A BRONZE AGE CEMETERY NEAR COWDENBEATH, FIFE. By A. D. LACAILLE, F.S.A.Scot.

On 11th October 1928 notices appeared in the Press to the effect that some pieces of ancient pottery had been found on the Cowdenbeath Golf Course. From the articles published it seemed that the relics were in the keeping of Mr Robert Holman, a newspaper correspondent at Cowdenbeath. A few days later, a second report stated that a number of shards, complete vessels, and many fragments of incinerated human bones had been unearthed at the same place.

Having taken an early opportunity to go to Cowdenbeath, I examined the pottery and bones in Mr Holman's office. Inspection there showed that no less than five vessels were represented in the discovery, which, I learned, goes back in the first instance to September 1927.

Mr Holman stated that he first heard of pottery fragments being found about that time when workmen were engaged in making a bunker at Green No. 17, situated at the highest point of the golf course. Later the exact spot was found to be about 501 feet above Ordnance Datum, 200 feet north-west of an old quarry, 500 feet north of the London and North Eastern Railway (Inverkeithing and Perth Section), and about 80 feet north of the 500-feet Bench Mark cut on a stone where the foundations of a wall meet the drystone dyke separating the golf course from a plantation of trees above the quarry. The site is in the parish of Ballingry about 200 yards north of the march with the parish of Beath; from it a wide view is commanded to north, east and west.

Although many years have passed since farming was engaged in here, agricultural operations had so long been carried on formerly at the place, that it cannot be said definitely now if there survive the remnants of a mound or cairn where the pottery was accidentally brought to light. While it might be remarkable that the examination of the ground did not reveal more than a few stones in the soil, the presence of the nearby dyke of land-gathered stones suggests the possibility that a cairn had existed.

The shards found in the autumn of 1927 were thrown aside by the workmen as being of no moment, but many of the pieces were recovered a year later by my informant. On further digging, on 9th October 1928, the greenkeeper and his assistant discovered two more sepulchral deposits, making five in all. These consisted of cremated human bones, originally placed in urns set vertically on their flat bases, the tops being not more than a foot under grass.

Little can be said now about the finds made in 1927, but as regards those of October 1928 precise details are fortunately available. vessels are all kiln-fired and of varying shades of brownish red, the clay containing small fragments of pounded stone added to give a harder consistency to the finished urns. A description of these is given hereunder in the order of their discovery.

Some time after my visit to Fife, Mr Holman sent on a box containing pottery and bone fragments picked up by searchers attracted by the subsequent publicity in the newspapers. Local interest in the discovery being thus aroused, many pieces collected by the curious were secured.

Looking over the potsherds obtained as a result of the general search in the vicinity of the seventeenth green and quarry below it, I noticed that there were some fragments bearing distinctive ornamentation and representing one more urn. The cemetery had thus comprised no less than six vessels, and it is possible, of course, that the burials here Digging or search might well disclose were even more numerous. additional evidence that this was so.

Urn No. 1 is now represented by a few dark mellow brick-red fragments, the clay containing a fairly large proportion of pounded While scanty in number, the pieces are sufficiently large to show, not only the original contours of the vessel of which they formed part, but also the nature of the scheme of decoration. From what has been put together, a reasonable conjecture can be arrived at as to the height and diameter at the base; these were probably 10 inches and $4\frac{1}{2}$ inches respectively. Internally, this upper portion forms the arc of a circle 8 inches in diameter.

Below the plain flat rim which declines slightly inwards as well as

projects outwards to a pronounced lip, the wall averages $\frac{5}{8}$ inch in thickness. Under the external edge of the rim is a hollow moulding, in the lower part of which is a horizontal line made by the impression of

a twisted cord into the clay before firing. From here the wall bulges outwards for $1\frac{1}{8}$ inch, and then curves inwards for a little way to the point where the upper portion of the urn is finished off in a well-rounded exterior beading. Above this beading is a horizontal line similar to that below the rim. These parallel lines confine a zone of decoration $2\frac{7}{8}$ inches wide, com-

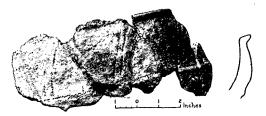


Fig. 1. Cinerary Urn from Cowdenbeath (Urn No. 1).

prising double rows of lines made by a twisted cord, set in pairs and arranged in an effective chevron pattern (fig. 1).

Urn No. 2 is very similar with a low exterior beading $2\frac{3}{8}$ inches below the top. The clay, however, is of coarser body and contains many comparatively large pieces of pounded basalt; it is of a lighter shade

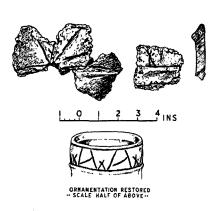


Fig. 2. Cinerary Urn from Cowdenbeath (Urn No. 2).

than No. 1. The wall of the upper part is vertical, but, inside, the rim is formed by a rounded but uneven internal moulding. From what remains of the urn below the exterior beading appearing on one or two of the few fragments, it may be seen that the lower wall of the vessel originally decreased gradually downward in diameter to the base. Consequently, this urn may be placed in the category of the bucket-shaped type of sepulchral vessel. It has probably measured 9½ inches in height, 7½ inches and 4½ inches across the mouth and base respectively.

Immediately under the edge is a deeply incised line running round the rim; this line has a counterpart in another one less deeply cut above the exterior beading. These parallel lines enclose a decorated space containing a design made up of parts of conventional geometrical ornamentation, but here disposed in an interesting and unusual way. This simple and effective scheme will be seen from the restoration based on the pattern borne on the shards. The main motif is a series of large incised saltires,

placed near the lower enclosing horizontal cut, and between two oblique lines radiating upwards in opposite directions.¹ In the interspace between each opposed set of lines is another line placed approximately in the middle and set at a less acute angle. It does not seem to have been the artist's intention to make any of the cuts meet except in the case of the cruciform figures (fig. 2).

Urn No. 3 now consists of a small portion of the lower wall, but the base is complete and measures $4\frac{3}{4}$ inches across. The clay, of a light

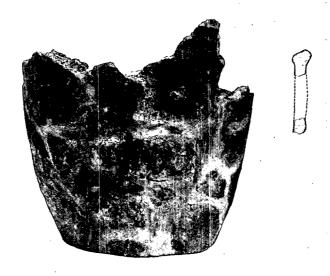


Fig. 3. Cinerary Urn from Cowdenbeath (Urn No. 4).

reddish-brown brick shade, is of poor quality but highly fired throughout. Innumerable grass radicles have caused the pottery to come apart, and so much is missing that it is only possible to conjecture a proportionate estimate of the original height to be 10 inches with a diameter at mouth of $7\frac{1}{2}$ inches. A fragment indicates that the urn was possessed of a slight exterior beading, but there is nothing to show if any pattern decorated the vessel, which was probably of the shape of a bucket.

Urn No. 4, although not entire when discovered, has been reconstructed so far as possible. The clay, of somewhat inferior quality, dull brown in colour, contains much coarse material and is not uniformly fired. When taken from the soil it was found to be soaked through and

¹ From the appearance of the fragment shown in fig. 2, the large X in association with part of the oblique line on the right of it was erroneously taken by a newspaper to be a piece of a Roman vessel bearing an ill-made numeral XI. As a relic of the Roman occupation, the discovery was first reported in the Press.

reduced almost to the consistency of dough. So many radicles of grass issued from the numerous cracks and the clay itself that the vessel collapsed in drying. Little now survives of the top, but in its reconstructed condition it is apparent that it represents the largest urn of the group, and is of the bucket-shaped type. Originally it has measured about 11 inches in height and 8½ inches in diameter over the top. On one fragment is a portion of a low exterior beading with a fraction of an incised horizontal line near it. The decorated zone was probably about 3 inches wide, and the ornamentation was a geometrical pattern of cut-out cross-hatched lines, but in one place only does the pottery recovered indicate that this was so. Fragments of the thick rim, projecting slightly outwards and rounded off externally and inside as well, have been collected, and from these the drawing of the section has been made to accompany the illustration (fig. 3). The walls are almost vertical.

Inside this vessel were the cremated bones of two individuals—those

of an adult and of a young person. With these were fragments of soft yellowish clay, which, no doubt, formed part of a packing or cover serving to seal the osseous contents. The surmise that clay formed a means of closing the urn is supported by the examination of No. 5.

Urn No. 5 is bucket-shaped like No. 4, and at some time had also suffered injury in the upper portion, probably by contact with a plough-share. When unearthed, long cracks extended from the top of the urn to its base, but after drying, restoration of the vessel was effected and the few missing portions of rim were reconstructed. The illustration shows the urn as now completed (fig. 4).

A clay layer, still intact when the vessel was first handled, reached to



Fig. 4. Cinerary Urn from Cowdenbeath (Urn No. 5).

within $1\frac{1}{2}$ inch of the top. This packing, 2 inches deep, was tightly pressed against a mass of incinerated bones beneath it. Near the top

¹ Only two Scottish Bronze Age burial deposits, presenting this manner of sealing cinerary urns with clay, have been placed on record. Three of the urns containing calcined human bones found in 1906 at Stevenston, Ayrshire, were covered with a plugging of soft clay (Mann, Proc. Soc. Ant. Scot., vol. xl.; Urn No. 2, pp. 382-5; Urn No. 8, pp. 389-90; Urn No. 15, p. 394). Mr John Smith mentions a sepulchral vessel removed from a prehistoric grave in the same county as far

of the osseous deposit was a fragment of the parietal or temporal bone to which adhered a crust of green-coloured cuprous oxide, indicating that there had probably been gathered up with the human remains some small object of copper or bronze. A stone 1½ inch long of the native basalt was found embedded in the middle of the clay plugging.

The urn containing this remarkable and untouched deposit is of a pleasing shade of reddish brown and is $8\frac{3}{4}$ inches in height, the walls averaging $\frac{1}{2}$ inch in thickness. It has, in its upper part, a decorated zone $2\frac{1}{2}$ inches wide, enclosed at top and base by a line running round the vessel. The pattern is somewhat complicated and interesting as showing the diversity in ornamentation which may be produced by a simple combination of straight lines. In the present example, the decoration consists of a succession of treble lines arranged in a zigzag design, the lower extremity of each set so disposed that, to a certain extent, it overlaps its neighbour on either side along the lower enclosing line.

Urn No. 6 has been reconstructed from a few fragments of the top, body and base. From the collection of shards received after my visit to Cowdenbeath, these were identified as belonging to a distinct sepulchral vessel. Because of the nature of the pieces this complete reconstruction of the urn could be made, and it materially adds to the information to be derived from the Cowdenbeath deposit.

The pottery is much closer and harder in body than any of the other vessels from the site. The outer layers are of a terra-cotta shade. In the composition of the potter's clay, pounded granules of white quartz were used and, upon examination, the breaks revealed that the outer crust, upon which the firing had acted most, covered an inner layer bluish black in colour. Some of the fragments are seen to be very much weathered, and the hard grains of quartz stand out prominently from the softer material. This feature points to the fact that these pieces had probably been unearthed at some distant date and were thrown away in the neighbourhood of the quarry. Throughout the thickness of the urn the same homogeneity is apparent, thus testifying to the quality of the potter's clay. In this respect Urn No. 6 may be regarded as an important specimen of the Bronze Age potter's craft.

The urn, in its reconstructed condition, is the shape of a flower-pot and is 9½ inches high. Across the mouth it measures 7½ inches while the diameter of the base is 4 inches. The thickness of the wall increases back as 1837; its contents were sealed with flat stones as well as clay (*Prehistoric Man in Aurshire*, p. 149).

¹ This is confirmed by Sir Arthur Keith to whom the bones were submitted for examination and report—infra, p. 268.

uniformly from $\frac{3}{8}$ inch at the top to $\frac{5}{8}$ inch where it merges into the base. So perfect is the circularity of the base, $\frac{3}{4}$ inch in thickness, that one might readily be led to believe that the wheel had been employed in the production of this interesting urn.

For $1\frac{3}{4}$ inch the upper part bulges outward to a low exterior beading below which the contour changes and the diameter decreases evenly downward. The narrow rim, slightly depressed inwards, measures, as

has been stated, \(\frac{3}{8}\) inch in thickness. Under the brim is a horizontal line formed by impressing a thin cord into the clay before firing. A similar impression has been practised above the beading, and enclosed within the two horizontal lines is a pattern of three lightly impressed parallel lines made by a twisted cord. The lines are arranged chevronwise, the extremities being placed 2\(\frac{3}{8}\) inches apart at top and bottom alternately (fig. 5).

Disposition of the Urns.—An overground survey was made where the cinerary urns were found, and the place occupied by each was noted. (What might have been the situation of the sixth urn can never be told for



Fig. 5. Cinerary Urn from Cowdenbeath (Urn No. 6).

the fragments of this vessel were picked up in the disused quarry.)

The shallow rectangular excavation made by the workmen measured about 20 feet by 12 feet, and was little more than a removal of the thick turf.

Urns 1, 2, 3 and 5 were placed in a line extending for 13 feet 7 inches and orientated $12\frac{1}{2}^{\circ}$ west of true north, urns 1 and 2 being found together at what may be called the northern end of the row. The fifth vessel was unearthed at the southern extremity, and the third was laid bare at a spot approximately between the isolated No. 5 and the group including 1 and 2. Urn 4 was embedded in the ground at a point 4 feet 3 inches to the west of No. 5, that is to say, in a line at right angles to the axis of the main row of the four vessels. Illustration (fig. 6) shows the position of the cemetery in Cowdenbeath Golf Course and the situation of the urns.

The urns were placed in the ground with the mouth upwards and no stones were used to pack them in the soil.

Near the place occupied by Urn No. 4, I picked up a small fragment of secondarily worked olive-coloured Arran pitchstone. This furnishes an interesting indication of commerce or travel in the late Bronze Age, for, although pitchstone implements have already been noted from the eastern counties of Scotland, this is the first recorded example from a locality north of Forth.¹

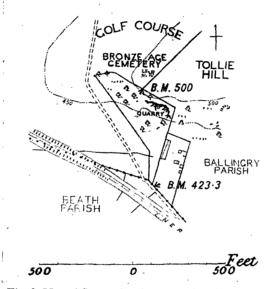


Fig. 6. Map of Cowdenbeath Bronze Age Cemetery Site.

Report on the Bones.—Sir Arthur Keith, F.R.S., Hon. F.S.A.Scot., of the Royal College of Surgeons of England, who has been kind enough to examine the incinerated remains sent him for examination, says: "In only two of these cremations are the fragments big enough to permit inference. (4) In this case the evidence is not clear. All are human ashes: but the cheek-bone (malar) in the separate envelope is that of a young small person, while the other parts are of a large-limbed person—probably man. The earth containing a few fragments of burnt bone represents the scrapings gathered up after the cremation.

"(5) Parts of the skull and limb bones can be identified. All seem parts of one individual—a woman. The tibia is flattened or platyenemic, as was usually the case in Bronze-Agers. Her chin and lower jaw

¹ Callander, Bulletin de la Société Préhistorique Française, vol. xxvii. p. 218.

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were small. The earth with No. 5 has human ashes in it, but more one cannot say. I noticed the green crust and suppose some brass or copper thing had come in contact with the fragment of bone. I saw no sign of rheumatoid changes on any of the bones.

"The fragments gathered after you left are also from a human cremation."