6. Examination of the Prehistoric Fort on Cairngryfe Hill, NEAR LANARK.

Quarrying operations conducted by the Lanarkshire County Council are destroying the Scheduled Monument labelled "Earthwork" on the O.S. map, but the Ancient Monuments Board stipulated that prior to its removal some scientific examination should be made of the ruins. At their request I undertook the supervision, the County Council supplying the labour, and started a four-weeks' campaign on 12th September 1939. Under war conditions our

¹ Inventory of Monuments, Midlothian, No. 194.

² The property had a connection with Dunfermline, but that connection can be ignored.

aim had to be to recover an accurate plan of the monument with the maximum

of speed.

Cairngryfe fort dominates the gap that is followed by the modern road from Lanark to Symington, cutting off the great bend of the Clyde. On the O.S. map the monument is indicated by three rings, but the 1856 edition correctly marks the innermost ring "Ree." G. V. Irving, in his article on "Ancient Camps in the Upper Ward of Lanarkshire," also recognized its recent character. He omits it from his plan, which shows an entrance to the fort on the south and two traverses in the south-west quadrant. Christison shows in addition two traverses in the south-east quadrant too.

When we arrived in 1939 a large section of the outer rampart on the southwest had also been destroyed, the site of the entrance being thus lost. A stone-and-turf dyke as well as the sheep-ree has been built out of the stones taken from the ancient fortress. The space within the enceinte was covered with green turf interrupted by stones, but the rest of the hill is clad with heather which is encroaching upon the outer ring of the fort. This outer ring appeared as a very low bank, along the crest of which stone protruded through the turf in a belt 6 to 10 feet wide with an overall diameter of 190 feet east to west. The inner ring looked like a belt of large stones on which grass was encroaching along both edges, on the east entirely covering the stones up to the edge of the sheep-ree; elsewhere the belt of exposed stones was 22 to 24 feet wide. It has evidently been quarried into at many points, and on the north stones have been piled up to form two rough cairns. The sheep-ree wall impinges upon it on the east, while outside the latter a triangular trigonometrical station has been built of, and partly upon, the ruins of this wall.

We succeeded in recovering the inner face of the inner ring nearly all round the site, showing that the central fort was an irregular oval with an internal diameter of 66 feet east and west and 73 feet north and south (fig. 1). Spoliation for sheepfold, cairn, and dyke had in most places left only the footings of the wall, the good facing stones having naturally suffered the worst. Disturbance and grass roots had destroyed almost every vestige of the original surface on which the fort's occupants had lived, and no occupation level was recovered. The foundations of the wall consist for the most part of blocks of the local trap rock, 1 to $1\frac{1}{2}$ foot long and 9 to 15 inches high, but in places large boulders of conglomerate, $1\frac{1}{2}$ to $2\frac{1}{2}$ feet in length, had been collected to replace the inferior volcanic stone. On the south-west, long flat slabs of sandstone or conglomerate, measuring up to 2 feet 5 inches ×1 foot 4 inches ×1 foot 4 inches or 3 feet 4 inches × 7 inches × 1 foot 8 inches, were regularly employed for the second On the north-east, where the wall rests low down on rock sloping northward, three to five courses were discovered still standing more or less intact as much as 3 feet high. Here the upper courses consist of relatively small blocks (Pl. LI, 2).

In the solid rock that slopes under the face here a series of rather irregular holes had been quarried at intervals of just under 2 feet 8 inches some 12 inches from the wall base. One, 1 foot in diameter, was marked by a black stain of carbonized wood at ground level, the dirty loose soil continuing down to a depth of 8 inches. The rest were recognized only in the rock and were full just of dirty earth (Pl. LI, 2). As there was as a rule no undisturbed soil overlying rockhead, and as grass and heather roots penetrating the incipient fissures disintegrate the rock so that even a brush will manufacture a hole, post-holes were

¹ Arch. J., 1855, 1-53.

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not easily discernible elsewhere. But in the south-west quadrant a segment of face, over six feet long, runs over (without directly resting on) a flat surface of quite solid rock. In this it was certain no post-holes had been quarried. Hence the posts attested in the north-west quadrant were presumably added simply to

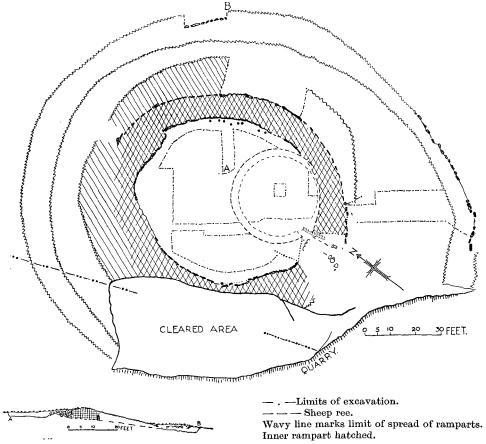


Fig. 1. Plan of fort and section along AB.

provide extra stays where the foundations rested on a steep slope instead of as usual on level ground.

The disparities in the masonry above-mentioned are not the only indications that the rampart's inner face was constructed in pieces by distinct gangs. On the north two segments join up; evidently the line had not been laid out accurately since the footings on the west terminate over a foot in front of those on the east. Indeed the discrepancy was so glaring that we sought—in vain—a continuation of the northern face behind the southern. In reality there are no footing stones behind those shown.

The outer face was generally in worse plight than the inner, even the footings having slipped in many places, and the upper courses having generally fallen

outwards. On the west, however, we were lucky enough to discover a segment of building, some 7 feet long, standing $2\frac{1}{2}$ to 3 feet high and comprising five courses of flat slabs with pinnings at the joints in the manner familiar from Argyllshire dùns (Pl. LI, 1) But at both ends of the segment the masonry had toppled forwards bodily, as shown in the photograph on right, so that the whole line is obviously deformed. On the north a segment of outer face, 34 feet long, was exposed. Only two to three courses were standing in formation to a height of 2 feet, and these have also slid forward out of the vertical. The foundation course generally rested, not on rock, but on its original covering, which had been reduced under the weight of the wall to a clayey consistency. No post-holes were detected in front of the face. Against the face, but separated by about a foot of splintered debris from virgin soil, was found the skeleton of a sheep with part of a clay pipe near it, both relics of the shepherd who had used the sheepfold. Farther east only a few footing stones mark the line of the outer face.

Between the faces the inner rampart is 9 to 10 feet wide, expanding to 12 feet on the east. The core is composed entirely of rubble. The visible spread of debris beyond the outer face is 12 to 15 feet, while on the inside fallen stones, now covered with turf, extend for a distance of 10 feet inwards from the face. The rampart can therefore hardly have been very high—perhaps no more than 8 feet externally. The rubble core included a few blocks of the order of 3 feet \times 1 $\frac{1}{3}$ foot \times 1 foot and 2 $\frac{1}{5}$ feet \times 2 $\frac{1}{5}$ feet \times 2 $\frac{1}{5}$ foot, but most are a foot cube or less.

Of the entrance on the south-east nothing remained but a gap. The face, noted by Christison on the east of this, can hardly be the cheek, since it rests on debris and runs across the foundation blocks of the outer face, while the line of inner face runs on west of it. Though both faces break off, no returns connecting them could be traced. The entrance evidently formed a quarry for the builders of the ree and the cairn. A big block, $3 \text{ feet} \times 2 \text{ feet} \times 1\frac{1}{3} \text{ foot, now lying inside the ree, might have been a jamb.}$

Under the entrance of the sheepfold, and just east of the point where the line of inner face seems to break off, is a V-shaped cleft in the rock sloping down outwards under the face. It was filled with small stones, mostly lying horizontal, mixed with very black earth and doubtless represented a drain. Part of a stone ring was recovered from it. South of the line of the drain a little rather disturbed paving was exposed under turf and loose stones. It doubtless belonged to the

fairway, but, unfortunately, the walls bordering it were gone.

The outer rampart is bordered externally with large undressed blocks set on edge. Many of them are leaning outwards, and some have actually fallen prostrate. Most rest on soil with wedging stones under them. Immediately behind them is a stony bank, $1\frac{3}{4}$ foot or so deep. It has no clearly defined inner margin, but spreads inwards for $7\frac{1}{2}$ feet, and in places as much as $10\frac{1}{4}$ feet. Under the rubble immediately behind the kerb is a small bank of clay that may be artificial. The whole rampart is very ruinous. On the west it has already been quarried away, while even on the north the kerbstones seem missing, having perhaps been used in the boundary dyke. In itself it could not form a serious obstacle and may perhaps have served as the base for a palisade.

This outer ring is far from concentric with the inner one. While on the north its outer margin is only some 30 feet away from the outer face of the inner rampart, the distance is increased to fully 50 feet to the east near the entrance. It may even be questioned whether the two works form part of the same plan.

We unfortunately found no evidence to settle the question.

Apart from the fragment of a stone ring in the drain, no relics nor anything

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like an occupation deposit (save for the coal fires and glazed crockery and bottles of the nineteenth-century shepherd) were found within the fort. But in clearing the rock surface between the inner rampart and the quarry edge the quarryman collected, under stones fallen from the rampart, a jet suspension ring, a bronze terret, a hollow hemisphere of lead, and a bronze object of uncertain use, which were presented to the National Museum of Antiquities by the Lanarkshire County Council. These four relics cannot be treated as a closed find, having been collected at different times, but all do come from the limited area between the two ramparts stripped in preparation for quarrying. They presumably belong to the occupants of the fort, and possibly to its knightly lord.

The jet ring (Pl. LII, 1) is almost circular in section and has an internal diameter of $\frac{5}{8}$ inch (1.6 cm.). It is $\frac{5}{8}$ inch (1.6 cm.) thick, save at one point where friction has worn a conspicuous groove. An exactly similar ring was found in 1860 among the cist graves near the Culdee Chapel at St Andrews (*Proc. Soc. Ant. Scot.*, vol. xliii. (1909), p. 411). It belongs to a well-known family going back to early La Tène times, and may even be a descendant of the hollow bronze

rings found in a few Late Bronze Age hoards.

The terret (Pl. LII, 3) is a fine specimen of Leeds's type 8 (Celtic Ornament, p. 122) that Kilbride-Jones in Proc. Soc. Ant. Scot., vol. lxix. (1934–5), pp. 448–453, has reasonably proposed calling the Donside type. Along its major axis the eliptical ring has a diameter of $3\frac{1}{16}$ inches (8·2 cm.). Like other terrets of this type, the lower part of the ring is cast hollow though of relatively thick metal. But it lacks the masked bar, usually of iron, by which Donside terrets are normally attached to the harness. Viewed from the side, as fig. 2 shows, the terret is asymmetrical, a feature which, Mr Edwards points out, is noticeable in other terrets and which, considering their function, is only natural.

The metal being unusually pale in colour, an analysis of some filings taken from the interior was very kindly made in the Chemistry Department of the University of Edinburgh by Dr Christine C. Millar. She found the percentage composition to be:

Coppe	er						80.7
Tin (including any phosphorus)							$13 \cdot 4$
Lead					,		$3 \cdot 6$
Zinc							0.94
Iron				-			0.06

It is conceivable that the lead may be derived from the lead solder by which the iron attachment bar is held in place in several complete terrets of this group.

On the typology proposed by Kilbride-Jones (loc. cit.) the Cairngryfe terret belongs to group 5, and to that extent the geographical position of its discovery accords satisfactorily with that author's theory. The nearest parallel, however, comes from Dinas Emrys, Caernarvonshire (Arch. Cambrensis, lxxxv. (1930), p. 352, omitted from Kilbride-Jones's list), a fort built according to Welsh legend by Merlin for Vortigern, a fifth-century king. It would obviously be tempting to explain the analogy between the south Scottish and north Welsh terrets by the connexions due to the establishment of Cunedda of the Otadini, allegedly at home in the Tweed valley, as chief in North Wales (cf., e.g., Collingwood and Myres, Roman Britain and the English Settlements, p. 289) just before A.D. 400. But such an explanation would involve a date for Donside terrets even later than Leeds is prepared to support, and would lead to speculations out of place in a Note.

The object shown in Pl. LII, 4 is $3\frac{1}{16}$ inches (7.5 cm.) long and cast in bronze. But at the end shown uppermost in the photograph the bronze encases an iron core just over $\frac{3}{16}$ inch (0.5 cm.) thick, which presumably once extended beyond the casing, though the exposed portion has been completely rusted away. The

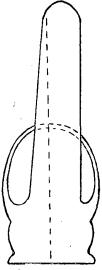


Fig. 2. Profile of terret (1/1).

opposite end terminates in a flat disc, $1\frac{1}{16}$ inch (4.6 cm.) in diameter, and does not seem to have been intended as a base, as the illustration might suggest. Its edge is rounded, and on the bevel a groove has been engraved which cannot be traced right round it. The surface of the disc is rough with two blister-like excrescences in one quadrant. These show up pale against the dark patina and suggest blobs of solder. The end was apparently covered by a disc of bronze, less than 0.1 cm. thick and about $1\frac{1}{16}$ inch (4.3 cm.) in diameter—its edges are worn—that was found detached from the casting. Conceivably a plate of enamel or some perishable material with an ornamental edge had originally been interposed between the loose disc and the end of the casting.

Though I have shown the photograph to leading experts in Roman and Celtic archæology, no close parallel has been adduced. The most plausible suggestion as to the object's function, made by Mr C. F. C. Hawkes, F.S.A., is that it was the ornamental terminal of a chariot's lynch-pin. The thinness of the surviving end of the iron core, that would constitute the pin proper, may militate against this hypothesis. On the other hand, it would bring it into connexion with the terret as part of a chariot's gear. If Hawkes's suggestion be accepted, our specimen would be a derivative of the Yorkshire type as defined by Professor Ward Perkins in

Antiquaries Journal, xx. (1940), pp. 358-367, as might be expected in view of the familiar connexions with the Arras culture observable in horse-trappings from the Scottish Lowlands (Childe, *Prehistory of Scotland*, p. 230).

Finally, the object shown as Pl. LII, 2 is made of lead, 0.2 cm. thick, the edges being much damaged.

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