately discovered the foundations of som old outer Roman buildings 2 or 3 joynd in . . . abreast extending lengthwards to the S.W. 3 rooms on a floor of 5 yards square, and fronting and flanking with the N. East side of the great Romane fort, where several fragments of Roman Antiquities have bin discovered. In the first Roome wh lyeth NE was an Oven floored as they informed me of bricks of 1 ft. diameter and 3 inches thick, on wh was impressed a Lyons-paw, as true and exact as if a Lyon had trod on the clay before it was baked. But the arching was made on the concave with their brick or tiles fixed one to another and on the convex with Roman cement wh so incorporated the whol mass together that they could [not] procure one single tile of whole and entire but broke them in pieces. Near the oven mouth 3 large flags . . . one upon another and the Lowest had this inscription the face turned downe wards" [he omits to give the inscription, but appends a rough plan of the fort, good enough to show us that we can rely on his points of the compass]. Machell MSS., vol. ii, pp. 82-83. This material was used by Nicolson and Burn (vol. i, p. 108); but they do not seem to have either faithfully transcribed the part which they used, or wholly understood it, so no further reference will be made to their account of the place.

DATA FOR AN HISTORICAL ACCOUNT.—Apart from the above materials, the plan of sun-burnt strips made by Mr. Arthur Hoggarth in the drought of 1887 (*Trans. N.S.* viii, p. 102), is our only evidence for the plan of the fort. The only inscription which has any historical value is the tombstone of P. Aelius Bass[us?] with its reference to the *fiscus* of "our lords" the Emperors—a form of title which makes it clear that the fort was inhabited at least as late as the end of the third century. A piece of Samian with the stamp ALBINI . M. is the only recorded piece of pottery which is of use as evidence. The stamp is that

of a South Gaulish (La Graufesenque) potter of the reigns of Nero and Vespasian. But one piece of pottery does not make a date. Four coins only are recorded; two, gold, of Augustus and Vespasian; one, silver, of Lucilla, and one, brass, of Faustina—it is not known which of the two Faustinas.

Apart from these data, references may be drawn from the relation between Watercrook and other places in the neighbourhood. To them we shall now turn.

STRATEGICAL RELATIONS.—Watercrook does not lie on the direct road from Cheshire to the north. That passed up the Lune. Near Kirkby Lonsdale, the road from Ribchester and the south entered the Lune valley and was joined by a road from Lancaster before it went on to Low Borrow Bridge and Carlisle. Whether any road ran direct from Lancaster to Watercrook is not known; indeed, no Roman road leading from any direction to Watercrook has been satisfactorily traced. The possible roads are four; from Lancaster, from Overburrow near Kirkby Lonsdale, from Low Borrow Bridge, and from Ambleside. The Lancaster and Overburrow roads may have existed, but no one has yet been able to trace them. The late Mr. Titus Wilson thought he could trace a Roman road from Watercrook to Low Borrow Bridge (*Trans.* o.s. vii, 90), or at any rate for part of the way; but for the first five miles from Watercrook he could not find it. Dr. Villy has told me of what he believes to be traces of a Roman road running almost due north from Watercrook to Shap; and certainly there is an old road on that line, called the Staingate; but I see nothing Roman about it. That there was a road to Ambleside may be considered certain, but nobody has been able to identify it. Various fragments of old roads have been found on the line, for instance at Staveley and at Causey, near Windermere (itself a significant name), but their date is not known and there is no proof that they are Roman.

But it is vouched for by two pieces of evidence; the High Street road, which must have joined it somewhere near Troutbeck, and the Wrynose road, from Ambleside to Hardknot, which implies a road joining Ambleside to the general road-system of the country; and this road can only have gone to Watercrook. The alternative, that these two roads, the High Street road and the Wrynose road, may have joined at Ambleside and formed a single line, is ruled out by the fact that there is no road from High Street direct to Ambleside, as I have stated elsewhere in this volume.

Watercrook, therefore, must be regarded as a link in the branch road which, beginning at Overburrow or Lancaster, ran to Ambleside and Ravenglass. This road, according to the view now generally accepted, is the Tenth Antonine Iter. From this identification it follows that Watercrook is the Alone of the Iter, which, again, is probably the Alione of the *Notitia*, garrisoned by the Third Cohort of Nervii. However that may be, the association with Ambleside, Hardknot and Ravenglass makes it probable that Watercrook is an Agricolan fort. Even if Hardknot was a later addition to the original Agricolan road (*Trans.* N.S. xxviii, 350, 361) it is hardly likely that Watercrook also was an addition, because the little Agricolan fort at Ambleside (1.63 acre in area: *Trans.* N.S. xv, 63) would hardly be up to the work of patrolling so long a line.

PLAN OF THE FORT.—When the dry strips of grass plotted by Mr. Hoggarth are superimposed on the plan of the fort as now visible, it becomes clear that the lines running round the edge of his plan cannot be the *intervallum* road. They can only be the ramparts. The present form of the ground shows that the ramparts must have been of earth or clay, for they are visible as well-marked banks; and the top of a hard clay rampart might very well show in dry weather, whereas the *intervallum*

road would not, because it would lie in the hollow inside the rampart and therefore receive a certain amount of moisture. The remaining lines are obviously roads. They are disposed almost exactly like the main roads at Gellygaer; and if the plan of Gellygaer is superimposed on the plan of Watercrock, with a little adjustment for the fact that Watercrock (which I suppose to have been 370 by 400 feet externally) is slightly narrower than Gellygaer (which is 385 by 402 feet), the roads fall in precisely the right places. Another close parallel is Hardknot (375 feet square), whose internal arrangements so far as we know them would exactly fit Watercrock. The same is true of the Agricolan fort at Slack near Huddersfield, and of Melandra Castle in Derbyshire (368 by 398 feet). It is clear, then, that Watercrock belongs to a well-known series of forts nearly square in shape and about two and a half acres in area inside the defences. They were designed to accommodate a *cohors quingenaria*, divided into six centuries each eighty strong. The street plan suggests that the six barrack buildings for these centuries were arranged at Watercrock exactly as they were at Gellygaer: that is, four in the *praetentura*, in pairs facing one another just inside the *porta praetoria*, and two just inside the *porta decumana*. When the central buildings—the headquarters, the commandant's house, and the granaries—have been arranged in the middle of the fort, this leaves room for two rows of workshops, stables, etc., one facing the *via praetoria* and one facing the *via quintana*.

THE BATHS.—Machell saw the remains of two buildings outside the fort. One, he tells us, was on the north. The other, which in his account is separated from this one by the description of the fort itself, may therefore have been on the south. In these *Trans.* N.S. viii, 105, W. G. Collingwood says that in the shipp on of Watercrock farm and the corner of the house nearest to it "there are underground cavities and the summits of arches appearing

above the level of the ground," and identifies these, no doubt correctly, with the remains mentioned by Machell. I have not been able to find these things, but I think we may accept the inference that the baths were to the south of the fort, on the site of the farm buildings.

Machell's description of them is remarkably complete and clear. First we come to an "oven," the stoke-hole of the hypocaust. Then comes a room with a hypocaust beneath the floor. This room, no doubt, represents both the *caldarium* and the *tepidarium*, divided as usual by a partition having flues running through it below floor-level, so that Machell did not see that they were two different rooms (*cf.* the plan of the baths at Hardknot, *Trans. N.S.* xxviii, 333). Then comes a room with no hypocaust, that is, the *frigidarium*. Here Machell notes two cement floors, separated by four inches of gravel and pebbles. Mr. Curle's photograph of the cold bath at Newstead (*Roman Frontier Post*, plate xiii), with two cement floors of different periods separated by a layer of stones and rubbish, might be an illustration of Machell's notes. Out of the *frigidarium*, in the ordinary way, opens the cold plunge-bath, convincingly described as a "Sinke," from which a stone drain runs to an obvious *sudatorium* or *laconicum*, a room said to be "in the second course," that is, on one side of the range hitherto described. This is the normal position for the *sudatorium*. It was, he tells us, a semicircular one, like the one at Inchtuthil, not a detached round building like the one at Hardknot. The way in which the apse of such a room is lined with vertical brick flues is well described. It would be easy to draw the whole plan of the bath-house from Machell's account, relying on one's imagination for the measurements; I only refrain for fear that someone, not reading the text of this paper, should assume that the plan had been properly ascertained by excavation.

BUILDINGS ON THE NORTH AND WEST.—Machell's other

building was 70 yards from the north corner of the fort. This implies that it cannot have been north-east of that corner—70 yards that way would place it in the river—but must have been north or north-west, probably the latter. It seems to have consisted of three rooms each 15 feet square, with the arched stoke-hole of a hypocaust at the north-east end of the range. The “three large flags one upon another” may have been some kind of base or pedestal. The inscription on the lowest was, I presume, the epitaph of Aelius Bass[us], whose tombstone was certainly cut down into a large flagstone and re-used for some purpose or other.

The buildings on the west side of the fort, whose relics are vouched for by Horsley, may have been the same as this, or some other or others on the flat meadow between the fort and the river. There is plenty of room here for a considerable civil settlement; and, if Watercrook is really the Alione of the *Notitia*, it is quite natural that one of the buildings in this settlement should have been inhabited at a late enough date to have contained a re-used tombstone of the late third or fourth century.

OTHER OBJECTS OUTSIDE THE FORT.—Pottery kilns were found in 1813, south-west of the fort, on the other side of the river (Cornelius Nicholson, quoted in *Trans.* N.S. viii, 107). The same author mentions a cremated burial, but its position is not given.

Four hundred yards south-south-west of the fort is a mound called the Sattury. It is oval in shape, 65 yards long by 35 yards wide; its longer axis points up and down the valley. It has been thought a Roman or other burial place, and popular etymology, connecting Sattury with Saturn, has led to the fancy that it was some kind of temple. It seems really to be nothing but a moraine, such as are commonly found in these strongly-glaciated valleys. The hand of man has left no visible mark upon it, and its name is explained by W. G. Collingwood

(*Trans.* N.S. viii, 108) as O.N. *Sætr-haugr*, the mound of the settlement.

Mr. Hoggarth's plan shows roads leading north-west, no doubt into the civil settlement, and north-east, apparently to the river. This suggests that the road to the north must have left the *porta praetoria*, crossed the Kent close to the fort, and run through what is now Kendal. Of roads to the south and south-east I have tried in vain to find traces in the fields near the fort.

SUMMARY.—The fort was originally about 370 by 400 feet externally, $2\frac{1}{2}$ acres internally. Its main gate faced north-east, and its internal arrangements were of the standard pattern for a *cohors quingenaria*, in this case apparently the Cohors iii Nerviorum. It seems to have been called Alone or (less correctly) Alione, a British name whose stem *alaun-* is found in names of rivers, personal names and divine names, and has been conjectured to mean something like "holy" or "mighty" (Ekwall, *English River Names*, p. 7). Pottery and coins, though their evidence is too scanty to be relied upon, help to bear out the presumption drawn from the association of Watercrook with Ambleside and other sites on the Tenth Iter, that it was founded in the first century and perhaps by Agricola. Analogy suggests that it was rebuilt in stone, after the fashion of the time, in the second century, and pieces of buff freestone like those used at Ambleside (*Trans.* N.S. xiv, 442) suggest that the two forts may have been stone-built at the same time, perhaps in the reign of Hadrian, though the excavations at Ambleside did not determine this date with precision. Certainly the occupation of Watercrook continued to a late date. An inscription takes it down to at least the time of Diocletian, and if it is really the Alione of the *Notitia* it was in occupation at the time to which that portion of the *Notitia* refers, whenever that was; perhaps as late as the end of the fourth century, but hardly much later than that.

monument, by leave of the commanding officer, who was a centurion of the York legion.

Line 6: Added in another hand. Aelius Supinus was the regimental mason.

The title "Our Lords" is occasionally used as early as the middle of the third century (by the Philips, before 250); but it does not become at all common until the time of Diocletian, and therefore the inscription probably dates after 284.

[Horsley, *Brit. Rom.* p. 300; Whitaker, *Richmondshire*, ii, 333; *Athenaeum*, 1830, p. 591; C.I.L. vii, 292; *Trans.* N.S. viii, 106; *Ephem. Epigr.* ix, p. 565].

2. Bishop Nicolson in 1688 saw an altar on which he read the following:—

. . . . DEAB
SACRU
. . . VALENS
AVG. V. S
L. M

One may conjecture a possible dedication *Dis Deabusque Sacrum*, and the dedicatator may perhaps have been an *Eques singularis Augusti* or a *procurator Augusti* or the like.

[*Trans.* o.s. xii, 60; *Proc. S.A.* xiii, 265; *Arch. J.* xlix, 194; *Ephem. Epigr.* ix, 1123].

3. A small altar seen by Horsley in the house. He gives it thus:—

DEE VI
ÆELIT
VV

De(a)e M(inervae) has been suggested but nothing is certain. [Horsley, *Brit. Rom.* p. 300].

An unscribed altar, seen by Horsley (*ibid.*), is in the British Museum. It is figured in these *Trans.* N.S. viii, facing p. 107.