The following Communications were read:—

T.

EXCAVATION OF THE ROMAN CAMP AT LYNE, PEEBLESSHIRE, UNDERTAKEN BY THE SOCIETY OF ANTIQUARIES OF SCOTLAND IN 1901. By D. CHRISTISON, M.D., SECRETARY. WITH NOTES ON THE RELICS BY DR JOSEPH ANDERSON, KEEPER OF THE MUSEUM.

INTRODUCTION.

The Roman Camp of Lyne attracted less attention of old than the similar strongly fortified works in Scotland, perhaps because it lay outside the supposed beaten tracks of the Roman armies, and therefore did not so readily lend itself to the theories of their lines of march in vogue among the early authorities. Its position, indeed, buried as it is among the lofty Peeblesshire hills, seems at first sight inexplicable, but the key is probably to be found in the remark of Chalmers that it is close to the point where at the present day the highways from the eastern borders, the western borders, the Lothians and Lanark all meet together. It is a fair inference, therefore, that the object of the Romans was to protect this important connection between the main east and west routes by which from time immemorial invading armies have penetrated into Scotland, and it is noteworthy that these connecting roads, although running through a hill country, encounter no high pass and have such easy gradients that they are favourite cycling routes at the present day.

Additional interest was lent to the place by its traditional name of Randal's Walls, which seemed even to cast some doubt on its Roman origin; and as it was not clear that Roman relics had ever been found at it, a thorough investigation seemed desirable, if only to determine whether it was Roman or not. Accordingly, on the completion of our excavations at Gask last summer, the Council sanctioned operations being undertaken at Lyne, and permission having been freely given by Lord Wemyss, the proprietor, and by Mr Ritchie, the tenant, the work was begun early in August under the same management as at Gask, and was successfully concluded in about three months.

A. HISTORY.

The earliest notice of Lyne is at the very end of the seventeenth century, by Sir Robert Sibbald, not in any of his own publications, but in the following very brief reference in Gibson's edition of Camden, which there can be little doubt was furnished by him:—"A place called Randal's Trenches seems to have been a Roman Camp; and there is a causey leads from it for half a mile together to the town of Lyne."

Dr Alexander Pennecuik ² follows in 1715 with an almost equally brief notice:—"Here is to be seen the remains of a large and formall camp near half a mile in circuit, strongly fenced with dry and double ditches, especially on the height above the water, which the country people call to this day Randal's Walls."

Alexander Gordon³ in 1726 published the following account (somewhat abridged). The camp "is still very intire in most places, and strongly fortified with double ditches and three rows of ramparts, and it has had four regular entries one on each side, only the one on the north has been levelled with the plough. . . . A vast rampart of stone and earth encompasses the north end of it, but I think part of that may be natural ground and with some art made use of to defend it. On the end of the said bank is a large Cavity, which seems to have been a place appropriated for the burning of the dead; the marks of Fire appearing upon some of the stones to this day and ashes have been dug out of it."

Gordon goes on to conjecture that the camp "was a work of Severus in his northerly expedition, because no less extent of ground than the whole space from the Fort along the water-side to the other square intrenchment beyond Romana was capable of containing so great an army as he brought along with him, part of which in all probability lay encamped on the side of the hill where the huge terraces of Romana

¹ Britannia. William Camden: Revised and enlarged by Edmund Gibson, 1696.

² Description of Tweeddale. Alexander Pennecuik, M.D., 1715.

³ Itinerarium Septentrionale. Alexander Gordon, 1726.

appear." Finally, as to relies, all that Gordon has to say is that "whatever inscriptions may have been found are either lost or destroyed."

Gordon's description is very misleading as to the fortifications of the

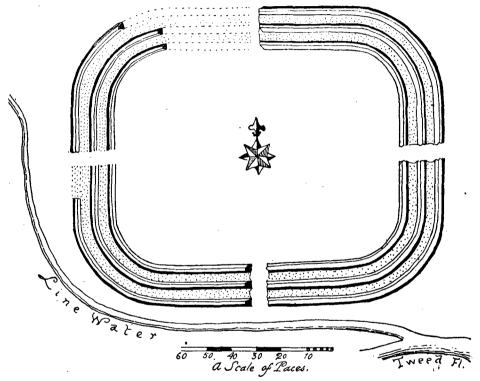


Fig. 1. Lyne Camp, from Gordon's Itinerarium Septentrionale.

camp itself; and the "vast rampart," which he puts to the north instead of the east of the camp is, I should say, entirely and not partly natural. Neither does it "encompass the end of the Camp," but runs nearly parallel with its east side at a distance of about 100 yards. The extravagant idea that the army of Severus was encamped

all along the valley of the Lyne had probably no better foundation than a misapprehension of the derivation of the place name Romana or Romana.

Gordon was the first to give a plan of Lyne Camp (fig. 1), which, regardless of facts, he draws with the perfect regularity which he evidently thought was proper in all Roman camps. Three ramparts of equal size and two trenches of equal size are represented going round all the four sides, and the entrances are symmetrically placed, whereas there is an extraordinary diversity in the entrenchments, and the *Portæ Principales*, instead of being in the middle of the north and south sides, are much nearer their east than their west end. The plan also makes the Lyne water flow into the Tweed at the camp, whereas the junction is a mile and a half distant from it. Probably this was to typify, as it were, the fact of the junction, but as there is no explanation it is very misleading.

Horsley ¹ has but little to say by way of description:—"There is a Roman Fort and a visible military way near Line Kirk, halfway between Peebles and Kirkurd." But he makes up for this deficiency of facts by identifying Lyne with the Coria Damniorum of Ptolemy, and supporting his theory by the prevalence in the neighbourhood of place names containing the syllable Urd, which he derives, with a boldness unrivalled perhaps in the whole annals of strained derivations, by dropping the first and last letters of Coria and retaining only the first of Damniorum!

General Roy gives no description of the camp, merely stating that "it is very fine," but it is probable that even this slight information was at second hand, as the plan (fig. 2) in his classic work 2—so unlike those that are undoubtedly his own—is full of errors, and indeed is little better than that of Gordon, which it resembles in making the lines of fortification symmetrical on all sides and in misplacing the Portæ Principales. The surrounding country, however, appears to be correctly

¹ Britannia Romana. William Horsley, 1732.

² The Military Antiquities of the Romans in North Britain. General Roy, 1793 (long after his death).

given. Ignorant that the work attributed to "Richard of Cirencester" was a forgery, Roy speculates that Lyne Camp may be "Richard's Corda," on the ground that it was situated only a few miles from

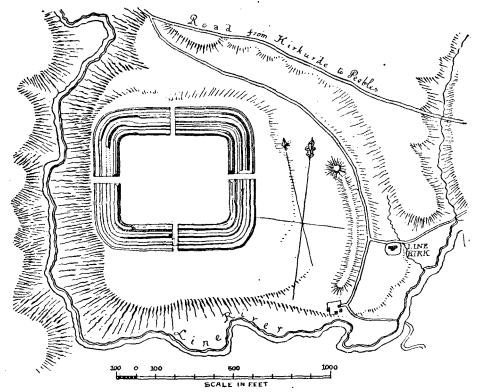


Fig. 2. Lyne Camp, from Roy's Military Antiquities of the Romans.

Kirkurd, "which perhaps was corrupted from Caer Corda," nearly as wild a derivation as Horsley's.

Not long after Roy comes Armstrong, who, after quoting from Gordon, and referring to his error as to the orientation of the "Vast

¹ A Companion to the map of Peeblesshire, 1775.

Rampart," desires that Gordon had "taken notice of the Prætorium in the centre; the redoubt and causeway to the castward of the Fort: and the exploratory Camp on Hamildean Hill:—These, with several recurring evidences, prove it to be a Roman Station: but the tradition of the country are strong negatives on its antiquity. Sir Thomas Randolph, nephew to the victorious Robert I., . . . it is said, built the Church of Lyne, and had a house in Lyne Camp, the remains of which are now called Randal or Randolph's Walls, and have been most barbarously obliterated through inattention of the proprietor and ignorance of the farmer. This camp is 495 feet square and contains 6 Acres, 2 Roods (Scots)."

It is hard to make anything of this confused and improbable account. If a prætorium had been visible, surely it could not have escaped the notice of Gordon and Roy; and as to the redoubt at the east end of the camp, Armstrong could hardly have meant Gordon's "vast encompassing rampart," as he had already spoken of it in noticing Gordon's mistake in its orientation, and yet there is nothing else in that direction, either above ground, or discovered under it by our excavations, that could possibly be called a redoubt. Then as to his application of the name "Randal's Walls" to a house, he speaks in the same breath of the remains of this house as still existing, and as having been barbarously obliterated, so that it may be reasonably doubted whether there ever was a house there at all.

It is possible, however, that the Randolph legend may have been handed down in the country-side from the times of that famous warrior. At least there is historical foundation for it in Barbour's Bruce in the account of Douglas's capture of Randolph, who at that time was a partisan of King Edward, and was lurking in the forest of Ettrick.

"A nicht as he travaland was
And thocht for till haf tane restyn
In ane hous on the watir of Lyne:
And, as he come we his menhye
Nerhand the hous, sa lisnit he
And herd thar sawis ilke dele
And by that he persaivit wele

That the war strange men that That nicht tharin herbryit war. For of Bonkill the lord thar was Alexander Steward hat he, And othir twa of great bounte, Thomas Randol of gret renoun, And Adam alsua of Gordoun."

We are then told that these noblemen had come with a strong force to chase Douglas from the Forest,

"Bot othirwais all yhed the gle,"

For Douglas having "umbeset the hous," attacked them as they sallied out, and after a fierce contest

"Thomas Randal thar haf tha tane
And Alexander Steward alsua
Was woundit in a plas or twa
Adam of Gordoun fra the ficht
Quhat throu slicht and quhat throu micht
Eschapit, and fele of his men."

It is pretty evident from this description that the house in question did not belong either to Douglas or Randolph, neither of whom, I believe, had lands in the Lyne valley; and as we are only told that it was "on the Water of Lyne," there is no reason to locate it within the camp, or even in its vicinity. Moreover, the earliest authorities for the legend make no mention of a house, and Sibbald, the earliest of them all, speaks not of Randal's Walls, but Randal's Trenches, so that in all probability the story of the house is a mere modern accretion on the old tradition.

Pocock, Maitland, and Pennant, the remaining authorities of the eighteenth century on our Scottish Roman Camps, are silent about Lyne, and the writer of the description of the parish in the O.S.A., 1794, merely tells us that "the road leading to the camp is still visible, and runs through the present glebe," that the ground within the camp has been frequently ploughed, and that "it is said that Roman coins, etc., were frequently found on it."

Richard Gough, evidently from carelessly quoting Gordon, makes the Britannia. William Camden. Edited by Richard Gough, 1806.

ungrammatical and unintelligible statement that "about a mile west of Romana, at Lyne Kirk, are vestiges of a Roman Camp, one of them single ditched," which seems to be an attempt to combine Gordon's two camps,—the one at Lyne, and the very doubtful one near Romanno.

Brown of Newhall, in his Notes to Pennecuik, gives no additional information beyond stating that in 1815 the camp was almost ploughed down and levelled—an exaggerated statement, as its present state shows.

Chalmers 2 makes the pertinent remark regarding the situation of the

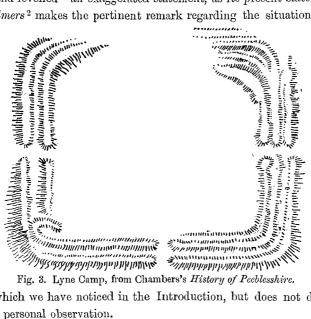


Fig. 3. Lyne Camp, from Chambers's History of Peeblesshire.

camp which we have noticed in the Introduction, but does not describe it from personal observation.

Stuart 3 states with regard to the camp that "with the exception of a few coins it does not appear that any reliques of its Roman occupants have ever been discovered there," but without giving any authority for the coins. He also sensibly remarks that the excavation in the mound, to the east of the camp, containing ashes and stones

¹ The Works of Alexander Pennecuik, M.D. Edited by Brown of Newhall, 1815.

² Caledonia. George Chalmers, 1807-1824.

[&]quot; Caledonia Romana. Robert Stuart. 2nd ed., 1852.

blackened by fire, mentioned by Gordon as an evidence of Roman occupation, is more likely indicative of the camping ground of gipsies or border thieves.

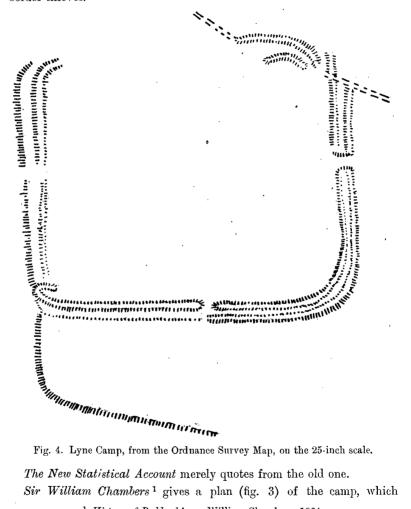


Fig. 4. Lyne Camp, from the Ordnance Survey Map, on the 25-inch scale.

The New Statistical Account merely quotes from the old one. Sir William Chambers 1 gives a plan (fig. 3) of the camp, which ¹ History of Peeblesshire. William Chambers, 1864.

represents the remaining ramparts disproportionately broad and by no means accurately. He states that "there had been some works exterior to the camp," probably relying on the older writers; and that "a few years ago the remains of Roman cooking utensils in brown earthenware were found at a spot about thirty feet beyond the outer valum on the

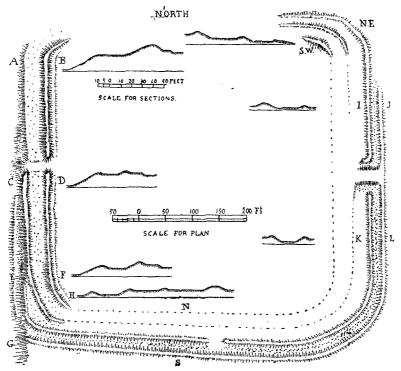


Fig. 5. Plan by Mr F. R. Coles of Lyne Camp before excavation.

north; these relics are now in the museum at Peebles." Unfortunately, however, it seems that they were not labelled, and I have ascertained that some years ago they were thrown away along with a quantity of other unmarked pottery.

The plan on the 25-inch scale of the O.M. (fig. 4) is more accurate

than its predecessors; but the fortifications at the north-east angle extend further round to the north than is represented, and several other parts are made out to be less perfect than they really are.

On the whole, the chief service done by all these plans was to emphasise the necessity of a thorough scientific survey and investigation of the camp. As a means to this end the plan (fig. 5) was

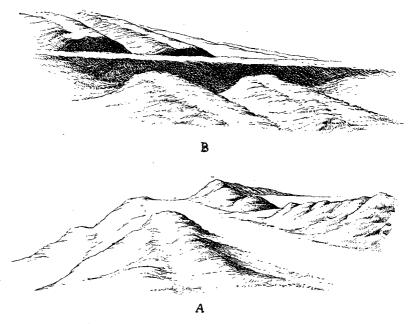


Fig. 6, A and B. Views of West Ramparts and East Entrance at Lyne Camp.

taken by Mr F. R. Coles for my work on the Early Fortifications of Scotland, and it was the first to give an accurate representation of the camp before excavation, or—what amounts to the same thing—in its present state. The sections (fig. 5) and view (fig. 6, A), from a sketch taken by myself, show the terraced character of the work before excavation—a character which was largely maintained even after our operations

revealed the existence of deep trenches as well. B is a view by Mr Coles of the east entrance, before excavation.

B. DESCRIPTION.

(a.) The Site.—The position of the camp or station is four miles due east of Peebles, and 300 yards east of Lyne Kirk, 700 feet above the sea, upon a nearly level plateau (fig. 7, plan of the site, founded on the O.M. but filled in from information supplied by Mr Mackie) elevated 100 feet above the Lyne water, which bends round the west and south sides of the plateau at a distance of about 150 to 250 yards, and is separated from the steep slopes which fall from the plateau on these two sides by a haugh or river-flat at most 100 yards wide. On the opposite side of the river the bank rises at once very steeply, and is so high that the station is commanded from the gentle hill slopes beyond, but at too great a distance to be annoyed by primitive missiles.

The site was admirably chosen for its natural strength. The south and east sides were amply protected by the steep ascents from the river. The north side was rendered almost equally strong by a morass, D D, in a hollow, now drained, but which formerly covered the whole front, except a small portion at the west end, where a narrow neck, E, level with the plateau, connected it along the top of the bank with the hills beyond. This approach was far too narrow to permit of a serious attack, as the assailants would be hemmed in between the steep bank and the morass. On the east front the ground, although easier, was by no means unfavourable to the defence. The southward trend of the morass contracted the width of the access from the east, and the ground fell away from the plateau in a hollow, F, which, bending southward between the plateau and the "moraine," H, opened on the haugh of the river. Thus the only level approach from the east was by a narrow space, G, between this hollow and the morass. The "moraine," H H, 100 yards distant and quite detached, may have been used as an outlying defence, but no doubt, if taken by an enemy, would be a source of weakness to the garrison.

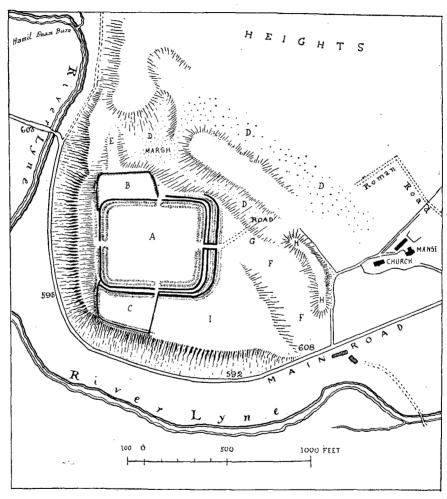


Fig. 7. Adaptation of the Fortifications to the site, Lyne Camp.

(b.) Occupation of the Site.—We may now point out how skilfully the fortifications were placed on the plateau, making use once more of fig. 7, on which, in order that the reader may recognise the fortifications at a glance, the trenches, which are the key to the whole plan, have been marked by strong black lines. As shown on the previous plans, all that was visible, previous to our excavations, were the remains of the rectangular work, A, set with its back on the western edge of the plateau; but it did not occupy the whole width of the plateau, and thus two strips of level ground, one on the north, B, the other on the south, C I, were left, upon which an enemy attacking in force might effect a lodgment. Our excavations proved, however, as we expected, that the Romans had not been unmindful of this risk and had provided against it by constructing the two wings or annexes, B, C, at the west end of the plateau, thus occupying its full width at that end. The north annex took in practically the whole of the level ground on that side, and although the south annex occupied only a part of the level ground on its side, it flanked I, the remaining part.

The black lines of the trenches show at a glance how the defences of the main work were proportioned to the varying strength of the different sides or parts of the sides, but this will be pointed out in detail further on.

C. The Fortifications.

It is remarkable that all the Roman military works as yet excavated in Scotland prove to be earthworks, notwithstanding the abundance of stone in the country and its frequent use for the buildings within the fortified lines. Whatever the reason may have been, perhaps no other country, and certainly none of so limited an area, can show so many examples of the skill of Roman military engineers in constructing entrenchments and adapting them to the requirements of the particular sites. So great, indeed, is the variety in the plans in the four stations hitherto excavated by the Society, that the only resemblance they can be said to bear to each other is in form, the details in each

being worked out in entirely different modes. Lyne is not behind the others in the ingenuity of its defences, and we shall now proceed to describe the various parts, taking first the main work, front by front, and then the annexed wings.

I. THE MAIN WORK.

A mere glance at the plans (figs. 7 and 8) suffices to show the great diversity in the fortifications, not only on the different sides compared with each other, but in portions of the sides themselves. The only lines carried round all the four sides are the inner or main rampart and its trench, and these are strengthened by other works according to the requirements of the different parts.

The East Front.—All that was to be seen of the east front before excavation is shown by the upper line in sect. A B, fig. 9. A slight, scarcely perceptible rise marked the position of the main or inner rampart, a^1 a^1 , and a long way in advance of it were two distinct but slight ramparts, g, i, with a terrace between, which concealed the trench, h. Our excavations, however, quickly revealed that the defences, which had been obliterated by ploughing on the surface, retained so much of their structure underneath, that an almost perfect idea of their original state could be made out. This we shall now explain seriatim by referring to Mr Ross's plan (fig. 8), and particularly by following the lower line in section A B (fig. 9).

 a^1 a^1 is the base of the main rampart, of which about two feet in height remained, consisting of layers of clay and black mould. Two stone "kerbs," a^2 a^2 , 4 feet wide and 24 feet apart, did not exactly limit the rampart, as the layers of clay or mould went a little beyond them, perhaps from slipping in the long lapse of centuries, but the base of the rampart must have been at least 32 feet wide. The kerbs were roughly built and had no smooth face.

- b. The berm, 8 feet wide, measuring from the kerb.
- c. The first trench, angled at the bottom like all the rest; 12 feet wide and $5\frac{1}{2}$ feet deep; and if we allow the very moderate height of 10 feet

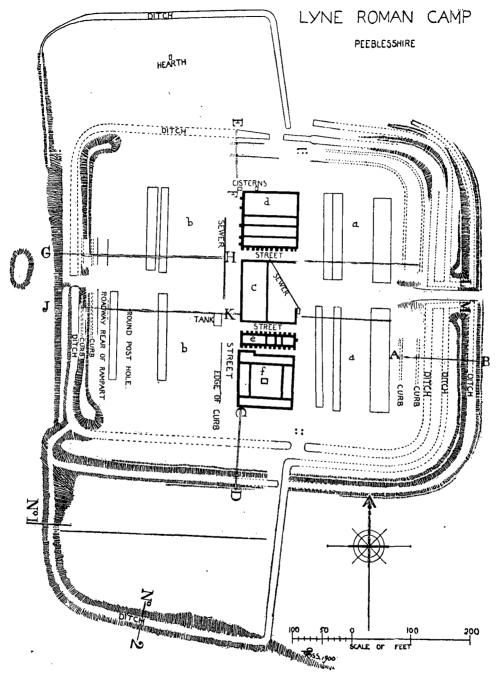


Fig. 8. Fortifications and Interior Foundations, Lyne Camp, by Mr Thomas Ross.

for the rampart when perfect, the bottom of the trench must have been at least 15 feet below the top of the rampart.

d. A terrace 18 feet wide, with no parapet nor sign of a palisade. It was surfaced with hard compacted gravel.

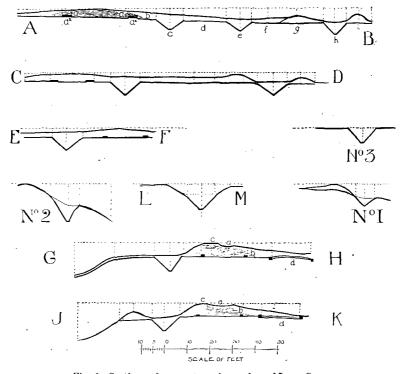


Fig. 9. Sections of ramparts and trenches of Lyne Camp.

e. The second trench similar to, but rather smaller than the first.

f. A second terrace 12 feet wide, on the same level as the first and as the berm, having a rampart, g, about 20 feet wide at the base, with a present height of 3 to 4 feet, and consisting of earth without layers of clay, etc.

h. The third or outer trench, 8 feet deep, the outer slope of g forming its scarp.

i. The outer mound forming the counterscarp of the trench h, and standing at most 3 feet above the exterior, but 8 above the trench. Perhaps its object was to increase the depth of the trench from the outside, as it is much too high to have served for a breastwork to defenders in the trench, unless provided with a banquette, of which there was no sign.

The total width of this front was 140 feet, and omitting the outer mound it admitted of three lines of defence, first the outer terrace



Fig. 10. View of north-east angle of Lyne Camp.

f, then the inner terrace d, and lastly the main rampart, which with its berm may be considered as a double line.

As the north angle of this front is one of the best preserved parts of the camp, a view of it from the outside is given (fig. 10), from a photograph by Mr Mungo Buchanan, Corr. Member S.A. Scot.

The South Front.—Between the south front and the steep bank, and not occupied by the main work, there was a level space fully 100 yards wide opposite the east angle and contracting to about 50 near the west angle. The eastern half of this space was comparatively open and exposed, so the lines of the east front were all carried round the angle

as far as the south entrance, but on a somewhat contracted scale, the width being reduced from 140 to 120 feet. West of the entrance the main work was covered by the annex, and as shown in the plans (figs. 7, 8), and in the sect. C D (fig. 9), some reduction was made in the lines by missing out the middle trench, thus leaving one terrace instead of two and two trenches instead of three; but as this terrace was about 30 feet wide and had a rampart nearly 20 feet broad, the defences were still very strong, although the width of the inner rampart was reduced to about 25 feet, or about 7 feet less than on the east front.

The North Front.—The north side had some level ground in its front, but it was much contracted by the morass (fig. 7, D) formerly described, which greatly hindered free access to it. From the east angle, therefore, as far as the north entrance, the outer line of works was dispensed with, and the defences were reduced to the main rampart and trench and one terrace and its trench, giving a total width of 80 feet. West of the entrance the main work was covered by the annex, which itself was very unassailable, and here, section E F, the defences were reduced simply to the main rampart with its berm and trench, having a total width of only 45 feet.

The West Front.—The west front had the immediate strong protection of the bank, which slopes from the rampart at first moderately and then very steeply to the haugh of the river. The artificial defences, therefore, were reduced to the inner rampart with its trench, and beyond that a terrace. The terrace running south from the entrance was furnished with a parapet, section J K (fig. 9), but there was none on the northern half, section G H.

Before excavation a broad path or platform was distinctly visible all the way behind the low narrow rampart, and the excavations showed that this platform was indeed the old rampart walk, so that the apparent narrow rampart was truly the parapet of the rampart, the whole arrangement being exactly like the parapetted rampart of Vauban's system of fortification. Both the sections, G H and J K, show this, a speing

the rampart-walk, with the slope up to it at b, and c being the parapet. In rear of the whole, on the interior level, is the Vallum roadway, d, 16 feet wide, of hard gravel, and furnished with kerbs. The whole arrangement is well displayed in the enlarged plan and section of the west entrance (fig. 12).

II.—THE SOUTHERN ANNEX.

The southern annex is a trapezium enclosing a space of about 350 by 200 feet, and is bounded by the western half of the south front of the main work on the north, by the steep descent towards the river on the west and south, and by a trench running straight from the edge of the descent to the east side of the south entrance on the east. On the south and west it was fortified by the simple yet strong expedient of cutting a steep-sided trench a few yards down the slope, and throwing the spoil upwards to form a rampart of no great size, sections 1 and 2 (fig. 9). Behind the trench which formed the eastern boundary there were only doubtful signs of a rampart. The north side, of course, was unassailable, as it rested on the main work. This annex, therefore, was strong in itself; and while covering one half of the south front of the main work, it flanked the other half.

III.—THE NORTHERN ANNEX.

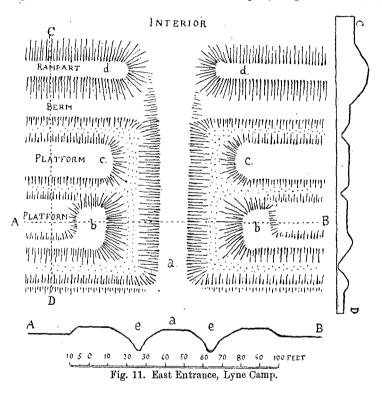
The northern annex is also a trapezium, or nearly a trapezoid, of about 350 by 150 feet. The west end, resting on the edge of the bank, was fortified in the same way as the corresponding side of the southern annex. The north and east sides have simply a straight trench, and the indications of a rampart on both these sides are as if it had been of no great size, but the morass which lay in front to the north was probably almost sufficient in itself to prevent a serious attack from that side, and assailants of its east face were exposed to be attacked in flank from the main work.

IV.—THE ENTRANCES AND GATEWAYS.

The four entrances at Lyne differ remarkably not only from each other, but from the entrances of all the Roman works previously

examined by us; I have therefore given special plans of them taken on an enlarged scale from Mr Ross's general plan, the bottom of the trenches being conventionally indicated by dots.

The East Entrance (plan, fig. 11, and view, fig. 6, B) is simply a straight continuation of the road to the camp by a gentle ascent, a,



to the interior, undefended by the customary traverse, and we could find no post holes or any other evidence of wooden barricades, or of a stone gateway, although the original hard gravel surface seemed unimpaired. The only visible defence was from the flanks of the three lines of fortification, b, c, d, from the two outer ones of

which it is cut off by a trench 28 feet wide, and with the remarkable depth of 11 feet (sections L M, fig. 9, and A B, fig. 11). The hard gravel subsoil in which it is cut admitted of unusually steep scarps, which increased in steepness down to the bottom. To promote this

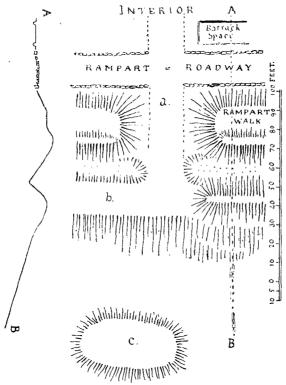
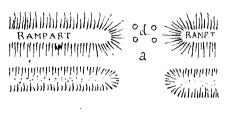


Fig. 12. West Entrance, Lyne Camp.

flanking defence, the ramparts of the outer platform on each side, b b, were widened opposite the entrance. The width of the entrance is about 12 to 14 feet. The roadway is surfaced with hard gravel and rude paving, which seemed to have gone some way down the scarps.

The West Entrance (fig. 12) is like the last, except that it is shorter, as it has only two lines of defence to pass, and that it has a traverse or advanced work, c, on the downward slope, 50 feet in its front, but shoved, as it were, a little northward, so as not to be symmetrically in front. This traverse showed no sign of its presence on the surface, but on excavation proved to be still $4\frac{1}{2}$ feet thick. It was 60 feet long and 40 feet wide at the base, and was composed of

INTERIOR



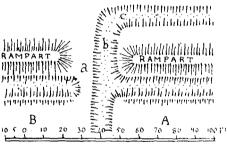


Fig. 13. South Entrance, Lyne Camp.

layers of blue clay, and woody or peaty earth, and the base was let into the soil at the foot to check slipping down the slope. The roadway α did not descend to the traverse c, but seems to have turned northwards along the terrace b.

The South Entrance (fig. 13) does not give upon the open country A, but upon the interior of the annex B, immediately in rear of its north to south trench, and as the annex has no entrance,

access to that work from the outside must have been by a bridge. The passage a a, about 8 feet wide on entering from the annex, is flanked on the east side by a trench b, which connects the ends of the two outer trenches of the south face of the camp, but on reaching the inner trench c, it turns at right angles first eastward and again northward, thus zigzagging through to the interior. Four large post holes at d showed that there had been a gate where the entrance passed through the main rampart.

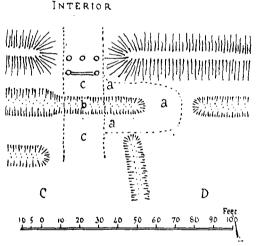


Fig. 14. North Entrance, Lyne Camp.

The North Entrance (fig. 14) differs from the last in issuing upon the open country, C, and not into the annex D. Originally, it had taken a complete right-angled double bend, a a a, round a short trench b, 8 feet wide, which was a prolongation westward of the 15 feet wide inner trench of the north front; but, subsequently, this little trench had been filled in with gravel, and a straight entrance, c c, constructed over it. Where the entrance pierced the inner rampart, two post holes with a cut between, probably to hold a beam, vol. XXXV.

and a little further back a row of three post holes, indicated the position of gates or barricades. The entrance gave access also from the outside C to the annex D.

D.—Interior of the Main Work.

The station fronts eastwards, and the interior is divided into three well marked sections,—the Pretentura (fig. 8, a a,) and Retentura, b b, neither of which contained stone foundations, and separating the Pretentura from the Retentura, a line of four stone buildings, c d e f, on the west side, or rear of the Via Principalis.

The Via Principalis is unusually far forward, being only 190 feet from the Prætorian Gate, whereas it is 360 feet from the Decuman Gate. The Via Prætoria is normally placed, and as it strikes upon the middle of a large building which from its central position facing the Via Principalis was no doubt the Prætorium, the road had to pass round the flanks and rear of this building, in the usual manner, before being continued to the Decuman Gate. A wide street also ran parallel with the Via Principalis, in rear of the line of buildings. The rampart-roadway could be made out well enough on the north, south, and west sides, although not so distinctly on the east. But as the surface of the roads did not differ much from that of the natural hard gravel-subsoil, it was not always easy to identify them exactly.

The Pretentura (fig. 8, a a), although devoid of stone foundations, appeared to have been occupied by wooden buildings as indicated by five long narrow rectangular spaces, uniformly enclosed by a slight trench, 18 inches wide and deep, with sloping sides and a slightly rounded bottom 9 inches wide. These trenches were probably intended for wooden groundsills, but we obtained no proof of this. They contained nothing but earth of a somewhat darker tint than that of the neighbouring soil. The spaces were disposed at right angles to the Via Prætoria, but at irregular intervals—three on the north and two on the south side, and stretching nearly to the rampart-roadway. They varied in length from 140 to 170 feet. Two of them were only 13 feet wide. The

other three were 30 feet wide, one of them being subdivided longitudinally by a trench into two equal compartments.

The Retentura (bb) contained four similar rectangular spaces, two on the north and two on the south of the Via, at right angles to it but unsymmetrically placed. They varied in length from 137 to 148 feet, and in width from 13 to 15 feet.

The row of four buildings that separates the Pretentura from the Retentura occupies a width of very nearly 100 feet, and has a frontage to the Via Principalis of 355 feet. They have been of stone, or at least have had stone foundations, for although it might be almost said that not one stone was left upon another, yet a single course of masonry generally remained in situ, and where the masonry was quite gone, its position was generally easily identified by the layer of clay and gravel on which the stone work had universally been founded.

Three of the buildings (fig. 8, c, d, f) were of nearly equal size, and, roughly speaking, were squares of about 100 feet, but the fourth, e, 100 feet long, was only 20 feet wide including the walls. The row taken as a whole is nearer the south than the north side of the station, being 63 feet distant from the post holes of the Porta Sinistra and only 32 from the post holes of the Porta Dextra.

One of the large buildings, c, is exactly in the centre, not of the row, but of the Via Principalis, facing down the Via Prætoria, and is therefore presumably the Prætorium, but no characteristic subdivisions remain. It is simply bisected by a trench running from north to south, the western compartment 40 feet, the eastern 46 feet wide. The latter seems to have been a courtyard, being laid with gravel. For three-fourths of its frontage to the Via Principalis, beginning at the north end, there seems to have been no wall. A small drain or sewer, close below the surface, crossed the fore court obliquely, discharging into a rectangular "cess-pool," just outside the wall, in the Via Principalis.

The nearly square building, d, to the north is separated from the Prætorium by a street 16 feet wide, paved with cobblestones, covered with

gravel, and has no less than twelve buttresses to the wall on that side. There are also five set irregularly along the west side or back wall, but none on the north. On the east side the wall had been entirely removed. The foundation of the walls of this building was of blue whinstone bedded on clay and cemented with the same material, but as a great many faced blocks of red sandstone lay close to the walls, the superstructure was probably of that material. The interior is divided from east to west into four compartments, the northmost one being 37 feet, the others from 13 to 17 feet wide. Outside, at the north-west angle, an oval hole measuring 6 feet by 4, and about 10 feet deep, had been excavated in the hard gravel, perhaps to catch the rain water from the roof, and 30 feet eastwards at the foot of the wall there was a similar hole measuring 4 feet 6 by 3 feet 6, and 9 feet deep, probably These holes are marked 'cisterns' on the for the same purpose. plan.

On the other or south side of the Prætorium, and separated from it by a roadway of hard impacted gravel, 14 feet wide, comes the narrow building e. It is 97 feet long and only 20 feet wide over the wall, and has twelve strong buttresses on either side and one at each end. The buttresses were 4 feet wide and 4 feet apart on the two sides. The south wall was nearly 4 feet thick, the north one not so much. The interior is divided transversely into four compartments of unequal length and 13 feet wide.

Separated from this by a passage 10 feet wide, narrowed by a slight projection at the north end to 4 feet, is the third nearly square building, f, which seems to have had a central court 53 feet square, with long narrow apartments on all four sides. In the centre of the court was a remarkable stone lined pit, of which a view from a photograph taken by Mr Inglis is given in fig. 15. It is 8 feet 8 inches long, 6 feet 6 inches wide at the top, and 9 to 10 feet deep, constructed of excellent coursed red sandstone masonry 18 inches thick, and with no trace of cement, the walls sloping considerably to the bottom, which measures 5 feet 9 inches by 3 feet 10 inches, and is flagged, the flags bedded in clay, and with a

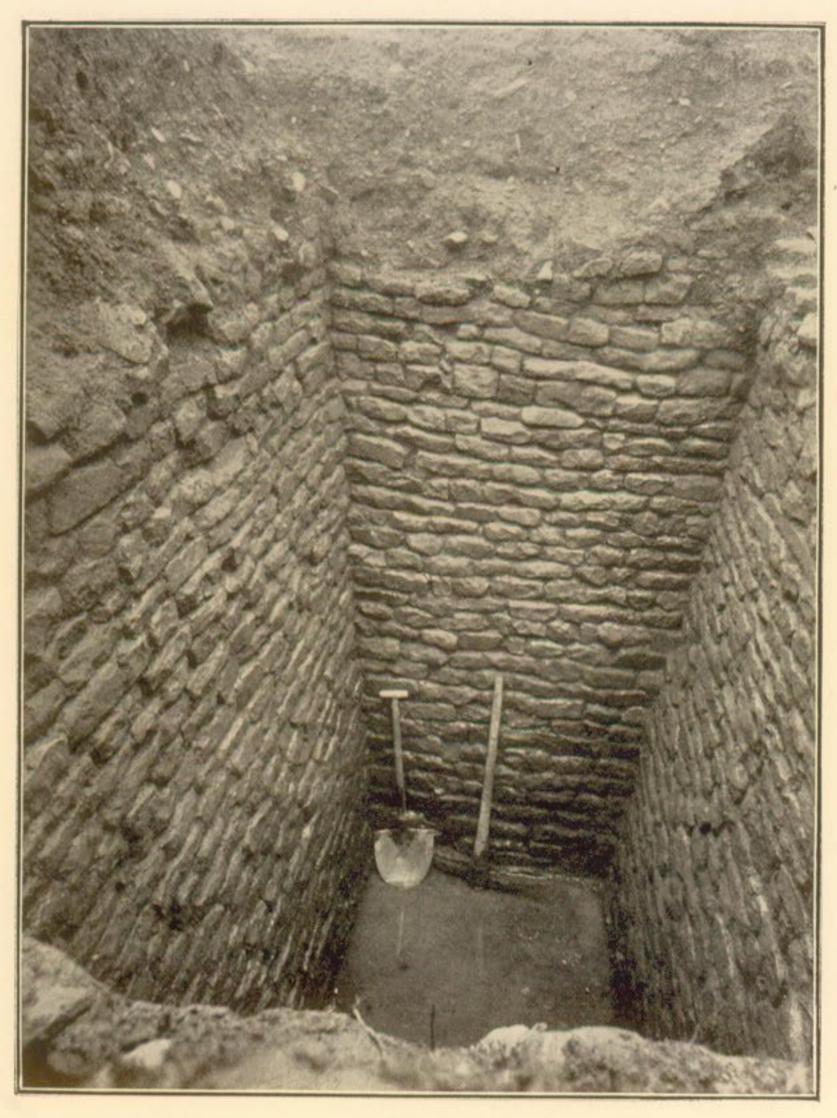


Fig. 15. Stone-lined Pit in the court of a Building within Lyne Camp.

covering of yellow clay 10 inches thick. An iron spear head and several varieties of pottery were found in it.

It has been mentioned that a street runs along the back or west side of the buildings. This was marked at the south end by a kerb giving a width for the street of 28 feet, and the same width is defined opposite the Prætorium by a sewer which seems to have discharged into a tank 20 feet long, 12 feet wide and at least 10 deep, cut in the hard gravel, the sides of which stood like a wall of concrete, after the filling was removed.

E.—Interior of the Annexes.

In the interior of the south annex no stonework was discovered, but a small trench, precisely like those of the rectangles in the Pretentura and Retentura of the main work, and probably intended to hold a palisade, bisected it from west to east, stopping short within 6 feet of the trench that forms the east boundary of the annex.

In the interior of the north annex nothing was discovered except a small paved space like a hearth, and showing the action of fire, near which various fragments of pottery were found.

F.—ROMAN ROAD.

According to Sir Robert Sibbald, at the end of the seventeenth century, a causey led from the camp for half a mile together to the town of Lyne." Horsely also mentions "a visible military way near Lyne Kirk," and the writer in the O.S.A. Scot., 1794, tells us that "the road leading to the camp is still visible and runs through the present glebe." We therefore searched for this road, and by making transverse cuts from the eastern gateway, Mr Mackie had no difficulty in finding it (fig. 7, near G), and tracing it in a north-east direction for about sixty yards, when it was lost in the former marsh, now cultivated land. It was again taken up, however, 200 yards further on, in the low swampy ground north of the church, and was traced for 100 yards till it joined at right angles another road coming up the valley from the S.E. This latter road could be

traced a considerable distance southward, but could not be detected going northward, perhaps because of the hardness of the ground in that direction, and I am not aware that a "Roman road" has been noticed anywhere further up the valley. The roads discovered by us were not paved, but were made of hard compacted gravel.

G.—Relics.

Dr Joseph Anderson supplies the following description of the relics found during the excavations:—

The collection of relics from the excavation of Lyne is very much smaller and less important than that from any other of the stations previously explored, giving the impression of a much briefer occupation of the site than at Birrens, Ardoch, or Camelon. The character of the relics, however, indubitably indicates a Roman occupation.

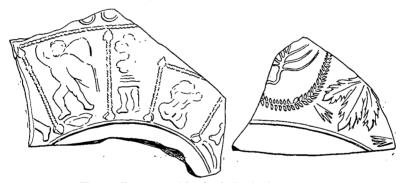


Fig. 16. Fragments of Bowls of 'Samian' ware. $(\frac{1}{2})$

Pottery.—The pottery, though by no means abundant, consists of the usual varieties of the so-called Samian ware, black and grey ware, amphore, and tiles. Of the so-called Samian ware there are about twenty small fragments indicating the common varieties of vessels, such as bowls, cups, and platters. Only two of these fragments exhibit ornamentation (fig. 16). The largest is a piece measuring 4 inches by $2\frac{1}{2}$ inches, of the side of a bowl about six or seven inches in

diameter, ornamented with rather rudely designed figures in straight-sided compartments round the lower part of the exterior. The next largest is a triangular fragment 3 inches by $2\frac{1}{2}$, with ornamentation of leafage, and a circular panel enclosing a plant-like ornament. Other two fragments are quite small, showing only portions of the festoon and tassel border surrounding the vessel immediately below the plain space underneath the rim. There are three portions of rims, and six of bottoms of bowls which show no ornamentation, but may have been plain parts of ornamented vessels. A portion of the everted lip of a small cup shows part of a pointed leaf ornament in relief on the turned-over part of the lip. Three portions of shallow platter-like dishes are plain, merely showing a slightly rounded moulding on the lip.

Of the grey and black ware, mostly with reticulated ornament slightly tooled on the exterior, there are bottoms and pieces of sides of small jars, from 3 or 4 to 6 or 7 inches in diameter, and pieces of rims with everted lips. There are also pieces of basin-shaped dishes of this ware with flat rims and sloping sides, about $2\frac{1}{2}$ or 3 inches in depth, with a diameter of probably more than 8 inches.

Portions of three or four large amphoræ also occurred, and some pieces of tiles from half an inch to three quarters of an inch in thickness, with flanges, and ornamented on the upper face with wavy lines tooled in the soft clay.

There were no potter's marks on the pottery with the exception of a retrograde SR on a small portion of the lip of what seemed to have been a mortarium in a hard red ware.

Glass.—A considerable number of fragments of window glass of the usual Roman character were met with, and two pieces of square bottles of blue glass, also of the usual Roman type. The only other portion of a glass vessel is the upper part of what has been a very pretty vase, or beaker of thin transparent glass, with an everted lip, and ornamented by grinding a band of three hollow mouldings each less than a sixteenth of an inch in diameter round the circumference of the vessel, at a distance of $I_3^{\frac{3}{4}}$ inch underneath the lip.

Iron.—The iron implements are principally nails with big heads, the spike varying from 3 to over 5 inches in length. Some of these spike nails seem to have been driven through thin sheathing plates of iron. One implement, which is unfortunately broken, resembles a fire-dog.

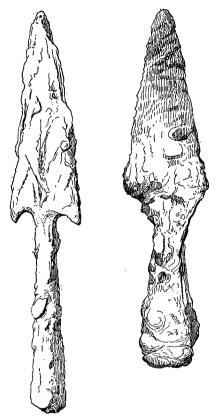


Fig. 17. Iron Spear-heads found in Lyne Camp. $(\frac{1}{2})$

Another is a long slender hook 10 inches in length. There are also a square bracket-like hook 3 inches in length with a knob at the end, and a part of a horseshoe. Of weapons there are two spear-heads (fig. 17).

One is barbed, the blade $4\frac{1}{4}$ inches in length by $1\frac{3}{4}$ inch in width at the base, the shank 4 inches in length, $\frac{3}{4}$ inch in diameter at the butt, and $\frac{5}{8}$ inch at its junction with the blade. The other is unbarbed, the blade somewhat leaf-shaped and $5\frac{1}{2}$ inches in length by 2 inches in width at the widest part; the shank is only 3 inches in length, but the butt has been bent and seems broken.

Stone.—No stone implements were found, except a small polisher of hematite, $1\frac{1}{4}$ inch in length by an inch in breadth and $\frac{1}{4}$ inch in thickness.

Coins.—Only two coins were found. They were much corroded, but have been identified by Mr Grueber of the British Museum. One is a denarius of Titus:—

Obv. IMP. TITVS VESPASIAN AVG. P.M. Head laureated to right.

Rev. TR. P. VIIII. IMP. XIIII. COS. VII (=A.D. 79).
An armed figure on rostral column.

The other is a sesterius or Large Brass of Trajan (a.d. 104-110):—

Obv. IMP, CAES, NERVAE TRAIANO AVG. GER. DAC. P.M. TR. P. COS. V.P.P.

Rev. S.P.Q.R. OPTIMI PRINCIPI S.C. Dacia in mournful attitude seated before a trophy of arms.