

VI.

NOTICE OF EXCAVATIONS IN THE SOUTH FORT, ISLAND OF LUING
ARGYLESHIRE. BY DR ALLAN MACNAUGHTON, F.S.A. Scot.

In August 1890 I superintended a preliminary exploration of a prehistoric stone fort situated in the island of Luing, Argyleshire. This fort has already been described as the South Fort, Luing, by Dr Christison in the Society's *Proceedings*, vol. xxiii. p. 405.

In the locality the fort is not known by any name except the general Gaelic one, An Caisteal, *i.e.*, The Castle. The ridge upon which the fort is built, and which is the easternmost of the several ridges traversing the



Fig. 1. View of South Fort, Luing, after excavation.

island almost from end to end, has upon it at its northern end a similar fort, in distinct view from the South Fort. This fort is also named An Caisteal, and the farm upon which it stands, Bal-a-Chasteal. In the neighbouring district there are several other forts. To the N.W. is Dun-channel, to the E. Dun Teine, to the S.E. Craignish Fort, and to the N.E. Oban-Seil Fort. About a quarter of a mile south of the fort which was the subject of exploration are the remains of a rather extensive

walled structure. The walls follow the irregular contour of the portion of the ridge which terminates above the village of Toberonochy. The wall remains are grass-covered, and give a width of about 4 feet. Towards the north are Dun Mhucinnis and Dun Urrain. Almost all of these can be seen from the South Fort, Luing, which is on one of the

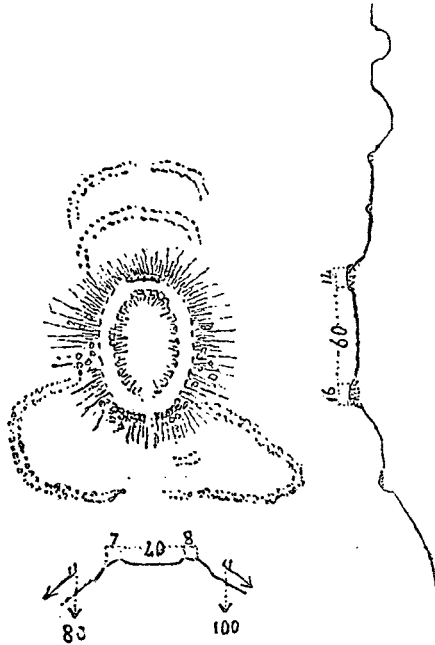


Fig. 2. Ground-plan of South Fort, Luing (as given by Dr Christison).

highest points in the island, being 279 feet above sea-level. The flanks of the ridge upon which the fort stands incline somewhat steeply to marshy swamps. Loch Iliter, a quarter of a mile from the fort, was not long ago considerably larger than it now is. An extensive drainage system has lowered it, and rendered the swamps passable in dry weather. It is not at all improbable that the defensive character of the fort was materially helped by water on its eastern and western sides.

The entrance could easily be made out in the south-west aspect of the fort wall. The appearance of this part of the fort, before digging operations were commenced, is well shown in Christison's drawing, vol. xxiii. Plate V., 2. The workmen were ordered to clear out the entrance, which was completely filled with fallen stones, slates, slabs, and earth. After removing some of the larger stones, a large quantity of limpet shells was come upon. These were in a heap near the ground-level, at the entrance. Mixed with the limpet shells, and strewn generally in the entrance, were found shells of the oyster, cockle, razor-fish, whelk, common mussel, horse-mussel, and dog-whelk. Numerous mammalian remains were also come upon at an early stage of the excavation. These were carefully preserved, and I am indebted to Mr James Simpson, F.R.P.S.E., Assistant Curator of the Anatomical Museum, University of Edinburgh, for a full and careful report upon them:—

“In the autumn of last year (1890) a large collection of bones was exhumed at South Fort, Luing, Argyllshire, and through Dr Christison, Secretary of the Scottish Society of Antiquaries, were sent to Sir William Turner, who kindly handed them to me for purposes of identification. Having examined the find, it was clear that several animals were represented. All the bones were in a fragmentary condition, and many of them bore evidence of having been split up in order to give free access to the marrow cavity. This was especially noticeable in the case of the malleolar ends of the tibiæ of the Red Deer (*Cervus elaphus*). In these the obliquity of the cleavage was such as to produce uniformity of appearance among the fragments, and although the marks of teeth were not to be distinguished on the sectional margins, still the appearances were closely akin to those resulting from the splitting of the bones by a carnivorous animal. (See my paper on ‘Mammalian Remains,’ *Edinburgh Geological Society's Transactions*, March, 1886.)

“In addition to these oblique sections of the malleolar ends of the tibiæ, one of them bore a cut, evidently inflicted by a sharp instrument. Among the antler remains were some fragments which had been cut transversely, also by a sharp instrument.”

From a careful examination of the fragments, the following different animals were represented:—

RED DEER (*Cervus elaphus*).

Tibiæ.—Malleolar ends of ten bones, five of the right side and five of the left. One of the latter had no fellow among the right tibiæ, and was recog-

nised as the bone of a young animal, from the fact that the epiphysial end was detached from the shaft. The other bones were those of adult animals, and presuming that the four left fragments were the fellows of a corresponding number of the right fragments, six animals were indicated.

Femora.—Two portions of the lower ends, right and left. As these bones were not fellows, they were from separate animals.

Humeri.—Portions of the lower ends of four right and one left.

Scapulae.—Six portions of the humeral ends, with the glenoid fossa.

There were also a number of loose teeth, and numerous fragments of superior and inferior maxillæ, with teeth *in situ*.

ROE DEER.

There was a portion of the lower end of a tibia of a small ungulate, and the epiphysis being united to the shaft proved the adult character, and since it was too small for a red deer, and too small for a sheep, it ought probably to be referred to the above animal. There was also a portion of a lower end of a humerus, which for similar reasons might also be referred to the roe deer.

PIG (*Sus scrofa*).

The presence of this animal was indicated by numerous fragments of the alveolar margins of the jaws, with the teeth *in situ*, affording evidence of different individuals of different ages. Amongst the loose teeth there were a large tusk and incisor of the lower jaw.

OX (*Bos*, sp.).

As in the case of the pig, this animal was largely represented by portions of the upper and lower jaws, with teeth *in situ*.

SEAL (*Halichærus gryphus*).

“Only a right humerus and a right femur could be determined from among the remains.

“While the bones already mentioned have been selected as affording proof of the presence of the above animals, there were also numerous fragments, for example, femora, tibiæ, antlers, crania, ribs, &c., as well as entire vertebræ, astragali, calcanea, corroborative of the above statements.”

Besides these mammalian remains and shells, there were found in the entrance several hammer-stones. These, like the shells and bones, were not confined to the ground-level of the entrance, but also mingled

with the rubbish at a height of several feet. The greater number of the stones were broken, with their corresponding fragments lying close together. Those that were whole showed the usual wearing at both ends. Numerous large slabs of slate were lying in the entrance, some having evidently fallen from the roof, whilst others were lying flat in the entrance, forming an irregularly-laid pavement, under which no remains were found, with the exception of a few shells. Remains of charred wood were met with in abundance in the inner half of the entrance, and here also, on the right-hand side, a large fixed stone formed one of the sides of a fireplace. Near it were found a bone pin and a portion of deer antler, perforated in its long diameter, and with the ends showing marks like those made by a saw. Its length was about an inch. Several other portions of antlers had this sawn appearance, especially where the tines branched off. One in particular was partly severed in this manner, and had the remaining part roughly broken across.

On being cleared out by the workmen, the entrance looked like a cutting into a large mound, the roof being entirely gone. The sides were well preserved, and formed of very large stones. The extreme length of the entrance on the right-hand side of a person entering is 13 feet 7 inches; on the left-hand side, 13 feet 11 inches. The width at the outer and inner ends is much the same, the measurements giving 5 feet 8 inches. At a distance on the right-hand side of 2 feet 6 inches, and on the left-hand side of 1 foot 10 inches, measuring from the outer corners of the entrance, two upright stone door-posts are placed edgewise into the wall, and form a rebate for a door. The height of the right-hand door-post is 4 feet 9 inches; width, $12\frac{1}{2}$ inches; thickness, 12 inches in some parts; 9 inches in others, it being considerably worn. This stone (fig. 3) on the side facing the interior has upon it fifteen cup-markings. These have been made in an irregular line over the stone face, one above the other. They vary from 1 to 2 inches in width, and are only about $\frac{1}{2}$ an inch in depth. The stone itself is of slate, much decayed and friable, and has its lower end somewhat rounded. The height of the left-hand door-post is 4 feet, width 1 foot, thickness 1 foot 1 inch. Behind the two door-posts are a bar passage and a bar slip.

The bar passage is on the right-hand side of the entrance, at a distance of 1 foot from the cup-marked door-post, and the bar-slip is 9 inches from the other door-post. The size of the mouth of the bar-passage or



Fig. 3. Cup-marked Stone in Gateway of South Fort, Luing.

chamber is 9 inches by 8 inches, and that of the bar-slip 10 inches by 7 inches. The length of the bar-passage is 12 feet, the depth of the bar-slip 3 feet.

The right-hand face of the entrance shows a considerable curve, widening out inside of the right-hand door-post. The opposite face is but slightly curved. Outside the door-posts the opposing walls are tolerably straight. Inside the doorway not only is the curving marked, but also an approximation of the walls at the top. The width at the middle of the entrance is 6 feet 9 inches. At the top it is only 5 feet 3 inches. The wall here at its highest part is 9 feet. At the inner end of the entrance, on the left-hand side, and built against the inner face of the fort wall, are 3 feet of inferior masonry, which evidently follows the wall for some distance. The corresponding right-hand inner corner shows no signs of this scarcement-like building.

Having been with Dr Christison when he was examining the fort Suidhe Chennaidh, near Kilchrenan (*Proceedings of the Society*, 1889, p. 413), I was at once struck with the resemblance of the entrance of that fort to the entrance of this South Fort, Luing, both as to the curving of the walls and the approximating of them towards the top.

At the eastern end of the fort indications of a second entrance were observed. A slight clearing of the rubbish showed that in direction this entrance lay almost due east and west. It was of an almost uniform width of 4 feet 10 inches. It measured 12 feet in length. It was not cleared out, but the examination made of it was sufficient to show that the side-walls were in three sections of almost equal measurement,—an outer band of large stones evenly built, a middle band of smaller stones loosely built, and an inner band similar in character to the outer. No time was available to me to make a full investigation of this secondary entrance. Superficial turning over of the soil, however, showed numerous whelk and limpet shells. Of the fort generally it may be said that the greater part of its walls are hidden by fallen debris, with the exception of the south-western face, in which is the larger entrance. Here the outer aspect of the wall shows over 50 large stones regularly built, and evidently laid in courses. A stone in the wall on the left-hand side of the entrance is 5 feet in length, 2 feet in depth, and 1 foot 6 inches in width. The largest stone in the fort debris, lying a short distance down the hill from the main entrance, measures in length 6 feet; width, 1 foot 10 inches; thickness, 1 foot 3 inches. The farmer on

whose ground the fort is situated, and who recollects the entrance being partly roofed, informed me that this stone was the lintel, and that an attempt had been made to have it taken to the farm steading, but that it proved too heavy for removal. He himself broke off two or three feet of it for building purposes. The fort wall at its widest part near the larger entrance measures 16 feet. The opposite wall, in which is the second entrance, measures 14 feet at its widest part. It is difficult, without some excavation, to determine the exact thickness of the side-walls of the fort, owing to the outer band of the wall formation giving way and falling down the slope; but making due allowance for the evident batter, the width of wall at the sides may be put down as about 10 feet, at a height of 8 feet from the foundation. The amount of excavation made revealed no chamber in the walls. The opening in the wall described by Dr Christison (*Proceedings of the Society*, 1889, p. 406) as leading into a passage undoubtedly structural was an opening formed by the removal of a stone in the wall face into the bar-chamber.

The somewhat oval interior of the fort measures from the inner face of one wall to the inner face of the opposing wall in its greatest length 66 feet. The shortest measurement of the interior from wall to wall is at a distance of 20 feet from the south end of the fort, being at this part 34 feet across. At a distance of 27 feet from the inside of the wall at the north end of the fort the width across is 43 feet.

Remains of outworks, almost grass-covered, are to be noted, starting from the walls at the sides near the northern end. These curve towards the main entrance, but their exact relationship to it could not be made out owing to their dilapidated condition. The western outwork was at one part 40 feet from the fort wall. Its width was 6 feet, its total length 100 feet. The outwork north of the fort was shorter, similarly built, and curved towards the second entrance to the fort. A shorter concentric wall was drawn between this outwork and the fort wall.

A more systematic and prolonged examination than I was able during a short holiday to make of this unique hill fort will, I feel convinced, do much to throw light upon a somewhat neglected branch of archæology.