

I.

NOTES ON FURTHER EXCAVATIONS OF THE SOUTH FORT, Luing,
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In a previous volume of the Proceedings of the Society¹ will be found a description of a preliminary excavation of the South Fort in the island of Luing, which I was requested by the Council to superintend. Having been requested again last year to continue the work, I have the honour of submitting an account of these further excavations to the Society.

The structure is a very large one, oval in shape, and the enclosed area, filled with the fallen debris, measures in its longest diameter 66 feet. The enclosing walls at the ends of the oval are 16 and 14 feet thick, the side walls about 10 feet thick. Two entrances give access to the area of the fort, and these are at the ends of the oval where the walls are thickest.

The larger entrance was described in my former paper, and proved to have no structural opening or chamber from it, with the exception of a bar passage and a bar slip. It opens to the south-west. The smaller passage has its opening pointing almost due east. In opening this other passage the workmen came upon the usual collection of sea-shells and bones. The shells for the most part consisted of limpets (*Patella vulgata*) and wilks (*Littorina littorea*) in about equal proportions, and those of the oyster (*Ostrea edulis*), which were not nearly so numerous. The bones were mammalian, and are more minutely described in Mr Simpson's report. Immense stones had to be cleared out of the passage, and the

¹ *Proceedings*, vol. xiii. pp. 476-483.

work took a good deal of time. When the workmen came near the ground-level they found many hammer-stones and stone discs; these also they came upon in the part they cleared in the fort interior. A scarcement-like wall of inferior masonry, 5 feet 2 inches in height, 4 feet 6 inches thick at the foundation, and 4 feet at the top, is built against the inner face of the fort wall proper, and appears to extend from the western to the eastern entrance on the north side. At a distance of 8 feet from the outside there is an opening from the passage into a chamber to the right. Its width is only 3 feet 3 inches, and access to it is obtained by a step 2 feet above the ground-level. On the left-hand side of the passage there is another opening 4 feet in width. It also is 2 feet from the floor of the passage. Here was a platform 4 feet square, and from it a stair ascended, of which now only two steps remain. A step led down to the chamber on the right, and the floor was found to be paved with large slabs, rather regularly laid. Oval in shape, it measured in its greatest length 9 feet, and from side to side 7 feet 8 inches. The walls are still standing to a height of 4 feet 6 inches, and are neatly built with small stones. They curve towards the entrance and converge towards the top, the roofless space measuring 7 feet across. Through the middle of the thick fort wall a stair ascended from the floor of the chamber opposite the entrance. This stair (fig. 1) was interrupted after 3 steps by a level platform measuring 4 feet \times 2 feet 6 inches, and from this the stair, consisting of six other steps, was continued to the top of the fort wall, and made to follow the curve of the wall towards the left. The height of this part of the stair is 4 feet 6 inches. This makes the existing part of the stair altogether 7 feet 6 inches. Covering the floor of the chamber was a profusion of shells, mainly those of the limpet, oyster, and periwinkle. Mixed with these were numerous bones, very much decayed and broken. Several good specimens of stone discs and pounders were found. Ashes and charred wood were all over the floor. On lifting some of the flags similar remains were come upon. The labour of clearing out the chamber was great, owing to the massive stones that had formed the fort wall having fallen into it, and one part of the chamber wall had to be buttressed by the workmen to prevent its falling in.

I am of opinion that this is the only remaining chamber in the fort wall. The two steps rising from a platform on the left hand of one entering the passage undoubtedly led to a chamber, the walls of which have fallen inside and outside the fort. That other chambers existed at higher levels seems to be indicated by the existence of shells, bones, and stone implements near the surface of the debris, which almost fills the fort interior to a height of 8 or 9 feet. At the north-east corner of the fort, near the surface, a small quern, measuring only 5 inches in



Fig. 1. Stair in the Fort Wall.

diameter, was found; and throughout the fort interior and down its slopes remains of shells and bones are to be found. When it is remembered that the fort interior is filled with debris to a height of 8 or 9 feet, one cannot but consider that in this great mass there may lie much that is certain to be of interest.

The work hitherto done at the fort is but a mere fraction of what is

required in order to ascertain its true character and something also about its builders and occupants. Resembling the brochs in its thick and massive walls of dry-stone, its stairs, its chambers, its contents, yet differing from them in its great size, its oval shape, and its two entrances, it forms an archæological puzzle which only extensive excavation can help to solve.

The larger entrance, with walls standing to a height of 9 feet, has not a trace of a guard chamber or structural opening, except the bar passage and the bar slip. The smaller and other eastern entrance, on the other hand, has two openings from it, leading to stairs and a well-defined chamber. That this entrance is not a mere accidental breaking of the fort wall into a passage leading from the fort interior to chambers, is proved by the perfectly even faces of the passage along its whole length.

A curious feature in the building of the fort is that the foundation of the western part is on a much lower level than that of the eastern part, the building beginning several feet down the slope terminating the ridge, which extends for about a mile from the north fort. This ridge shows an extensive out-cropping of the rock of which the fort is built, and one can understand how the labour of building was facilitated by the abundance of material available on a level with the eastern foundation, and requiring only to be dragged to the entrance, and by means of the stairs in construction, taken to the upper part of the walls. There was thus no call for the laborious dragging of building material up steep hillsides, and this fact may have had not a little to do with the choice of a site.

Regarding the bones and teeth found in the eastern entrance, in the chamber, and in the fort area, I have been favoured with the following report by Mr James Simpson, F.R.P.S.E., of the Edinburgh University Anatomical Museum :—

“ Last October I received from you two boxes of bones and teeth which you wished me to examine. The specimens, as stated in yours of 19th October, were found in the South Fort, Luig, Argyllshire.

“ All the bones are in such a fragmentary condition that a detailed description of them is practically impossible. I may, however, state that those

specimens found in the wall chamber of the fort, in so far as I could determine, consisted of

Portions of antlers of <i>Cervus elaphus</i>		
Teeth of upper and lower jaws of <i>Cervus elaphus</i>		
Lower end of humerus of	”	”
Portions of scapula of	”	”

and numerous other fragments of bones of that animal.

“There were also the remains of *Sus scrofa*. These consisted of portions of the upper and lower jaws, which still retained the characteristic teeth. The crown of one of the teeth was considerably worn. There were also some loose teeth, and one, a tusk which, although a piece was wanting at its alveolar end, measured $3\frac{3}{4}$ inches in a straight line.

“There were no human remains. The specimens from the eastern and smaller entrance, and from the interior of the fort, consisted of fragments of long bones and teeth of *Cervus elaphus*, a metacarpal bone, two portions of the right and left halves of the lower jaw, portions of scapulae, and the upper end of a femur, all probably belonging to *Cervus capreolus*, and pieces of the long bones of a large bird. None of the specimens in this find could be identified as belonging to *Sus scrofa*. There were no human remains. All the long bones were split up in the characteristic way to get at the marrow.”

Comparing this find to that of the western entrance, it is noticed that in this case no bones of the ox were found, although these were largely represented in the former find. With the exception of the seal, a right humerus and a right femur of which were found in the western entrance, the animal remains are otherwise almost identical. It is, however, somewhat remarkable that although the bones of *Sus scrofa* were found in abundance in the western entrance, they were not at all come upon in the eastern, nor in the excavated portion of the fort area near it, and yet they were numerous in the wall-chamber. As to quantity, the bones found occupy the following relative positions:—(1) *Cervus elaphus*; (2) *Sus scrofa*; (3) *Bos*, sp.; (4) *Cervus capreolus*; (5) *Halichærus gryphus*; (6) bones of birds not defined.

The following is a list of stone implements, &c., found in the fort in October 1892:—

1. Point-sharpener, an oval pebble of quartzite, $3\frac{3}{4}$ inches by $2\frac{3}{4}$ inches, and 1 inch in thickness, having a groove on each of its flat sides, running nearly in the direction of the major axis, and one end

slightly worn by pounding. A similar stone is described by Dr Anderson (*Scotland in Pagan Times*, p. 220) as having been found in the Broch of Kintradwell.

2. Pear-shaped pounder, thick at smaller end, and bevelling towards the wider. One side is flat, and has a smooth, polished surface. Length, 4 inches; largest width, $3\frac{1}{2}$ inches; weight, $1\frac{1}{2}$ lb.

3. Oval pebble of quartzite, very smooth, and with slight wearing at one end. Length, $3\frac{1}{4}$ inches; width, $2\frac{1}{2}$ inches; weight, 5 oz.

4. Oval pebble of micaceous schist, $3\frac{3}{4} \times 3\frac{1}{2}$ inches, and $1\frac{1}{2}$ inches in thickness, showing a smoothed portion stained a brownish colour. Circumference, 8 inches; weight, 13 ounces.

5. Small pear-shaped pounder, 3 inches in length; weight, 5 ounces.

6. Flattish round stone, showing smoothed and stained sides, and wearing at each end. Length, $3\frac{1}{2}$ inches; width, 3 inches; weight, 11 ounces.

7. Part of large, round pounder, weighing 15 ounces.

8. Slab of sandstone. Both sides show signs of its having been in use. Size, $8\frac{1}{2}$ in. \times $8\frac{1}{2}$ in.; thickness, 1 inch.

9. A slender rod or pin of brass or bronze; length, $3\frac{1}{2}$ inches.

10. Upper and lower stones of small quern, made of slate; diameter, 5 inches.

11. Large quern of slate; size, 2 feet 8 inches in diameter.

12. Fragment of an iron blade.

13. Fragment of coarse pottery.

14. Two pieces of iron slag, one of them magnetic.

There were besides small fragments of discs and pounders, and much charred wood.

I have pleasure in recording that the Marquis of Breadalbane has erected a substantial fence round the fort, and has from the outset taken great interest in the work. I derived valuable assistance from Mr George Willison of Ardlarach, and his foreman, Mr John Gibson. Messrs J. & A. M'Lean of the Toberonochy Slate Works also kindly lent a waggon and several implements, which proved of much use in removing the large blocks of stone.