

III.

THE FORTS OF KILMARTIN, KILMICHAEL GLASSARY, AND NORTH KNAPDALE, ARGYLE. BY DAVID CHRISTISON, M.D., SECRETARY.

The forts of Lorne and Loch Awe, with a few in the north of Craignish, and an outlying one in the far north at Onich, Ballachulish, were described by me in vol. xxiii. of our *Proceedings*, pp. 368-432. Thus were recorded all the known forts, fifty-nine in number, in the north of the mainland and the adjacent smaller islands of Argyle, as far as the south end of Loch Awe. To these I am now able to add twenty-four of the thirty-six known to exist southward in the adjacent parishes of Kilmartin, Craignish, Kilmichael Glassary, and North Knapdale. It was my ambition to overtake the whole number in the district, so as to complete the record thus far, but an illness during the last fortnight of my holiday obliged me to leave out the remaining forts of Craignish, and those on the east side of Loch Sween.

The names of the forts are taken from the O.M., as carefully verified by the Officers of the Survey, and the translations occasionally given are on the authority of that well-known Gaelic scholar, the late Rev. Dr Alexander Stewart of Ballachulish. The plans are on the scale of 60 feet to the inch, double that used for the forts of Lorne, which were kept on the same scale as that of the much larger Lowland forts previously described by me, but which proved inconveniently small for the Highland forts. My plans, taken from measurements by tape and pacing, can only claim a rude accuracy, but were helped in some cases by the Ordnance plans on the 25-inch scale, although that scale is not large enough to delineate satisfactorily the majority of the forts.

A.—FORTS IN THE PARISH OF KILMARTIN.

1. *Tur a Bhodaich*.—This fort lies one mile north of Kilmartin parish boundary, but it is convenient to include it here. It is nearly $4\frac{1}{2}$ miles due north of Kilmartin Church, half a mile north of Lochan

na Goirt, and 697 feet above the sea. I was unable to see it, but have got the following description of it from Mr Alex. Mackie, Corr. M.S.A. Scot.

The fort is situated on the top of a conical hill very steep on all sides. It is very ruinous on the east side, which resembles a cairn, but on the west side about 4 feet in height of wall is visible on the outer face. The inner face is not well preserved. The entrance is on the north, and is about 3 feet 6 inches wide, and shows no rebate. Its wall stands about 4 feet high to the outside, and is at least 6 feet thick. It may have been more, but the exact thickness cannot be determined without excavation, as a modern rude shelter of rough stones has been constructed in the doorway. The fort is nearly circular, and measures 54 feet in diameter over the walls.

2. *Dun an Nighen*.—Fully $2\frac{1}{2}$ miles N.N.E. of Kilmartin Church, at the head waters of Kilmartin Burn, 500 feet above the sea, a little beyond Tibbertich, the last inhabited place in the glen, which lies on high ground a quarter of a mile west of the burn. The fort, although only 150 yards east of the burn and road, is hidden by an intervening ridge that rises abruptly from the road, and it is only after climbing round the south end of this ridge that it comes into view, crowning a parallel ridge, with a very steep descent to a marshy flat about 60 feet below (fig. 1).

Scrambling up to the neck, seen on the sky line in the view, a wall comes in sight drawn across the rocky top, and barring access to the interior of the fort (fig. 2). It is still 5 or even 6 feet high near the middle, but at the ends streams down the slopes in utter ruin. It is only 3 or 4 feet high inside. The width is from 9 to 10 feet, and through it there is no visible entrance. A wall of like dimensions, except that the inner face hardly rises above the interior, defends the northern end (fig. 3). It is pierced in the middle by the only entrance, about 6 feet wide, which is much ruined, but a part at the S.W. corner survives (fig. 4), carefully built of stones much larger than those of the wall. The eastern side has been defended by a wall, the fragments of which

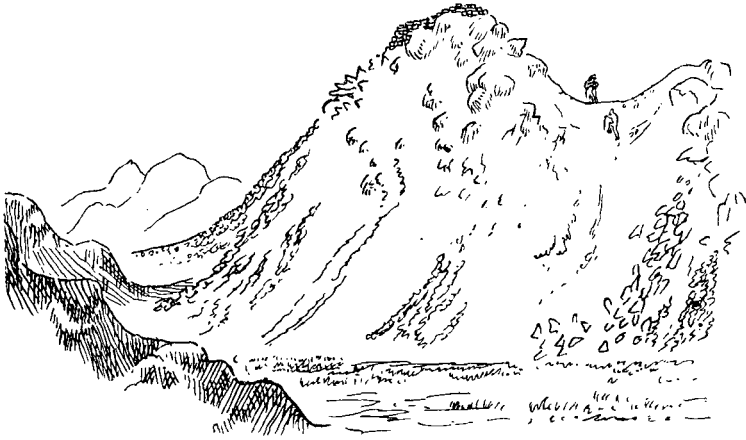


Fig. 1. Dun an Nighen, Kilmartin, from the south.

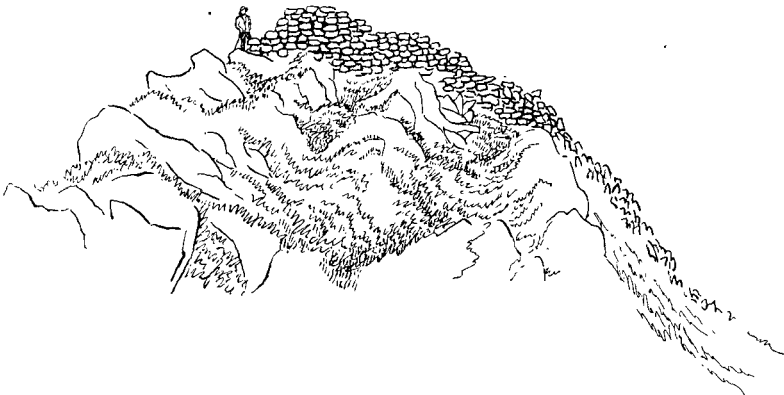


Fig. 2. Outer face of wall, south end of Dun an Nighen.

have slid down the slope along with the decaying rock. No artificial defence seems to have been thought necessary on the west side, where

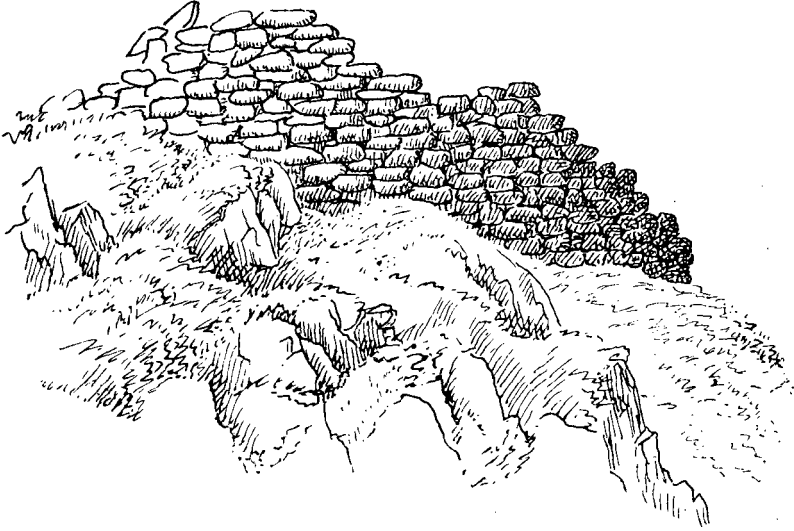


Fig. 3. Outer face of wall, north end of Dun an Nighen

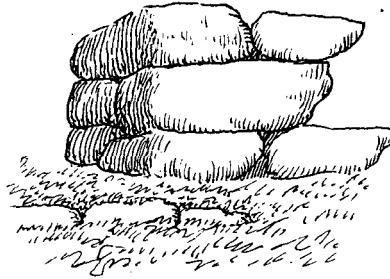


Fig. 4. Masonry at entrance, Dun an Nighen.

the steep slope is twice the height of the one on the east, and the rock at the top is less decayed. The level interior (plan, fig. 5) is oblong, with straight sides and rounded ends, and measures 45 by 30 feet.

This fort is the *Dun-na-hein* of Miss Maclagan, who unaccountably calls it circular, and speaks of a second wall, "a good way down the steep, where few would venture to go," on which "the decay of the rock has had still more disastrous effects." But it is most unlikely that a wall could have been built on such an exceedingly steep slope, and I think

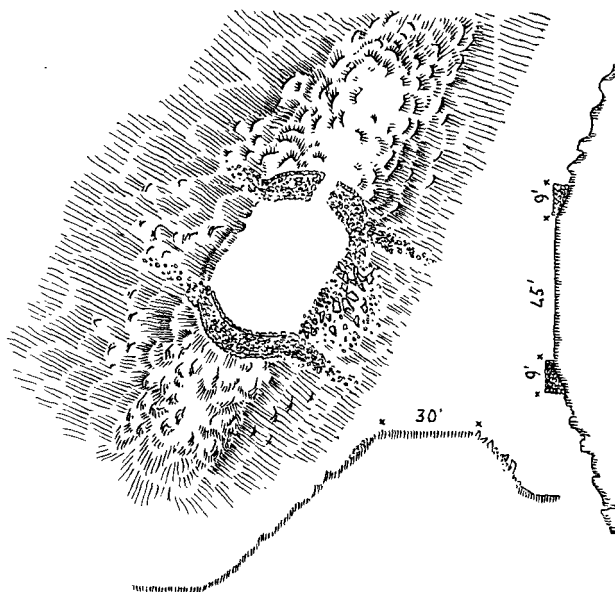


Fig. 5. Plan of Dun an Nighen, Kilmartin.

Miss Maclagan must have been deceived by a chance arrangement of the fragments of the upper wall in sliding down the slope.

3. *Dun Mhic Choish*.—Half a mile down the valley from Dun an Nighen, a green, nearly level-topped ridge, on the east side of the road, leads in another half mile to Dun Mhic Choish, on the top of a rocky mound that strides across the ridge near its sudden termination at the edge of a precipitous wooded descent 300 feet in height.

The site is 450 feet above the sea, $1\frac{3}{4}$ miles N.N.E. of Kilmartin Church, and 250 yards S. of the pleasantly situated upland farm-house of Creagantairbh Mor. The position is important, as it overhangs the

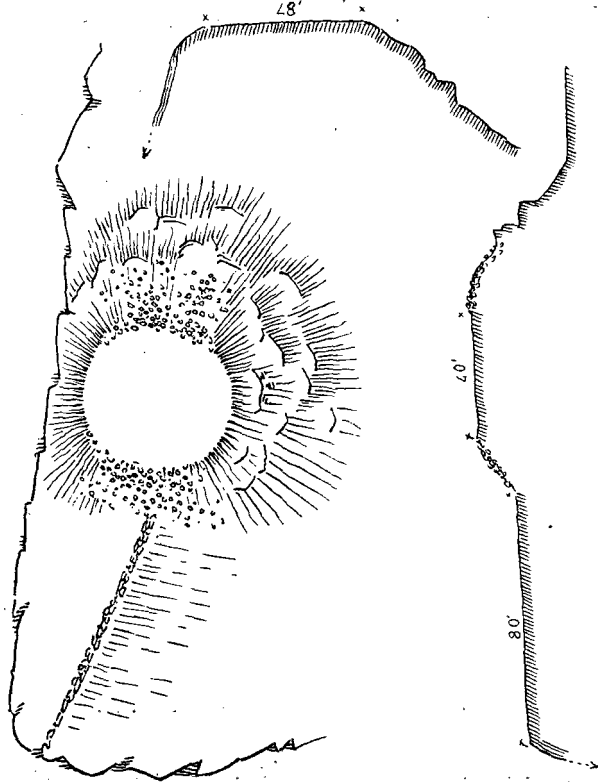


Fig. 6. Plan of Dun Mhic Choish.

bifurcation of the pass from Kilmartin to Oban in one direction and to Loch Awe in the other.

The level interior (plan, fig. 6) occupies the whole summit of the knoll, and measures 48 by 40 feet. To north and east the descent is

30 to 40 feet high, steep, and broken by little mural faces of rock. To the west the ground falls almost at once to the edge of the lofty precipitous bank. On the south, a descent about 10 feet high falls on a narrow platform, 80 feet long, from the point of which you look down an almost mural though wooded precipice to the pass 300 feet below.

Scanty debris peeping through the sod over a width of 24 feet on the north and 15 on the south slope is all that remains visible of the wall. The platform below has a wall on its east side, but it seems to be a modern fence. It is here, however, that the fort was most vulnerable, as the fall in the ground eastward is quite gentle and smooth, and the fort is only 10 feet above the platform. The late Rev. Alex. Stewart (Nether Lochaber) translated *Mhic Choish* as "son of Coas," a name which occurs on an ancient Irish tombstone at Glendalough as *Mac Cois* (*Christian Inscriptions in the Irish Language*, Petrie, edited by Miss Stokes, ii. No. 71).

4. *Creag A' Chapuill*.—No fort is marked here on the O.M., but I was directed to it by the tenant of Creagantairbh Beag, a farm by the roadside about a mile south of Ford, Loch Awe. Creag A' Chapuill (plan, fig. 7, from the O.M.) is a finely-formed rocky hill rising to a peak 920 feet above the sea, and, like others in the vicinity, precipitous to the south-west. A col, about 600 feet above the sea, connects it with Creagantairbh (625 feet), a counterpart of itself on a smaller scale, but more conspicuous, as it comes nearly down to the road, whereas Creag A' Chapuill lies back.

Following the march dyke at the col westward, on the lookout for the usual small oval fort, I was puzzled on finding to the left the remains of a straight wall, about 50 feet above the highest point attained by the dyke, just where the steep ascent eased off, at about the 800-foot contour; and on walking up the gentle slope towards the top of the hill for about 100 yards, I was still more surprised to see no sign of fortification to close in a space for defence. Returning to the wall, which ran for about 80 feet between two large inaccessible rocks, I soon found that it was continued at intervals in both directions, wherever the

rocks were insufficient as a defence. On both sides it ran out at the great south-western precipice, and thus a somewhat quadrilateral space at the top of the steep ascent, measuring perhaps 250 by 200 yards, was effectually fortified.

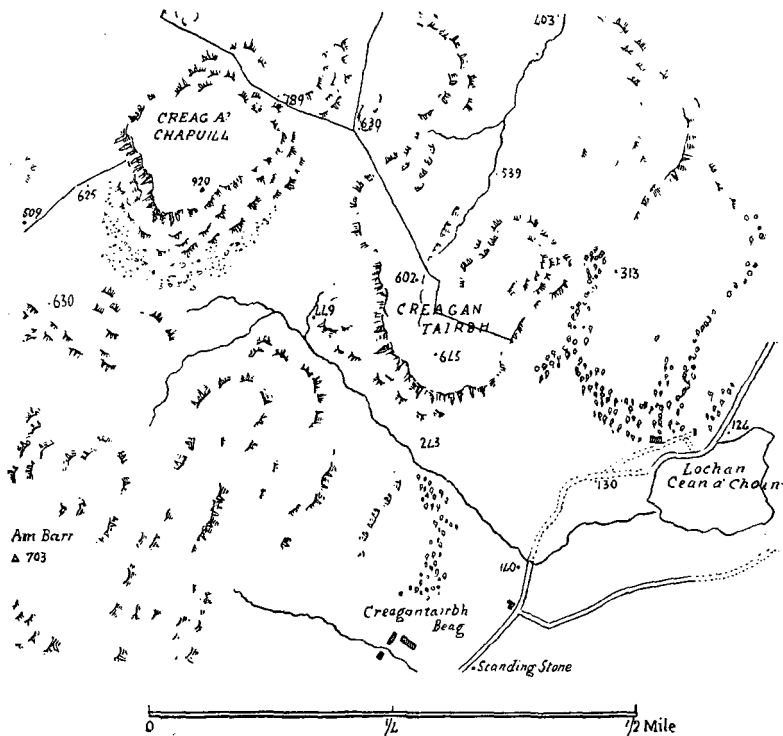


Fig. 7. Chart of Creag A' Chapuill, etc., near Ford. Reduced from 15-inch O.M.

This fortress, of quite exceptional size in the Highlands, is situated in a wild, remote region, $2\frac{3}{4}$ miles N.N.E. of Kilmartin Church, with a superb view up the whole length of Loch Awe to Ben Cruachan, and forms one of a group of four forts, the other three being *Dun Chonallaich*,

Dun an Nighen, and *Dun Mhic Choish*, which are all in full view, and the furthest only three-quarters of a mile off.

5. *Near Slocavul*.—A mile and a quarter W.S.W. of Kilmartin Church, and a quarter of a mile west of the cheerfully situated hamlet of

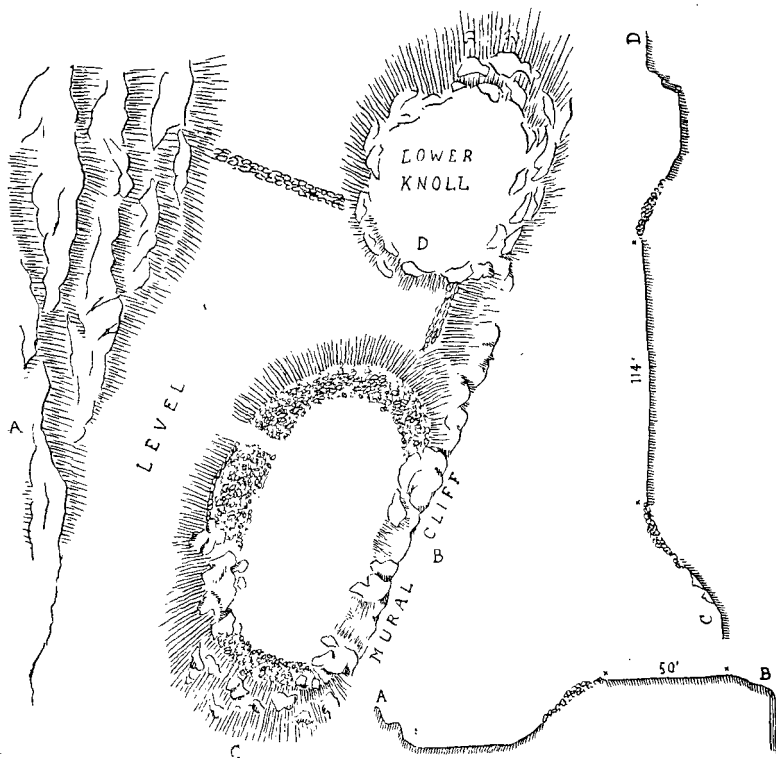


Fig. 8. Plan of Fort near Slocavul, Kilmartin.

Slocavul, this fort stands 300 feet above the sea, on a rocky knoll on the west side of the burn that flows past the hamlet.

The fort occupies the whole top of the knoll, and the interior is a grassy flat of 114 by 50 feet with straight sides and rounded ends (plan, fig. 8). The eastern side rests on the edge of a mural cliff about

30 feet high. The opposite side falls by an easy descent to a narrow flat 20 to 25 feet below, beyond which rises another and larger knoll. The south end slopes by a steep rocky descent to open ground 30 feet below; and on the north the descent is only 10 to 15 feet deep to a neck joining on to a third, smaller and lower knoll. Intrusive rocks contribute to the defence of the sides, and the ends and western side have been protected by a wall, the debris of which forms a mound 2 or 3 feet high and 20 to 25 wide. A row of large stones lines the foot of the western debris. The entrance is on the west side. Walls connect the three knolls, but seem to be modern.

6. *Near Loch Michean*.—Up the little valley from the last, past the north end of Loch Michean, and a quarter of a mile down the glen to the north-west, a very small fort stands on an isolated knoll, which rises from a little flat space embosomed in hills. The fort has a fine outlook westward across Loch Craginish, through the Gulf of Corryvreckan, and southward over Crinan Loch down the Sound of Jura. The site is 1 mile W.N.W. of the last, 2 miles west by south of Kilmartin Church, and 500 feet above the sea.

The whole top of the knoll, which is somewhat square, is occupied by the fort (plan, fig. 9). The interior measures only 35 by 33 feet, and has been fenced by a wall 8 or 9 feet thick, parts of which still stand on all sides to a height of several feet, particularly on the S.W. (fig. 10). The entrance is seen in this view, formed by a rock on one side and a wall on the other. It slopes upwards, and is narrowed from 3 feet to 2 feet at the outside by a projection from the wall, shown in the sketch. This entrance wall, $3\frac{1}{2}$ feet thick, is very well built, and has not been bonded into the wall of *enceinte*. As, moreover, the sketch shows that the stones of which it is composed are smaller than those which constitute the wall of the fort, it seems probable that this entrance wall is a recent construction. The surface of the interior is covered with low mounds, overgrown with heather and dwarf willow. A little burn courses round the east and south below the fort, about 50 yards from the walls.

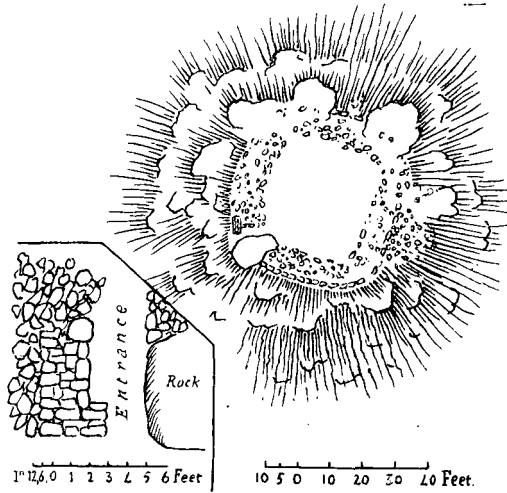


Fig. 9. Plan of Fort near Loch Michean, Kilmartin.



Fig. 10. Entrance to Fort near Loch Michean.

7. *Duntroon*.—Near the shore at the head of a little bay on the north side of Crinan Loch, $2\frac{3}{4}$ miles S.W. of Kilmartin Church, and $\frac{5}{8}$ mile

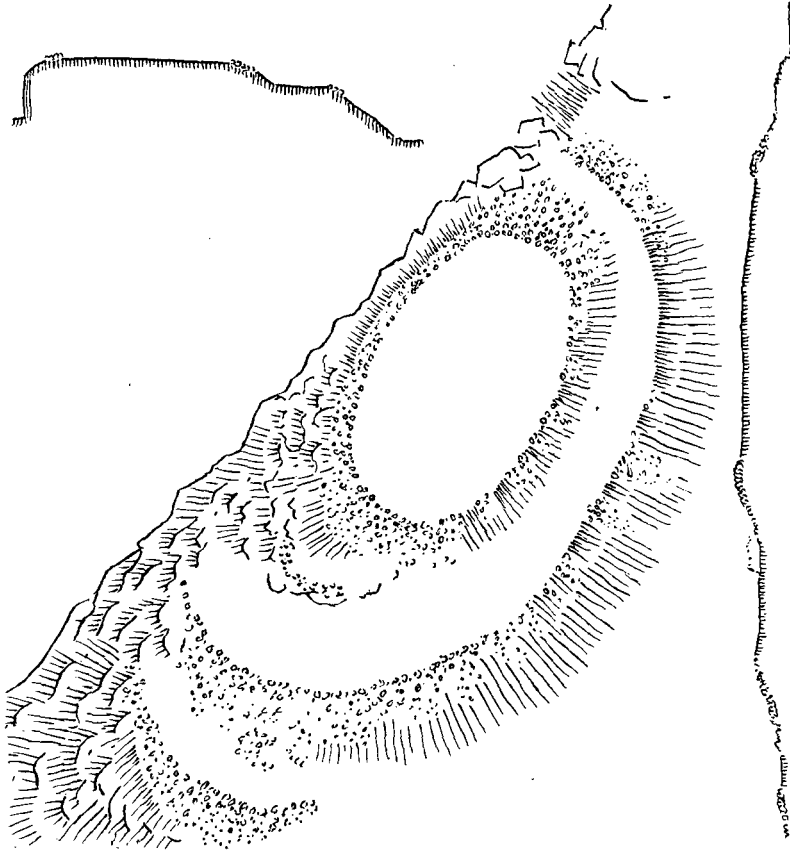


Fig. 11. Plan of Duntroon, Crinan Loch.

E.N.E. of Duntroon Castle, the next fort stands on the top of a rocky eminence, 90 feet above the sea, which is less than 100 yards off.

The western side of the fort (fig. 11, taken mainly from the O.M.)

rests on the edge of a straight mural cliff, 15 to 20 feet high, looking down on a smooth grassy hollow. The opposite side descends steeply to a field, the slope being interrupted, 7 to 10 feet below the top, by a terrace 40 feet wide towards the south, but narrowing northward, and gradually disappearing at the north end. The northern end of the interior is 15 to 20 feet above a narrow flat separating it from a very small, low knoll; and the southern end is about 50 feet above the road, the ascent here being rough, rocky, and rather steep.

The oval interior, measured with tape, is about 130 by 85 feet, and has been enclosed by a wall, of which abundant debris, 20 to 30 feet wide, lies at the ends. There is less at the sides, and to the west the wall at the top of a little slope to the cliff edge has evidently been less strong. A rocky projection from the interior upon the terrace at the S.W. corner has had a subsidiary wall. The terrace has also been fenced by a wall, as strongly towards the south as the upper *enceinte*; and still further down to the south there appears to have been a small annex also defended by a wall of which the debris is 25 feet in width. Slight remains of rude building of smallish stones are visible in a few places, but I saw no facing stones. There are obscure evidences of entrances at both ends. The total length of the work I made to be 380 feet, which agrees with the Ordnance Plan, except that the annex is not given there.

This fort is marked "vitrified" on the O.M. The first notice of it as such appears to be by Canon Greenwell (*Proc. S. A. Scot.*, 1868, vol. vi. p. 338): "A vitrified fort at Duntroon, though considerably destroyed, has still sufficient remains left to show the peculiar character." In the same volume, p. 351, the Rev. R. J. Mapleton mentions "the vitrified fort referred to in the paper by Mr Greenwell"; and Dr Angus Smith (ix. 1872, p. 407) says: "This fort is well seen in the woods, as shown me by Dr Mapleton: it is vitrified." Captain Thomas, R.N. (xiii. 1879, p. 35) speaks of it as "the vitrified fort near the present Duntroon." And Miss Maclagan ("Hill Forts," etc., p. 42) says: "At Duntroon on the sea coast stands a vitrified fort."

All these authorities perhaps did not speak from personal knowledge, but the evidence of vitrefaction, if vague, seems to be sufficiently strong. I was surprised, therefore, that I did not notice any among the extensive stony debris traversed in the course of my measurements; but I did not look very carefully for it, and I am informed by Dr Alex. Munro that he saw a considerable quantity in the debris of the western wall, which I did not examine. The wall here is at the top of a steep little slope to the edge of the precipice, and probably was intended to prevent falls over the precipice rather than for defence, which was sufficiently provided



Fig. 12. Fort at Ardifuar, Crinan Loch, Kilmartin.

for by the mural cliff. If by a "vitrified fort" we mean one in which vitrified walls seem purposely to play an important part in the defence, it still remains to be proved that Duntroon is entitled to that designation.

Dr Angus Smith and Captain Thomas express the opinion that this fort is the *Dun Treoin* of the *Tale of the Sons of Uisneach*, and it seems likely enough.

8. *Ardifuar*.—Rounding first the bay westward from the last, and then a second sequestered bay, marked *Gallanach* on the O.M., the track leads over a low ridge to Ardifuar farmhouse, close to the west of which, 100 feet above the sea, stands a remarkably well-preserved fort (fig. 12). It is 1 mile W.N.W. of the Duntroon fort, 3 miles W.S.W. of Kilmartin Church, and 500 yards from the sea to the S.S.W. at the

head of the third and most westerly bay on the north side of Crinan Loch.

Its position is unique among Argyle forts, as it has absolutely no natural strength, being situated on smooth and nearly level ground at the foot instead of on the top of a rocky knoll called Dun Fheidh (plan, fig. 13). An almost circular wall encloses an area 67 to 69 feet in

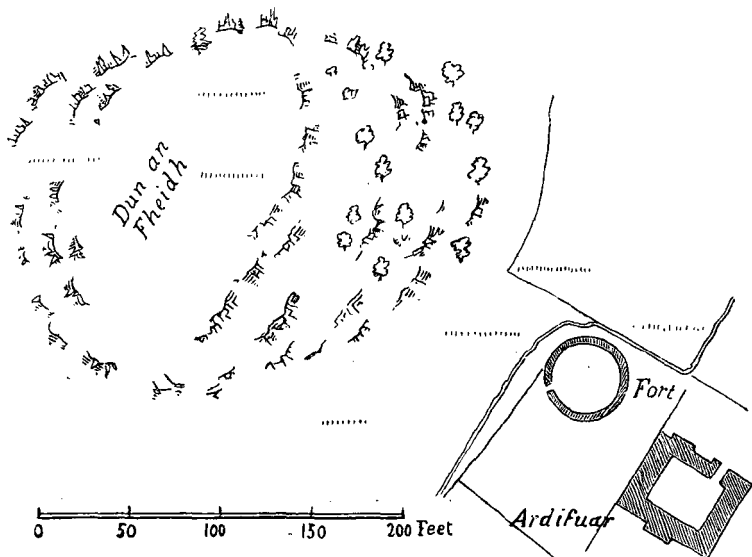


Fig. 13. Plan of Fort, etc., at Ardifuar.

diameter, which I could not examine properly, as it was covered with a dense growth of nettles 5 feet high, and was partly in use as a midden.

The inner face of the wall stands to a height of about 6 feet all round, and has a scarcement 2 feet above the present bottom, which, however, is formed by accumulated rubbish. The outer face also is probably standing all round, but is obscured by rubbish on the south side. On the opposite side it is quite free, and is in good condition. Its height is greatest on the N.W., where, outside, at the two highest points it

measured 9 feet 3 inches and 10 feet 2 inches, and had a batter of 1 in 10. The width of the wall varied at the present top from about 9 feet to 6 feet 2 inches. The over-all diameter is about 85 feet.

Two openings at present give access to the interior. One of them, on the south-west, is evidently an original entrance, but was so choked with rubbish that I could not examine it properly. On the right hand is a roofless chamber in the thickness of the wall. I could see no signs of the covered way from this entrance into the area mentioned and figured by Miss Maclagan (*op. cit.*, p. 42, Pl. XIX.). The opposite opening is probably recent, but requires examination.

Miss Maclagan calls this "the Broch of Ardafure." But there are grave objections to accepting it as a broch. First, there is its great interior diameter. Of some fifty measured brochs recorded in our *Proceedings*, the largest is 12 feet less in diameter, and that is the Lowland example *Etinshold*, which itself exceeds all the others by 12 feet. Secondly, there is the thinness of the wall. Only three of the fifty brochs have a wall so thin as 9 feet. Generally the wall is at least 12 feet thick. At Ardifuar in one place it is only 6 feet 2 inches. This is about 9 feet up, but even allowing a foot for the batter, the width of this part at the base would be two feet less than that of the narrowest broch wall yet recorded.

The only known broch in Argyle is *Tirefour*, on the island of Lismore, and it is certainly remarkable that the only instances of the termination *fuar* or *four* to place names in the county, I believe, are of these two forts, one of which is a broch, and the other has been supposed to be one. The derivation of *Tirefour*, according to the late Rev. Dr Stewart of Ballachulish, is from *tur*, a tower, and *foor* or *fuir*, an older form of *foir*, help or safety. It is difficult to see the applicability of the prefix *ard* to a fort on almost level ground. But there is a hill 451 feet high, half a mile north of the fort called *Binnein Ardifuar*, and it may be a question whether the name did not originate there, was afterwards applied to the farm, and never had anything to do with the fort.

On the whole, we may conclude that Ardifuar is more analogous to the

forts on the island of Luing, although these are oval, and to the Irish stone forts, than to the brochs.

9. *Near Ardifuar*.—About 400 yards N. of the last are the remains of another circular fort, which Mr Mackie describes as being on the tableland of a high peak in view of the fort at Ardifuar. It is from 50 to 60 feet in diameter over all. The walls are nearly levelled. On a ledge of rock lower down something like a breastwork can be made out.

B—FORTS IN THE PARISH OF KILMICHAEL GLASSARY.

10. *On Binnein Mór*.—A mile and a half N. by E. of Glassary Church, and 553 feet above the sea, this fort stands at the end and on the highest point of a narrow rocky ridge, which gradually rises till it arrives midway between Lochan Tor a Bheallaich and Lochan na Corra, two little sheets of water about $\frac{2}{3}$ of a mile apart. The name of the first of these lochans is possibly derived from the fort, which commands the pass from the middle part of the valley of the Add to Rudale and the lower part of the same valley.

The interior is a nearly level grassy space of 130 by 100 feet, but it is divided by three rocky rises into a kind of terrace that runs round the ends and one side (fig. 14) and a squarish space on the other side. These spaces, however, freely communicate by passages between the rocks. Ample grass-grown debris shows that a wall had defended the terrace all round, although the ascent is here very steep and almost precipitous. The square space is defended by a mural cliff, except at one point, which, though almost inaccessible, is blocked by the remains of a wall. The entrance is at one end of the terrace. From the imperfection of my notes, I am not sure if the orientation in the plan is correct.

11. *Torrabhlaraín*.—Three-quarters of a mile N.E. of Kilmichael Glassary Church this fort stands near the south end and on the highest point of an isolated ridge that rises conspicuously about 700 feet above the wide plain of the Add and 285 feet above the sea (plan, fig. 15). The fort consists of a central circular part, surrounded at a somewhat lower

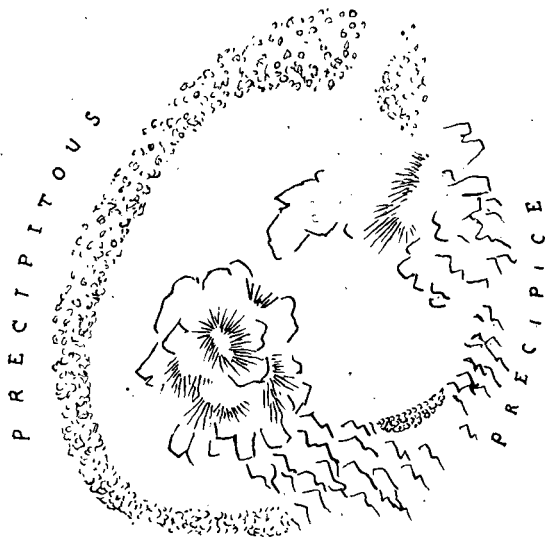


Fig. 14. Fort on Binnin Mór, Kilmichael Glassary.

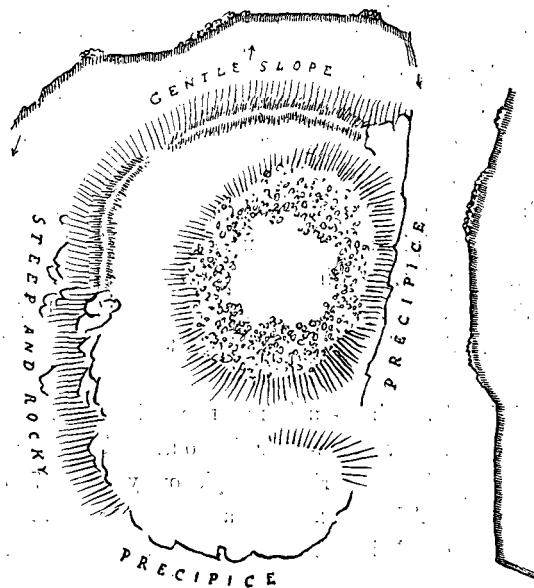


Fig. 15. Torrabbharain, Kilmichael Glassary.

level on three sides by a terrace, the whole coming on the east to the straight edge of a precipitous descent, which has at the top a natural *chevaux de frise* of decomposing diorite rock (see fig. 1, p. 124 of this volume). Natural strength also amply protects the south and west sides by precipices and steep ascents, but the approach along the ridge from the north is easy.

A quantity of debris all round the main work indicates a wall, which had perhaps formed a circular or slightly oval tower, from which the name "tower of the plains" may have come; but apparently the wall has been much wider at the north and south ends than at the east and west sides. A mound with debris suggests a wall of less strength for the terrace, from the north as far round the west as was necessary, till nature took up the defence. There is an entrance from the N.W. through the terrace wall, but I could not perceive any in the central wall.

The dimensions over all are about 140 by 90 feet. The diameter of "the tower" is not easily made out. It may have been about 35 by 40 feet. Pacing round the middle of the debris brought out about 150 feet.

12. *Dunmore at Dunamuck*.—Two miles S.W. of *Torrabhlairain*, at the south side of the river Add, which is 600 yards distant, this fort stands on a knoll, close to, but separated from, the hilly ground to the south, between it and the Crinan Canal, and projected on the plain that slopes gently to the stream. The knoll is rough and rocky, though not inaccessible, rising 80 or 90 feet above the plain, and 130 above the sea.

The fort occupies the nearly circular flat top (plan, fig. 16), and as far as I can make out in its very ruinous condition, measured about 40 feet from north to south and somewhat less from east to west, and had been surrounded by a single wall, of which only a slight mound a foot or two in height survived. In one place where the soil had been removed I could see a rude building, 7 feet wide, deprived of its facing stones. The only entrance is by a comparatively smooth ascent from the east. At a lower level by 6 or 8 feet, a narrow level tongue runs southwards

for about 60 feet along the top of the lower part of the knoll. This space has apparently not been fortified, and a row of rocks gives natural strength to the east side only.

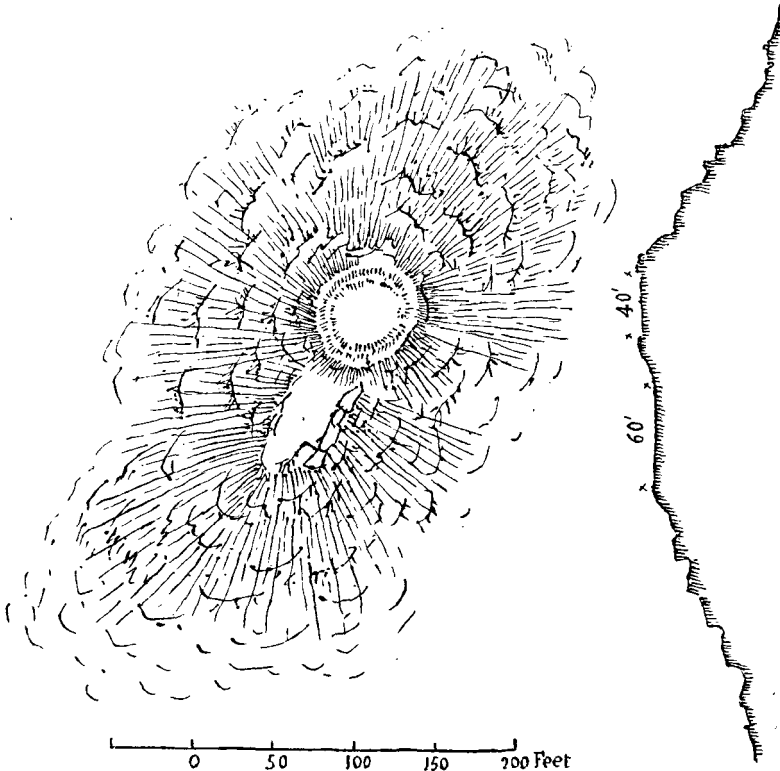


Fig. 16. Plan of Dunmore, Dunamuck, Kilmichael Glassary.

13. *Dunadd; its history.*—Dr W. F. Skene in 1850 gave a lecture at Paltalloch, which first drew Dunadd from the obscurity under which it had lain for many centuries, and in 1876 he published in his *Celtic Scotland* a history, constructed from the bald notices of the early annalists, to the following effect. Dunadd was the capital of Dalriada,

which Dr Skene apparently inferred from the important events recorded as happening there. About A.D. 640, or less than a century and a half after the settlement of the Scots in Dalriada, Dunadd must have been deprived of its status as an independent capital, because the kingdom then passed under the sway of the Britons, and during the next forty years the Scots appear to have had no common king, but each tribe was ruled by its own chief under the sway of the Britons, both Scots and Britons being subject to the Angles. From this subjection Fearchar Fadha, chief of Cinnel Baedan, rebelled, and with Bredie, king of the Picts, besieged Dunadd A.D. 683, but the attempt failed. Two years later, however, the independence of both Scots and Picts was secured by the destruction of King Egbert and his army by Bredie at Dunnichen. Dunadd would thus regain its position as capital of the Scots, but fifty-one years later (A.D. 736) it was besieged and taken by Angus MacFergus, king of the Picts. History is silent as to its fate for the next century, but it must have lost much of its importance after 843, when Forteviot became the capital of both Scots and Picts under Kenneth MacAlpin, King of Alban.

Passing to romance, Dunadd has been connected by Skene and others with the *Tale of the Children of Usnach*, in which the sons of Usnach are called "the three dragons of *Dunmonadh*," a name for Dunadd derived from the *Monadh-mor*, or great moss, upon which the fortress stands so prominently. According to the generally-received date of the events on which that tale is founded, this would carry back our knowledge of Dunadd to the beginning of the Christian era. Dunadd has also been identified by the same authorities with the *Dunmonaidh* in the *Tale of the Battle of Magh Rath*, which records events of date 637.

Description.—The only published description of Dunadd is by Captain F. W. L. Thomas, R.N. ("Dunadd, the Place of Inauguration of the Scottish Kings," *Proc. S. A. Scot.*, 1878, vol. xiii. p. 24), but he was chiefly concerned with the "footmark" on the top of the rock, on which he believed the kings stood at their inauguration, and his brief description of the fortress is destitute of plan or drawing. To record more ade-

quately a place of such pre-eminence in our early history has been my endeavour in the account now offered, and if I cannot claim strict accuracy for my hasty plan, I trust that in conjunction with the sketches a fair idea of this ancient fortress may be given.

The position of Dunadd as the capital of the lengthy, straggling kingdom of Dalriada was not ill-chosen, being at the junction of the two sub-provinces of Lorn and Kintyre, the latter of which at that time extended as far north as the Crinan Loch; but it was rather open to attack by a force landing at Lochgilphead, which in a two hours' march could reach it by a route offering no physical difficulties. It is true, three forts, if they were contemporary, had to be passed on the way—Dunmore at Lochgilphead itself, Dunnamaraig near Cairnbaan, and Dunamuck, but these could only hold such small garrisons that, according to our modern ideas, they could easily be masked by a force operating against Dunadd, if they could not be at once stormed.

The actual site is where the spacious cultivated vale of the Add merges into the *Monadhmor* or "great moss," a dead level upwards of two miles square, meandering through which the river Add finishes its course in the Crinan Loch. Here, the bare isolated rock on which the fortress was built rears itself abruptly to a height of about 160 feet above the moss and 176 above the sea. The rock of Dunadd bears no little resemblance to Dunbarton rock, as they both rise with startling abruptness to a double-headed top, from a dead level of the sea in one case and the moss in the other. The channel of the Add, which flows close by on the north, is sunk several feet below the moss, which is here only 14 feet above the sea, so that possibly the river may have been navigable for small vessels of old, as far as Dunadd, where the effect of the tides, indeed, is still felt, although the sea is two miles distant in a straight line.

The whole rocky elevation stands on a space of about 1000 by 650 feet (chart, fig. 17), including a low plateau on the south and a high one on the south-east. Deducting these, the precipitous height that strikes the eye covers 750 by 300 feet. Viewed from the north-west, it presents

an all but inaccessible face, rising to a haunch on the south and to a rounded peak on the north (fig. 18). On the opposite side, the haunch descends steeply to a hollow plateau 30 to 40 feet below, seen in the view from the north-east (fig. 19). This plateau and the haunch above it are apparently the only parts of the rock and its surroundings that

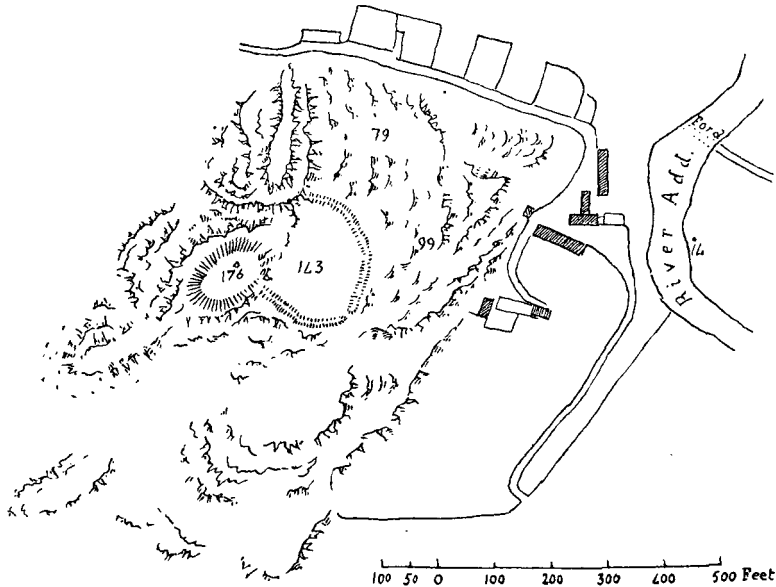


Fig. 17. Plan of Dunadd, from the 25-inch O.M.

have been fortified, and they may be described as the upper and lower forts.

Upper Fort.—The upper fort occupies the whole of the narrow haunch, or southern summit, except perhaps a gentle slope about 50 feet long at the south end (plan, fig. 20), which shows only doubtful traces of fortification. North of this, on the very summit, is the main work, an oval level space of 80 by 50 feet, or only 40 feet if we exclude a slight slope preliminary to the steep one on the east. It is well defined by the nature of the

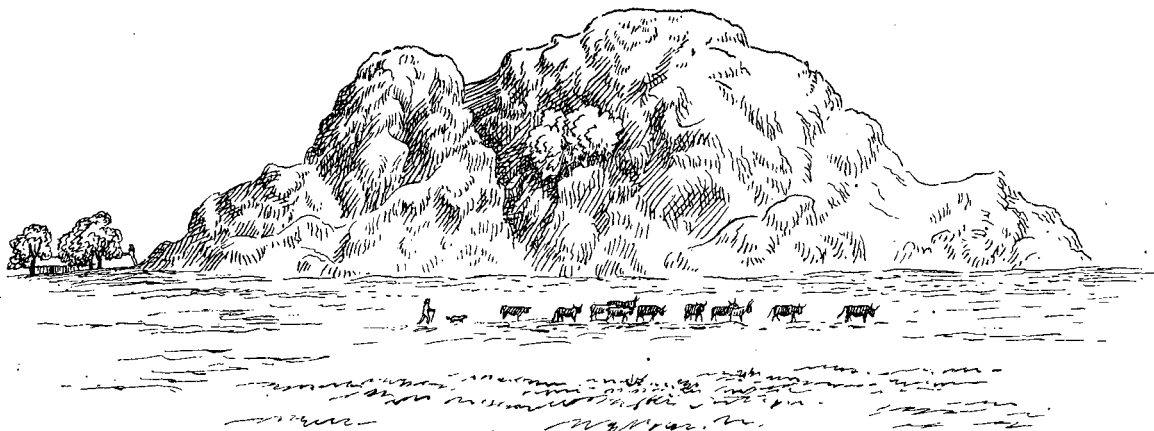


Fig. 18. Dunadd, on the Monadh Mor, from the N. W.

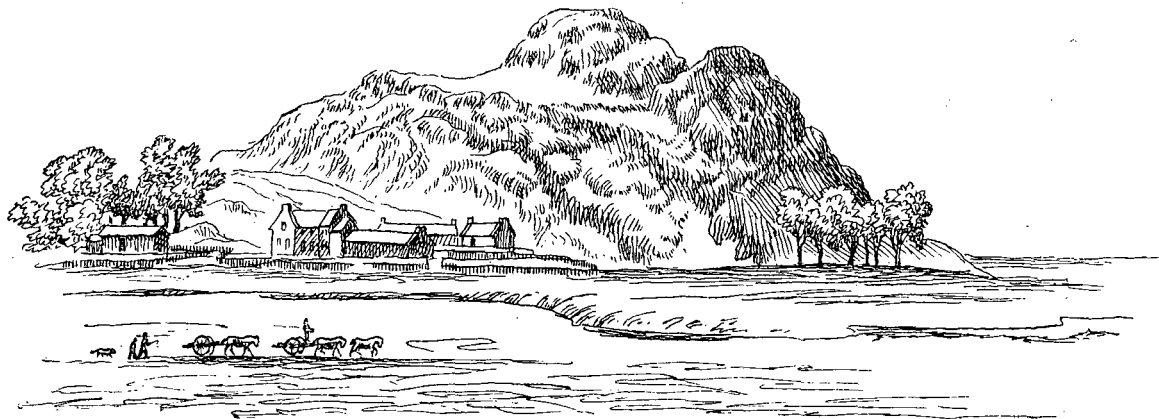


Fig. 19. Dunadd, from the N. E.

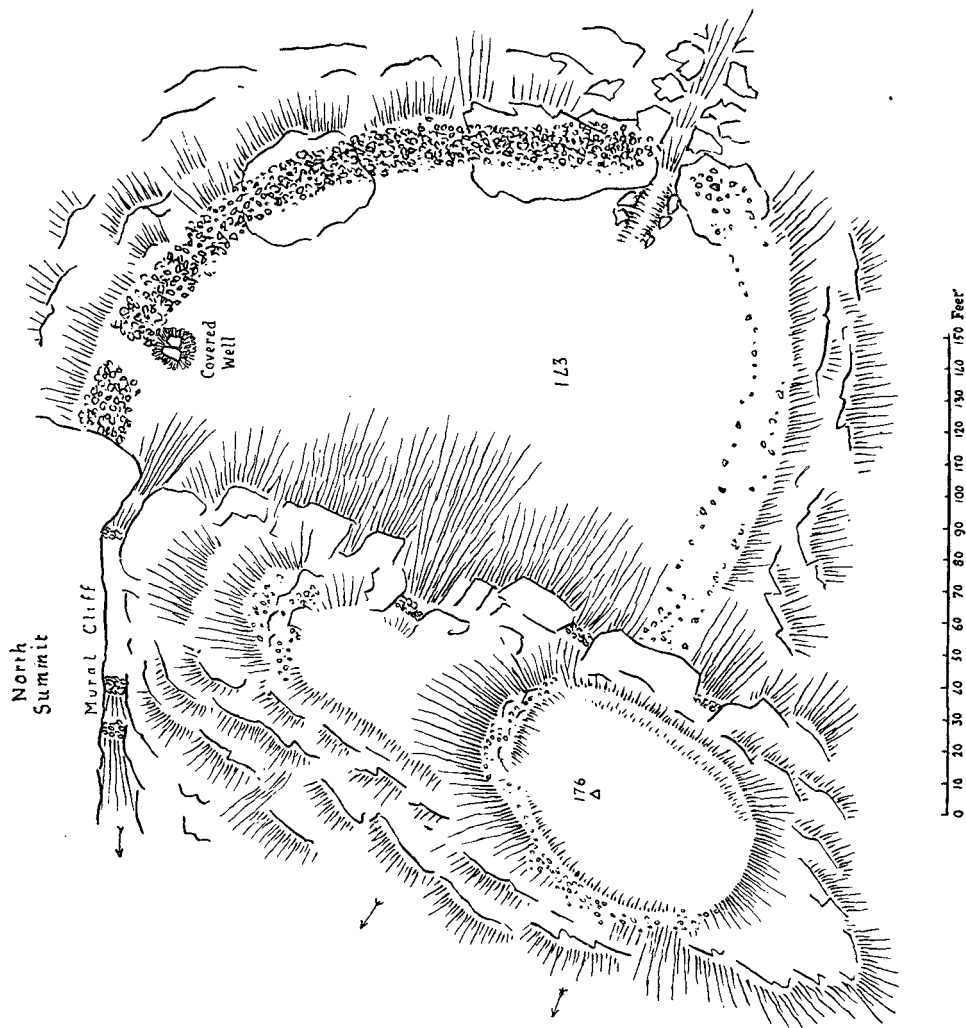


Fig. 20. Plan of upper and lower forts, Dunadd.

ground, but shows debris of a defensive wall only on the west and north. At the north end the walling is helped out by little rock faces, beyond which a slope leads to a second narrow level space 40 feet long. Walling and rock defend the north end of this also, at the top of a rough descent, 20 feet in height, to the very narrow neck, only a few yards wide, which separates the haunch from the mural wall of the peak. The length of the fortified top to the neck is about 250 feet.

The approaches to the upper fort (fig. 20) are (1) from the west, by the little ravine between the haunch and peak, only two or three yards wide near the level neck, where it is barred by remains of two walls; (2) from

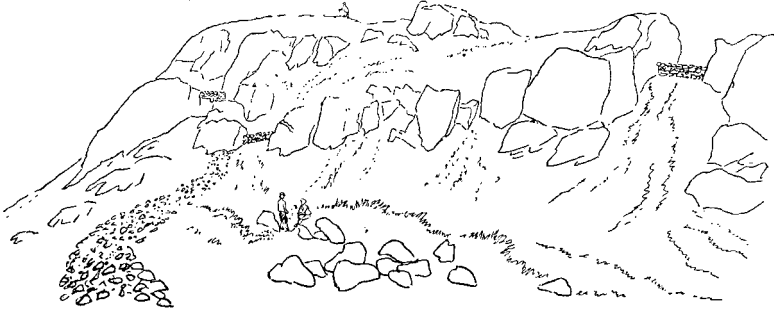


Fig. 21. The upper fort, from near the entrance to the lower fort, Dunadd.

the east, by (a) an ascending narrow passage between mural rocks, from the north end of the lower fort to the neck, where it is barred by a wall; (b) by a wide grassy ascent from the middle of the lower part to the second or lower fortified space above, barred, where it passes between rocks near the top, by a wall; (c) by a steep ascent from the south end of the lower fort to the north-east corner of the first or upper fortified space, likewise barred by a wall; (d) by a difficult ascent outside the lower fort, also barred by a wall. These barriers, as we now see them, may be modern, but almost certainly stand on ancient foundations. They are shown in the outline views of the north and south parts of the fort, taken from near the entrance of the lower fort (figs. 21 and 22).

Lower Fort.—The lower fort occupies a plateau or irregular hollow, strewn with rocks and boulders, on the east side of the upper fort, and from 30 to 40 feet below it. The ground falls considerably northward, and is dominated and completely protected on the west by the haunch. To the east the limit is the semicircular crest of the plateau, which can only be reached from below by winding about through the numerous little mural cliffs that break the ascent. Thus an assault in close order

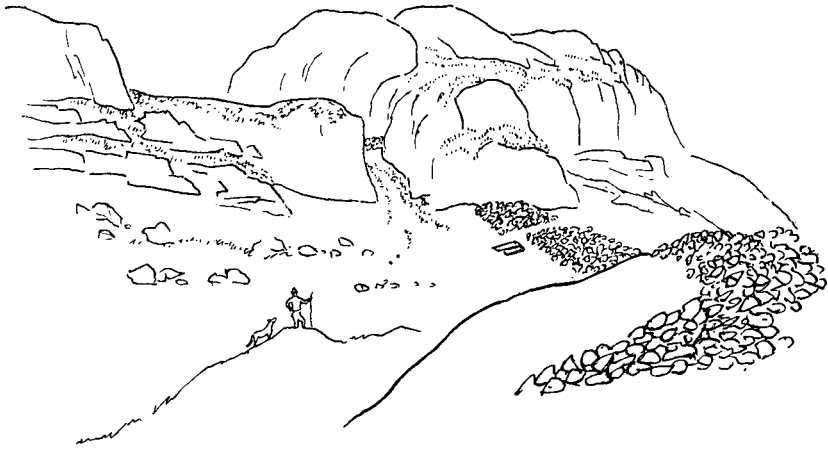


Fig. 22. North summit of Dunadd, and north approach to upper fort.

could not be made, but, on the other hand, abundant shelter would be afforded to scattered assailants.

A single wall has been drawn round the crest, abutting on the north on the foot of a mural cliff of the peak, close to the neck which separates the peak from the haunch (figs. 20 and 22), and on the south on another cliff under the middle of the main work of the upper fort (figs. 20 and 21). The debris of the wall is 20 to 25 feet wide, but its original width I could not determine, as only a small piece of the outer face is exposed. This is about 80 feet north of the entrance, and is only 6 feet long and

3 high (fig. 23). The stones are of no great size, but Captain Thomas saw, *in situ*, for a length of about 30 feet, foundation stones of large undressed blocks, one of them 5 feet long, on the south side of the entrance, where now almost all trace of the wall has disappeared.

The only original entrance to the lower fort is about a third of the way from the south end by an ascending passage through a natural gap about 60 feet long, and 8 to 9 feet wide, between mural rocks 6 to 9

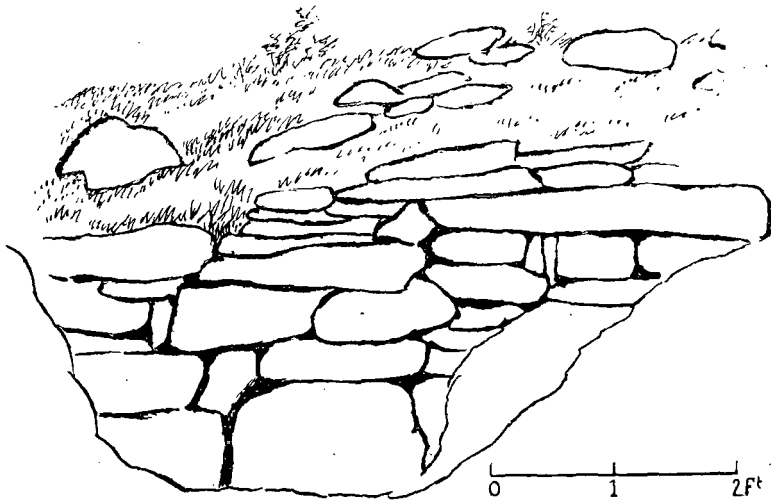


Fig. 23. Remains of outer face of wall, Dunadd.

feet high, which is prolonged about 20 feet further into the interior by a shallow hollow way. In fig. 24, the passage is shown from its lower end. The interior of the plateau is not seen, as it is below the level of the eye, but the figure in the distance is at the far side of the plateau, climbing the middle passage to the upper fort, through a gap which is in fact the continuation of the lower gap. Captain Thomas suggests that the passage may have been roofed, so as to carry the wall across.

Another passage through the wall, only 20 feet from its north end (figs.

20 and 22), is believed to have been made to give access to the well from the farmhouse below, but the well has long been closed and covered with two heavy slabs. The well is close to the inside of the wall (figs. 20 and 22), and is surrounded by a curious pavement of small thin stones set on edge and radiating outwards (fig. 25).

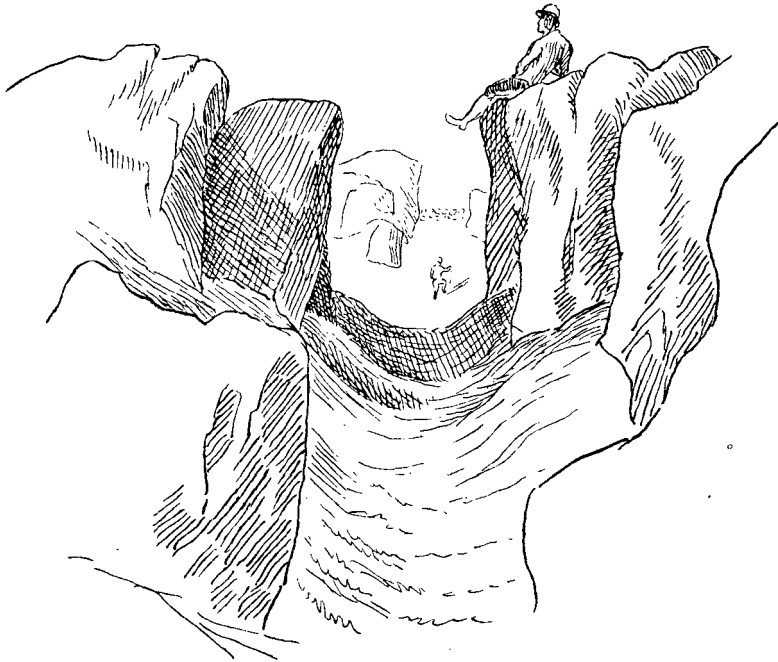


Fig. 24. Natural cleft, giving access to lower and upper forts, Dunadd.

No remains of hut circles or other buildings are to be seen within the forts or on the skirts of the hill.

The supposed "footmark" in the rock near the top of the upper fort has been so fully dealt with by Captain Thomas that I need only refer the reader to his account. A few yards from it a circular cup, 10 inches in diameter and 4 inches deep, is also carved in the rock.

14. *Dun na Maraig*, near Cairnbaan.—Retracing our steps up the valley of the Add, passing Dunamuck, and crossing into the wide vale that runs from Cairnbaan to Lochgilphead, we come upon this fort on the north side of the vale, half a mile east of Cairnbaan Inn, $1\frac{3}{4}$ miles N.N.W. of Lochgilphead Church, and $\frac{1}{3}$ of a mile W.N.W. of Auchnabreck farmhouse. It is not marked on the O.M. A wooded ridge, 450 yards long, and running more nearly north and south than the ridges of the district customarily do, rises from level ground on the south, at first

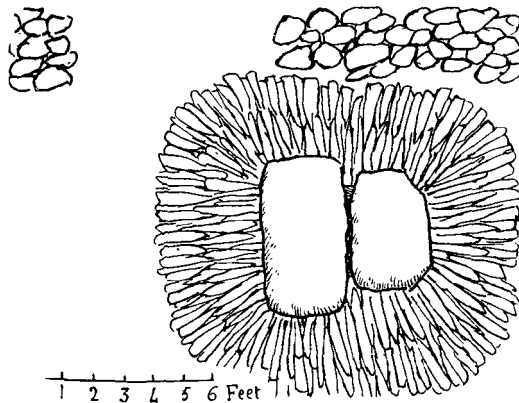


Fig. 25. Ground plan of covered well and surrounding pavement, Dunadd.

gently, but near the north end steeply, with rough precipitous slopes to north, east, and west. Here on the top the fort stands, about 150 feet above the low ground and 252 above the sea.

The north and east sides, practically inaccessible, show no sign of having been fortified, but a strong wall now ruined has protected the south and west sides (plan, fig. 26). The debris is from 10 to 20 feet wide, and contains many good-sized and even large stones. East of the entrance, which is in the middle of the south end, the wall climbs rather steeply over a rocky slope to end on the east side. The defence of the wall is much aided by the nature of the ground, and particularly on the

south and south-west, by the little cliffs, which, whether only a few feet or a few yards in height, invariably turn a perpendicular face to the outside. On the south-east the wall stands above a very broken rock

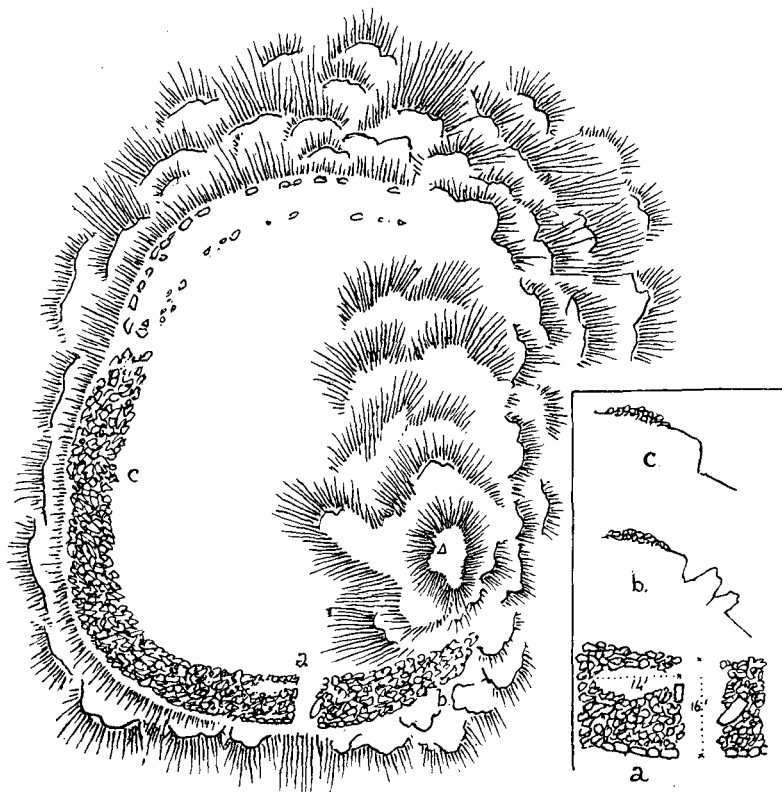


Fig. 26. Plan of Dun na Maraig, near Cairnbaan.

face, as in section *b*, fig. 26; on the west it is slightly retired above the little cliffs, section *c*; and on the north-west it is above a row of stones, shown in the plan, which, artificially laid as they seem to be, are, I believe, naturally placed.

The entrance (ground plan, *a*, fig. 26), although ruined, can be made out with some certainty to be 16 feet in length and 6 in width. Two or three courses of masonry at the foot of the wall are quite distinct for several yards on either side of the entrance outside; two stones one above the other, 2 feet in length, are *in situ* on its west side; and a stone, 5 feet 6 inches long, lies displaced on the east side. On the west side, near the north end of the entrance, there is something like a broken-



Fig. 27. Dunmore, Kilmory, Lochgilphead. From the 25-inch O.M.

down chamber in the wall, extending with its passage about 14 feet in from the entrance, but excavation is required to prove whether it is so or not.

The interior measures about 145 by 115 feet, but the western half is almost entirely taken up with a rocky knoll, which rises to its highest point close to the south-eastern end of the wall as shown in the plan.

15. *Dunmore*, Kilmory, Lochgilphead.—A mile and a quarter S.E. of Lochgilphead Church, half a mile E. of Kilmory House, and 200

yards N. of the farmhouse of Dunmore, this fort stands on a knoll 60 or 70 feet high, the top of which was covered with such a tangled mass of bracken and briers, concealing rocks and stones, that investigation was difficult and even dangerous, and I could not plan, or even see, the remains. I therefore give the plan (fig. 27) from the 25-inch O.M., which shows that the site is on a narrow knoll about 200 yards long, pointing N. by E., with a top about 120 yards in length and somewhat constricted in the middle. The fort is on the southern half of the top, and measures on the map about 150 by 80 feet over all. It has had apparently a single wall, of which considerable debris remains except at the south end. The height above the sea is about 350 feet.

16. *Dun Dubh*, at Tom Dow, Lochgilphead.—Three-quarters of a mile E.S.E. of the last, 1 mile N. of the point *Rudha Grabhard*, and $2\frac{1}{4}$ miles E.S.E. of Lochgilphead Church, the site of a fort is marked on the O.M., as a mound close N.E. of the cottage or farmhouse of Tom Dow, about 200 feet above the sea. I could see no remains of a fort on the spot or anywhere near it, and apparently all signs had already disappeared when the O.S. was made.

C.—FORTS IN NORTH KNAPDALE, WEST SIDE OF LOCH SWEEN.

17. *Baranloisgan*.—The slight remains of this fort are 15 yards south of "Cairn Baranloisgan" (O.M.), 300 yards west of the farm of the same name, and of the south end of Lochan na Cailliche; a mile and a quarter S.W. of Island Add Bridge, Bellanoch. The position has little natural strength, the approaches from the north and south being along the level top of a ridge, above which the site is raised only about 6 feet, and the slopes to east and west are short. The fort stands 160 feet above the Lochan, and 286 above the sea.

The oval interior (fig. 28) measures about 80 by 45 or 50 feet, but the east side, which is the steepest, shows no remains of a wall. A mound on the west probably conceals the remains of a wall which at the south-east corner shows itself distinctly enough, the outer face in one place having three courses of masonry still in position. The entrance is at the

north end, and is much broken up, but has been apparently formed on the west mainly by natural rock, and on the east by a wall.

A curved mound crosses the west side of the interior, and joins on to the mound or wall of the *enceinte*. Possibly this is the remains

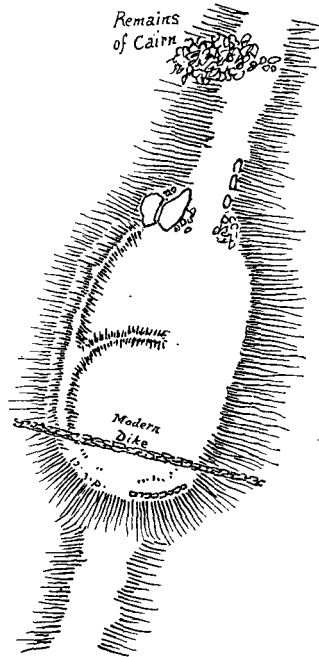


Fig. 28. Fort at Baranloisgan, near Bellanoch, N. Knapdale.

of a round tower, about 40 feet in diameter inside, at the south end of the fort.

The cairn appears to be much dilapidated, and is reduced to a low, irregular mass of stones extending about 30 feet across the ridge, 15 yards north of the entrance to the fort.

18. *Fort on Druin an Duin*.—This fort has an important position at the head of the pass from Crinan Loch to the west side of Loch Sween.

It stands 300 feet above the sea on the north end and highest point of a long ridge, where the road makes a sharp bend before its steep descent to Caol Scotnish, the western head of Loch Sween. The debris of its

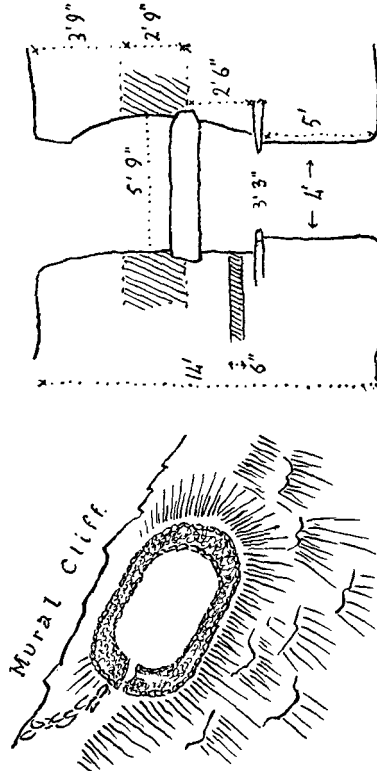


Fig. 29. Fort on Druum an Duin, near Bellanoch, and its entrance.

east side is conspicuous from the road 100 feet below, before it bends to the south. The site is $1\frac{2}{3}$ mile S.W. of Bellanoch, $3\frac{1}{2}$ N.E. of Tayvallich, and $\frac{3}{4}$ N.E. of the head of Caol Scotnish.

The ridge is about half a mile long, with a comparatively easy slope on the east side, which rises, however, almost to a knife edge formed by

the precipitous descent to the west. The approaches to the fort are along the knife edge, but are not steep. The view down Caol Scotnish and Loch Sween is extensive, but to the north is obstructed by near hills.

The interior inclines slightly to the east, and is grassy. It measures 53 feet north to south and 33 east to west, and is oval, but with nearly straight sides and well-rounded ends (plan, fig. 29). The wall stands all round, visibly to a height of from 2 to 6 feet, but if debris were removed would be found to be higher. Its width contracts from 14 feet at the

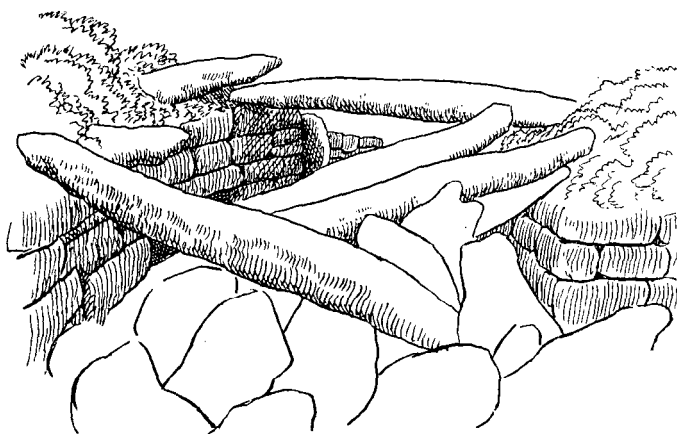


Fig. 30. Entrance to fort on Druum an Duin.

ends to 6 or 7 at the sides. I could see no signs of an entrance on the north, but that on the south seems to be in nearly perfect preservation, though encumbered with debris. The view, taken from the inner end (fig. 30), and the ground plan (fig. 29), show that it bears a close resemblance to the broch entrances. From the outside a straight passage, 5 feet long and 4 feet wide, leads to projecting stone checks, narrowing the entrance to 3 feet 3 inches. Behind this, the door, probably of stone and perhaps still existing in the debris, would be placed, and 6 inches behind the check the bar-hole, 6 inches square, remains running deep into the wall on the west side. Inside the checks the width of the entrance is

about 5 feet, and it gradually increases to 5 feet 9 inches, owing to a curve on the east side, the west side being apparently straight. About half-way along this inner part of the entrance, the top of a doorway on either side can be seen, leading, no doubt, to the customary guard-chambers: the lintel of the one on the east side is 3 feet 9 inches long, and the doorway 2 feet 9 inches wide. One of the roofing-slabs, nearly 6 feet in length, remains *in situ* over the inner passage, and several others, as shown in the view, lie amidst the debris with which the entrance is blocked to a height of 3 or 4 feet. To all appearance, if the debris were removed the walls of the entrance would be found to be perfect, and as I could pass my stick freely along the openings to the guard-chambers, these might prove to be still uninjured, particularly as there is no appearance of falling in on the wall, above where they should be. Altogether this fort is probably one of the best preserved in Argyleshire, and is well worthy of a complete excavation.

19. Fort on *Eilean na Circe*, Caol Scotnish, Loch Sween.—This island fort is $2\frac{1}{4}$ miles N.E. of Tayvallich Church, and $\frac{7}{8}$ of a mile from the head of the very narrow western arm of Loch Sween called Caol Scotnish. It is 100 yards from the eastern and 175 from the western shore of the Caol. The island is a mere rock rising from deep water some 15 to 20 feet above high tide, and the only access is by a landing-place on the west side.

It is a question whether the remains of building are prehistoric or mediæval, or partly the one, partly the other, as I am inclined to believe; but I could make only a very imperfect examination, as it was a very wet day, and the rock was covered with an almost impenetrable growth of bracken, briars, and scrubby trees. Indeed, but for the kind aid of Mr E. B. Bailey, of the Geological Survey, I could not have done anything.

The remains consist of an outer oval wall, enclosing a space about 120 feet long, and rectangular buildings occupying the interior for a length of 66 feet (plan, fig. 31). The outer wall is best seen, for a length of 40 feet, on its outer face at the north end. It is well built,

neatly rounded, stands several feet high, and is indistinguishable from ordinary prehistoric workmanship. It is continuous along the east side, rounds the south by a sharp, almost angled end, and about 30 feet to the north diverges outwards to the top of a little rock face almost at the water's edge. It seems then to have run, though but little now remains, close to the sea to the landing-place, beyond which it ascends to com-

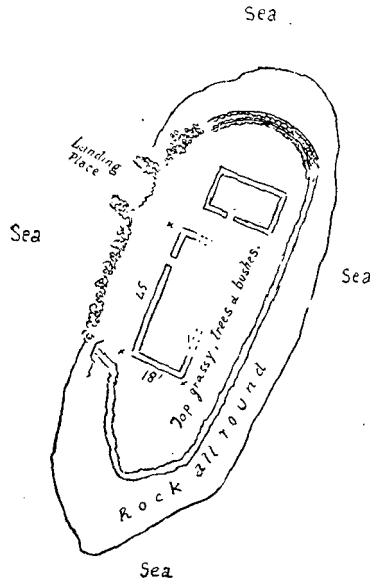


Fig. 31. Remains on Eilean na Circe, Caol Scotnish, Loch Sween.

plete the circuit at the well-preserved part of the north end. The landing-place is near the north end of the west side.

A short steep ascent leads from the landing-place to the rectangular buildings on the level top of the rock. One of these structures lies to the north, and measures about 20 feet from east to west by 14 from north to south. The walls are 2 feet thick, and there is a doorway about half-way along the south side. Separated by an interval of a few feet, and standing a few feet nearer the sea, another wall runs in a straight line in the same

direction as the west wall of the last; it is 46 feet long, and has an entrance 3 feet wide near the north end. The south wall of this building or enclosure was 18 feet long, but from the difficulties already adverted to, I could only trace the return on the east side for a few yards. The walls are several feet in height.

20. *Dun Beag*, Ardnackaig, Tayvallich.—This is the only fort marked on the O.M. on or near the Atlantic coast in this part of Knapdale. It is 2 miles due north of Tayvallich Church, 120 yards west of the farmhouse of Ardnackaig, and 230 yards east of the head of *Sailean na h'Earba*, a short narrow inlet of the sea. The scanty remains consist of a grassy mound 6 or 7 feet wide concealing the debris of a wall, round the oval level top of a green hillock, unusually free from rock, not more than 30 or 40 feet high, and 100 above the sea. The dimensions of the fort over all are only about 65 by 25 feet.

21. *Dun a' Chogaidh*, Tayvallich.—This fort looks down upon Loch a Bheallaich from the north at a distance of 300 yards, and is about one-third of a mile N.N.E. of Tayvallich Church. It is 305 feet above the sea, on the pointed top of a spur of Torr Mor (445 feet). The fort (fig. 32) occupies the whole regularly oval and level top, and measures internally 150 feet by 75 feet. The interior is pleasantly green and smooth, except for a low rocky knoll at the S.W. end, and another which crosses the area about the middle as a narrow band, nearly from side to side. The single wall, as far as can be seen, is entirely cast down, save a few fragments of the outside face at the S.W. end, but the debris is abundant and closely set, measuring 20 to 25 feet across at the ends and less at the sides. From the S.E. side the ground falls a few yards to the edge of a mural cliff, and the other sides have steep rocky descents 30 or 40 feet high. There is an entrance at the S.W. end, where from some imperfect indications I reckoned that the wall may have been 14 to 16 feet thick. There are some doubtful indications of another entrance at the N.E. end.

22. *Dun a Bheallaich*, Tayvallich.—As the last overhangs Loch a Bheallaich from the north, so does this from the west, at a distance of

300 yards, and it is the same distance west of the church. The knoll it occupies is steep and rocky on all sides, and is connected with a higher one to the south by a narrow neck 100 feet below the fort. The

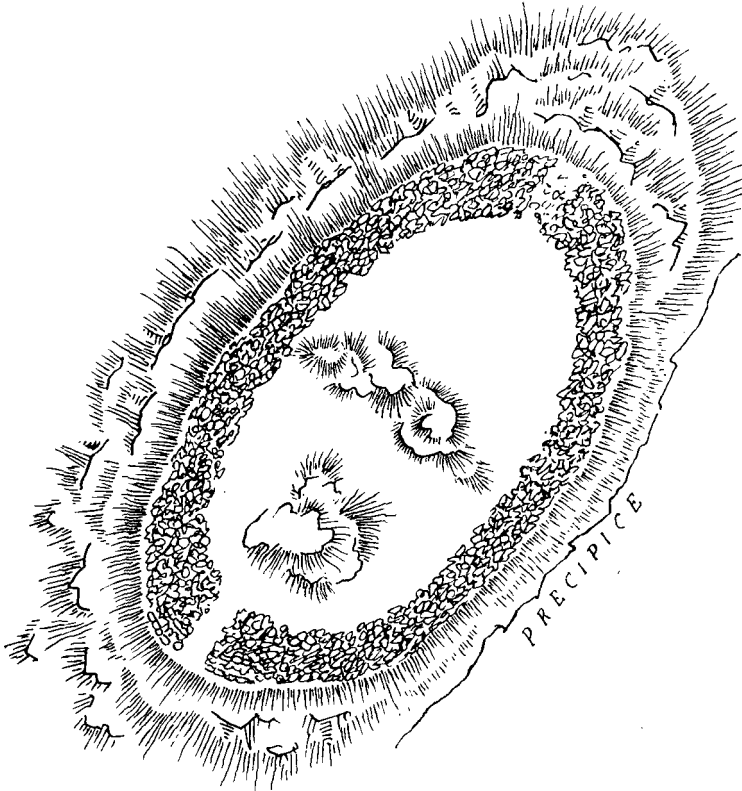


Fig. 32. Dun a' Chogaidh, Tayvallich.

top is a pleasant level of smooth green turf measuring about 150 by 120 feet, and is 238 feet above the sea. "Fort" is marked here on the O.M., but all that seemed to be left was a green mound a few feet high with an entrance through it at the N.E. end.

23. *Dun Brònaiq*, Tayvallich.—A track from Tayvallich to Barnshallig Farm leads to this fort, about 150 yards S.W. of the farmhouse, and 1500 S.W. of Tayvallich Church. The site is the top of a rocky knoll, steep on all sides and 30 to 50 feet high, 200 feet above the sea. The fort does not occupy the whole of the nearly level green summit, and its walls are much dilapidated and grass-grown. There seems to have been a main work measuring 42 by 21 feet inside the wall, with a small annex to the S.W., enclosed by a slight wall and divided into two parts by a rock. The total length of the work over all is 66 feet. It looks down on a rather extensive desolate moorland, with no sign of man's presence now or formerly, save a standing stone 200 yards off to the W.S.W.

24. *Dun Mhuirich*, Loch Sween.—On the Linne Mhuirich, a narrow inlet $2\frac{1}{2}$ miles long which runs parallel with Loch Sween on its west side. The fort is on a bay on the west side of and about half-way along the Linne, and is 2 miles S.S.W. of Tayvallich Church. By some mistake Miss Maclagan calls it *Dun Tayvaellach*, confounding it with *Dun a' Bheallich*, close to the church (*op. cit.*, pp. 43, 44). The fort stands on an isolated rocky ridge rising abruptly from the flat and marshy strip of plain that runs along the coast at the foot of Dun Mor (367), half a mile to the east. Retired and deserted as the neighbourhood now is, yet it seems to have been well peopled formerly, as on the slopes of Dun Mor, or near them, six hamlets or farms, Barr Breac, Barr Beith, Druim-nan-gall, North Ard Beg, Barr Thormaid, and Kilmory, are marked on the O.M., all within half a mile of the fort.

As approached from the north, the fort on its rocky site comes suddenly into view at a turn of the road, presenting the remarkable aspect seen in fig. 33. The ascent is easy enough from the bay by the hollow shown in the sketch. But the east side rises sheer from the sea, and the west side and south end are so precipitous as to be practically inaccessible. Not less remarkable in appearance than the north end is the south end, which seems bound together by bands of rock, smoothed and polished by glacial action (fig. 34).

Seen from the ridge of confused disrupted rocks to the north (fig. 35), a curved outer wall, well built and 4 to 5 feet high in places, running down to the sea cliff on the east, enclosing a terrace on the west, and



Fig. 33. Dun Mhuirich, Loch Sween, from the north.

having an entrance in the middle of its north face (sketch plan, fig. 36), with steps leading up to it, is a prominent object. It is 9 feet thick at



Fig. 34. Dun Mhuirich, from the south.

the entrance, narrows to 6 feet at the west side, and is a mere supplement to the natural defence of rock at the south end, where it runs out at the sea cliff. Towering above, and approached by climbing up a rocky spur, is the inner wall, more ruinous and without any visible

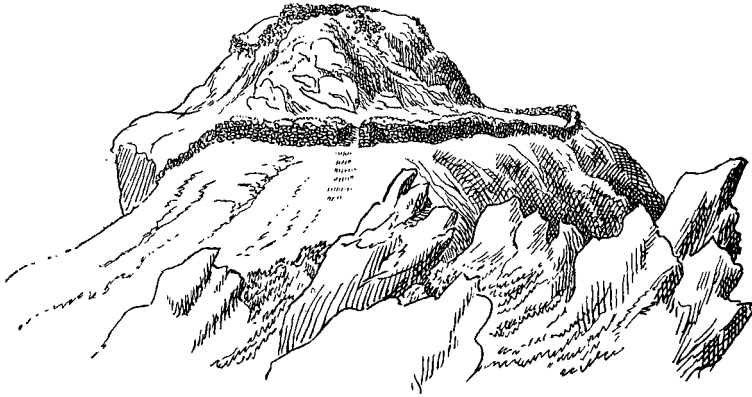


Fig. 35. Fortified terrace and upper fort, Dun Mhuirich, from the north.

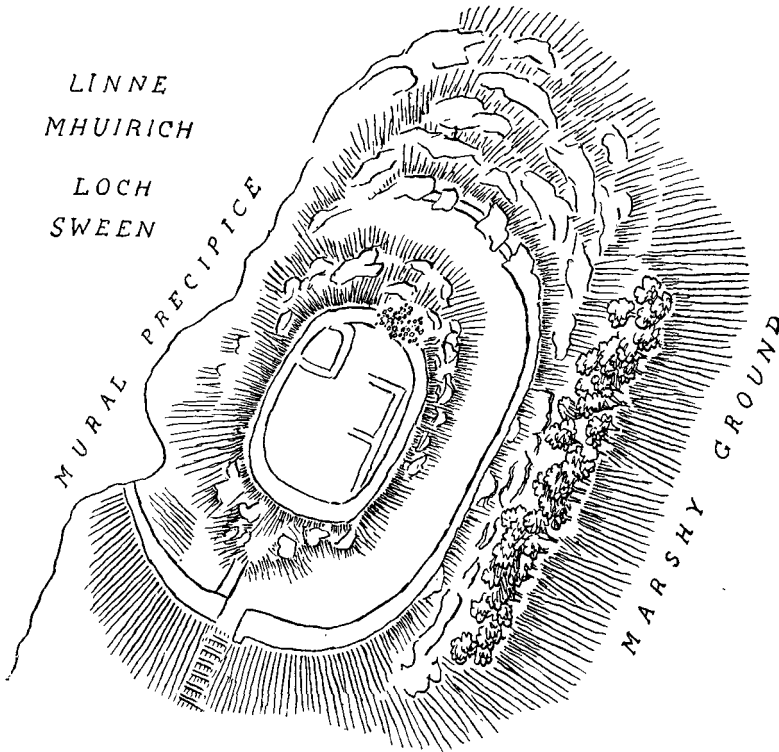


Fig. 36. Plan of Dun Mhuirich, Linne Mhuirich, Loch Sween.

entrance. This wall completely encloses the interior, and is 7 feet thick at the curved ends, but only 3 at the nearly straight sides. At the ends it is 5 feet high in places on the inside, and on the west side it is a foot higher. It is very well built of dry masonry. Miss Maclagan speaks of a third wall, but I could see no sign of it. Neither is there any place where another wall could easily be placed.

I found the level interior, measured by tape, to be 54 by 38 feet, although Miss Maclagan, in pursuit of her circular theory, calls it 60 feet in diameter. She also states that "the chief peculiarity of the fort is the still existing partition walls which have divided the central part into apartments. These seem all to have converged towards the centre, according to the usual division of round buildings." But her drawing does not show any such convergence, and as far as I could make out amid the dense growth of nettles and other weeds, the main foundation, about 2 feet high, is that of an ordinary rectangular building about 40 feet long, divided into at least two apartments and running parallel with the west wall of the fort, but separated by a narrow passage. From the fact of this building being rectangular and independent of the fort wall, it is probably a secondary structure, as the wall running from the entrance of the outer wall inwards may also be. In the S.E. corner of the area are remains of a building of a different type, and probably older, the north and west walls being straight, while those on the south and east are formed by the curved wall of the fort.

GENERAL REMARKS.

Sites.—The most usual site is the whole top of an isolated knoll, about 30 to 40 feet high, with a level oval summit, which has steep and rocky sides, often straight, one of them not infrequently a mural cliff, but is comparatively accessible at one or both ends. In other cases the summit of a ridge with similar characteristics is chosen. In a few instances, as *Dun Mhuirich*, *Dunadd*, the local height is considerably more, but only at *Creag a' Chapuill* can it be called great. Quite exceptionally *Ardifuir* stands on low level ground.

Of necessity no fort in that part of Argyle can be very far from the sea, nevertheless not one of them is actually on the coast, with command of a natural creek or harbour, unless *Dun Mhuirich*, which projects into a bay.

Elevation above the sea.—This is rarely much above the height at which people commonly live in Argyle at the present day. Of the twenty-four forts, nine are below the 200 contour, six are between 200 and 300 feet, six between 300 and 500 feet. Of the three remaining, *Binnein Mor* (553) little exceeds the 500 line, and only *Tur a' Bhodaich* (700) and *Creag a' Chapuill* (800) are at a considerable elevation.

Plans.—Generally very simple. In eighteen out of twenty-three forts, in which the plan can be made out, a space either oval, or oblong with straight sides and rounded ends, and only in three or four instances circular, is enclosed by a single wall. Additions of one or two annexes at one end, or of a terrace below one side but never extending to the other, occur at *Duntroon*, *Torrabhlairain*, *Dunadd*, *Dun Brònaiq*, and *Dun Mhuirich*. The only circular forts among them are the two at *Ardifuir*, *Tur a' Bhodaich*, and possibly *Torrabhlairain* and *Baranloisgan*.

Size.—Generally small. Taking interior length as the simplest criterion, and including annexes, if any, four are under 50 feet, five between 50 and 100 feet, nine between 100 and 150 feet. The three others are considerably larger; *Dunadd*, upper fort 158, lower fort 180; *Duntroon*, including a broad terrace and an annex at one end, 320; but above all, *Creag a' Chapuill*, which may be as much as 750.

Walls.—There can be no reasonable doubt that the forts of the district were usually fortified by dry-stone walls, rubble-built in the middle, and faced with good masonry outside and in. Out of twenty-four, eight have walls still standing in places visibly as much as from three to six feet in height, and in four others a foundation course can be seen here and there. A very little excavation would no doubt reveal remains of the wall in other cases. Perhaps only in three or four is the dilapidation so great as to have destroyed all trace of walls.

The wall does not always completely enclose the fort; where the natural defence from mural cliffs or rocks is strong, the wall is usually, though not always, omitted. The thickness of the wall is usually greatest at the comparatively accessible ends, varying from 9 to 14 or perhaps 16 feet; at the sides it is reduced to from 3 to 6 or 7 feet. The height is almost always several feet greater on the outside than the inside, the wall being usually constructed on the slope, probably with the object of economising materials and increasing the interior area. There is distinct evidence of chambers in the wall at *Ardifuir* and *Druim an Duin*, and doubtful signs of one at *Dun na Maraig*.

Interior.—Compared with the rough rocky ascents, the interior is generally surprisingly level and smooth, but there is no evidence that this has been artificially produced, and similar tops of unfortified knolls frequently occur. In not a few interiors, however, rocks rise above the surface and greatly diminish the accommodation. As far as can be seen on the present surface, there is a total absence of primitive structural remains unless at *Ardifuir* (Miss Maclagan, *op. cit.*). The rectangular foundations at *Eilean na Circe* and *Dun Mhuirich* are probably not prehistoric.

Entrances.—Usually distinct evidence of only one exists, but excavation is necessary to test doubtful indications of a second in several cases.

The inner wall of *Dun Mhuirich* does not seem to have had an entrance on the ground level. Generally the entrance is in the middle of one end. There are no traverses or other special protections to the entrance, save the natural covered way at *Dunadd*, the projecting buttress at *Dun Mhuirich*, and the contracted mouth (probably modern) of the entrance to the fort near Loch Michean. At *Druim an Duin* the entrance is apparently identical in structure with that of the brochs.

Water Supply.—As far as I could see, *Dunadd* alone has a well within the fortification. Probably there are springs within the large area at *Creag a' Chapuill*, but I had not time to look for them. In many cases, burns or little runlets pass quite close to the knolls, but there are no covered ways from the forts to the water.

Names.—Not much more than half of the forts are known as *Duns*, with such qualifications as *Mor*, *Beag*, *Add*, *a' Bhealich*, expressive of size or position ; *Dubh*, *a' Chogaid*, *Na Maraig*, signifying other qualities. Three—*Brónaig*, *Mhic Choish*, and *Mhuirich*—bear proper names, signifying Bronag, son of Coas, and Murdoch or Murach. In one, the *Dun* gives a distinctive name to a ridge, *Druim an Duin*. In *Torrabhlairain*, the *Torr* may signify tower or fort, but may mean the knoll on which it stands. Likely enough the forts that are now nameless were once known as *Duns*, but the appellation has been forgotten, a process which I found going on now.

History.—No mention is made in the early annals of any of the forts, save *Dunadd*, the scanty historical and legendary notices of which are given at p. 225.

Uses.—From the absence of wells or remains of buildings, it would seem that the forts were not regularly inhabited, but were merely temporary refuges in time of trouble. It may be rash, however, to come to this conclusion, because water may have been stored in skins or otherwise, and the dwelling of the period may have been of perishable materials. Indeed, that such was the case seems almost certain, because there is no trace of stone dwellings even at *Dunadd*, which was probably the capital of the Scots till the middle of the ninth century. Neither, from the nature of the ground, do I think that any remains of buildings would be found there by excavation.

Occupations of the People.—As the elevation of the forts is generally moderate, and as they are commonly near modern farmhouses, there seems no reason why the inhabitants should not have followed both pastoral and agricultural pursuits, but the almost universal inland position of the forts indicates that the people were not maritime, and did not strive for supremacy at sea.

MONDAY, 14th March 1904.

ROBERT MUNRO, M.A., M.D., LL.D., Vice-President, in
the Chair.

A Ballot having been taken, the following were duly elected
Fellows:—

JAMES ARCHIBALD FERGUSON, Banker, Leith.

ROBERT CAMPERDOWN HALDANE of Lochend, Ollaberry, Shetland.

COLIN LEITCH, Ardrishaig.

Rev. CHARLES RICHARD PANTER, M.A., LL.D., etc., Wickhampton
Rectory, Acle, Norfolk.

The following Donations to the Museum and Library were laid on the
table, and thanks voted to the Donors:—

(1) By Sir FRANCIS TRESS BARRY, Bart., M.P., Hon. F.S.A. Scot.

Lower part of a large Clay Jar (one of three), found in the broch at
Hill of Works, Barrock, Caithness. It measures $11\frac{1}{2}$ inches diameter
across the bottom and 12 inches in height to the highest part of the side
remaining, and is similar in form and material to the large jar from the
White Broch, Keiss, which is figured in the *Proceedings*, vol. xxxv.
p. 130.

Ninety-four large Photographs of Bröchs, etc., excavated on his estate
of Keiss, Caithness, and in the neighbouring district, by Sir F. T. Barry,
viz.—Keiss Broch, 10 photographs; White Broch, 8; Road Broch, 19;
Nybster Broch, 8; Hill of Works, 2; Ness, 4; Everley, 4; Freswick
Sands, 6; Skirza, 4; Hillhead (Wick), 8; Elsay, 9; Norwall, 3;
Sgarbach Mound, 4; Freswick Chambered Cairn, 2; Shore Ruins, 3;
Castle-Linglas (?), 1.

(2) By ALEX. W. INGLIS, F.S.A. Scot.

Two-pronged Table Fork, the bone handle inlaid with a chequered pattern, in case.

Two two-pronged Table Forks, with carved handles of bone, in case.

Spur, with large rowel of five points, and ornamented steel buckles.

(3) By Misses MARGARET and ELIZABETH KINNEAR, Pitlessie, Fife, through Mr WILLIAM STEVENSON.

Mr Stevenson supplies the following notes of the donation:—

Stone Implement, apparently a Pounding Stone, found upwards of fifty years ago on the lands of the late Mrs Don, Springfield House, Cupar, Fife, by the late Robert Kinnear, land-steward, and preserved by his family ever since.

Old Oil Candlestick Lamp, used by the family of the late Robert Kinnear for burning whale oil, until the introduction of mineral oil, upwards of forty years ago.

Two Brose Caps or wooden bowls which belonged to the late James Kinnear, son of the foregoing Robert Kinnear, and were used by him for about forty years. Half a century ago such wooden caps were universally used by the ploughmen in Fife, who owned the caps they made their own food in, and carried them with them from place to place.

(4) By JOHN BRUCE, F.S.A. Scot., Helensburgh.

Small Quaich of wood, ornamented with carved interlaced work, from Skye.

Polished Stone Axe, found in digging at Portkil, Kilcreggan.

Polished Stone Axe, from Montego Bay, Jamaica.

(5) By G. HAWKSLEY BEDFORD, F.S.A. Scot.

Iron Axe, with iron handle looped at the end, found in the ruins of Inverlochy Castle.

Octagonal Brooch of copper, with remains of inscription, found at Kilchrenan, Argyllshire.

(6) By the KEEPER OF THE RECORDS OF SCOTLAND.

The Accounts of the Lord High Treasurer of Scotland. Edited by Sir James Balfour Paul. Vol. v., A.D. 1515-1531.

The Exchequer Rolls of Scotland. Edited by George Powell M'Neill. Vol. xxii.

Calendar of State Papers relating to Scotland and Mary Queen of Scots. Edited by William K. Boyd. Vol. iii., A.D. 1569-1571.

(7) By the MASTER OF THE ROLLS.

Calendar of Treasury Books and Papers, 1742-1745; Calendar of State Papers (Colonial Series), America and West Indies, 1693-1696; Calendar of Patent Rolls, Henry IV., 1399-1401; Letters and Papers (Foreign and Domestic) of the Reign of Henry VIII., vol. xix.; Calendar of State Papers (Ireland), Adventurers, 1642-1659; Calendar of State Papers (Domestic), 1693; Calendar of State Papers (Ireland), 1647-1660; Calendar of Papal Registers (Papal Letters), vol. v., 1396-1404.

(8) By the SECRETARY OF STATE FOR INDIA.

Archæological Survey of Western India—Architectural Antiquities of Northern Gujerat. Vol. ix. By James Burgess, C.I.E., LL.D., and Henry Cousens.

(9) By JOHN HUME, 18 Chapter Road, Willesden.

Copy (type-written) of Charter of hereditary Feu-ferm of the Lands of East and West Reston, in the barony of Coldingham, by the Prior and Chapter of Coldingham Priory, to George Auchincralb in liferent, and to John Auchincralb his son and heir-apparent and his heirs male in hereditary right, 2nd August 1536.

Copy (type-written) of Charter by King James VI. (after the Act of Annexation) of the same lands to George Auchincralb and Euphenia

Home his wife in liferent, and to Robert Auchincralb their son in fee,
11th March 1608.

(10) By JOHN C. GIBSON, the Author.

The Lands and Lairds of Dunipace. 8vo; Stirling, 1903.

(11) By GEORGE WATSON, the Author.

The Annals of Jedburgh Castle. 8vo; Hawick, 1902.

(12) By LT.-COL. SANDEMAN of Fonab, F.S.A. Scot.

Roman Hayling: A Contribution to the History of Roman Britain.
By Talfourd Ely. 8vo; London, 1904.

(13) By Major-Gen. Sir ALEX. B. TULLOCH, F.S.A. Scot., the
Author.

Recollections of Forty Years' Service. 8vo; Edinburgh, 1903.

The following Communications were read:—