III.—SECOND-CENTURY DEFENCES AT CORBRIDGE.

(i) THE EAST RAMPART.

By J. P. Gillam.

The purpose is to summarize all the evidence available for the lines of the successive east ramparts of the second-century fort, and to describe in detail one of a number of sections cut across their lines.

Background.

After the large and distinctively planned Flavian fort had been burned down, a new fort was built on its site, not long after A.D. 103.[1] This fort, appropriate in size for five hundred cavalry, faced south. Its ramparts were of turf; its gates, and all its internal buildings except the chapel of the H.Q., were of timber.[2] The east and west ramparts lay immediately within what is now the Ministry of Works' guardianship area; their inner faces, measured along the back of the central range, were some 400 feet apart. In Hadrian's reign buildings in the *retentura* were replanned,[3] but the ramparts seem to have remained unaltered. In A.D. 139 and 140 the fort was completely reconstructed; in the *praetentura* and the central range stone or part-timbered buildings replaced those wholly of timber. The same line was retained for the west rampart, which remained substantially unaltered; the east rampart was however completely reconstructed on a new line. Excavation during the past four seasons has revealed the probable reason for this difference in treatment.

[1] *AA*[4] xxxiii, 231. [2] *AA*[4] xxx, 243.
[3] *AA*[4] xxxi, 212; the Hadrianic buildings are there identified as Flavian III.

Summary of the investigation (fig. 1).

The investigation of the eastern defences began in 1910 when two defensive ditches were discovered east of site XI.[4] They ran roughly north and south, and were parallel to each other, but they lay at an angle of 3° to the east side of site XI, being closer at the north than at the south. Both ditches were 18 feet wide and six feet deep; they were 55 feet apart, and the innermost lip lay 58 feet east of the north-east angle of site XI. Early second-century figured samian was found in each, but as the material of the filling was different the ditches were probably not strictly contemporary. The area between the ditches and site XI was also examined in 1910; the filled trenches of that season have frequently been encountered in recent years. But, to quote the report, "hopes were disappointed", and "efforts failed to find any trace of a building of the same importance as the *forum* and the granaries". If this is what was being sought it is hardly surprising that the remains of the ramparts were not recognized.

The innermost 11 feet of the early Antonine rampart was discovered in 1946, during investigations under and behind the H.Q. of the later east compound. This was the first occasion on which any portion of the defences of the second-century fort had been discovered and recognized for what they were.[5] There was however no trace of the Trajanic rampart. This was first encountered on the west side of the fort in 1948.[6] In 1951 the Trajanic east rampart was found on site XLIV;[7] there could be no doubt of its date for it was overlain by early Antonine rampart material and by second Antonine buildings, while it bore no possible relationship to the planning of the Flavian fort. It was founded on a corduroy of logs 20 feet wide; the logs were laid roughly at right-angles to the line of the rampart, but at an angle of 78° to the east side of site XI, instead of the expected 87° or 90°.

[4] *AA*[3] vii, 165.
[5] *AA*[4] xxviii, 172.
[6] *AA*[4] xxviii, 176; it is there described as Flavian.
[7] *JRS* lii, 90.

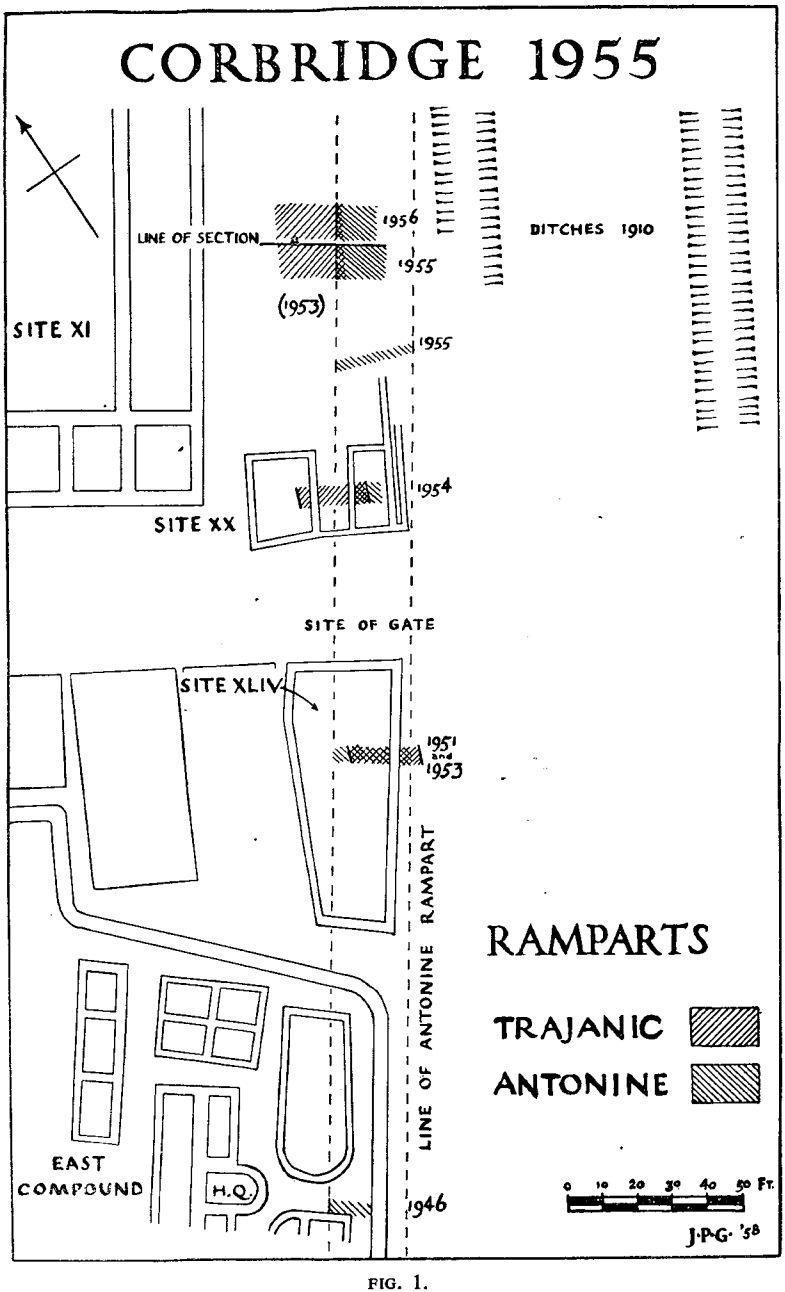
CORBRIDGE 1955
LINE OF SECTION
1956
1955
(1953)
1955
DITCHES 1910
SITE XI
SITE XX
1954
SITE OF GATE
SITE XLIV
1951
1953
LINE OF ANTONINE RAMPART
RAMPARTS
TRAJANIC
ANTONINE
EAST
COMPOUND
H.Q.
1946
0 10 20 30 40 50 Ft.
J.P.G. '58

FIG. 1.

The outer face of the rampart fell six feet east of the east wall of site XLIV. At this eastern end of the trench further rampart material was encountered, at a higher level than both the reduced Trajanic rampart and its early Antonine successor. This material was a yellow clay which contrasted with the turfwork or mixed material of the earlier ramparts; it continued still further east than the outer face of the Trajanic rampart. Insufficient is known about it to attempt a final interpretation, but it might be regarded as the tail of a second Antonine rampart.

The mutual relationship of the two earlier second-century ramparts was still far from clear, but the angle of the corduroy provided an explanation of the absence of the Trajanic rampart from the section, cut in 1946, 130 feet further south, for a line drawn from the inner face of the Trajanic rampart on site XLIV, at right-angles to the corduroy, would pass some 12 feet east of the east end of the 1946 section.

Little was added to what had been learnt in 1951 by further work on site XLIV in 1953; in the same year work was begun, for the first time since 1910, east of site XI and north of site XX, but was confined to the investigation of Antonine buildings. In 1954 a section across site XX and the ramparts beneath it threw fresh light on their mutual relationship as well as on the later history of the site.[8] The inner and outer faces of the Trajanic rampart were precisely determined, and in the eastern part of the section early Antonine rampart material was identified.

Since then, three further sections have been cut across the ramparts north of site XX, two in 1955 and one in 1956. In all three sections the surviving portion of the early Antonine rampart had a foundation of cobbles; this feature was absent from site XX, site XLIV and the east compound, though there can be no doubt that one and the same rampart was encountered in all six sections. This foundation made it possible to determine the line of the inner edge of the rampart with complete precision in all three sections. In

[8] *AA*[4] xxxiii, 224.

the more southerly 1955 section the outer edge was also reached immediately within the boundary fence of the guardianship area. No convincing trace of the Trajanic rampart was found in this section, though further north, both in 1955 and 1956, Trajanic rampart material was found behind the Antonine rampart and the line of its inner edge was approximately determined. Thus actual remains of the early Antonine east rampart have now been identified at six separate points in a stretch of 280 feet; the width, 21 feet, has been determined at one point; the precise inner edge has been determined at four points, and all lie on the same straight line, almost exactly parallel with the east side of site XI.

While the general line of the early Antonine east rampart may thus be laid down with some confidence, actual remains of the Trajanic east rampart have so far only been identified at four points in a stretch of 150 feet; the precise inner and outer edges, 19 to 20 feet apart, have been determined at two points. Its line cannot be laid down with the same confidence as that of its successor, but it is at least certain that the east and west ramparts of the Trajanic fort were not parallel to each other and that the fort was narrower at the north end than at the south. A similar error in setting out had made the Agricolan fort at Fendoch 18 feet narrower at the west end than at the east.[9] At Corbridge the *via principalis* was at right angles to the west rampart, and such internal buildings as are known were aligned on the road and the west rampart, not on the east rampart. In early Antonine times the error was evidently corrected by the complete reconstruction of the east rampart on a new line parallel with the west rampart.

The more northerly section cut in 1955 (fig. 2).

The cutting of the section was begun by Mr. S. H. Bartle and Dr. Norman McCord in June 1955; it was continued during the University's annual training course in July, and

[9] *PSAS* lxxiii, 114.

also during the Durham Colleges' extra-mural summer school in August, under Mr. Iain MacIvor; it was completed in September of the same year. Three holes, each ten feet square, were set out, in a line from east to west, with three-foot baulks between them. The baulks were removed when it was found that all the structural features, ramparts, stone walls and construction trenches, ran from north to south. This left a trench ten feet wide and 36 feet long, from the lip of the slope down to site XI to just within the boundary fence. The ground was everywhere much disturbed by earlier excavators' trenches, though they interfered with the northern face of the trench at only one point, and it is the section on this face which has been drawn. Hardly any stratified pottery was found, but what was has been taken into account in arriving at the date of the structures, though it is neither drawn nor explicitly described.

The section is described from top to bottom; the letters in round brackets in the text correspond with the letters on various features in the section on fig. 2.

Post-Roman.

The ground level in the eastern 16 feet of the section was approximately the same as that in the field immediately to the east. Here a layer of rich brown topsoil (A) survived to a depth of from eight to ten inches, doubtless the consequence of cultivation between the last archæological investigation of the site and its handing over into the Ministry's guardianship in 1934; it ran uninterruptedly over a typical filled trench from the 1910 excavation (B). This was fairly straight and had been dug, with almost vertical sides, down for about five feet, from topsoil to subsoil, removing in the process part of a second Antonine flagged floor, and part of the cobbled foundation of the early Antonine rampart. In the western 20 feet of the section the ground had been levelled by the Ministry's staff as part of the layout for display, and the recent humus (A) either wholly removed or reduced to a shallow layer. The shallow layer of humus also overlay a dis-

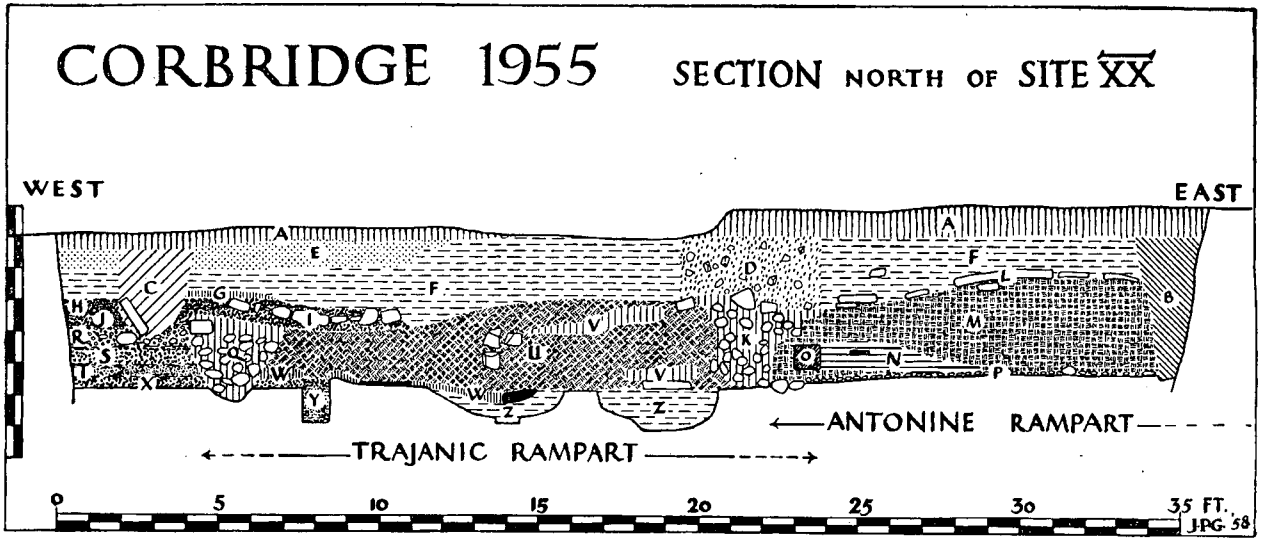

FIG. 2.

A. Topsoil; B. 1910 trench; C. Field drain; D. Robber trench; E. Gravel; F. Dried mud; G. Clay; H. Late second-century road; I. Building debris; J. Antonine II road; K. Antonine wall foundation; L. Antonine II floor; M. Antonine I rampart; N. Light grey material; O. Timber; P. Rampart foundation; Q. Antonine I wall foundation; R. Antonine I road; S. Hadrianic road; T. Trajanic road; U. Trajanic rampart; V. Clay; W. Clay and burnt wattle; X. Flavian gravel; Y. Flavian sleeper trench; Z. Depressions.

turbed strip (C), two feet wide, running from north to south, the full width of the ten-foot trench. It was three feet deep and had cut down into Roman levels without reaching the undisturbed sandy subsoil. It had none of the characteristics of an excavator's trench, for it was round bottomed and filled with compact light brown clayey soil, containing a few small stones, with larger stones at the bottom. While the feature is earlier than twentieth-century ploughing it is later than two other post-Roman layers and is probably a fairly recent field drain of the kind frequently met on excavations on virgin sites, though naturally rare at Corbridge. A little to the east of the centre of the section a third disturbance (D), rather more than four feet wide and of different character from the other two, led down from the bottom of the modern humus to the top of the surviving Roman structure, three feet below present ground level; it ran from north to south, the full width of the ten-foot trench. The filling was more mixed than that of the excavator's trench and included fragments of freestone, but it was more compact, which suggested that it was of some antiquity. It was clearly a robber trench from which the masonry of the second Antonine wall had been removed. As it cut through post-Roman layers it was obviously itself of post-Roman date, and this implies that the ruins of the second Antonine building were not completely swept away in the reconstructions of the third and later centuries, for sufficient remained to attract the attention of post-Roman stone-robbers, and to make their work worth while.

For 12 feet at the west end of the section a layer of very gravelly soil (E), some eight inches thick, underlay the humus and was cut through by the field drain; the level was clearly post-Roman and doubtless composed of material derived from a late Roman road surface elsewhere on the site, disturbed by early ploughing, and filling up a hollow behind the running mound of soil which overlay the reduced, but still compact, second-century ramparts. Immediately below this level was a layer (F), from one to three feet thick, running

along the whole length of the section, except where interrupted by field drain, robber trench and excavator's trench. As this lay immediately over structure datable to the second Antonine period, it was natural to ask if it were of Roman date. It was however composed of light grey-brown soil with the character and consistency of dried mud, and it could have had no structural significance in the third or any other century. The third-century and later levels had then been removed by natural weathering, and the second-century levels denuded, on this part of the site, which stands high in relation both to site XX to the south and to site XI to the west; this surely accounts for the absence of the deposit of charred wattle, fired daub and broken pottery, assignable to the destruction of A.D. 196. This deposit was found in 1953 as the highest surviving level, 15 feet south of the present section, and again in 1954, as the propenultimate surviving level 70 feet south.[10] A subsequent deposition by wind and rain of material derived from still further north-east partly buried the upstanding remains of the second Antonine wall.

Antonine II.

At the west end of the section as many as six separate layers of artificially laid gravel, of a total thickness of nearly three feet, were encountered above the subsoil of orange sand and below the layer of grey-brown soil. At one point a patch of clay (G) overlay the uppermost surface but its significance remains in doubt. The uppermost two layers of gravel had been cut through by the field drain which had gone down as deep as the third. The two uppermost were remarkably similar to each other in their orange colour and in the size of the pebbles. The layers were nevertheless distinct from each other, and the upper peeled off easily and accurately from the lower, leaving a compact surface of pebbles worn and flattened by the long continued tread of shod feet. As

[10] *AA*[4] xxxiii, 224.

both layers overrode the clay and cobble foundation of a demolished early Antonine building, they both belonged to the same main structural phase. The lower layer (J) was doubtless the first surfacing of a north to south road, wider than its predecessors, in the replanning of A.D. 163, while the upper layer (H) was a resurfacing between then and A.D. 196. A similar extra layer of gravel has been noted at the same relative level in the south-eastern quarter of site XI, while contemporary clumsy changes had been introduced into the Antonine H.Q. building,[11] and rough and ready timber subdivisions had been inserted in a room of the second Antonine period north of the granaries.[12] The precise date of these resurfacing and other changes, if indeed they are all strictly contemporary, is not known, though a date not far removed from A.D. 180 seems likely.

For a distance of some six feet to east of the centre line of the demolished early Antonine wall, but unconnected with it, a spread of stones (I), both roughly dressed building stones and large natural cobbles, overlay the gravel surface of A.D. 163, and was in turn overlain by the resurfacing of *circa* A.D. 180. The stones were obviously not derived from the early Antonine wall, which had already been demolished before the road of A.D. 163 was laid, but they may well have been derived from buildings undergoing modification elsewhere on the site in *circa* A.D. 180. Their structural function was probably to fill up a hollow which had developed in the surface to east of the strip where earlier *intervallum* roads and the remains of the earlier wall provided a firm foundation.

At a point 11 feet east of the west end of the section both the second Antonine gravel surfaces and the sandwiched debris came to an end. Doubtless they had originally continued as far east as the point now marked by the west side of the robber trench. Their disappearance may have been due to the same agency which had removed the burnt wattle and daub from the east end of the trench. If this interpreta-

[11] *AA*[4] xxx, 249. [12] *AA*[4] xxxi, 208.

tion be correct it implies a road 20 feet wide; roads of still greater width are known from the site.

Apart from the road surfaces the latest surviving Roman structure in the present section was the solid clay and cobble foundation (K) 14 feet from the east end of the section. It was three feet deep and four feet wide at the top and composed of clean, compact yellow clay in which large river cobbles were solidly set. While none of the stones which had once stood on it survived on the actual line of the section, several courses remained in the width of the trench. Immediately above the foundation the wall was three feet three inches thick. The facing stones on the west face had slipped one over the other and the wall was canting over dangerously to the west; it was only held in position by the dried mud around it. This tends to confirm the inferred process of natural denudation, which had removed the adjacent deposits and caused the partial collapse, but not the complete destruction, of a wall temporarily free-standing once more. The stones of the wall were nine inches to one foot broad along the face and proportionately deep. They closely resembled in colour and character, as well as in size, the secondary work in the west wall of the Antonine H.Q., the wall partly closing the front of the *sacellum* and the wall surrounding the granaries. All these are securely dated to the second Antonine period. The southward continuation of the present wall had been discovered in 1953, where it was earlier than the destruction deposit of A.D. 196, but structurally later than another stone wall of different character, also associated with Antonine pottery. The present surviving fragments of walling may then be ascribed to the replanning of the site in A.D. 163, though it is not impossible that it lay on the line, and re-used the foundation, of an early Antonine wall. The plan of the building of which this ten-foot stretch of wall formed part has not yet been completely elucidated.

On the east side of the wall, at the level of its footings, patches of flagging (L) immediately underlay the layer of light grey-brown soil; they continued eastwards until inter-

rupted by the 1910 trench. As there is no corresponding level on the west side of the wall there can be little doubt that it once formed part of the western side of a building whose eastern wall lay beyond the east end of the section. This flagging may then also be assigned to A.D. 163. It corresponds in date, and in relative position both stratigraphically and topographically, with the flagging noted on the east side of site XX in 1954.[13] The fact that on both sides a building of the second Antonine period overlay the early Antonine rampart suggests that in A.D. 163 the fort was enlarged on the east, and the clay bank noted east of site XLIV in 1951 (p. 62, above) may well be further evidence of the enlargement.

Antonine I.

The early Antonine rampart (M) survived to a maximum height of three feet towards the east end of the trench. While subsequent natural consolidation will account for some loss of height, the rampart had obviously been drastically and deliberately cut down for the erection of the second Antonine building; it had suffered much the same kind of treatment on site XX. About 12 feet of the thickness of the rampart survived in the trench; the heel had been cut into by the foundation already described, but the kerb of the rampart's own foundation had survived, revealing the precise line of its inner face. At the east end of our trench some two feet had been entirely removed by the 1910 trench, but the full width, 21 feet, is known from the section dug further south earlier in 1955; the outer face will thus have lain seven feet east of the east end of the present section.

The material of the body of the rampart was compact, yellowish grey in colour with flecks of bright orange, and closely resembled the turf rampart on site XX. The material was not however homogeneous for there were piles of different material within it, one of which shows as a patch (N) on the section; it was white in colour with definite grey

[13] *AA*[4] xxxiii, 240.

horizontal bands. At its western end a dark patch (O), ten inches square, appears in the section. This was composed of a very dark friable material which continued across the full width of the ten-foot trench. It was not charcoal but actual wood, less well preserved than the corduroy on site XLIV and in about the same state of preservation as that on site XX, except that there it was rust coloured and not black. This baulk of timber, of one of the standard sizes used in fort construction, had been deliberately laid as part of the revetment of the tail of the rampart. Within the body of light coloured material incorporated in the rampart were the decayed remains of a horizontally laid plank about seven inches wide and one inch thick. It is not precisely known how these timbers functioned structurally, but the incorporation of timber within the body of a clay or turf rampart has parallels on other sites.

Below the turf and timber of the body of the rampart a cobbled foundation (P) was discovered. It consisted of a single layer of small cobbles, set in a very little clay, which extended over the full width of our trench and from the inner kerb to the edge of the 1910 trench. It was laid directly on the sandy subsoil and there was neither occupation deposit nor fossil topsoil below it; the berm of the Trajanic fort had evidently been de-turfed before the single layer of cobbles was laid. The same foundation was found in the other section in 1955 and in that dug in 1956, immediately to north of the present one. The kerb of the foundation, on the inner edge, was composed of larger cobbles set in a shallow trench. Turfwork had been laid above these before the baulk of timber had been placed in position.

The mixed character of the material in the rampart is reminiscent of the mixed material used for the early Antonine rampart 280 feet further south, east of the H.Q. of the later east compound,[14] which is on precisely the same alignment. In its reduced form the present rampart immediately underlies a second Antonine floor. Thus character of material,

[14] *AA*[4] xxviii, 172.

plan and stratification combine to place it without doubt in the early Antonine period; it was almost certainly erected under Lollius Urbicus in A.D. 139 or 140.

Between four and seven feet from the west end of the section a wall was discovered running across the full width of the trench from north to south. Where well preserved it had been carefully built with small neat stones. It nowhere survived to a height of more than two courses, in places on either face only one course remained, and on the east face some stones of the lowest course were missing, leaving the top of the clay and cobble foundation (Q) visible. The wall was two feet three inches thick at the lowest course and stood on a foundation three feet thick. It was bonded not with mortar but with clay of the same yellow colour and the same consistency as that binding its own cobble foundation, which was two feet deep and reached the subsoil. Three post-holes, each three inches square, were found in the body of the wall, inside the west face, the most northerly being six feet south of the line of the section. Postholes have been noted in the body of other stone walls at Corbridge, not only in the *sacellum* of the Trajanic H.Q., but also in the main west wall of its Antonine successor.[15] In character the small neat masonry also matches early Antonine masonry elsewhere at Corbridge, and the wall is a continuation of one found to the south in 1953, which was dated by its context to the early Antonine period. It is then contemporary with the rampart just described, but is not the east wall of a building lying within the fort, for the level associated with it on the west is a road surface.

A layer of gravel (R), composed of somewhat larger pebbles than the two layers immediately overlying it, and containing some fairly large cobbles, ran up to the wall on the west side. The smooth well trampled surface met the lowest course a little below its top. Though the gravel is structurally secondary to the wall it was used simultaneously with it. This suggests that it was the west wall of a long

[15] *AA*[4] xxx, 244 and 245.

narrow building between the rampart and the *intervallum* road, on the *intervallum* proper. The layer of coarse gravel just described is, without doubt, part of the early Antonine *intervallum* road. The position of the east wall of the building cannot be identified, unless it occupied the same line as the second Antonine wall, thus giving a building 14 feet wide internally. The masonry of the two walls differed in character, they were not of the same width, and their later history was quite different, for one had survived to be robbed out after becoming buried, while the other had been demolished while still free-standing and its remains covered by metalling. Nevertheless the second Antonine wall quite possibly utilized the existing foundations of a demolished early Antonine wall, for the foundations are similar in character, and the fact that the eastern of the two does not reach so great an absolute depth as the western is not necessarily evidence for its being later; the early Antonine walling of the Commandant's house on site XI also slopes gently upwards from west to east. The eastern foundation is structurally secondary to the early Antonine rampart, but this would inevitably be the case whether they belong to the same phase of planning or not. If the assignment of both foundations to the early Antonine period be accepted, it follows that the floor of the early Antonine *intervallum* building was three feet higher than ground level outside the fort, the difference being caused by previous accretion within the fort, including the remains of the Trajanic rampart. The full height of the early Antonine rampart would present a bold face to the outside.

This early Antonine *intervallum* building, timber framed but set in low stone walls, corresponds in stratification, and in its relationship in plan to both road and rampart, with the building wholly of timber found on site XX in 1954. This was found to have been destroyed by fire, presumably accidentally.[16] No trace of burning was found at

[16] *AA*[4] xxxiii, 235 to 238.

this level in the present section, which confirms the limited extent of the mishap.

Trajanic-Hadrianic.

The early Antonine foundation on the west cut through three further layers of gravel, each with a trodden surface. Of the three, the highest (S), composed of clean, fairly large, light-coloured pebbles, and the second (T), composed of small pebbles with some admixture of earth, both appeared on the west side of the foundation but failed to reappear on the east. Here their place was taken by a bank (U) of grey material, with bright orange streaks, remarkably similar to that of the Antonine rampart; it was compact and clearly in position. Here and there a few stones were found in the body of the material and there were patches of yellow clay (V). The bank was 15 feet wide and survived to a height varying between one foot six inches and three feet. It was clearly the remains of a turf rampart in which masses of clay had been incorporated, as in Hadrian's Turf Wall at High House. Both back and front had been disturbed by Antonine foundations, but there was room for a rampart as wide as the Trajanic rampart on site XX, if some allowance be made for the disturbance of the front by the insertion of the kerb of the foundation of the Antonine rampart. There can be no doubt that this turf bank, cut through by early Antonine foundations and overlying burnt wattle and daub, was all that remained of the Trajanic rampart. The two gravel layers to the west may then be interpreted as parts of the original Trajanic *intervallum* road, and of a later, probably Hadrianic, resurfacing.

Flavian.

The lowest of the six layers of laid gravel (X), small sized orange pebbles, did not belong to the same phase of planning as the two immediately over it, for it continued eastwards 19 inches beyond the edge of the early Antonine foundation

trench; it underlay the tail of the Trajanic rampart and was separated from it by a layer of grey clay (W) associated with charred wattle and fired daub. The gravel layer stopped short at the top of a small construction trench (Y), ten inches wide and rather more than a foot deep. This trench had been dug through the natural sand into a belt of natural gravel below it, and was filled by a mixture of the same sand and gravel. It continued across the whole width of the trench from north to south, and two empty post-holes, each four inches square, were found in it; they were four feet apart and the more northerly lay one foot south of the section line. The laid gravel on one side of the construction trench and the undisturbed sand on the other were overlain by a layer of wattle and daub, burnt black and red, interspersed with the grey clay already mentioned; this too was doubtless also daub which had not reached the same degree of hardness or discoloration in the fire which had destroyed the building. The wattle and daub had fallen clear on either side of the construction trench for the building of which it had once formed part; none was found over or within the trench. The same relationship of burnt material to the construction trenches of destroyed Flavian buildings has been noticed on site XI. Although traces of burnt wattle were recorded below the Trajanic rampart on site XX, the present construction trench is the most easterly trace of an actual Flavian building so far recorded at Corbridge. The internal buildings of the Flavian fort obviously extended at least as far east as the site of the Trajanic rampart; while it did not extend so far south, the Flavian fort was wider than its Trajanic successor.

The layer of burnt and unburnt daub, and burnt wattle, continued over, and sank to some extent into, the western of two depressions in the subsoil (Z), which gave every indication of being artificial, though their structural significance could not be determined. While they were clearly visible in section they were not traced further south, for a 1910 trench, falling wholly within our wider trench, had created dis-

turbance. The depressions were filled with hard grey soil, with the appearance of dried mud, similar to the layer (F) below the topsoil. This filling contrasted with that of the Flavian construction trench to the west. Whatever caused the depressions, or however they functioned, each was both formed and filled before the Flavian fort was destroyed by fire, though the filling was not fully consolidated when this happened.

Summary of conclusions and outstanding questions.

For the first time there is proof in the form of structural evidence that the Flavian fort was wider than the Trajanic. There is further evidence for the widespread nature of the fire which destroyed it.

The east rampart of the Trajanic fort was here composed of turf with an admixture of clay, but without the timber corduroy which underlay it immediately north and south of the site of its east gate. The rampart did not lie precisely at right-angles to the *via principalis*. The *intervallum* road lay close up against the heel of the rampart; it was resurfaced twice while the rampart was still in use.

The error in setting out was corrected in the early Antonine period. A new rampart, two feet thicker, of similar but more varied material, was constructed parallel with the west rampart. At this point, opposite the central range, the early Antonine rampart fell on the berm of the Trajanic fort; it lay on a shallow cobbled foundation not found much further south.

Immediately after this a timber framed building on stone sills was erected on the site of the Trajanic rampart, which had been reduced to three feet or less: the *intervallum* road ran behind this building.

In the second Antonine period the early Antonine rampart was levelled in its turn, and the inner wall of the *intervallum* building demolished. Its site was covered by a road which was resurfaced before the end of the century. A new stone building now occupied the site of the early Antonine

rampart; its inner wall was probably a rebuild of the outer wall of the earlier building.

This wall remained standing, as a ruin, for a long but indefinite period. All later Roman levels had vanished from the site, though the section preserved some record of the site's more recent history.

Several questions remain unanswered, and further excavation will be needed before a final report on the eastern defences can be written.

Apart from a few post-holes found on site XX, nothing is known of the east gate of the second-century fort in any of its three main phases.

While the line of the early Antonine east rampart is now well established, that of the Trajanic east rampart is not yet established with sufficient precision. Hardly anything is known of the second Antonine east rampart, and the position of the Flavian east rampart remains quite unknown.

The relationship between the ditches discovered in 1910 and the successive east ramparts is still a matter of inference rather than certain knowledge. Their alignment as recorded presents a problem, for while they run at an angle to site XI and to the early Antonine rampart that angle seems to be more acute than the angle of the Trajanic rampart to the same features.

Many of these questions will remain unanswered until it is possible once more to excavate in the field to the east, but there is a prospect of obtaining some answers inside the guardianship area within the next few seasons.

(ii) THE WEST GATE.

By I. A. Richmond.

A fourteen-foot length of the northern passage-wall of the Antonine timber west gate was discovered in 1953, when sheds and equipment dumps of the Ministry of Works were being reorganized by their staff in the area to south of the Museum. There was no opportunity at the time to extend the work further in any direction, and the information was secured in a trial-trench, as indicated in the plan (fig. 4).

The upper levels (fig. 3) comprised the east-to-west road which linked the Roman site with the Stanegate, and there were three of these, representing the Severan, Constantian and Theodosian periods respectively. They continued right across the trial-trench in all directions; and this follows correctly from the fact that the area examined lay in the track of the road in question as continued westwards[1] from the granaries (sites VII and X), some little way south of the frontage of site IX. The roads were in good order, but it appeared that the topmost had been stripped of its crowning layers, as is likely enough if these had been large re-used slabs serving as flag-stones. At a point three feet nine inches below the surviving surface and four feet above the undisturbed subsoil an important change occurred. The northern half of the trench was now occupied not by road-metalling but by a mass of rampart-material comprising blocks of clay, or very clayey turf, disposed in clearly distinguishable layers. The rampart in question was separated from the undisturbed subsoil by a thin occupation-layer, upon which further comment will be made presently. The southern edge of the rampart-mass, however, stood vertical against a row of four post-holes, each containing remains of a post, one foot thick in cross-section, of which the dark-

[1] *AA*[3] v, 344, pl. xxii.

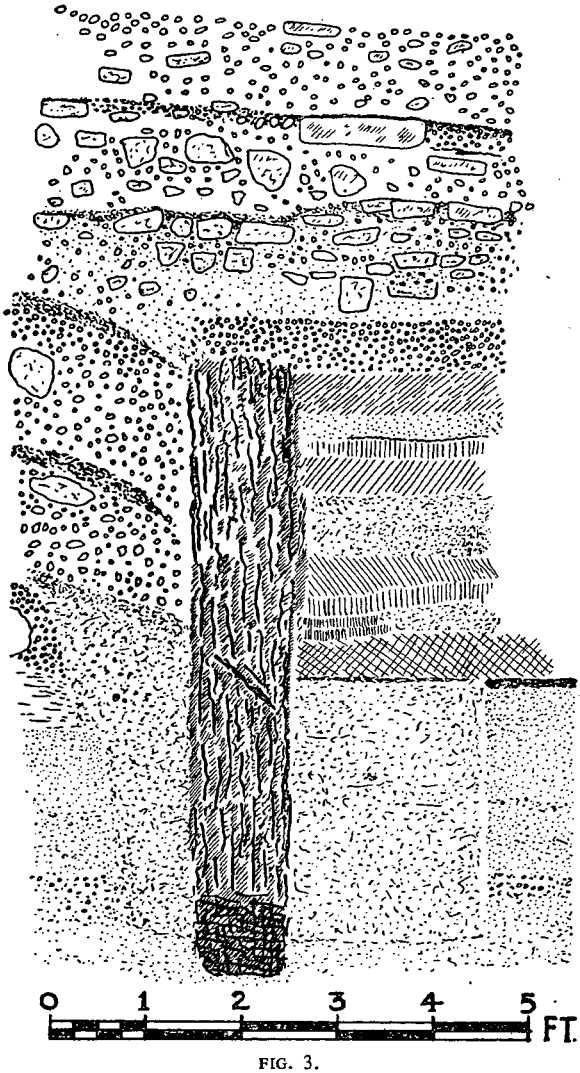

FIG. 3.

WESTERNMOST GATEPOST OF NORTH PASSAGE-WAY OF THE ANTONINE WEST GATE AT CORBRIDGE, AS DISCLOSED IN 1953.

brown rotted shreds still clung to the edge of the heavily compressed strata forming a matrix about them. The marked irregularity of the matrices suggested that roughly trimmed posts, comprising trunks from which little more than the bark had been removed, had been employed, as at Oakwood[2] (Selkirkshire). The posts had each been set in a pit, dug into the undisturbed subsoil, of which one was examined and may be regarded as exemplifying all. This pit was three feet six inches deep and measured four feet nine inches from north to south. It had not only been dug into the undisturbed subsoil, but had also cut through a nine-inch gravel roadway, ballasted upon nine inches of blue-coloured turf. The post had been placed standing free in the pit, until it was packed round with the material dug from the pit itself and returned in clean but mixed condition. It thus stood almost a foot away from the south side of the pit, which was not vertical, as was the north side, but had received a sloping cut, such as would be made when the spade glanced off the hard mass of the gravel road through which it had cut. The post had rested on the bottom of the pit, without a bed-plate, an omission which had allowed it to sink under its own weight, and that of any superstructure attached to it, to a depth of some four inches into the sandy subsoil. The packing round it was tight and undisturbed. The total height of the rotted stump surviving was six feet six inches. The uppermost two and a half feet of the post was flanked on the south by two superimposed cambered gravel roadways, separated by a silt layer three inches thick. The lower of the two roads, like the rampart, overlay the packed pit in which the post-hole had been set, and both roads were as clearly associated with the post itself as the earlier road and all the later roads were dissociated from it.

The post and section just described lay at the west end of the trial-trench, the post-hole having been discovered and developed for study during the baring of its western face. Further east, three more post-holes were revealed during the

[2] *PSAS* lxxxvi, 105.

CORBRIDGE 1953

NORTH PASSAGE-WALL OF
THE ANTONINE WEST GATE

SITE X

SOUTH FRONT OF WEST GRANARY

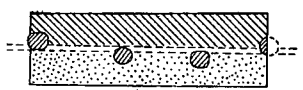

FIG. 4.

cutting of the trench itself, at two intervals of five feet and one of four feet apart from centre to centre, reading consecutively from the west end of the trench. They were not quite in line, but the two middle posts were staggered in relation to the other pair, as if boarding had been wedged between them. All the holes furnished the characteristic traces of brown rotted wood, indicating that the lower end of each post had been left in position. The length of the passage must remain unknown, but it may be observed that a Flavian rampart at least 24 feet wide has been recorded[3] beyond the north end of the Museum building, in the area now occupied by the Durham University Excavation Committee's hut. The spacing of the posts, at intervals of four or five feet, is comparable with the arrangements at the north gate[4] of Turf-Wall milecastle 50 (High House) and the west gate[5] of the fort at Birrens, and differs from such gateways as the south gates[6] of Fendoch and the above milecastle and Old Church fort, where the spacing is wider. The contrast is usually taken to signify the difference between a lofty structure in the form of a tower, which would demand the closer timbering, and a simple gangway carrying the rampart-walk across the gate, and this, in one form or another, may be accepted as the explanation here.

In relation to the known structural sequence at Corbridge there is no doubt about the place of the gateway. The position of the south gate[7] of the Agricolan fort indicates that no west gate of that period can have occurred at this point. This consideration permits an explanation of the occupation-layer below the rampart, which would be exactly comparable with the occupation-layer which occurs below the Trajanic and Antonine east ramparts and contains foundation-trenches for timber buildings (see above, p. 75). Here, however, the Trajanic stage is represented by the early roadway in the

[3] *AA*[4] xxviii, 175, fig. 5. [4] *CW*[2] xxxv, 221, fig. 2.
[5] *PSAS* lxxii, 285, fig. 4.
[6] *PSAS* lxxiii, 121, fig. 5 (Fendoch): *CW*[2] *loc. cit.* (milecastle 50 TW): *CW*[2] xxxvi, 174 (Old Church).
[7] *AA*[4] xv, 294, folding plan.

gateway opening, showing that, as might be expected, a Trajanic gateway had existed on the line of the known Trajanic *via principalis*,[8] at the same distance west of the axis of the Trajanic *principia* as the known east Trajanic rampart. Its passage-wall, however, doubtless of timber, had been cut away by the pits intended to hold the posts now under consideration. The next stages in the development of the site are the two Antonine periods, signalized by the inscriptions[9] of A.D. 139 and A.D. 163, and it is these periods of occupation which are represented by the two roads that are stratigraphically linked with the post-holes and the rampart.

An Antonine west gate, which lasted in the main unaltered through the two Antonine periods, is thus attested. But three further points deserve comment. First, there is no trace here of a third Antonine period in the road system. This is consonant with the fact that the changes[10] of the third Antonine period are in the nature of casual alterations to existing buildings rather than complete rebuilding. Secondly, while the close-set posts may be taken to indicate provision for a tower, it remains uncertain whether this was a tower over the actual gateway passage or a tower which flanked the passage and spanned a rampart occupying its basement. Both types are possible, and only exploration further southwards at this gate, or northwards and southwards at the east gate, will reveal the true state of affairs. Thirdly, when the gate was dismantled, the timbers, set deep in the subsoil and tightly embedded in successive structural layers, proved difficult to withdraw and were accordingly cut off at the ultimate road-level, leaving the sawn-off stumps in position, to rot gradually away. The rough timbers would in any case have been impossible to draw, even in far easier conditions. There is no sign of burning, such as produced the tapered stumps at Oakwood[11] (Selkirkshire). This is perhaps surprising, in view of the plentiful evidence for

[8] *AA*[4] xxx, 240, fig. 2.
[9] *AA*[4] xiii, 274, pl. xxii: *AA*[4] xxi, 246, fig. 5.
[10] *AA*[4] xxx, 249-50.
[11] *PSAS* lxxxvi, 105.

wanton destruction[12] in the Maeatian invasion of A.D. 197 which closed this epoch in the history of the site. But it will be realized that only a small part of the main fabric of the gateway is here in evidence, and, while its demolition is certain, there is no surviving clue to indicate whether Romans or Maeatians plied the axe. The deliberate demolition by enemy hands of such structures as the north gate of Housesteads milecastle[13] should be remembered in this connection.

[12] *AA*[4] xxviii, 178ff. [13] *AA*[4] xi, 107-108.