

VIII.

NEWLY DISCOVERED SHORT CIST BURIALS WITH BEAKERS.¹

BY PROF. V. G. CHILDE, D.LITT., D.SC.; ARTHUR J. H. EDWARDS,² DIRECTOR OF THE MUSEUM; PROF. ALEXANDER LOW, M.D.; AND MARGARET O. MACDOUGALL.

1. REPORT ON SHORT CIST FOUND AT LOCHEND, INVERNESS-SHIRE.

By MARGARET O. MACDOUGALL, Inverness Museum.

On Saturday, 6th September 1941, a short cist was discovered during tractor excavations on the Dochfour Estate at Lochend, near Inverness. The cist was situated on a bank about 130 feet above the north shore of Loch Ness and about 30 yards from the main Inverness-Fort William road. The bank dips deeply towards the Loch and is situated on arable land.

The cover slab, which lay about 15 inches below the surface, was smashed into fragments, as were the two side slabs. The slab at the bottom end of the cist was also badly damaged, while that at the top was slightly damaged and cracked. A considerable quantity of loose earth, clay, and gravel fell into the cist almost completely covering the contents. When examined on 11th September the extent of the damage as recorded above was discovered. Careful riddling of the gravel resulted in the removal of considerable portions of a human skeleton. The skeleton, when uncovered, was found to have been placed in the usual crouched position and was lying on its left side facing south. Beneath the skeleton small fragments of charcoal and a burnt substance was found.

A beaker, which fortunately was undamaged apart from a slight crack at the rim, was found behind the head of the skeleton, while a flint nodule was found in the N.N.E. corner of the cist.

The cist, which lay in its long axis N.N.E. and S.S.W., measured internally 3 feet 6 inches long, 2 feet 6 inches wide, and 17½ inches deep. The slabs were roughly 2 inches thick and were of gneiss—a common stone in the district. The floor was composed of small gravel similar to that found on the nearby shores of Loch Ness and was about 1 inch deep. Beneath the gravel was black undisturbed earth.

The flint nodule measures 1¾ inch and 1¼ inch and has not been worked.

¹ We print here as a joint paper four important contributions to knowledge of the Beaker culture in Scotland.—ED.

² The late Director has been unable to correct the proofs of his contributions.

The beaker (Pl. VII, 1) measures:—

Height	6 $\frac{3}{8}$ inches (irregular).
Diameter at rim	5 $\frac{3}{4}$ inches.
Do. at base	3 $\frac{1}{4}$ inches.
Circumference at rim	16 $\frac{3}{4}$ inches.
Do. at base	11 inches.
Do. at bulge	14 $\frac{1}{4}$ inches.

It is light reddish-brown in colour and has a fairly smooth surface. The inside is slightly rough and is of the same light reddish-brown colour. The vessel is decorated with four bands of incised ornamentation with uninterrupted lines. The ornamentation is roughly executed, some incisions being very slight, merely marking the surface, while others are $\frac{1}{32}$ of an inch deep. The bottom band of engraving is irregular, part being herring-bone and the remainder half-crescent markings. The remaining three bands are larger than the bottom band—the two top consisting of two rows of right to left strokes about $\frac{3}{16}$ inch long, between which there is a row of right to left strokes and left to right strokes joined by a perpendicular stroke. The third band differs in that it has no band of right to left strokes.

A report on the skeletal remains has been submitted by Professor Low, Aberdeen. The loose gravel which fell into the grave completely crushed several bones and badly damaged the skull. Several teeth were missing, but some were subsequently found amongst the loose gravel, while others had been removed by some unauthorised person.

My thanks are due to Baroness Burton for her kindness in presenting the contents of the cist to Inverness Museum, and to Professor Low for his report upon the skeletal remains.

2. SHORT CIST AT LOCHEND, INVERNESS. REPORT ON THE SKELETAL REMAINS. By Prof. ALEX. LOW, M.D., F.S.A.Scot.

The skeleton from this cist is that of a young man of good muscular development, twenty-five to thirty years of age, and 5 feet 7 inches in stature. The bones are in wonderfully good condition, but unfortunately the tractor in passing over the cist had crushed a number of them.

The Skull.—The vault and face of the skull are well preserved, but the occipital region is deficient. While the basilar suture is closed, all the sutures of the vault are patent both externally and internally, and, further, the cusps of the teeth show only slight signs of attrition, so that it can be estimated that the individual while adult was less than thirty years of age. The skull has distinctly male characters, the superciliary ridges are pronounced, the orbital margins are rounded and the malars are strong. The outline of the vault as viewed from above is broad

TABLE I.—MEASUREMENTS IN MM. OF SKULL FROM SHORT CIST AT LOCHEND, INVERNESS.

Sex	Male	Transverse arc	322
Cubic capacity	—	Horizontal circumference	—
Glabello-occipital length	182 ap.	Maxillo-alveolar length	56
Maximum breadth	156	Maxillo-alveolar breadth	66
Minimum frontal breadth	98	Palatal length	47
Basibregmatic height	130 ap.	„ breadth	40
Basinasal length	97	„ height	18
Basialveolar length	99	Dental length	45
Nasialveolar height	71		
Nasimental height	124		
Bizygomatic breadth	135 ap.	<i>Indices.</i>	
Bigonial breadth	—	Length-breadth	85.7
Nasal height	47	Length-height	71.4
Nasal breadth	25	Gnathic	102.0
Orbital height, R.	31	Upper facial	52.6
„ „ L.	30	Total facial	91.8
Orbital breadth, R.	41	Nasal	53.2
„ „ L.	40	Orbital	75.6
Frontal arc	132	Maxillo-alveolar	117.8
Parietal arc	132	Palatal	85.1
Occipital arc	—	Dental	46.4

TABLE II.—MEASUREMENTS IN MM. OF BONES OF EXTREMITIES FROM SHORT CIST AT LOCHEND, INVERNESS.

	R.	L.		R.	L.
Humerus:			Tibia:		
Maximum length	323	—	Maximum length	384 ap.	385
Radius	—	261	Ant. post. diam.	38	37
Ulna	—	280	Trans. diam.	26	25
Femur:			<i>Platycnemic index</i>	68.4	67.5
Maximum length	473	472	Angle of torsion	—	37°
Oblique length	466	462	Fibula	375 ap.	—
<i>Upper third of shaft:</i>					
Ant. post. diam.	27	27	Stature as calculated from femur 5		
Trans. diam.	39	38	feet 7 inches.		
<i>Platymeric index</i>	69.2	71.0			
Angle of neck	127°	123°			
Angle of torsion	23°	—			

and relatively short—*brachycephalic*. The profile view shows a skull moderately high with root of nose depressed, a certain amount of subnasal prognathism, superciliary ridges projecting, and vault flattened.

The face is of medium height; orbits large, narrow, and with long axes somewhat oblique; the nasal aperture is broad; features characteristic of the short-cist Bronze Age skull.

The palate and teeth are in excellent preservation and are of particular interest. The palate is relatively broad and high, and there has been a

complete set of permanent teeth in the upper and lower jaw, but the right upper central incisor and the right lower central incisor have dropped out and been lost. The cusps of teeth are beautifully preserved and show little trace of attrition except for the central incisors which show edge-to-edge bite. The dental length from the front margin of the first premolar to the posterior surface of the last molar is 45 mm., which, relative to basinasal length, gives a dental index of 46.4—*megadont*. There are no traces of caries or other dental disease.

Of the bones of the trunk there are a number of very fragmentary ribs and vertebræ, also pieces of the two innominate bones, the left innominate having male characteristics—a narrow and deep sciatic notch, slight preauricular sulcus and a large acetabulum.

Measurements and indices of the intact limb bones are given in Table II. While the right humerus is intact, the head of the left has crumbled away, the muscular markings of the shafts are well developed. The left radius and ulna are intact, but the corresponding bones on the right side are broken. Of the hands, the left is represented by the proximal row of the wrist bones, and the metacarpals of thumb, index, and middle finger; all that remains of right hand is the base of metacarpal of index finger.

Both femora show torsion and marked flattening of the upper third of the shaft—*platymeria*. In the tibia the angle of torsion is also well marked, the shaft flattened from side to side—*platycnemia*, and there is a "squatting" facet on the anterior border of the lower articular surface; the right patella is complete, the left rather fragmentary. Of the bones of the feet there are the imperfect talus, calcaneum, and navicular of each foot, and in addition, belonging to the left foot, is a medial cuneiform, and a very stout metacarpal of the great toe.

3. TWO CIST BURIALS AT KIRKCALDY AND THEIR CONTENTS.

By V. GORDON CHILDE.

At the beginning of January 1931 a cist was exposed in excavating the site for a new abattoir at Kirkcaldy and was examined by Mr A. T. Richardson, convener of the Museum Committee. He reported (*Fifehire Advertiser*, January 3rd and 10th) that the cist was orientated east and west, measured internally 4 feet by 2 feet 4 inches by 2 feet 6 inches and was composed of five slabs of freestone of a sort not belonging to the immediate vicinity. The floor was covered with a sprinkling of gravel. It contained a Beaker urn, a tanged blade of bronze with a hazel-wood haft, and a smaller bronze object like a pin, a flint flake, twelve conical buttons, and an elongated bead of "jet" and the hopelessly decayed remains of a skeleton.

Some days later a second cist was exposed only four or five feet away from the first. In it were a skeleton in better preservation and portions of a leather covering with a bone-hafted knife-dagger in its sheath; small fragments of woven fabric were adhering to the leather.

The relics were conveyed to the Museum, and the assistance of Mr Edwards, then Keeper of the National Museum of Antiquities, was secured in their preservation. But owing to various mishaps the full publication of the important discoveries was delayed, and it now falls to my lot with the kind permission and assistance of Mr Mackie, Curator of the Museum and Art Gallery, and Mr Richardson to establish a record of these important objects in so far as is now possible.

Contents of the First Cist.

The Beaker (Pl. VII, 2) has been made of poorly levigated clay in which considerable grits can be seen, but its exterior is covered with a layer of finer clay, probably a true slip, the surface of which has been smoothed or even lightly polished. The walls are nearly half an inch thick. The core is black, but the superficial layers have burned to a muddy brown, while the outer surface is reddish in patches. The interior is stained black. As reconstructed the vessel stands $8\frac{3}{8}$ inches high and measures about $7\frac{1}{8}$ inches across the rim, $6\frac{3}{4}$ at the belly, and $3\frac{5}{8}$ across the base. One inch below the brim the neck is encircled by a low but rather wide rounded collar in relief. Below this the neck is embellished by a zone of incised chevrons, composed of four parallel incisions, delimited just above the shoulder by a single horizontal line. A second horizontal line just below the shoulder forms the upper boundary of a second zone of ornament which extends almost to the base and consists of a net of lozenges formed by intersecting lines. All the decoration is made up of very irregular lines, lightly scratched in the slip with a rather blunt instrument, probably of bone. The patterns have been very carelessly executed: the lines are unevenly spaced, often overrun their frames, and have been emended in several places. In the upper zone the clay seems to have become already too dry when the lines were scratched so that their edges are sharp and almost raised, whereas in the lower zone they are smooth and neater. This might suggest that the vessel had been built up inverted from rim to base; or else that the artist proceeded in the inverse order.

The vessel is in many ways anomalous. It diverges from the standard beaker in its clumsy form and tasteless decoration, and above all in the decorative technique, the impression of a notched stamp or a cord being the normal method in this ceramic class. On the other hand the surface treatment—the use of a slip and the attempt at a reddish colour—is proper to the Beaker and to no other class of prehistoric pottery in

Scotland. Collars, though not so fat, are worn by several other beakers from Scotland and also from England and Wales, and recur on Dutch beakers too. The nearest general parallel would seem to be the vase, now lost, from Cairn Greg, Linlathen, Angus, which was also associated with a knife-dagger; on it, though the motives are different and even poorer, the ornamentation consists of two zones only filled with very sparse patterns and, judging from the woodcut, not executed with a toothed stamp or cord. Both vessels must rank as typologically late and degenerate.

The "bronze" blade (Pl. VIII, 1), now just over 4 cm. (1 foot 6 inches) long, is in reality a thin metal rod hammered out to form a blade; the point is missing and the edges are much corroded. A provisional restoration would give a total length of 4.5 cm. and a maximum width of 1.2. The tang, preserving the rectangular section of the original rod, is .4 cm. wide and not much over .2 cm. thick at the blade's base. It tapers off below, and the extremity is missing. When found bits of the hazel handle were adhering to the tang; it seemed to be 3 or 4 inches long, but was too far decayed for conservation.

Our little blade resembles though not precisely the fragment found by Herring in the Well Glass Cairn, Largantea, Co. Derry (*U.J.A.*, i. (1939), 176). The latter has been compared to the "Palmella points" of the Portuguese Copper Age (Childe, *Dawn of European Civilization*, 1939, fig. 125, 2), but the agreement is neither exact nor illuminating. The Irish specimen was associated with an admittedly late "Beaker-Food-Vessel" hybrid in a megalithic chamber with double portal that contained also several true Beakers. The whole complex gives an impression of lateness such as does the Beaker just described. The comparison gains in significance because another similar North Irish tomb at Loughash contained a Beaker, the closest parallel to which comes from Archerfield on the opposite shore of the Forth! (*U.J.A.*, iii. 79).

The pin or awl (Pl. VIII, 1) is now 2.9 cm. ($\frac{3}{4}$ inch) long, but is incomplete at both ends. It is .4 cm. thick at the widest point and tapers off in both directions. But one end is rectangular, the other round in cross-section. Perhaps one end was designed for insertion in a bone or wooden handle, while the other would serve as a pricker or tattooing needle rather than a pin. Similar ambiguous implements have been found with food vessels in four graves in Scotland,¹ but also with Beakers in England.²

The flint flake has been struck from a pebble of black flint. The crust is preserved on the upper surface, but the bulbar face is unpatinated. It is altogether devoid of secondary trimming.

¹ Balkalk, Tealing, *Proc. Soc. Ant. Scot.*, vol. xiv. p. 260; Mt. Stuart, Bute, *ibid.*, vol. xxxviii. p. 63; Kilmory, Bute, *ibid.*, vol. lxviii. p. 425; Mauchrie Moor, Arran, *ibid.*, vol. v. p. 185.

² Abercromby, *Bronze Age Pottery*, vol. i. p. 59.

The twelve buttons are all of the conical type with V-perforations classically associated with the Beaker complex throughout Europe. But half our specimens are oval rather than circular in plan, and the set is nicely graded in diminishing sizes as Pl. VIII shows. The largest measure 2.1 by 1.7 cm., the smallest 1.5 by 1.1 cm. and 1.3 by 1.3 cm. respectively.

In England such buttons are most often found in Beaker graves, but in Scotland one was found with a Food Vessel (*Proc. Soc. Ant. Scot.*, vol. lxxviii, p. 431), while another served as the clasp for a crescentic necklace—a type frequently associated with Food Vessels (*ibid.*, vol. lxxiii, p. 326). In no other case has so large an assemblage of buttons been reported. Their number and gradation in size would be appropriate to some more decorative use than fastening cloths. Very possibly they really did form part of a necklace or collar, but presumably sewn on to some fabric.

The single bead is now 2.4 cm. ($\frac{15}{16}$ inch) long and .85 cm. in diameter at the widest point; the string hole is not quite symmetric, measuring .3 by .25 cm. across, but seems to retain the width throughout its length. Such fusiform beads are most commonly met as components of the crescentic necklaces already mentioned, but are sometimes associated only with simple disc beads as at Greenknowe, Pluscarden (*Proc. Soc. Ant. Scot.*, vol. lxxiii, p. 224).

Hence all the relics are compatible with the deduction from the degenerate character of the vase that the burial belongs to the end of the Beaker phase.

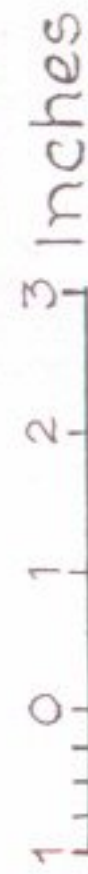
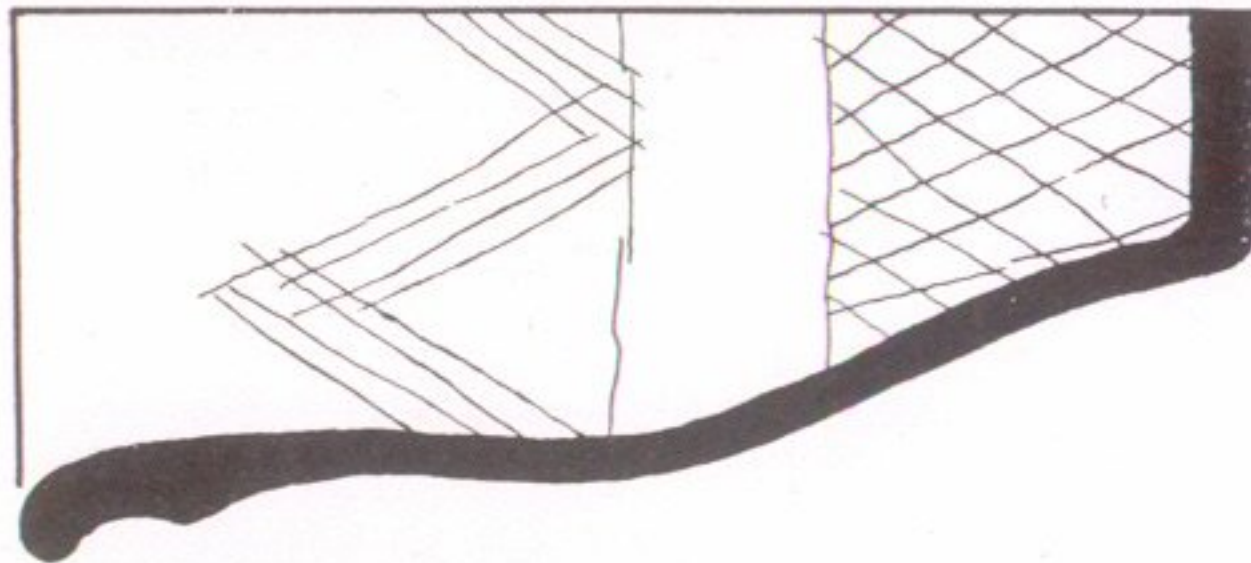
Cist 2.

The *knife dagger* is much corroded and the point is missing altogether, but clearly belongs to the round-heeled class which generally has a blunted point. It is now 4 inches long, but was probably originally $4\frac{1}{2}$ inches; the width at the widest part of the butt is just over $1\frac{1}{2}$ inch. The blade is flat (fig. 1). The hilt was apparently attached by three rivets, of which the middle one is missing, together with the section of the hilt-plate into which it would have been fixed. The two surviving rivets are $\frac{7}{12}$ inch long and $\frac{3}{16}$ inch thick with heads, $\frac{5}{16}$ inch across, at both ends. The imprint of the hilt of the butt of the blade, with the usual semicircular indentation in the centre, is still clearly visible. When found parts of the actual hilt were still adhering to the metal. It was made of bone, according to the Royal Commission, but no portions of the material have been preserved.

The blade is now rusted on to its sheath of hide that is in such a fragile condition that it would be unsafe to attempt to remove it. This sheath (Pl. VIII, 2) appears to-day to consist of two distinct layers of hide. To form the sheath the strips have been simply folded over and the edges sewn



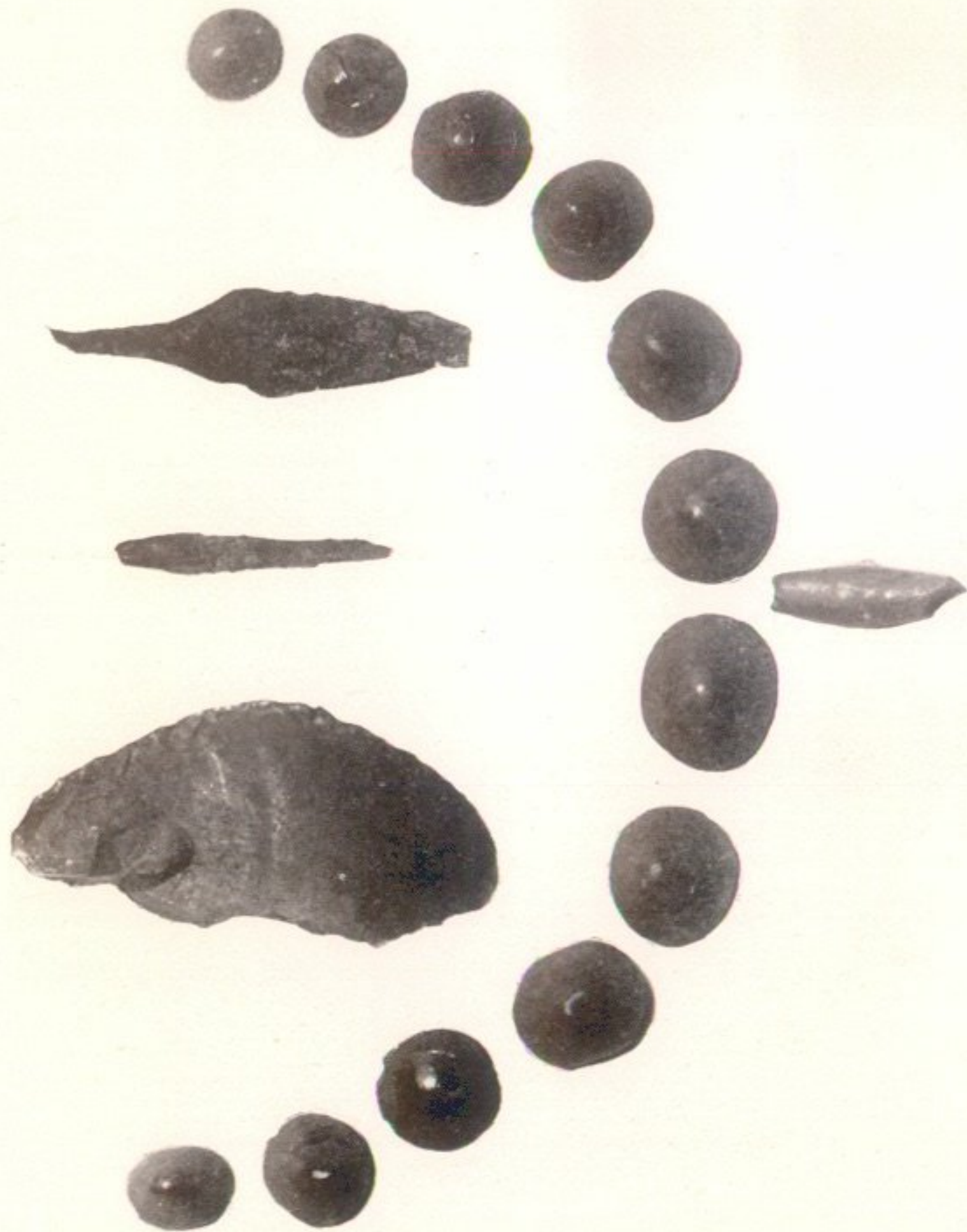
1. Beaker from Lochend, Inverness.



2. Beaker from Kirkcaldy.



INCHES. 1 2
2. Dagger in sheath with frog from Cist II.



1. Grave goods from Cist I. i.



1 0 1 2 3 Inches.

1 Beaker from West Fenton.



1 0 1 2 Inches

2. Beaker from Nunraw.

together; in the half-inch of joint still intact there are five stitches, the thread being apparently sinew. It is just possible that the whole was originally a single strip of hide, folded double, and that the second fold along or parallel to the sheath's mouth has decayed away. In any case there is, now detached, part of a strip of hide, about $\frac{1}{2}$ inch wide, that if not really part of the main folded strip must have been sewn round the sheath's mouth to strengthen it. It is perforated with holes now $\frac{1}{4}$ inch long and $\frac{1}{8}$ inch wide in which fragments of a hide lace are still sticking. Stitches of the same size and material served also to attach to the sheath a leather frog. The remains of this interesting appurtenance are still 4 inches wide and $2\frac{1}{2}$ inches long. The fabric adhering to the leather was certainly woven from a vegetable fibre, but its exact nature could not be decided.

This is the thirteenth flat round-heeled riveted knife-dagger reliably recorded as found in a grave in Scotland. Of these, two only actually lay in the same cist as a Beaker—namely those from Callachally, Mull (*Proc. Soc. Ant. Scot.*, vol. ix. p. 537—in small fragments), and from Cairn Greg, Linlathen, already cited as containing the nearest parallel to our Beaker (*ibid.*, vol. vi. p. 98). The gold-mounted dagger from Collessie was found under the same cairn as two Beakers, but in a pit nearer the periphery than either of the Beaker graves and containing cremated bones. Like the gold-mounted dagger from Skateraw (*Proc. Soc. Ant. Scot.*, vol. xxvii. p. 7), it was more than an inch longer than ours. At Doune Road, Dunblane, a blade comparable in size to ours accompanied a Food Vessel (*Trans. Stirling Nat. Hist. Arch. Soc.*, vol. i. p. 28), while a gold mount presumably belonging to another accompanied a Food Vessel in a cist at Comuston Cross, Monikie (*Proc. Soc. Ant. Scot.*, vol. ii. p. 447).

Accordingly in Scotland knife-daggers in general and ours in particular are to be assigned to the Food Vessel phase or the very end of the Beaker period. In my Rhind lectures I gave reasons for believing that these two stages overlapped so that the terms are actually interchangeable. Now we have seen that the contents of Cist 1 are appropriate precisely to this phase. At the same time the spatial relations of the two cists strongly suggest contemporaneity. We have therefore two graves belonging at

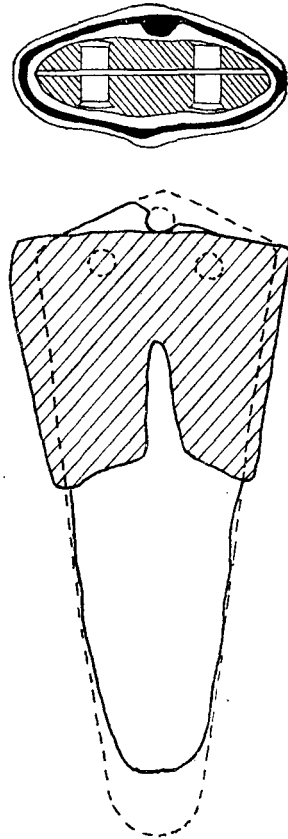


Fig. 1. Bronze Dagger in leather sheath from Kirkcaldy. †.

least to the same archæological stage, of which No. 2 certainly contained the remains of a male, while the furniture of No. 1 is appropriate to a female. The graves therefore very probably represent the burials of man and wife, both persons of relative wealth and rank. It is not proved that the interments took place simultaneously, still less do the cists afford evidence for suttee. On the other hand it may be remarked that the practice of burying two or more persons in close proximity is more appropriate to the Food Vessel complex (save in Aberdeenshire where Beakers remained fashionable during much of the Food Vessel period).

4. A CIST CONTAINING A BEAKER URN AND SKELETAL REMAINS AT WEST FENTON, NEAR DREM. By A. J. H. EDWARDS, Director of the Museum.

In December 1943, when ploughing operations were being carried out on the farm of West Fenton, near Drem, in the Parish of Dirleton, East Lothian, the ploughman, Mr Thomas Dunnet, accidentally uncovered a short cist in which lay a Beaker Urn of clay and some skeleton remains.

The Honorary Secretary of the East Lothian Antiquarian and Field Naturalists' Society, Mr C. L. Bruce, very kindly sent information of the find to the Museum, and we are indebted to him and to the proprietor, Mr John A. Morrison, for particulars of the discovery.

The field in which the grave was found is known as Park Hills, and the site chosen for the burial some rising ground between $\frac{1}{2}$ and $\frac{3}{4}$ of a mile south-west of the farm of West Fenton, and a little to the north of the O.S. bench-mark.

The cist, the long axis of which lay east and west, consisted of four side-slabs and a cover stone. It measured 3 feet 4 inches in length, 1 foot 8 inches in width, and 1 foot 8 inches in depth. The cover-stone was rough and irregularly shaped and measured about 3 feet by 4 feet, with an average thickness of 4 inches. The side stones were smooth in comparison to the cover-stone, but the average thickness was much the same—4 inches.

The Beaker (Pl. IX, 1), which was found lying at the west end of the grave, is a very fine specimen of this particular type of Early Bronze Age vessel. It is made of a light red clay and measures $7\frac{7}{8}$ inches in height, $5\frac{1}{8}$ inches in external diameter at the mouth, $5\frac{1}{4}$ inches at the bulge, and 3 inches at the base. The exterior is apparently covered with a thin slip and is lightly burnished.

The decoration consists of seven zones of horizontal hyphenated lines executed with the "cog-wheel" or notched stamp and close set in groups of 5 to 3. Between these groups of lines the wider zones on the shoulder and below the bulge are left blank, while the rest are filled with a metopic

arrangement of stamped and sharply incised elements executed after the horizontal lines had been completed. Every other panel is left blank save for feathering of the borders; the filling of the remainder consists alternately of columns of stamped herring-bone motives and groups of vertical incised lines with obliquely cross-hatched interspaces.

The Society is indebted to Mr John A. Morrison, who has generously presented the urn to the National Museum of Antiquities of Scotland.

REPORT ON THE SKELETAL REMAINS by Prof. ALEXANDER LOW, M.D.

Apart from the skull the bones of the skeleton are very imperfect due to decay. From examination of the skull it can be said that the skeletal remains indicate an adolescent from ten to twelve years of age.

The skull has crumbled away where its left side has lain in contact with the floor of the cist and, further, the lower jaw has decayed so that only part of the right ramus is intact.

TABLE III.—MEASUREMENTS IN MM. OF SKULL FROM SHORT CIST AT WEST FENTON.

Glabello-occipital length	176	Orbital breadth, R.	41
Ophryo-occipital length	175	Sagittal arc, 1	124
Nasio-inional length	166	" " 2	126
Minimum frontal breadth	96 ap.	" " 3	117
Parietal breadth	142		— 367
Basibregmatic height	135		
Basinasal length	97		
Basialveolar length	90	<i>Indices.</i>	
Nasialveolar height	65	Length-breadth	80.7
Nasimental height	105	Length-height	76.7
Bizygomatic breadth	120 ap.	Gnathic	92.8
Orbital height, R.	31	Total facial	87.5
		Orbital	75.6

There is no trace of closure of any of the cranial sutures, the basilar suture being still widely open. The teeth are of especial interest in arriving at the approximate age of the individual. In both upper and lower jaws the first permanent molar, the six-year-old tooth, is erupted and behind this the second permanent molar is just erupting—this usually takes place at twelve years of age. The second premolar in the upper jaw is just erupting, and in the lower jaw the first premolar and canine teeth are erupted. From the time of eruption of these teeth one can infer that the individual was between ten and twelve years of age.

Although the skull is young it already shows characteristics of the Bronze Age Beaker skull. It is broad—*brachycephalic*—with a high vault

and flattened occiput. The forehead and face are relatively broad and the orbits narrow—*microseme*.

The other bones of the skeleton are represented by a few fragments: four small pieces of ribs, part of left clavicle, shaft of right humerus, shaft of right femur, and five fragments of leg bones.

5. A BEAKER BURIAL AT NUNRAW, GARVALD, EAST LOTHIAN.

By Prof. V. G. CHILDE.

In January 1944 Mr Kellagher, ploughman at Nunraw Barns, displaced a flat stone in a field disclosing a cavity in which lay a Beaker urn and a human skull. The urn, the skull, and the femurs were withdrawn through the aperture, but the cist was not otherwise disturbed and information was sent to the Rev. V. C. Bennie of Garvald, who promptly informed the Director of the National Museum. At his request I repaired to the spot next day and opened the cist with the help of Mr and Mrs Bennie and Jack Forrest.

The field in which the grave was found lies east of the hill road from Garvald to Duns and close to the lodge of Nunraw House (O.S. East Lothian, 16 N.W.). The cist was at the highest point of a level terrace just over 600 feet above O.D. and at the very edge of a steep brae falling away southward to the Thorter Burn and a tributary thereof. No sign of a cairn could be discerned, but the field has been under plough for many generations so that any such superficial monument might have been completely obliterated. The capstone was an irregular diamond-shaped slab, about 8 inches thick with a maximum length of 4 feet and width of 5 feet, so that it must originally have covered the cist completely. The latter was orientated roughly east and west, the major axis reading 58° E. of true N. It was composed of six thin sandstone slabs, one at each end and two on each side, all deeply planted in the sandy gravel of the subsoil, but supporting in places small horizontal slabs of the same material. The eastern headstone was 18 inches long and 22 inches high; the western one, 21 inches long and of similar height, was supplemented by a second slab outside it that could not be measured without destroying the whole structure. The distance between the headstones along the southern side of the cist was exactly 30 inches, but the side slabs overlapped to an extent of 5 inches. The eastern upright was 22 inches high and over 18 inches long. The western upright, about 18 inches high, was set behind the eastern, so that of its total length of 16 inches only 11 were exposed between the extremity of its neighbour and the western headstone. Three small slabs laid horizontally on its upper edge made up the deficiency in its height. On the northern side the western slab was exposed for a length of 25 inches. Behind and over-

lapping its eastern end for a couple of inches stood another stout upright of rather less height, but the actual face of the cist at the east end was formed by a thinner and narrower slab, only 9 inches wide, set between the stout upright and the north end of the headstone and abutting against the east end of the west upright, with which it was not quite in line. Above it came a layer of slabs as in the diagonally opposite corner.

The skeleton reposed on a very rough pavement of coarse pebbles only 18 inches below the underside of the capstone. The pebble bed rested in turn upon the much sandier subsoil, into which the upright slabs had been embedded to a depth of 6 or 7 inches. As stated above, the skull and femurs had been extracted before the capstone was lifted, but fortunately the lower jaw and one knee cap were still *in situ*. These showed that the body had been interred facing south with the head at the west end of the cist, and lying on its right side in a strictly contracted attitude with the knees drawn up to the chin and the feet close to the pelvic girdle. The arms were similarly bent up to bring the hands close to the face. At the west end of the cist behind the skull stood the Beaker intact. A small unworked flake of black flint was found among the pebbles of the pavement under the pelvis. No other relics were disclosed by a careful scrutiny of the cist's contents.

REPORT ON THE BEAKER by A. J. H. EDWARDS,
Director of the Museum.

The Beaker (Pl. IX, 2) is intact and is made of greyish clay that is turning to brownish red on the outer surface. The surface is lightly burnished inside and out. The vessel measures 6 inches in height, $5\frac{3}{8}$ inches in external diameter at the mouth, $4\frac{5}{8}$ inches in width at the bulge, and 3 inches in diameter across the base; the lip is bevelled downwards towards the interior for $\frac{5}{16}$ of an inch.

The surface is decorated with three zones of ornamentation separated by two narrow plain zones. On the exterior edge of the rim the decoration consists of a series of oblique dashes running from left to right. With this exception, the three zones of decoration are similar and consist of a row of vertical lines with, above and below, a multiple horizontal chevron pattern. The vertical lines and the chevrons are bordered, above and below, by two horizontal lines. In the lowest zone the lines below the last row of chevrons have been omitted for lack of space. The decoration of the vessel has been boldly executed entirely with the notched stamp or "cog-wheel," giving the well-known hyphenated line effect. The urn is now in the Museum, having very kindly been deposited on loan by the proprietor, Mr Marcus Spurway.

Bones of Trunk and Limbs.—The bones of the spine are represented by the first two cervical, the five lumbar vertebræ, and the upper three segments of the sacrum. Of the two hip bones the two iliac bones are present and can be articulated with the sacrum; the two ischial bones of pelvis are imperfect. There are also a number of fragmentary ribs and vertebræ.

Of the upper extremities there are a right clavicle and a small piece of right shoulder blade; lower three-fourths of shaft of left humerus; each forearm represented by the radius and ulna without epiphyses and two metacarpals and two phalanges of hand.

Of the lower extremities there are the femora with epiphyses—each measures 280 mm. in total length; the shafts of the two tibiæ and imperfect shafts of the two fibulæ; the left talus and calcaneum and four metatarsals and two phalanges of foot.

REPORT ON MATERIAL ADHERENT TO THE SKULL FROM SHORT CIST AT
NUNRAW MAINS, EAST LOTHIAN. By E. V. LAING, M.A., D.Sc.,
Lecturer in Forestry, Aberdeen University.

The material is composed of extremely fine roots which have very long root hairs, and I am inclined to think they are the roots of grass. There is also amongst the material a good deal of fungal hyphæ and there are a few two- to four-celled spores which are known to belong to a soil fungus. It is very difficult to name a plant by its root unless there is something very characteristic. I would venture to suggest that the grass came from a Fairy Ring. This impression is based on the quantity of fungal hyphæ.