

III.

NOTES ON THE DISCOVERY OF A DEPOSIT OF POLISHED STONE AXES AND OVAL KNIVES OF PORPHYRY, ETC., AT MODESTY, NEAR BRIDGE OF WALLS, SHETLAND. BY GEORGE KINGHORN, ST ROLLOX WORKS, GLASGOW.

When spending my holidays in Shetland, and residing at the house of Mr Laurence Laurenson at Modesty, about 4 miles north of Bridge of Walls post-office, I was shown three stone axes and three large, oval, and polished stone knives found by his boys in a grassy knoll in front of his house. The knoll is about 20 yards long and 10 yards broad. On the east and west it slopes gently and on the south abruptly, the ground being broken where the axes were found.

The strata are composed of—

- (1.) Grass, turf, and sandy peat, about 8 inches.
- (2.) Yellow peat ashes, about 5 or 6 inches.
- (3.) Decomposed charred wood, about 4 or 5 inches.
- (4.) Subsoil, red gravel, and rock.

The axes were found in the charred wood layer.

About eighty or ninety years ago, previous to his house being built, a bank of peat, about 4 feet thick, had been removed from the site of the house and the knoll, and this may account for the shallow depth at which the relics were found.

As Mr Laurenson intended making a garden on the knoll, I prevailed on him to make a further search, and in doing so he discovered a burial urn of steatitic clay, crushed flat and broken into small pieces. It was

partly covered by a flat stone of mill-stone grit, 17 inches by 11 inches by $4\frac{1}{2}$ inches thick, on the top of which is a semicircular concavity $\frac{1}{4}$ inch deep, with parallel sides tapering to the ends. In close proximity he found another stone, nearly circular, $7\frac{1}{2}$ inches by $6\frac{1}{2}$ inches by $2\frac{1}{2}$ inches thick, which fitted exactly to the hollow in the large stone. They had evidently been used for crushing or grinding grain, and were found embedded in the charred wood.

About 18 inches behind the urn, the apex of a stone axe showed itself in the sandy peat, and on pulling it out we found it thickly covered with peat and a netting of fibrous roots. It measures 8 inches by 3 inches by $1\frac{1}{2}$ inch thick, and weighs $1\frac{3}{4}$ lb., and is in a beautiful state of preservation.

At Engamoor, one quarter of a mile to the west of Modesty, a similar discovery was made about seventeen years ago by the late Mr Peter Irvine, who sent the relics to the National Museum, Edinburgh.

The broch at West Burrafirth is about half a mile to the north-west of Modesty. The ruins entirely cover a very small island about 50 yards from the shore, from which there is a submarine causeway or stepping-stones, which are 2 feet deep below *low-water* mark. They are now covered with seaweed, and can only be seen with difficulty.

The perforated circular disc was picked up on the margin of Loch Houlma, north of Modesty.

About 20 yards to the west of the house are the remains of tumuli, the stones from which had been used for building the house and fences.

I have just heard that the remains of other two urns have been found in the knoll.

[Mr Kinghorn having generously presented to the Museum the portion of this interesting find which was in his possession (see the previous List of Donations on p. 7), and the remaining portion having been also acquired for the Museum from Mr Laurensen, the following is a detailed description of the objects :—

The whole find consists of nine stone axes and the same number of oval knives of porphyritic stone, and of that peculiar form which is known only in Shetland. This correspondence in the number is

suggestive of the original association of a knife with each axe, whether that association may have been one of personal possession or of sepulchral deposit. The occurrence of three separate clusters of broken fragments of steatite vessels is suggestive of a sepulchral deposit; for

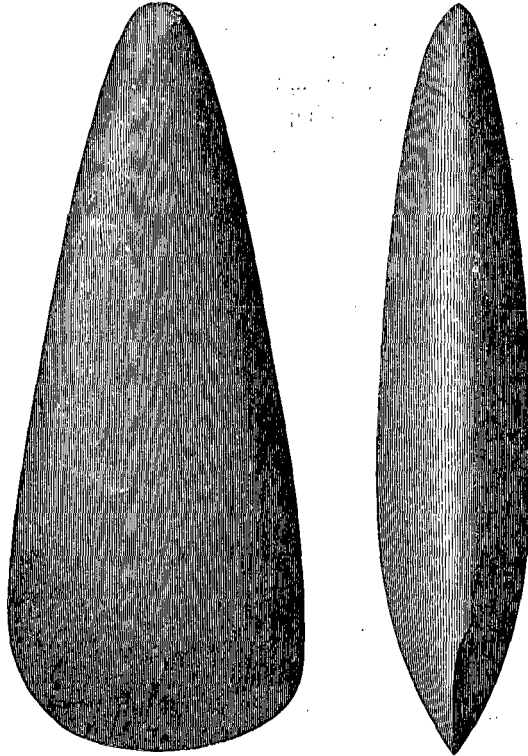


Fig. 1. Axe of hornblende, found at Modesty, Walls, Shetland.

though these steatite vessels are not always sepulchral, they are so in most cases. The stone axes are:—

1. An axe of hornblende, sparsely mixed with crystals of felspar (fig. 1). It measures $7\frac{3}{4}$ inches in length by 3 inches in greatest width

across the cutting face, which is rounded off to a fine edge. It is oval in the cross section in the middle of its length, and tapers upwards to a bluntly conical butt, the whole surface being finely finished and highly polished.

2. An axe of porphyritic stone, $9\frac{3}{8}$ inches in length and $3\frac{1}{8}$ inches in greatest breadth across the cutting face, the cross section a long oval, and tapering to a conical butt. It is somewhat irregularly formed, having some hollows in the surface imperfectly ground out, but the whole surface is well polished except where these hollows occur.

3. An axe of diorite, $8\frac{1}{8}$ inches in length by $2\frac{5}{8}$ inches in greatest breadth across the cutting face, oval in the cross section, and tapering to a bluntly conical butt. The whole surface is highly polished, but somewhat irregular in outline. It has been broken into five pieces, the breaks being old. Two of them are directly across, at a distance of $1\frac{1}{4}$ and 3 inches from the cutting edge. The others are splinters taken off the thickness of the implement on both sides, as if to prepare it for a new cutting edge.

4. An axe of porphyrite, 6 inches in length by $2\frac{3}{8}$ inches across the cutting face, oval in section, and somewhat flattened on one face, so as to be rather more adze-like than axe-like. It is also somewhat irregular in shape, and abruptly conical towards the butt, but well polished. On one of its edges, near the shoulder of the cutting face, there is an abraded portion, 2 inches by 1 inch, which has been caused by use of the axe, either as a hammer-stone or an anvil-stone.

5. An axe of diorite, 6 inches in length by $2\frac{1}{4}$ inches across the cutting face, the cross section an irregular oval, the hollows not ground out, and the butt irregularly conical.

6. Adze of porphyrite, 6 inches in length by $2\frac{1}{4}$ inches across the cutting face, and tapering to a bluntly rounded butt. It has one side flat, the other convex, the edges rounded, and the cutting edge ground mostly from the convex side.

7. Adze of diorite, $6\frac{1}{4}$ inches in length and $2\frac{1}{2}$ inches in greatest breadth across the cutting face, tapering irregularly to a bluntly rounded butt. The implement is flat on one side, and irregularly convex on the other, the edge being mostly ground from the convex side.

8. Short stumpy adze of diorite, $4\frac{3}{4}$ inches in length by 3 inches in greatest breadth across the cutting face, the cross section a long oval, the greatest thickness being $1\frac{1}{2}$ inch. It has a slightly shouldered and truncated butt, and the cutting edge is ground nearly all from the one face.

9. Axe of porphyrite (fig. 2), of which only the butt end remains entire. It is 6 inches in length and $2\frac{3}{4}$ inches in breadth at the lower end, tapering to a bluntly conical butt. The lower portion, with the whole of the cutting edge, having been broken away, the fractured part has either been used as a hammer-stone all round, or there has been a partial re-making towards a new cutting edge, by battering the fractured edges away.

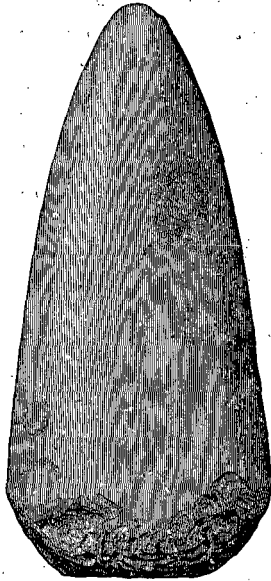


Fig. 2. Axe, abraded by use as a hammer-stone, from Modesty, Walls, Shetland.

10. Flat oval knife of porphyritic stone, $7\frac{3}{4}$ inches in length, $3\frac{7}{8}$ inches in greatest breadth, and nowhere exceeding half an inch in thickness, ground to a uniformly smooth surface all over, and having its thinner edge retouched by chipping on one side only.

11. Flat oval knife of porphyritic stone (fig. 3), 7 inches in length by 4 inches in breadth, and nowhere exceeding half an inch in thickness, thinning towards the cutting edge, which is slightly retouched by chipping on one side only.

12. Flat oval knife of porphyritic stone, 6 inches in length by $3\frac{3}{4}$ inches in breadth, and nowhere exceeding half an inch in thickness, thinning slightly from the back to the cutting edge, which is retouched by chipping on one face only.

13. Flat oblong knife of porphyrite (fig. 4), $7\frac{3}{4}$ inches in length by $2\frac{7}{8}$ inches in greatest breadth, and not exceeding half an inch in thickness, the back nearly straight, somewhat pointed towards one end, and the cutting edge retouched throughout by chipping on one side only.

14. Flat oval knife of porphyritic stone of a bluish-green colour, $5\frac{7}{8}$ inches in length by 3 inches in breadth, and nowhere exceeding

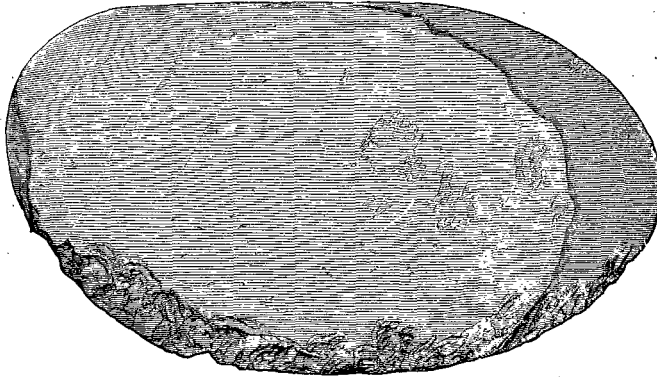


Fig. 3. Oval knife, from Modesty, Walls, Shetland.

half an inch in thickness, the back nearly straight, the cutting edges retouched by chipping from one side only.

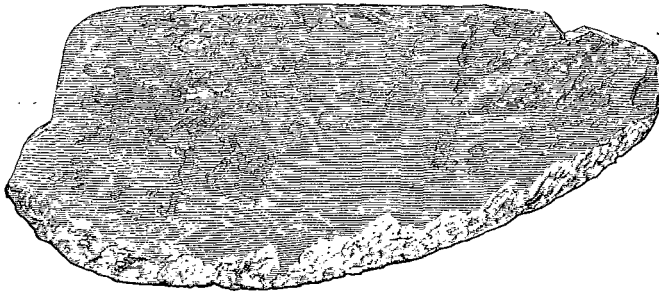


Fig. 4. Knife of porphyrite, from Modesty, Walls, Shetland.

15. Flat oval knife of greyish porphyritic stone, $4\frac{3}{4}$ inches in length by $2\frac{1}{4}$ inches in breadth, and nowhere exceeding half an inch in thickness, the back nearly straight, the cutting edge retouched by chipping from both sides.

16. Half of a flat oval knife of greyish porphyritic stone, $3\frac{1}{4}$ inches in length by $2\frac{1}{2}$ inches in breadth, and nowhere exceeding half an inch in thickness, the back nearly straight, the cutting edge retouched by chipping on one side only.

17. Half of a flat oval knife of bluish-grey porphyritic stone, $3\frac{1}{4}$ inches in length and the same in breadth, nowhere exceeding $\frac{5}{8}$ inch in thickness, and the cutting edge retouched by chipping from one side only.

18. Portion of a flat and almost quadrangular knife of bluish porphyritic stone, measuring 5 by 5 inches, and not exceeding $\frac{3}{8}$ inch in thickness. It is broken in a curved fracture diagonally, from within an inch of the one corner to within the same distance of the opposite corner, so that only about an inch of the cutting edge remains, which, however, shows the same retouching by chipping from one side only that characterises all the other specimens from this remarkable find.

19. Fragments apparently of three vessels of a coarse steatitic clay, about half an inch in thickness, mixed with very small stones, and apparently also with stalks of withered grass, of which the impressions are visible on the inner surface as well as in the fracture of the thickness of the clay.

20. Two oval masses of clay, about the size of a man's fist, and apparently moulded or kneaded by hand.

21. Fragments of charred faggots of branches or roots, from 1 inch to $1\frac{1}{2}$ inch diameter.