### VIII.

EXPLORATORY TRENCHING AT THE ROMAN FORT OF CAPPUCK, ROXBURGHSHIRE, IN 1949. By Professor IAN A. RICHMOND, M.A., LL.D., F.B.A., F.S.A., F.S.A.Scot.

The Roman fort at Cappuck lies on the east bank of the Oxnam Water, where Dere Street, the Roman North Road, crossed that stream on the way to Newstead, 11 miles to north-west. It is a small fort, measuring some 260 by 240 ft. over the ramparts recognised in 1911–12, and, while possessing a good immediate command of the stream-crossing from the little bluff which it occupies, is without good outlook for watching or signalling. There is a short view of about three-quarters of a mile upstream, but elsewhere the site is virtually hemmed in by low ridges which cut off all distant view. It is thus evident that the purpose of the fort, like other forts at Blakehope, Risingham, Ebchester or Binchester on Dere Street farther south, was to guard the stream-crossing on its southward side and presumably to protect a bridge.

The site has twice been excavated, first by Walter Laidlaw in 1886 and next by Messrs G. H. Stevenson and S. N. Miller in 1911–12. The first excavations proved the existence of Roman buildings and exposed the granary, the second did much to elucidate not merely the buildings but also the defences. In 1947 and 1948, however, air-photographs taken by Dr J. K. St Joseph revealed that the rampart and ditches disclosed in 1912 were not all the defences that the Romans had provided. Four ditches instead

<sup>&</sup>lt;sup>1</sup> Laidlaw's work is described in *Proc. Ber. Nat. Club* (1892–93), 382–9, reprinted in W. Laidlaw, *Poetry and Prose* (Kelso, 1901), 92–100, with the exception of a plan (pl. ix in the former). The later work is described in *P.S.A.S.*, xlvi, 446–483, but in all the texts and plans the north point is misplaced: "north" should read "west," and all other references to cardinal points should be changed correspondingly. The error was Laidlaw's and has been, unfortunately, copied ever since. The granary, exposed by Laidlaw and left to become utterly ruinous and a source of weed infestation, has been covered up, at the writer's instance and with the agreement of owner and tenant, by the Roxburghshire War Agricultural Executive Committee.

of two were revealed on the east, south and west sides of the site. When the present writer was asked to prepare an account of the site, for the Roxburghshire volume of the Royal Commission on Ancient Monuments in Scotland, it became imperative to determine the relationship of the newly discovered ditches to those already known: and with the kind permission of the Trustees of the Lothian Estates and of their tenant, Mr William Allan, a trench was cut across the southern <sup>1</sup> defences. The work occupied twelve days between 12th and 24th September 1949, and was undertaken with the aid of Messrs Fairgreave and Lindsay, lent by the kindness of Mr Robert Hamilton, Burgh Surveyor of Jedburgh.

It should be said at the outset that the trench confirmed the existence of the four ditches apparent upon the air-photograph. But it disclosed so much more detail that it will be well to take the points singly and systematically (fig. 1, plan; fig. 2, section).

#### THE RAMPART AND DITCH-SYSTEM.

 $\dot{P}eriod~I.$ —The earliest rampart was  $23\frac{1}{2}$  ft. thick and was built of whitish puddled clay, still hard and tough to cut. Immediately behind it came an intervallum roadway, some 17 ft. wide, of fine-grade red gravel, about 3 in. thick and set very hard. The front of the rampart was underpinned by a kerbed stone foundation of large cobbles and broken sandstone, carefully laid at the outer edge and somewhat irregular towards the back (Pl. XII, 1 and 2). It is possible that this rearward irregularity has been produced by ploughing, for the more prominent stones have been scored by the ploughshare: but other such foundations exhibit irregular backs where, deep below the superincumbent rampart, strict regularity was not required. The average breadth of this foundation was 6 feet, sufficient to underpin the rampart and so to prevent it from slipping or sliding forward.

A berm 3 ft. wide separated the rampart-kerbing from a ditch 12 ft. wide and 4 ft. 9 in. deep. The bottom of the ditch, furnished with a narrow drainage channel, lay 7 ft. forward from the inner lip, so that the outer scarp, or counterscarp, was considerably steeper than the inner scarp. The profile of this ditch was particularly well preserved, because, at a time when only the drainage channel was filled with silt, the whole ditch had been deliberately filled with clay, deposited in recognisable clods or lumps, and sealed over at the top by a harder and cleaner layer. In this filling were found two fragments of an amphora-neck and most of a triple-ribbed angular handle of a flagon in buff ware, the last datable to the Flavian period.

Period II.—The second stage is marked by an extension of the rampart front. This additional kerbing was first identified in the section and was

Described as the "west" in the account of 1911; see previous note.

then uncovered for a width of nine feet, in order the better to view it (Pls. XIII, 1 and XII, 2). It consists of a well-laid kerb of cobbles, 2 ft.

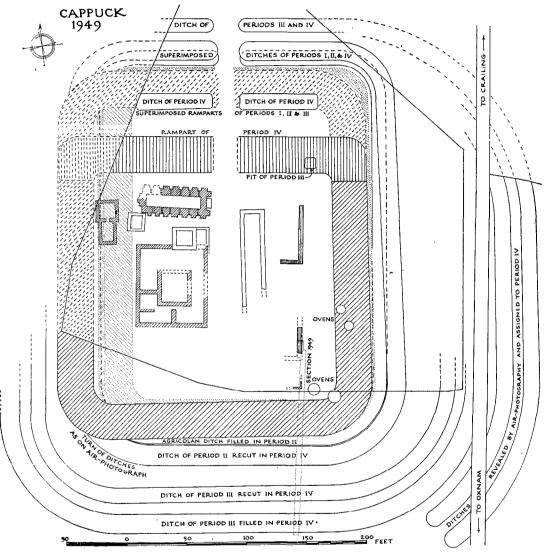


Fig. 1,

broad, with a light infilling  $2\frac{1}{2}$  ft. wide between this and the earlier rampart front. The plough had certainly removed much of the lighter infilling, since the frontal cobbles are heavily scored with plough-marks, no less than

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# CAPPUCK 1949: SECTION THROUGH SOUTH DEFENCES

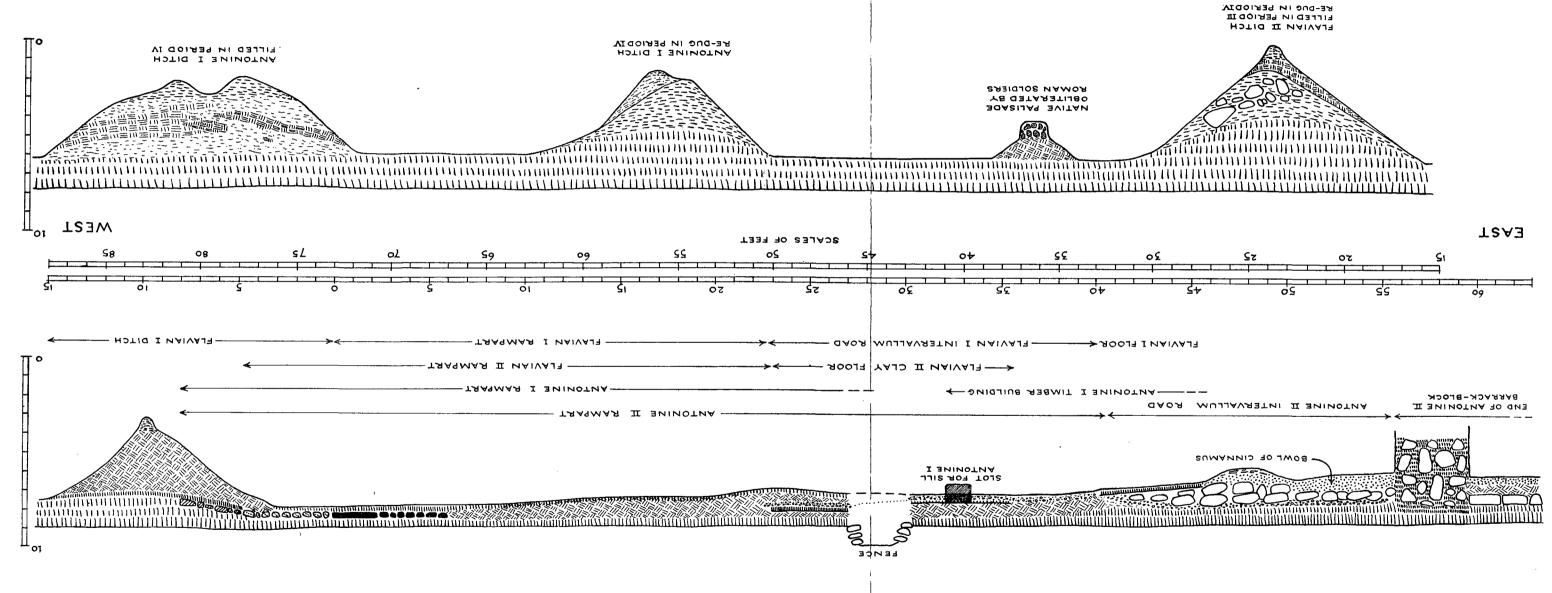


Fig. 2.

thirty-one scorings being counted on the most prominent stone. The new foundation projected well beyond the inner lip of the filled ditch and had subsided slightly over it.

Eleven feet beyond the new rampart front lay a ditch 16 ft. wide and 6 ft. 3 in. deep, with symmetrical scarp and counterscarp, meeting at the bottom in the usual narrow drainage channel. The inner scarp of this ditch cuts so sharply and abruptly into the very edge of the counterscarp of the filled ditch as to show that they belong to different periods: and the same effect, very schematically delineated, is apparent in Section I of the 1912 Report. It seems in fact clear that, while the filled ditch goes with rampart I, the ditch now being described goes with rampart II, the tell-tale distinction between the ditch-fillings having been hitherto unobserved.

Period III.—A third rampart front, 3 ft. 3 in. wide, must now be noted. This lies immediately in front of rampart II and is composed of cobbles and much broken freestone (Pl. XIII, 1). It has sagged appreciably over the filling of ditch I, and its build is markedly inferior both in material and in execution as compared with the first and second rampart fronts. It is in fact very like the rampart front <sup>1</sup> found superimposed upon an earlier front on the east side of the fort in 1912. While, however, that front completely overrode the earlier cobbling, this one only begins to override the second front at the south end of the section now exposed (Pl. XII, 2).

In front of the third rampart foundation the 16-foot ditch of the second period was now filled, when its drainage channel was choked to overflowing The filling used was clay, cut in blocks, exactly as in the earlier ditch, and can be recognised as a similar deliberate filling of the ditch. clay filling is visible extending right across the silted channel and well up the inner scarp of the ditch; but everywhere else it has been removed in a slightly asymmetrical recutting of the ditch, discussed later (fig. 2). Immediately, however, the place of the filled ditch was taken by the two outer ditches revealed by air-photography. The inner of the two, third in the whole series, is now  $12\frac{1}{2}$  ft. wide and  $4\frac{1}{2}$  ft. deep. But the quickest glance at its profile suffices to appreciate that it also has been recut, a surmise amply borne out by the character of its filling. An original channel filled with silt has been covered by a shoot of clean material derived from recutting the top of the counterscarp to a less steep angle. It is not now possible to be quite certain of the proportions of the original slope: if its scarp was symmetrical, it was 8 ft. wide and  $4\frac{1}{2}$  ft. deep (see fig. 2).

A 9-foot interval separated the third ditch from the fourth, which was a double one,  $16\frac{1}{2}$  ft. wide and 4 ft. deep, with two bottom channels divided by a comb  $3\frac{1}{2}$  ft. wide and 1 foot high. Both channels had been completely filled with silt, and three inches of silt had already formed above the crest of the comb when the whole feature was deliberately filled and obliterated.

<sup>&</sup>lt;sup>1</sup> P.S.A.S., XLVI, 451-2, fig. 4, where the side in question is described as "south."

Period IV.—A fourth structural period is not apparent in the rampart front, but is very evident in the ditch system.

The outermost double ditch, now obliterated, was filled to the top with returned upcast, containing also shoots of yellow and grey clayey filling identical with that of the second ditch (fig. 2). Only the recutting of the second ditch can in fact have provided this material, and a relationship is thus established between the recutting of ditch II and the filling of ditch IV. The clean upcast with which it is mixed is, on the other hand, too great in volume to be accounted for by the recutting of ditch III: it is best explained by the assumption that some of the upcast from the double ditch itself was now returned to its original position.

When the outermost ditch was filled, the third ditch, nine feet behind it, was recut (fig. 2). The top of the counterscarp was cut to a less steep angle and a new inner scarp was cut back, producing a new bottom to the ditch at a depth of four feet and some four feet nearer the inner than the outer lip. The recut ditch then remained open and silted up steadily until it became a shallow depression only 18 in. deep, afterwards filled with plough-soil.

The recutting of the ditch of the second period is also shown to belong to this stage not only by the use of its yellow clay filling in the material now shot into the outermost ditch, but also by the fact that the ditch, once recut, remained open until natural silting over a long period filled it to within thirty inches of the top. The depression thus left was then filled up gradually by ploughed humus until no surface indication of the ditch remained. An intermediate filling operation is, however, represented by a mass of freestone and boulders thrown against the counterscarp of the recut ditch while silting was still in progress (Pl. XIII, 2). This might well be the product of clearing the fort for agriculture when the ditches had not yet been subjected to cultivation.

The work of Period IV is thus represented by the recutting of the two middle ditches and the filling of the outermost ditch. Elsewhere in this section it can be traced at the back of the rampart only (see below, p. 143).

#### THE NATIVE PALISADE.

A pre-Roman feature associated with the ditches now falls to be described. Immediately beyond the 16-foot ditch of Period II occurred a palisade trench 3 ft. wide and about 18 in. deep, at the bottom of which round stone-packed holes 1 ft. in diameter had been drilled at 1-foot intervals. The line of holes curved obliquely across the trench, describing an open curve, on a scale which was plainly large but impossible to gauge accurately from the short segment at our disposal. This palisade or timber wall had nothing to do with the Roman alignment, and the Romans had in fact obliterated

it and filled it tight with white clay. It may thus be regarded as having belonged to a native settlement on the ridge, deliberately obliterated when the Roman defences were erected. Such a sequence has so rarely been recorded upon Roman sites in Scotland that it deserves special mention, the more so when palisading of this type is emerging as a special feature of pre-Roman Iron Age settlements on the surrounding hills.<sup>1</sup>

## THE INTERVALLUM AND INTERNAL BUILDINGS.

The early 17-foot intervallum road has already been described. bordered on the east by a beaten clay floor, presumably associated with a timber building, though the timbering was not carried in a sleeper-trench. The whole *intervallum* was next covered by a layer of burnt clay, presumably the levelled remains of a half-timber building destroyed by fire; and in this layer had later been dug a sleeper-trench, in which was found a fragment of latticed cooking-pot typical of the first Antonine period. Thus the early building, represented by the clay floor, would seem to have served both Flavian periods and was certainly destroyed by fire. The Antonine builders, on the other hand, seem to have built on the old intervallum. however, a much more fundamental change took place. The whole area occupied by the structures so far described was covered by hard grevish clay rampart-backing, still remaining a foot thick; while farther north the older levels were irregularly scooped away in order to bed the bottoming of a new intervallum road. This bottoming was mostly composed of reused building stones, like that of the late-Antonine roadways at Inveresk,<sup>2</sup> and it sealed two typical early Antonine sherds, the first a cooking-pot rim, with wavy line scored on the neck, the second a fragment of Samian ware of Dragendorff's shape 37, decorated in the style of Cinnamus. Farther north still came a wall of this period,3 running N-S., of which the SE. corner had been destroyed by an excavator's trench, afterwards filled with loose spoil. presumably dug by Laidlaw in 1886. In the late Antonine period, therefore, the rampart was widened at the back and a new intervallum road was This coincides with what is known of the N. rampart, examined by Messrs Miller and Stevenson, which was much wider 4 than the others.

## THE GENERAL PLANNING AND HISTORY OF THE FORT.

In the light of the air-photographs and the trenching now described, it becomes possible to add something to the results achieved in 1911 and at the same time to harmonise them with the information now obtained.

<sup>&</sup>lt;sup>1</sup> P.S.A.S., lxxxiii, 58-9, 64-7. <sup>2</sup> Report forthcoming.

<sup>3</sup> The wall, though probably first found but not recognised by Laidlaw, is noted on the plan of 1911, and provides a useful point of contact between the newest and older work.

<sup>4</sup> P.S.A.S., XLVI, 453.

When the ditch system of the fort, as revealed on the two air-photographs, is related to the ditches as planned from a series of widely separated sections in 1911, two important facts emerge. Firstly, while the ditches recovered in 1911 on the E. and S. sides of the fort are the two successive Flavian ditches, those then found on the W. side of the fort do not belong to the same series: they are the two new outer ditches disclosed by the air-photograph, which also reveals that the inner pair of ditches had already turned in underneath the Antonine fort at a point considerably farther east (see When this new and conclusive information is plotted on the plan, its effect is to bring the fort gateway into an axial position in relation to the The second important point is that the new ditches revealed Flavian forts. by the air-photograph on the E. side of the fort are set out in relation to the N. rampart of the fort as discovered in 1911. But this rampart covered an early Antonine pit 1 which produced a coin of Trajan and Antonine pottery. It must therefore be regarded as belonging to Period IV, the second Antonine occupation, and so must the additional eastern ditches. As at Newstead,2 the defences were now considerably strengthened.

The ditches which continue beyond the line of this rampart and form an advanced north front can now be recognised as the two Flavian ditches, while in the area behind them the isolated ditch comprising two short sectors represents an extra defence. This extra feature placed between the Flavian north ditch and the late Antonine north rampart allows room for the Flavian rampart as remodelled in the first Antonine period to continue in existence, exactly as on the north front at Ardoch.<sup>3</sup> The line of the two outer Antonine ditches on the E. presumably lay between these ditches and the newly revealed eastern pair, but, since neither air-photography nor excavation has as yet revealed their precise course, they cannot be marked upon the plan.<sup>4</sup>

The definition of the relationship between the Antonine and Flavian defences carries with it a new understanding of the buildings as discovered in 1911. It becomes plain that all the large stone buildings within the fort belong to the Antonine period. There can be recognised a granary, an internal bath-house and a building closely resembling a commandant's house, as if this little fort had no headquarters building, but was administered from a larger fort elsewhere.<sup>5</sup> At least one restoration is vouched for in the commandant's house, where a drain was observed <sup>6</sup> to overlie the N. wall of the courtyard; but the building appears also to have embodied <sup>7</sup> an earlier single square room, one of a pair, which closely resembles three buildings discovered at Haltwhistle Burn fort <sup>8</sup> and may be a survival from

<sup>&</sup>lt;sup>1</sup> P.S.A.S., XLVI, 454. 
<sup>2</sup> Ibid., LXXXIII, 45-67. 
<sup>3</sup> Ibid., XXXII, 438, pl. v.

This part of the field has not yet been under a responsive crop at the time of an air-reconnaissance.
 Cf. Haltwhistle Burn, Arch. El.<sup>3</sup>, v, 224, pl. ii, where much the same conditions must have obtained.

<sup>&</sup>lt;sup>6</sup> P.S.A.S., XLVI, 460-1. 7 Ibid., 461.

<sup>8</sup> Arch. Æl.3, v, 224, pl. ii, buildings I, III and VI.

buildings of the second Flavian stage. To south of these buildings lay a pair of long buildings recognisable as barracks. They are not of normal size, 30 ft. wide, but resemble the half-width barracks of the retentura at Birrens, which are paired across a street. At Cappuck, contact was made with the southern set in the section of 1949, when it was seen to be associated with the intervallum road of the second Antonine period. It may well be that the first Antonine barrack-buildings were of timber, as was certainly true of the Flavian buildings in corresponding position. An early Antonine building in timber appears in the section of 1949, but is presumably a minor structure upon the intervallum.

#### SUMMARY.

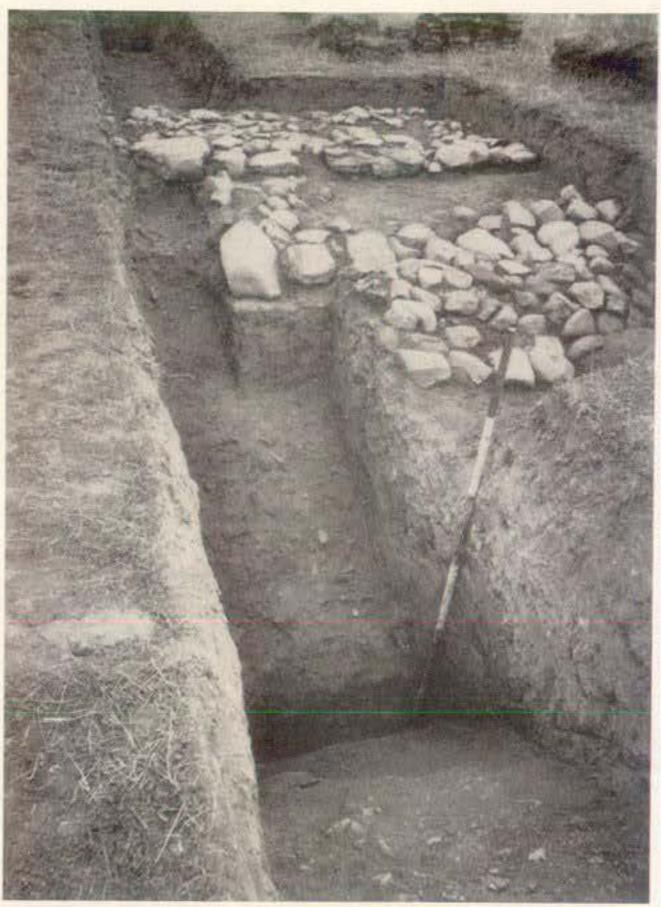
The main lines of the development of the Roman fortlet at Cappuck are now clear. It began its existence under Agricola as a little fort, with single ditch and rampart, facing N. and entered by one gateway only, in the N. side. The size of this fort is 290 by 218 feet over the ramparts. It was next strengthened by a new extended rampart front and a new and larger ditch. These changes <sup>2</sup> correspond in miniature with the modifications of the later Flavian period at Newstead, and, as at Newstead, the period seems to have ended in destruction.

The Antonine period opened with an increase in the width of the fort, which now measured 303 by 260 feet over the ramparts. The rampart was defended by a pair of ditches, set well out at the edge of the field of fire. The new fort was equipped with principal buildings of stone, but had no headquarters building of normal type. The barrack-blocks were perhaps of timber. In a second Antonine period the ditch system was recut, closer to the fort, the rampart was thickened at the back and the fort was reduced in length, so as now to measure 260 by 252 feet over the ramparts. An additional ditch was added in the vacant space created by the reduction, and two new outer ditches were dug to screen the eastern side, where the fort faced uphill and invited an attempt to rush it.<sup>3</sup> These defences were the last on the site and were allowed to fall into slow decay.

<sup>&</sup>lt;sup>1</sup> P.S.A.S., xxx, 96, pl. i.

<sup>&</sup>lt;sup>2</sup> Ibid., lxxxiv, 7-8.

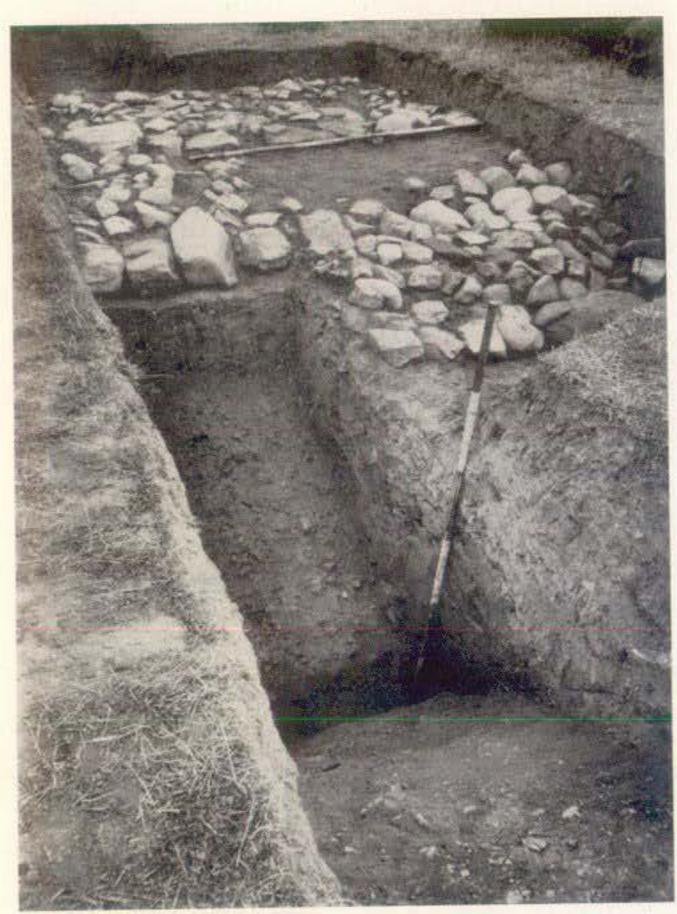
<sup>&</sup>lt;sup>3</sup> Cf. Whitley Castle, R. G. Collingwood, Archaeology of Roman Britain, 45, fig. 10a; or Ian Richmond, Roman Britain, 20, for an air-photograph.



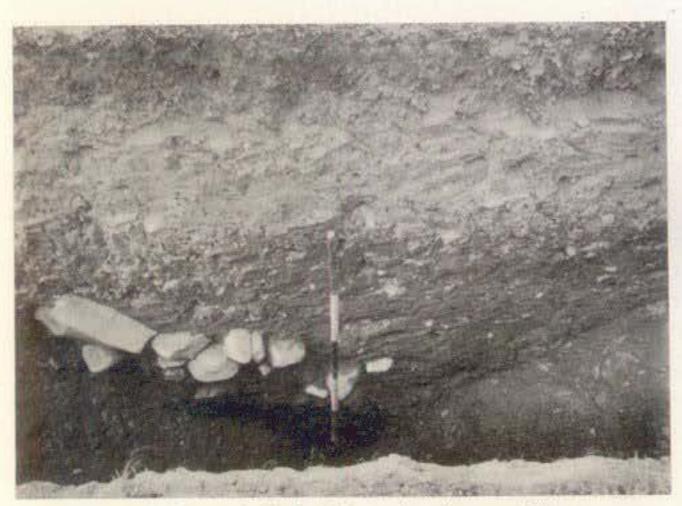
1. Cappuck: South rampart, showing three successive fronts underpinned with cobbles. Looking north.



2. Cappuck: South rampart, showing three successive fronts, the third (on right) overlapping the second. Looking east.



1. Cappuck: South rampart, showing third front cut away to reveal second front. Looking north.



2. Cappuck: Second ditch of fort, showing post-Roman filling containing boulders.