

I.

EXCAVATIONS AT BIRRENS, 1936-1937. BY ERIC BIRLEY, M.A.,
F.S.A.Scot., F.S.A., WITH CONTRIBUTIONS BY I. A. RICHMOND,
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HEDLEY, F.S.A.

In presenting this report¹ I may be allowed to express my thanks to my collaborators. Mr I. A. Richmond paid a visit, which proved most instructive, to the excavations of 1936, shared in the direction of the work undertaken in the following season, and has contributed the sections of this report which describe the rampart of the fort and its water-supply, besides giving general help with the sections for which he is not directly responsible; Mr Richmond undertook the surveying of the

¹ The following abbreviations are employed:—

AA ²⁻⁴	. . .	<i>Archæologia Æliana</i> , 2nd-4th series.
CIL	. . .	<i>Corpus Inscriptionum Latinarum</i> .
CW ²	. . .	<i>Transactions</i> , new series, of the Cumberland and Westmorland Antiquarian and Archæological Society.
Fölzer	. . .	E. Fölzer, <i>Die Bilderschüsseln der ostgallischen Sigillata-Manufakturen</i> , Bonn, 1913.
<i>Hofheim</i>	. . .	E. Ritterling, <i>Das frühromische Lager bei Hofheim i. T.</i> , Wiesbaden, 1913.
JRS	. . .	<i>Journal of Roman Studies</i> .
<i>Niederbieber</i>	. . .	F. Oelmann, <i>Die Keramik des Kastells Niederbieber</i> , Frankfurt a.M., 1914.
NMA	. . .	National Museum of Antiquities.
O.	. . .	F. Oswald, <i>Index of Figure-types on Terra Sigillata</i> , Liverpool, 1936-1937.
ORL	. . .	<i>Der obergermanisch-rätische Limes des Römerreiches</i> (Reports of the German Limes Commission).
PSAS	. . .	<i>Proceedings of the Society of Antiquaries of Scotland</i> .
Ricken, <i>Saalburg</i>	. . .	H. Ricken, <i>Die Bilderschüsseln der Kastele Saalburg und Zugmantel</i> , in <i>Saalburg Jahrbuch</i> , viii., 1934.
RWS ²	. . .	Sir George Macdonald, <i>The Roman Wall in Scotland</i> , second edition, 1934.

Well-known excavation reports are indicated by the name of the site *in italics*; it will be convenient to give further references here to those sites which have been reported upon in AA or CW:

AA ³ , viii.	. . .	<i>Corbridge</i> , 1911.
AA ⁴ , vii.	. . .	<i>Denton Hall turret, Chapel House milecastle</i> .
AA ⁴ , xv.	. . .	<i>Corbridge</i> , 1938.
CW ² , xi.	. . .	<i>Poltross Burn milecastle</i> .
CW ² , xiii.	. . .	<i>High House milecastle, Birdoswald, High House, and Appletree turrets, Throp fort</i> .
CW ² , xxx.	. . .	<i>Birdoswald fort</i> .

structures examined in 1937, and has also drawn the figure illustrating the two west gateways, found in 1895 and 1936 respectively. Mr J. A. Stanfield, besides drawing most of the decorated Samian ware and the bronzes, has contributed valuable notes on the most interesting of the former material; and Mr W. Percy Hedley has provided notes on the coins. During both seasons Mr W. L. George, B.A., assisted in the direction of the excavations, and he has given considerable help in the examination of the pottery; I have had the benefit of consulting Mr F. G. Simpson, Hon. F.S.A.Scot., in connection with some of the latter material. Mr R. C. Reid undertook the business arrangements, and saw to it that the work to be detailed presently should not be curtailed for lack of funds or labour; and Thomas Batey, my foreman, showed himself equally competent as an excavator and as a trainer of the local men whom we employed.

I. INTRODUCTION.

The original excavations at Birrens in 1895¹ aimed at proving the Roman date of the visible defences and securing as complete a plan as possible of the interior arrangements of the fort; and both objects were attained, with a success all the more noteworthy because of its stimulating influence on the development of scientific excavation elsewhere. Furthermore, considerable incidental light was thrown on the history of Birrens in Roman times, not merely by the inscriptions, coins, and other relics found, but by the discovery of evidence for a drastic rebuilding of the fort after a violent destruction. But no attempt was made to discover whether the two structural periods between them accounted for the whole or only a part of the occupation of Birrens by the Romans; and, with pottery not yet established as a means of dating, there was no guide other than that provided by the inscriptions and coins to the time when the fort was first built or to the total length of the occupation. Among the inscriptions, only one was directly dated, to A.D. 158,² and none could be shown to be earlier or later than the second century; the brief coin list gave no cause to assume an occupation antecedent or subsequent to that century;³ and it seemed to follow that the history of Birrens must have been similar to that of any Antonine fort in Scotland, established before the middle, and finally abandoned before the end, of the second century.

But as time went on it became clear that Birrens could not be placed

¹ PSAS, xxx., 1896, pp. 81-199; reprint, pp. 1-119.

² *Ephemeris Epigraphica*, ix. 1230 (correcting the reading given in PSAS, xxx. p. 129).

³ Cf. PSAS, lli., 1918, p. 217.

in the same category as Newstead or the forts of the Antonine Vallum. The historical attribution of the different structural periods at Newstead can hardly be settled without further digging,¹ and here we must confine ourselves to noting the mere fact that they outnumbered the two periods at Birrens. But excavation in the forts of the northern *limes* regularly produced three periods attributable to the occupation inaugurated by Lollius Urbicus, and it became clear that the discrepancy could only be explained in one or more of three ways: (1) Birrens had been occupied for a shorter period than the other forts; *a priori* this was not a likely suggestion. (2) It had succeeded in escaping one of the destructions which overwhelmed the forts farther north; this possibility was clearly strengthened by the results, to be referred to later, obtained by excavation at Risingham and High Rochester. (3) The two periods noted in 1895 represented a part only of its occupation; I will show presently that this explanation seemed certain to me, but I must first deal briefly with a different reading of the evidence, which was largely the cause of my undertaking excavation at Birrens.

In the concluding chapter of the second edition of his *Roman Wall in Scotland*, Sir George Macdonald, adopting the second of the above explanations, made his interpretation of the evidence from Birrens a touchstone for the vicissitudes of the Antonine frontier. His argument may be summarised thus:² The inscription of A.D. 158, already referred to, must belong to the second of the two observed periods, for the circumstances under which it was found showed that it was still in position when Birrens was deserted for the last time; there was no break in the occupation of the site between that date and the final destruction of the fort; and the archæological evidence showed that the site had lain derelict after *circa* A.D. 196. *Ergo*, Birrens (like Hadrian's Wall) had escaped the disaster which overwhelmed the Antonine Vallum in the early years of Commodus; and if it was not occupied later than A.D. 196, the Antonine Itinerary, in which one route has Birrens as its northern terminus, must be assigned to the time of Commodus at latest; and the absence from it of the forts farther north showed that they, and the Antonine Vallum, must already have been abandoned under that emperor.

This is not the place to discuss the wider question as to the history of the Roman Wall in Scotland, though the sequel will show that my interpretation of the evidence differs widely from Sir George Macdonald's; but it is necessary to set forth the reasons which led me to reject the

¹ Cf. Dragendorff's acute observations in JRS, i., 1911, p. 135.

² RWS², p. 478.

above interpretation of the evidence from Birrens, and to initiate the recent excavations there in order to prove my point.¹

In the first place, I concurred in thinking that Birrens had escaped the disaster of *circa* A.D. 180, because its position suggested that Birrens should be regarded as an element in the Hadrianic frontier rather than as a link in the Roman occupation of Scotland. The accompanying sketch-map (fig. 1) will serve to emphasise the close similarity between its position and that of Netherby or Bewcastle in relation to Hadrian's

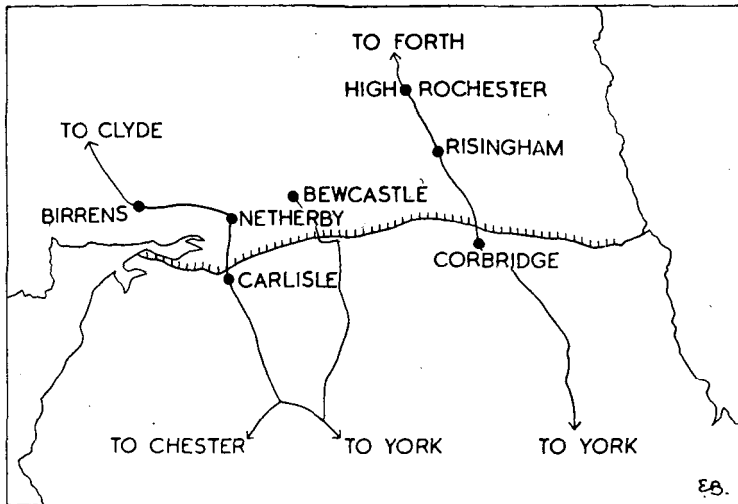


Fig. 1. Hadrian's Wall and its outliers.

Wall, and those forts are known by inscriptions² to have been established by Hadrian. The three forts form a screen, thrust forward eight or nine miles beyond the Wall, into an area where archæology suggests that there was then a considerable native population. There has been no scientific excavation at Netherby, and Bewcastle did not receive attention until 1937,³ but Mr Richmond's excavations at Risingham and High Rochester in 1935⁴ showed that both forts had escaped the destruction which overwhelmed the Antonine Wall in the time of Commodus; and if they escaped, it seemed unlikely that the nearer outliers in the west, less easily accessible from the northern *limes*, should have been affected.

¹ A preliminary outline of the views here set forth was given in a review of RWS² in *Proceedings of the Society of Antiquaries of Newcastle-upon-Tyne*, 4th series, vi. p. 281 (1934); cf. also *Dumfriesshire and Galloway Transactions*, xx. pp. 157-170, from which the following discussion has been expanded.

² CIL, vii. 961, Netherby; 978, Bewcastle.

³ Cf. CW², xxxviii. pp. 195-237.

⁴ AA⁴, xiii. pp. 170-198.

But the evidence from High Rochester seemed even more apposite to the study of Birrens, because until 1895 no Roman site in the north of Britain had been so completely examined. As in the case of Birrens in 1895, High Rochester, in the middle of last century, was examined with a view to obtaining a plan of its interior arrangements, and the excavators distinguished traces of two distinct periods of occupation, which could be matched with building-inscriptions of two periods, Antoninus Pius¹ and the early years of the third century.² But Mr Richmond has been able to show that, in place of the two periods revealed by the previous excavations at High Rochester, there were as many as five, the last of which must be assigned, on the evidence of pottery, to the early years of the fourth century. That seemed to justify the presumption that further digging at Birrens would reveal more than the two periods distinguished in 1895, especially when it was remembered that in 1895 it was not yet a commonplace that the Roman occupation of the north of Britain was subdivided into so many distinct periods. And the fact that excavations or chance finds had shown the other outliers—High Rochester, Risingham, Bewcastle, and Netherby—to have continued in Roman hands, not merely throughout the third century, but well into the fourth,³ seemed to justify the suspicion that Birrens had not been left unoccupied after the destruction of A.D. 196.

When I turned to consider the evidence from Birrens itself, it seemed to show that my suspicion was justified. It had been demonstrated, indeed, that the gold coin of Constantius Chlorus recorded from there has no necessary connection with the presence of the Romans at Birrens, since it had seen long use as an amulet;⁴ and the cut-glass beaker, for which a late date had at first seemed certain, might well have reached the site at a considerably earlier time.⁵ But among the inscriptions there were three which, though they are not dated, should belong to the third century rather than the second, namely, two dedications to Mercury by a college of his worshippers⁶ and the altar set up by the architect Amandus in honour of Brigantia.⁷ The attribution of the latter altar to the third century has been confirmed by Mr S. N. Miller's convincing identification of the dedicator with the Valerius Amandus attested on a German inscription of A.D. 208,⁸ and the style of the two altars to Mercury clearly best fits such a date: the complicated ligatures on one of them and the abbreviation of a rare *nomen* to its first three letters on the other cannot lightly be ignored. Furthermore, an examina-

¹ CIL, vii. 1041.

² CIL, vii. 1043, etc.

³ Cf. Birley, *Three Notes on Roman Cumberland*, in *CW*², xxxi. pp. 137-147; Richmond, *AA*⁴, xiii. *cit.*

⁴ *PSAS*, lii. p. 219.

⁵ *Ibidem*, and *cf.* p. 335 below.

⁶ CIL, vii. 1069 and 1070.

⁷ CIL, vii. 1062.

⁸ *JRS*, xxvii. pp. 208-209.

tion of the 1895 plan suggested that it retained evidence of more than two structural periods, and that the inscription of A.D. 158 could not be associated with the last of them.

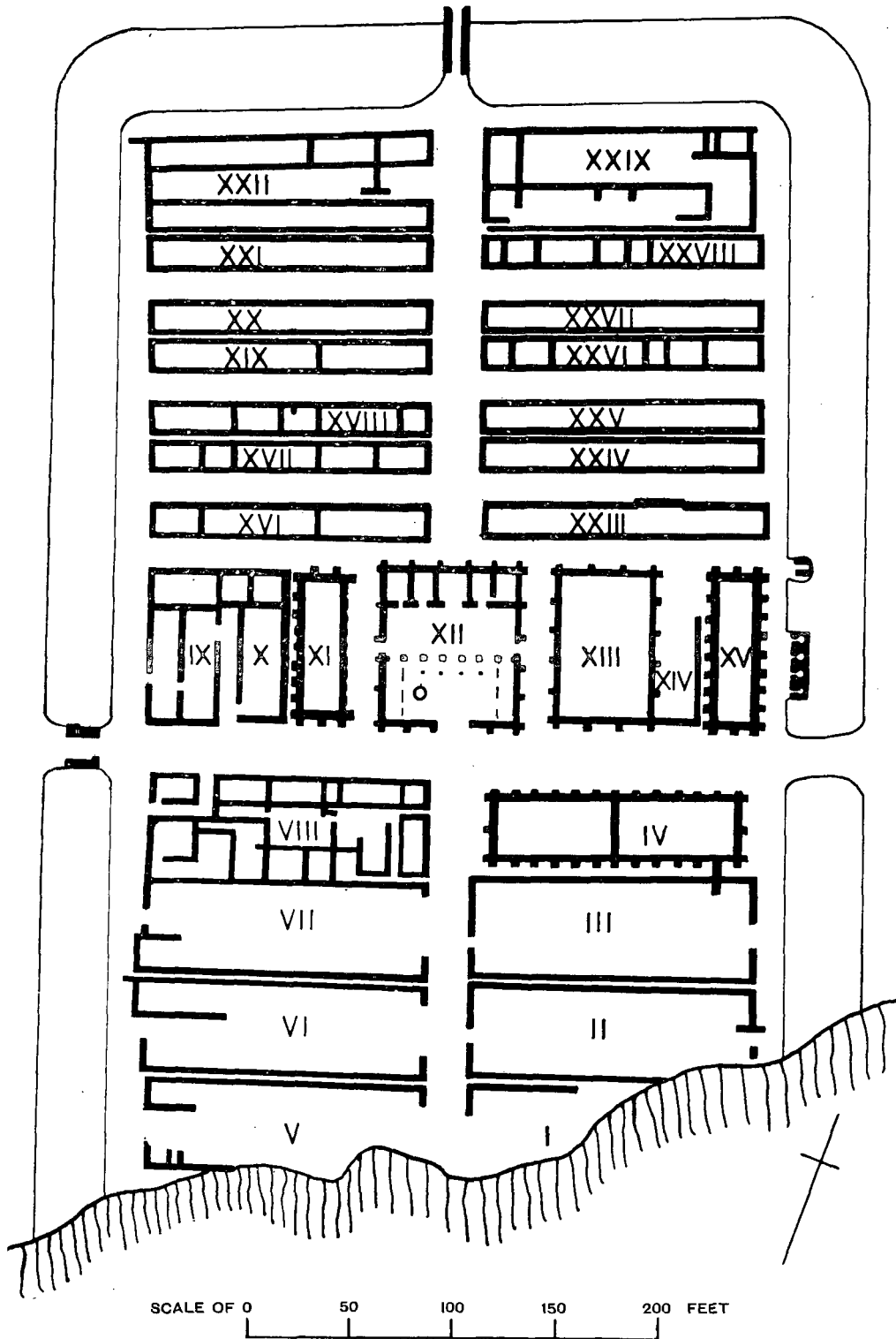
In the central block of buildings, Sites IX–XV, the plan only presents two structural periods—"primary" shown in black and "secondary" in blue; but when the "secondary" walling is eliminated, as in fig. 2, it will be seen that there is still more than one period represented, for the buildings numbered X and XIV plainly interfere with the symmetry of the block. Site X makes an extremely awkward junction with IX, and leaves no room even for pedestrian traffic on the west side of the Granary XI; Site XIV is an obvious addition to XIII, and similarly blocks access to the street which must originally have run between XIII and the Granary XV; and the 1895 plan shows "secondary" walling overlying part of XIV. If we eliminate these intrusive structures, we obtain the intelligible arrangement of five buildings shown on the accompanying fig. 3: in the centre is the *principia*, Site XII; to the east of it are the *praetorium*, Site XIII, and a granary; to the west the *quæstorium*, Site IX, and another granary. And an accidental discovery from elsewhere allows the suggestion that this arrangement should be assigned to the re-occupation of Birrens attested by the inscription of A.D. 158.

A military diploma discovered at Eining in Bavaria shows¹ that in A.D. 147 a vexillation of the second cohort of Tungrians was serving in the province of Raetia, and a comparison with the Raetian diplomas for 153 and 157 suggests that the detachment only returned to Britain between those two dates. It seems clear that, for some reason, half of the regiment had been transferred for a time to strengthen the garrison of Raetia, where it counted as an independent *cohors quingenaria*; and while it was on duty there some of the men in it became due for discharge from the army, on the completion of their twenty-five years with the colours, and so it came to be included in the diploma which set forth the grant of the privileges customarily accorded to the soldiers qualified for honourable discharge, and named the regiments in the province which had men so qualified. One consequence was, that the gaps in its ranks had to be filled by the enrolment of fresh recruits enlisted, as was usual in this period, in the province where the unit was serving, namely Raetia. That explains the occurrence, on an altar found at Birrens, of *c(ives) Raeti milit(antes) in coh(orte secunda) Tungrorum*.² Recalled from Raetia when it was necessary for the cohort to occupy the milliary fort

¹ CIL, xvi. 94; cf. Birley, *A Note on the second cohort of Tungrians*, in CW², xxxv. p. 56 *et seq.*

² CIL, vii. 1068.

BIRRENS - PRIMARY STRUCTURES



E. B. AFTER J. BARBOUR

Fig. 2.

of Birrens at full strength, the detachment brought with it these new recruits. But it seems to have brought with it something else as well.

There is a remarkable feature about the central block of buildings at Birrens: not only the granaries, but also the *principia* and the *praetorium* are provided with frequent external buttresses (cf. fig. 3) of slighter construction and more widely spaced than in the granaries, in which it is usual to find buttresses provided. But the case is quite different with regimental headquarters and commandants' houses; we know of no other fort in Britain where such buildings are treated in this way, but in Raetia there are several instances.¹ It seems difficult to escape the conclusion that the exceptional treatment of these two buildings at Birrens was a by-product of the half-cohort's period of service in Raetia, and that the inscription of A.D. 158 was set up in the first of the three

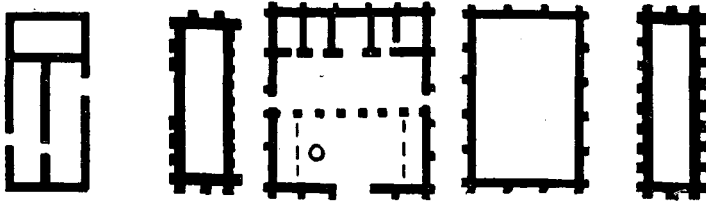


Fig. 3. Central block, original state.

periods which the plan allows us to distinguish in the central block of buildings.

It has been argued, indeed, that the circumstances under which that inscription was found show that it was still in position when Birrens was deserted for the last time, and that therefore it must have been set up when the *principia* was rebuilt, not when it was originally constructed.² But that argument will not survive a critical examination. The discovery is recorded in the following terms:³ "Some of these fragments were found near, others in, the well that was discovered within the area of the" *principia*. In other words, the pieces were lying in the courtyard of the building; but if the inscription had been still in position when the fort was abandoned, its fragments should have been found fallen upon the street to the south of the *principia*, for its original position must have been in the front of that building, where it could be seen by people approaching from the *porta praetoria*. It can only be concluded that the inscription had been re-used, as was often the case, as a flag or flags in the paved courtyard. Analogies are not far to seek. It will

¹ ORL, 61a (Sulz), 64 (Schierenhof), 66a (Urspring), 68 (Ruffenhofen), 70 (Gnotzheim). Cf. also 2a (Niederberg) and 44 (Murrhardt) in Germania Superior.

² RWS², p. 478.

³ PSAS, xxx, p. 129.

be sufficient to refer to the fragments of the inscription recording the erection of the *principia* at Rough Castle, found "in a hole among other debris" in the courtyard of the headquarters building there,¹ and to the dedication to Antoninus Pius from the well in the *principia* at Bar Hill;² for on any interpretation of the three Antonine periods on the northern *limes* neither of these inscriptions can have been set up at the opening of the third and last occupation: indeed, though neither stone is dated, there can be no doubt that both were set up at the time of the erection of the two forts in the governorship of Lollius Urbicus.

To sum up: it seemed clear that there were at least three structural periods represented in the remains planned in 1895, and that the first, not the last of them, must be associated with the inscription of A.D. 158; and further, that the fort was not finally abandoned at the close of the second century, but was re-occupied in the third.

It happened that the Dumfriesshire and Galloway Archæological Society paid a visit, in the summer of 1935, to my excavations at Chesterholm, and I had occasion to discuss the problems of Birrens with its president, Mr R. C. Reid; he at once suggested that that Society should raise a fund large enough to allow of a trial excavation, and invited me to superintend the work. Permission to dig was readily granted by Mr and Mrs James Mackie, the proprietors, and the excavations took place in August 1936; their object was restricted to a fresh examination of the stratification, to discover what the total number of structural periods had been and, by applying increased knowledge of pottery evidence, to see whether I was justified in inferring for Birrens a history similar to that of the other outliers of Hadrian's Wall.

The results, described in the following section of this report,³ were striking. As many as five structural periods were found, and although there was very little stratified pottery there was enough to suggest a provisional dating of those periods: (1) to the time of Agricola; (2) and (3) to the second century; (4) to the third; and (5) to the beginning of the fourth. But it seemed essential to secure a larger series of pottery in order to provide a surer correlation of the five periods with the history of the Roman occupation, and there were several problems raised by an incidental examination of the rampart and gateways of the fort which called for fuller examination. I was fortunate enough to persuade Mr I. A. Richmond to join me in the direction of this further excavation, which took place in July 1937, with the aid of generous grants from the

¹ RWS², p. 228.

² RWS², p. 279.

³ A preliminary report appeared in *Dumfriesshire and Galloway Transactions*, xx. pp. 157-170; reprint, pp. 1-14.

Council of this Society and from the Trustees of the Haverfield Bequest, as well as fresh contributions from members of the Dumfriesshire and Galloway Society.

In the event, a full enough range of pottery was obtained to give a definite answer to the problem that had taken us to Birrens, and a great deal of light was shed on the structural history of the rampart; in addition, fresh problems arose, not all of which could be solved before the second season's work came to a close, and some day it will be necessary for further work to be undertaken, to complete the investigation of the points which still remain obscure. But as we are now in a position to answer the original question, it seems an appropriate time to lay before this Society a report on the work done in 1936 and 1937.

II. THE EXCAVATIONS OF 1936.

The first season's work comprised examination of the stratification on two sites, the west end of XIX in the *retentura* and part of VIII in the *prætentura* of the fort; the cutting of a section through the west rampart, opposite Site XIX; and a partial re-examination of the north and west gates. The last-named operations were disappointingly inconclusive. In the first instance we cut trenches in the gateways merely to allow us to pick up points from which we could measure off the position of Site XIX, which we had selected for particular attention because the 1895 plan showed that a minimum of digging had been done there in that year. But it soon became clear that the gateway structures planned in 1895 had been wholly removed after the planning of them had been completed. At the north gate we were unable to find any masonry in position, and a fuller examination in 1937 was hardly more successful; but at the west gate we did succeed in finding a gateway, though it was not the one found and planned in 1895.

The West Gateway.—The accompanying diagram (fig. 4) gives an enlargement from the 1895 plan, together with a plan, to the same scale, of the gateway that we found in 1936. The difference is not merely one of dimensions, but of materials. The 1895 gateway is described as being of good masonry, "the stones, of various sizes but generally small, being squared, and well fitted in bonded courses";¹ in contrast to this, the masonry found in 1936 was rough in the extreme and seemed a complete puzzle, until Mr Richmond explained it convincingly as the rubble filling of a timber framework. Originally the gate-passage must have been about 18 feet long, with four upright beams recessed into each

¹ PSAS, xxx. p. 103.

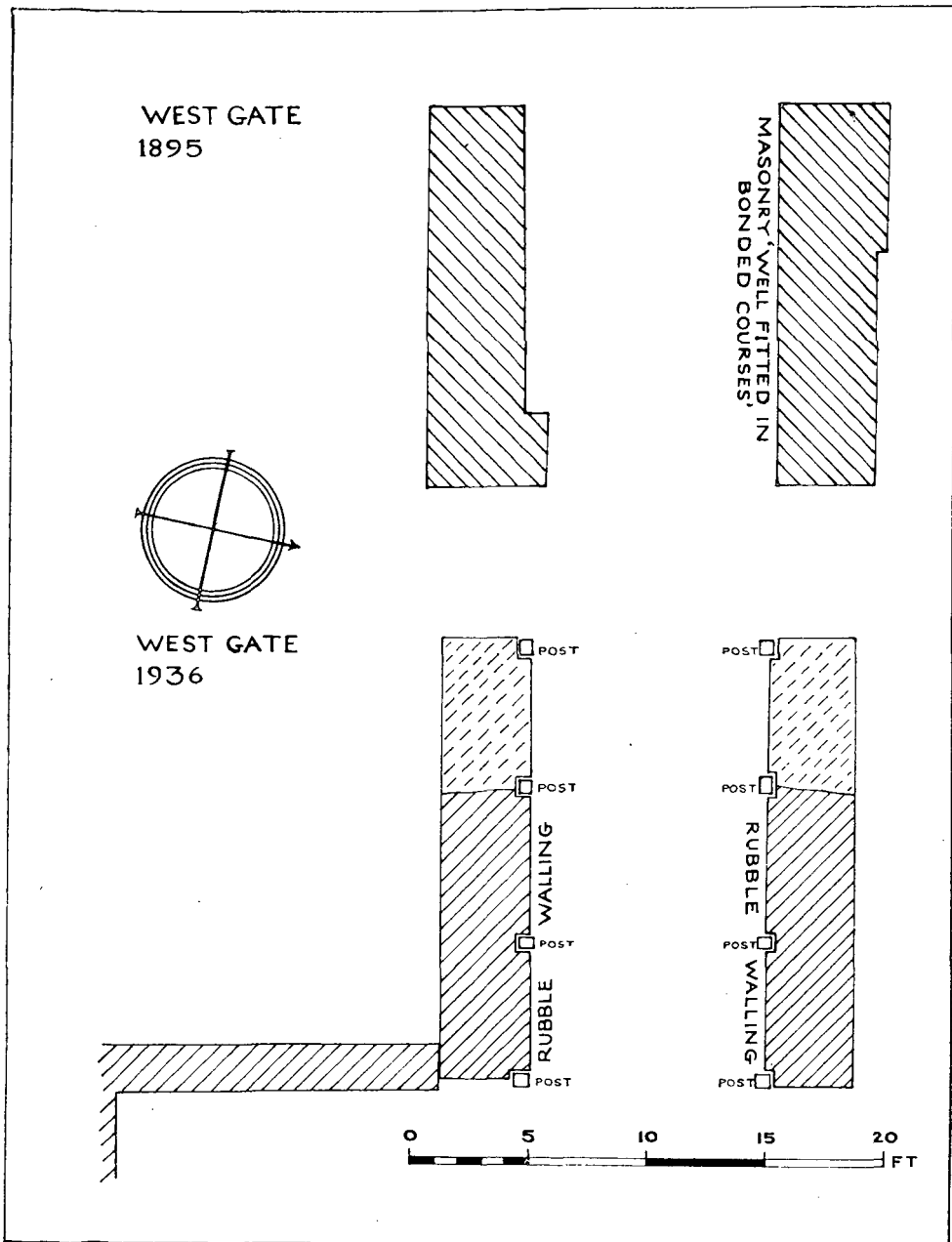


Fig. 4.

side at the ends and at one-third and two-third intervals; the outer third has been wholly removed by stone-robbers or excavators. Extending southwards from the inner end of this gate-passage was a narrow wall, which returned eastwards at 14 feet; within the angle so formed was a hearth, and it is conceivable that we have here the remains of a guardroom attached to the inner side of the rampart; but we did not complete the examination of this area, which will have to receive attention on another occasion. It will be remembered that a somewhat similar structure was found in the same position relatively to the "secondary" north gate in 1895,¹ but we did not succeed in establishing the relationship between the 1936 west gateway and any of the levels found elsewhere in the fort, and the date of this timber and rubble gateway remains a matter for conjecture. We were careful to leave the northern side untouched, so that the connections between passage-wall, turf rampart, and internal levels can still be established.

It will be convenient to describe the section cut through the west rampart, farther north, opposite Site XIX West, after recording the results obtained on that site and Site VIII.²

Site XIX West.—Fig. 5 gives a record-plan of the structures found on this site, together with separate plans for each of the stone buildings; notes follow on each of the five structural periods.

Level I.—Four post-holes, insufficient to indicate any plan, and a short length of sleeper-trench, comprise the whole of the evidence on this site for an original timber building; there was only one piece of pottery at this level—part of the flange of a Samian bowl of Curle's type 11 (fig. 26, 1 below), which might be as late as the time of Hadrian.

Level II.—The first stone building had a doorway (whose width we did not ascertain) in its south wall, 15 feet from the west end; there was a small patch of flagging inside that wall and in the doorway itself (*cf.* fig. 8), but otherwise the floor was of clay, spread over and securely sealing the post-holes of Level I. The only pottery from this level is illustrated below (fig. 26, 2 and 3); it appears to belong to the period A.D. 120–160.

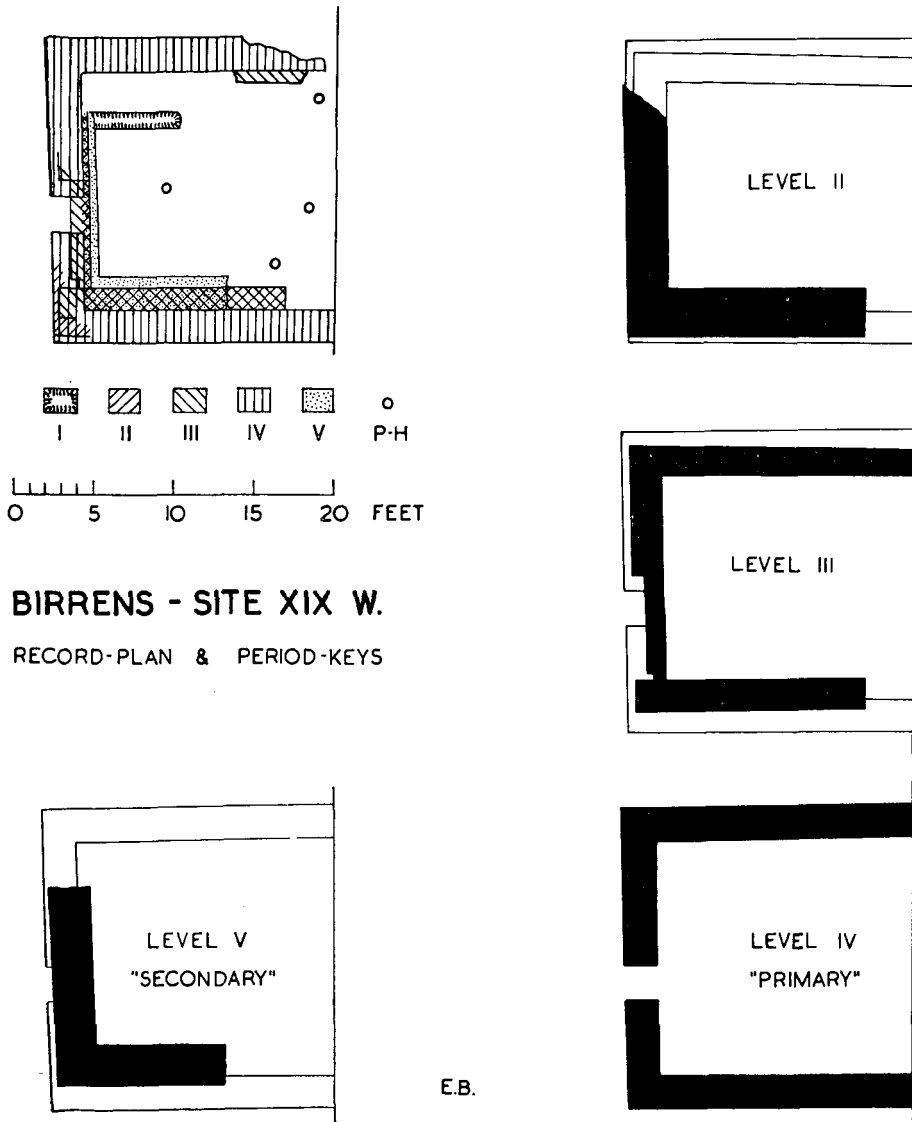
Level III.—As reconstructed, the building now had rather thinner walls. In addition to the original doorway in the south wall, which was retained in use, a doorway 6 feet 6 inches wide,³ with a flagged threshold which showed signs of considerable wear, was inserted in the west wall (*cf.* fig. 9); there was a rather larger area of flagging, and a large flag

¹ PSAS, xxx. pl. iii., facing p. 102.

² Below, p. 293; *cf.* also pp. 302–306.

³ *Cf.* the 10-foot doorway in the stables at Halton, AA⁴, xiv. p. 164.

serving as a threshold in the south doorway, about 6 inches above the floor of Level II (*cf.* fig. 7). No pottery was found at this level.



E.B.

Fig. 5.

Level IV.—In this period a new building was erected, on the same general lines as its predecessor but not on the same foundations; the

south wall of the new building was almost wholly south of that of Level III, which was mainly covered by the flags of the new floor (fig. 6,



Fig. 6. Site XIX West: flagging and south wall of Level IV.



Fig. 7. Site XIX West: flagging and south wall of Level III.

and *cf.* figs. 7 and 8). There was no longer a doorway in the south wall, and only a narrow one at the west; nearly half the floor-space was now

flagged (fig. 6). There was no occupation-deposit of pottery, but from

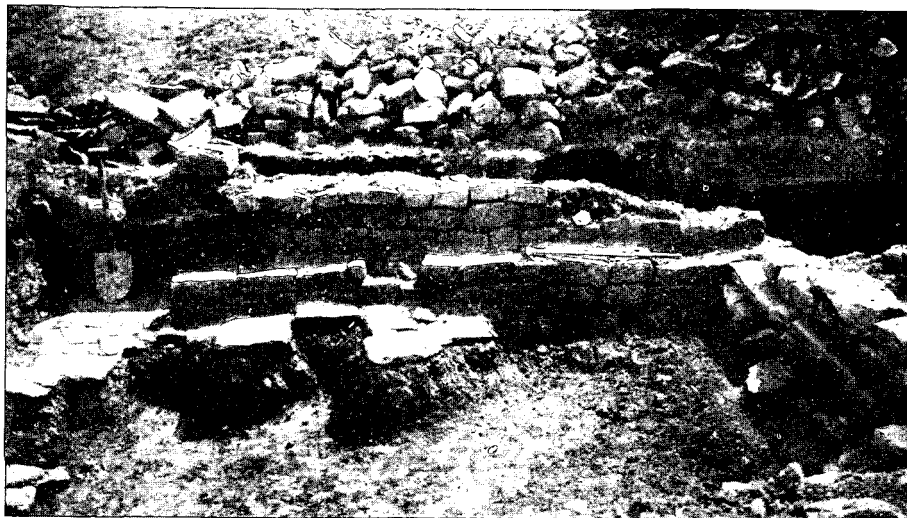


Fig. 8. Site XIX West: flagging and south wall of Level II.



Fig. 9. Site XIX West: inner face of west end, showing remains of Level II wall covered by Level III threshold and two courses of Level IV walling.

among the debris overlying the floor came the outbent cooking-pot rim (fig. 26, 4), which can hardly be earlier than the close of the third century.

Level V.—The 1895 plan shows the south-west corner of a “secondary” building overlying the “primary” walls of this site; the latter are clearly those of our Level IV; but no traces of this later structure were found surviving in 1936. As we were to find elsewhere at Birrens, the remains had been badly robbed after their planning had been completed. In fig. 5 the walls of this level have been plotted in by enlargement from the earlier plan.

The scarcity of pottery inside this site was in part compensated for by the discovery of two vessels, securely stratified, in the alley-way to the north of it. One of them, a jug, had been deposited in the alley at Level III, most of it being covered by the north wall of Level IV, which had to be removed before all the pieces could be secured; the other, a large mortarium, came from the same level, but further to the east, where the wall of Level IV had been wholly destroyed. Both pieces are illustrated in fig. 27 below; they appear to belong to the close of the second century, and thus give a useful *terminus post quem* for the beginning of the period represented by Level IV.

Such as it was, then, the stratified pottery from Site XIX West allowed the following provisional dating of the successive periods:—

Level I, timber building : Hadrian at latest¹ (Samian bowl, Curle, 11).

Level II, first stone building : A.D. 120–160 (platters best paralleled on Hadrian’s Wall in that period).

Level III, second stone building : A.D. 160–200 (jug and mortarium, broken at the end of the period, assignable to *circa* 200).

Level IV, third building : A.D. 200–300 (cooking-pot, in overlying debris, assignable to *circa* 300).

Level V, fourth stone building : A.D. 300 onwards.

But it was clearly desirable to obtain a more extensive series of pottery, and accordingly attention was transferred to Site VIII in the *præentura*, where the surface indications promised reasonably intact stratification and analogies suggested that we should find buildings that had been occupied as barracks, rather than the stables which seem to be represented by the structures on Site XIX.

Site VIII.—Here the 1895 plan makes no distinction of periods in a complex of walls, in which it is at first difficult to see any satisfactory indication of a coherent plan. But as soon as the possibility of more than one period being represented is entertained, the problem becomes

¹ In the preliminary report it was assumed that this level belonged to the period of Agricola, because of the presence of a pre-Hadrianic rim in the series of material from Birrens preserved in the Dumfries Museum; but in view of the discoveries made in 1937 it seems wiser to suspend judgment on this point (*cf.* p. 345 below).

less acute. Fig. 10 is an enlargement of that plan, on to which the excavation of 1936 is also plotted. A study of the plan suggests (1) that

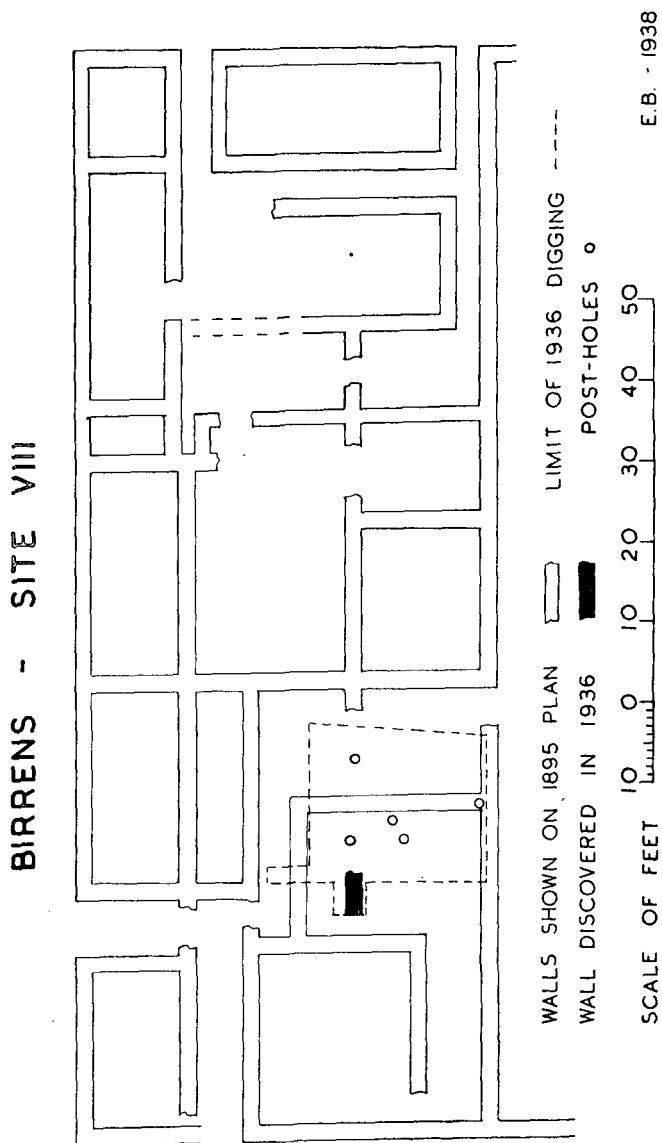


Fig. 10.

at the east end we have a series of independent huts, separated from each other by narrow alley-ways, as in the Constantian barracks at

Birdoswald and High Rochester; and (2) that in the first instance the site was occupied by two long and narrow barrack buildings, separated by a street (*cf.* fig. 11) whose outline may still be discerned in spite of extensive rebuilding, which has involved the disappearance of the street and the partial obliteration of the original plan.¹

The small portion of the site reopened in 1936 was chosen more for its promise of stratification than for the possibility that it might throw light on the structural changes suggested by a study of the published plan; but it proved to contain evidence in support of our second inference, for a fragment of wall, not shown on that plan, was found in westward continuation of what we have taken to be the northern wall of the original southern barrack (fig. 10), and that wall proved to be earlier by two structural periods than the one parallel to it and about



Fig. 11. Conjectural first lay-out of Site VIII.

6 feet farther north; for the latter's foundations rested on a cobbled roadway, which extended over the remains of the former. This was not the only evidence for a series of structural periods comparable to what had been found on Site XIX West. Within the area examined the following sequence was observed:—

Level I.—A series of post-holes, cut into the subsoil, seems to belong to wooden buildings alined diagonally to the existing fort; no pottery was found at this level.

Level II.—The clay floor of the southern barrack (to retain a convenient term) overlay the post-holes; it was covered by a deposit whose maximum depth was about 3 inches, containing a quantity of burnt matter, including many pieces of partly charred wood. There were only a few uninformative scraps of pottery, but there were about 200 fragments, some of them distorted by intense heat, from one or two glass vessels, together with the interesting group of bronzes that are described below, p. 337.

¹ It is possible, on the other hand, that the arrangement may have been like that at Birdoswald in the second century, with a narrow store-building lying along the *via praetoria* and a standard barrack behind it; the 1895 plan does not preclude the possibility of such an original arrangement.

Level III.—The burnt deposit was sealed by a fresh clay floor, merging into the cobbled roadway which covered the north wall of the barrack. This floor was only a few inches below the turf; the associated structural remains had been badly disturbed—for example, the wall running north and south across this area, shown on the 1895 plan, had been wholly removed, and it was not possible to tell what form the block of buildings had now assumed, or which of the original walls were still retained in use. Nor was it possible to distinguish for certain between the pottery deposited on the new floor and the disturbed material from the overlying Level IV (see below) that had been removed; the pieces selected for illustration in figs. 28 and 33 are therefore described as coming from Level III +. But while some of this pottery must be assigned to the third century (fig. 28, 7; fig. 33, 1), most of it seems to belong to the latter part of the second.

It will be seen, then, that Site VIII retains structural evidence of a timber building, Level I, followed by a first stone building, Level II, whose occupation ended in destruction by fire; the second stone period, Level III, has produced pottery of the latter part of the second century; and a third stone period, Level IV, is attested by third-century pottery, and by the more northerly wall, already referred to as being two periods later than the original southern barrack. If the interpretation put forward above for the structures planned at the east end of this site is correct, they may belong to the Constantian period and represent Level V, completing a series similar to that on Site XIX. There is little doubt that a careful re-examination of the whole of Site VIII would allow the production of a tolerably complete series of plans; but the time and means available in 1936 did not allow further excavation, which must be deferred until another occasion.

The Section through the West Rampart.—Fig. 12 gives a diagrammatic representation of the features observed in this section which, as it will be seen presently, differed in material particulars from those cut in the east and north ramparts in 1937. Three periods were noted in the body of the rampart. The first was represented solely by a strip of turfwork, 11 feet from east to west, laid immediately on the subsoil, and underlying the foundation of the second period. The latter was of cobbles, with a large outer kerb, and measured 13 feet from east to west; from the kerb to the ditch was a sloping berm, 7 feet wide; the ditch itself sloped at an angle of about 40 degrees to the horizontal, but we could not get as far as its centre, as there is a small sike running by the side of the field-hedge at this side of the fort which set a limit to our trench. About a foot set back from the kerb, and a foot above it, came a foundation of

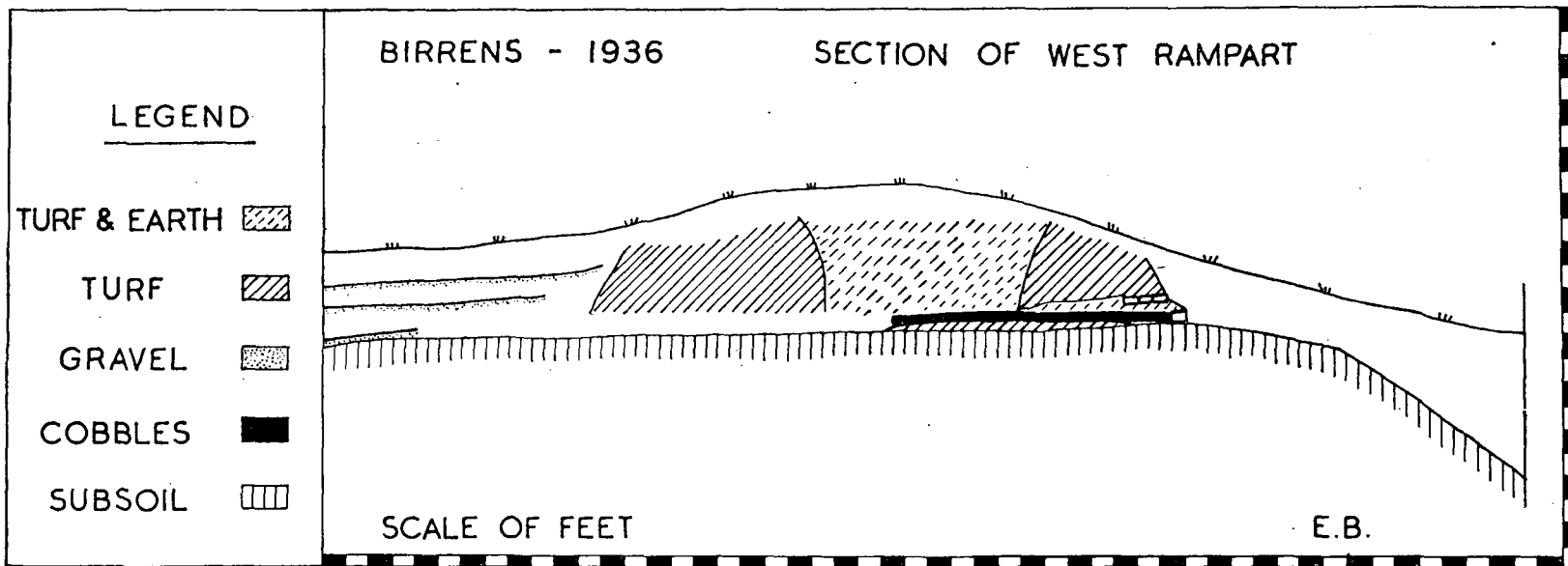


Fig. 12.

flags, 3 feet only from east to west,¹ on which rested a well-defined cheek of laid turf, which gives the third structural period; as Mr Richmond points out below, this seems to correspond to the re-facing of the north rampart, noted in the western of the two sections cut in 1937.

Below the turf cheek, and within it, the rampart was formed of mixed turf and earth; there was no inner foundation, but there was a wide inner cheek of laid turf, whose lower part was not observed sufficiently carefully for its relationship to the subsoil to be recorded, so that it must remain uncertain whether or not it represented a rearward addition to the rampart of Period II. Within this inner cheek came three successive levels of the *intervallum* road, each extending farther west than the one below it, surfaced with gravel. It is to be regretted that the relationship between these three levels and the successive buildings on the adjacent Site XIX could not be established; but there can be no doubt that further work near by, in the light of the experience gained in 1937, would enable a relationship to be defined.

III. THE EXCAVATIONS OF 1937.

Apart from the further examination of the rampart structure, dealt with by Mr Richmond in Section IV below, and some trenching near the granary, Site XV, to test the depth of stratification surviving in that part of the fort, work in 1937 was concentrated on two parts of Site XXII, where surface appearances seemed to promise that we should find a considerable depth of stratification. In the event, we found that we should have been better advised to select a building in the eastern part of the fort, for the subsoil proved to be rising more sharply towards the north than the present surface suggests, whereas it falls towards the east; in consequence, the maximum undisturbed deposits lie immediately inside the east rampart.

Site XXII East (fig. 13).—Here conditions were particularly disappointing, for the site proved to have been drastically denuded. Not only had the upper levels been almost wholly removed, but the north wall and all but the southernmost 12 feet of the east wall of the earliest stone building had gone. There was a partition wall running northwards from the south wall, 25 feet from the east end, and immediately west of it there was a 3-foot doorway, which had been blocked up in a second period (*cf.* fig. 14), when the partition wall had been demolished and covered by a rough tumble of stones. Within the room to the east of the partition the only surviving stratification was in the centre, where

¹ *Cf.* the outer kerb in the section through the east rampart, p. 302 below and fig. 18.

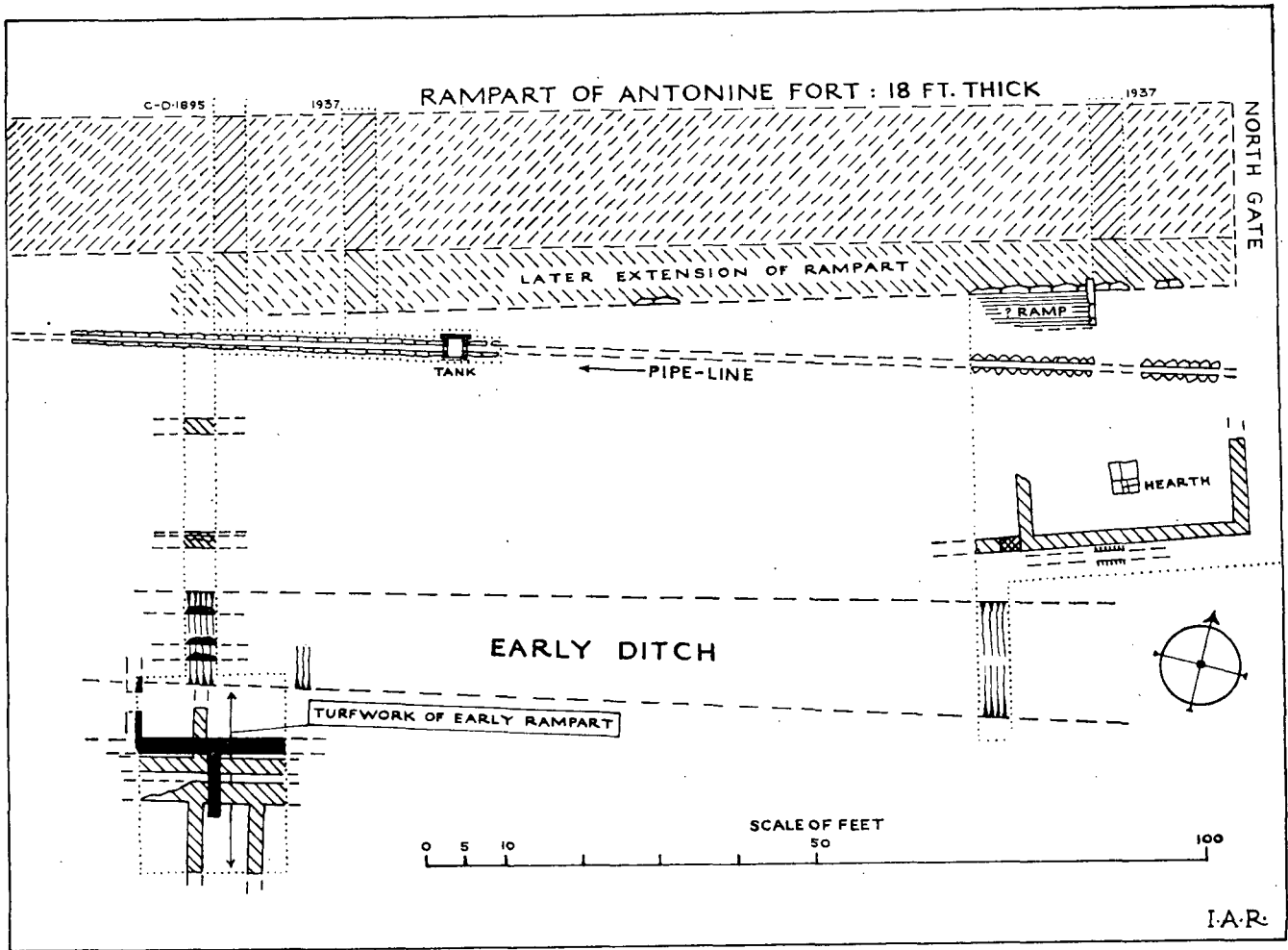


Fig. 13.

a secondary hearth overlay a deposit that contained the greater part of a deep flat-rimmed platter (fig. 31, 13), part of which may be seen in the photograph reproduced as fig. 15. In the second period on this site the building had been extended southwards across the street on to which the doorway already mentioned had opened; the "primary" wall, shown on the 1895 plan (fig. 2) as the upright stroke of an inverted T



Fig. 14. Site XXII East from the south, showing the walled-up doorway and demolished partition wall.

lying across this street, no doubt belongs to the same period; and the black occupation-layer that marked the floor of the extension yielded the beaker rim (fig. 31, 9) which may be paralleled in third-century deposits on Hadrian's Wall.

Careful search showed that there were no post-holes underlying the barrack or the street, and a discovery to be recorded presently explains why there were none; but for the time being it will be enough to say that this site, with only two surviving stone periods, and none of timber, presented so complete a contrast to the results from Sites XIX West and VIII that it only served to add to the problems with which we were faced. Accordingly we turned to another area, Site XXII West,

nearly 100 feet farther west and somewhat farther south, where there were surface indications of rather deeper stratification.

Site XXII West.—Here we were rewarded with an instructive if complicated series of levels, which it will be convenient to describe in the order of discovery rather than in the historical order observed hitherto.



Fig. 15. Site XXII East; secondary hearth, and portion of a flat-rimmed platter.

(1) Immediately below the turf we came upon a wall running east and west, with a southward partition 8 feet long with squared end, marking the north side of a doorway; there was nothing left of its south side and the southward continuation of the partition; to the north, at the west side of our excavation, there was another partition-wall, interrupted by a doorway rather under 3 feet wide. These walls are shown in solid black on fig. 13. We found no trace surviving of the floor of this building, but it is possible that some of the pottery found in the topsoil may have come from it; and there was a rough buttress against the south side of the east-west wall, in the body of which we found the two rims, fig. 31, 11 and 12.

(2) Interrupted by the walls just referred to, which had been cut into it, there was a layer several inches thick of burnt matter, among which there was a quantity of pottery (fig. 31, 1-8; fig. 32, 2-4). Within the area examined there were no structural remains that could be associated with this layer, which overlay a spread of debris that is clearly shown in fig. 16.



Fig. 16. Site XXII West from the west, showing the late east-west wall founded on a layer of debris, and the clay and cobble footing and rough stone floor of the earlier northern barrack.

(3) The latter spread in turn covered the remains, reduced for the most part to their clay and cobble footings, of two stone buildings, running east and west and separated by a narrow alley-way; there were two partition-walls in the southern building and one in the northern (to be seen in fig. 16), and the rooms so formed had floors either of clay or of rough flagging. There was no pottery associated with this level.

(4) Lowest of all, reaching a maximum depth of about 6 inches below the late east-west wall, there was a deposit of turfwork exactly comparable to that of the lowest period in the section cut through the west rampart in 1936 (p. 293 above), namely, laid directly upon the sub-soil, without any foundation. This was clearly the remains of a rampart;

and search to the north of it quickly revealed the associated ditch, which had been filled in when the buildings of Level (3) were erected; and at



Fig. 17. Cut across the early ditch, eastern side of the *retentura*, from the north-west.

this point there was also an east-west wall of a later period overlying it, between which and the ditch-filling there was sealed the small group of pottery illustrated as fig. 30 below. Further cuts were made to establish the line of the ditch, the first at 10 feet farther east, the next opposite the west end of Site XXII East, and a third (fig. 17) in the eastern half of the *retentura*; these showed that it had run approximately parallel to the existing north rampart and nearly 50 feet south of it, measuring

from its original inner edge to ditch centre. It was not possible to obtain as full details as we could have wished, for the discovery was only made in the last week of the season, and we were hampered by water whenever we dug down into the ditch (*cf.* fig. 17).

This level produced, below the central room of the southern building of Level (3), the greater part of the side of a large Samian platter of form 18/31; its surface and the edges of the fractures had been so badly damaged by the action of the soil (which at Birrens generally has this effect on Samian ware) that a drawing seemed out of the question; but the thickness of the fabric and the comparatively heavy profile preclude the possibility of a date earlier than the time of Hadrian being suggested for the vessel, and it might well belong to the Antonine period.

The significance of this discovery is plain for all, that fuller information must be sought by further digging. Comparison with the west section cut in 1936 shows that we have here the north rampart corresponding to the lowest of the three that were noted there; as Mr Richmond points out below, the sections cut through the visible north rampart, and through the east rampart at a point farther north than the early ditch, produced nothing comparable; in other words, the earliest west rampart returned eastwards 50 feet or more south of the eastward return now visible, and the latter represents a northward extension of the fort.

Evidence for the date of the extension is provided by two deposits of pottery; the first is the Samian platter already referred to, which shows that the occupation of the unenlarged fort did not come to an end before the time of Hadrian, and may have lasted into the time of Antoninus Pius. The second is a group of pottery found underlying the visible north rampart (figs. 22, 23 and 29), which includes pieces ranging in date from *circa* A.D. 120 till about the middle of the second century. It does not seem unreasonable to suggest that the extension was the work of Julius Verus, in the course of the reconstruction already attested by the inscription of A.D. 158. In that case, the lack of correspondence between the levels observed on Site XXII and those on Sites XIX and VIII becomes less of a problem; for the pottery already found entitles us to postulate at least one period, and possibly two, in the occupation of Birrens before that date. But this question, for the satisfactory solution of which the evidence is still too scanty, must be left for discussion in the concluding section of the present report; at the moment it will be sufficient to note that the absence of post-holes on Site XXII is adequately explained by the fact that the buildings in the enlarged fort were all of stone.

The remainder of the work done in 1937 is described by Mr Richmond in the following two sections, IV and V.

IV. THE RAMPART. By I. A. RICHMOND.

In 1895, when the first sections were cut through the ramparts at Birrens, it was found difficult to interpret even the main features of the structure. Doubt was expressed as to whether the stone bottoming noted below the rampart was intended to hold masonry or earthwork. To-day, it is possible to get a little further, largely on the basis of observation in the light of comparative material. Many points, however, still remain obscure, and it is just as evident as in 1895 that much further work must be carried out before the rampart structure can be completely understood.

The East Rampart (fig. 18).—This section proved to be the simplest. The original rampart, 20 feet wide, was composed of a core of mixed turf and upcast, retained between two very massive turf cheeks. The toe of the front cheek was set upon a 3-foot kerb of rough stonework, topped with clay. The rearward cheek was supported upon a broad kerb, 8 feet wide, and was bonded into the material of the core by a long tongue of turfwork. Both cheeks were linked at the base of the rampart by a bedding of turf. While, however, weathering had destroyed the original face of the front cheek, the profile of the rearward cheek had been perfectly preserved by the addition of a mass of mixed earth, adding at least 10 feet to the back of the rampart.

The rearward extension of the rampart covered an early *intervallum* road. At the point where the section was taken (*cf.* fig. 21, where the positions of the sections taken in 1936 and 1937 are marked) the additional material had also been cut back to receive a well-built oven of the same type as those discovered close to the east gate in 1895. On a level with this oven, a new ash-strewn layer began inside the fort. It is not, however, clear what the relation of the oven to the extended rampart may be. This depends upon whether a level intermediate between the early *intervallum* road and the oven exists.

In this section, two clear stages of construction can be detected, and an extension of the section would soon reveal the relation between the rampart and the buildings of the fort. It may be added that this section was cut north of the limits of the earlier fort (*cf.* p. 301 above).

The North Rampart, West Section (fig. 19).—The same sequence is visible here as in the east rampart. Stone kerbs at back and front carry an original rampart 19 feet thick. Here, however, the rearward cheek of

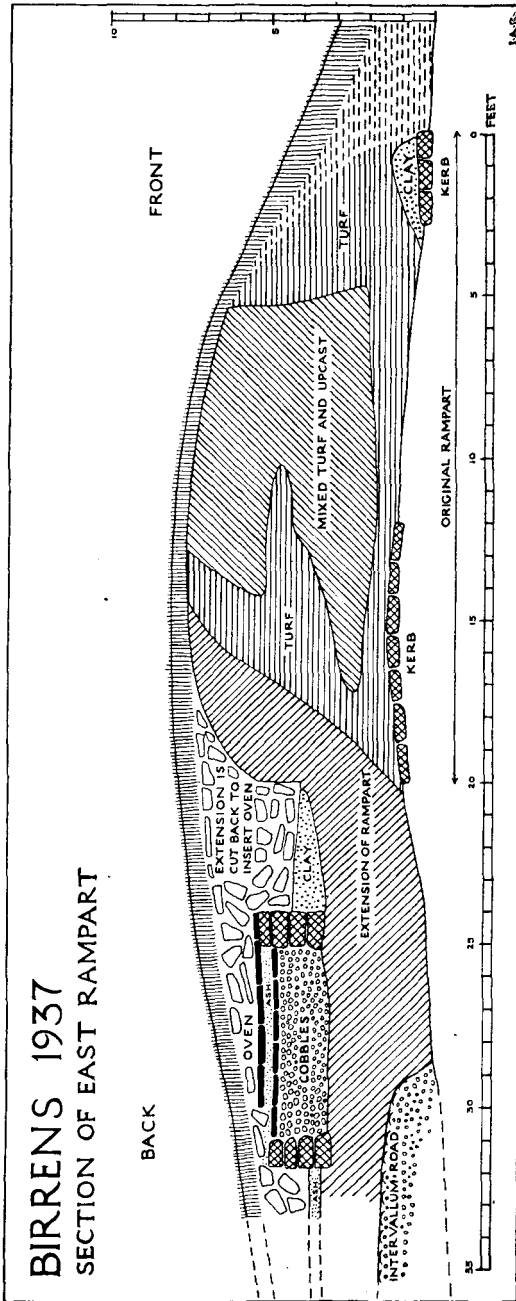


Fig. 18.

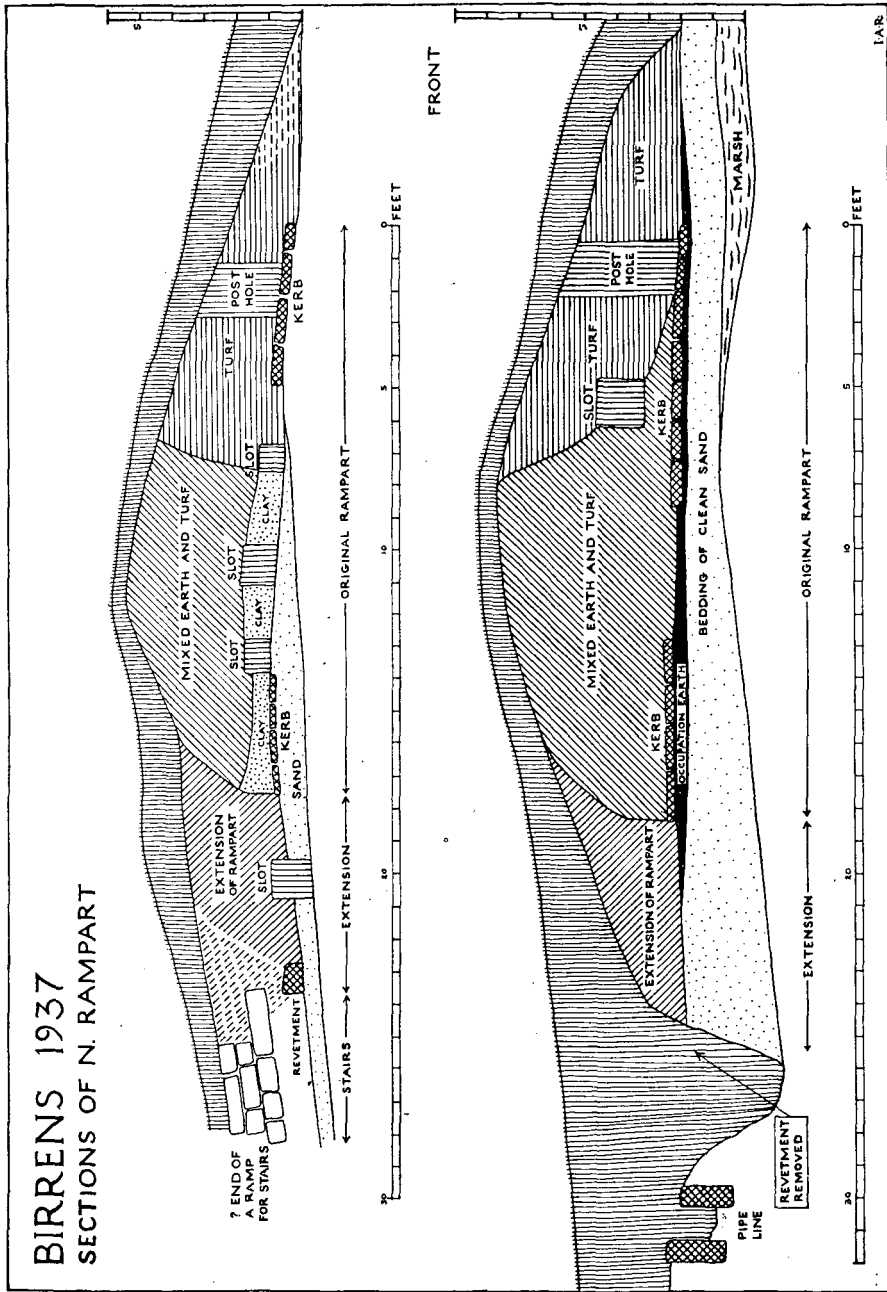


Fig. 19.

turfwork is missing, and the kerbs are considerably thicker. They are laid in occupation-earth, covering a bedding of clean sand, spread upon marshy ground. The pottery from this deposit is considered below (p. 310, figs. 22 and 29), and gives an Antonine date to the rampart. The front cheek of turfwork is pierced by two large elements of timber, the foremost an upright post resting upon the kerbing and held in position by the turfwork, the hindmost a horizontal beam running parallel with the front of the rampart.

Behind the original rampart the extension is present, and a massive feature has been delved away from its back. This missing feature is probably the stone revetment which occurs at this point in the east section of the north rampart.

It should be remarked that the turf cheek holding the timber work extends so far beyond the kerbing as to suggest very strongly that this cheek is not original, but is a refurbishing of the front of the rampart. Secure evidence for such a change was obtained in 1936, in a section of the west rampart, where the additional cheek was built upon the levelled remains of the earlier front, with a new kerb (*cf.* p. 295 and fig. 12 above).

The North Rampart, East Section (fig. 19).—A third section was cut 14 feet west of the north gate. This revealed, as farther west, the two stages of construction. The early rampart, however, contained three horizontal beams, parallel to the front and close together, about midway through the rampart. These are presumably connected with a tower at the gate, of which the foundations were carried upon wooden cradling. Such a tower might be expected to go with a gate resembling the west gate discovered in 1936, a half-timbered structure with rubble infilling (*cf.* fig. 4 above); and it may be remarked that the latter gate fits the early 19-foot rampart. The best parallel is the rampart of Saalburg II.¹

The rearward extension of the rampart here retained one course of its back revetment, and exhibited also a horizontal beam, passing through the rampart at an angle of 45 degrees, and evidently representing a diagonal stay. The front cheek of turf extended at least 6 feet beyond the front kerb, and was pierced by an upright, in much the same position as in the west section.

A third period in the construction of the rampart is represented by a revetment at right angles to the rampart (*cf.* fig. 20), retaining, as it would seem, the end of a ramp or platform for stairs. The builders of this work, at a considerably higher level, have removed all but one course of the back revetment of the extension, in order to bond in their earthwork.

¹ Jacobi, *Saalburg Jahrbuch*, iv. pp. 7-12.

Conclusion.—In conclusion, it may be noted that it is as yet impossible to discriminate accurately between the extension of the back of the rampart and the refurbishing of the front. These operations may be either distinct or contemporary. No accurate relationship has yet been established between the structure of the rampart and its gates, and it is



Fig. 20. Late revetment at right angles to the north rampart at the eastern section; in the foreground is a length, interrupted where the side-stones have been removed, of the water-channel.

doubtful whether the previous excavators have left enough in position to make such a definition possible. Finally, the denudation of the north end of the site makes it impossible to work out the sequence of building-periods in connection with the north rampart. This, on the other hand, should be possible behind either the east or west ramparts, and offers the remaining chance of associating the history of the buildings with that of their defences.

V. THE AQUEDUCT. By I. A. RICHMOND.

The first traces of this structure were detected behind the west sector of the north rampart, where the kerb and curious stone structure, noted

in 1895, were re-examined. It soon became plain that the so-called kerb was a continuous channel, formed either of large upright stones set on edge (and sometimes squeezed together) or of massive facing stones laid flat, as if forming the side of a drain.

The stone structure proved to be a box-like tank made of very well-fitted red sandstone slabs set in clay. The bottom was flagged, but the front flag had been torn out and was tipped on end. At the sides, where the drain-like structure reached the tank, the flags were notched, as if for inflow and outflow.

An interpretation of the function of this structure would have been difficult if a close analogy had not been forthcoming. At Corbridge,¹ in the same summer, a system of underground tanks closely resembling this one in type, though larger in size, had been discovered in connection with the distribution of water from the fountain at the aqueduct-head. While these, however, were fed from carefully built stone conduits, the Birrens example is fed from a rather clumsily built duct, with strong sides but no bottom. This can be explained only upon the assumption that the duct at Birrens originally held a pipe-line, for such a duct as remained would effectively shield either a lead pipe or a wooden conduit.

This interpretation however, demanded a source of supply entering the fort at its north end, whence the water might be distributed all over the site; and levelling soon showed that the only possible line of entry was along the causeway leading across the ditch-system to the north gate. A trench was therefore cut across the causeway 40 feet north of the rampart face. This revealed, in the centre of the causeway, an underground channel composed of large stones in which a semicircular gutter had been cut, while their tops were covered with large flat slabs set in very stiff clay. Water was still running in the channel, of which the cross-section was 10 inches wide.

The channel discovered exactly resembles the visible aqueduct at Corbridge, of which a few cover-slabs are now in position, and recalls very closely Bruce's description² of the water-channel supplying Brem-enium, which entered by the south causeway of the fort. There can be no doubt as to its purpose. It may be presumed that the supply arrived at a distribution-tank behind the north gate, and was thence carried throughout the fort. Important buildings would have their own supply. The rank and file drew their water from such dipping-tanks as the example discovered behind the north rampart.

There can be little doubt that the system, or its like, was originally

¹ AA⁴, xv. pp. 253-54.

² *The Roman Wall*, edn. 2, p. 301.

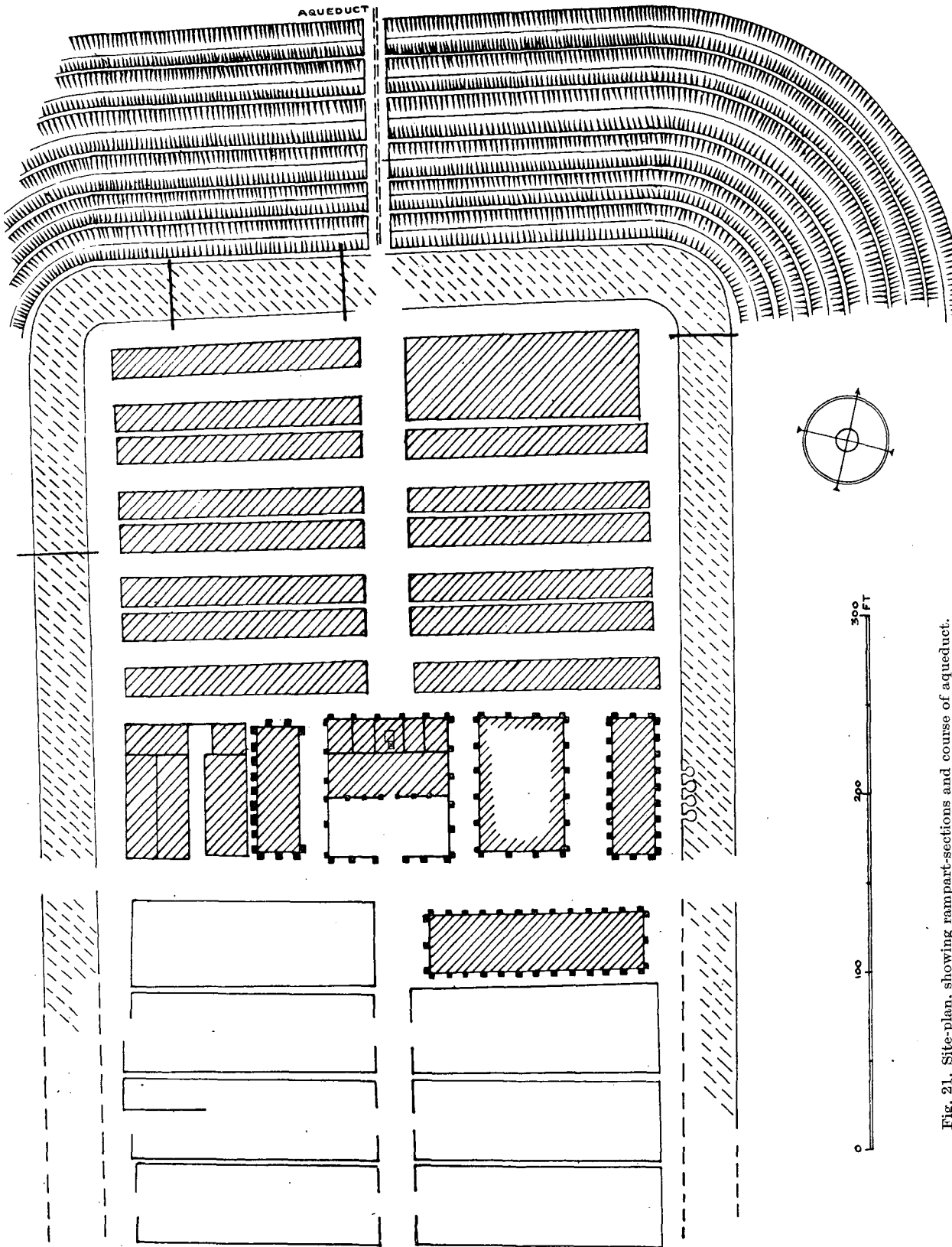


Fig. 21. Site-plan, showing rampart-sections and course of aqueduct.

much more common in permanent forts than the known examples would suggest. It is obvious, especially in cavalry forts, that the solitary well in the *principia*, so often cited as the source of supply, cannot have met the convenience of the whole garrison. A constant supply continually flowing from tank to tank, and delivered below ground, where its presence remained unknown to the enemy, would ensure that the everyday needs were met upon a scale which conforms to Roman standards of lavishness.

VI. THE FINDS.

In the following pages will be found illustrations and descriptions of as many of the objects found—decorated Samian ware, other pottery, glass, bronze objects, an inscription, and coins—as had a claim to publication, either as coming from stratified deposits or because of their intrinsic interest. Most of the material does come from stratified deposits, and for that reason it has seemed best to describe the pottery, which forms the bulk of it, mainly according to the deposits in which it was found, rather than in the manner of a museum catalogue, type by type.

The objects found during the excavations of 1936 have been presented by Mr and Mrs Mackie to the Dumfries Museum; the destination of those found in 1937 has not yet been decided, though it is probable that they will be divided between the National Museum of Antiquities and the Dumfries Museum. It seems necessary, therefore, to note, in the case of each item, the year in which it was found, so that it may be easier to identify individual pieces in time to come. Occasion has been taken to include notes on a few of the potsherds found during the earlier excavations at Birrens; in such cases, the National Museum of Antiquities reference number takes the place of the date 1936 or 1937.

A. *Decorated Samian Ware.*

It has recently been suggested¹ that Roman regiments received their supplies of crockery from "some central authority," which presumably made large purchases direct from the manufacturers. It is hardly necessary to emphasize that there is no evidence in support of this view, when evidence to the contrary (of which Birrens can supply its quota) is so abundant. In the first place, the assumption that pottery was issued to regiments, and owned collectively by them, is belied alike by what we know of the organisation of the Roman army² and by the frequency with

¹ By Sir George Macdonald, "The Dating-value of Samian Ware," in *JRS*, xxv. p. 197.

² For example, there is no evidence of such a practice in the Egyptian papyri in which, incidentally, the private ownership of all kinds of equipment is attested.

which vessels are found bearing the name of an individual owner; two examples are illustrated below, fig. 36, 1 and 2, and several were found in the earlier excavations at Birrens.¹ Moreover, block purchase should result in far greater uniformity in the material, on a military site than obtains in a town, supplied by the ordinary channels of competitive trade; but the attempt to make such a distinction between forts and towns² is clearly tendentious; no greater uniformity can be observed on military than on civil sites, and the present small series of decorated Samian from Birrens provides an admirable example of the variety of sources on which troops in garrison at a single fort could draw:³ Nos. 1 and 4-7 below come from Central Gaulish potteries whose products are regularly represented in Britain, but the East Gaulish or German bowls, Nos. 2, 3, and 9, have but few counterparts on civil or military sites in this region. On the assumption of block purchase, they had no business to find their way to Birrens; but purchase by individual soldiers from *negotiatores cretarii* supplies an ample explanation. There is a further point, however, which it seems worth while discussing, particularly in view of the occurrence at Birrens of a bowl from the Samian potteries at Trier. Oelmann has observed⁴ that in Germany the products of Trier hardly made their way farther south than the Main, whereas the far more extensive potteries of Rheinzabern were able to gain a share of the market even in Trier itself. Decorated bowls from Trier are so uncommon in the north of Britain that it may be permissible to suggest that they came, not in the ships or crates of pottery merchants, but in the baggage of individual soldiers or civilians. In that case, No. 9 below might well have come to Birrens with someone, like the architect Amandus, who had been serving in Germany before the British expedition of Severus; the Hadrianic piece, No. 2, might equally have been brought by a man transferred from Germany under Platorius Nepos; and No. 3 (to which there are several parallels at Corbridge) by a soldier of Lollius Urbicus. For all its smallness, then, the group of decorated Samian from the recent excavations presents features of more than usual interest, which may serve to justify a somewhat extended discussion of the individual pieces.

1. Fig. 22, A and B. 1937; west section through north rampart, below flag footing (see also fig. 29, p. 324, below). Mr J. A. Stanfield reports as follows:—

“The fragment (drawing A) is much worn, and the glaze has disappeared from the surfaces in relief. Nevertheless the design is clearly recognisable,

¹ PSAS, xxx. pp. 107-108.

² JRS, xxv. pp. 196-197.

³ An analogy, from the earlier excavations at Birrens, is referred to in JRS, xxv. p. 199, where its implications are not realised.

⁴ *Niederbieber*, p. 19.

and the restoration (drawing B) is certain. The design is an arcade, the arches being double, connected by astragali, and supported by pillars with prong-like projections from the capitals, while each pillar is placed between a pair of wavy lines. The figure subjects are *Bacchus* (O. 566) and *Diana* (O. 109).

A bowl by the same potter has been found at Chesterholm (AA⁴, xiii., fig. 8, 12), but, since the connection between that bowl and the Birrens fragment is not immediately obvious, a fragment from London is also illus-

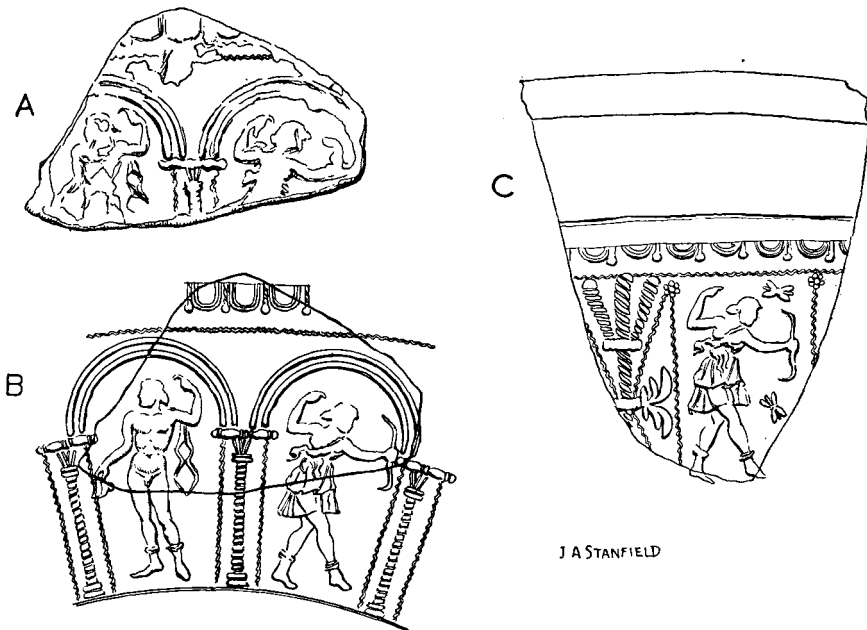


Fig. 22. Decorated Samian from Birrens (A=B) and from London (C). ($\frac{1}{2}$.)

trated (drawing C), which bears the peculiar cruciform ornament of the Chesterholm bowl side by side with the Diana of the Birrens piece. These two motifs also occur together on fragments, not yet published, from Corbridge.

As stated in the notes on the Chesterholm bowl, the style of these designs is characteristic of certain Central Gaulish potters whose manufactories were in all probability situated at Vichy, and whose most fruitful period of production occurred during the principate of Trajan. The present potter's designs contain ornamental elements that were used by several of the Vichy potters, notably RANTO and MEDETVS. Nevertheless, he cannot be identified with either of them, for the only signed example of his work known to the present writer bears the initial D. The cursive initial occurs, below the decoration, on a piece of form 37, in the Cambridge Museum of Archaeology and Ethnology, on which the decoration is similar to that of the Birrens fragment, namely an arcade, whose double arches (one enclosing the same

Diana) are connected by astragali and supported by identical pillars between wavy lines. Other figures on the Cambridge piece are *Perseus* (O. 233), a *dancer* (O. 281), and an interleaved snake-like ornament in the style of RANTO. Additional figures, occurring on a separate fragment, undoubtedly part of the same bowl, are the group O. 238 and a *dancer* (O. 354).

The work of this potter, who must now be referred to as D....., cannot be said to be uncommon, as examples of it have been found over a wide area that includes London, Colchester, Richborough, Verulamium, and Silchester in the south of England, York, Corbridge and Chesterholm in the north, and Leicester, Wroxeter, and Chester in between.

It now remains to establish the connection between the work of D..... and that of RANTO and MEDETVS by means of the following concordance: the signed bowls by the two last-mentioned potters being the well-known form 29 from Heddernheim stamped RANTOF, and the vessel of the same form at Kettering with the stamp MEDETI M. They will be referred to as the Heddernheim and Kettering bowls respectively.

The *ovolo* (drawing B) is closely similar to those on fragments in the style of RANTO from London, Leicester, and Corbridge.

The *fine wavy lines* (drawings B and C) are characteristic of Trajanic potters generally and, with the *seven-bead rosette* (drawing C) occur on the Heddernheim and Kettering bowls.

The *Bacchus* (drawing B) occurs on a fragment of form 37 from Leicester, and on a fragment at the British Museum (M. 1389) with the same *ovolo*, both in the style of RANTO; and also on a form 30 at the Guildhall Museum, London, in conjunction with the *pelta* that occurs on the Heddernheim and Kettering bowls.

The *Diana* (drawings B and C), although it has not been met with by the present writer on any bowl directly in the style of either RANTO or MEDETVS, occurs (drawing C) in conjunction with the little butterfly-like ornament used on the Heddernheim and Kettering bowls. Both the Diana and the "butterfly" occur on the Corbridge pieces already referred to.

The *double acanthus leaf* (drawing C), which also occurs between the arches on the Cambridge bowl, also occurs on the Kettering bowl.

Another element of design on the Heddernheim bowl which, though not present on drawings B and C, occurs on fragments in the style of D....., is a *beaded ring* similar to those used by IOENALIS and DONNAVCS, but like RANTO's variety of that ring in having a tiny five-pointed star within the ring. This beaded ring appears on a fragment of form 30 in the Guildhall Museum, which also shows the pillar, the double arch, and the *ovolo* of drawing B.

There is therefore good evidence that the potter of the Birrens fragment, the initial letter of whose name was D, was a Trajanic potter, perhaps directly associated with MEDETVS and RANTO. The date of the Birrens piece would be rather later than the Heddernheim and Kettering bowls, say *circa* A.D. 110-115."

The date assigned to this piece on general grounds may be checked by reference to site-evidence from the north of England. Both at Corbridge and Chesterholm the work of the same potter occurs, in associa-

tion with deposits which start in the Flavian period, and are sharply interrupted at about the point where the deposits on Hadrian's Wall begin; at High Shield,¹ on the other hand, a piece by the same potter has been found in association with pottery clearly starting with Hadrian. That is to say, we have a "borderline" potter before us, whose work may be expected on Trajanic and on Hadrianic sites; and it is only by reference to the associated finds that it will be possible to judge the site-dating. Fortunately at Birrens the associated finds, though few in number, have a clear story to tell; in place of the characteristic fabrics of the Flavian-Trajanic period, the deposit from which the present piece came included two examples of the black-fumed cooking-pot, which in the north of Britain is typical of the period from Hadrian onwards. There is thus no necessity to suppose occupation at Birrens under Trajan; but the occurrence of this fragment, and some other pieces discussed below (p. 322), provides satisfactory evidence of occupation starting at about the same time as in the forts on Hadrian's Wall.

2. Fig. 23. 1937; underlying north rampart, east section. Mr J. A. Stanfield supplies the following note:—

"A small fragment, fortunately large enough to show the form of the vessel of which it was a part, namely the hybrid form 29/37. The central moulding bears a string of conjoined astragali bordered by rows of small, neat beads. Over this, on the upper frieze, is a series of acanthus calices placed side by side, with another row of beads above and, finally, the remains of a series of festoons with pendants that terminated in sharp-pointed leaves. Less remains of the lower frieze, but there are indications that the decoration consisted of medallions (of the same type as the festoons) alternating with some other ornament. In fig. 23, A is a drawing of the fragment itself, and it is also shown in section as part of the restored profile, based on a bowl of similar shape from Heiligenberg (Knorr, *Rottenburg*, pl. viii. 7).

As concerns the style of decoration, it is true that strings of conjoined astragali were much used on pottery from Trier, notably by the potter Dexter (Fölzer, pl. xv. 14), and also festoons somewhat similar in character to those of this piece (*ibid.*, pl. xv. 13, 18, and 19); and conjoined astragali were also used on La Madeleine ware (Ricken, *Saalburg*, pl. ix. 19, and x. 1). On the other hand, although an acanthus calyx was also used at Trier (Fölzer, pl. xxxii. 900), as used there it has not the drooping ends of those on the Birrens fragment; these are much more like Ludowici's type O. 1, used by seven Rheinzabern potters, including Ianus and Reginus, who both appear to have worked at Heiligenberg before moving to Rheinzabern (Oswald, *Index of Potters' Stamps*, *sub voce*).

Apart from the ornamental types mentioned above, however, there is little resemblance to Trier, La Madeleine, or Rheinzabern ware in the present fragment, and much closer parallels exist in certain pieces, from a pottery

¹ AA⁴, xv. p. 349.

which Ricken does not assign to any particular place, in the Saalburg collection (Ricken, *Saalburg*, pl. xiv. 5, 6, 7, and 9). On Ricken's 6 and 7 occurs the same acanthus calyx with drooping ends, used in a similar way, namely, side by side—in 7 taking the place of an ovolo, and in 6 at the base of the decoration. Furthermore, the small triple ornament in the medallion of the Birrens sherd occurs on all four of the Saalburg fragments, on which rows of small beads are also seen, so that there is little doubt that the pieces from Birrens and the Saalburg are the products of the same pottery."

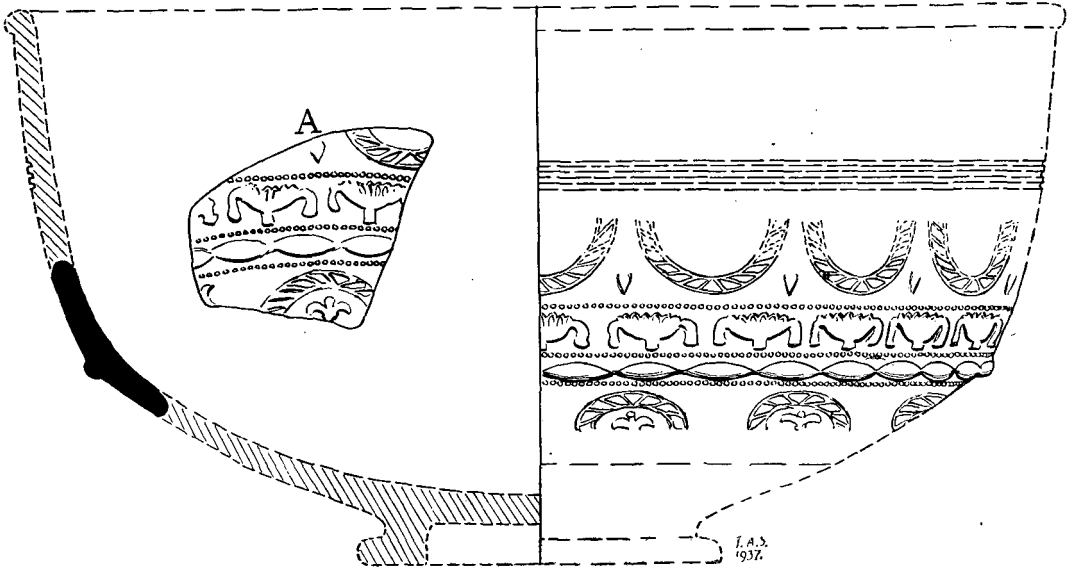


Fig. 23. East Gaulish bowl, form 29/37. ($\frac{1}{2}$.)

3. Fig. 24, 1. 1937; Site XXII East, unstratified. Mr J. A. Stanfield writes:—

"This is part of a bowl in La Madeleine fabric, with a very deep plain band between the lip and the decoration. All the types are shown by both Fölzer and Ricken as La Madeleine types, viz.:

	Fölzer, pl. xxv.	Ricken, pl. vii.
<i>Acanthus calyx</i>	74	25
<i>Astragalus</i>	100	8
<i>Triple leaf</i>	92	14
<i>Ovolo</i>	119	C
<i>Rosette</i>	108	1

A similar panel of superimposed acanthus calices occurs on a fragment from Friedberg (Ricken, pl. x. 10), and astragali placed athwart bead-rows are common on this ware (*cf.* Ricken, pl. ix. 1, 3, 6, 14, etc.; Fölzer, pl. i. 29, 39, etc.)."

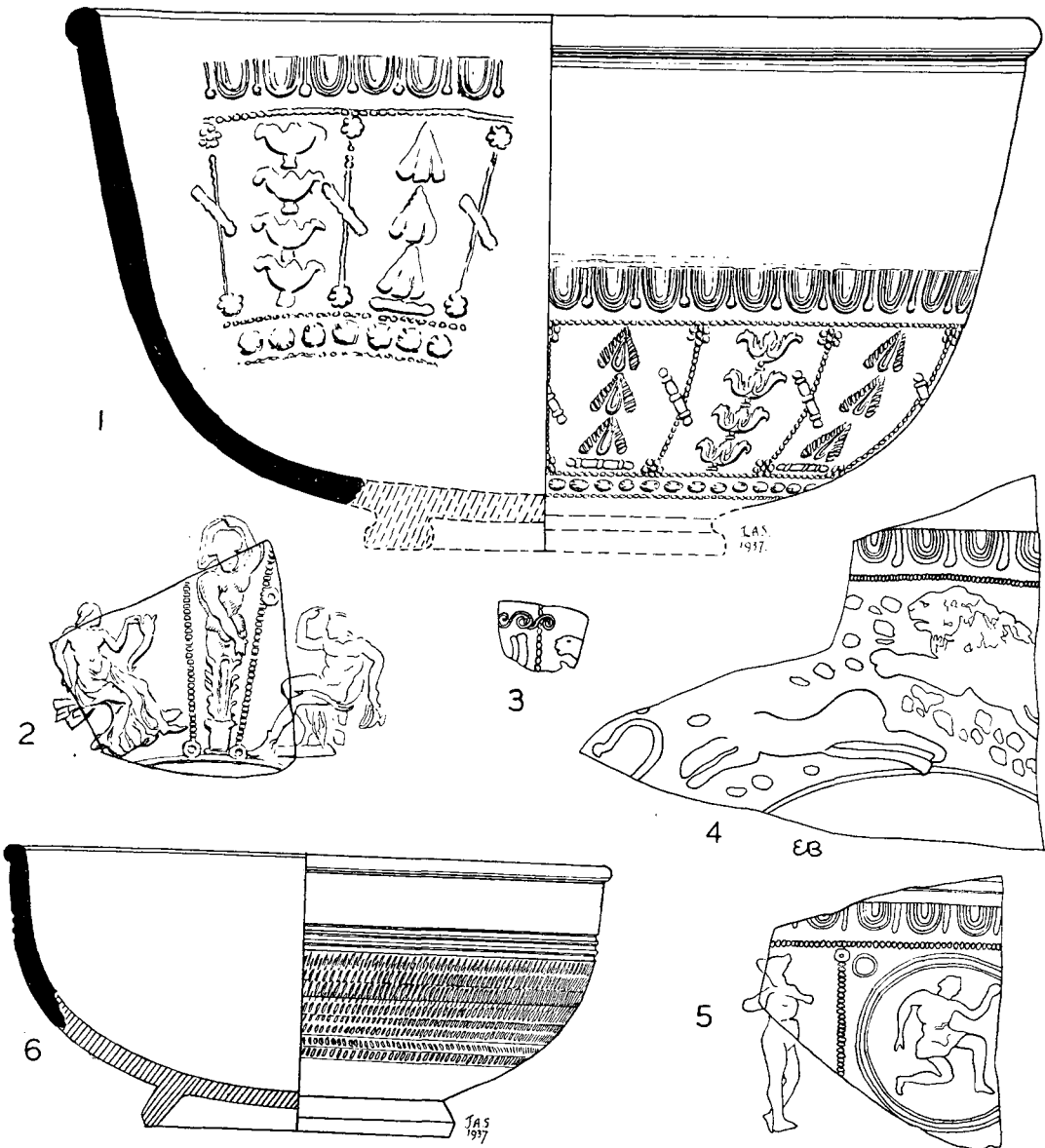


Fig. 24. Decorated Samian ware. ($\frac{1}{2}$.)

The products of La Madeleine are seldom represented on sites in the north of Britain; I have not noted any other examples from Scotland, but there are several vessels included in the Corbridge collection; none of the Corbridge pieces is close enough in style to the present bowl to warrant a detailed comparison here.

4. Fig. 24, 2. 1936; unstratified. Mr Stanfield writes:—

“This piece, in Lezoux ware, is unmistakably the work of the potter DIVIXTVS. The seated figure of *Fortune* (O. 801) occurs on form 37 from Silchester, form 37 from Corbridge (AA³, viii. p. 191, fig. 13), form 30 from Caerleon (Lee, *Isca Silurum*, pl. xii. 3), forms 30 and 37 at Colchester, and on another form 37 from Corbridge (not yet published), all stamped DIVIX · F. The *caryatid* (O. 1207 A) occurs on at least eight bowls bearing the same stamp, and on many more, in the same style, on which no stamp is preserved; it is perhaps the commonest figure-type used by DIVIXTVS. The third figure, of which only part of the legs is preserved, is the seated *Bacchus* (O. 571) which occurs on the bowls from Silchester, Caerleon, and Colchester referred to above. If anything further were needed to prove the attribution of the piece, it would be the ring-terminal of the bead-rows, which occurs on as many as seventeen bowls stamped by this potter.”

5. Fig. 24, 3. 1937; Site XXII West, in the same occupation-layer as fig. 31, Nos. 1–8, below. A small, worn fragment from a bowl by the “Potter of the small S” (*cf.* CW², xxxvi. p. 136), whose products are widely represented on Antonine sites, for example at Balmuildy, Mumrills, and Newstead. The *panther* (O. 1570), whose head just shows on the present fragment, is one of this potter’s commonest types; his commonest *ovolo* is that in which the tongue is replaced by a knob projecting from the outer line of the egg, at the right-hand side, as on *Mumrills*, Nos. 48 and 54; the former piece also shows the leaves in the field of which the potter was extremely fond.

6. Fig. 24, 4. 1937; Site XXII West, in the same occupation-layer. A large piece, partly burnt, from a bowl decorated in free style; it comes from a rather worn mould, so that the decoration has lost much of its detail. The figure-types are a *lion* (O. 1450), whose tail just shows at the left and his forepart at the right, and a *stag* (O. 1772); the types are assigned to various potters by Dr Oswald, but the only two shown to have used both of them are ATTIANVS (who stamps OF ATT) and CRICIRO; the present piece might be assigned to the former, who uses similar conventional herbage, but the *ovolo* looks unlike any known to have been used by Attianus.

7. Fig. 24, 5. 1937; Site XXII West, overlying the filled-in ditch and sealed by later walls (*cf.* fig. 30, p. 325, below). Part of a bowl, form 30, in the style of CINNAMVS. The figure-types are *Venus* (O. 331)

and a *warrior* (O. 204), both of which occur commonly on work stamped by this potter; *Mumrills*, No. 32, is a larger piece from a bowl probably made in the same mould.

8. Fig. 24, 6. 1937; unstratified. Mr Stanfield supplies the following description:—

“Form 37 in rouletted technique, from an East Gaulish pottery. Three deep grooves separate the plain zone from the rouletted decoration, which is in lateral bands placed close together and sometimes overlapping.”

9. Fig. 25, 1. 1936; west gate, unstratified. Part of a rather small bowl of form 37; Trier fabric. The *ovolo*, Fölzer's type 944, is not very

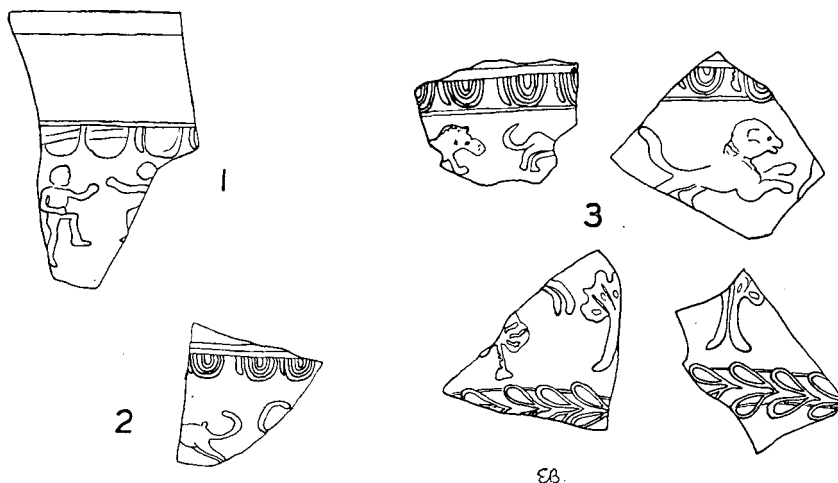


Fig. 25. Trier ware fragments: 1, Birrens; 2, Corbridge; 3, Housesteads. ($\frac{1}{2}$.)

clear, partly because the bowl has been made in a worn mould, and partly through defacement sustained when the rim was being attached. The figure-types are two *boxers* (Fölzer 524, 525), which occur frequently on vessels with this *ovolo*; the name of the potter who used it is not known, but Fölzer, discussing his work,¹ assigns him to the close of the second century and the beginning of the third, a dating supported by the occurrence of his products at Niederbieber.² His work is seldom found in the north of Britain; we have not noted any other examples in Scotland, and there is only one piece showing the same *ovolo* in the collection at Corbridge. In order to give a better idea of his style of decoration, we illustrate the Corbridge fragment and four pieces of a

¹ *Op. cit.*, p. 79 f.

² *Niederbieber*, pl. vii. 34 and 35.

bowl from Housesteads: Fig. 25, 2, *Corbridge*; find-spot unrecorded. *Ovolo* as before; *dog* to left (Fölzer 651); tail only of *dog* to right (Fölzer 642). Fig. 25, 3, *Housesteads*; underlying building VIII in the *vicus*. *Ovolo* as before; *lion* and *boar* (Fölzer 593, 610); *lion* (Fölzer 589); hind legs only of *dog* (Fölzer 650), and *trees* (Fölzer 737, 772). The lower wreath is of the form particularly characteristic of Trier products, and another typical feature is the use of plain guide-lines instead of bead-rows. The glaze of this bowl is of the clear orange tint which Fölzer notes as a common feature of the potter's work.

B. Other Pottery.

In considering the pottery other than decorated Samian ware, it seems necessary to begin by setting forth the principles on which its value for dating purposes should be estimated. There are several points to bear in mind. In the first place, not all types had a sufficiently restricted life to be of great value in this connection; thus, the flat-rimmed platter, in the black fumed ware which first appears in Hadrianic deposits in the north of Britain, persists well into the third century, with little dateable variety in its profile;¹ and it is often difficult to attempt a close dating of cooking-pots² in the same fabric. Though stratified examples of such vessels are illustrated below, it has not been thought worth while to quote extensive parallels from other sites. And when parallels are quoted, to be of real value they must only be taken from securely stratified deposits, preferably dateable within exact limits; for that reason, unless it is to show that a type occurs on Antonine sites, it has seldom been necessary to quote parallels from Newstead or from the forts on the Wall of Pius; quite apart from the uncertainty as to the terminal date of their occupation,³ the scarcity of stratified pieces assignable to one or other of their successive periods necessitates looking elsewhere for parallels. Fortunately, a valuable series of material is available from Hadrian's Wall, particularly from the mile-castles and turrets excavated by our Honorary Fellow, Mr F. G. Simpson, whose reports⁴ provide the essential starting-point for a study such as this. There will be frequent occasion to refer to the periods of Hadrian's Wall, so that it may be desirable to insert here a schedule of them:⁵

¹ Cf. *Birdoswald*, fig. 16, 73.

² For the definition of cooking-pots, as opposed to jars, cf. CW², xi. p. 450.

³ See below, p. 343.

⁴ CW², xi. pp. 390-461; CW², xiii. pp. 297-397.

⁵ Cf. AA⁴, vii. pp. 164-74; AA⁴, xv. p. 267.

Period I A: *circa* A.D. 122-162.

Period I B: *circa* A.D. 162-196.

Period II: *circa* A.D. 205-297.

Period III: *circa* A.D. 300-367.

Period IV: *circa* A.D. 368-383 or later.¹

Periods I A, I B and II are of obvious importance for a study of the pottery from Birrens; types which occur in Period II only can be dated securely to the third century, and demonstrate that the fort continued to be occupied in that period; and the known re-building of Birrens in A.D. 158, coming so close to the end of I A, invites a comparison between the second-century levels here and those on Hadrian's Wall. But of that more in the sequel; we must return to our examination of principles.

The next point to be established is the definition of a useful type. By that is implied more than the occurrence of pieces similar in profile and fabric; what is more important is consistent stratification. In other words, an isolated piece, even though securely stratified, is not of great value, for it may be a freak;² similar pieces coming from deposits of different periods (unless, for reasons discussed below, they can be shown to be intrusive in one of those periods) cannot provide evidence for close dating; but two or more vessels of the same profile and fabric, coming from deposits of the same period, allow the confident dating of unstratified parallels. It is perhaps necessary to emphasize the importance of fabric, since an examination of the pieces themselves is needed for its identity to be established, whereas similarity of profile can be shown by drawings; and experience shows that similarity of profile alone is not necessarily a safe guide.³

At this stage it seems necessary to insert a caution as to the interpretation of stratification. The mere occurrence of a piece in a stratified deposit does not necessarily mean that the vessel from which it comes was in use during the period when that deposit was formed. We may exclude the possibility of introduction from a later level by subsequent disturbance, for that will mean that the deposit is not completely stratified. But it often happens that pieces lying about a site long occupied will find their way into an occupation-layer far later in date than the period

¹ Cf. Hedley, *The last days of Corstopitum and the Roman Wall—the coin evidence*, in AA⁴, xiv. pp. 95-102.

² E.g. *Appletree turret*, pl. xvii. 63, unjustifiably treated as a type by me in AA⁴, vii. p. 173, and by Collingwood, *Archæology of Roman Britain*, p. 222.

³ Cf. the mortarium, *Birdoswald*, fig. 13, 10; its profile has suggested an early second-century date to competent judges, but its fabric is that commonly found in hammer-head mortaria, and it belongs to the close of Period II.

of their manufacture, use and breakage;¹ such pieces can usually be distinguished without difficulty, by the student of Roman ceramics, from the material contemporary with the occupation-layer, and it is necessary to describe them as "strays," in contrast to the "survivals" or pieces characteristic of the period immediately preceding, and only rarely represented in the period in question. It would not have been necessary to stress this point if the distinction between strays and survivals had been observed more closely by previous writers.² And there is another point which seems worth stressing, namely, that it is sometimes possible to arrive at a closer dating than merely to a given period, by observing the circumstances in which a particular vessel was discovered. Thus, on a clay floor, which was made up several times in the course of a period, the pieces trodden deepest into the clay are likely to belong to the early years of the period; but pieces lying among the debris of destruction, by contrast, will have been in use at its close.³ And it is perhaps the clearest indication that vessels belong to the very end of a period, if they are found complete or nearly complete in an occupation layer;⁴ for the normal practice was to carry rubbish away and tip it outside the fort; hence the scarcity of pottery in barracks of the second and third centuries, with which northern excavators have long been familiar.

Finally, it may not be out of place to observe that it is a mistake to look for parallels too far afield, unless we are dealing with the products of a great exporting centre, such as Samian or Castor ware, or unless we are confronted with vessels which there is reason to regard as unusual importations into the district with which we are concerned; it is true that the interaction of Italic and La Tène elements produced a somewhat similar series of developments in the pottery fashions of Western Europe,⁵ but there is sufficient evidence to show that the incidence of those developments varied considerably in different districts, even within the same province.⁶

¹ It is hardly necessary to quote instances, but cf. *Corbridge*, 1938, fig. 8, 14 and fig. 13, 6, pre-Hadrianic strays in an Antonine deposit.

² Thus, at *Mumrills* a typically Flavian carinated bowl with reeded rim (fig. 101, I) occurred in Level B of the westmost Antonine ditch, and was interpreted as a survival into the Antonine period, as was a fragment of "rustic" ware (fig. 103, 4) found "a little way beneath the modern surface."

³ This point was first made, by implication, in the report on *Poltross Burn milecastle*, p. 447 *et seq.*, where "early first period" material is distinguished from "first period (mostly in debris)."

⁴ Cf. *Birdoswald*, figs. 13, 8; 15, 42 and 44—from the close of Period II; and Ritterling's observations in *Hofheim*, p. 85.

⁵ S. N. Miller in *Balmuildy*, p. 82.

⁶ Cf. the case of black-fumed ware, referred to already as occurring in deposits from the time of Hadrian onwards in the north of Britain (cf. AA⁴, xv. p. 229); in Wales it began to appear before the close of the first century.

Judged in accordance with the above principles, the evidence provided by the pottery from Birrens is remarkably clear. Much of it, indeed, for the reasons outlined above, cannot be dated very closely; and the denudation of the upper levels, and the difficulty of access to the earliest strata, combine to make the series as a whole rather scantier at the beginning and the end of the occupation than could have been wished. But it is instructive to note the correlations which it has been possible to make between Levels II and III at Birrens and I A and I B on Hadrian's Wall; the jug and mortarium¹ belonging to the close of the period represented by Level III, the former underlying a wall which in 1895 had been taken to be "primary," justify the attribution of Level IV to the Severan reconstruction; and there is ample variety of types which on Hadrian's Wall occur only in Period II. Some of these types can be assigned to the end of that period, particularly the hæmatite-washed mortaria represented most strikingly at Birrens by the piece found underlying the side of the water-channel, near the north gate;² so that there can no longer be any question but that Birrens, like the other outliers of Hadrian's Wall, continued in occupation throughout the third century. It is unfortunate that the latest level has produced so little pottery, so that we are unable to estimate how long into the fourth century it lasted; but the fine jar illustrated as fig. 35 is a handsome addition to the growing corpus of early fourth-century types.

Fig. 26. 1936; stratified pieces from Site XIX.

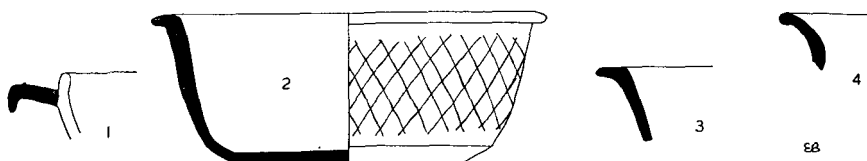


Fig. 26. Stratified pieces from Site XIX. (†.)

1. Level I. Flange fragment from a Samian bowl of Curle's type 11; on the upper edge of the flange is barbotine decoration, as normally on this type. Curle 11 is described by Oswald and Pryce, *Terra Sigillata*, p. 212, as especially characteristic of the Flavian period, but persisting into the time of Trajan; but its lower limit can be carried rather farther, for an example occurred on Hadrian's Wall at *Birdoswald turret* (p. 349). As far as the present piece is concerned, it seems to come late in the development of the type, for the sharp downward turn of the flange seems

¹ Fig. 27.

² Fig. 31, 14.

without parallel on any Flavian site. It must be left undecided whether we have here a late or an exceptional vessel: it cannot be taken as necessarily pre-Hadrianic.

2. Level II. Deep, flat-rimmed platter, with slight chamfer between the base and the wall; black fumed ware. From the time of Hadrian, when it first appears in the north of Britain, there is little variation in the rim-section of this type; analogies could be cited from both second-century periods on Hadrian's Wall. But the fabric of this vessel, a rich black, with the surface highly burnished, is best paralleled in deposits of period I A.

3. Level II. Rim of a similar platter; once black, but now badly burnt.

4. In debris overlying the flagged floor of Level IV. Outbent rim-fragment of a grey fumed cooking-pot. Cf. *Throp*, pl. xxvi. 21 and 22 (associated with a hammer-head mortarium in white pipeclay ware, of the type that first appears on Hadrian's Wall *circa* A.D. 300; many more parallels of the same date could be cited).¹

Fig. 27, 1. 1936; Site XIX West, mostly underlying the north wall of Level IV. The greater part of a jug with pinched neck, in hard, rather sandy, grey ware; jars in late second and early third-century deposits on Hadrian's Wall are often of a similar texture. Jugs with pinched necks occur sporadically in all periods from the first century to the fourth (indeed, they long outlast the Roman period), and it is rather from the fabric and the contour of the body of the jug that an estimate of dating is to be derived. In this case the fabric, as has been said, has affinities with that common *circa* A.D. 200, and the rather bulbous body best suits the same period.

Fig. 27, 2. 1936; found a few yards east of the preceding vessel, and at the same level, though not underlying the north wall of XIX West. Most of a mortarium, in fairly hard, reddish ware; the grit is fine and mainly white. A close parallel to the rim occurs at *Poltross Burn*, pl. iv. 7 (first period, "mostly in debris," *i.e.* latter part of the second century), a piece with an illegible name-stamp on it; I have not had an opportunity of examining this piece recently, to see if the stamp can now be deciphered. There is a somewhat similar rim from *Throp*, pl. xxvi. 2; *Corbridge*, 1911, 45 is in a wholly different fabric, and should not be confused with this type; the lighter Hadrianic rims, *Birdoswald*, fig. 13, provide an instructive contrast.

¹ In view of the site-evidence from the north of Britain, it seems probable that the three intrusive rims in the alley at *Birdoswald* (p. 191, h-k) belong to the Constantian rather than the Severan reconstruction; the Constantian builders carried their foundations deep down (*Birdoswald*, p. 171).

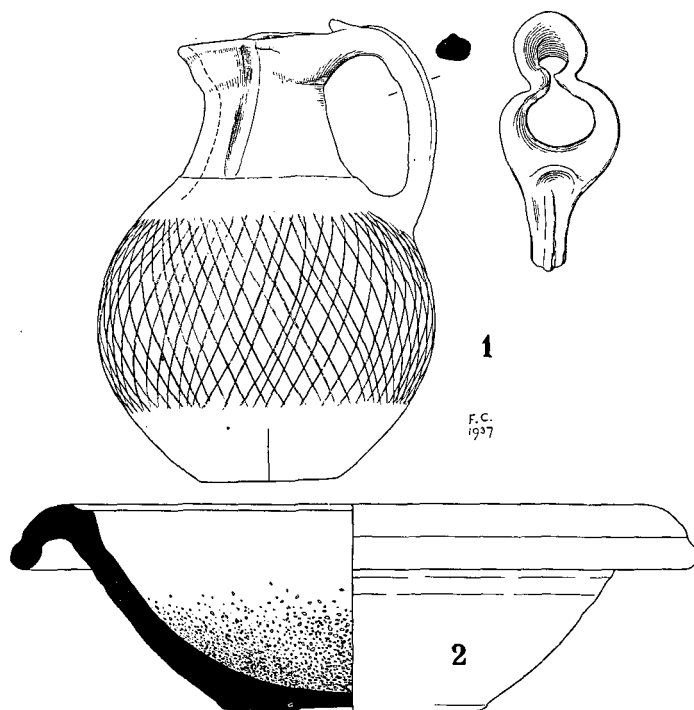


Fig. 27. Stratified vessels from Site XIX. (1.)

Fig. 28. 1936; Site VIII, Level III +.

1. Rim-fragment from a Samian cup; I have not been able to find a parallel to this form.

2. Wall of a Samian cup, form 33; outside, on the lower part, is the name of the owner, Gaius (fig. 36, p. 334 below).

3. Black fumed cooking-pot.

4. Cooking-pot, once fumed; the surface is badly burnt.

5. Fumed beaker.

6. Grey jar; cf. *Corbridge*, 1938, fig. 7, 20 (an Antonine piece).

7. Grey fumed cooking-pot; cf. *Poltross Burn milecastle*, pl. iv. 24 (Period II).

8. Black fumed platter.

9. Similar platter.

10. Dark grey roll-rim platter, fumed but not burnished.

11. Platter rim in light buff ware.

12. Lipless platter in black fumed ware, with lattice scored on the outside.

13. Fumed platter, burnt yellow; cf. *Corbridge*, 1938, fig. 8, 5 (second Antonine level).

From the same deposit came part of a "hunt cup" in blackish Castor ware, and much of a Samian platter, form 18/31, with the incomplete stamp AE[(fig. 36, p. 334, below); as often happened in a wood fire, the

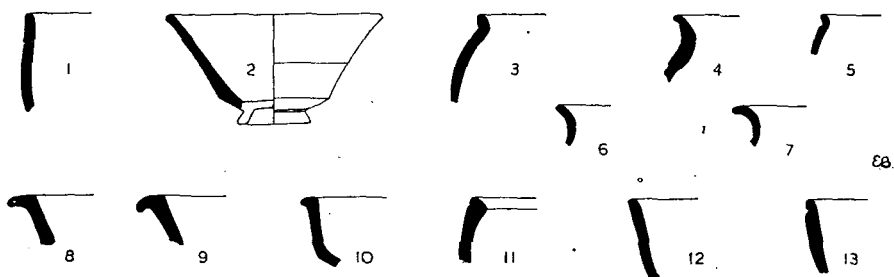


Fig. 28. Rims from Site VIII, Level III+. (↓.)

latter vessel has been burnt black (cf. *Newstead*, p. 230, a platter by Cintugenus, similarly burnt).

Fig. 29. 1937; below flagged foundation of north rampart, west section.

1. Black fumed cooking-pot. For the rim-section, compare *Bird-oswald turret*, pl. xvi. 11 (period I); *High House turret*, pl. xvi. 39 (period I A); *Chapel House milecastle*, pl. liii. 56 (period I B); *Balmuildy*,

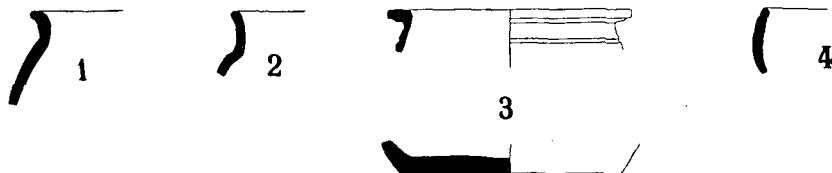


Fig. 29. Deposit below the existing north rampart. (↓.)

pl. xlv. 14. It does not seem possible to give a closer dating to the type than *Antonine*.

2. Black fumed cooking-pot. The closest parallels that have been noted are *Chapel House milecastle*, pl. liii. 59 (period I B) and *Balmuildy*, pl. xlv. 13.

3. Rim and base fragments from a jar in a moderately hard, reddish ware. I have not come across any close parallel to the form, but the rim has obvious affinities with the carinated bowls, whose rims no longer show any reeding, that occur in Hadrianic deposits on the Wall.

4. Platter rim in reddish ware with buff-washed surface. The rim-

type does not seem to occur elsewhere in the north of Britain; the fabric suggests a Hadrianic date.

Fig. 30. 1937; XXII West, overlying the filled-in ditch and sealed by later walls.

1. Samian cup, form 33, stamped GNATI·M. For a note on this Antonine potter see p. 334, below.

2. Wall fragment from a similar cup.

3. Rim and wall of a jar in fairly hard, blue-grey ware, grey in fracture. Contrast the rather soft fabric of the Hadrianic jars at *Birdoswald* (p. 191); the rim approaches the high, third-century type.

4. Cooking-pot rim.

5. Beaker rim in black fumed ware; a wall-fragment, from the same deposit, has a handle (cf. *Old Kilpatrick*, p. 46; *Newstead*, p. 256; *Bird-*

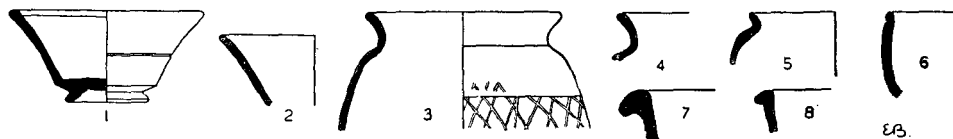


Fig. 30. Sealed deposit from Site XXII West. (¼.)

oswald, p. 192). For the rim-section, cf. *Appletree turret*, pl. xvii. 88 (period I B); *Birdoswald*, p. 194.

6. Platter rim, of the well-known Antonine type, *Newstead*, pl. xlviii. 42.

7. Rim fragment from a large platter in coarse, sandy, dark grey ware.

8. Roll-rim platter in fumed ware.

Fig. 31. Stratified pieces from various deposits examined in 1937. Nos. 1-8 come from the burnt layer on Site XXII West (cf. p. 299, above).

1. Flanged bowl, in hard reddish-buff ware; cf. *Caerleon, Archæologia Cambrensis*, 1929, No. 57 (dated "Hadrian-Antonine").

2. Black fumed platter-rim; cf. *Appletree turret*, pl. xvii. 67 (period I B).

3. Disk-mouthed jug-neck, in brown ware with polished surface. The type is a long-lived one; cf. *Newstead*, fig. 33, 11 and p. 263; *Colchester Museum Report*, 1930, No. 146.30, p. 35; *Templebrough*, pl. xxxiii. B, 223 and p. 115 (a very close parallel).

4. Black fumed platter rim.

5. Worn fragment of a flat-rimmed platter.

6. Worn rim-fragment of a fumed cooking-pot.

7. Reddish-buff jar rim, in coarse soft ware.

8. Black fumed cooking-pot rim; cf. *Chapel House milecastle*, pl. liii. 53 (period I B); *Corbridge*, 1938, fig. 9, 2 (second Antonine period).

9. Black layer overlying roadway, XXII East. Black fumed cooking-pot; cf. *Birdoswald* 42 (period II) for the rim-type, though that is a different type of pot.

10. North rampart, west section; in the bottom of the turf revetment

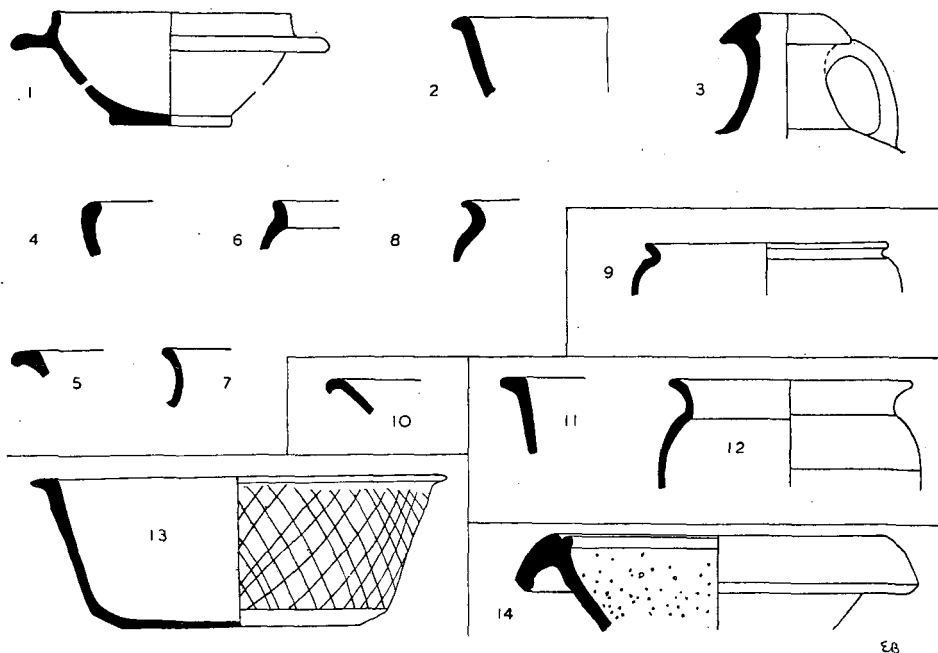


Fig. 31. Stratified pieces from various deposits. (1.)

at the front, beyond the stone kerbing. Rim fragment of a Samian platter, Curle's type 23 (an Antonine type).

11. XXII West, in the body of a buttress supporting the late east-west wall. Fumed flat-rim platter.

12. As No. 11. Grey-black fumed cooking-pot.

13. XXII East, underlying the secondary hearth (cf. fig. 15, above). Much of a grey fumed platter, of the deep chamfered type with flat rim, *Birdoswald* 65 and 66; the rim of the present example is a good deal coarser than on the Birdoswald bowls.

14. North of XXII East, sealed by the clay layer on which a side stone of the water-channel rested. Rim-fragment of a small mortarium in hard, red-brown ware, with a fine hæmatite slip on the rim; white

and brown grit. The type is well attested in third-century deposits on Hadrian's Wall; cf. *Poltross Burn milecastle*, pl. iv. 10 and *High House milecastle*, pl. xviii. 113, both in the same fabric as our No. 14, though belonging to larger and more open vessels; another example of the same form, though in a different fabric, has been found at Winshields milecastle (unpublished), as Mr F. G. Simpson has been good enough to inform me. There are two or three vessels of the same type included among the material found at Birrens in 1895 and now preserved in the National Museum of Antiquities (NMA, FP 108, 119), and another, found on Site VIII in 1936, is figured below, fig. 33, 1.

Fig. 32. Pottery from various sites.

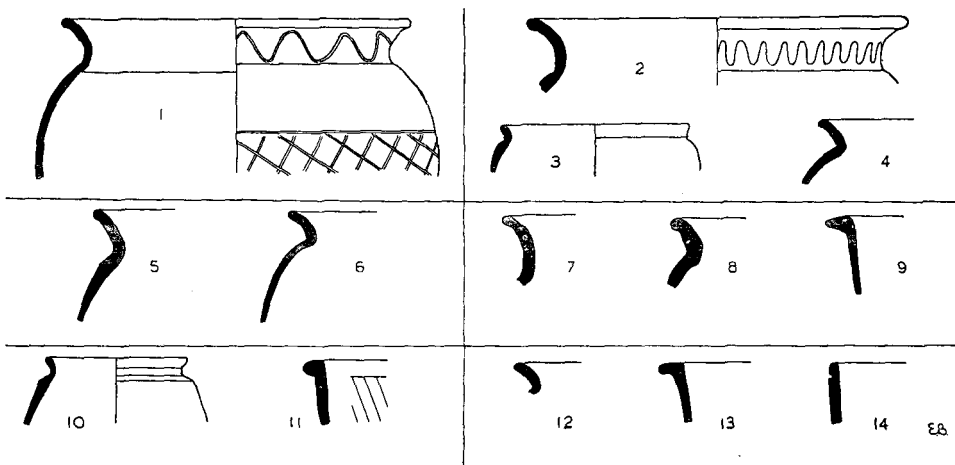


Fig. 32. Pottery from various sites. (1.)

1. 1937; unstratified, from east cut for early north ditch. A large piece from a cooking-pot with high, rather outbent rim. The exterior of the rim still shows the lightly scored wavy line, which is usually regarded as an indication of second-century date; but an example has occurred, on a somewhat similar rim, in an early third-century deposit at *Denton Hall turret* (pl. li. 13), and another in a third-century deposit at *Corbridge* (*Corbridge*, 1938, fig. 7, 14); and the hatching on the body of the vessel, at an oblique angle to the horizontal, and the horizontal scored line above the hatching, are normally met with on cooking-pots of the latter part of the third century and the first half of the fourth. This vessel cannot well be earlier than the third century.

2. 1937; Site XXII West, in the same layer as fig. 31, 1-8. Rim of a cooking-pot belonging to the same general type as the preceding

vessel; about 150 pieces of this and a similar pot were found here, too badly burnt and decayed for reconstruction to be practicable.

3. 1937; origin as No. 2. Rim of a beaker in black fumed ware; one piece has been badly burnt, another is unburnt.

4. 1937; origin as No. 2. Rim of a jar, in the hard, blue-grey ware characteristic of third-century deposits on Hadrian's Wall (cf. *Poltross Burn milecastle*, p. 451); for the sharply outbent rim, cf. *Denton Hall turret*, pl. li. 15, and *Corbridge*, 1938, fig. 7, 3 (these two vessels are both cooking-pots, and both come from third-century deposits).

5. 1936; unstratified. High-rimmed cooking-pot; cf. *Birdoswald turret*, pl. xvi. 21 (Period II); *High House milecastle*, pl. xviii. 120 (Period II).

6. 1936; unstratified. Grey jar, with outbent rim; cf. *Poltross Burn milecastle*, pl. iv. 24 (Period II).

7. 1937; Site XXII East, in or over the black occupation-layer overlying the roadway. Cooking-pot rim, of the same high type as No. 2 above, but lacking the wavy line.

8. 1937; origin as No. 7. Cooking-pot rim; cf. *Appletree turret*, pl. xvii. 83 (Period I B).

9. 1937; Origin as No. 7. Platter rim.

10. 1937; topsoil in section through east rampart. Beaker rim, in friable grey clay, probably burnt. Cf. *Birdoswald*, fig. 15, 42 (Period II).

11. 1937; origin as No. 10. Roll-rim platter.

12. 1937; topsoil in section north of XXII West. Outbent cooking-pot rim.

13. 1937; origin as No. 12. Flat-rim platter.

14. 1937; origin as No. 12. Platter rim.

Fig. 33. Mortaria from various deposits.

1. 1936; Site VIII, Level III+. About half a mortarium in hard, reddish-brown ware, with traces of hæmatite slip on the rim; the interior is thickly sprinkled with a crystalline grit; the spout has been broken off. This is a larger example of the third-century type discussed under fig. 31, 14 above.

2. 1936; Site VIII, Level III+. Mortarium in red-brown ware, once with a dark red slip on the rim; sparse white and brown grit. A somewhat similar rim occurred in Period I "mostly in debris" at *Poltross Burn milecastle* (pl. iv. 6).

3. 1936; Site VIII, Level III+. Light brown ware, with traces of a cream wash, and a name stamp, impressed twice, which I have been unable to decipher.

4. 1936; unstratified. Rim-fragment in rather rough, yellowish-drab

ware without any slip-coating. The fabric and rim-section together leave no doubt that this comes from a mortarium by the potter ANANVS or ANAVS, one of the Antonine potters whose work is most widely distributed in the north of Britain (cf. *Corbridge*, 1938, p. 276).

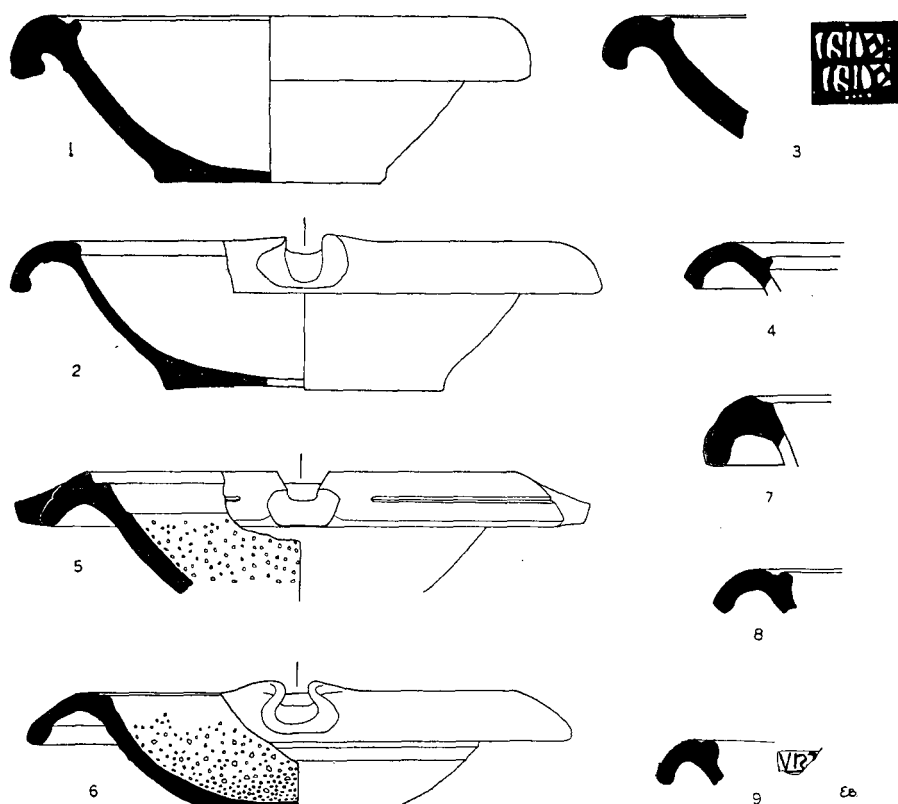


Fig. 33. Mortaria. (4.)

5. 1937; Site XXII West, unstratified. Much of a mortarium in red ware, with a thin, dark red glaze; the spout is small and neat, and there are two lugs or handles. There are one or two examples of the same type in the Corbridge collection; cf. *Wroxeter*, 1912, types 74, 78, where it is suggested that the type was introduced into Britain about the end of the first century, and lasted well into the second, "but their disappearance is not yet dated with any accuracy"; it is extremely uncommon in the north of Britain, and I cannot quote a stratified example; but there are

two or three represented in the material from the excavations of 1895 (NMA, FP 111, 114, and 117).

6. 1937; Site XXII West, unstratified. Hard yellowish buff ware, with brown grit; a potter's stamp is just amissing on either side of the spout; the vessel has been overbaked.

7. 1937; Site XXII East, unstratified. Hardish red ware, with hæmatite wash; cf. *Poltross Burn*, pl. iv. 8 (Period II).

8. 1937; north gate, unstratified. White pipeclay ware, with pink grit thickly sprinkled on a fragment from its base (not drawn). The fabric and grit recur on some examples of the well-known Constantian type of hammerhead mortarium, but the present rim hardly looks as late as that period.

9. 1937; XXII West, in the same deposit as the pieces illustrated in fig. 31, 1-8. Whitish buff ware, with part of the retrograde stamp of *Mossius*; there is a more complete example of the same stamp from Rough Castle (NMA, FR 341), and the potter's name is established by stamps from Lincoln (British Museum, cf. *B.M. Cat.*, M 2793; I have examined the piece myself) and *Wroxeter* (1912, No. 10).

Fig. 34. Four mortarium rims with makers' stamps, from earlier excavations at Birrens, are preserved in the National Museum of Antiquities, and are illustrated in this figure.

1. FP, without a number; stamped AVSTiNi MANu. Stamps of *Austinus*, from at least three different dies, occur at *Ambleside* (CW², xv. p. 56, where it has been misread), *Carlisle* (CW², xvii., pl. xvii. 3), *Corbridge* and *Chesters* (unpublished) in the north of England; and at *Newstead* (unpublished; NMA, no number), *Mumrills* (fig. 94, 1), *Bar Hill* (p. 70), *Balmuirdy* (pl. xl. B, 17 and 18) and *Camelon* (NMA, FX 231) in Scotland. This distribution makes it probable that the potter worked in the north of Britain, but there is at present no evidence sufficient to indicate the place where he worked.

2. FP 194, PSAS, xxx. p. 186; stamped]NANI. I have not yet met a parallel to this stamp.

3. FP 193, PSAS, xxx. p. 186, 2; stamped SARR in large letters. *Sarrus* used a large number of dies for his name-stamp, and his mortararia exhibit a wide variety of rim-types and fabrics; there can be no doubt that his period of activity was a long one. His stamps occur at *Lincoln* (British Museum, two examples; cf. *CIL*, vii. 1334.9), *Aldbrough* (*Reliquiæ Isurianæ*, pl. xxxiii.), *Corbridge* (many examples, as yet unpublished) and *Lanchester* (unpublished) in the north of England; and at *Newstead* (p. 266, 28), *Rough Castle* (p. 52), *Bar Hill* (p. 70), *Balmuirdy* (pl. xl. B, 11), *Camelon* and *Ardoch* (NMA, unnumbered) in Scotland. *Haverfield*

refers, with reserve, to the reported discovery of a stamp of this potter in a kiln at Hartshill in Warwickshire (*VCH Warwicks*, p. 246); the variety in fabric, already referred to, seems suitable for a potter working in forest country and moving from place to place in search of fuel.

4. FP 101; stamped GRATINI. I have not yet noted any rim on which the complete stamp of *Gratinus* occurs; in most cases the first part of it has been impressed on the rim, as here, while once or twice it is the first two letters that are missing. In contrast to Sarrus, Gratinus exhibits little variety in fabric or rim-section. His stamps have been recorded at *Templebrough* (No. 5), *Wilderspool* (*Warrington's Roman Remains*, p. 64, misread), *York* (CIL, vii. 1331.52, wrongly inserted among the amphora stamps) and *Corbridge* (unpublished) in England; in Scotland at *Newstead* (p. 266, fig. 35, 2, 10, and 11; NMA, FRA 1454, 1461, 1462) and *Balmuirdy* (pl. xl. 6).



Fig. 34. Stamped mortaria. (↓)

I have been unable to find the incomplete stamp]IAR, referred to in PSAS, xxx. p. 186, 3.

It is desirable to add a note on the general question of mortarium-stamps, which has hitherto been unduly neglected.¹ There have been two main tendencies: either to regard such stamps as having mainly local interest, as the products of potters merely serving their own restricted markets,² or to take cases of identity of name between makers of mortaria and makers of Samian ware as evidence for the manufacture of mortaria by the latter.³ Neither view is wholly incorrect; it is clear that many potters did serve a restricted market, for example *Satu(rninus)* of Corbridge, whose stamp occurs there and at Newstead,⁴ but has not yet been noted elsewhere: or the potter whose stamp IME· or CEF· or both in conjunction is at present restricted to six sites in Scotland.⁵ Again, the graffiti from La Graufesenque reveal that mortaria were made

¹ The best discussion which I have come across is that by Mr S. N. Miller, *Balmuirdy*, p. 79.

² So Haverfield in AA³, viii. p. 194; May, *Warrington's Roman Remains*, p. 60.

³ Ritterling, *Hofheim*, pp. 310-11; Oswald and Pryce, *Terra Sigillata*, p. 211; Macdonald and Curle, PSAS, lxiii. p. 527.

⁴ Cf. AA³, viii. p. 194, and *Newstead*, fig. 35, 25; the latter stamp (NMA, FRA 1477) is a far completer impression from the Corbridge die than the published drawing suggests.

⁵ *Newstead* (four), *Rough Castle* (one), *Ardoch* (two), *Camelon* (three); *Balmuirdy* (two), *Old Kilpatrick* (one). I have examined all but the last three stamps; drawings and full references will be given in a subsequent paper.

by many South Gaulish potters, in a period when mortaria in Samian ware are not met with.¹ But there are very few cases of apparent identity which will bear the test of a close scrutiny; and while a study of the distribution of mortarium-stamps will often (as in the case of *Sarrus*, above) show a far more than purely local market, it demonstrates that the stamps from second-century deposits in the north of Britain must be the products of British potters, even though there were Samian potters of the same names working in the same period. And in many cases there is a demonstrable disparity in date between the two potters whose identification has been attempted; thus, the *Sarrus* who made Samian ware is dated to the time of Nero,² while the mortarium-maker belongs to the Antonine period; the latter probably worked in Warwickshire, while his namesake had been a potter of La Graufesenque. Even where there is identity of period, identification is not by any means certain; for example, the Flavian mortarium-maker (*L. Atisius*) *Secundus*, to judge by the distribution of his products and by his *nomen*,³ worked in Gallia Narbonensis, and cannot be identified with the *Secundus* of La Graufesenque familiar to students of Samian ware; nor can *Albinus*, *Marinus* and *Matugenus*, who made mortaria in the Flavian period, be identified with the contemporary Samian potters of La Graufesenque, for their wares often bear the additional stamp *Lugduni factum*—"made at Lugdunum." In effect, then, it is not permissible to generalise; each case of apparent identity must be examined on its merits; but where I have made such an examination, the case for identification has usually fallen to the ground. It is clearly desirable that the mortarium-stamps from Britain should be properly collected, so that further light can be thrown on the other question, the distribution areas and working-places of the different potters; I have already obtained some very interesting results from a preliminary study of this kind, and hope to lay a paper on the Scottish material before this Society in the near future.

Fig. 35. 1937; in and close to the water-channel, west of the tank (fig. 13 and p. 307 above). Much of a very large storage jar in hard, whitish buff ware; its height was $17\frac{3}{4}$ inches, and maximum diameter $12\frac{1}{2}$ inches. Below the rim is a frilled strip; there is a double cordon round the neck, and a single one just above the lower attachments of the two handles; the cordons have been roughly decorated by notches cut with a wheel; and on the shoulder there are two parallel grooves, lightly incised and terminating a short distance from the handles. The

¹ Cf. Hermet, *Les graffites de la Graufesenque*, 1923, pp. 149-50 et al.

² Oswald, *Index of Potters' Stamps*, p. 281.

³ Cf. CIL, xii. 764, from Arles.

base is well formed, and has a groove demarcating the footstand on the under side. I have found no very close parallels to this handsome vessel, but there are some fragments with a similarly notched double cordon in the Corbridge collection, and cf. *Niederbieber*, type 73A, fig. 42

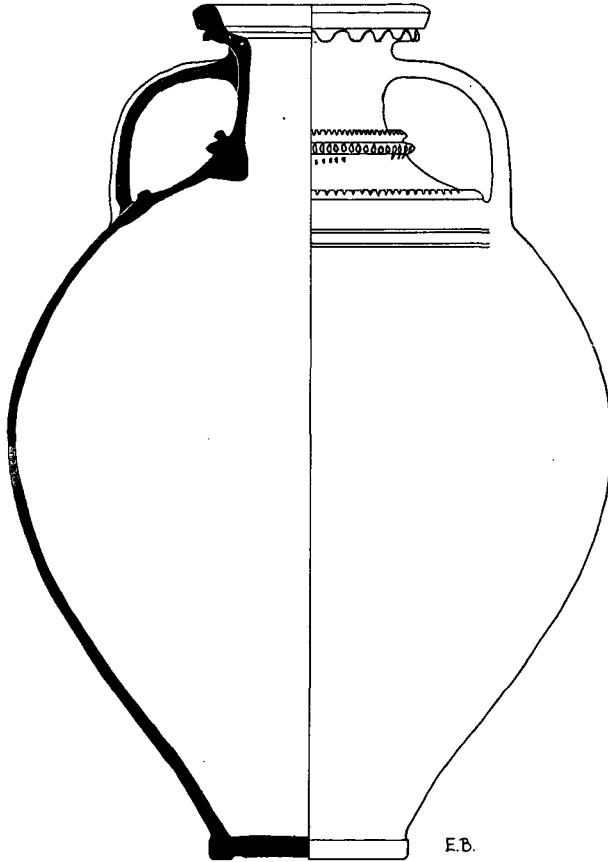


Fig. 35. (4.)

(a rather squatter vessel, with three handles, and somewhat similar incised cordons below the rim and on the shoulder), and *Caerleon*, *Archæologia Cambrensis*, 1932, fig. 57, 118 (only about two-thirds the size of the Birrens jar, rather different in fabric and in form, but with a frilled strip below the rim); the fabric seems not unlike that of the Colchester face-urns, which normally have similar frilling. Its find-spot shows that this jar can be assigned to the last structural period at Birrens. *Early fourth century.*

Fig. 36. Graffiti and potter's stamps on Samian ware.

1. 1936; Site VIII, Level III +. Owner's name, GAI—"the property of Gaius," scratched on the wall of the Samian cup, fig. 28, 2.

2. 1937; Site XXII West, overlying the filled-in ditch and sealed by later walls (*cf.* p. 300 and fig. 30, where other pottery from the same deposit is illustrated). Owner's name, apparently [V]ITALIS, scratched on the under side of a base fragment from a Samian platter of form 18/31.

3. 1936; Site VIII, Level III +. On a platter of form 18/31, burnt black in a wood fire: the first two letters of a potter's stamp, AE[. There are too many second-century potters whose names begin thus,

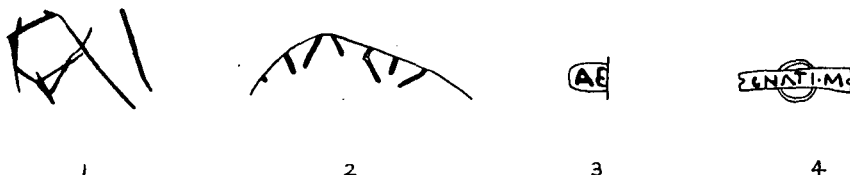


Fig. 36. Graffiti and potters' stamps on Samian ware. (3.)

for an attempted restoration of the name to be profitable; *cf.* PSAS, lxxv. pp. 433-34.

4. 1937; origin as No. 2. On a cup of form 33 (fig. 30, 1), the stamp GNATI·M. Gnatius is assigned conjecturally to La Madeleine by Dr Oswald in his *Index of Potters' Stamps*, p. 138; three other examples of his stamp, none of them complete, have been recorded from Scotland (PSAS, lxxv. p. 437); the forms made by him justify Dr Curle's attribution of his work to the Antonine period (*Newstead*, p. 229 with p. 236), but there do not seem to be any records of his stamp occurring in stratified deposits.

C. Glass.

Only one vessel was represented by a fragment large enough to permit a drawing being made; that was part of a hemispherical cup, in colourless cut-glass (fig. 37), found in 1936 on Site VIII, Level III +. The facets on this cup are rather more squat than on the straight-sided beaker, in similar technique, found at Birrens in 1895 (PSAS, xxx. p. 109). Cut-glass vessels in this style of decoration have a wide distribution, but do not seem to occur very commonly anywhere; *cf.* Dr James Curle's valuable discussion in PSAS, xxx. pp. 110-1, where a date late in the Roman period is suggested for the Birrens beaker. Since 1895, evidence has come to light which suggests the possibility of a considerably earlier

date; thus, Oelmann, in his monograph on the pottery from the Roman fort at Niederbieber in Upper Germany,¹ discussing this type of decoration, quotes a number of glass vessels of closely related form and assigns them to the latter part of the first century;² and an extremely close parallel to the 1895 piece has been found in a sealed deposit antedating the Trajanic reconstruction of the legionary fortress at Caerleon.³ But the evidence cited by Dr Curle is sufficient to demonstrate the persistence of the type into the late Roman period, and the stratification of the present piece does not accord with an early date: if it had been a stray from an earlier level, it could hardly have escaped breaking into fragments, for it is thin, delicate ware; it is probable, therefore, that it belongs to

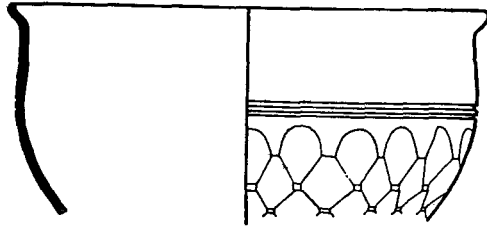


Fig. 37. ($\frac{1}{2}$.)

the vanished Level IV, like the mortarium, fig. 33, 1 and the cooking-pot, fig. 28, 7, and should be assigned to the third century.

The glass from the burnt deposit on Site VIII, Level II, included part of the footstand of a platter in colourless glass, and very many pieces from one or more rectangular bottles in greenish glass. It has not yet been possible to put together enough of the fragments to show the form of vessel represented, but there is a handle similar to that of *Hofheim*, type 12,⁴ and there are at least three plane surfaces ornamented with two concentric circles, flanked by single upright trees.

D. Bronze Objects.

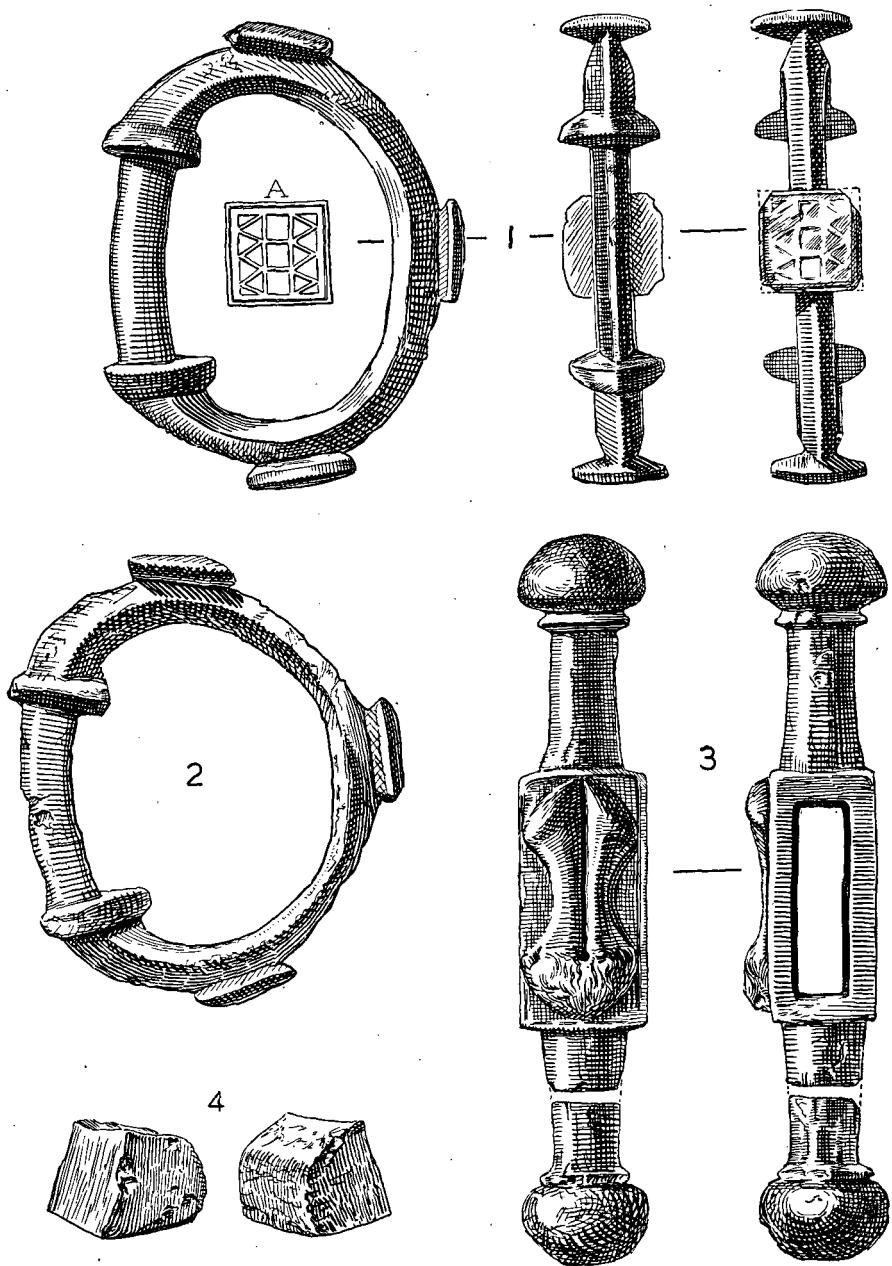
I had hoped to be able to include a full discussion of the bronze objects by our Fellow Mr H. E. Kilbride-Jones, but, since he has been prevented by pressure of other work from completing his contribution, it has become necessary for me to provide a brief description, which I hope that he will be able to supplement on another occasion, in the

¹ *Niederbieber*, p. 8; cf. also *PSAS*, lii. p. 219.

² The evidence cited by Oelmann does not appear decisive, but the Caerleon parallel proves his point.

³ *Archæologia Cambrensis*, 1929, fig. 18, 2.

⁴ *Hofheim*, pl. xxxviii. and p. 373; the Hofheim type, however, is not rectangular but cylindrical.



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Fig. 38. Bronze objects. (3.)

course of the wider study of the bronzes of native manufacture which is so badly needed.

With the exception of fig. 38, 4, an unstratified find made on Site XXII East in 1937, all the following objects were found in the burnt deposit, Level II, on Site VIII in 1936, and are therefore to be found now in the Dumfries Museum.

Fig. 38, 1 and 2. Terret rings, ornamented each with three square bosses once inlaid with enamel, traces of which remain, let into the geometric framework illustrated in fig. 38, 1 A. A third ring of the same type and probably from the same set was also found, in fragments. The type is a well-known example of native metal-work; cf. *Newstead*, p. 302; the decoration invites comparison with that on other categories of native craftsmanship.

Fig. 38, 3. Cheek-piece for a bridle; on the side is a decorative feature in relief to which, as Mr Kilbride-Jones points out to me, there are many counterparts on a variety of bronze objects found in the north of Britain.

Fig. 38, 4. Indeterminate object, perhaps a weight.

Fig. 39, 1. Ornamental stud for attachment to harness; there has been a central decoration, now missing, as the circular depression into which it fitted shows.

Fig. 39, 2. Handle from a small bronze jug. A more elaborate counterpart to this handle, from the Ruberslaw hoard found in 1863, is illustrated in Dr James Curle's paper on objects of Roman and Roman provincial origin, *PSAS*, lxvi., 1932, p. 367, fig. 51. Unlike the preceding items, this object is not of native manufacture; parallels may be found throughout the Roman world.

Fig. 39, 3. Bronze shoe for a wooden pole or shaft.

It is hardly necessary to stress the interest of this group of objects from Site VIII, as a homogeneous deposit assignable to the end of a period which (as is shown elsewhere in this paper) closed shortly before A.D. 158; but it seems worth noting that the terret rings and bridle-piece, while they attest the presence of mounted men, need not be taken to show the presence of a cavalry regiment at Birrens: for both the second cohort of Tungrians and *coh. I Nervana Germanorum* (the only other regiment known to have been in garrison there at some time¹) were *equitatae*.

¹ CIL, vii. 1063 and 1066.

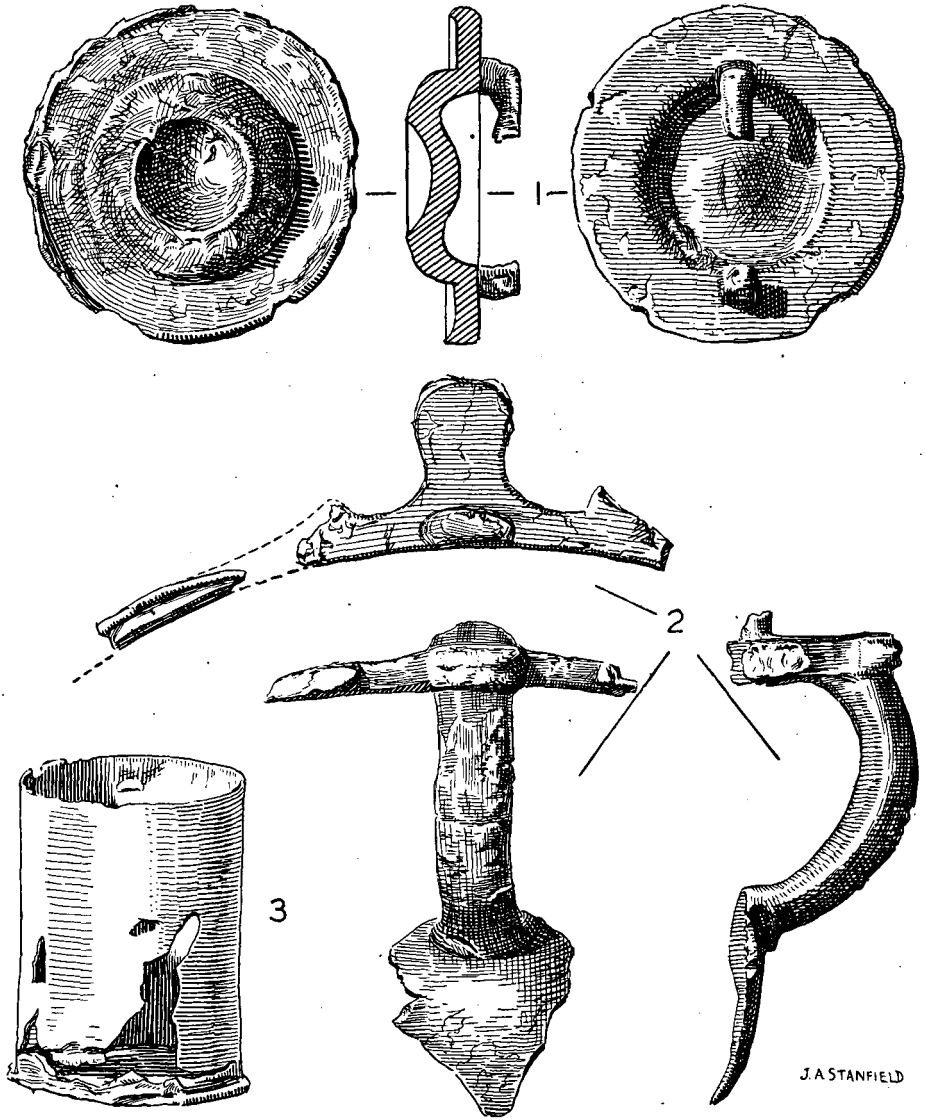


Fig. 39. Bronze objects. (1.)

E. *Inscription.*

The only inscribed stone was the upper part of a small altar, found in 1937 partly protruding above the turf on Site XXII West. The letters (fig. 40) are not deeply cut, and the text presents a difficulty in the last symbol in line 2; but it seems possible to obtain the following reading: *d(eo) Nept[un]o Cl(audius)* [. . . —“Claudius . . . (fulfils a vow) to the god Neptune.” It need occasion no surprise to find a dedication to Neptune at an inland site like Birrens; compare Sir George Macdonald’s observations on the altar, similarly dedicated, from Castlecary.¹

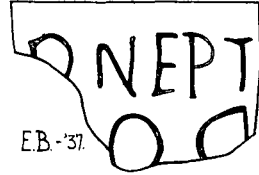


Fig. 40. (½)

F. *Coins.*

Only one coin was found in 1936, a bronze one so far decayed that nothing could be made of it. The excavations of 1937 were more fortunate, producing eleven coins in all (as many as are recorded in the report on the excavations of 1895); but all of them were in poor condition, and only six could be deciphered. I am indebted to Mr W. Percy Hedley for the following list:—

No.	Find-spot.	Denomination.	Identification.	Date.
1	XXII East.	Denarius.	Trajan (M. 98, C. 120).	A.D. 103-111.
2	N. rampart.	Denarius.	Trajan (M. 331, C. 190).	A.D. 114-117.
3	XXII East.	Sestertius.	Trajan.	
4	XXII East.	As.	Trajan.	
5	XXII West, in black layer.	As.	Antoninus Pius (M. 934, C. 117).	A.D. 154-155.
6	XXII East.	As.	Antoninus Pius (M. 934, C. 117).	A.D. 154-155.
7	N. rampart, below outer cheek.	As.	Illegible.	
8	XXII West.	As.	Illegible.	
9	XXII West, in black layer.	Denarius.	Illegible.	
10	XXII East.	Denarius.	Illegible.	
11	S. of XV.	Denarius.	Illegible.	

It will be seen that no further light is thrown on the occupation of the fort by any of these coins; Nos. 7 and 9, if they had been decipher-

¹ RWS², p. 422; cf. also Domaszewski, *Abhandlungen zur römischen Religion*, 1909, pp. 19-21.
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able, might have been of value, but the coin of Antoninus Pius, coming from the same layer as No. 9, is clearly a good deal earlier than the terminal date of the deposit in which it was found (*cf.* p. 346, below).

It remains to mention two coins shown to us by Mr A. Cunningham of Larchcroft, Ecclefechan; they are said to have been found during the excavations at Birrens in 1895 by one of the workmen employed there, from whose daughter Mr Cunningham acquired them. The first, a worn bronze of Domitian, is nothing out of the ordinary, but the second is an *antoninianus* of the Gallic usurper Victorinus, A.D. 268–70. Since the pottery found in 1936 and 1937 includes material sufficient to show that the fort was occupied throughout the third century, there is no need to question the attribution of this coin to Birrens, though it must be admitted that its credentials might have been better.

Mr Cunningham also showed us a coin found about 1935 in repairing a stone dike at Dockenflat, near Ecclefechan, which it will be convenient to place on record here. It is a bronze coin of Maxentius, in mint condition; obverse, MAXENTIVS P F AVG, reverse CONSERV VRB SVAE, mint-mark PT.

VII. CONCLUSIONS.

A correlation between the structural periods observed at Birrens and the successive phases of the Roman occupation of the north of Britain may not yet be attainable with certainty, but it seems necessary to attempt one, if only to show in what respects our evidence requires to be supplemented. It has been shown that there is still uncertainty, at Birrens itself, as to the precise relationship between the periods of the rampart and those of the internal buildings, and between the levels in the unenlarged fort and those in the northward extension; the following attempt to define the relationship, and to connect the various periods with the general history of the Roman occupation, is put forward with all reserve.

In the first place, it will be convenient to emphasise the distinction between the evidence relating to the north of Britain in general, and that derived from Birrens itself, for the historical framework into which the structural periods have to be fitted; the latter category is the simpler, and may be summarised first. Apart from a piece or two to suggest the possibility of an Agricolan occupation,¹ the pottery series starts with the time of Hadrian and continues up to the close of the third century, while one late third-century mortarium,² underlying the water-channel inside the north rampart, shows that the latest structural period may be

¹ *Cf.* pp. 290, 321, above.

² Fig. 31, 14.

assigned to as late as *circa* A.D. 300. Within the period of nearly two hundred years so defined, there are as many as four periods of stone buildings and (if it does not belong to the Agricolan occupation) one of wood, to be correlated with historical changes; but while the stratified pottery, as has been shown, suggests a partial time-table, Birrens itself has only produced direct evidence for the date of one such change, namely, the inscription of A.D. 158. In order to resolve the problem, we must turn to the general evidence already referred to.

The complexion of the pottery series allows us to begin our survey with the building of Hadrian's Wall, *circa* A.D. 122. At that time a number of forts were constructed, not in immediate touch with the new *limes*: in particular, the outposts at Bewcastle, Netherby and (as we are now in a position to add) Birrens itself. It may be noted that the excavations recently conducted at Bewcastle by Mr Richmond show the Hadrianic fort there to have had buildings of timber,¹ like the mile-castles westward from the Irthing on Hadrian's Wall,² and perhaps the first fort at Castlesteads;³ this might be taken to support the view that the initial timber period at Birrens should be assigned to the time of Hadrian and no earlier.

The next stage comes with the reoccupation of the north of Britain, up to and beyond the isthmus between Forth and Clyde, by the governor Lollius Urbicus in the early years of Antoninus Pius; at this time stone forts, later retained as outposts of Hadrian's Wall, were built at Risingham and High Rochester:⁴ there is considerable evidence to show that a rearrangement of garrisons took place in the forts of the Hadrianic frontier zone:⁵ and it is conceivable that, on such an occasion, it may have been found convenient to replace timber buildings by buildings of stone in a fort like Birrens, to suit the requirements of a fresh regiment. But it should be noted that no such change occurred at the nearby fort of Bewcastle.

After the governorship of Lollius Urbicus, the available evidence falls into two groups, associated with the Hadrianic and Antonine frontiers respectively.

*Hadrian's Wall.*⁶—Here the first period, inaugurated twenty years previously, continues as far as the forts are concerned without interruption until the close of the second century, when a destruction occurs which can now be assigned to the year 196, when Clodius Albinus was defeated in Gaul by Septimius Severus and the latter's first governor of Britain,

¹ CW², xxxviii. pp. 195-237.

² Cf. JRS, xxv. pp. 1-18, especially p. 8.

³ CW², xxxiv. p. 164.

⁴ AA⁴, xiii. pp. 170-98.

⁵ Cf. JRS, xxii. pp. 55-59; AA⁴, xii. pp. 199-200.

⁶ Cf. CW², xxx. pp. 199-202; AA⁴, vii. pp. 167-69.

Virius Lupus, found it necessary to buy off the Mæatae, who had created the widespread havoc to which each fresh excavation bears added testimony. The second period opens with the reconstruction by Virius Lupus and his successor Alfenus Senecio, and closes in a comparable destruction at the end of the third century, when the usurper Allectus was engaged in his unsuccessful struggle against the Cæsar Constantius Chlorus; and the building-record found at Birdoswald in 1929 allows us to place the beginning of the third period *circa* A.D. 300, as the work of Constantius Chlorus himself.

Thus far Risingham, High Rochester, and Bewcastle can be shown to have experienced the same historical sequence as Hadrian's Wall, but in the fourth century a divergence occurs. The third Wall period ends in destruction by the Picts in A.D. 367; at Risingham and Bewcastle the pottery series reaches up to (but not beyond) that year, but there is an intervening destruction followed by rebuilding, which it seems justifiable to assign to the expedition of Constans in A.D. 343; at High Rochester, on the other hand, the pottery series does not extend so far, there is no such rebuilding, and it seems that the site was omitted from the reconstruction carried out by Constans. In view of the lack of late pottery from Birrens, it may well be that it shared the fate of High Rochester; we will be justified in putting forward *circa* A.D. 340 as the latest date for its occupation by the Romans. But whereas High Rochester has three structural periods to cover the years from *circa* 140-340, Birrens has at least four and, as we have seen, may have five. If it had been four only, it would have been a simple matter to suggest that the rebuilding in A.D. 158, without a counterpart at High Rochester, explains the difference; but we must return to the question presently.

The fourth and closing period of Hadrian's Wall, opening with reconstruction by Count Theodosius in A.D. 368-9, and continuing at least until the usurpation of Magnus Maximus, has no known counterpart on any site to the north of the Wall, so that it need not detain us further.

The Wall of Pius.—When we turn to consider the history of the Antonine frontier, we are on sure ground in stating that it falls into three structural periods, but the attribution of those periods is open to question. The most recent view is that put forward by Sir George Macdonald, in the second edition of *The Roman Wall in Scotland*,¹ where the periods are assigned to the following time-table: I, *circa* A.D. 142-155/8; II, *circa* A.D. 158-181; III, *circa* A.D. 184-185. But that view is so largely based² on an interpretation of the history of Birrens which has been shown by

¹ RWS², pp. 478-82.

² RWS², p. 478.

the recent excavations to be untenable, that it will be necessary to consider the evidence afresh.

We may start our reconsideration with a statement of principles. In any case of conflict between literary and archæological evidence, the latter clearly needs to be examined with great care before it can be allowed to override the former; and if the conflict is between positive literary evidence and the negative evidence of archæology, it will need an overwhelming argument to justify disregard of the literary record. Such a conflict exists in relation to the Roman occupation of Scotland, and the negative archæological evidence has been generally permitted to override that of our literary sources.

Briefly, the key-stone of the current archæological interpretation is the absence of coins later than the time of Commodus from all Roman forts in Scotland, with the exception of Cramond; this absence is held to justify the view that, with that exception, none of those forts was occupied in a later period.¹ At first sight the argument may seem a sound one; but it should be remembered that the total number of coins from the Antonine Wall is not very great, and it may be useful to point to the case of Housesteads fort on Hadrian's Wall, where the excavations of 1898 produced as many as 129 coins, which did not include a single one between the time of Commodus and that of Elagabalus;² yet that fort continued in Roman hands until the close of the fourth century, and it has produced fragments of a Severan building-inscription.³ And when we turn to the literary evidence, which has been unaccountably neglected, it seems to make it certain that Roman Scotland was reoccupied for at least four years, from A.D. 207 until 211.

In the former year, as Cassius Dio records,⁴ Severus in Rome was greatly disturbed because he was unable to put a stop to the activities of a notorious brigand in Italy, at a time when his generals were winning victories in Britain. The scene of those victories is not recorded, but it can hardly have been south of Cheviot; for the building-record from Risingham, dated *circa* A.D. 205,⁵ shows that reconstruction was already in progress there—and it is perhaps significant that the work is described as being under the superintendence of the procurator, Oclatinus Adventus. The inference seems justified that the governor, Alfenus Senecio, had entrusted the work of reconstruction to the procurator, while he himself followed the tide of campaigning further north. There is no question that it was farther north that Severus and Caracalla conducted their campaigns against the Mæatæ and the Caledonians, with the avowed

¹ RWS², p. 480; PSAS, lii. p. 275.

² AA⁴, ix. pp. 233-34.

⁴ Book lxxvi. 10.

² AA², xxv. p. 298.

⁵ CIL, vii. 1003.

object of conquering the whole of Britain;¹ and, after the death of Severus in A.D. 211, we learn that Caracalla made peace with the enemy and withdrew the garrisons from their territory.²

When we find the archæological evidence from the forts on the Antonine Wall showing a brief final occupation, ending in peaceful withdrawal, it seems difficult to resist the conclusion that this occupation should be assigned to Severus and the withdrawal to Caracalla, as the literary sources suggest, and that the absence of coins of Severus is as much an accident there as at Housesteads.

In that case we are left with two structural periods to cover the interval between A.D. 142 and the Severan reoccupation; and, in view of the evidence available, it seems possible to suggest two alternative time-tables. (1) If Ulpius Marcellus reoccupied the northern *limes* in A.D. 184,³ the second period will presumably have ended in the same destruction as overtook Hadrian's Wall in A.D. 196; and that leaves A.D. 142–181 for the first period, which terminates in the barbarian incursion recorded by Cassius Dio.⁴ In that case the reconstruction at Birrens in A.D. 158 will have had no counterpart on either Wall, and the historical explanation for it must be sought in the immediate neighbourhood—a possibility which is not weakened by the geography of the area. (2) If Marcellus contented himself with drastic punitive operations,⁵ and reverted to the Hadrianic frontier system, leaving the Antonine *limes* unoccupied, we are at liberty to look for an occasion between A.D. 142 and *circa* 181 for the end of the first and the beginning of the second period; and that occasion might well be contemporary with the need for reconstruction at Birrens, though it may be doubted whether there was any necessary connection between events in what is now Dumfriesshire and on the northern *limes*.

The Periods at Birrens.—It appears, then, that there were two structural periods in the forts of the Antonine Wall between A.D. 142 and the end of the century, as against the single period on Hadrian's Wall. High Rochester, Risingham, and Bewcastle are in the same case as the latter, while Birrens, with the reconstruction of A.D. 158, seems to compare more closely with the former. It is time to consider whether we can arrive at a closer correlation of the periods at Birrens.

(1) *The First Period.*—This is marked by the timber buildings of which traces were found below Sites XIX West and VIII. In favour of an Agricolan date is the apparent difference in alinement noted on

¹ Cassius Dio, Book lxxvi. 13.

² Cassius Dio, Book lxxvii. 1; *cf.* Herodian, iii. 15, 6.

³ *Cf.* RWS², p. 479.

⁴ Book lxxii. 8.

⁵ *Ibidem.*

the latter site; the cooking-pot rim in the Dumfries Museum¹ seems clearly pre-Hadrianic, and the Samian bowl from this level² might belong to the same period, of which Curle 11 is one of the most characteristic types. On the other hand, it has been pointed out that there is no need to postulate a date earlier than Hadrian for that particular piece, and the fact that the Hadrianic forts at Bewcastle and perhaps Castlesteads were of timber may seem to justify assigning the first period to that emperor. Further deep digging, within the area where timber buildings have been noted, is plainly required to settle the point.

(2) *The Second Period.*—The timber buildings are replaced by stone barracks in alinement with the existing ramparts; if the inference drawn from the position of the post-holes on Site VIII³ is correct, the first period in the section through the west rampart, and the early north rampart, will belong to this period. The small yield of pottery from Level II on Site XIX West, and from the lowest level on Site XXII West, is consistent with an attribution of this period to the years *circa* 122-158, but here too further pottery is required to confirm the dating.

(3) *The Third Period.*—This brings the reconstruction of Level III on Sites XIX West and VIII, the latter yielding a fair amount of late second-century pottery;⁴ the material found underlying the visible north rampart⁵ justifies placing the extension of the fort, and with it the second rampart-period in the west section, and the first stone buildings on Site XXII, in this period, which may be dated A.D. 158-*circa* 196. It should be observed that pottery evidence from the first period of the northward extension is still badly needed; at present the platter from Site XXII East⁶ is the only piece.

(4) *The Fourth Period.*—This period opens with the Severan reconstruction, as the deposit sealed below Level IV on Site XIX West,⁷ and pieces from Level III + on Site VIII⁸ and the second level on Site XXII East,⁹ allow us to infer. It seems reasonable to assign the thickening and refacing of the north rampart to the same period,¹⁰ particularly because there is a later structural phase there, which must be reserved for the final period.

(5) *The Fifth Period.*—The beginning of this period is to be assigned to Constantius Chlorus, on the strength of the mortarium found underlying the water-channel near the north rampart,¹¹ and the cooking-pot

¹ Cf. p. 290, above.

² Fig. 26, 1.

³ Cf. p. 292, above.

⁴ Cf. fig. 28 and fig. 33, 2-3.

⁵ Figs. 22, 23, and 29.

⁶ Fig. 31, 13.

⁷ Fig. 27.

⁸ Figs. 28, 7 and 33, 1.

⁹ Fig. 31, 9.

¹⁰ Cf. p. 305, above; the Samian rim, fig. 31, 10, which is clearly an Antonine type, was found in the bottom of the turf revetment at the outside, where it appears to represent a refacing; this was the only stratified evidence for the second period of the north rampart, for the remaining pieces were sealed by its original structure.

¹¹ Fig. 31, 14.

rim among the debris overlying Level IV on Site XIX West.¹ Much of the "secondary" work detected in 1895 probably belongs to the same period, whose maximum extent may be put as from *circa* A.D. 300 until 340; the aqueduct, and the third period in the north rampart, belong to the same stage.

The situation on Site XXII West still presents some difficulty. There we have three surviving levels subsequent to the extension of the fort, and of these the second has produced the pottery illustrated as figs. 24, 3 and 4; 31, 1-8; 32, 2-4; and 33, 9. The detailed discussion of that material shows that the bulk of the pieces can be paralleled in the latter part of the second century rather than in the third; yet on the above consideration of the periods at Birrens the first stone buildings, at the underlying level, ought to belong to that period. There are two alternative explanations to put forward. (a) It has been noted that no pottery was found at the same level as the first stone buildings,² and that they were largely reduced to their clay and cobble footings. It seems possible that, at the Severan reconstruction, all the structures in this area were demolished and the debris was then spread evenly over the site before fresh buildings were put up, the top layer of the spread being composed of occupation material from a neighbouring building. (b) Less likely is the suggestion that the pottery should be taken to show the persistence of the types concerned into the third century, though there are certainly one or two pieces for which a third-century date seems preferable.³ Here, too, further digging is urgently needed to settle the problem.

Summary.—The occupation of Birrens did not end, as had been supposed, before the close of the second century, nor was it confined to two structural periods. On the contrary, there were five such periods, carrying its occupation at least from the time of Hadrian, and perhaps from the governorship of Agricola, until some time in the first half of the fourth century. Further excavation is required to fix the apportionment of those periods to the phases of the Roman occupation, and to the structural sequence in the rampart and on different sites in the interior; but it seems justifiable to put forward the following provisional time-table:—

Period I: a fort with timber buildings, on a different alinement to the fort now visible. *Circa* A.D. 80.

Period II: the first stone fort, with turf rampart lacking a foundation, over fifty feet shorter than its successor. *Circa* A.D. 122-158.

¹ Fig. 26, 4.

² *Cf.* p. 299, above.

³ Fig. 32, 2-4.

Period III: the fort enlarged, and the buildings not within the extension reconstructed. A.D. 158-196.

Period IV: reconstruction of rampart and internal buildings. *Circa* A.D. 205-297 (=Period II on Hadrian's Wall).

Period V: further reconstruction, and the provision of the water-supply system recently detected. *Circa* A.D. 300-340 (=the penultimate period at Bewcastle, the last period at High Rochester, and the first part of Period III on Hadrian's Wall).

And, in view of the considerations advanced above, it seems likely that the explanation of the reconstruction required in A.D. 158 is to be sought in the history of the immediate neighbourhood rather than in the main course of events affecting the Antonine Wall, where two structural periods of second-century date are to be observed, or Hadrian's Wall, where there is only one.