

### III.

NOTICE OF A HOARD OF BRONZE IMPLEMENTS, AND ORNAMENTS, AND BUTTONS OF JET FOUND AT MIGDALE, ON THE ESTATE OF SKIBO, SUTHERLAND, EXHIBITED TO THE SOCIETY BY MR ANDREW CARNEGIE OF SKIBO, LL.D., F.S.A. SCOT. BY JOSEPH ANDERSON, LL.D., ASSISTANT SECRETARY AND KEEPER OF THE MUSEUM.

The objects now exhibited by the courtesy of Mr Andrew Carnegie, LL.D., of Skibo, a Fellow of the Society, on whose estate they were found, form perhaps the most remarkable Bronze Age hoard which has hitherto been met with in Scotland. Such hoards are of three different kinds. There is the personal hoard, concealed probably in time of trouble, and not recovered by the depositor, consisting simply of used tools, weapons or ornaments, which may have been the property of a single individual; the trader's or travelling merchant's hoard, consisting of sets of bronze articles of the same kind or kinds, unused but ready for use; and the local or travelling founder's hoard, comprising moulds, jets, and lumps of rough metal and old worn or broken implements, weapons, and ornaments intended to be melted and recast, and possibly also some objects fresh from the moulds and still undressed from the rough form of the casting.

The Migdale hoard belongs most probably to the first of these classes. If it was the property of a single individual, not a trader, he must have been a man of some consequence and wealth. The hoard was found, as I am informed by the Rev. Dr J. M. Joass of Golspie, in blasting the top of a granite knoll situated on the moor, at the west end of Loch Migdale, in the parish of Criech. The precise circumstances of the location of the deposit before it was thus disturbed were not ascertained. Two hundred yards north-east of the knoll are two hut-circles, and all around, but at greater distances, there are many tumuli and cairns.

The hoard (fig. 1) consists of two flat bronze axes; three pairs of plain solid rings or armlets of bronze; a pair of flat ornamented armlets, and a portion of another; a necklace of forty (or thereby) cylindrical beads of thin bronze; one (or probably two) ear pendants of bronze; portions, more or less complete, of four (or possibly five) conical hollow bosses of thin bronze, and six buttons of jet of the usual more or less conical form, pierced at the back with two holes meeting each other obliquely.

*The Axes.*—The two axes, as shown in fig. 1, are of the usual type of the flat bronze axe, which is reckoned the earliest variety of this implement in metal. The larger of the two measures  $6\frac{1}{8}$  inches in length by  $3\frac{1}{4}$  inches across the widest part of the cutting face, and  $\frac{1}{2}$  inch in thickness in the middle of its length, thinning gradually and evenly to the sharp semicircular edge of the cutting face, and to a blunter rounded edge at the butt, which is  $1\frac{1}{2}$  inches in width. The side edges are almost straight from the butt for about a third of the length of the implement, curving outwards for the remainder of their length to meet the cutting edge. The flat surfaces are smooth on one side, which still shows distinct traces, especially on the upper part, of having been coated with tin, as has been observed on a good many other axes of this

description.<sup>1</sup> The tinned appearance also extends some way across the side edges. The other face of the axe is wasted and pitted by weathering.

The other axe is of the same type, but smaller and thinner and much more wasted by weathering, the surface on one side being quite rough and pitted all over with oxidation. It measures 4½ inches in length by 2¼ inches in breadth across the cutting face, and is scarcely more than ¼ inch in thickness at the thickest part. Originally it appears to have had some expansion towards the cutting edge, but is now so much wasted that the shape is almost triangular and the cutting edge completely worn away.

<sup>1</sup> See, a paper by Dr John Alexander Smith and Dr Stevenson Macadam in the *Proceedings*, vol. ix. p. 428. Sir John Evans, however, is doubtful as to the 'intentional tinning,' and suggests the possibility of the tin in the alloy coming to the surface of the bronze casting in some unexplained way. *Ancient Bronze Implements, etc., of Great Britain*, p. 56.

*The Bracelets.*—Of the four pairs of bracelets three (shown in the upper part of fig. 1) are formed of solid rods of bronze about a quarter of an inch in thickness, convex on the exterior surface but flat in the interior, bent into a circular form so that the two ends come quite close together. There is very little difference in the size of the different pairs, the largest having an opening of 2½ inches in diameter, the others from 2⅓ to 2¼ inches in diameter. One of the smallest pairs has been reduced in its internal diameter by forcing the ends slightly past each other.

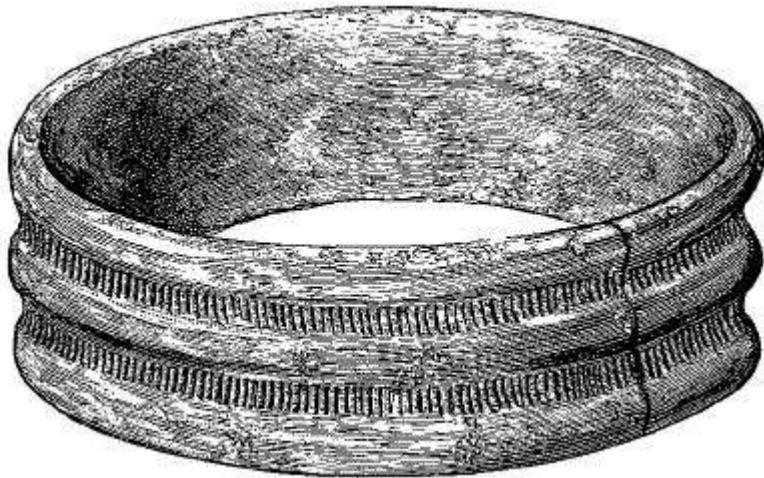


Fig. 2. Bronze Bracelet from the Migdale Hoard. (Actual size.)

There are in the Museum a pair of precisely similar bronze rings or armlets found with an urn of food-vessel type in a cist at Kineff in 1831, and a single armlet of the same form found with an urn of drinking-cup type in a cairn in the parish of Crawford, Lanarkshire, in 1850. Two of the same form were found with a burnt burial at Stobo, Peeblesshire, in 1855.<sup>1</sup> The fourth pair of armlets (one of which is shown in fig. 2) is of a different form and much more elaborate workmanship. They are made of bands of bronze  $\frac{1}{8}$  of an inch in width and fully  $\frac{1}{8}$  inch in thickness, bent round to meet as a

<sup>1</sup> *Proceedings*, vol. ii. p. 276. *Scotland in Pagan Times—Bronze and Stone Ages*, p. 58.

closed but unjoined circle of  $2\frac{1}{2}$  inches internal diameter. The interior is flat, the exterior ornamented with two marginal mouldings about  $\frac{3}{16}$  one central moulding of somewhat greater width. The hollows between the mouldings are filled with chasing of closely-set parallel lines at right angles to the edges of the mouldings.

There is also what seems to be a portion of a flat bracelet (fig. 3) of very thin bronze about 3 inches in length. It is  $\frac{3}{4}$  inch in width, has a marginal beading on either side about  $\frac{1}{8}$  inch in breadth, and the space between the headings is ornamented in repoussé with oblong ovals about  $\frac{1}{8}$  inch in width in the centre and  $\frac{3}{16}$  inch apart. These oval bosses stand across the width of the bracelet between the inner margins of the beading, and the spaces between them are filled with a groundwork of closely

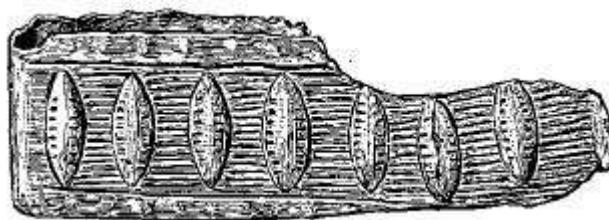


Fig. 3. Broken Bronze Bracelet from the Migdale Hoard. (Actual size.)

chased lines parallel to the headings on either side, while the oval bosses are ornamented along each side of the base on the oval itself by a row of punctulations.

Bronze Age bracelets of any kind are by no means common in Scotland, and flat bracelets of these types are exceedingly rare in Britain. Sir John Evans figures one from West Buckland in Somersetshire, which has a double marginal beading with rows of punctulations, and a row of circular bosses in the space between, the headings. We have in the Museum a remarkably fine bracelet of thin bronze (fig. 4), one of a pair found in a cist with an unburnt burial at Melfort, Argyllshire,<sup>1</sup> and with the beads and plates of one of those elaborately constructed and ornamented necklaces of jet which are so frequently found with Bronze Age burials

<sup>1</sup> *Proceedings*, vol. xix. p. 134.

in Scotland, and so rarely in any other part of Great Britain that they may be said to be characteristic of the Bronze Age in Scotland. This Melfort bracelet is much deeper, being  $2\frac{1}{2}$  inches diameter and 2 inches in the depth of the circular band, and much more elaborately ornamented than the one last described from the Migdale hoard, but the ornamentation on both is practically of the same character. The Melfort bracelet has a double set of hammered-up oval bosses, arranged alternately two and one in two triple rows, with marginal headings of three chased lines round each margin and round the centre between the rows of ovals. Bronze Age bracelets of the flat form are more common on the continent.<sup>1</sup>

<sup>1</sup> Chantre, *Age du Bronze*, vol. i. p. 108.



Fig. 4. Bracelet of thin bronze found at Melfort, Argyllshire. (Actual size.)

*The Necklace.*—The necklace (see fig. 1) is one of the special features of the hoard, being the first of its kind recorded in Scotland, or, so far as I know, in Britain. It consists of forty (or thereby) beads of the oblong cylindrical shape known as ‘bugles,’ each formed of a rectangular plate of thin bronze rolled round and covering a cylindrical core apparently of wood, which is perforated lengthwise for the string. These composite beads are of several sizes, graduated apparently to suit their various positions in the necklace, the largest being  $1\frac{3}{8}$  inches in length and  $\frac{1}{4}$  inch in diameter, and the smallest not exceeding 1 inch in length and  $\frac{1}{8}$  inch in diameter. The precise method of their original arrangement as a necklace is, of course, matter of conjecture.

Beads made of flat rectangular plates of bronze rolled into cylindrical tubes have been found in the hoards of Reallon and Larnaud, and in some dolmens in France.<sup>1</sup> They are also recorded from the Lake Dwellings of the Lake of Bourget in Savoy.<sup>2</sup> These are not stated to have been rolled on wooden cores like those from Migdale, but the practice of casing a core of wood in a sheathing of thin bronze is exemplified in the case of a large needle or bodkin found in the Culbin Sands, Morayshire, where

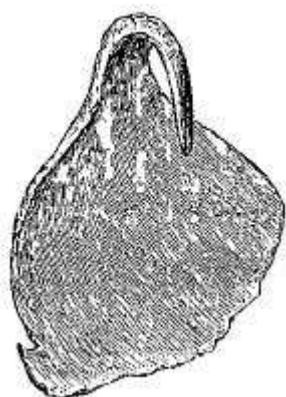


Fig. 5. Broken Ear Pendant from the Migdale Hoard. (Actual size.)

a large number of articles made of thin bronze have been met with.

<sup>1</sup> Chantre, *Age. du Bronze*, vol. i. p. 108.

<sup>2</sup> Perrin, *Etude Prehistorique sur la Savoie*, pl. xiv. fig. 10

*The Ear Pendants.*—The ear pendants are unfortunately much broken. One (fig. 5) still shows the pointed hook for its suspension in the lobe of the ear. The other has lost the anterior part and shows only the rounded extremity of the other end of the pendant. Indeed, it is so flattened out and broken that it is now impossible to say with certainty whether it is the terminal portion of fig. 5 or of another pendant. It is, however, in favour of its having been part of an ear pendant that in width and thickness it is much the same as the other, and that the rounding off of the end more closely resembles the way in which these pendants were finished off than the terminal portion of any variety of the thin bronze blades, which are the only other forms to which it can be likened. These bronze ear pendants are exceedingly rare in Britain, and not less so in France. The only British example cited by Sir John Evans is the pair found by Canon Greenwell in a barrow with a female skeleton at Cowlam in the East Riding of Yorkshire.<sup>1</sup> They are exactly of the same type as the Migdale pendants, "made by beating the one end of a piece of bronze flat, and forming the other end into a pin-shaped termination." The pin end was bent into a loop and passed through the lobe of the ear, and the broad end bent round over it, so that the pendant was permanently fixed in the ear. Sir John Evans remarks further that ear-rings of the bronze period appear to be almost unknown in France, but that he possesses two of this special form from a hoard at Dreuil, near Amiens, in which were socketed axes, swords, spearheads, bracelets, and a variety of other objects.

<sup>1</sup> Greenwell's *British Barrows*, pp. 52, 223. Evans's *Bronze Implements of Great Britain*, p. 392



Fig. 6. Bronze Boss from the Migdale Hoard. (Actual size.)

*The Bosses.*—The conical hollow bosses of thin bronze are (probably) four in number, one being broken into several fragments. They differ slightly in size, the largest being  $1\frac{1}{8}$  inches in diameter and  $\frac{3}{8}$  inch in height, and the smallest (fig. 6)  $\frac{1}{8}$  inch in diameter and little more than  $\frac{1}{4}$  inch in height. They are each provided with a couple of marginal pin-holes, one on each side, apparently with the purpose of fastening or lacing them to something as ornaments, probably on a belt, or band. I have not met with anything like them elsewhere.

*The Jet Buttons.*—The six jet buttons are all of the usual type of jet buttons of the Bronze Age, being circular discs of shale or lignite, more or-less conical on the upper side, flat on the under side, which is pierced on either side of the centre, with two holes running obliquely into one another for the fastening. Only one of the six is at all

like jet, the others having the coarser texture and the brownish-black colour of the Brora lignite. They vary in size, the largest being 1*f* inches in diameter and the smallest not more than 1*¾* inches in diameter.

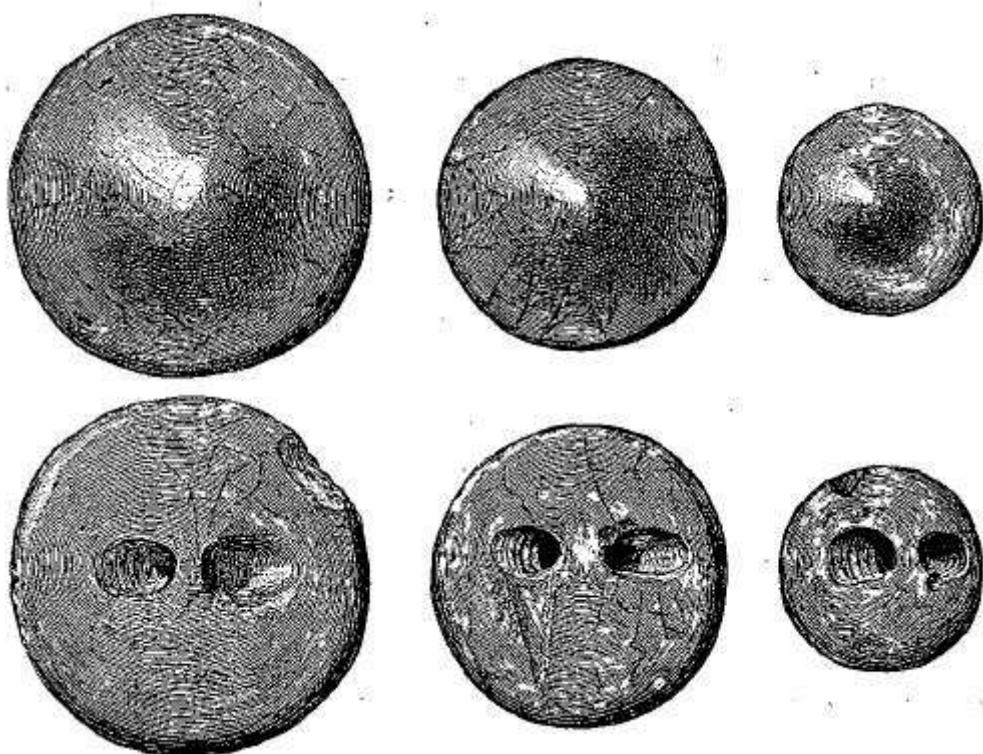


Fig. 7. Jet Buttons found with an unburned burial at Keith Marischal. (Actual size.)

Similar buttons of jet or cannel coal have, been frequently found with interments. In the volume of the *Proceedings* for 1898-99 I have figured and described a set of three jet buttons of different sizes, found in a cist with an unburned burial at Keith Marischal, East Lothian, and now in the Museum. As they are exactly similar to those in the Migdale Hoard I have reproduced the illustration here (fig. 7). Sir John Evans records a large number of instances of their occurrence in connection with interments chiefly of the Bronze Age in various parts of England.<sup>1</sup> They seem to have occurred in sets of from two to five, and in one case as many as twenty in connection with one interment.<sup>2</sup>

Among about a score of hoards of Bronze Age implements recorded in Scotland, the majority belong rather to the late than to the early Bronze Period, including socketed implements and swords. Only a few have occurred in which flat axes of the early type have been found either by themselves or associated with other objects, and of these few the Migdale hoard is by far the most important and interesting.

The stone implements exhibited with the hoard are a scraper of chert of the usual form, 2 inches in length by 1*¾* inches in breadth and 1 inch in thickness; a flat flake scraper, formed from a thin oval flake; 2*¼* inches in length by 1*½* inches in breadth and  $\frac{3}{8}$  inch in thickness, struck off the surface of a water-worn nodule of brown flint, with the convex surface trimmed off at the scraping edge; two rough fragments of chert; and a small flake from an agate pebble about an inch in diameter, with one

side frayed as if by use as a strike-light. These were picked up later, on or near the Knoll, and may have nothing to do with the hoard itself. There is also a whorl of micaceous schist,  $1\frac{1}{2}$  inches in diameter and nearly  $\frac{3}{4}$  inch in thickness, with rounded edge, the central perforation bored from both sides and narrowing from about  $\frac{3}{8}$  inch in diameter at the outside to about  $\frac{1}{4}$  inch in the central part. This was picked up about twenty yards away from the site of the hoard, and probably has nothing to do with it.

<sup>1</sup> *Ancient Stone Implements of Great Britain*, Second Edition, London, 1897, p. 454.

<sup>2</sup> *Archæologia*, vol. 1ii. p. 19.