

PLATE—Crop-marks by Park House Farm, 5 miles S.E. of Carlisle, 1945.

Photo: J. K. St. Joseph (reproduced by kind permission of the Cambridge University Committee for Aerial Photography). Copyright reserved.

facing p. 9

ART. III.—*A newly-discovered Roman fort at Park House, near Carlisle.* By R. L. BELLHOUSE, B.Sc.

Read at Penrith, September 14th, 1954.

AN air photograph taken in the dry summer of 1945 by our member Dr K. St. Joseph, F.S.A., showed some interesting crop-marks in fields at Park House farm, Wreay, five miles south of Carlisle (map reference, 83/442496). I was asked by the late Sir Walter Aitchison to carry out an exploratory dig on the site, to find out the cause of the marks; one day's digging, with two men, was arranged in April 1953, and a further day's work in the following October, with the results described below.

The photograph reproduced opposite shows a view of the farm taken from the south. In the field of ripening corn, to the east of the green lonning, may be seen two dark lines forming two sides of a rectangle with a rounded corner, and two other lines joined thereto, forming part of a rectangle with a sharp corner. In the grass field to the west of the lonning the original print showed, very faintly, some pale marks which complete the other two sides of the rectangle; these faint marks may not be distinguishable on the half-tone, but nevertheless it is sufficiently clear that the presence of something like a small Roman fort was indicated.

The site was duly inspected. It lies on the top of a flattish hill, rising to 312 feet O.D., 660 yards from Scalesceugh (on the main Carlisle to Penrith road) but on the other, western, side of the gorge through which the Petteril here runs. From a military point of view it is a good position, as it commands a wide view all round, and is protected on the south and east by the steep ascent from the valley of the Petteril. On the ground it was

possible to trace a very low and wide linear mound, forming a square with sides approximately 300 feet long and enclosing about two and a half acres. This mound crosses the lonning in two places, forming a distinct hump each time.

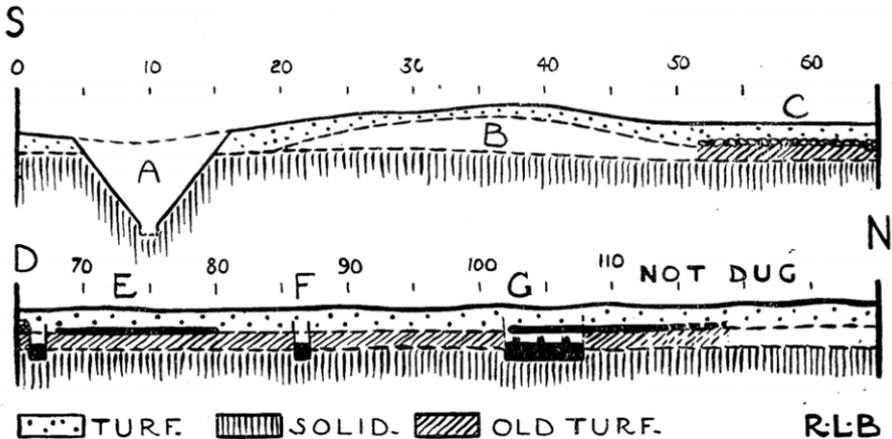


FIG. 1.—Section of N/S trench in lonning. Vertical scale exaggerated.

- | | |
|-----------------|--------------------------------|
| A—Ditch | D—Kerbing and first sleeper |
| B—Rampart | E—Clay floor |
| C—Gravel spread | F—Second sleeper |
| | G—Third sleeper and clay floor |

The south end of the lonning was chosen as being the best place for the first trial trench, since it was here that the ground seemed least likely to have been ploughed much, if at all. One of the humps mentioned above was chosen, and a trench crossing it at right-angles was laid off, beginning about 20 feet to the south of it. The turf was removed, and almost immediately made ground was encountered (fig. 1). Careful digging revealed a ditch with battered sides, measuring 10 feet between its lips and filled with a coarse pasty silt, grey in colour, which showed horizontal stratification. Unfortunately, water soon began to enter the trench and prevented the removal

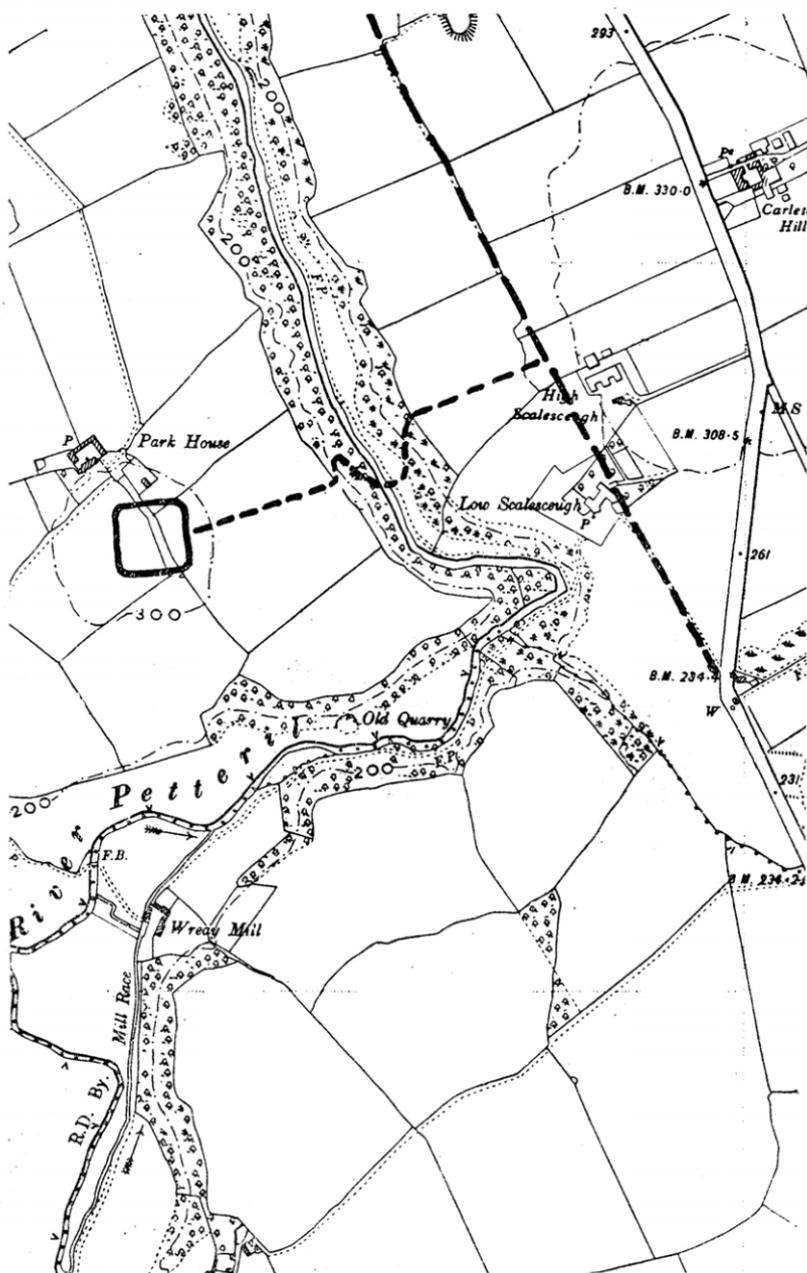


FIG. 2.—Park House fort and its setting. Reproduced, by permission, from the Ordnance Survey 6 in. map (Crown copyright reserved).

of the last foot of filling but it was possible with a probe to confirm the presence of a small square channel at the bottom. The ditch itself was five feet deep.

The trench was continued northwards, and very close to the north lip of the ditch mixed boulder-clay and soil was found; this material formed the low linear mound noted above. Trial pits dug down to the underlying clay, fifteen feet from the lip of the ditch, proved a maximum thickness of two feet and the absence of any signs of the original surface of the ground. The mound was then sectioned and its mixed nature was confirmed; no trace of a turf-line could be found below it.

The significance of the two kinds of crop-mark was now apparent: the dark line in the corn was that of the ditch, and the pale line in the grass was due to scorching along the mound. The remainder of the first day was spent in tracing the ditch, proving the rounded angles and preparing a plan. The trial holes on the line of the ditch yielded six small fragments of pottery, but these were unfortunately indeterminable.

The ditch silt varied from a pale grey pasty material, containing much coarse sand, to a blackish loam. One trial hole, by the hedge in the grass field at the north end of the lonning, revealed in the ditch-filling a large fragment of an oak post. In all places, the digging showed that the partly silted ditch must have persisted as a water-filled feature until it was finally levelled up by the plough and filled with the mixed material from the mound. This "blanketing" formed a very hard layer over the ditch, making it impossible to use the probe to search for an undug portion which might indicate the position of a gateway; a later visit to the site, with such an idea in mind, merely proved the ground to be too hard for that particular method of underground investigation.

A second day's digging was arranged in October 1953, mainly in the hope of finding datable material. The trench in the lonning was continued northwards from the

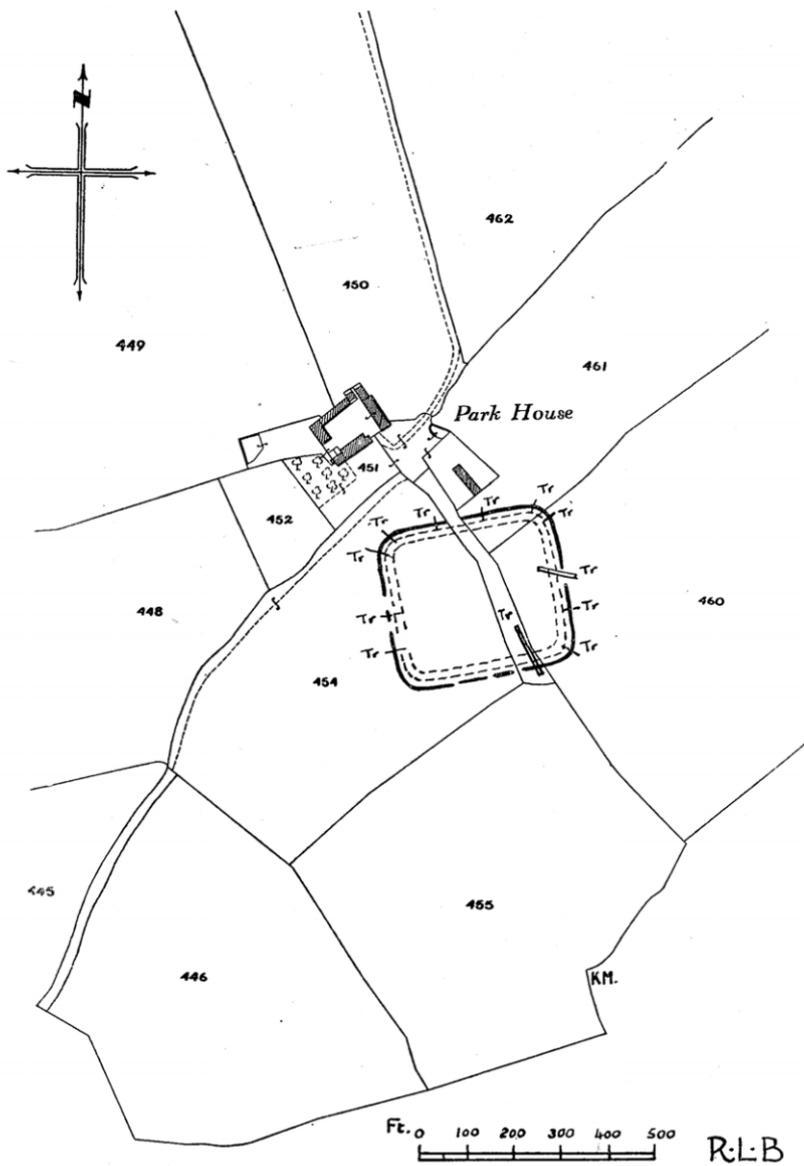


FIG. 3.—Plan of fort, showing ditch and rampart as traced in the trenches and trial holes (shown as Tr.) Based, by permission, on the Ordnance Survey 25 inch sheet XXXI . I, 1925 Edition.

centre of the upcast mound. At a point fifty feet from the ditch-centre a thin gravel spread was exposed, fourteen feet wide and bounded on the north by a line of cobbles; this had the appearance of a typical *intervallum* road. Close behind the cobbles, and parallel to the line of the ditch, was found the first sleeper-trench; it lay only twelve inches below the surface, and was cut two inches into the boulder-clay. Fragments of carbonised oak were plentiful here. Continuing the trench northwards, a thin uniform layer of red clay was exposed, lying immediately below the modern turf; a section taken down to the undisturbed drift showed this layer to be one inch thick and to be resting on the original turf. This band of clay persisted along seventeen feet of the trench and terminated at the second sleeper-trench to be discovered; this was like the first and parallel to it, and it contained many fragments of oak. Two pieces of greenish-blue Roman glass were found in the filling, the larger piece being part of the shoulder with part of the handle attached, the handle being fluted on the outside; the smaller piece was from the bottom edge of a square bottle.¹

The clay layer recommenced and continued for a further fourteen feet, until it was interrupted by another sleeper-trench, at right-angles to the others but crossing the line of the trench obliquely. This sleeper-trench, when carefully scraped with a trowel, showed a line of four uprights, three inches square, at twelve-inch centres; these were not main uprights, but they represent the vertical framing for the wattling of a wattle and daub wall. Fragments of wood other than oak were found here, but with no clear structure to aid identification. The clay layer reappeared on the west side of the trench, which was not continued further.

Some time was spent investigating the other crop-marks,

¹ In Tullie House Museum, Carlisle, there is a large square bottle, of similar glass, which had been used as a cinerary urn.

to the south-east of the angle of the ditch, but nothing was found under the turf to explain them.

Finally, as the greater part of the day had been used up, a trench was laid off across the rampart and ditch, on the east side, where the photograph indicated a possible gateway. No obvious mixed upcast was seen but the heel of a very fine oak post was found, approximately twelve inches square, on the centre-line of the rampart. The ditch was not found, although the trench was extended along the line of its known position, and this presumably indicates the existence of a causeway at the point in question. Close by the post were found one sea-shell, one small piece of pottery and a fragment of bone.

As it seemed quite certain that the site was Roman, evidence was sought for the existence of an approach-road from the known Roman highway to the east, at Scalesceugh. There are no definite signs of a causeway leading from the proved east gate, except for a few large cobbles, brought to the surface when the field was last ploughed and left there among the new grass, but there is a zigzag track down the steep side of the valley towards the Petteril, coming from nowhere and going nowhere and clearly in the right place for our approach road.

To sum up. Excavation proved the crop-marks to be due to the existence of a ditched enclosure, the ditches being V-shaped and forming a square with rounded angles, measuring approximately 380 feet square from ditch-centres. The turf had been stripped off before the building of an inner rampart of clay, now ploughed down and spread over the ditch, partly filling it. An *inter-vallum* road has been proved, bordered by wooden buildings with clay floors, and two pieces of Roman glass were found in association with the buildings. Finally, the existence of a gateway at the centre of the east rampart has been established.

My thanks are due to the owner of Park House, Mr Harrison of Scalesceugh, and to his tenant, Mr Mitchin-

son, for their kindness in permitting me to carry out this investigation and to the Christianbury Trust, which met the expenses for labour. Dr St. Joseph, to whom I submitted a draft of my report, tells me that when he visited the site in September 1945, the field (O.S. 460) being in stubble at the time, the line of the ditch could still be traced by a closer grouping of the corn-stalks than occurred elsewhere in the field. This field was ploughed out of grass in the spring of 1954, so I revisited the site in order to search the freshly turned earth. I found nothing, and this leads me to think that the fort was occupied for only a short period. On the same occasion I examined the track down to the Petteril more carefully. Although no metalling shows across the field to the east of the fort, the zigzag track down the steep bank is so like examples of Roman engineering which I have seen elsewhere, that I have not hesitated to show it on the 6-in. map, reproduced on p. 11, and to suggest its probable further course to meet the known Roman highway from Carlisle to Old Penrith.

The photograph reproduced facing p. 9 was taken on 29 July 1945, and is reproduced by kind permission of the Cambridge University Committee for Aerial Photography.