

## II.

### EXCAVATION OF THE FORTS OF CASTLEHILL, AITNOCK, AND COALHILL, AYRSHIRE. BY JOHN SMITH, DYKES, DALRY, AYRSHIRE.

#### I. CASTLEHILL FORT.

This fort is situated on the summit of an isolated rock on the farm of South Howrat, 600 feet above sea level, in the parish of Dalry in Ayrshire. At the north end the rock, which appears to be a remnant of a dolerite sill, rises almost vertically to a height of about 60 feet. At that end a large mass has fallen off from it, and in its fall is said, by tradition, to have killed a woman who was milking a cow. This is the only bit of "history" connected with the spot. No one ever appears to have suspected that it had been a fort, the whole summit of the rock, before examination with the spade, being covered with grass. As the rock stands in a field which rises towards the south, and the surface of the rock dips a little in that direction, it is only about 20 feet high at that end, the sides between the ends being rocky and precipitous with occasional ledges. The greatest length of the upper part of the rock is 37 yards, and its greatest breadth 15 yards.

The dolerite of the southern half exists in plated layers; of the northern half it is massive. Where the old plated layers outcrop on the surface there are deep gutters, and this has obliged the people who occupied the summit to fill in the hollows with soil, evidently brought up from the land below, while over this they had placed a pavement, generally of thin limestone slabs, a lot of them being of the *burdee*, or rash-rit (root of the rush), a species of coral. These slabs extended over about half the area of the southern half of the rock, and the greater part of them had been laid at the time the rock was appropriated as a fort site. This is shown by two facts: first, there is not the slightest sign of occupation having taken place before the slabs were laid; and, second, above the pavement there was a dark layer in and upon which

the relics occurred. Towards the south there had, however, been a small extension of pavement, and under it two articles were found.

That this fort had been surrounded by a wall I found substantial proof of in three places and presumptive proof in seven. The three

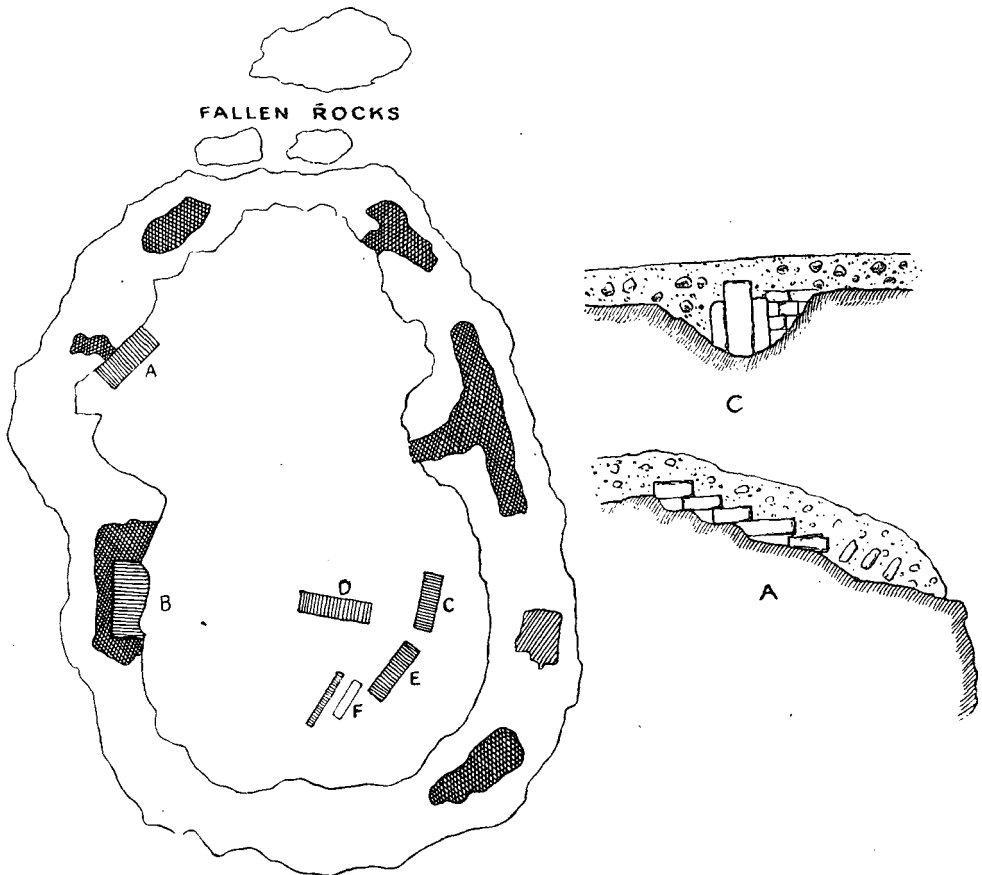


Fig. 1. Plan and Sections of Castlehill Fort.

are marked A, B, C on the plan, fig. 1. At B the wall was 9 feet thick at its foundation, and was built on a slope of the rock, the stones being underpinned and level as to their upper surfaces. At A the wall was close to the upper edge of the rock. At C it was a short distance from the edge. These remnants of the fort wall had been preserved from destruction by having been built in hollow parts of the rock, the part at C being in the deepest one and the stones placed as shown in fig. 1, c.

The largest stone—a limestone—stood about a yard high, and had been set on edge in the deepest part of the hollow.

The second proof of there having been a wall is that on the ledges there was an abundance of blocks of stone not belonging to the rock, such as limestone and sandstone, which could not have been got nearer than a quarter of a mile away. These had been thrown down from above and were lying in the manner stones take on a sloping surface, with the usual “tail” of smaller debris at the upper ends. They were also mingled with articles from the fort, broken querns, etc. At some parts this debris was covered over by 20 inches of fine soil which could be delved into without touching a stone, being evidently an accumulation of wind-blown “loess” since the fort was destroyed. It may here be remarked that there was no appearance of any glacial debris or boulders on the surface of the rock nor on its ledges.

The northern half of the surface was comparatively smooth, with little more than turf, about a foot thick, on it.

Inside of the fort there had probably been a building. At least, remnants of walls were found at the places marked D and E on the plan, and the pavement extended under these walls.

All the debris lying on the whole upper surface of the rock was turned over, as well as that on the ledges—shown in cross-hatching on the plan at seven places. On the southern half of the surface of the rock and pavement the debris was thickest, and had probably for the most part been composed of stones from the walls and any soil mixed with them that had resulted from their partial decay and from the turfs with which the stones of the wall had originally been intercalated, as well as from blown dust. All the pavement was lifted and the debris in the gutters of the rock underneath it was all cleared out.

At a point marked F on the plan there was found a long stone set up on its edge and neatly underpinned on the rock, with its long axis north and south. At 22 inches from it, and parallel, were some stones laid in building order; connected with it there were a number of rough stone slabs, an iron axe, an iron spear-head, and fragments of Samian ware.

This fort commands an extensive view of the valley of the Garnock Water. Caerwinning Hill, occupied by an old extensive fortification, is  $2\frac{1}{2}$  furlongs south-east of it. The latter had three walls of circumvallation which can still be traced by remnants, the farmers having removed most of the stones more than a hundred years ago.

There is a spring at the foot of the rock, the water of which is now conducted in pipes to the farmhouse. This spring was very conveniently situated in former times for the inhabitants of the fort.

There was a large number of bones and teeth found in the debris

of the southern half of the rock, but all very much decayed; the reason for there being anything left of them at all was doubtless the presence of so much limestone. They consisted of the remains of oxen, sheep, pig, red-deer, horse, and wolf or large dog.

Charcoal of wood was frequently found, and close to the inside of the wall there had been a fire.

The land on which the fort is situated is called Howrat, probably the original name of this rock, and meaning "fortified hill." Near it are Con's Hill, Green Hill, Caerwinning (meaning Fort of Winning) Hill, and the Blairock—all rocky eminences.

#### RELICS RECOVERED FROM CASTLEHILL FORT.

##### *Bone Objects.*

A few bone objects, including—

- Small bone implement pointed at both ends.
- Trimmed fragment made from a marrow bone.
- Tine of a stag's horn with a bit of the beam attached, showing where it had been partially sawn through and thereafter broken off.
- Three dressed pieces of bone, the largest of which was a flat oblong,  $2\frac{3}{8}$  inches in length, all chemically treated and very solid.

##### *Stone Objects.*

- Hammerstones, about a score, mostly of quartz or quartzite.
- Anvil, one massive quartzite pebble,  $5\frac{1}{2}$  inches  $\times$  4 inches  $\times$   $3\frac{1}{4}$  inches, showing signs of much use, probably as a ridge anvil.
- Whetstones, a number, the largest of which measured  $5\frac{1}{2}$  inches in length.
- Polishers, eight.
- Slickstones, two: one  $4\frac{1}{4}$  inches  $\times$  2 inches tapering to both ends, very smooth on the worked face; the other,  $4\frac{3}{8}$  inches long, showing evidence of use at one end.
- Discs, a number, perforated and unperforated; among the latter two of the class sometimes designated "mirrors."
  1. Circular,  $1\frac{1}{4}$  inch diameter  $\times$   $\frac{5}{16}$  inch in thickness, perfectly flat on one side, with a slight concavity on the other, polished on both sides.
  2. Similar disc, 2 inches diameter  $\times$   $\frac{1}{4}$  inch in thickness.

##### *Articles of Cannel Coal.*

- Two fragments of a bracelet, indicating a diameter for the complete article of about 3 inches, flat and unpolished on the inside, convex and highly polished on the outside.
- A thin, polished disc,  $1\frac{1}{2}$  inch in diameter.
- A roughly spherical object with a diameter of  $1\frac{1}{8}$  inch, evidently a piece in course of manufacture.
- A small portion of a ring.

##### *Querns.*

- Numerous broken fragments, but no complete parts. The five best-preserved pieces showed that the querns had been circular, with diameters of from 14 to 15 inches.

*Keel.*

Several pieces of red keel were found, obtained from some of the volcanic ash beds of the district.

*Cawk or Barite.*

Two lumps of cawk showing well-rubbed surfaces, one of them faceted.

*Pottery.*

Two fragments of a coarse hand-made urn, resembling pieces found on the Ayrshire raised beach sands. These had evidently been thrown over the side of a rock on to a ledge.

A number of pieces of Samian ware, several of which join and form a nearly complete shallow bowl approximating to Dragendorff type 18, with a diameter of  $7\frac{1}{2}$  inches. A section is shown in fig. 2. Pieces of a similar

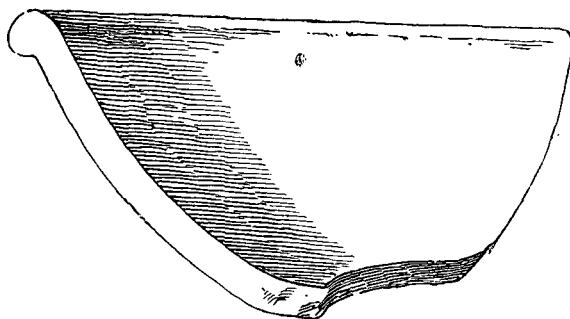


Fig. 2. Section of Samian Ware Bowl.

form were found in the ditch of the early fort at Newstead, and indicate accordingly a late first-century date.

Fragment of the foot-stand of a second bowl, but not sufficient to show the form.

*Glass.*

A thick, green, reeded fragment, evidently a small piece of a handle of a large Roman glass jar.

Several bits of thick, plain glass of a similar tint, probably pieces of another such jar.

Two fragments of pale yellow glass ornamented on the surface with a series of white enamelled lines (fig. 3, No. 6). These are apparently of the same character of glass as that found on the Mote of Mark in the Stewartry of Kirkcudbright, excavated in 1913,<sup>1</sup> and evidently dating from the eighth or ninth century.

A small, pale yellow fragment with a chevron pattern, of a vesicular texture, probably produced with sand (fig. 3, No. 7). This is evidently a piece of glass analogous to a fragment found also on the Mote of Mark, in which the pattern had been produced by a similar method and which is of eighth- or ninth-century date.

<sup>1</sup> *Proc.*, vol. xlviii. p. 125.

A cane of blue glass for the manufacture of beads  $\frac{1}{2}$  inch long (fig. 3, No. 4).

A similar cane of white vitreous paste (fig. 3, No. 5).

A number of beads of yellow vitreous paste of various sizes, and similar to those found on the Glenluce and Culbin Sands, Traprain Law, and other native sites in Scotland (fig. 3, No. 2).

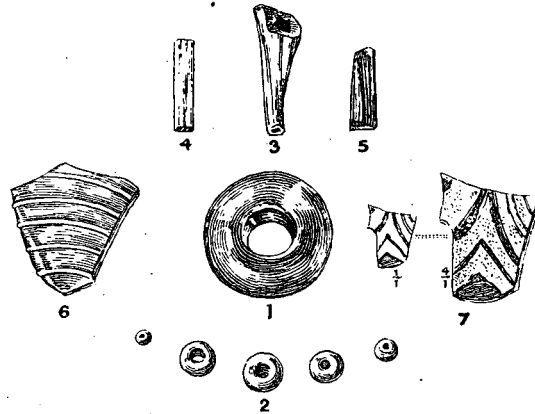


Fig. 3. Beads and Fragments of Glass from Castlehill Fort.

Pipe beads of yellow vitreous paste; and slag, showing that the beads of this material had been manufactured on the spot.

A pipe bead of light-coloured vitreous paste.

A bead of blue glass.

Part of a bugle bead of the same colour.

Fragment of a blue melon-shaped bead of Roman manufacture.

A bead of an oval section of pale yellow glass,  $\frac{3}{8}$  inch in diameter (fig. 3, No. 1).

#### *Bronze.*

A dragonesque fibula of bronze (fig. 4, No. 1). In the centre of the S-shaped body there is a flattened boss rising from a cup-like hollow, with a small inset of enamel on the top. A series of triangular spaces (some still containing fragments of translucent enamel or glass) are formed over the surface of the rest of the body. The ear-like projection of the head is flat and is crossed diagonally by two lines of rope ornament. One of the eye-sockets still retains a fragment of glass. A circular hollow at the end of each snout has contained red enamel, a trace of which still remains in one. The pin, which is much curved, is intact.

Tri-lobed sword-guard of bronze of a well-known Celtic type, which may be compared with a guard found at Newstead<sup>1</sup> and with others from Hod Hill, Dorsetshire. While these, however, bear some decoration, this is plain (fig. 5).

A small penannular brooch of bronze with pin, plated with white metal, and terminating in lozenge-shaped ends, each containing a small lozenge-shaped boss with slight projections from the angles, and hollowed in the centre (fig. 4, No. 2). This type of brooch belongs to the eighth or ninth century. Moulds for casting such were found in the excavation on the

<sup>1</sup> *A Roman Frontier Post*, fig. 19, p. 186.

Mote of Mark in the Stewartry of Kirkeudbright in 1913.<sup>1</sup> The practice of plating with white metal was also in vogue at this period, and is occasionally met with in Viking relics.<sup>2</sup>

*Iron Objects.*

Among the numerous pieces of iron the following may be noted:—

1. Large ring, not welded.
2. Axe,  $5\frac{1}{2}$  inches long by  $3\frac{3}{8}$  inches wide at the cutting edge, with a large shaft-hole.
3. Socketed spear-head, 5 inches long, blade  $1\frac{1}{2}$  inch wide.
4. Socketed spear-head,  $7\frac{1}{4}$  inches long, blade  $4\frac{1}{2} \times 1\frac{3}{4}$  inch.

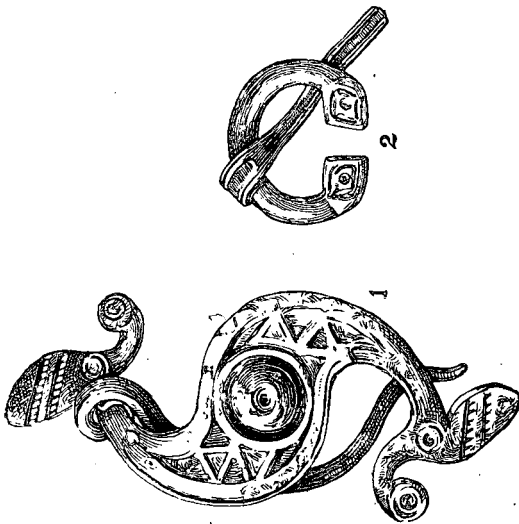


Fig. 4. No. 1, Dragonsque Fibula; No. 2, Penannular Brooch, both from Castlehill Fort.

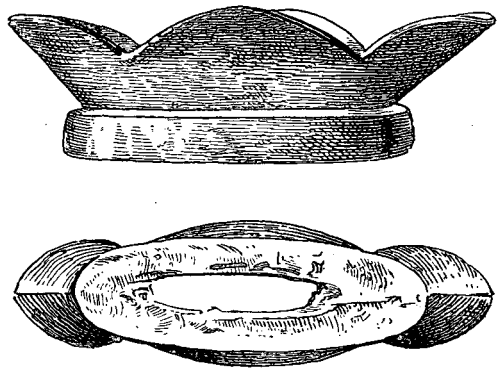


Fig. 5. Tri-lobed Sword-guard of Bronze, from Castlehill Fort.

5. Tanged spear-head,  $5 \times 2$  inches, with a large portion of the point broken off. It shows fibrous markings of a wooden shaft, and next the shaft there are the remains of some substance which had been wrapped round to fix it.
6. Tanged spear-head,  $4\frac{3}{8}$  inches long.
7. Part of a knife-blade which had been fixed in a wooden handle.
8. Small gouge.
9. Ring,  $1\frac{1}{8}$  inch diameter.
10. Broad-headed nail.

These relics indicate clearly two periods of occupation, the one contemporary with first Roman invasion at the end of the first century of our era, and the second referable to the eighth or ninth century, probably synchronising with the descent of the Vikings on our western coasts.

<sup>1</sup> *Proc.*, xlviii. p. 144.

<sup>2</sup> *Ibid.*, p. 185.

## II. AITNOCK FORT.

This fort is situated on the summit of a cliff which rises about 60 feet perpendicularly from the waters of the Rye stream at the south-west angle of Hindog Glen near Dalry in Ayrshire. On that side the cliff would form a sufficient defence for it. To the south-west the land rises gently, and in that direction the fort had been defended by a deep ditch and stone wall, the foundation of part of the wall still remaining being

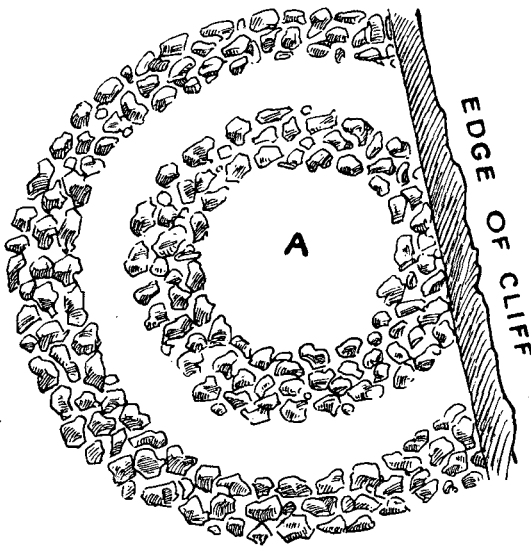


Fig. 6. Plan of Aitnock Fort.

15 feet thick and composed of rough stones and boulders, some of them fairly large. At a part where the wall was cut through there was found a thin dark layer under each stone, showing that it had probably been originally built of alternate layers of turf and stone, which would make it air-tight. The ditch, on the fort's destruction, had been largely filled up with the debris of the wall. It is at present horse-shoe shaped, but at one time it may have been carried further round the fort, while the wall had been continued right round. There is evidence of the sandstone rock having been quarried for a bit between the fort and the edge of the

cliff, but it is likely that this was done in comparatively recent times.

The fort inside the wall is nearly circular, and measures about 30 feet in diameter. The floor had been carefully constructed in the following manner. After the necessary levelling had been made it was covered with tempered clay of a yellowish colour, such as is still got in several places in the neighbourhood, and is much used in pits for luting the joints of rhones, as well as for plastering on horses' feet inflamed or with "mud fever." It may also be seen under fireplaces on the antiquarian ground of the Ayrshire sands, and in connection with the curious water-tight structure in Ashgrove Loch.<sup>1</sup> It was also found in connection with interments at King Coil's Grave.<sup>2</sup>

On the top of the yellow clay there had been placed a pavement of

<sup>1</sup> See *Prehistoric Man in Ayrshire*, p. 48.

<sup>2</sup> *Ibid.*, p. 149.



rough slabs, and at parts water cobbles. The floor was level for the most part, but as it approached the wall it dipped gently towards it all round. During the occupation of the fort the floor had evidently never been cleaned, and on the top of the pavement a deposit, dark in colour, had accumulated to a depth in places of 6 inches. In and on this deposit the relics were found.

At the point A on the plan, fig. 6, was found a cauldron of sandstone which may weigh about 2 cwts., the well-shaped hollow in it being nearly a foot deep. It is still in its original position. Close beside it there was a fire-place of slabs set on edge, the cinders of the last wood fire being still in it. It seemed as if the cauldron had been used for holding hot water, the water being heated by stones made red hot in the fire beside the vessel and dropped into it. Of course, as the fire was near the side of the cauldron it would, so far, keep the water warm. This was the only remarkable feature about the fort. There were no partitions or stones found worthy of note, with the exception of the half of a quern which had been set up on edge, though the debris in the whole interior area was turned over.

Passing across the sandstone and under the floor there was a crack about 6 inches wide. Doubtless the rock will fall away into the stream from this fissure some day, as falls have evidently taken place before, great blocks of sandstone occupying the bed of the burn.

An irregular lump of sandstone was found which has two cup-markings, one on each side, placed almost opposite to each other. One measures  $4\frac{1}{2}$  inches in diameter by 1 inch deep, the other  $4\frac{1}{2}$  inches by  $1\frac{1}{4}$  inch; both having been picked out.

#### RELICS RECOVERED FROM AITNOCK.

The relics found in this fort included the following:—

##### *Stone Objects.*

Hammerstones, a large number.

Anvil of quartzite,  $5\frac{1}{4} \times$  by 2 inches, much worked at one end and a large part of it stained black.

Ridge anvil of white quartz,  $5\frac{1}{2} \times 5 \times 3$  inches,  $5\frac{1}{4}$  lbs. in weight.

Whetstone of sandstone,  $3\frac{1}{2} \times 3$  inches, worn hollow.

Polisher,  $7\frac{1}{2} \times 2\frac{1}{2} \times \frac{1}{2}$  inches.

Slickstone of quartzite, glossy on one side.

Needle-sharpener of fine-grained slate, which had also been used as a hammer.

Oval flattened stone, opposing surfaces worked flat and marked.

Disc of sandstone, imperforate and roughly made,  $1\frac{1}{2}$  inch in diameter, flattened.

Spindle whorl, or perforated stone,  $1\frac{3}{8}$  inch in diameter, hole  $\frac{1}{4}$  inch, equal in diameter all through, now quite soft.

*Glass.*

A bead of yellow vitreous paste.

*Pottery.*

One fragment of a shallow Samian bowl, too far decayed to afford a reliable indication of its type, but it is probably Dragendorff, Type 18, and of late first-century date. There is also another piece of reddish pottery, of coarse Roman ware.

*Bone.*

There were many fragments of burnt bones in the relic-bearing layer, but no other kind of bones was seen.

One fragment of a small object of burnt bone, perforated at one end.

*Miscellaneous.*

Charcoal was found in abundance, but, though several coal-seams outcrop in the glen, no cinders of coal were observed.

Only one lump of cawk (barite or heavy spar) was found having marks of rubbing.

There were many burnt and split pebbles which may have been used as heating stones.

A few objects of iron were recovered.

Several fragments of quern stones were found which seem to have been purposely broken.

A small portion of a millstone was found which measured 5 inches by 1½ inch at the thickest part.

Several grains of wheat were recovered from the black layer.

At several parts of the interior an upper black layer of occupation was observed laid above the level debris of the walls of the earlier period, the upper floor being formed 24 inches above the older one. There was no evidence that during this occupation the fort had been used as a workshop or place for grinding corn; at least, not a single implement or quern was found in connection with it. From the centre of the black layer, however, came four denarii; these were as follows:—

1. Vespasian, Coh. (2nd ed.), i. p. 371, No. 45.
2. Hadrian, Coh. (2nd ed.), ii. p. 229, No. 1481.
3. Antoninus Pius, Coh. (2nd ed.), ii. p. 295, No. 226.
4. Antoninus Pius, Coh. (2nd ed.), ii. p. 299, Nos. 286 ff.<sup>1</sup>

The coins had apparently been wrapped in some material, and were sticking together in a mass of white lead.

### III. COALHILL FORT.

This little fort is situated on the ridge of a small hill which stands on the watershed between Dalry and Ardrossan, close to the east side of the road. The name has evidently been applied recently, coal having been

<sup>1</sup> Determined by Dr G. Macdonald.

worked at its eastern base. The ridge is of meaugerite basalt, and, as it was too narrow for a fort, had been made up on its eastern side with earth and stones which had been carried up from the base of the hill. This was quite evident, as a lot of the stones in the earth were different from the trap of the ridge.

The fort had been defended by four ditches cut across the ridge, two on each side.

The longitudinal section (fig. 7) shows two ditches on each side of the fort. The bottom of the first ditch on the north-east is at present 10 feet 4 inches below the fort, and of the second one 9 feet 4 inches. That of the first south-west ditch is 6 feet 8 inches below the fort, and of the second one 8 feet 5 inches, but there is at present some debris in the bottoms of all the ditches.

The ditches had all been cut out of solid rock; the space between the upper edges of the two southern ditches is only a yard wide, but that between the northern ones is 24 feet wide and forms a small level plat-



Fig. 7. Longitudinal Section of Aitnock Fort.

form, C on section, fig. 7. To ascertain if this was an outwork of the fort, it was all turned over down to the rock, but no signs could be found of its having been occupied—no black layer and no relics were to be seen. The irregular rock surface had, however, been levelled up with earth. It may have been a ballista emplacement.

The fort had also been defended by a strong wall, very little of which now remains, but at the south-east side the inside of it is continuous for about a third of the whole original perimeter, and there is evidence that it had been not less than 9 feet wide.

Owing to its position on a ridge, the shape of this fort is necessarily a long oval; it measures 33 feet by 24 feet inside the wall. At the west side there had probably been a recess in the wall where there may have been an outlook-hole or arrow-slit, and it had extended to within a yard of the present edge of the western slope of the hill-top. At two points there were holes in the surface of the rock where there had probably been fires, and another on the forced-earth part.

No flooring of either clay or pavement was discovered, but over the surface lay a thin dark layer, evidently the old floor, and in this layer and on the top of it the antiquities were found. Near the south end there were a few thin slabs of sandstone lying on the black layer; if they

were used as pavement they must have been laid down after the place had been inhabited for some time.

No partitions were found within the wall, nor evidence of any separate apartments.

The view from this fort is extensive: Caerwinning Fort, on Swinlees Hill, Knockrevoch Mound, Nockjargon Fort, and Cleavance Camp, Dundonald, are all seen from it. From its position and small size, its destruction (once it was captured) was easy, so that very little debris was left inside of the wall; and, as all the material was turned over, none of it was found to be more than 18 inches in depth, the bulk of the stones from the wall having been rolled down the hillsides or put into the ditches.

As no limestone had been used in the construction of the fort, no bones were preserved, as at Howrat, except some fragments of those that had been buried. The building material used for the wall had been blocks of trap, sandstone—none of them dressed—and natural boulders.

The articles found in this fort are all of stone, with the exception of a rusted bit of iron; and as these stone objects are similar to those from Aitnock and Howrat, it may have been contemporaneous in age with the earlier occupation of these two forts. No beads were found here, but the precaution of sifting the material of the black layer in water was not taken; this we have found by experience to be the only effectual way of bringing to light such small articles.

For its small size this place produced quite a lot of hammerstones. As a rule they have been very carefully worked, few of them showing a single chip broken off by a hard blow. The reason for there being such a large proportion of them made of quartz (a much inferior substance for hammers than quartzite) is that the calciferous conglomerate crops out not far from the fort.

For occasional help in the trenches I was much indebted to Mr Archibald Shanks.

#### RELICS RECOVERED FROM COALHILL.

##### *Stone Objects.*

Stone hammers, a large number, mostly of quartz or quartzite.	
Polishers, several.	Discs, imperforate, three.
Perforated stones, three.	Querns, three.
Ball, possibly for a ballista.	

##### *Iron.*

Iron, one piece only, much rusted.

I am much indebted to Mr Alex. O. Curle, F.S.A.Scot., for his great care in editing this paper and comparing articles with others got in various parts of Britain. The forts were explored in 1901-1902.