

NOTICE OF TWO HAMMER-STONES (*BARKSTEIN*) USED IN THE PREPARATION OF DYE FROM *TORMENTILLA* IN THE FAROE ISLES, AND OF A FAROE BISMAR. [SPECIMENS EXHIBITED.] By T. N. ANNANDALE.

The Barkstein.—Throughout the Faroe Islands yellow sheepskin leather, tanned with a decoction of the roots of the common tormentilla (*Tormentilla potentilla*) instead of bark is much used for shoes. The roots are scraped up from under the moss with the hands, well dried in the air, and pounded in a peculiar mortar. This mortar consists merely of a piece of rock which is naturally level, but circular pits are soon produced in it by the action of the pestle. They are about four inches in diameter at the top and slightly funnel-shaped, and they vary in depth with the time for which they have been used. The rock chosen is sometimes on the sea-shore but usually inland; occasionally a flat-topped boulder is used. There is, as a rule, only one such mortar for each village.

The pestle or "barkstein" at the present time is nothing more than a roughly oval stone, more or less flattened from above downward, and slightly polished by the action of the sea. These stones vary considerably in size, but on an average are about 6 inches in length, 3 inches in breadth, and 2 in depth. They are gathered at certain places on the coast, and are never—the people say—artificially smoothed except by use.

In the last generation the "barkstein," although not differing otherwise, was provided almost invariably with a wooden handle, which fitted into a hole drilled with a steel point to the depth of about an inch and a half in one end of the stone. The handle was simply jammed into the hole,—never tied or fastened in any way. Such stones are rarely, if ever, used nowadays.

When the roots are to be ground, the stone is grasped by the centre, brought down on a handful collected in one of the pits, and rotated smartly upon them for some seconds. It is then lifted, the roots are pressed together into a ball, and the same process is repeated until a fine powder is obtained. The powder is boiled in water, and the leather is steeped in the decoction. The best leather is hung up in the smoke of the kitchen fire for many years before it is used. It is then smoothed and stretched over the same stones with which the roots were ground, and sewn into shoes. The men's shoes have white strings, and the women's red or blue.

The stones are sometimes used also for breaking up peat before it is put on the fire.

Both the specimens now exhibited were obtained at Kvivig, a large village on the west coast of Stromoe. Both specimens have been used, but a handle was specially fitted to No. 2 (which has a perforation in one end) by an old man, who remembered making them for his mother when a boy. The photograph showing the women using the barkstein at the rock-basins produced by their use was taken at Saxen, a smaller village a few miles north of Kvivig. These implements, in an archaeological sense, are hammer-stones, and in the absence of their story might have been classed among the prehistoric implements of that nature. They are oblong beach pebbles of igneous rock, selected for their size and shape to be easily grasped in the hand and wielded as crushers. No. 1 is 5 inches in length by 3 inches in greatest breadth, and 2 inches in thickness, flatter on its broader than on its narrower faces, and rounded on the ends and edges. It is greatly abraded and slightly fractured on both ends by use. The abrasion also extends along the sides, and to a slight extent on the broader faces. No. 2 is more rounded in its general form. It measures $5\frac{1}{2}$ inches in length by $2\frac{1}{4}$ inches in breadth, and

$1\frac{3}{4}$ inches in thickness. It is similarly abraded at both ends and also along one of the narrower sides, but differs from No. 1 in having a hole $\frac{3}{4}$ inch in diameter sunk in the line of its longer axis to the depth of $1\frac{1}{2}$ inches in the centre of one of its ends, in which a wooden handle $4\frac{1}{2}$ inches in length has been jammed.

The Bismar.—In every Faroese cottage, except in the largest villages, at least one “bismar” or weighing-beam is kept, although it has been illegal for some years to sell anything by bismar weight. They are usually weighted and graduated up to twenty-four Danish pounds, and a “bismar pound,” meaning twenty-four Danish pounds, is a common expression among the people. Dried fish and woollen goods are roughly weighed by bismar before being sold to the storekeeper, who weighs them in a regular weighing-machine stamped by the inspector. The beam itself is of wood, graduated in half-pounds by means of little metal nails. The weighted end is made separately, and weighted either with lead or with old scrap-iron. The indicator is either of wood with a string loop, or, as in this specimen, of sheep’s horn, tied with whale’s sinew. Old bismars are rarely met with in the Faroes, but there is in the Oxford Museum a specimen from Stromoe which is at least a hundred years old. The weighted end of this specimen is made from the butt of a matchlock, weighted with old nails. Most of those now in use have been made within the last ten years.

MONDAY, 10th January 1898.

J. BALFOUR PAUL, Lyon King of Arms, Vice-President,
in the Chair.

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

JAMES CADENHEAD, Artist, R.S.W., 14 Ramsay Gardens.

NEIL KENNEDY COCHRAN-PATRICK of Woodside, Advocate, 4 St Colme Street.

HUGH ERNEST FRASER, M.A., M.D., Medical Superintendent, Royal Infirmary, Dundee.

ANGUS M'GILLIVRAY, C.M., M.D., 23 Tay Street, Dundee.

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

(1) By Col. H. S. HOME DRUMMOND, F.S.A.Scot., of Blair Drummond and Ardoch :—

Collection of Articles discovered during the Excavation by the Society of the Roman Station at Ardoch, Perthshire, viz.—

Fragments of Amphoræ, Dolia, and other large Vessels of coarse Pottery ; Portions of Bricks, Tiles, and Flooring of Concrete ; Portions of Mortaria, White and Red Ware ; Portions of wide, shallow, basin-shaped Vessels in Black Ware ; Portions of wide-mouthed, oval-shaped Jars of Black, Red, and Grey Ware ; Portions of bowl-shaped Vessels of the Red Lustrous Ware called Samian, mostly ornamented with figures ; Nozzle of Lamp in red clay ; Fragments of Jars of Greyish Ware, with greenish or yellowish glaze ; Fragments of Vessels of various kinds, with Potters' Marks ; Seventy Oval Pellets of Clay, resembling sling-bolts ; Fragments of a Beaker of Glass, ornamented with incuse ovals ; Fragments of Glass Vessels of various shapes of bluish-green glass ; Small fragment of Vessel of Pale Opalescent Glass ; Fragments of thick, flat Window Glass ; Small circular Bead of Amber ; Three ribbed melon-shaped Beads of Blue Porcellanic Paste ; Socketed Axe of Bronze, with

loop and oval socket, and raised band between the loop and rim ; Portion of Flat Handle of Patena of Bronze ; Rings of Bronze, 1 and 2 inches diameter ; Stud, and portions of Mountings or Fasteners of Bronze ; Broken Ring, or Harness Mounting, of Bronze ; Small Axe-head, and Adze-head, and pair of Pincers of Iron ; Spear-head, and portions of Blades, Gouge, and Key of Iron ; Two Sharpening Stones, and several fragments of Querns, some of Lava, probably from the Rhine ; Five fragments of Sculptured Ornamentation in Sandstone ; Two fragments of Figure-Sculpture in Sandstone ; Four fragments of Sculptured Tablets, with letters of inscriptions. [See the subsequent Communication by Dr Joseph Anderson.]

The following Communications were read :—

I.

ACCOUNT OF THE EXCAVATION OF THE ROMAN STATION AT ARDOCH, PERTSHIRE, UNDERTAKEN BY THE SOCIETY OF ANTIQUARIES OF SCOTLAND IN 1896-97.

[The papers describing the excavations at Ardoch have been transferred to the end of the volume in order to give time for the preparation of the illustrations.]

MONDAY, 14th February 1898.

J. BALFOUR PAUL, Lyon King of Arms, Vice-President,
in the Chair.

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

HENRY G. ALDIS, Secretary and Librarian, Philosophical Institution,
Edinburgh.

JOHN GRAHAM CALLANDER, Benachie Distillery, Insch, Aberdeenshire.

REV. EDWARD MILLER, M.A., Free Church Manse, Newtyle.

ALEXANDER F. ROBERTS, Thornfield, Selkirk.

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

(1) By the DOWAGER-LADY DUNBAR, of Northfield, *Lady Associate*.
Water-colour Drawing of the Stone Circle at Aquhorties, near Manar.

(2) By Sir JOHN STRUTHERS, M.D., LL.D., F.S.A. Scot.
Lock of Hair, from the Macdonald's Cave, Island of Eigg.

(3) By JOHN GRAHAM FAIRLY, through Mrs JAMES STEWART.
Old Collecting-Ladle of wood, from West-Calder Parish Church.

(4) By Captain J. H. ANDERSON, F.S.A. Scot.
Ten Palæolithic Implements of flint, from Farnham, Surrey.

(5) By Rev. J. M. JOASS, LL.D., Corr. Mem. S.A. Scot.
Sinkers for Cod-Lines, made of lava, from Middalr, Reikavik, Iceland.

(6) By Miss HADWEN, 11 York Buildings.
Six Arrow-heads of flint, from ancient graves at Morro Morena, Chili.

(7) By Mr DUGALD M'ISAAC, Argyle Square, Oban.

Large Cinerary Urn (fig. 1) measuring $20\frac{1}{8}$ inches in height, by 14 inches in diameter at the mouth, ornamented on the upper part with an irregular pattern of impressed lines arranged in chevrons. The upper part of the urn is nearly vertical, and the lower part tapers in a flower-pot shape



Fig. 1. Cinerary Urn found near the M'Kelvie Hospital, Oban. ($\frac{1}{8}$.)

to a base of 6 inches diameter. Mr John Munro, F.S.A. Scot., Oban, has kindly supplied the following information as to the discovery of the urn :—“ In connection with the M'Kelvie Hospital, situated about half

a mile south from Oban, a new road was being made by the burgh workman on a height about 150 feet above the Glenshellach road. About 19 inches under the surface two urns, apparently about 9 inches in height, were first found in fragments, and subsequently a very much larger urn, also much broken, but most of the pieces have been preserved. Close beside this large urn, but not within it, lay a perforated axe-hammer of a very soft and light material, resembling a yellowish fireclay. The urn was found at a depth of 21 inches under the surface, in very black soil, as if largely mixed with charcoal and ashes. The urn stood mouth uppermost, with its bottom resting on a ledge of rock. The contents of all the three urns were most carefully examined by Mr M'Isaac, but nothing in the shape of either implement or ornament was found among the cremated bones."

The Axe-Hammer (fig. 2), which is apparently of some variety of kaolinite, is 4 inches in length by $\frac{7}{8}$ inches in width in the middle of its length, widening towards both ends, one of which is hammer-shaped and the other axe-shaped. The width across the face of the axe-shaped end is $1\frac{5}{8}$ inches, and across the rounded hammer end $1\frac{3}{4}$ inches. The two broader faces are convexly curved both longitudinally and transversely, and the narrow sides are curved longitudinally inwards. The haft hole, which is placed slightly nearer the butt end than the middle of the length of the implement, has been bored from both sides, and is smooth, but narrows slightly towards the centre.

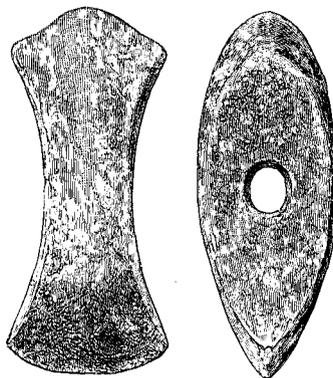


Fig. 2. Axe-Hammer found with the Urn. ($\frac{1}{2}$.)

(8) By J. R. FINDLAY, F.S.A. Scot.

'Adder Bead' of blue vitreous paste, with chevron streaks of white, and small ring of jet, from Skye.

(9) By T. N. ANNANDALE.

Two Hammer-Stones of basaltic rock, being oblong beach pebbles, $4\frac{3}{4}$ and $5\frac{3}{4}$ inches in length, and about 3 inches in breadth and $2\frac{1}{2}$ inches in thickness, rounded and abraded at the ends by use as pounders in the preparation of tormentilla roots for dyeing leather, as described by the donor in a previous paper on p. 52. One has a hole bored in one end, $\frac{3}{4}$ inch in diameter and $1\frac{1}{2}$ inches in depth, in which a wooden handle was fitted. Both specimens are from the Faroe Isles, where this method of preparing tormentilla is still in use.

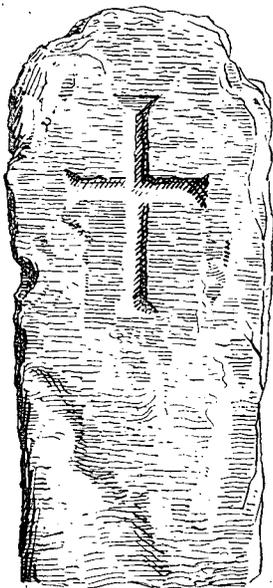


Fig. 3. Slab with incised Cross from Eilean Naoimh. ($\frac{1}{4}$.)

A pair of Shoes of soft leather, dyed by tormentilla so prepared.

A wooden Bismar, from Faroe, $23\frac{1}{2}$ inches in length, with its indicator made of ram's horn and a cord of whale's sinew.

(10) By J. H. CUNNINGHAM, F.S.A. Scot.

Upright monumental Slab of small size, measuring $21\frac{1}{2}$ in length, $8\frac{3}{4}$ inches in breadth and $2\frac{1}{2}$ in thickness, from Eilean Naoimh, Garvelloch Isles. The slab is of chlorite slate, and bears on one face a plain Latin cross, incised, the arms, shaft, and summit each widening slightly from the intersection. The whole length of the cross is 8 inches and the breadth along the arms $4\frac{1}{2}$ inches. A much defaced incised cross is also on the opposite face of the slab.

(11) By the SECRETARY OF STATE FOR INDIA.

Archæological Survey of India, vol. vi.; Muhammedan Architecture of Gujerat. By James Burgess, LL.D.

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

Register of the Great Seal of Scotland, vol. ix., 1634-51 ; Exchequer Rolls of Scotland, vol. xvi., 1529-36.

(13) By JAMES CURLE, F.S.A. Scot., *Librarian*.

Des Bracteates d'Allemagne, par G. L. Schlumberger. 8vo ; Paris, 1873.

(14) By Rev. H. J. LAWLOR, D.D., F.S.A. Scot., the Author.

Chapters on the Book of Mulling. 8vo ; 1897.

(15) By ROBERT MUNRO, M.A., M.D., Sec. S.A. Scot., the Author.

Prehistoric Problems ; being a Series of Essays on the Evolution of Man, and other Controverted Problems in Anthropology and Archæology. 8vo ; 1897.

(16) By Sir JOHN EVANS, K.C.B., D.C.L., Hon. Mem. S.A. Scot., the Author.

Ancient Stone Implements of Great Britain and Ireland. Second Edition. 8vo ; 1897.

(17) By DAVID MACGIBBON, F.S.A. Scot., and THOMAS ROSS, F.S.A. Scot., the Authors.

The Ecclesiastical Architecture of Scotland, vol. iii. 8vo ; 1897.

(18) By the AYRSHIRE AND GALLOWAY ARCHEOLOGICAL ASSOCIATION.

Transcript of the Cartulary of Lindores.

The following Communications were read :—