II.

NOTICE OF THE EXCAVATION AND CONTENTS OF ANCIENT GRAVES AT DALMORE, ALNESS, ROSS-SHIRE. By WILLIAM JOLLY, Esq., F.S.A., Scot. WITH NOTES ON THE CRANIA. By THOMAS AITKEN, M.D., F.S.A., Scot.

Alness is a small village situated about halfway between the northern and southern extremities of the western shore of the Cromarty Firth. It stands at the mouth of a stream called the Alness, and is built upon a terrace of gravel, which skirts the coast of the Firth, at a height of from 65 to 70 feet above sea-level.

Last year, a branch line of rail was made from Alness Station to Dalmore Distillery, which stands close by the sea-shore. During the progress of the works, two sites of ancient graves were discovered—the first on the 29th of May 1878, immediately above the distillery; the second on the 2d of July, about 200 yards nearer the station. Mr Andrew Mackenzie, proprietor of the distillery and projector of the branch line, had the graves carefully dug and preserved in both cases, until their systematic examination by officials of the Inverness Field Club and the Ross-shire Philosophical Association, and others interested, whom he invited to Dalmore for the purpose. These investigations took place shortly after the discoveries in each instance, the first on the 29th of May, and the second on the 5th of July. From notes taken on these occasions, the following account is drawn up: while I am greatly indebted to Mr Mackenzie for

additional assistance and information; to Mr Roderick Maclean, Ardross, for the accompanying map of the Moray Firth, and the plan of the graves; to Mr Alexander Ross, architect, Inverness, for the careful drawings of the finds; to Mr Sutherland, artist, Dingwall, for sepia drawings of the urns, and a sketch of the general scene; and to Dr Aitken of the Inverness District Asylum, for a report on the crania obtained.

There were dug up and examined eighteen graves in all,—ten at the first site, eight at the second. They all consisted of short cists formed of flat stones, of different sizes, set in the ground and covered on the top with one or more stones. The cists enclosed bones either entire or burnt and broken; some of them also enclosed urns, and other objects of human workmanship.

I. The Graves discovered at the First Site above Dalmore Distillery.

The ten graves found here formed a close group, the disposition of which is shown in the accompanying ground-plan (fig. 1). These seem to

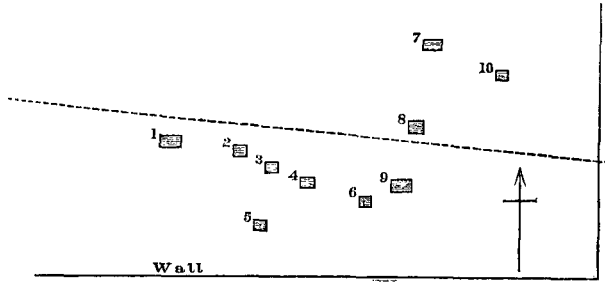


Fig. 1. Ground-plan of Graves at Dalmore, first site.

have been included within a stone wall, the base of which could be traced along three sides, enclosing a space, 108 feet by 66 feet, the shorter walls, which were parallel, running north and south. The following is a description of the different graves and their contents, the numbers indicating their position on the plan.

Grave No. 1.—This was the most westerly of the group. It was found

8 feet from the surface, and lay east and west, magnetic.[1] It consisted of a rough cist, measuring 2 feet 6 inches × 1 foot 8 inches × 1 foot deep, in the inside. The sides were formed of several flat stones standing on end, and it was covered in by a single large slab, with a few stones on the top of it. Its contents were,—

1. A human skeleton, evidently buried entire, with the knees drawn up to the chin, in the usual way. The bones were much decayed, but there remained pretty entire the coronal region of the skull, found at the west end of the grave, 29 out of the 32 teeth, in excellent preservation, only two of them being decayed, and fragments of the femora and other larger bones of the trunk—all in one heap in the centre of the cist, and covering an area of some 12 inches square.[2]

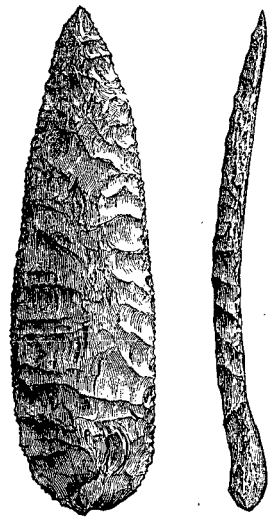


Fig. 2. Flint Knife (4 inches in length).

2. A fine flint leaf-shaped knife (fig. 2), found at the east end of the grave, 4 inches × 1 inch, and varying in thickness from $\frac{1}{4}$ to $\frac{1}{8}$ of an inch; of the common light brown colour, the natural surface being left on the hollow side, and the other being very well chipped, and possessing a finely-serrated edge and a sharp point preserved entire.

3. Fifty beads lying underneath the bones, formed of a close black shaly substance, which seems to be the jet-like *Albertite*, which is found *in situ* at Craig near Dingwall, and at Nigg in Easter Ross, and portions of which were discovered near the graves, 4 feet below the surface. The beads are perfectly circular, well formed, evidently polished on the outside of the ring, and smooth on the flat sides, as shown in fig. 3. They vary

[1] The compass directions throughout the paper are *magnetic*.

[2] The top of the skull was sent for inspection.

from $\frac{1}{4}$ to $\frac{3}{16}$ of an inch in diameter, and are in general $\frac{1}{16}$ of an inch in thickness, perforated in the centre with a well-drilled circular hole of $\frac{1}{16}$ of an inch. No binding string was found, though many of them were re-strung on the rootlets of some plant, which had curiously run through the central holes; showing that the beads must have remained close together in their position as parts of a necklace, when deposited in the grave, after the original string had decayed.

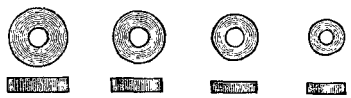


Fig. 3. Beads of a jet-like substance (actual size).

4. An oblong concave ornament of stone (fig. 4), light-coloured and fine-grained, $1\frac{11}{16}$ inch long × $1\frac{3}{16}$ broad at one end, and $\frac{1}{16}$ at the other, × $\frac{3}{16}$

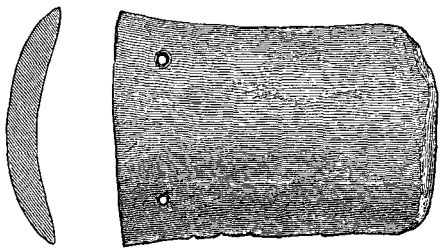


Fig. 4. Stone Bracer (actual size).

inch thick; with two holes at the wider end, countersunk on one side. It was found along with the beads beneath the bones; which would seem to suggest that it might have been hung as a pendant from the middle of the necklace. It probably belongs, however, to the class of objects now usually regarded as "bracers," to be fastened on the left wrist as a protection against the recoil of the bowstring.

Grave No. 2.—This was found 8 feet east of No. 1, 20 inches underground, lying north and south; being 18 inches × 9 inches × 12 inches deep, neatly constructed, with a single slab on each of the sides and ends, one forming the bottom and another the top or lid. It contained—

1. A large number of small bones, in a layer 2 inches thick, burnt and

broken, lying on some leaves (?) which had been strewed on the bottom of the cist.

2. An implement of bronze, now shaped like a flat spoon (fig. 5). It is evidently the wasted butt end of one of the small tanged bronze blades

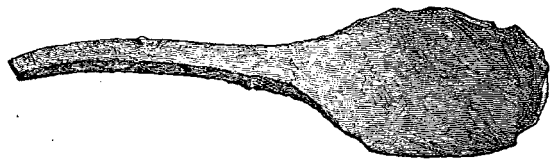


Fig. 5. Bronze tanged Blade (actual size).

that are occasionally found in connection with interments. This was the only piece of metal found in any of the graves, except a bit of bronze in No. 7. There were, however, traces of bronze colouring on the bones in several of the graves.

Graves Nos. 3, 4, 5, 6, and 7, consisted of rough cists, formed of flat stones on the sides and top, resting on the soil and enclosing bones, chiefly human, but, in some cases, those of other animals not yet determined, burnt and broken into small pieces, which formed a layer 2 inches deep. They contained nothing else except a little stem of bronze in No 7, very brittle and much decayed, which has since been destroyed. One of the graves consisted of some broken bones, lying on the earth, with no protecting slabs, and only two or three loose stones above them.

Grave No. 8 was of a different construction from the others. It was formed of a circle of stones built like a dike and covered in on the top with a flat stone, 2 feet 3 inches below the ground. This structure enclosed an urn inverted on a rounded flat stone of mica schist, the stone being 18 inches × 14 inches in diameter and $2\frac{1}{2}$ inches thick. The urn had unfortunately been broken by some of the stones of the wall having fallen on it. It was 21 inches across at the rim, 5 inches across at the bottom, and 13 inches high. The rim was surrounded by a fine ornamental border, of unusually neat workmanship, showing a raised pattern which had been

fastened on and not worked up from the surface of the urn. It had two or more holes perforating the border just under the rim. What had been their use?

It contained a few calcined bones, very much broken, which Dr Sutherland of Invergordon pronounced, after some hesitation, to be human; and a hollow, cylindrical ornament or object of bone $\frac{7}{8}$ of an inch long and $\frac{6}{8}$ in diameter, white in colour, with three equal, curved grooves running round it at equal distances parallel to the flat ends, polished outside and planed inside, with two circular perforated holes in the middle groove. It would be interesting to ascertain what *kind* of bone it is, and what was its use? It is now in fragments, having been subsequently broken, on account of its brittleness.

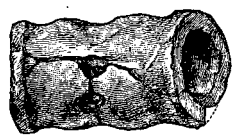


Fig. 6. Hollow cylinder of Bone (actual size).

Grave No. 9 was carefully opened in presence of the officials from the societies named. It lay east and west, and enclosed a space 2 feet 4 inches × 1 foot 6 inches, and was 1 foot 8 inches deep. The sides were of flat flags set on end, their height being added to by other stones built dike-wise on the top; covered in with one large stone, 22 inches × 20 inches, and seven others. It contained burnt bones in a heap in the centre, broken into small pieces, much disintegrated and decayed, no pieces being larger than 2 inches, and a little charcoal mingled with them.

Grave No. 10, discovered on May 30th, the day after the first examination, was formed of rough stones, enclosing two urns, large and small. The smaller, which was rather well formed, contained nothing but gravel, which seemed to have fallen into it, as it stood on its base without any covering. The larger, which was inverted in the usual way, contained nothing but burnt bones, similar to those in the other graves.

The stones of the graves in the first site consisted variously of mica schist, yellow flaggy sandstone, and quartzite, all evidently utilised as they were found, and not worked upon in any way, most of them being more or less rounded by natural causes, and some mere boulders from the terrace in which the graves had been formed.

II. The Graves discovered at the Second Site.

Grave No. 1 was about 5 feet below the surface. It enclosed a space 3 feet 6 inches × 1 foot 8 inches × 1 foot 6 inches deep; was formed on three sides by single slabs of Old Red Sandstone, the same as is worked on the west side of the Alness near the shore; and on the fourth side, by two slabs overlapping each other a little, with some stones at the ends to make up the requisite height; and was covered in by one large slab of the same rock 4 feet 4 inches × 2 feet × 4½ inches thick. This cist was very carefully and neatly put together, but was less perfect than No. 2. It lay east and west.

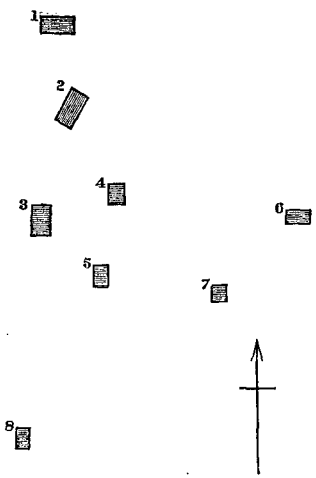


Fig. 7. Ground plan of Graves at Dalmore, second site.

1. It contained an entire skeleton, pronounced by Dr Bruce of Dingwall and Dr Sutherland of Invergordon (both of whom carefully examined the remains found in the graves), to be that of a middle-aged female. The bones were much decayed, being covered with a white mould of carbonate of lime, and the lower half of the skull was gone, destroyed evidently by the moisture in the ground. It lay on its side, looking towards the east, with the knees drawn up towards the chin.

2. In front of the skull stood an urn, inverted, entire at first but afterwards broken, but firm and hard in material, ornamented with scratched lines. No weapons or other articles were found in the grave. The skeleton lay in fine, clean, well-smoothed gravel, evidently laid into the grave when formed, as it differed from the rougher and closer-knit gravel of the terrace in which it had been dug.

Grave No. 2 lay 7 feet 9 inches below the surface. It was the finest

cist found at either site, being exceedingly well constructed, the whole being carefully laid down, the sides of equal height, the angles squared with great exactness and covered with smaller stones to prevent earth getting in, and the bottom level and neatly smoothed by fine sand laid on it. It lay north-east and south-west. It consisted of four large well-squared Old Red Sandstone slabs, of the same kind as No. 1, enclosing an oblong space, 4 feet 2 inches × 2 feet 4 inches, and 1 foot 9 inches deep; covered in by one large flat mass of grey gneiss, 5½ feet × 3½ feet × 6 inches thick. On the dry, smooth, sandy bottom lay a human skeleton, entire, in perfect preservation, with the knees drawn up and the face looking to the east. It was ascertained by the medical men to be that of a male, apparently between thirty and forty years of age, the bones being firm, unbroken, and well-formed. The thigh bone measured 1 foot 6 inches, and the tibia and fibula about the same, so that the man would have stood from 5 feet 8 inches to 6 feet in height. The skull was entire, and the teeth were complete and in very good condition.

Behind the head stood an inverted urn, entire when first seen but afterwards broken, similar to the others already described, only slightly ornamented, and containing nothing but charcoal and other softer matters. No ornaments or weapons were found in this cist.

These two cists were the largest and best of those then discovered, and showed the most careful sepulture; and, from their being so similar in build and so close to each other, they were probably those of near relatives.

Grave No. 3 was found some 3 feet below ground, measured 3 feet 4 inches × 1 foot 6 inches, and was 1 foot 8 inches deep. The sides consisted of two stones each, of gneiss and mica schist, and the top was one piece of gneiss unsquared and wanting in two of the corners, 4 feet 10 inches × 2 feet 8 inches, and 7 inches thick. One of the stones of the sides was peculiar. It consisted of an imperfect square, hollowed out into a circular concave surface 2¼ inches deep, and 1 foot 3 inches in diameter, the hollow being broken on one side. It may have been used as one of the common grinding stones, and had likely been utilised in forming the cist,

on account of its coming by an accident which rendered it useless for grinding. The grave contained the top and some other pieces of the skull, and a few fragments of other bones much decayed.

Grave No. 4, two feet below ground, was the first discovered at this site. Its sides and top were formed of small stones enclosing a space 1 foot 8 inches × 1 foot. It contained broken burnt bones, with a little charcoal, and some stones which had been subjected to fire, as shown by the well-known igneous discoloration; a rough urn was also found broken on opening the grave.

Grave No. 5 lay 5 feet beneath the surface, and consisted of burnt bones laid on a bed of sand, without any protecting stones.

Graves Nos. 6, 7, and 8, were small rude cists, formed of stones, but destitute of human or other remains.

It is remarkable that in none of the cists of this second site was found a single trace of human workmanship except the urns.

One very interesting fact in the discoveries made at both sites was the existence of *two* forms of burial—sepulture and cineration; and, what was very important, as leading to a determination of the relative ages of the two forms, was this, that some feet right above the two largest cists Nos. 1 and 2, at the second site, a second, and of course subsequent, burial had been made, of calcined broken bones. This would seem to indicate that the unburnt burial was older than the incinerated one; but whether the first sepultures were known to exist before the second were made, or whether the second were made at the same time as the whole burials below, as might have been the case, from their being *right over* the first, it is impossible to say. One thing was clear, that the cinerary graves were much ruder, less artistic, and less carefully built than the other.

The manner of digging the graves at the second site was also very clearly shown. The terrace, which extends round Alness as a flat plateau, consists of alternate stratified sand and gravel, compact and hard, and sometimes closely agglomerated by ferruginous and calcareous infiltrations. In this hard, gravelly, and stony terrace, circular pits had been excavated in which the cists had been built, the bodies deposited and enclosed at

the bottom, the whole of the pits being finally filled up again with *fine sand*—indeed, it was the discovery of these circular patches of sand beneath the black cultivated surface soil that suggested the fact that they enclosed graves and led to their discovery.

The valley of the Alness, with its good water-supply and well-clothed surface of heath and grass on its gently sloping sides, would seem to have been a favourite dwelling-place of the prehistoric tribes. Other evidences of their residence in the district are abundant. The whole of the graves at the Second Site have not yet been excavated, as shown by the circular sandy patches already described. On the same terrace, about 300 yards west of this site, a grave was dug up about two years ago. It consisted of a stone cist $2\frac{1}{2}$ feet $\times$ 2 feet, covered in with a single slab, all the stones being of the same sandstone as those of the Second Site. It contained nothing but gravel, the contents having entirely decayed before opening.

Some fifty years ago, a large cairn existed in a field about $\frac{1}{4}$ of a mile to the east of the village, about 30 feet in diameter and 20 feet in height, containing bones and an urn. It was removed by Mr Rose of Calrossie to supply materials for a neighbouring dike. The cist, however, still remains, along with its original large upper stone ; but the contents have disappeared and cannot be traced.

A fine urn was found in a grave near Ardross Castle, up the Alness, some years ago. It is happily almost entire, and is well ornamented on its sides. It is preserved in the Castle, to which also the manufactured contents of the graves at the sites now described have also been sent by Mr Mackenzie ; it is desirable, however, to have them placed in the National Museum.

A large standing stone in a field on Rosskeen Farm is visible from Dalmore, where the graves were found about a mile to the north-east. It is called *Clach Mharlich*, or the *Thief's Stone*, and is evidently one of the monuments so abundant in the north, which afterwards received its curious name from some more modern circumstances connected with the place.

Notes on the Crania found in the Cists. By T. Aitken, M.D., F.S.A. Scot.

First Site.

Grave No. 1 contained fragments of a cranium.

The fragments consist of a considerable portion of what is supposed to be the vault of a male skull, of the type of the more perfect one to be presently described, and are made up of parts of the frontal bone and parietal and occipital bones. The sutures connecting these are anchylosed, and the outer surface roughened from decay. Besides these there are portions of the two temporal bones remaining, the only feature requiring to be referred to being the distinct marking of the digastric groove; and there are also two fragments of the lower jaw and one part of the upper, all containing teeth. With these are associated eleven teeth, the crowns of which are considerably ground, though from indications in one or two it would not appear that their possessor had arrived at a period of life above the middle age.

Second Site.

Of this find the crania of only Nos. 1, 2, and 3 cists have been forwarded.

In *Grave No.* 1 was found the fragment of a skull and skeleton complete. The conclusion that this belonged to a female, formed doubtless on the pelvic bones, not forwarded, is possibly correct. The portions remaining, however, consist of the left half of the parietal bone, with the exception of a part broken off immediately below the posterior superior angle, a portion of the occipital bone, exhibiting the left condyloid process, the temporal bone, the styloid process being broken off, the left upper molar bone complete, a small portion of the superior maxillary bone, and part of the left wing of the sphenoid containing the foramina. The sutures in this instance are also anchylosed, and the external surface of the lower roughened from decay.

No. 2 *Cist* contained a male skull and skeleton complete. The pelvic bones in this case have also not been forwarded, and it is possible the sex of the individual has been determined correctly, though the bones of the

face scarcely look massive enough for those of a male. The cranium itself is of the Brachycephalic type: looked at from above, it exhibits a somewhat rounded oval, the parietal eminences being well marked, and a distinct difference is observed between the parietal and frontal breadths. Looked at sideways, the glabella and orbital ridges are well but not distinctly marked, and the forehead rises perpendicularly to a level with the frontal eminences, when it bends easily round and rises gently until about an inch anterior to the coronal suture. This contour then passes almost horizontally until in a line with the parietal eminences, when it turns with some degree of boldness, and slopes downwards towards the superior border of the occipital bone. From this point to the superior curved line the contour is first boss-like, then slopes towards the inferior curved line, and lastly turns round towards the foramen magnum. Looked at from behind, the contour is globular, the left side of the outline being the more rounded, though neither lateral outlines are at all intruded upon by the prominence of the mastoids. Seen in front there is nothing to remark except what has already been stated, that the facial bones are neither massive nor strongly marked. The foramen magnum is of the usual form, but the right condyle is of a more quadrilateral form than the left, which is somewhat rudely triangular. In the supra maxillary bone the canine fossa is well marked, and in the palatal surface can be distinctly seen the premaxillary suture. The teeth have all been developed, but the two inner and upper incisors are awanting, and also the right external incisor and first bicuspid. All are in good preservation, and offer no peculiarity. The lower jaw is perfect, containing the whole series of teeth, and from these as well as those in the upper maxillary bones being very slightly worn, and from the angle of the lower jaw, the parts undoubtedly belonged to a person in the vigour of life. The bone presents no peculiarity, and none of the prominences or muscular attachments are at all exaggerated. The base of the skull also presents nothing worthy of remark, and the mastoids are certainly below their normal development. The sutures are in their normal condition, and the frontal is unobliterated. The ossa triquetra in the right lambdoidal suture requires to be noted. Those of the left side have not been ascer-

tained, as it was thought better not to disturb the calcareous matter by which this portion of the cranium is covered, so that it might be seen in exactly the condition in which it was found; but possibly this may be of the larger size of those to which attention has already been drawn. The external surface of the skull is less roughened by decay than the other fragments found, but in the left half of the frontal bones, the bone is seen exfoliating.

No. 3 *Cist* contained only the fragment of a cranium composed of the greater part of the frontal bone, though a considerable part of the left half is awanting, the right nasal bone, part of the orbital and nasal, parts of the right superior maxillary bone, and a fragment of ethmoid with the crista galli attached. The inner frontal crest is very prominent. From the thinness of the bones, it may possibly be part of the skull of a young person.

Measurements of Cranium in Cist No. 2, *Second Site.*

Circumference,	$20\frac{1}{2}$ inches.
Antero-posterior diameter,	$7\frac{1}{8}$,,
Breadth at forehead,	$4\frac{1}{4}$,,
Breadth at parietal eminences,	$5\frac{1}{4}$,,
Height from centre of meatus auditorius externus,	$4\frac{1}{8}$,,
Occipito mental,	$8\frac{7}{8}$,,
Fronto mental,	$5\frac{7}{8}$,,
Breadth of face,	$4\frac{1}{2}$,,

MONDAY, 14*th April* 1879.

PROFESSOR DUNS, D.D., Vice-President, in the Chair.

The following Memorial, for the amendment of the Ancient Monuments Bill by substituting the Board of Trustees for Manufactures in Scotland instead of the Trustees of the British Museum as the Commissioners under the Act for Scotland, was submitted to the Meeting by the Secretary :—

MEMORIAL FOR THE SOCIETY OF ANTIQUARIES OF SCOTLAND WITH REFERENCE TO THE ANCIENT MONUMENTS BILL.

The Society having had under consideration the Ancient Monuments Bill as amended in Committee of the House of Commons, have to submit the following observations thereon :—

1. The Society approves of the principle, and generally of the provisions of the Bill, to provide for the better protection of Ancient National Monuments.

2. But in so far as Scotland is to be affected by such legislation, the Society objects strongly to its administration being vested in the Trustees of the British Museum.

3. The Society is of opinion that the proper body to be entrusted with its administration in Scotland is the Board of Trustees for Manufactures in Scotland.

4. This Board is a branch of the public service established in Scotland, having permanent relations with the Society of Antiquaries of Scotland, and the custody of the National Museum of Scottish Antiquities.

5. The relations of the Board of Trustees for Manufactures with these Institutions arose from an agreement between the Government and the Society of Antiquaries in 1851, providing for the transfer to the Nation of "the entire collections of antiquities, coins, medals, portraits, manuscripts, and printed books," then the private property of the Society of Antiquaries of Scotland, together with "such additions as may be hereafter made to them." These collections so transferred were vested in the Board of Manufactures for behoof of the public, and placed under the charge and management of the Society of Antiquaries by Treasury Minute of 1st July 1851, the Board undertaking to

provide fit and proper accommodation in a public building for their preservation and exhibition to the public. Provision was also made for the permanent representation of the Board in the Council of the Society by which the National Museum thus established is managed, its maintenance as a public institution being provided for out of the Board's funds, without being the subject of an annual vote in Parliament.

6. Many of the Monuments in Scotland which fall under the scope of the Bill (such as the inscribed and sculptured stones included in the Schedule) are movable, and the Society has from time to time secured the protection and preservation of many of these by inducing proprietors to present them to the National Museum; and from proprietors of most of the other Monuments in Scotland it has received donations of antiquities which are preserved there along with the others. The Society has also made arrangements of a more or less permanent character for the preservation of Monuments which are not movable.

7. The Board has thus already established relations with the proprietors of the Monuments to be preserved. It possesses their confidence, and having at command the Society's intimate knowledge of the Monuments, is in every respect well-fitted to accomplish the objects contemplated in this Bill, so far as Scotland is concerned.

8. The Board of Trustees for Manufactures, which owes its origin to the Treaty of Union, and was first appointed in 1727, is also vested under Act of Parliament with the trust of the National Gallery of Scotland, and the Gallery of Ancient Sculpture in the Royal Institution, and the Society has no hesitation in urging the appointment of that Board as Commissioners for carrying out the purposes of the Bill under consideration so far as relating to Scotland.

Signed in name of and by authority of the Society.

LOTHIAN, *President.*

ROYAL INSTITUTION,
EDINBURGH, 18*th April* 1879.

On the motion of Mr Ferguson of Kinmundy, it was unaminously resolved that the memorial, signed by the President in name of the Society should be transmitted to Mr Cross, the Secretary for the Home Department, and that copies should be sent to Sir John Lubbock, the promoter of the Bill, to all Scottish Peers and Members of Parliament, and to all the Conveners of Counties and Clerks of Supply.

A ballot was then taken, and the following Gentlemen were duly elected Fellows of the Society :—

ANDREW MACKENZIE, Esq., Dalmore, Alness.
W. W. ROBERTSON, Esq., Architect, H.M. Office of Works.
GEORGE ROBERTSON, Esq., 4 Comely Park, Dunfermline.
JAMES WALKER, Esq., 74 Bath Street, Glasgow.

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

(1.) By Mr WILLIAM STEVENSON, Governor of the Combination Poorhouse, Inveresk.

Sculptured Stone, shaped like a pine cone, standing on a pedestal. It is of a yellowish sandstone, measuring 20 inches in height and 11 inches

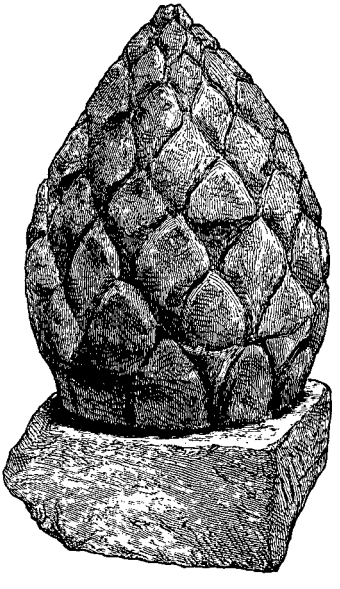


Fig. 1. Sculptured Stone (20 inches high).

in diameter. Its form and character will be better understood from the

accompanying woodcut (fig. 1) than from any detailed description. Similar pine-cone ornaments have been found frequently in connection with Roman sepulchral sites. Dr Arthur Mitchell, in his journal (MSS.), records the existence of five which, on the 4th of April 1864, he saw on the garden walk of the farm called The Sands, near the Roman Camp at Middlebie. Some of them, he understood, had been found in a field called Birren's Plain. They are roughly figured in Dr Mitchell's journal. Three of them are of the pine-cone shape, and are almost the same in size, but two are exceptional in their form—so exceptional as to make it doubtful whether they are really the same symbolic ornament; yet, when

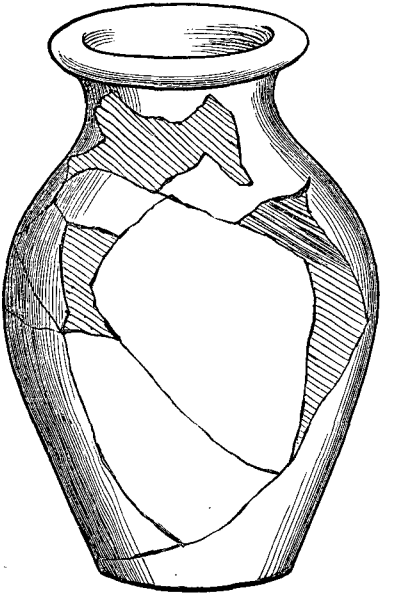


Fig. 2. Water Jar of reddish clay found at Inveresk (10½ inches high).

examined, they are found to be pine-cones with the sides sliced off, and being found at a Roman station along with pine-cones of the usual form, Dr Mitchell has regarded them as a variety. The cone or quasi-cone is,

in all the five cases, part of the same block as the pedestal. Dr Bruce, in the "Lapidarium Septentrionale," figures one which was found at Papcastle, Northumberland. It also stands upon a pedestal almost similar to the Inveresk one, and measures 2 feet 3 inches in height by 1 foot 5½ inches in greatest breadth. Another, found at Chesterholm, is figured in Horsley's "Britannia Romana," and the figure is repeated by Bruce. Another was found at Kirkby Shore, and at Carlisle one was found with a serpent coiled round it spirally. The monument to Aurelia Aureliana, which was also found at Carlisle and is figured by Bruce, has a pine-cone surmounting the pilasters on either side; and the monument of Crescentinus, found at Brougham, also figured by Bruce, has a pine-cone incised above the inscription. They have been supposed to be emblematic of a future life.

Water Jar of reddish clay, 10½ inches high, 8 inches in greatest diameter, and 5 inches wide at the mouth; the form as shown in the preceding woodcut (fig. 2). It was found broken into a great many pieces, but has been reconstructed so far as the fragments have been recovered.

Large Amphora of reddish clay, also broken into many pieces, but now reconstructed. It wants the neck and handles and a large portion of one side. It measures 27 inches in height by 22 inches in greatest diameter.

Fig. 3. Vase of black ware (4½ inches high).

Small Vase of black ware, resembling Upchurch ware (fig. 3). It stands

4½ inches high, and is 4½ inches in diameter near the bottom, tapering towards the mouth, which has an everted brim. It is finished at the bottom with a short foot-stalk 1½ inch diameter. The vessel has been finished on the wheel and the surface burnished smooth, so that it has an almost metallic lustre. The ornamentation consists of a diamond-shaped arrangement of dots in relief, apparently put on with a comb dipped in *slip* after the vase had been finished. Above these a single line traced with a sharp point surrounds the vase horizontally.

Portion of the lower part of a Vase of dark ware, now only 4 inches high and the same in diameter. The surface wants the burnish of the other vase, and the ornamentation consists simply of lines traced with a blunt point, crossing each other diagonally.

Portion of the lower part of a similar Vase, now only 3 inches high and 4 inches in diameter, of the same character as the last, and having the same ornamentation.

Mortarium of white clay (fig. 4), 14 inches in diameter, and 3½ inches high. When found it was in several pieces, but was fortunately capable of being reconstructed, and is now complete, with the exception of a small portion of the lip. Like all others of its class the interior is roughened

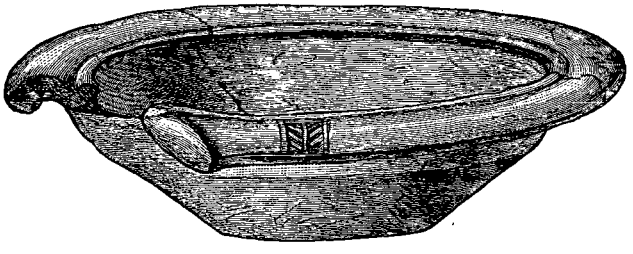


Fig. 4. Mortarium of white clay (14 inches diameter).

with small pieces of quartz. On the lip is a mark like a fern-leaf. A fragment of a smaller mortarium with a similar mark is among the specimens in the Museum which were found at Inveresk many years ago.

Portion of a Mortarium bearing a potter's stamp, which seems to consist of the letters ANLM, and other four letters of which there is too little left to make them legible. Fragments of two other Mortaria.

Portions of a shallow Dish with upright sides, about 4 inches in diameter and 2 inches high, of black ware, smooth on the surface and ornamented with a pattern of diagonal lines.

A great variety of Fragments of similar ware. Twenty-four fragments of red lustrous ware commonly called Samian, one having part of the potter's mark CRAC.

A quantity of the Bones of animals, chiefly of ox and horse.

Mr Stevenson has given the following account of this interesting discovery :—

"The portions of Roman pottery, sculptured stone shaped like a pine cone, and other articles presented to the Museum, were found in a field about 200 yards or so from the Inveresk railway station. The particulars of the find are as follows :—One of the workmen of the occupant of the park, in digging a hole for a fence post, while repairing the fence in July 1878, came upon a stone, which it was necessary to remove, and in doing so with his pick broke it into several pieces. Shortly afterwards the stone came into my possession, and I had the pieces carefully cemented together so far as they were found. This is the stone mentioned above and now in the Museum. The workman at the same time found a Roman coin, which has also been presented to the Museum.

"The finding of a tool-dressed stone of such peculiar form, and a Roman coin, suggested to the occupant of the ground and myself, that some other articles of greater interest might still be met with. It was accordingly arranged that, so soon as the crop was off the ground, some further excavations should be made. The severe and protracted nature of the past winter prevented anything being done till far on in the spring of 1879, when operations were begun and five days spent at the work.

"In digging the first pit, it soon became evident at the one side of it

that the original deposit of soil and gravel had never been disturbed, but at the other side of the pit the nature of the earth at once told of its having been 'travelled,' and very soon small bits of broken pottery began to be occasionally turned out. The excavations were continued at first for two days, and while now and again a few small bits of pottery were turned up, nothing of any greater importance was found. These pieces of pottery, and the stone above mentioned, were subsequently brought into the Museum and submitted to the Secretary, Dr Mitchell, and the Curator, Mr Anderson, who pronounced them all to be of the Roman period, and at their request I agreed to continue the excavations, and which I did for other three days, when the planting of the field put a stop to it.

"On the first day after renewing operations the most of the portions of the large amphora were found, together with that of the mortarium and the red vase. Two of the little black vases were also found. On the second day another of the little black vases was found, along with a large quantity of burnt ashes, and at a depth of $4\frac{1}{2}$ feet from the surface; on the third day, little was got except now and again fragments of pottery. During the whole time bits of 'Samian ware' were occasionally found, and the very last thing found was a bit of this ware.

"In making the excavations no difficulty whatever was felt in following the course of what had formerly been dug; whenever it was left, we at once got into gravel and sand which had not previously been disturbed. The portion of ground which had formerly been turned up was not of any regular shape, and the portion I examined does not by any means exhaust it.

"The inquiry often suggested itself to me during my operations, How did so many remains come to be deposited in such a place? and I started various theories without, I must confess, being satisfied with any of them.

"The first was one founded on what is seen to be going on in the neighbourhood at the present time, viz.,—that of a builder, digging a hole, removing the sand for building purposes, and refilling the same again with the rubbish and other refuse of the buildings. But on reflection, it was not difficult to see that the whole of the material which had been used to fill up the place from which the sand had been removed was not rubbish,

but soil of a good quality; and many traces of bones and large quantities of teeth were met with.

"Another theory which suggested itself was that the place was a Roman burial-ground; that the stone was the finial of a monument; that the serviceable stones of the monument had at one time or another been removed for other purposes; while the graves or burying-places have been rifled in search of money or coins. I supported this theory with the fact that all the vessels found but one, which are usually supposed to be urns, had evidently been disturbed and were lying in different positions; while the finial of the monument, which would be of little use for other building purposes, was buried amongst them. But against this theory I put the question, How did all the other portions of pottery come to be buried in a burying-ground?

"In favour of the theory that the ground had been used for cremation purposes, was the fact that the one vase, found at a depth of 4½ feet, had to all appearance not been disturbed, and immediately on the top of it was a large quantity of burnt ashes covering a space of about a yard square. Nothing, however, of the nature of ashes was found in the vase."

[Since the preceding account was in type, and after the crop of barley on the ground was cut, the examination of the place was continued for other four days at the instance and expense of the Society. During the work very many pieces of broken pottery, bones, a part of a stag's horn, bits of burnt coal and wood, bits of unburnt coal, a denarius of Hadrian, a small gilt ornament richly chased, bits of iron, a portion of the shaft of a column of hewn sandstone, many water-worn stones such as might be used for causewaying, and at one spot two or three tons of water-worn and quarried stones, and some half burnt lime stones were found. Some of these larger stones were as much as one man could lift, and may have been used for building purposes.

On the fourth day of the work it became unmistakably evident that we were following the track of what had formerly been an open ditch, used for the purpose of carrying off the drainage by the nearest course to

the river. We traced the ditch for about 30 to 40 yards, having a depth of 4 to 5½ feet.

In the former excavations I found the difficulty of giving the place the name of a builder's rubbish heap, from the fact that it contained no such rubbish as might be expected. I also found the difficulty of accounting for it as a burial-ground, because, while very many bits of different vessels were found, no whole ones were obtained. Soon, however, after we got on the track of the ditch, I felt at once that there would be little difficulty in accounting for the deposit. The open ditch had been made the receptacle for all the broken dishes of the Roman houses whose drainage it conveyed to the river, just as may be seen in many country places at the present time.

The ditch (if such it was) appeared to have been allowed gradually to silt up, except at the place filled with the large stones before mentioned. From the last 10 yards examined little was found, but at the end nearest which I expect the dwellings to have been, the most of the articles were found. Foundations or traces of buildings were not found, but if any did at any time exist on the ground, and are still buried beneath the soil, I would expect to find them immediately to the south of where I made the excavations, and possibly with their frontage facing to the south.

If my commission and permission would have allowed me to examine a little more, it might have been of interest to have done so, and also to have examined the track of the ditch somewhat nearer the river. To do more, however, would require the sanction of the proprietors and tenants, both of the ground where the deposit was found and also nearer the river.

In connection with the foregoing, I would like to draw the attention of the Society to the site of the well which presently supplies the Combination Poorhouse in the neighbourhood with water. The site of the well at the time of the building of the poorhouse was a cattle pond, into which flowed a very beautiful and clear spring of water at the rate of upwards of 12,000 gallons a day. When I entered on my duties as

governor of the poorhouse about eighteen years ago, the wells which had been made nearer the house for supplying water were found to be unserviceable, and as a make-shift I made a temporary square hole, out of which water was for a time carried to the house in pitchers. A well was ultimately formed on this site.

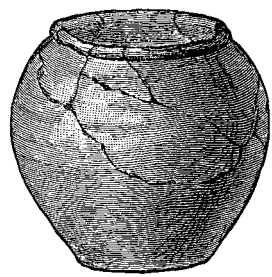
The popular tradition in the village of Inveresk about the old cattle pond was that it was the mouth of an old coal pit which had gradually got silted up; and an old miner, who had been offered poorhouse relief, refused to go in because he said the house was built over the workings of an old pit, of which the site of this pond was the shaft, and that when a boy he had worked in it.

In making the well I had the whole of the surface rubbish removed down to the solid gravel, and the well itself was sunk through the strata of gravel, and for other 3 or 4 feet into the solid boulder clay, showing that it had never been an old pit. So much for tradition. However, in the work of making the well, buildings of an old date were laid bare, which had, without doubt, been placed there for the purpose of containing the water or making a reservoir. The stones were of what is called ashlar work—I forget whether broached or stugged—moulded to the circle and laid in courses. Either on the top course or lower a gutter or hole was cut for overflow water. A considerable portion of the building was removed, but some of it still remains buried beneath the levelled up surface. The formation of what still remains may be seen in the boundary wall of the poorhouse grounds, and is known as "the bend in the wall." It is in the form of nearly a full half circle of 15 to 20 feet diameter. The portion removed was not a continuation of the same circle, but apparently a part of another and much smaller, both meeting at a tangent. During the clearing out of the old site I did not meet with anything which could tell a tale; but it did occur to me at the time that the buildings were of a character much superior to what one would expect to find in a simple cattle pond. Part of the adjoining ground about seventy years ago was a common, with the Esk on one side. That on the other side was cut up, according to the old titles, into small

properties of a few rigs or acres each, with the common name of Skelliebraids or Skellybred, and none of these small proprietors would likely go to the expense of such a well-constructed cattle pond. I therefore submit for consideration the question, whether this reservoir may not have been the common source of water supply for the adjoining Roman colony? The water is plentiful and of very superior quality. It would be possible at some little expense to have the building yet remaining uncovered and examined.

In the levelling operations behind the poorhouse a small well was opened up and removed. It was about 6 feet deep from the surface, with a small spring at the bottom. It was built with unhewn stones, and had been filled up. In making excavations for one of the new houses on the top of the hill, near by where the deposit of pottery was found, a portion of a causeway made with boulder stones was laid bare. Neither of these, however, appeared to me to have had connection with the Roman occupation, or with the deposit now described.]

The small globular vessel presented by Mr Gavine, builder, at the last meeting (which is here figured), was found in making the new road at some distance from the place excavated by Mr Stevenson, and consider-



Vase of Black Ware (3½ inches high).

ably to the west of it, so that there is now evidence to show that the Roman town or station must have covered a very considerable space of ground.

The first discovery of Roman remains at Inveresk which is on record was in 1565, when a singular cave, and an altar with the inscription APOLLINI GRANNO Q. L. SABINIANVS PROC. AVG., were discovered in the grounds of Eskgrove. They are described by Thomas Randolph, English ambassador, in two letters written by him, and preserved in the State Paper Office, the one being addressed to the Earl of Bedford and the other to Sir William Cecil. Both are printed in the "Archæologia Scotica," vol. iii. pp. 287, 288, where is also found the entry in the Lord Treasurer's accounts of a payment of twelvepence to a boy passing from Edinburgh with a letter from Queen Mary addressed to the Bailies of Musselburgh, "charging thame to tak deligent heid and attendance that the monument of grit antiquitie now fundin be nocht demolishit nor broken down." This is the first recorded instance of State interference for the preservation of ancient monuments in Scotland. It is almost unnecessary to add that neither the cave nor the altar are now known to exist. A Roman bath was discovered in 1783, and is described by Mr Cardonnel in "Archæologia Scotica," vol. ii p. 179. In 1827 Roman remains were again found in making a sunk fence on the premises of Sir David Milne. These and other notices of the Roman antiquities of Inveresk were collected, with additions, in a paper communicated to the Society on 26th March 1850 by D. M. Moir (the well-known "Delta") and printed as a small pamphlet of forty-five pages by the Messrs Blackwood in 1860.

(2.) By JAMES DALGARNO, Esq., Slains, Corr. Mem. S.A. Scot.

Four perforated Sink-stones found near Slains. They are flattish, water-worn pebbles of irregular form, varying from 3 to $4\frac{1}{2}$ inches in length, and from $2\frac{1}{2}$ to $3\frac{1}{2}$ inches in width, and from $\frac{1}{2}$ inch to an inch in thickness. They are each perforated near the centre of their flat sides by a hole varying from $\frac{1}{4}$ to $\frac{3}{4}$ inch in diameter.

Three Sheaths of the horns of cattle found in a bog at Lochlundie, Slains.

(3.) By Rev. R. K. D. HORN, Minister of Corstorphine, F.S.A. Scot.

Perforated Disc of coarse-grained, greyish sandstone of oval shape, 3 inches long, $2\frac{1}{2}$ inches wide, and an inch in thickness, perforated in the

centre by a hole an inch in diameter at both the surfaces of the disc, and half an inch in the middle of its thickness, found near Corstorphine.

Four Fragments of various bones of the ox; tooth of horse; two portions of deer-horn; and one flint flake from the cave at Cresswell.

(4.) By Robert Carfrae, Esq., F.S.A. Scot., Curator of the Museum

Double Handle of a bronze vase, of Roman workmanship. It is semi-circular, with ornamental loops passing through eye-holes in solidly cast and chased side pieces which had been fastened on the brim of the vase. One of these represents a masked head, the other a head with a peaked head-dress.

Pair of Gaulish Bracelets of bronze, oval in shape, penannular, and expanding at the extremities. Each is formed of a circular rod of bronze, bent to the required shape, and cut and chased into a beaded pattern, the ends ornamented with chased work, and the form and appearance of the whole similar to those figured by Lindenschmidt in his "Alterthumer Unserer Heidnischen Vorzeit," vol i. heft ix. taf. 1, fig. 6.

(5.) By Professor John Duns, D.D., Vice-President.

Five Smoothing-Stones used by weavers for calendering or smoothing the web as it is woven. [See the subsequent communication by Professor Duns.]

(6.) By the Ayr and Wigtown Archæological Association.

Archæological and Historical Collections relating to Ayrshire and Wigtownshire. Edinburgh, 1879. 4to.

(7.) By the Curators of the Bodleian Library.

Calendar of the Clarendon State Papers in the Bodleian Library. Oxford. 3 vols. 8vo. 1879.

(8.) By the Archæological and Natural History Society of Derbyshire.

Journal of the Derbyshire Archæological and Natural History Society. Vol. I. 1879.

(9.) By R. W. COCHRAN-PATRICK, Esq., F.S.A. Scot., the Author.

Notes towards a Metallic History of Scotland. By R.W. COCHRAN-PATRICK, B.A., LL.B. Nos. II. and III. 8vo, 1879. Reprint from the Numismatic Chronicle.

(10). By M. HENRI GAIDOZ, the Author.

Esquisse de la Religion des Gaules. Paris. 8vo. 1879.

(11.) By JAMES CRUIKSHANK ROGER, Esq., F.S.A. Scot., the Author.

Historical Summary of the Rogers, tenants of Coupar. London. 8vo. 1879.

The following Communications were read :—