

I.

NOTES ON THE ROMAN REMAINS AT GRASSY WALLS AND BERTHA,
NEAR PERTH. BY J. GRAHAM CALLANDER, SECRETARY.

Very few parts of Scotland are so rich in archæological and historical remains and associations as the city of Perth and its immediate neighbourhood. Monuments belonging to prehistoric times still survive in large numbers in the district, evidence of its connection with the Romans is seen in the remains of two forts or camps, and our historical records show that for a long period it enjoyed a prominent position in the government of the country, particularly during the Wars of Independence and the early Stuart reigns.

The reason why Perth should have been a centre of such importance for so many centuries is simply that the physical characteristics of central Scotland—the mountain masses of the Grampians on the west and the deeply penetrating Firth of Tay on the east—determined that the district should be one of the chief nodal points in the main line of communications between the south and the north of Scotland, especially as it lay midway between these parts of the country, and was surrounded by rich agricultural districts in times when husbandry was the principal industry of the land. Even at the present day, when the great industrial and administrative centres lie in the south country, the importance of Perth as a focus of land transport is demonstrated by the fact that seven lines of railway converge towards it.

When the Romans decided on imposing their rule on the north country, the most direct and, indeed, the only practicable road for their army lay through the hollow formed by the three great straths—Strathallan, Strathearn, and Strathmore—which stretch in a straight line along the north-western flanks of the Ochill and Sidlaw Hills for a distance of some fifty miles. Gradients are easy, and the only natural obstacle of any importance in the whole course of this route is the River Tay, which cuts directly across it ten miles north of Perth. No doubt the Romans had a crossing in this locality, near the fort at Inchtuthil, which lies on the further bank, but there is a good ford nearer Perth, about two miles from the town, immediately to the north of the mouth of the river Almond. This shallow was also chosen by the Romans for passing over the river, a camp being erected in the vicinity at Grassy Walls on the left or eastern bank, about half a mile above the ford, and a fort at Bertha on the western bank opposite the crossing. The locality had also the advantage of being accessible from

the sea, as the tide comes up to within 400 yards of the ford, and the Tay would be navigable for Roman shipping as far as the town of Perth.

Portions of the fortifications on the two sites mentioned still survive. That the remains are the work of the Romans is no recent discovery, as they have been recognised as such for at least a century and a half. The camp at Grassy Walls was discovered in 1771 by General William Roy, when he was engaged in investigating sites connected with the Romans in Scotland,¹ and the fort at Bertha was described as a "Roman Station" by William Maitland in 1757.² There is little doubt, however, that the last-mentioned site had a Roman association attributed to it before this date. For how long before we do not know, but it may be mentioned that a farm which once stood on the east bank of the Tay, almost opposite the mouth of the Almond, within 200 yards of the fort, had been known by the suggestive name of Rome for more than a century previous. The names Old Rome and New Rome both appear on Roy's plan.

During the late evenings of the summer before last (1917), I made a survey of the antiquities in the neighbourhood of Perth, and in the course of this work took the opportunity of visiting these sites and comparing the remains on them with Roy's plan and Maitland's description. I was usually accompanied by Mr George Valentine, Perth, whose knowledge of the locality was of great assistance to me, and by Mr Thomas M'Laren, Depute Burgh Surveyor, Perth, who took no end of trouble to provide copies of old plans and to measure and plan the remains which we examined.

GRASSY WALLS.

The camp at Grassy Walls, so called from a farm of the name that once stood here, lies on the farm of Sheriffston, in the Parish of Scone, some three miles north-north-west of Perth. Roy considered that this name had been chosen because of the grass-covered mounds, the remains of the ramparts surrounding the camp, which, doubtless, two or three centuries ago, would be more extensive and more prominent than they are to-day. The name "Grassy Well," however, as will be seen later, appears on a plan drawn in 1778, and the question thereby suggested is whether this may not be the correct name. The word "well" is pronounced "wall" in many parts of Scotland, and it is quite possible that the farm may have been served by a grassy well, as parts of the site were until late times marshy and, indeed, contained several small ponds. But there seems little ground for this theory, as I have been informed by

¹ Dr George Macdonald in *Archæologia*, vol. lxxviii. pp. 185 and 224.

² *History and Antiquities of Scotland*, vol. i. p. 198.

the Earl of Mansfield that, so far as he is aware, the name has always been Grassy Walls.

The site of the camp occupies the extremity of a broad spur projecting westwards from the lower slopes of the Sidlaws towards the River Tay. At the north-western corner of the spur there is a rather sudden rise in the ground forming a small hill known as Donald's Bank, which on its western side drops in a steep declivity some 80 feet to the left bank of the river, its summit being about 120 feet above Ordnance datum. The ground forms a tilted plateau, sloping generally from north-west to south-east, and standing from 70 to 90 feet above sea-level. In selecting a position that was to be fortified, Roman military engineers naturally chose one of some strength, and the site of the encampment at Grassy Walls would fulfil all their requirements, as it is bordered on the north, west, and south by steep banks, while on the east there is a slight fall in the ground before it begins to rise again towards the hills; it is also assured of a water supply from two springs within its area. On the northern boundary the bluff rises from a height of some 30 feet at the north-eastern angle of the camp to some 60 feet at the north-western angle, the Gelly Burn running along its base; on the south the bank has a general height of some 30 feet, and on the west it gradually increases in altitude towards the north till it culminates in the height of Donald's Bank. Roy's plan shows two small marshes containing pools of water within the camp—one towards the western side, and the other near the northern boundary¹; but the former was drained many years ago, and is now represented by a hollow sloping down towards the Tay, and the latter, which emptied into the Gelly Burn through a small gully cut into the ridge on the northern end of the camp by the overflow of water, was only drained in the summer of 1917, between my first and second visits to the site.

From the reproduction of the plan made by Roy in 1771 (fig. 1), it will be seen that he was able to trace the rounded north-western angle of the fort, the western rampart running therefrom in a south-south-westerly direction as far as the summit of Donald's Bank, the greater part of the northern rampart, and a short length of the eastern mound where it crossed the higher end of the marshy ground at the northern end of the camp. The north-eastern angle seems to have been almost obliterated, but a projection of the lines of the northern and eastern ramparts fixed its position.

The southern extension of the camp was conjectural, and Roy indicated his views regarding its bounds by dotted lines. This plan

¹ *Military Antiquities of the Romans in North Britain*, pl. xii.

PL. XLII.
 PLAN showing the Vestiges of AGRICOLA'S CAMP at GRASSY-WALLS on the EAST BANK of the TAY, as
 also the situation of BERTHA supposed to have been the ORBEA of the ROMANS

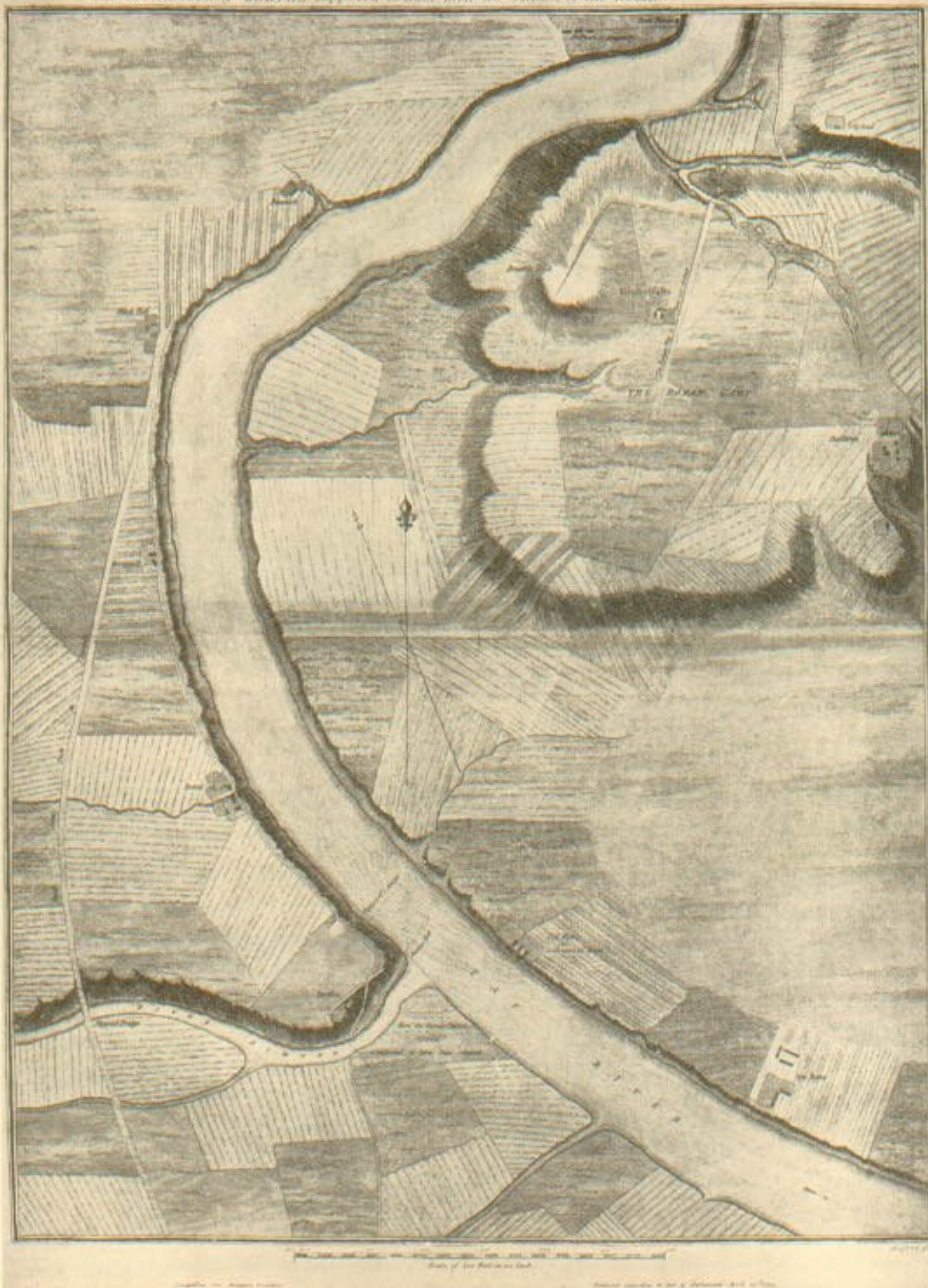


Fig. 1. Plan showing Vestiges of Fortifications at Grassy Walls and Bertha, reproduced from
 Roy's *Military Antiquities, etc.*

approaches a parallelogram in shape, with the alignment of the western side projected slightly outwards so as to take advantage of the rise in Donald's Bank, and the line of the northern end brought inwards at the centre that it might cross the higher end of the small gully running into the Gelly Burn. The trace of the northern rampart bears a striking resemblance to the same defence in the camp at Raedykes, near Stonehaven.¹ If Roy's plan of the encampment is approximately correct, the area enclosed by the ramparts would measure about 128 acres in extent.

A track, which Roy called the "Roman Way," extended from opposite the site of the steading of Grassy Walls to the northern boundary of the camp. This road passed through the gap in the northern rampart and was said to be very distinct. The roadway extended from the eastern end of the ford over the Tay at Bertha across the flat river terrace to the bluff on the southern boundary of the fort. After crossing the enclosure it descended the declivity on the northern margin, crossed the Gelly Burn, and continued northwards in a course parallel to the river along the narrow strath on the left bank. This track is laid down on the Ordnance Survey map, as well as its continuation some two miles further north, in the neighbourhood of the farm of Berryhills, in St Martins parish.

In the Perth Museum, amongst the papers which once belonged to the old Literary and Antiquarian Society of Perth, are two plans of the camp, drawn in 1778, seven years after Roy's visit, by Mr J. M'Omie, Rector of Perth Grammar School, and one of the founders of the Literary and Antiquarian Society of Perth, which was formed in 1784. M'Omie seems to have taken a lively interest in the Roman remains in the district, as there is in the same collection two plans of what he calls the Roman camp at Fendoch, near Crieff, drawn by him. One of the plans, which is coloured, is drawn to the scale of 2 Scots chains to the inch, and is entitled "A Plan of the Roman Camp at Grassywell," and the other, which is in black and white, is drawn to half that scale, and bears the title "A Plan of the Roman Camp of Grassywell near Scoon, 1778."

The northern portion of M'Omie's plan is in general agreement with Roy, but his reconstruction of the southern part gives the camp a polygonal form with an acute angle at the southern extremity. He shows it divided into two parts by a broken line running from the north-eastern angle in a south-westerly direction, and a note explains that the area on the north-western side of the divisional line was "supposed to be the camp of the infantry," and the area to the south-

¹ *Proc. Soc. Antiq. Scot.*, vol. I. p. 344, fig. 6.

west was "supposed to be the camp of the cavalry." These sections measured 33 acres 1 rood 39 falls and 32 acres 2 roods 11 falls Scots measure respectively, which gives a total measurement of 66 acres 0 roods 10 falls, equivalent to about 84 imperial acres. The impression conveyed by the shape of the southern part of M'Omie's plan is that he had taken the flattened remains of some old "fael" dykes as indistinct traces of ramparts, but the ditch on the south-west is not so easily explained, as an ordinary drainage channel could hardly have been required so near the edge of the bluff.

At the present day the surviving portions of the ramparts appear in plantations in which there are many traces of former cultivation. In some places there is also a thick undergrowth of rhododendron, bourtree, and other bushes, so that even in the winter months, when the bracken has fallen, it is with some difficulty that the remaining vestiges of the earthen mounds can be traced. Notwithstanding this, after an interval of about one hundred and fifty years, it is possible to verify the accuracy of Roy's observations.

My first visit to the site was made on 1st May 1917, before there was much growth in the vegetation. It was hardly to be expected that any traces of ramparts or ditches would be detected on the eastern or southern boundaries or on the western side south of Donald's Bank, seeing that Roy had failed to discover any in 1771; and the land had been under cultivation ever since. The short section of the eastern rampart near the northern end, in the marshy piece of ground, had been completely levelled in the interval, and no indications of it could be seen. Remains of ramparts, however, were distinguishable in Drumshogle Wood, the plantation on the northern margin of the encampment, and in the plantation on Donald's Bank on the north-west, and these were in general agreement with Roy. A few yards back from the brow of the steep descent of the height just mentioned, overlooking a bend of the Tay, which cuts into its base some 60 feet below, was the obtuse north-western angle of the camp. The remains consisted of a slight mound rising from 18 inches to 2 feet above a distinct hollow outside. From this point the directions of the western and northern ramparts were traceable for some distance: the former, though almost obliterated, could be followed for about 100 yards, when it disappeared in a dense thicket, in a course which would surmount the 100-foot contour line, and pass a short distance east of the summit before descending the opposite side of the hill; the latter appeared as a broad low mound tending east by south through the wood, and entering the field in a direction which would carry it towards the south side of the small pond which occupied part of the marshy ground before

mentioned. Within the margin of the plantation was a gap, possibly the northern gateway of the camp, some 15 yards wide, opening into what seemed to have been a sunken way down the northern bank. The continuation of the rampart east of the pond was picked up again in the wood in the shape of a low mound spread over a width of 15 yards, and rising to a height of from 12 inches to 18 inches, running east by north towards the public road from Old Scone which goes past Waulkmill. The break in the alignment of the northern defence, already mentioned, doubtlessly was rendered necessary by the hollow and inward bend in the edge of the bluff formed by the gully leading from the pond. An extension of the mound was searched for in the wood on the east side of the public road, but as there was a thick mass of rhododendrons and many open drains at the spot, it was impossible to say whether any portion of the work at this place still survived, or had ever extended so far.

As irregularities in the growth of vegetation often give a clue to the position of ancient excavations or disturbances of the soil when these can not be determined from surface indications, I revisited the site on 10th August, by which time the crops were fully grown. The northern field next the wood was in grass and the adjoining field to the south under grain. In the latter field a strip of corn of extraordinary regularity in the matter of height, width, and colour stretched away in a south-south-westerly direction, till near the western side of a clump of trees, now removed, a distance of 100 yards, beyond which it could not be followed owing to a gentle curve in the ground. The difference between this strip of grain and the crops on the adjoining parts of the field was so marked that it could be detected from a lateral point of view a considerable distance away. It measured about 5 feet in width, stood about 18 inches higher than the grain on the east, and about 9 inches above that on the west, and, in addition, while the crop on the eastern side was dead ripe, and on the western side well turned in colour, on the ridge it was quite green. The relative shortness of the straw on the east side might be taken as evidence of a ditch on the outside of the mound. Roy's plan did not show any remains quite so far south as this, although the strip of vigorous growth must be very nearly in the same line as the short section of the mound which he planned crossing the marshy ground a short distance to the north. M'Omie, however, carried the traces of the rampart for some distance south of the marsh, and it is to be noted that he made the line of the rampart break off in a more westerly direction at a point which must be very near the spot where the high ridge of grain terminated. Later on I returned again to the site to see if it was

possible to trace the continuation of the ridge in the growing grain in the south end of the field, but saw no indications of it.

The width of this strongly growing strip of vegetation, only 5 feet, is considerably less than might have been expected if it really occupied the site of a portion of the ditch which surrounded the camp, and the strip ought to have extended to a much greater length. The value of this observation, however, would be easily determined by a little excavation.

Mr M'Laren prepared drawings showing Roy's plan superimposed on the Ordnance Survey map, but these did not prove satisfactory because the course of the Tay indicated by Roy does not agree with the map, neither does that of the Gelly Burn.

I had occasion to go back to Grassy Walls a fourth time, when investigating the site near the centre of the camp where the three Bronze Age food-vessel urns and other relics described in last year's *Proceedings* were found. This was about the New Year, by which time one of the fields traversed by the "Roman Way" had been ploughed. Some time was spent in trying to find if the line of the road could be distinguished by any variation in the soil after it had been turned over, but nothing indicating the former presence of a track could be made out.

When the Romans constructed a camp covering such a large area of ground as at Grassy Walls, we know that it was only a temporary fortification, made to protect an army on the march, and never occupied for very long. Consequently such sites do not offer the same opportunities for the discovery of relics as the smaller permanent forts. The only object found on the site, which I know, that can be assigned to the time of the Roman occupation is a coin picked up in 1907, and now preserved in the Perth Museum. Though it is very much corroded and defaced, Dr Macdonald, to whom it was submitted, was able to identify it as a first brass, probably of Trajan.¹

On the narrow northern projection of the level haugh land that lies between the plateau on which the camp was situated and the river, immediately to the south of Donald's Bank, the site of "Gold Castle" is marked on the Ordnance Survey map. Roy does not show this site on his plan, although it was well known and believed to have been a Roman fort before his visit to the neighbourhood. It is scarcely possible that he would not hear about it, because Maitland had described it, giving its dimensions, only fourteen years before. He said that "the military way having crossed the Tay . . . continues its course eastwards (? northwards) between the Golden-castle on the north and a small village denominated Rome on the south, a little above Bertha; the Tay winding eastwards (? northwards), a Roman fort, called the Golden-

¹ *Proc. Soc. Antiq. Scot.*, vol. lii. p. 232.

castle, is situated on its southern (? eastern) bank; at present it is about 180 yards in length, and 122 in breadth, inclosed with a rampart and ditch on all sides, except the northern (? western), where both have been demolished by the river. In this fortress is a tumulus, out of which a considerable quantity of golden coins have been dug; and therefore it receives the name of Golden-castle.

“Betwixt the aforesaid fort and the military way is a handsome square; inclosed with a rampart and a ditch, resembling a fort; but as it is full of water, with a small island in the middle, it must have been for another use.”¹

This is a very circumstantial account of these remains, but I was unable to discover any vestiges of works on the two sites.

A short distance south of Donald's Bank there is a broad, deep cutting with regularly trimmed sides leading through the edge of the bluff from the low terrace on the river side on to the plateau. Its large dimensions might entitle it to be considered as the work of the Romans; but as it leads directly to an old drive through the woods, it may have been excavated at a very late period.

BERTHA.

About two miles north of Perth, and about three-quarters of a mile south-south-west of the camp at Grassy Walls but on the opposite bank of the Tay, is the fort at Bertha, supposed by Roy to be the Orrea of the Romans. It is situated in the parish of Redgorton, on the flat, elevated terrace in the angle formed by the confluence of the River Almond with the Tay, the former stream flowing past the southern boundary and the latter past the eastern margin. On the south and east it was amply protected by the steep escarpment which rises some 20 to 30 feet above the bed of the Almond, and by the steep western bank of the Tay, which is about 15 feet in height opposite the fort. In the opposite directions the terrace extends in an almost level stretch for a considerable distance towards the north, but merges in the rising ground to the north-west some 200 yards away. It lies slightly north of the passage through the Tay known as Derder's Ford, which has a gravelly bottom, and seems suitable for carts at the present day, except when the river is high. Claims have been made that a wooden bridge once stood here.

I have already referred to the possibility that the site had been associated with the Romans by people living in the locality as far back as the first half of the seventeenth century. Whether this hypothesis

¹ *History and Antiquities of Scotland*, vol. i. p. 198. Maitland has mistaken his directions: apparently he has taken the Tay as running east and west at this part, while its course is generally north and south for a distance of ten miles above Perth.

is justified or not, the Roman character of the fortifications had been recognised by the antiquaries of the neighbourhood by 1757, the year in which Maitland's book was published.

After tracing the route followed by the "military way" from the Roman camp at Strageth, in Strathearn, as far as Bertha, Maitland stated that part of the northern rampart could be traced for a distance of 227 yards, and the southern rampart on the northern bank of the Almond for about 150 yards: the track of the "military way" was indicated by an arable mound, skirting the northern boundary, which was known as the Causewayridge. He also referred to Roman stones and bricks having been found on the site, but he did not know if any "inscriptional stones" had ever been discovered.¹

The descriptions of the remains at Bertha, like those on the opposite bank of the Tay, are so explicit in their details that Maitland must either have been familiar with the ground himself, or he must have received his information from someone who not only knew the district well but was interested in the Roman remains of the neighbourhood. When Roy planned the site fourteen years later, he could hardly fail to have the ramparts and military way pointed out to him by local people who were familiar with Maitland's views, even though he were not acquainted with Maitland's writings on the subject. But evidently these opinions did not commend themselves to him, because he rejected the traces of remains at the "Causeway ridge" as the remnants of the northern boundary of the station, and planned the mound on the edge of the bluff overlooking the Almond—Maitland's southern rampart—as the northern defence of the fort, and showed the western end of this mound curving round towards the south to form the north-west angle (fig. 1). In so doing he made the major axis of the encampment run north and south, and explained that the "prodigious impetuosity" of the Almond had washed the site almost entirely away.² His plan shows the length of the rampart surviving at his day to have been about 220 yards, the eastern end which had been truncated by the Tay and Almond being placed about 66 yards from the western edge of the former river and about 266 yards from the eastern side.

Roy believed that it was quite possible for the Almond to have worn away the terrace for a depth of possibly 400 yards since Roman times, even though the thickness of the material transported may have amounted to an average of nearly 20 feet. This stream has a rapid fall throughout its course, and as its waters rise very suddenly, when a spate does come down their destructive power is very great. Fresh breaks on the

¹ *History and Antiquities of Scotland*, vol. i. p. 198.

² *Military Antiquities of the Romans in North Britain*, p. 129.

northern bank, which have taken place in recent years, testify to this. However, since the construction in 1827 of the bridge that carries the Perth and Dunkeld road over the river, about 600 yards from its mouth, the stream below it has been controlled, and the encroachments on that part of the bank where the fort is situated have been stopped. But for this it is practically certain that the rampart shown by Roy would have been carried away long ago. Landslips which took place in 1759, 1761, and 1774, and which exposed some Roman remains, are referred to by James Cant in the notes appearing in the edition of H. Adamson's *Muses Threnodie* which he published in 1774.

Local geologists with whom I discussed the question maintained that, even allowing for the powerful erosive capabilities of the river and the softness of the alluvial deposits of which the terrace is composed, and through which it has cut, it was impossible for the Almond to carry away practically the entire site of the fort in eighteen centuries, and their opinion was that, if ever there had been a fort at the place, Maitland's description was the more reasonable one.

After examining the site, I think there is quite good reason for accepting the account given by Maitland instead of that put forth by Roy. There is no doubt about the rampart on the edge of the bank overlooking the Almond. Though considerably reduced in length since 1771, it can be traced for a distance of 105 yards, but there is a wide gap near the centre caused by the formation of a broad track that slants up the bank towards the east and cuts through the mound; seemingly it occupies the same position as a narrow road which appears on Roy's plan (fig. 1). The eastern extremity of the rampart tails out diagonally over the edge of the bank, and the western stands about 20 yards back from the brink. It measures from 4 feet to 6 feet in height, and from the centre of the crest to its northern margin about 10 feet, which would give it a total breadth of about 20 feet at the best preserved part. Maitland states that it was 150 yards long, but whether Scots or Imperial measure is not mentioned; if the former, it would be about 187 imperial yards. Roy's plan, though made at least fourteen years later, shows its length as about 220 yards, or 33 yards longer. At present the distance between the end of the mound and the western edge of the Tay is some 100 yards, but, as we have seen, Roy made it only 66 yards. If Roy's distance is correct, these measurements indicate that in the interval between the surveys either 100 feet of the mound have been demolished by river action or that width of silt has accumulated on the western side of the river opposite the mound. But if we take the distance to the opposite side of the river, it will be found that the present measurement of 266 yards is practically the same as Roy's distance, because he shows the Tay

100 feet wider than the Ordnance Survey map. Silting does not seem to have taken place on the eastern side of the water, and though there may have been some accumulation of alluvium on the western bank, I do not think it can have amounted to 100 feet. It should be noted that Roy's plan generally makes the Tay 100 feet too wide, which may be the fault of the map he worked on, as he must have been a skilled surveyor, and consequently we cannot summarily reject his measurements. Still, if that part of the rampart which lies to the east of the track that slants up the bank, as indicated by Roy, be compared with the present fragment, it will be found that their lengths are about equal, in which case the position of the eastern extremity must be much the same as when Roy saw it.

On this assumption Roy's north-western angle would lie very near the northern end of the present railway bridge; on the other hand, if Roy's plan was correctly laid down in relation to the western margin of the Tay, and if no change has taken place in it, the position of the angle would be almost 70 yards east of the bridge. Near this spot is a wide, sloping trench running over the edge of the bank and forming an obtuse angle with the line of the rampart. The trench is bordered on both sides by a slight mound, and measures some 30 feet in width. While it is about 5 feet deep where it debouches on the edge of the bluff, it runs out on to the level at the northern end, and there is a gap about 30 yards wide between it and the present western termination of the rampart. At this place the rampart enters a cultivated field beside a stile, the result being that it has been completely levelled. I do not think that it is at all probable that this ditch represents the turn in the rampart depicted by Roy, because his drawing does not indicate a double wall with an intermediate ditch at this part, and he makes the western mound lie at right angles, not at an obtuse angle, to that on the north. Further, the narrow road on his plan, instead of occupying the same position as the modern footpath, as seems probable, would cut the rampart further east where now it is best preserved.

The hamlet of Bertha on Roy's plan consisted of three buildings which stood between the mound and the edge of the bluff, a short distance east of the north-western angle; all traces of these houses have disappeared, but under present conditions the space here is far too narrow to provide room for these structures. From this it is quite evident that considerable erosion had taken place at this part of the escarpment between 1771 and the time when the railway bridge was built.

Having noted the remains of this rampart, a search in the fields to the north revealed not only traces of a mound, which seemed to be confirmatory of Maitland's observations about the northern boundary of

the fort, but also indications of the western rampart, which this writer had failed to detect.

Access to the rampart on the edge of the bluff is obtained by following a footpath which strikes off the road from Perth to Dunkeld immediately to the north of the bridge over the Almond and runs eastwards along the edge of the escarpment on the north side of the Almond outside the hedge round the field. About 30 yards before the railway is reached, a distinct ridge, about 20 yards broad and about 1 foot in height, is seen crossing the track. This ridge can be traced striking through the field to the north in a north-westerly direction for a distance of some 150 yards, maintaining a breadth somewhat similar to that shown in crossing the path, but even more flattened, and about 55 yards from the northern end there seems to be a gap of about 50 feet. At the northern end the mound turns towards the railway, following a north-easterly course, and after crossing the embankment it is more clearly defined in the field to the east, where it measures at least 30 yards in breadth, rising about 4 feet above the level of the ground to the north, and rather less above that to the south. Near the eastern edge of the field, just before the high bank overlooking the Tay is reached, the mound makes a distinct curve towards the south, as if this had been the north-east angle of the fort. This mound is probably the "Causeway ridge" of Maitland, or the remains of the rampart which he mentioned as running alongside it. The surface of the terrace in the neighbourhood of the fort is wonderfully flat and regular, with no sudden rises or hollows, or even undulations; but in the field to the west of the railway the mounds are more scattered and less distinct, and here the position is plainly displayed by a regular curve at the root of the hedges beside the railway and on the southern boundary of the field. No remains of the eastern rampart were to be seen south of the north-eastern angle, and although the two angles on the southern side of the enclosure have disappeared, by projecting the lines of the surviving portions of the mounds, an approximately correct outline of the station can be obtained. In shape it apparently was quadrilateral, but not quite rectangular, with the main axis running nearly north-east and south-west (fig. 2). The north side measured 280 yards in length, the south side 293 yards, the east end 150 yards, and the west end 188 yards, the area enclosed by these lines amounting to about $9\frac{1}{4}$ acres.

With regard to relics found at this site, Cant records the circumstances accompanying four separate discoveries which were brought about through the activities of the Almond when in spate, and his descriptions of some of the objects which were secured, and of the deposits in which they were embedded, enable us to identify their character with a greater amount of confidence than we can usually afford to writers of his time.

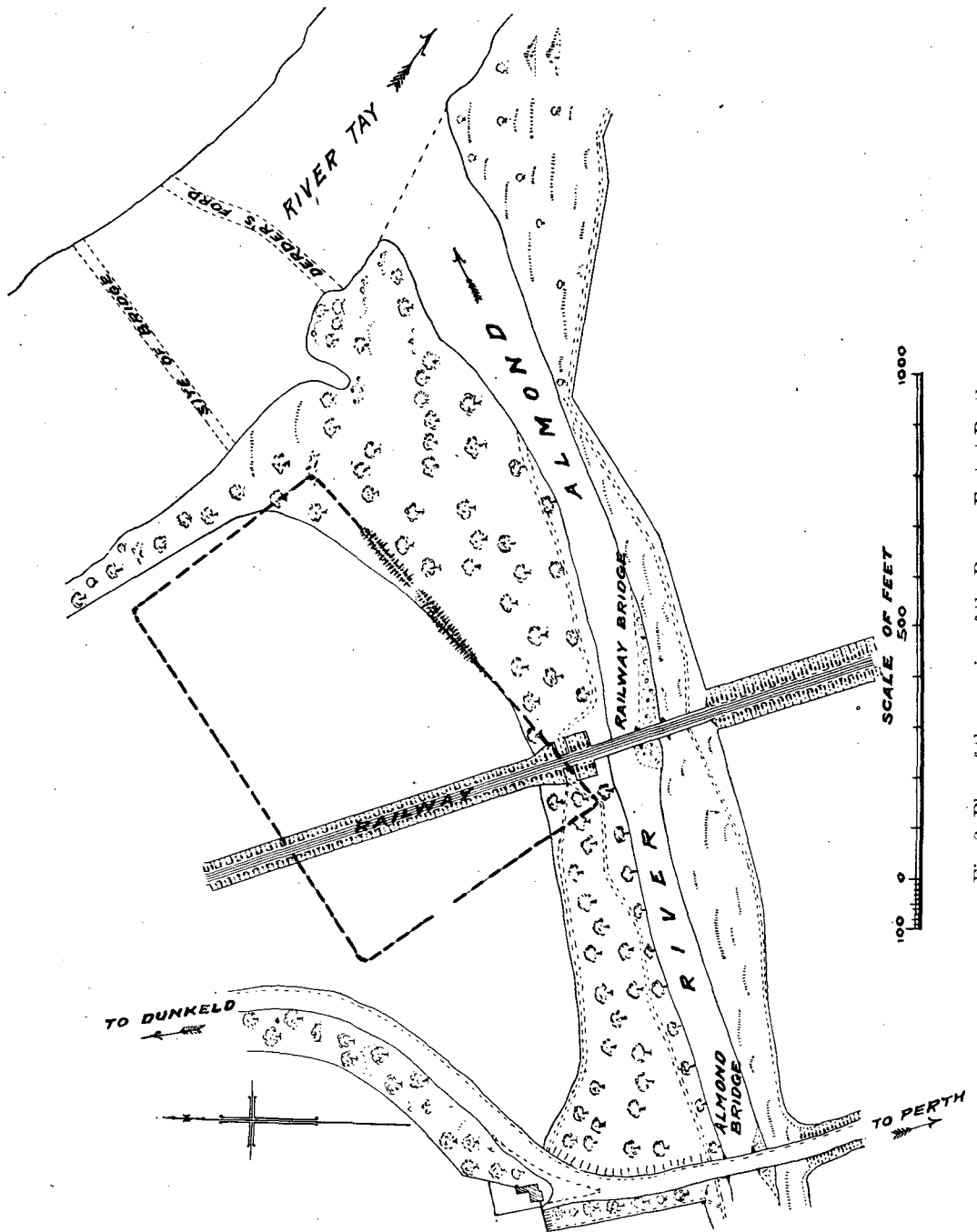


Fig. 2. Plan of the remains of the Roman Fort at Bertha.

About fifteen years before the publication of his book, that is about 1759, a labouring man recovered a large earthen pot which he saw jutting out of the north bank of the river, a little above the surface of the water, about 160 yards west of Bertha. Its mouth was sealed, and the man broke it into pieces in the hope of obtaining concealed treasure.¹ Apparently about the same time Cant observed six semicircular pillars of dark hazel-coloured material appear in the face of the bank, the soil of which was of a reddish colour. The pillars extended to a depth of 18 feet below the surface of the ground, and urns were seen in the bottoms of the pillars. Two years later another pillar came to light after another inundation, 150 yards west of Bertha. Cant excavated the deposit and secured an urn, but, in spite of precautions, it was broken with the spade. Its capacity was about an English quart and a half, and "it contained a few ashes of oak-wood and part of a lachrymatory, which was a small glass phial about $\frac{1}{8}$ of an inch in thickness." All the urns discovered, except the first, were about the same size as the last. The pillars were in line 10 feet distant from each other.

The last discovery mentioned by Cant took place in April 1774 after the winter inundations had exposed another pillar to the west of these already described. From the bottom of the pillar a vase, which had a narrow mouth, two cylindrical handles, and three short round feet, was extracted. The vessel measured 15 inches in diameter, the mouth $6\frac{1}{4}$ inches, and the inside of the brim 4 inches; the wall was 1 inch thick, and its contents 3 or 4 English gallons. It stood on "a square brick stone with a turned-up brim like a flat tea-cup" (? saucer), which was 14 inches square and burnt black and vitrified. Beside the vessel lay some square bricks, the remains of a helmet, the handle of a spear almost consumed with rust, and a piece of wood within the socket. Underneath these objects was an "oblong square" block of lead, weighing 73 lbs., bearing an inscription on one of the sides.² The description of the vessel reads very like that of an amphora.

Mention of the "pillars" recalls the numerous refuse pits, which contained such a magnificent assortment of relics, discovered at the Roman fort at Newstead, especially when we consider that the pillars were 18 feet deep, a measurement repeated by Cant when comparing these deposits with the remains found in native cairns for the purpose of demonstrating the Roman character of the former.³ If they were rubbish pits, it is difficult to understand why the occupants of the fort took so much trouble as to dig them when they could have disposed of their rubbish so much more easily by throwing it into the Tay, which ran past the wall of their encampment.

¹ *Muses Threnodie*, p. 52.

² *Ibid.*, p. 21.

³ *Ibid.*, p. 28.

Regarding the exact position of the "pillars," Cant states that they were exposed about 150 and 160 yards west of Bertha, the position of which is marked by Roy. If we agree that the north-western angle shown by him was situated about the railway bridge, then they must have been exposed some 70 yards to the west of it. At this point Roy's plan shows the bluff as making a considerable curve to the north, but here again his map is faulty, as the curve should be further west and not so deep. There is every probability, however, that the pits were dug near the south-western corner of the fort, seeing that the south-west angle formed by a continuation of the rampart on the edge of the bank and the low ridge that I have suggested as the western margin would lie some 30 yards west of the bridge and some 40 yards south of the edge of the bank.

The relics mentioned by Cant do not complete the list of objects found on this site, as a few fragments of Roman glass vessels were presented to this Society in 1781. Owing to the Museum collections being inaccessible at present, I am not able to give a description of them.

In the Perth Museum are four very good Roman or Romano-British relics of bronze—two broken pateræ, one with the name of the maker [P.] CIPI P[OLIBI]; a chain with a moulded shield-shaped pendant, its ornamented openwork being in true late-Celtic style; and the massive enamelled harp-shaped fibula described by me to the Society last session. It is quite possible that these objects may have been found at Bertha, but unfortunately their provenance is unknown and they may as likely have been found on some of the other Roman or even native sites which lie within easy reach of the town.

Like the site of Grassy Walls, Bertha betrays so very little structural remains above ground that no definite conclusion can be arrived at regarding the greater part of its boundaries, but the indications of their possible position make it specially desirable that some further examination be made. A single trench cut across each of the ridges on the north and west would determine whether they represented the scattered remains of the ramparts, and if the bank in the vicinity were scraped down to a depth of a few inches traces of Cant's "pillars" might even be detected.