

III. NOTICES OF ARTICLES OF POTTERY, GLASS, STONE, BRONZE,
IRON, AND LEAD FOUND IN THE COURSE OF THE EXCAVATIONS
AT BIRRENSWARK. By JOSEPH ANDERSON, LL.D.

The articles found during the progress of the excavations at Birrenswark were few in number and comparatively unimportant in character. In noticeable contrast with the collections from Birrens and Ardoch, the quantity of pottery is quite insignificant, and in the coarseness of its quality is altogether different from the character of the pottery usually found on sites of Roman occupation. On the other hand, the quantity of fragments of iron implements is disproportionately large, although, unfortunately, their state of preservation is such as precludes the possibility of recognition of the original form and character of the great majority of the implements. Perhaps the most noticeable groups of

objects are the missiles of stone and lead, balista-balls, and sling-bolts, many of which bear evidence of use as projectiles, exhibiting unmistakable marks of impact.

The following is a detailed description of the articles found :—

Stone.—Portion of a whetstone, 3 inches in length by $1\frac{1}{2}$ inches in breadth and $\frac{1}{2}$ inch in thickness, the sides rounded, one end showing the fracture, the other end rubbed on both faces slantwise to the terminal part, which is rubbed to a flat surface in the line of the width of the implement.

Whetstone, $5\frac{3}{4}$ inches in length by $1\frac{1}{2}$ inches in breadth at one end and $1\frac{1}{4}$ inches at the other, and $\frac{1}{2}$ inch in thickness, the edges rounded, and the ends rubbed flat. It has been broken across the middle, and shows a few indented marks on one face, near the broad end.

Three whetstones, 5 to 4 inches in length, which are naturally shaped oblong pebbles of hard micaceous sandstone, two having one side smoothed by use as whetstones, and one similarly smoothed on two sides.

Three pounders, being oblong, naturally-shaped pebbles of greywacke, from $6\frac{1}{2}$ to $5\frac{1}{4}$ inches in length, abraded and slightly fractured at one or both ends by use.

Half of a circular disc of red sandstone, 5 inches in diameter and $1\frac{1}{2}$ inches in thickness, with a central circular hole 1 inch in diameter pierced from both sides, as if for an axle, and the circumference rounded and smoothed as if by use as a grindstone.

Square piece of red sandstone, $5\frac{3}{4}$ inches in length by 5 inches in width and $1\frac{1}{2}$ inches in thickness, one face slightly tooled with lines crossing it obliquely, and one edge smoothed by use as a sharpening stone.

Flake of flint (fig. 1), $1\frac{7}{8}$ inches in length, nearly triangular in section, and slightly curved, having one end brought to a sharp point, as if for a borer.

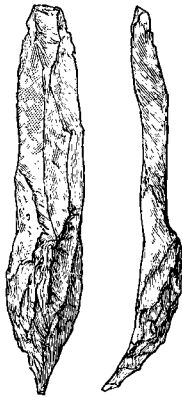


Fig. 1. Flake of Flint. ($\frac{1}{4}$.)

Small chip of flint, $\frac{5}{8}$ inch in length, with a somewhat scraper-like edge on one side.

Eleven balls of red sandstone, varying from $3\frac{3}{4}$ inches to $2\frac{1}{4}$ inches in diameter. They divide themselves roughly into four sizes, weighing

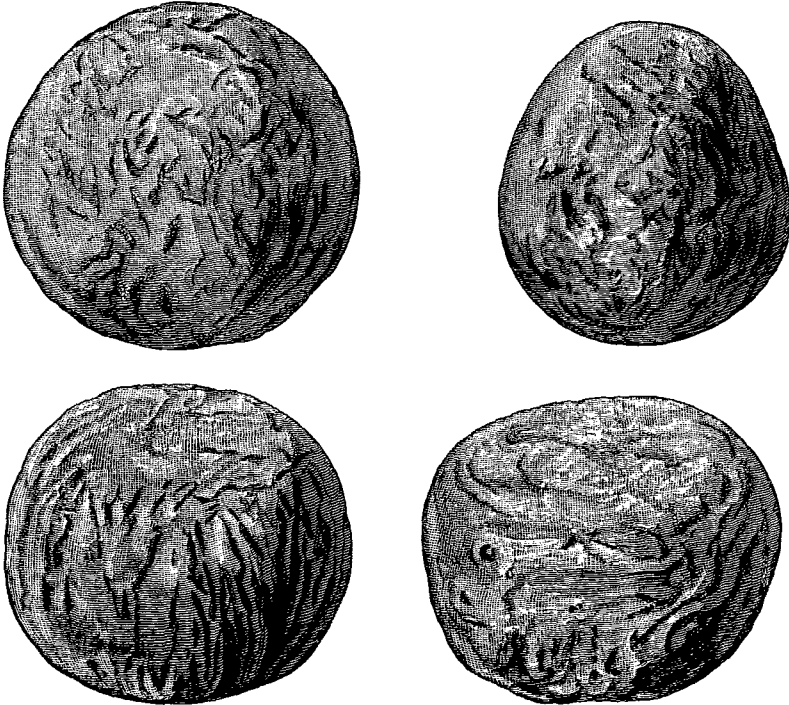


Fig. 2. Four Balista-bullets of Red Sandstone. (3.)

about $2\frac{1}{2}$ lbs., $1\frac{1}{2}$ lbs., 12 oz., and 6 oz. respectively. They are roughly hewn or pecked into shape, and most of them have on part of their circumference a flattened space, as if to enable them to be placed on a flat surface without rolling. Four of them are shown in fig. 2. These are balista-bullets, made to be thrown from the machine so-called, which was

chiefly used in sieges for throwing heavy bullets against the defences of the place besieged ; but there were also lighter machines, called "carro-balistæ," which were used in the field, and drawn on carriages like the modern field-guns. While the larger machines threw stones weighing over a hundredweight, the smaller were used with missiles of about two pounds and upwards. A number of balista-bullets of the larger size, weighing from a hundredweight to a hundredweight and a half, were found in the Roman stations at Housesteads and High Rochester, in Northumberland.¹

Nine similar balls, broken. From the nature of the fractures it seems as if they had been produced by impact.

Lead.—Sixty-seven sling-bullets of lead, varying from $\frac{5}{8}$ inch to $1\frac{1}{2}$

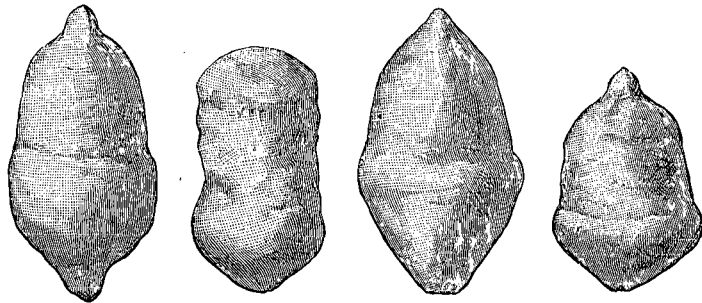


Fig. 3. Leaden Sling bolts. (†.)

inches in length, and from about $\frac{3}{4}$ oz. to $2\frac{1}{4}$ oz. avoirdupois. Most of them are acorn-shaped or almond-shaped (as shown in fig. 3), varying to roughly globular. A few, which may be failures in the casting, are smaller and more irregularly shaped than the others. Dr Christison has given the outlines and weights of the different forms on p. 210.

¹ Bruce's *Roman Wall*, 1867, pp. 189 and 323. "Projectiles for the Catapult," described simply as "round stones," are also noticed as having been found in the Roman camp or Castellum at Saalburg, *Proc. Soc. Antiq. Lond.*, 1889-91, p. 118.

Two thick rings of lead, about $1\frac{1}{2}$ inches diameter, each with a central perforation $\frac{3}{4}$ inch in diameter.

Bronze.—Bottom of a Roman patella of bronze, 3 inches diameter, ornamented with concentric rings in relief on the inner side, the edges much broken away.

Ring of bronze, $1\frac{7}{8}$ inches diameter, the thickness of the body of the ring being $\frac{1}{4}$ inch, the ends brought together, but unjoined.

Mounting of bronze, being a flat disc $\frac{7}{8}$ inch in diameter, with a loop on the under side, the loop and edges broken away.

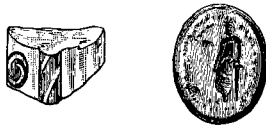
Personal Ornaments.—Portion of a bracelet of shale or cannel-coal, $2\frac{1}{2}$ inches in length, flattened on the inner circumference, rounded on the outer; part of the thickness has been split away.

Two spheroidal studs of green glass, each half an inch in diameter.

Portion of an armlet of greenish glass (fig. 4), with a rope-moulding of blue and white round the exterior edge, and oval studs of the same on the outer circumference. A fragment of a similar armlet was found in the Crannog at Hyndford, in Lanarkshire.¹

Portions, varying from $\frac{1}{2}$ inch to $1\frac{1}{2}$ inches in length, of five armlets of vitreous paste, three being greenish-white and two yellow.

Intaglio setting of dark blue paste for the bezel of a finger-ring (fig. 5),



Figs. 4, 5. Portion of an Armlet of Glass and Intaglio of Paste. (1.)

oval in shape, measuring $\frac{5}{8}$ inch by $\frac{1}{2}$ inch, bearing a standing figure, surrounded by the remains of an inscription, much defaced.

Two ribbed or melon-shaped beads of greenish porcellanic paste, $\frac{5}{8}$ inch diameter.

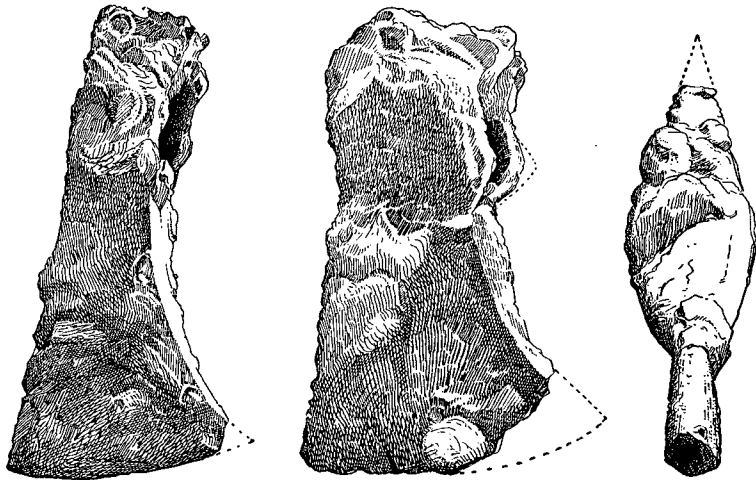
Small portion of green glass, probably part of a vessel or cup of moulded glass.

¹ See the subsequent paper on the Crannog at Hyndford, by Dr Robert Munro.

Pottery.—Portion of the upper part of a vessel of black ware, $3\frac{1}{2}$ inches in length, with swelling sides and a boldly recurved lip.

Portion of the upper part of a vessel of dark-coloured ware, of coarse paste, and rudely made, with a slightly everted lip, and showing part of a loop handle on the exterior underneath the lip.

Portion of the upper part of a bowl of the lustrous red ware commonly called Samian. It is of soft paste, much decayed, and retains the



Figs. 6, 7, 8. Axe-heads and Spear-head of Iron. ($\frac{1}{3}$.)

lustrous glaze only on a small portion of the internal surface. It probably belongs to the inferior class of red ware called "false Samian."

Several fragments of the bottoms and sides of coarse unglazed and badly fired vessels, more resembling the native pottery than any kind of Roman ware.

Several fragments of a large vessel of dark bluish paste, covered on the exterior with a whitish slip, and coated with a greenish yellow glaze. The vessel is wheel-made, and the ware resembles that of many mediæval water-jars.

Iron.—Axe-head of iron (fig. 6), 7 inches in length by 3 inches across the face at the cutting edge, the haft-hole $1\frac{1}{2}$ inches in diameter.

Axe-head of iron (fig. 7), 7 inches in length by $4\frac{1}{4}$ inches across the face at the cutting edge, one corner of which is broken away, the haft-hole $1\frac{1}{4}$ inches in diameter.

Spear-head of iron (fig. 8), $6\frac{1}{4}$ inches in length, the blade, which is ovate, being 4 inches in length and $2\frac{1}{4}$ inches in width at the widest part, the socket-opening $\frac{3}{4}$ inch in diameter.

Horseshoe of iron, measuring over all $5\frac{1}{4}$ by $4\frac{1}{4}$ inches, the opening $2\frac{1}{4}$ inches in width in the middle, narrowing to $1\frac{1}{4}$ inches at the tips.

About fifty fragments of iron implements of various kinds, some apparently portions of blades and others of much stronger tools, but all in such a condition of oxidation and incrustation that there is nothing to be made of them.