### XVI.

BRONZE AGE GRAVES AT PATRICKHOLM SAND QUARRY, LARKHALL, LANARKSHIRE. EXCAVATED DURING THE AUTUMN OF 1947. By J. HARRISON MAXWELL, M.A., F.S.A.Scot.

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#### I. Introduction.

Four prehistoric burials of the Middle Bronze Age were discovered in the autumn of 1947 at the Patrickholm Sand Quarry, Larkhall, Lanarkshire, which was only opened in January of that year. Similar finds of cists and urns were made in neighbouring sand quarries operated by Messrs D. Hastie & Sons, and Messrs Shanks & MacEwan, Ltd., at Ferniegair, Riccarton, and were reported on in 1936 and 1939 by Mr Ludovic McLellan Mann. The site of the 1947 discoveries is a piece of high ground (lat. 55° 43′ 43″ N., long. 3° 59′ 8″ W., six-inch O.S. Sheet: Lanarkshire xvIII S.W.)¹ about 420 feet above sea-level, rising steeply on the west side of the River Avon, and very close to the magnificent Larkhall viaduct which here towers more than 150 feet above the floor of the gorge about a quarter of a mile south of Millheugh Bridge. In the absence of Mr Ludovic Mann, who was then

in the Orkneys, I was asked by the Directors of the Patrickholm Sand Quarry, Messrs Reid, Tomison and Maxwell, to investigate the site and to report on any further discoveries.

### II. LIST OF BRONZE AGE SITES AT PATRICKHOLM.

- No. 1. Cist 1 with inhumed burial and food-vessel No. 1.
- No. 2. Uncisted cremated bones with a flint knife.
- No. 3. Small Cist 2 with cremated remains and bone beads.
- No. 4. Cist 3 with inhumed burial and food-vessel No. 2.

## III. SITE No. 1: Inhumed Cist Burial with Food-vessel No. 1.

While the sand-workers at Patrickholm were digging and loosening sand on a terrace about 20 feet above the present quarry floor-level, they suddenly

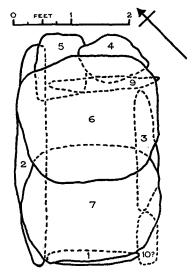


Fig. 1. Cist No. 3: reconstruction.

came upon some large sandstone slabs of a cist or stone coffin. The front slab on the south-west side of the cist, unfortunately broken, measured about 50 inches in length, about 18 inches in breadth, and about 2 to 3 inches in thickness.

The cist (No. 1) was about 5 feet below ground-level. Above the cist was a large cover-stone about 30 inches long, 18 inches broad, and 1 foot thick. It was apparently not large enough to cover the cist completely, for six smaller rounded stones (about 10 by 10 inches each) were needed to accomplish this. When these and the cover-stone were removed it was seen

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that the cist consisted of the two long side slabs (that on the north-east side measuring 52 inches in length) and two smaller end slabs, each about 2 feet long and from 2 to  $2\frac{1}{2}$  inches thick, all four set into the sand. Inside the cist were two fragments of human bones, part of a skull and part of the lower end of a femur of an adult, and a food-vessel of the Middle Bronze Age. The urn, which is in excellent condition, measures a little over  $4\frac{1}{2}$  inches in height, and is highly ornamented on the rim, the body and the base (Pl. XXXVI, 1).

# IV. SITE No. 2: Uncisted Cremation Burial with Flint Knife.

At a spot 6 to 8 feet from the first burial site I was able to recover a large number of pieces of cremated bones of human bodies scattered throughout the sand, with no sign of an urn or cist. Dr R. J. Harrison, then at Glasgow University, testified that the bones from this site were those of a child over 12 and under 20 and of a young adult of about 20 years of age.

Among the bones and sand I found a small burnt flake of white flint, showing secondary trimming, and with a definite twist in the lower part (fig. 2, 4).

A flint very similar was found in a barrow at Rudstone, Yorkshire, with a hemispherical lump of iron pyrites.<sup>1</sup>

## V. Site No. 3: Small Cist with Cremation Burial of Several Bodies.

About 5 feet below ground-level at the place mentioned in the last section was a remarkably small oblong cist full of cremated bones. It was only about 2 feet long by 1 foot broad. The cover-stone, somewhat irregular in shape, measured about 22 inches in length and in breadth. The cist beneath was a simple, small oblong chamber formed by four stone slabs, two long (north and south sides) and two short (east and west).

Outside the west wall of the cist were two small stones, placed there as if to act as a buttress to the western slab.

The cist chamber measured internally 1 foot 8 inches in length and 11-12 inches in breadth.

The cist was full of a very great number of large and small cremated human bones, weighing in all over six pounds, and being the remains of at least four individuals, one adult over 25, a younger adult possibly a female, and two children 7 to 12 years of age.

There was no stone slab on the bottom of the cist, the mass of bones resting on clean sand. On removing the bones we noted that the inner surface of the north and the east stone slabs of the cist was blackened as if by fire action.

<sup>&</sup>lt;sup>1</sup> Evans, Ancient Stone Implements, p. 284, fig. 223; Joseph Anderson records the finding of one somewhat similar at Flowerburn, Ross-shire (Bronze and Stone Ages, pp. 375-6, figs. 406, 407). VOL. LXXXIII.

A few small pieces of charcoal were found inside the cist and some larger pieces behind the north slab. The sand also behind the north slab showed two or three very thin layers of charcoal, perhaps remains of dead vegetation, or a thin wash of fine coal dust from coal outcrops at a higher level such as one sees to-day on the fine sea-sand on the shores of the River Forth.

Two small fragments of reddish-brown soft clay were found among the bones and sand. This may have been part of a pottery vessel or it may have been used for "luting" the cist, *i.e.* coating inside the corners of the cist to keep it airtight or watertight, as has been found in other cists.

In sifting carefully the mass of bones I found the following objects:—

1. Two small pebbles, a small flint flake (fig. 2, 3), and a small finger-shaped piece of ironstone (fig. 2, 1).

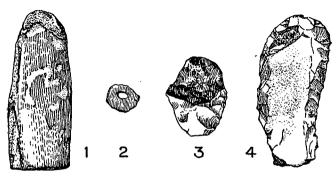


Fig. 2. Objects from Sites 2 and 3. (Full size)

- 2. Small stone disc or bead, oval in shape, and with two perforations (fig. 2, 2). It is 8 mm. long by 7 mm. broad, and is a little over 1 mm. in thickness. The larger perforation is 2 mm. in breadth. The other is a tiny hole near the edge through which a human hair might pass.
- 3. A small piece of "honey-combed" bone, roughly triangular in shape with a small round perforation. Perhaps natural.
- 4. Three and a half bone beads and about five bone fragments that may have been parts of beads (Pl. XXXVI, 2). All four beads are short cylinders perforated lengthwise with a round or oval hole, and are beautifully smooth at both ends where they have been cut from a larger bone. The three whole beads measure in length respectively:  $1\frac{3}{8}$  inch, 1 inch, 1 inch. The diameter of the perforation is about 2–3 mm. They were definitely manufactured from human bones, probably metatarsals. (See Appendix III.)

A parallel to this find was made in a Bronze Age cinerary urn with over-hanging rim discovered in a burial cairn at Milngavie Golf Course, New Kilpatrick.¹ This urn contained one leaf-shaped arrow-head, four barbed flint arrow-heads, and three bone beads and half of another, all calcined.

<sup>1</sup> Proc. Soc. Ant. Scot., vol. xlii. p. 218.

J. G. Callander gave a list of bone beads found in graves in vol. lxiv. of our Society's *Proceedings*, and he noted that all of these bone beads or most were cylindrical. "It is probable," he wrote, "that these objects are the sole remaining parts of a more elaborate and composite ornament such as our jet necklaces, and that they had been placed on the pyre while the body was being cremated; the other parts, perhaps composed of jet beads, would perish in the flames."

Bone beads have been found at Skara Brae, in six brochs, at Jarlshof, and at the well-known Heathery Burn Cave, Co. Durham.

### VI. Site No. 4: Stone Cist: Inhumed Burial with Food-vessel No. 2.

On 2nd October a third stone cist was discovered and broken open by the sand-diggers with their picks and spades before they realised what it was. The end stone at the south-west end of the cist fell down to the bottom of the sand-pit about 20 feet below. This stone measured 19 inches long, 17 inches broad and 5 inches thick. The cist was covered with two stone slabs, the smaller of which was shattered to pieces by the workers. The larger cover-stone being removed, the cist was seen to be full of dark brown sand. For sketch of a reconstruction see fig. 1.

At the west-south-west corner of the cist was a splendid food-vessel (No. 2 from Patrickholm). It was highly ornamented all over with comb-tooth impressions, and at the concave neck-band with a triangular stamp. Inside the food-vessel were pure brown sand, a well-preserved molar tooth and one incisor crown (calcined).

Also in the cist were found one small fragment of bone about  $2\frac{1}{2}$  inches in length, a few other small bone fragments, and a small piece of stone somewhat like flint.

This raises an interesting problem. In this cist (No. 3) were found (a) one molar (not burned) of a human body; (b) one incisor (calcined); (c) some fragments of calcined bones.

Have we here: (1) An inhumed burial and a cremation burial in one cist? or (2) A cremated body accompanied by one normal unburned human tooth, or by an unburned skull? or (3) Was the molar (perhaps a keepsake or part of a necklace) added—unburnt—to the cremated remains when they were interred in the cist?

I did not see the cist when it was entire, so I can only give an estimate of its dimensions from what was left.

It was constructed of at least nine stone slabs, including the two coverslabs. I think there was an additional stone used at the south-southwest corner, about 15 inches in length, but this I did not find. I took compass bearings of the long and short axes of the cist and found them to be 240° (mag.) and 150° (mag.), giving true bearings of 228° and 138°

respectively. Thus the long axis of the cist lay almost north-east to south-west.

The Patrickholm cist was lying about 2 to 3 feet below ground-level. From the stones left and measured, I estimate the dimensions of the cist to be roughly:

# VII. ORNAMENTATION OF FOOD-VESSEL No. 1.

This urn is elaborately ornamented on the rim, the neck, the shoulder, the body and the base (Pl. XXXVI, 1, and fig. 3).

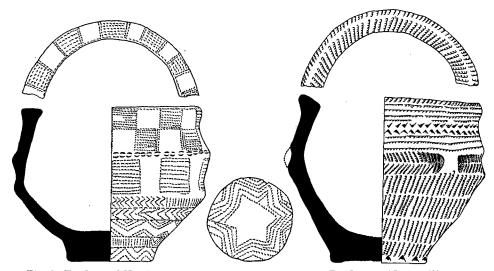


Fig. 3. Food-vessel No. 1: with rim and base. (1)

Food-vessel No. 2.  $\binom{1}{3}$ 

The ornamentation consists almost wholly of impressions made by the teeth of combs. The potter may have used small combs of wood or bone with five to twelve teeth, and there are about ten teeth to the inch. Joseph Anderson, in Scotland in Pagan Times (p. 237), suggested that broken bits of comb may have been used, and on p. 233 (fig. 205) he gives an illustration of a small comb, breadth  $1\frac{1}{4}$  inches, and with twelve teeth, found in the Broch of Bowermadden, Caithness, which would do such work admirably. A. C. Haddon, in his Evolution in Art (p. 14, fig. 2), pictures a very similar small wooden comb of breadth 1.6 inches which may have performed the same service, in the Torres Straits.

Possibly the edge of a small shell has been used to produce fine crescentic impressions, while larger markings of this form in two lines round the vessel above and below the shoulder are obviously made with the finger-nail.

In decorating the urn the potter has divided it into eight parallel bands of varying breadth. The neck has two bands, the shoulder one broad band about 1.3 inches in breadth, and the body proper or lower part of the vessel has five bands.

It is rather remarkable that the rim, the two bands of the neck and the broad band of the shoulder are all divided into twenty-four compartments, alternately plain and ornamented.

The twenty-four panels into which the rim is divided are not mathematically exact. Alternate panels have normally six horizontal lines of markings made with combs with seven to ten teeth. Two of the plain compartments have teeth impressions round the four sides. Two have these at the sides but not at the inner or outer margin. In the other ten plain panels there are markings at the two sides and at the inner margin but not at the outer margin. These fine teeth impressions are square, oblong or crescent-shaped.

The twenty-four panels, alternately plain and ornamented, of the two neck-bands and the broad shoulder band are arranged like the squares of a draught-board. Each ornamented panel of the neck has five to seven horizontal lines with seven or eight teeth impressions. The upper band measures eight-tenths of an inch, the lower band of the neck seven-tenths in width.

The scheme of decoration here closely resembles that on a beaker from Worlington, Suffolk, now in the British Museum (Abercromby, No. 34), a photo of which appears in *Proc. Soc. Ant. Scot.*, vol. xxxviii. p. 377. The ornament on the three zones in the upper part of this beaker is remarkably similar to that of the three highest zones of this Patrickholm urn.

The panels of the broad shoulder band are very irregular in size, the smallest being  $\cdot 4$  to  $\cdot 5$  of an inch in breadth while the largest is  $1 \cdot 1$  inches in breadth.

The ornamented panels have eight to eleven horizontal lines of combteeth impressions.

The lower part of the urn has the ornamentation of its five zones arranged quite differently.

Its first or highest band is divided into six panels, alternating, three with vertical markings made with a very small five-toothed comb about 4 of an inch in width, and three panels filled with a series of slightly tilted "Z"s arranged in parallel succession. This motif is somewhat similar to that on a beaker (Abercromby, No. 104) found at Gordonstone, Elgin, now in Elgin Museum.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Proc. Soc. Ant. Scot., vol. xxxviii. p. 394.

Band No. 2 has a continuous series of herring-bone pattern in two lines of comb-teeth impressions made with a small comb with six teeth.

Band No. 3 has a series of inverted triangles formed by three to four parallel lines of comb-teeth impressions above, and an alternating series of triangles below made by two to three parallel lines of comb-teeth impressions. The same design is found on a beaker found in barrow 60 at Thwing, East Riding of Yorkshire, now in the British Museum.

Band No. 4 has an almost continuous series of vertical and obliquely sloped lines of comb-teeth impressions (six teeth), with the exception of a break at one place where there is a capital "V" formed by two lines.

Band No. 5 has been somewhat irregularly worked out with nine sets of triangles composed of three lines (in one case four) of teeth impressions made with a comb of eight teeth.

The base of this food-vessel, like the one found by Mr Ludovic Mann at Riccarton in 1939, is also ornamented, an unusual feature. It is in the form of a six-pointed star, or rather of five to six concentric six-pointed stars, for the artist has not been able to complete his design perfectly in the very limited space of a base whose diameter is only a little more than two and a half inches. Professor V. Gordon Childe has pointed out that the radial arrangement on the base of Irish and Scottish food-vessels is strikingly similar to that on Bronze Age beakers from Thuringia and the Iberian Peninsula. In the case of this Patrickholm food-vessel, as I have shown, not only the base decoration but also the whole scheme of ornament is strongly reminiscent of beaker pottery. Only five beakers, however, have been found in Lanarkshire out of a total of 275 for the whole of Scotland, whilst 27 food-vessels, or about one-ninth of the total of over 250 for all Scotland, have been discovered in this county.

### VIII. ORNAMENTATION OF FOOD-VESSEL No. 2.

This vessel is in perfect condition (fig. 3), but is nothing like so elaborately ornamented as food-vessel No. 1. Its dimensions are:

Height	•		•			$5 \cdot 1 - 5 \cdot 3$	inches.
Breadth	across	mout	h			$5 \cdot 6$	,,
Breadth	of rim					•56	inch.
Breadth	(max.)	at sh	oulder			$6 \cdot 6$	inches.
Breadth				. '	_	2.9 - 3	

<sup>&</sup>lt;sup>1</sup> British Barrows, pp. 226-8, figs. 3 and 5.

<sup>&</sup>lt;sup>2</sup> A pigmy vessel with a five-pointed star on its base was found in 1937 by A. G. McLeod in a cairn at Nith Lodge, Ayrshire (*Proc. Soc. Ant. Scot.*, vol. lxxii, p. 243, fig. 7).

A small urn filled with calcined bones found by Kermode in a cairn at Cronk Aust, Lezayre, Isle of Man, had also on its base a five-pointed star.

<sup>&</sup>lt;sup>8</sup> The Prehistory of Scotland, pp. 93-4.

The rim is bevelled both inward and outward, the neck is slightly concave, and the more deeply grooved shoulder zone has four imperforate lugs.

Small combs of bone or wood, about half an inch in length and with six to ten teeth in each, have been used to make lines of impressions on both the outer and inner bevel of the rim, and on all the body of the vessel save a narrow central band of the neck where a triangular stamp has been employed.

The neck is ornamented as follows:—

- (a) four parallel horizontal lines of comb-teeth impressions;
- (b) a horizontal line of inverted equilateral triangles;
- (c) a horizontal line of equilateral triangles;
- (d) three parallel horizontal lines of comb-teeth impressions.

All this decoration is found in the space of about an inch and a half, the breadth of the neck-band.

The grooved shoulder zone is about an inch broad. Its ornament is in herring-bone pattern, formed by two sets of slightly sloping lines of combteeth impressions.

The four imperforate lugs which span the shoulder zone vary in thickness from .6 to .9 inch, whilst their breadth is only about .2 inch.

The body of the vessel is ornamented with five irregularly spaced bands of comb-teeth impressions, vertical or slightly sloping downward. There are eight to ten teeth in each line of impressions. There are no lines of demarcation between the bands. The height of this portion of the vessel is about 2.7 inches. The bottom band of impressions is somewhat roughly finished.

The only ornament on the base is a roughly circular line about 2 inches in diameter and separated from the edge of the base by an interval of ·4 to ·5 of an inch.

The seven lines of impressions which encircle the neck were made by one comb; the five sets of lines of the body and the two sets of the shoulder zone have been made by another, a slightly thicker comb.

### IX. CONCLUSION.

The county of Lanark has been especially rich in finds of the Bronze Age. Five beakers are recorded from Carluke, Carnwath, Crawford and Lanark Moor (2). At least 27 food-vessels have been found, sites being at the following places: Baillieston, Blantyre, Cadder, Cathkin, Dalton, Dechmont, Drumsargard (Cambuslang), Drumpellier, Ferniegair, Lesmahagow, Mt. Vernon, Newton, Rachan (near Biggar), Stonehouse, Thankerton. Cinerary urns number over 40, and come from Queen Mary's Cairn, Cathkin Hills; Clyde Iron Works near Cambuslang; Abington; Kyle Park, Uddingston; Drumsargard, Cambuslang; Sheriff-flats, Thankerton; Ferniegair. Five

pigmy vessels hail from the Upper Ward: one found with four urns at Sheriff-flats, Thankerton, and four in the Sim Collection from Coulter, Cauld Chapel, Lamington, etc. Burial cairns, small and large, abound; there are fourteen in the neighbouring parish of Lesmahagow, one of which exceeded 50 feet in height. More than fifty cists have been uncovered, the best known sites being at Baillieston, Blantyre, Cambuslang, Cathkin, Dalton, Drumpellier, Ferniegair, Dalserf, Law Hill (Mauldslie), Lesmahagow, Mt. Vernon.

Gold ornaments (lunula, rings, torques), objects of bronze (axes, spearheads, knives, perhaps too a small ball, measuring  $1\frac{1}{2}$  inches in diameter found at Walston), beads of jet and amber and a button of jet, have all been recorded as finds, especially in the Upper Ward.

To this extensive list of sites, all witnessing to the occupation of the county by Bronze Age peoples, we can now add the testimony of this little cemetery at Patrickholm above the gorge of the River Avon, containing two stone cists with inhumed burials and food-vessels, uncisted cremation burials in the sand, and a small cist with the cremated remains of several individuals and four beads fashioned from human bones.

In conclusion, I should like to express my thanks to all those who have assisted in this research: to the former owner of the quarry, Mr McNeill Hamilton, for generously donating the two food-vessels to the National Museum of Antiquities of Scotland: to the present owners of the quarry. Messrs Maxwell, Reid and Tomison, for their ever-willing and ready cooperation in granting me all facilities to dig at the sand-pit; to Mr Meikle, foreman, and to Robert Lang, Tom Hamilton, Charles Hughes, James Tait and the other sand-diggers for their great assistance; to Mr Robert B. K. Stevenson, Keeper of the National Museum of Antiquities, for his excellent photographs of the food-vessels and the bone beads, and for advice and encouragement: to Mr R. J. Harrison, formerly of the Anatomy Department, Glasgow University; to Dr Alexander G. Mearns, Department of Social Medicine, Glasgow University, and to Miss Margery I. Platt, Assistant Keeper, Natural History Department, Royal Scottish Museum, for their respective Reports on the human remains; to the proprietors of the Hamilton Advertiser and the Airdrie and Coatbridge Advertiser for their fine photographs of the sites and vessels; and, lastly, to my good friend, Ludovic McLellan Mann, for advice on many points and his constant encouragement.

### APPENDIX I.

REPORT ON HUMAN REMAINS FROM SITES 1, 2 AND 3. By R. J. HARRISON, M.A., M.B., B.Chir., M.R.C.S., A.L.S., Anatomy Department, Glasgow University.

### Site 1.

- (a) Part of an adult human skull, comprising the left petrous temporal bone, part of the squamous temporal (mastoid and styloid processes both missing), portions of the left greater and lesser wings of the sphenoid and the left half of the sphenoidal air sinus with a part of the basisphenoid; the base of the lateral pterygoid plate is also present. A small portion of the orbital plate of the left frontal bone is attached to the lesser wing of the sphenoid.
- (b) A portion of the posterior aspect of the lower end of the femur from an adult.
- Site 2.—Cremated bones found loose in sand at a spot above or very close to a short cist. From a large number of fragmented bones the following were definitely identified:—
  - (a) Skull.—Numerous small pieces of membranous bone, all the sutures separated.

Part of the occipital bone of a child, showing the torcular Herophili.

Part of the right frontal bone of a child.

Parts of 1 left, 1 right petrous temporal from a child.

- (b) Teeth.—1 secondary incisor (root only).

  1 premolar (carious).
- (c) Vertebræ.—Parts of three lumbar vertebræ.

Part of sacrum.

Numerous pieces of cervical and thoracic vertebræ.

The odontoid process of an axis (nearly full grown), and portion of another showing an incompletely fused epiphysis.

(d) Limb bones.—Numerous fragments of long bones.

Base of an adult proximal phalanx.

Head of an adult distal phalanx.

(e) Ribs—Numerous fragments of ribs of a child. Some fragments of ribs of an adult.

Conclusions.—The identifiable fragments could have come from (a) a child over 12 and under 20, and (b) from a young adult of about 20 years of age.

Site 3.—Cremated bones, weighing in all over six pounds, from a short cist. From a very great number of large and small fragments the following were definitely identified:—

- (a) Skull.—Over 30 large fragments of membranous bone, in the majority the sutures were separated.
  - 4 left, 3 right petrous temporal bones. It is probable that six of these are pairs, and from their appearance and character it is likely that they are from 2 adults and 2 children.
    - 5 pieces of sphenoid from at least 3 different skulls.

1 zvgoma, almost intact.

- 1 occipital condule with anterior condular foramen, from a child.
- 5 pieces of maxilla, no teeth in situ.
- 2 pieces of mandible at least.
- (b) Teeth.—Primary dentition:

4 incisors.

4 lower molars.

4 upper molars.

Fragments of 3 (?) molars.

Secondary dentition:

11 incisors, roots and fragments of roots only.

28 fragments of molars and premolars, comprising at least 1 third molar, 5 premolars, 4 molars.

2 upper canines (fragments).

Many other unidentifiable fragments.

(c) Vertebræ.—Parts of at least 8 lumbar vertebræ.

Numerous pedicles and neural arches from cervical and thoracic vertebræ.

2 odontoid processes of axis, neither full grown.

(d) Ribs.—1 large right first rib.

1 smaller right first rib.

Large numbers of fragments of ribs from an adult and also a child.

(e) Lower limb.—Upper ends of 4 left femora.

Upper ends of 3 right femora.

Lower ends of 2 right femora.

Lower end of 1 left femur.

From their size and texture it is probable that there are 3 pairs of femora, 1 pair from an adult, 2 pairs from children; the fourth femur appears to be from a young adult.

1 large patella.

3 medium-sized patellæ.

2 small patellæ (? a pair).

Epiphysial plates from upper ends of 6 tibiæ. Parts of the shafts and upper ends of 8 tibiæ.

These fall into 4 pairs (2 adult, 1 young adult, 1 child).

4 (or more) lower ends of tibiæ.

1 upper, 1 lower end of fibula.

4 tali (2 probably a pair, from a child).

Portions of the pelvis (pubis) from a young adult, many other fragments of an adult ilium.

Heads of 7 large metatarsals (adult).

Heads of 6 small metatarsals (child).

3 terminal phalanges of great toe.

(f) Upper limb.—Heads of 8 humeri (4 pairs: 2 large, 2 small).

Upper ends of shaft of 6 humeri.

Lower ends of 3 different humeri, 2 from a child.

Ulna—at least 4 specimens, probably 2 pairs from children.

Radius—2 large, 2 small, and 1 small separate radial epiphysis.

1 lower end of adult ulna.

4 (?) lower ends of radius.

3 hamates, 2 from adults.

1 pisiform, adult.

Remnants of several small carpal bones.

Portions of 14 separate metacarpals.

Fragments of at least 5 terminal phalanges from the thumb, and over 30 fragments of phalanges from fingers and toes.

Fragments of the spine and acromion of 3 distinct scapulæ.

Conclusions.—Although the pairing off of the various fragments is a matter of some speculation, there is sufficient evidence to state that this eist contained, without doubt, the remnants of at least four individuals. Detailed examination of the remnants, however, indicates that of these four individuals one was an adult over 25, and two were children 7 to 12 years of age. There is some indication that the fourth individual was also an adult, though younger, or smaller, or possibly of a different sex than the first. It is indeed tempting to imagine this cist to be the burial site of a family of father, mother and two children, yet there is, unfortunately, no fragment that provides conclusive proof of the presence of a female skeleton. It must be stressed that the pairing off is purely speculative, and can only be based on the relative size, texture and appearance of any two bones from different sides of the body. It must be understood, therefore, that there may well be more than four skeletons in this cist, and that the conclusions given here are presumptive and solely the opinion of this author.

#### APPENDIX II.

REPORT ON HUMAN REMAINS FROM SITE No. 4. By ALEXANDER G. MEARNS, M.D., B.Sc., D.P.H., F.R.S.E., Department of Social Medicine, University of Glasgow.

Examination of Bones from Bronze Age Cist found at Patrickholm Sand-Pit on 2nd October 1947.

Three identifiable structures and some organic fragments comprise the specimens:

- 1. First molar tooth, adult age with extended roots in excellent preservation.
- 2. Small portion of calcined (?) long bone. The specimen possesses the anatomical features of an ulna of adult age. This specimen is fragile but bears the characteristics clearly.
- 3. Tooth crown, calcined, possessing the characteristics of an incisor tooth; probably upper.

### APPENDIX III.

REPORT ON BONE BEADS FOUND IN A SMALL CIST AT PATRICKHOLM, LARKHALL. By Miss MARGERY I. PLATT, Assistant Keeper, Natural History Department, Royal Scottish Museum.

Four fragments of bone were submitted to me for identification. Each was shaped into a short cylinder, and it was suggested that these had been used as beads.

In spite of the care with which they were handled, one was so fragile that it broke to pieces on lifting it. The small pieces, however, were carefully examined to discover from the internal structure any clue as to their identity. The conclusion was reached that the fragments had been worked down their middle in some way, as well as abraded externally, to give the required shape. Many animal bone shafts of similar dimensions were compared with the specimens in question.

Some, such as metatarsals, would require very little alteration before acquiring a short cylindrical shape. As a result I am of the opinion that the bead fragments have been produced from (a) animal bone by abrasion; (b) that they have become fragile through great age and possibly to a certain extent calcined; (c) that they more nearly resemble in texture human bones (cf. metatarsals) than any other species.