### II.

# NOTES ON SOME BROCHS AND FORTS VISITED IN 1949. By ANGUS GRAHAM, M.A., F.S.A., F.S.A.Scot.

### Read December 12, 1949.

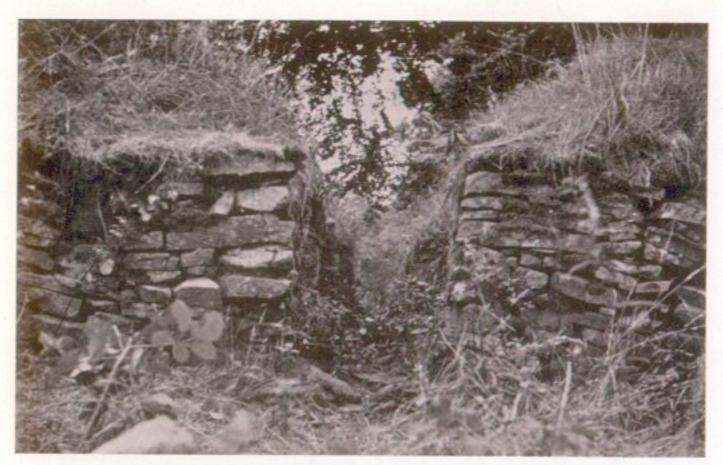
The purpose of this paper is to record the results of some field-work done during the summer of 1949, the subjects being two brochs, a galleried dun and two vitrified forts. In the case of Caisteal Grugaig, one of the brochs, my own observations have been augmented by some unpublished drawings made in 1871 and 1872 by the late Sir Henry Dryden, which are now in the Society's possession, and, much more materially, by a description written in 1924 by Mr G. P. H. Watson, F.R.I.B.A., R.S.W., F.S.A.Scot. I am most grateful to Mr Watson for his permission to make use not only of this matter but also of his survey notes, from which the plan has been prepared. I am likewise much indebted to Mr C. S. T. Calder, A.R.I.A.S., F.S.A.Scot., who drew this plan *in toto* and also helped me greatly with the rest of the drawings; as well as to Mrs Collingwood and Mr R. F. Graham for active assistance in the field.

#### COLDOCH BROCH.

This broch (Pl. III) is situated in the grounds of The Coldoch, near Doune, Perthshire,¹ and was visited by kind permission of the proprietor, Mr W. McNair Snadden, J.P., M.P. It was cleared out in or just before 1870 and has since lain open to the elements; a description was published, without a plan, in 1870,² and a plan, stated to have been made by a Mr Ballingall, appeared in 1877.³ This plan, like all the early plans of brochs, is obviously diagrammatic in that it represents the structure as being perfectly circular, and it was in order to produce a more realistic plan and to check the published measurements that the present survey was undertaken. The result is shown in fig. 1. From this it will be seen that the court is not truly circular, its "diameter" varying between 29 feet 6 inches (N.W. to S.E.) and 27 feet 6 inches (N.E. to S.W.), while the wall varies in thickness between 17 feet 6 inches and 19 feet 6 inches. The wall is built of smallish quarried material, and the quality of the masonry is poorer than is generally seen in brochs. The inner wall-face stands some 4 feet above the present level of the interior,

<sup>&</sup>lt;sup>1</sup> Six-inch O.S. map of Perthshire, 2nd edition (1901), Sheet CXXXI N.E.; National Grid Ref. 26/697982 on Sheet 66 of the one-inch O.S. map of Scotland, "Popular" edition.

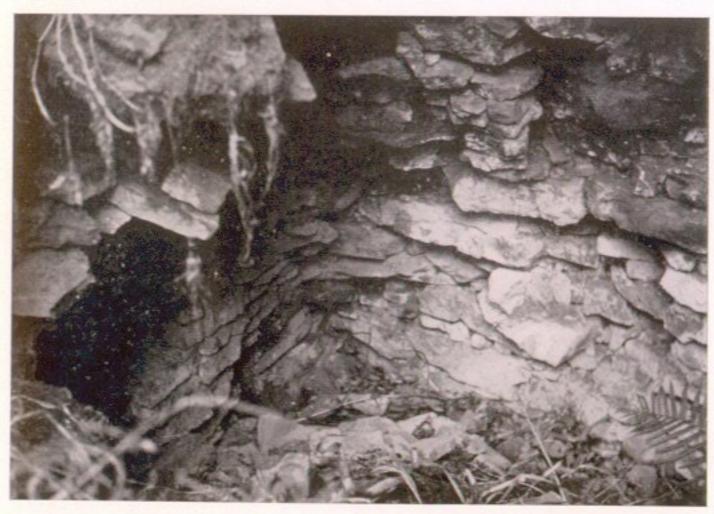
P.S.A.S., vol. ix. (1870-71 and 1871-72), p. 38.
Ibid., vol. xii. (1876-77 and 1877-78), p. 324.



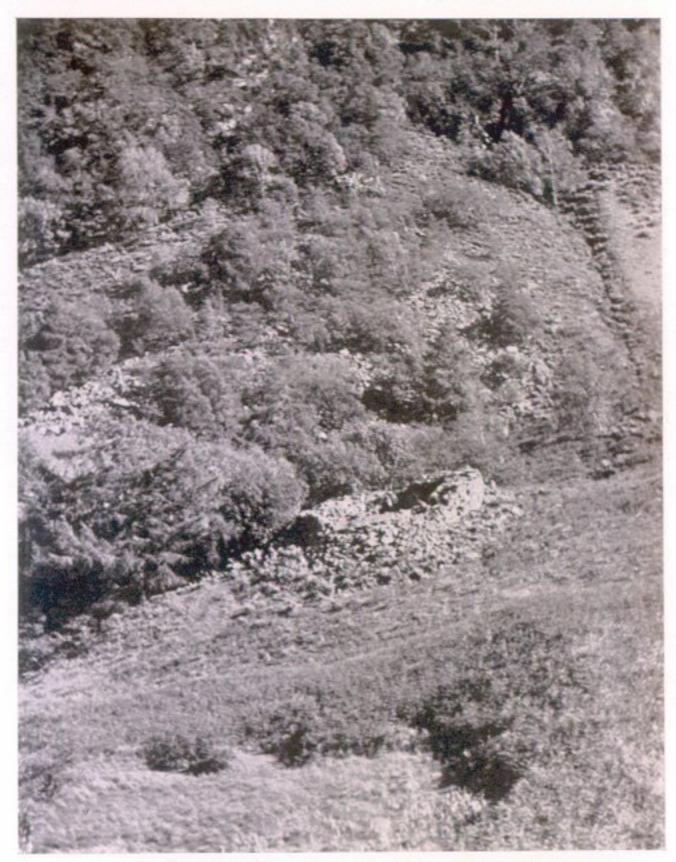
1. Coldoch Broch: entrance from inside.



2. Coldoch Broch: entrance to north-western cell.



3. Coldoch Broch: interior of northern cell, showing square corner.



1. Caisteal Grugaig from the north-west.



2. Caisteal Grugaig from the south.

ANGUS GRAHAM.



1. Caisteal Grugaig: entrance.



2. Caisteal Grugaig: interior of entrance passage, showing door-check and entrance to guard cell.



3. Caisteal Grugaig: inner end of entrance passage, with aperture above and scarcement to right at level of lintel.



4. Caisteal Grugaig: entrances to small cell and stair lobby in eastern arc.



5. Caisteal Grugaig: aperture to passage in southern-east arc.



6. Caisteal Grugaig: opening broken through roof-lintels of passage on south, with footings of upper passage.

ANGUS GRAHAM.



1. Caisteal Grugaig: round-ended alcove above entrance.



2. Dun Grugaig: interior of north-eastern arc, showing scarcement.



3. Dun Grugaig: masonry on southern arc, showing displacement of courses by subsidence.



4. Dun Grugaig: top of blocked doorway on south-east of court, with side of aperture above.



5. Dun Grugaig from the north-east.

ANGUS GRAHAM.

and this may or may not represent the level of the scarcement as no recognisable remains of a scarcement now survive. West of the northern cell, the ruinous core of the wall, heavily overgrown with grass, stands as much as 8 feet above the court.

The entrance-passage, though slightly crooked outside the checks and not quite symmetrical inside them, is otherwise of a normal pattern, and the sinuous alignment given to it in Ballingall's plan is quite misleading. Its width is 2 feet 4 inches at the outer end, 1 foot 11 inches at the inner end, and about 4 feet behind the checks, the southern one of which is broken.

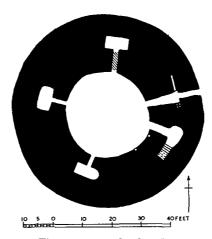


Fig. 1. Coldoch Broch: plan.

The usual bar-hole appears on the north side of the passage, but the corresponding recess on the south side has been obscured by displacement of the stonework. According to a plan in the Society's possession, apparently prepared at the time of the clearing-out, the bar-hole was 7 feet deep and the recess 2 feet deep. Both door-checks are shown in position, with a space 3 feet 5 inches wide between them. The entrance possesses no guard-cell, but this is less uncommon than is sometimes believed.<sup>2</sup>

The disposition of the internal features can be most easily explained by treating the court as a clock-face with the entrance in the VI-o'clock position. We then find the entrance to a stair at VII o'clock, two small recesses, like aumbries, between VII and VIII o'clock, and three mural cells at X, I, and IIII o'clock respectively. This arrangement is not exactly repeated in any broch for which information is available. To deal with the "aumbries" first, it may be said that they are each about 8 inches square, and recall the recesses that occur, though in much larger numbers, at The

<sup>&</sup>lt;sup>1</sup> E.g. it should not have been quoted as a "curved" passage in my paper, *ibid.*, vol. lxxxi. (1946-47), p. 55 and note.

<sup>&</sup>lt;sup>2</sup> See table, ibid., p. 56.

<sup>3 &</sup>quot;V" in fig. 2, ibid., p. 59.

Tappock, Tor Wood, Stirlingshire; there is no evidence that they are secondary, and it is difficult to see any reason for putlog holes so close to the ground. The passage leading to the stair is 2 feet 3 inches wide at its entrance and 3 feet 2 inches wide where it opens into the stair-lobby. has lost its roof. The depth from the entrance of the passage to the eastern corner of the lobby, which is also unroofed, is 12 feet. The stair is 2 feet 8 inches wide, and runs out on to the ruined wall-top; seven steps were found in 1870. The entrance-passages of the southern and western cells are still intact, though the cells themselves are unroofed; the northern passage is blocked, but its doorway survives in a somewhat ruinous condition. The doorway of the southern cell-passage (X o'clock) is 2 feet 2 inches high by 1 foot 7 inches wide, the passage being 3 feet 9 inches in The cell is 8 feet 7 inches long by 3 feet 9 inches broad, and its greatest surviving height is 5 feet; it is peculiar in possessing one square and one rounded end. The western passage-doorway (I o'clock) is 2 feet 6 inches high by 1 foot 3 inches wide, the passage being 4 feet 10 inches long. The cell is 8 feet long by 4 feet 6 inches wide, its greatest height is 6 feet, and its shape is oblong with slightly rounded corners. The northern passagedoorway (IIII o'clock) is 1 foot 10 inches in height and breadth and its length is 7 feet 4 inches. This cell is rectangular on plan, measuring 8 feet 6 inches in length by 4 feet 7 inches in breadth; but 6 inches above the surface of the debris lying on the floor the angles begin to be rounded as the walls converge through the encorbellation of the courses, and at the surviving height of 6 feet the size of the cell is reduced. In 1870 the roof was still in place presumably lintels spanning the "bee-hived" top-and the height of the cell is recorded as having been 7 feet. The small size of these three mural cells, and the tendency of their corners to be square, place them in contrast to the round, oval, bag-shaped or passage-like cells that are usually found; and these features, combined with the thick wall, the rather poor standard of the mason-work, and the unusual position of the stair, tend to mark Coldoch broch out as a somewhat exceptional structure. This is not, however, to be wondered at, seeing that it is so far distant from the confines of the broch region proper.

### CAISTEAL GRUGAIG.

This broch stands rather over half a mile west-south-west of Totaig, overlooking the head of Loch Alsh and its junction with Loch Duich and Loch Long from a height of about 250 feet O.D.<sup>2</sup> Its site is on a grassy slope which falls steeply north-eastwards towards the lochs, and is bounded on

<sup>2</sup> Six-inch O.S. map of Ross and Cromarty, 2nd edition (1905), Sheet CXXIII; National Grid Ref. 18/867251 on Sheet 36 of the one-inch O.S. map of Scotland, "Popular" edition.

<sup>&</sup>lt;sup>1</sup> A sketch in the Society's possession, which probably dates from 1870, shows the stair entrance as lintelled and sodded over, and the aumbry nearest to it as divided in two by a shelf. Two other aumbries appear, one on each side of the entrance to the northern cell.

the south-east by a small burn, Allt Aoinidh, beyond which the flank of Faire Donn rises abruptly to its crest some 750 feet above. The lie of the land can be seen in Pl. IV, 1 and 2, and in the former some of the screes of Faire Donn from which, most probably, the building-stone was obtained. The broch actually stands on a small rocky knoll, which rises immediately on the left bank of Allt Aoinidh and also shares in the north-easterly slope of the

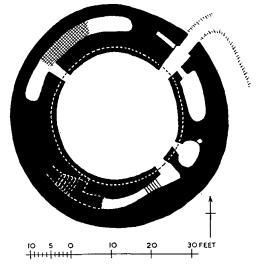


Fig. 2. Caisteal Grugaig: plan.

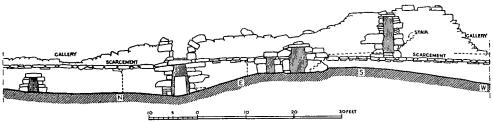


Fig. 3. Caisteal Grugaig: elevation of the interior developed on the flat.

hillside; as a result the level of the court itself falls at least 5 feet from south-west to north-east, and this cant in the surface of the site—as will shortly appear—has set the builder a problem in the vertical arrangement of his galleries. The ground immediately below the north-eastern arc has been revetted with masonry 6 feet out from the footings. The interior is free of debris, having been cleared out in 1889.

The plan of the structure (fig. 2) is almost a perfect circle, with a diameter of 31 feet 6 inches. The wall is from 11 feet 5 inches to 12 feet 3 inches thick,

<sup>&</sup>lt;sup>1</sup> P.S.A.S., vol. xxxi. (1896-97), p. 86.

is slightly battered, and shows a scarcement whose width of about 12 inches Apart from one major irregularity, which will is partly due to corbelling. be discussed later, the scarcement, as will be seen from fig. 3, maintains a fairly uniform level all round the court notwithstanding the declivity of the site, with the result that the height of its surface above the ground varies from 7 feet on the east side of the entrance to no more than 2 feet 4 inches between X and XI o'clock. The surviving height of the wall, which has evidently been heavily robbed, varies from 5 feet 4 inches at III o'clock <sup>1</sup> to 13 feet at XII o'clock—the latter figure representing a height of between 18 and 19 feet above the inner threshold of the entrance when allowance is made for the slope. It is noticeable that where the wall is highest the top of the inner face overhangs the scarcement by 9 inches in a height of 10 feet 6 inches; this amount is too small to indicate a drawing-in of the wall to form a domical roof, but it may imply the former existence of an upper Of the masonry, Mr Watson has written that it "is dry-stone scarcement. walling of excellent construction formed externally of large blocks roughly squared and naturally bedded, and internally of rather smaller material brought to their course by pinnings of small flat stones. A jamb in the entrance has been dressed to an arris with a small tool of the adze variety about  $1\frac{1}{4}$  inches broad."

The entrance, which is 4 feet 9 inches high by 3 feet wide, is set at the lowest point, facing north-east. It it a magnificent piece of prehistoric construction, with a great triangular lintel (Pl. V, 1). The entrance-passage is of the usual pattern, widening to 3 feet 10 inches behind the door-checks, which are built and not formed of erect slabs, and having a bar-hole more than 6 feet 6 inches deep. The massive masonry is shown in Pl. V, 2. On the eastern side of the passage there is a guard-cell measuring 13 feet 10 inches in length by 5 feet in breadth; its height is uncertain owing to its ruinous condition, but Dryden's section shows it as rising to a beehive top. The inner entrance, with its converging jambs, is shown in Pl. V, 3.

Within the court, on the right-hand side of the entrance (about II o'clock), there is the blocked doorway of a cell 3 feet high by 2 feet 6 inches wide. Most of the cell is likewise filled up with debris; but its north-eastern portion can be entered through a hole broken through the roof-lintels and one end thus located about 11 feet west of the entrance-passage, while Dryden's plan shows the position of the southern end as 8 feet south of the doorway. The total length of the cell along its axial arc must thus be about 35 feet.

On the other side of the entrance, between VIII and IX o'clock, there is a mural cell 6 feet 10 inches long by 4 feet 6 inches wide, which is entered by a doorway 3 feet 1 inch high by 1 foot 6 inches wide; to quote Mr Watson again, it "is built like a beehive, then corbelled transversely with lintels and

<sup>&</sup>lt;sup>1</sup> It is possible that debris once filled the interior, which is now clear, to about this height, and that the stone-robbers broke down this part of the wall for its removal.

closed with a flag," and it contains a small, well-made aumbry. o'clock, 3 feet 4 inches beyond the entrance to the cell (Pl. V. 4), there is another doorway, about 4 feet 9 inches high and of uneven width; this leads into a small stair-lobby in which five steps rise a total height of 3 feet The gallery at the top of the stair, which averages 3 feet 6 inches in width, runs on at a height which clears the bed-rock at the highest part of the site and brings it, though it is still a ground-floor gallery, approximately level with the first-floor gallery on the north-western and northern arc (cf. At about XI o'clock a void, over 8 feet high by 2 feet wide (Pl. V. 5), opens from the gallery into the court, two steps set in its bottom leading down on to the scarcement. Beyond the void Mr Watson, in 1924, saw another stair rising; in 1949 this was hidden by debris, but it must either have led into or passed through a gallery running on westwards and northwards at what would there have been second-floor level—the counterpart of one whose floor and outer footings are seen between X and XI o'clock, above the gallery leading from the lower stair to the void (Pl. V. 6). vanished second-floor gallery, beyond the upper stair, would thus have overlain a first-floor gallery which in turn overlay the long cell that is entered at II o'clock (supra). A ragged hole, representing this first-floor gallery, appears in the section of the wall that is exposed between I and II o'clock: while some of its footings and floor-lintels can be seen on top of the cell at about III o'clock. As the first-floor gallery ended blind behind the stair, and was blocked towards the north-east by a chamber over the entrance-passage with which it did not communicate, entry to it must have been gained, if it was gained at all, either at scarcement-level through a void —very possibly one set over the doorway into the cell—or else through its own roof from the gallery above.1

The small chamber over the entrance-passage is 7 feet 6 inches long by about 4 feet 3 inches wide; its outer end is rounded (Pl. VI, 1), and its inner end is open to the court, as a void at scarcement-level, over the inner entrance (Pl. V, 3). A similar arrangement is seen at Mid Howe.<sup>2</sup> The footings of a gallery can be seen just east of this chamber, and though the junction between the two is now obscured by debris, it was visible in 1924 and is also shown in one of Dryden's drawings. This length of gallery must presumably have been blocked towards the south by the tops of the small cell and the stair-lobby, and have ended blind at about VIII o'clock; the only access to it must consequently have been through the chamber above the entrance-passage—itself entered from the scarcement through the void at its inner end.

One of the most interesting features of this broch is the scarcement, as it happens to throw some light on the functions of broch-scarcements in general; and its discussion, which was postponed at an earlier stage, can

<sup>&</sup>lt;sup>1</sup> For this arrangement at Dun Telve, see P.S.A.S., vol. l. p. 247. <sup>2</sup> P.S.A.S., vol. lxviii. p. 451. VOL. LXXXIII. 2

now be usefully resumed. It is sometimes said, though in the face of a good deal of evidence, that the purpose of the scarcement was to support the roof-timbers of the broch, the inferred existence of a roof at this low level being then cited in support of the theory that brochs were in general structures of quite low elevation. I have drawn attention elsewhere to facts which suggest that the scarcement's function was really to support not the roof of the broch as a whole but a kind of veranda-roof, presumably flat, which also served as a balcony to give access to openings at its level. The evidence provided by Caisteal Grugaig is wholly in favour of this view, for the following reasons.

- (i) As has already been pointed out, the slope of the hillside brings the bed-rock in the southern part of the court, between X and XI o'clock, to no more than 2 feet 4 inches below the upper surface of the scarcement, and the idea that the roof of the whole structure rose from so low a level can naturally be dismissed as absurd. On the other hand, the potential utility of a kind of board-walk, giving access to voids at this level and also serving as a veranda-roof in the lower-lying parts of the court, is obvious enough.
- (ii) That access to the intramural spaces was in fact obtained from the scarcement is shown by the steps leading up from it in the base of the void at XI o'clock, and by the fact that the length of gallery over the guard-cell could apparently be reached only by way of the scarcement and the small chamber at VI o'clock. It has also been noted that, if the first-floor gallery in the vanished north-western part of the wall was accessible, entrance to it was most probably gained off the scarcement, by means of a void.
- (iii) It was mentioned earlier that the scarcement departed from its general level in one place—and this is between IX and X o'clock, where it is encroached on by the doorways of the stair-lobby and the small cell beside it. Here an ascending ledge of projecting stones takes the place of the scarcement 7 feet 4 inches south-west of the stair-lobby entrance, and from there passes over the tops of both the doorways to resume the original line just beyond the doorway-lintel of the small cell <sup>2</sup> (Pl. V, 4). The arrangement of this ledge, and the comparatively easy grade at which it ascends, suggest strongly that whatever passed over these two doorways was more in the nature of a gangway than of a mere protective porch.

If the position of the scarcement is no criterion of the height of a broch, it remains to ask what evidence of original height, if any, can be found in so ruinous a structure as Caisteal Grugaig. In the first place, there is no reason to doubt that its height was the same all round, as the arrangements made at the lower levels of the building had evidently overcome, however im-

<sup>&</sup>lt;sup>1</sup> P.S.A.S., vol. lxxxi. pp. 69 f.

<sup>&</sup>lt;sup>2</sup> The course of this ledge is shown in the photograph by the moss on the projecting stones, and some prominence has been given to it in the drawing of fig. 3.

perfectly, the constructional difficulties introduced by the sloping nature It follows from this that the elevation must have been higher To begin with the uphill side, the on the downhill than on the uphill side. highest part of the existing wall (XII o'clock) may be estimated as standing between 18 and 19 feet above the inner threshold of the entrance. of the upper gallery, already mentioned as surviving, with its outer footings, between X and XI o'clock, lies a few inches below this level—and that this was, in fact, a gallery and not a parapet-walk is shown by the downward step that can be seen (Pl. V, 6) running parallel with the footings on the opposite side of the gallery, evidently marking where the footings of an inner wall have been torn away. A gallery here would no doubt have added at least five feet to the existing height of the wall, and a parapet on top of it perhaps a further three, with the result that the top of the wall at XII o'clock cannot have been less than 26 feet above the level of the entrance. then, would have represented the minimum height of the broch on its northeastern, or downhill, face, while the south-western, or uphill, face might not have been more than about 20 feet. These figures, however, are minima, and are given as representing only what can be positively inferred from the structure in its ruined state; they would have to be increased by an appropriate amount if it were assumed that more than one gallery had been removed from the south-eastern part of the wall. On this latter question, of course, no evidence is now forthcoming, but—for what comparisons are worth— Dun Telve, a fairly near neighbour in Glen Beag, still stands over 34 feet in its damaged condition, and I have given reasons elsewhere 1 for believing that both Dun Troddan and Dun Telve must once have stood more—and the latter perhaps considerably more—than 40 feet in height. analogy Caisteal Grugaig might be supposed to have lost three galleries, and not one only, from the south-eastern part of its circuit; and its hypothetical height would then have to be increased by a further 10 feet at least.

### DUN GRUGAIG.

This monument is not a broch but a galleried dun. It is situated in the upper part of Glen Beag, Glenelg, about half a mile above Balvraid—its actual site being a rocky knoll (Pl. VI, 5) on the lip of a narrow and precipitous chasm through which the Amhainn a' Ghlinne Bhig passes at this point.<sup>2</sup> Sir Henry Dryden surveyed it in 1871, calling it not Dun Grugaig but Castle Chonil—no doubt rightly, as Alexander Gordon recorded this name in 1720 of some building in the eastern part of this glen and distinct from the two well-known brochs.<sup>3</sup> Dryden's drawings, which have never been published,

<sup>&</sup>lt;sup>1</sup> P.S.A.S., vol. Ixxxi. pp. 80 ff.

<sup>&</sup>lt;sup>2</sup> Six-inch O.S. map of Inverness-shire, 2nd edition (1902), Sheet LXII ("Dùne"); National Grid Ref. 18/851160, on Sheet 41 of the one-inch O.S. map of Scotland, "Popular" edition.

<sup>3</sup> Itinerarium Septentrionale, p. 166.

are in the Society's possession. He certainly, and probably Lockhart Bogle also, who published a summary description in 1894, as the remains in a somewhat less ruinous state than they are to-day, and in the present account an endeavour will be made to graft these two observers' records of vanished features on to the framework provided by the structure that still survives.

As fig. 4 shows, the structure is D-shaped on plan, the chord being formed by the lip of the precipice, which runs nearly straight from north-north-west to south-south-east, and the arc by the wall, both ends of which seem to have ended on the chasm. The enclosed area measures about 47 feet along the chord by 38 feet transversely. The wall varies in thickness from 13 feet

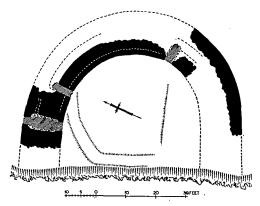


Fig. 4. Dun Grugaig: plan.

to 14 feet 6 inches, measured at the present level of the court, being reduced higher up by a scarcement 1 foot 8 inches wide (Pl. VI, 2); but under its eastern segment a hollow develops in the flank of the knoll, and the footings of the wall are carried well down into this with consequent batter and spreading out of the foundations (Pl. VI, 5). The floor of this hollow has subsided under the weight of the wall, the south-eastern face of which shows a crack and displacement of the courses (Pl. VI, 5 and 3). The masonry is good, as can be seen in Pl. VI, 3. The wall stands to its greatest height on the south and south-east, where the level of the site is raised, the top of the ruined inner side being about 8 feet above the level of the scarcement as seen on the north-east of the court. Elsewhere its greatest height is not more than 5 feet above the apparent surface of the interior; this, however, though grass-grown, has evidently been raised some two or three feet at least by accumulated debris, as is shown by the partial blocking of the celldoorways (e.g. Pl. VI, 4). A feature in the central and north-western parts of the court seems likewise to have been obscured since it was seen by Dryden, who here shows a depression with its margin defined by stonework, resembling the foundations of a hut; to-day, however, its outline is represented by a slight bank and the edge of a low terrace (cf. fig. 4).<sup>1</sup> The lip of the precipice seems to have been made up to a level with large blocks artificially placed, and these may once have carried a light wall to protect the edge of the court.

An entrance was identified on the north-north-west, 12 feet from the precipice along the inner face of the wall. It is now filled up with debris. but the rybats can be seen on both the inner and outer faces (breadth 3 feet), and the bar-hole was also found. Dryden recorded this entrance, but seems to have regarded it as a subsidiary one, as he marked as "main entrance" the doorway on the south-east of the court (infra). Nine feet east of the entrance a doorway, 2 feet 4 inches wide, leads into a mural passage or cell, the inner face of which, on the side towards the court, can be followed for some distance along the upper surface of the wall where it shows to a height of a few inches; its length, however, could not be determined, though Dryden's arrangement of a cell. 21 feet 6 inches long, with the suggestion of another cell beyond it communicating with the north-eastern doorway, is most probable and can well be accepted. The continuous passage, leading from one entrance to the other, that is shown on Bogle's plan,<sup>2</sup> is much less usual, though something of the kind appears to have existed on the upper level at Dun Ringill.3

The south-eastern doorway, which still retains its lintel (Pl. VI, 4), was 3 feet wide where measured; Dryden's measurement of 3 feet 7 inches may well have been made at a level which is now covered up. The outer face of the wall is here broken down, but the ruinous masonry, which was carefully searched for traces of an entrance-passage or outer doorway, shows no evidence at all for the existence of Dryden's "main entrance"; moreover, this point seems to be unsuited for an entrance on account of the steep downwards slope of the ground under and outside the wall. To the right of the doorway Dryden shows a passage-like mural cell 16 feet 9 inches long by 2 feet 3 inches wide at its outer end; this is at present completely obscured by debris.

From this doorway, towards the south and south-west, the wall is still high enough to show a few features belonging to an upper storey. Above the lintel of the doorway there has been a void opening into an upper gallery, as its right-hand jamb can be seen (Pl. VI, 4) rising vertically for several courses. In Dryden's time part of the left-hand jamb evidently survived as well. Again, in the broken-off end of the wall above and to the right of the right-hand side of this void there appears the open end of an upper mural passage, just visible in Pl. VI, 2 and well shown in a sketch of Bogle's. As

<sup>&</sup>lt;sup>1</sup> These features, and Dryden's "hut," may well, of course, be secondary.

<sup>&</sup>lt;sup>2</sup> P.S.A.S., vol. xxix. p. 182, fig. 3.

<sup>3</sup> R.C.A.M., Inventory of the Outer Hebrides, etc., No. 650 and fig. 293.

<sup>4</sup> P.S.A.S., vol. xxix. p. 183, fig. 5.

this opening is only 4 feet high, by 2 feet 6 inches wide at the bottom and 9 inches at the top, it would seem to be almost too small to have served as a passage, though it is comparable enough with the presumably inaccessible spaces that occur above the second galleries at both Dun Telve 1 and Dun Carloway.<sup>2</sup> Dryden, however, shows it as being based at the level of the entrance-lintel, instead of about 3 feet above it as it appears to-day, and also as measuring about 2 feet 6 inches in width at the top instead of 9 inches only; it is possible, therefore, that its apparent position and dimensions may be partly the results of disturbance—the top of the hole having risen when lintels dropped out, the floor having done the same as debris piled up, and the inner side having bulged and encroached on the open space as the whole structure became more ruinous. It is thus impossible to say whether this is an ordinary first-floor gallery or the kind of inaccessible space to which allusion has been made above. Consequently no argument can be based on it regarding the original height of the wall. Further, towards the south-west Dryden indicates the broken top of a gallery—apparently a continuation of this same one—with the bottom of an aperture 18 inches wide opening out of it: this aperture also seems to be about 3 feet higher than the entrancelintel, but as this wall face is now ruinous it seems impossible to arrive at any certain conclusions about the arrangement and levels of the intra-mural spaces.

None of the other galleried duns that are on record shows a ground-plan exactly the same as that of Dun Grugaig, though Dun Ringill, Skye, approaches it fairly closely.<sup>3</sup> It is also probably fair to compare it with the type in which a straight or curved barrier is drawn across the neck of a promontory <sup>4</sup> or the accessible side of a crag.<sup>5</sup> An example in which this barrier is so much curved as to approximate to the arc of a D is Dun Eyre.<sup>6</sup> In other respects Dun Grugaig conforms to type, and the apparent absence of a stair may simply be due to the ruinous state of the fabric.

### THE BARD'S CASTLE, BUNDALLOCH.

The existence of a vitrified fort at this site was recorded by the late Thomas Wallace, but no description of it has yet been published. He alludes to others in the same district without giving their position, and records the existence of vitrified matter on Eilean Donan. Hardly any

<sup>&</sup>lt;sup>1</sup> P.S.A.S., vol. 1. p. 245, fig. 4, and p. 249, fig. 7.

<sup>&</sup>lt;sup>2</sup> R.C.A.M., Inventory of the Outer Hebrides, etc., No. 68 and fig. 58. These spaces have been discussed in P.S.A.S., vol. lxxi. p. 63.

<sup>&</sup>lt;sup>3</sup> Ibid., No. 650 and fig. 293.

<sup>&</sup>lt;sup>4</sup> E.g. Barra Head, ibid., No. 450 and fig. 191.

<sup>&</sup>lt;sup>5</sup> E.g. Dun Vallerain, ibid., No. 544 and fig. 249.

<sup>6</sup> Ibid., No. 622 and fig. 284,

<sup>&</sup>lt;sup>7</sup> P.S.A.S., vol. xxxi. (1896-97), p. 87, and Transactions of the Inverness Scientific Society and Field Club, vol. viii. p. 109.

remains of structure now survive at "The Bard's Castle," though the name itself and the associated place-name, "The Point of the Tower," indicate that a building must have stood here at some time in the past. is on the edge of a semi-precipitous slope, which forms the eastern side of the trough of Loch Long at a point about 500 yards north-east of the footbridge that crosses the Glennan Burn at Bundalloch.<sup>1</sup> A rocky knoll here rises from the lip of the slope, and is flanked to landward by a modern drystone dyke which terminates just beyond the knoll on a small gully. knoll, on which some stony debris can be seen partly covered with turf, seems to occupy about half the area of a D-shaped enclosure measuring about 100 feet from north-east to south-west by 40 feet transversely; the chord is formed by the lip of the slope and the arc by faint vestiges of a stone wall, which curves round from north-east to south and then fades out after apparently turning west towards the slope. It is twice crossed obliquely by the modern stone dyke, which elsewhere follows it closely, and the point of its apparent divergence towards the west is marked by a large boulder incorporated in the dyke. The dimensions of the fort recorded by Wallace— 33 feet by 28 feet—are very much smaller than those given above, and are indeed so small as to arouse suspicion of their accuracy; however, the existing remains are too slight for superficial observations made now to be much better than guess-work, and it is possible that in the first decade of the century Wallace may have had some more definite evidence to guide him. A small specimen of vitrified matter—the only one seen—was recovered from the remains of the fort-wall where this lies to the east of the stone dyke, and its authentic character has been vouched for by Mr R. Eckford of the Geological Survey of Scotland.

With reference to the supposed mutual exclusiveness of vitrified forts and brochs, it is interesting to note that this fort is just 3 miles from Caisteal Grugaig, described above, and not very far from the pair of brochs in Glen Beag. The association of a broch and a vitrified fort on one and the same site was likewise described recently by Mr Calder and Dr Steer.<sup>2</sup>

## AN DUN, GAIRLOCH.

The discovery of this structure, another vitrified fort, has already been reported briefly,<sup>3</sup> but I am now able to furnish some further details. Its position <sup>4</sup> is on the neck of a small rocky promontory, which projects from the shore of Loch Gairloch some 1200 yards south of Gairloch Hotel and at

<sup>&</sup>lt;sup>1</sup> Six-inch O.S. map of Ross and Cromarty, 2nd edition (1905), Sheet CXXIV (unnoted); National Grid Ref. 18/898279 on Sheet 36 of the one-inch survey of Scotland, "Popular" edition.

<sup>&</sup>lt;sup>2</sup> Infra, pp. 68 ff.

<sup>&</sup>lt;sup>3</sup> P.S.A.S., vol. lxxxi. (1946-47), p. 182.

<sup>&</sup>lt;sup>4</sup> Six-inch O.S. map of Ross and Cromarty, 2nd edition (1906), Sheet LVI ("Site of Dun"); National Grid Ref. 18/802753 on Sheet 25 of the one-inch Survey of Scotland, "Popular" edition.

the southern end of a wide sandy beach. The site is naturally defensible as the neck has abrupt rocky sides, is cut across to seaward of the fort by a deep and wide fissure, and rises some 30 feet from its junction with the land in a slope broken by outcrops. These natural advantages have been improved by the elongation of the ends of two opposing clefts to form a ditch across the neck on the landward side of the fort; the southern section of this ditch is 32 feet long by up to 10 feet wide, and the northern section, which begins beyond an undug traverse about 7 feet wide, is about 12 feet long and on a rather more westerly alignment. The wall is now represented only by a grassed-over rickle of stones generally standing to a height of from 9 inches to 2 feet; on the northern arc it attains a height of 4 feet, but it is here probably raised on a hummock of rock. On the north the wall follows an even curve, but the southern side is less regular and contains a straight The enclosed area, which is flattened and occupies the whole of the habitable ground on the summit of the neck, measures 66 feet (crest to crest) from east to west by 62 feet transversely. The entrance is on the north-east, where the traverse interrupts the ditch, and a fine lump of vitrified matter, 3 feet high by 2 feet 6 inches broad, flanks it on the southand no doubt represents the remains of a gateway-structure which in, corporated a good deal of timber. A similar feature is to be seen at the fort on Hare Law, East Lothian. Vitrified matter was also found on the northern arc, where the remains of the wall stand highest.