

AN EARLY BRONZE AGE CAIRN ON HARLAND EDGE, BEELEY MOOR, DERBYSHIRE

By D. N. RILEY

THE moors on the high ground bordering the valley of the river Derwent preserve many ancient burial mounds, among which, a short distance below Harland Edge on Beeley Moor, at a height of about 1,090 ft., there is the large barrow, perhaps better described as a cairn (SK 288688), which was recognized in 1959 by Mr. C. Gregory and was investigated between 1960 and 1962 by the Hunter Archaeological Society, by kind permission of the Trustees of the Chatsworth Settlement. The cairn stands on a relatively pleasant south-westward slope, well drained by the underlying sandstone rock. The surface of the moor in the immediate vicinity consists of sandy soil with frequent weathered sandstone boulders, and there is a thick growth of bracken (fig. 1).

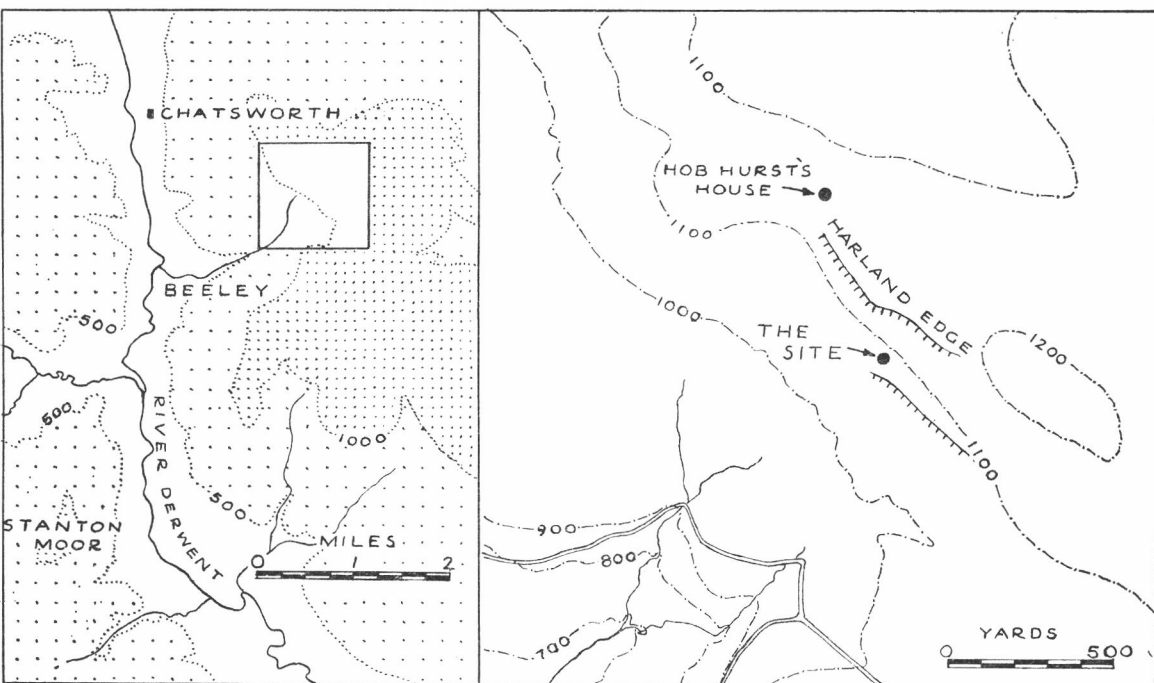


FIG. 1. The Derwent valley and the site of the Harland Edge cairn.

Hob Hurst's House, the well-known barrow with large stone cist, opened by Thomas Bateman on 3 June 1853, is situated about 600 yards to the north-west. The Harland Edge cairn had a large disturbance in the central and south-western parts, which presumably showed where early antiquaries had worked. There is no knowledge locally of this early work, though Thomas Bateman's excavations may have stimulated digging by others.

The countryside hereabouts is relatively rich in early remains, among which it is interesting to note, not far from Hob Hurst's House, a rock shelter yielding Middle Bronze Age collared urn fragments, also found by Mr. C. Gregory.¹

THE CAIRN (figs. 2, 3, 4)

The weathered stones of which the cairn was made had no doubt been collected from the surrounding moor, and almost all could be carried by one man, though some only with difficulty. To the north-east and the south-west the perimeter was marked by several adjacent placed stones, and the outer edge of the cairn thus defined measured 60 ft. in diameter. Near the north-west side of the mound a sunken track runs down the hill, and on this side the plan of the outer edge departs somewhat from the circular, probably because of the removal of stones when the track was in use.

The undisturbed part of the surface was covered by a peaty mat of bracken roots, in places over one foot thick, which was rather troublesome to remove. In the upper levels of the central part of the cairn the stones were loose, and there were frequent voids between them, but elsewhere in the upper levels they were embedded in coarse grey sand, much of which had probably been formed by weathering of the stones themselves. The height of the mound was probably originally about 5 ft., but the disturbance of the central parts prevented a measurement of this dimension, which can only be estimated.

On the north-eastern side of the mound there was a short line of stones on the surface, about 4 ft. from the outer edge (fig. 3), which it was suggested was part of an inner circle of stones. The profile of the mound in this region was different from elsewhere, the surface being nearly flat from the outer edge to the supposed inner ring, within which it rose more steeply. On excavation, however, no inner circle of stones was actually found.

The sand between the rocks at the base of the mound varied between light and dark brown in colour and was coarse grained. Pieces of charcoal were present in this layer; fragments of burnt bone were scattered in several areas and there were occasional small pieces of pottery and flint.

Removal of the lowest stones of the cairn exposed the flat upper surface of a layer of fine-grained sand, which varied somewhat in different parts of the site. Below the centre of the cairn and on the downhill (south-western) half of the periphery, the sand was pale yellow in colour, while on the uphill part it was dark stained. The thickness of the layer was up to 18 in. in the

¹ See Archaeological Reports, pp. 93-98. Also J. Radley, "A ring-bank on Beeley Moor", *D.A.J.*, LXXXV (1965), 126-31.

central parts, but it thinned down at the edge and was almost absent in the outer north-eastern parts of the mound. Pieces of charcoal occurred in the fine sand but no other foreign matter, except at one point where there were a few fragments of burnt bone in the upper part of the layer.

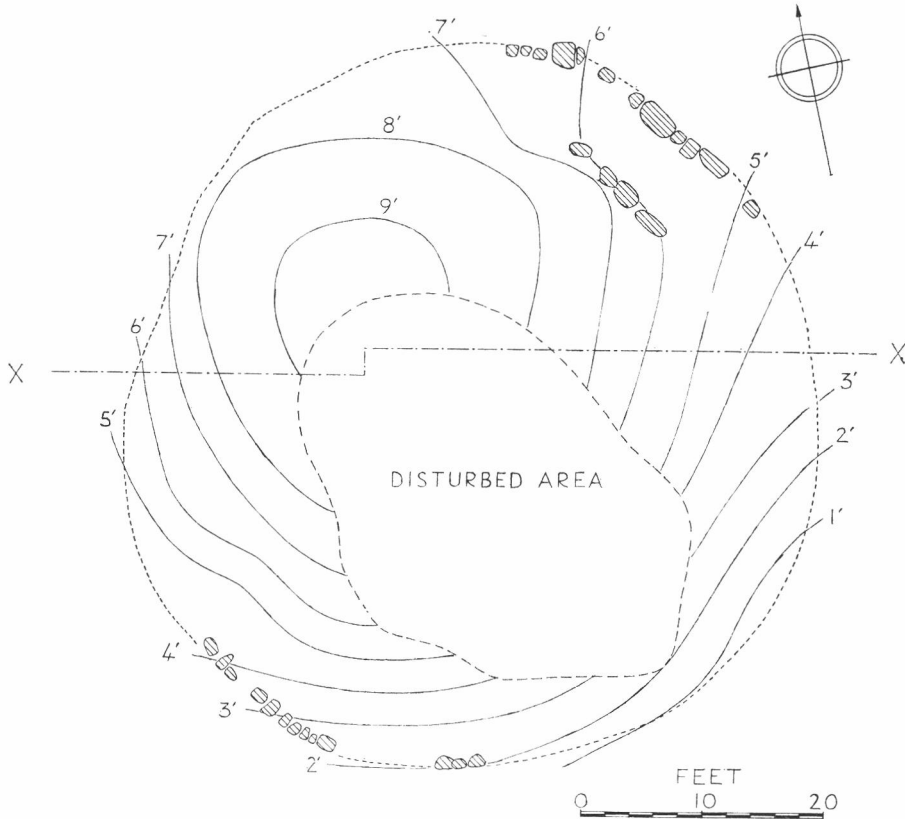


FIG. 2. Contoured plan of cairn after removal of bracken roots and peat from surface.
Contours taken at foot intervals.

An examination of the deposits below the cairn which was made by Dr. S. R. Eyre and Mr. W. N. Townsend of the University of Leeds (see report by Dr. Eyre, appendix I) revealed that the fine pale yellow sand was largely composed of pulverized rock, artificial in origin. The source of this crushed rock is discussed later.

The lowest layer was composed of sand and some rock fragments, in colour a conspicuous reddish orange under the central and downhill parts of the mound, and brown and dark stained under the uphill part of the periphery. A similar level is present at a depth of about a foot on the surrounding moorland. This layer passed, with little change of colour, into the stratum

of decomposed rock which covered the hard sandstone underlying the site. Further information on the reddish orange layer is given in Dr. Eyre's report.

Three pits were found below the mound, two of which were shallow depressions in the fine pale yellow sand and the third, a deep pit cut in the rock. A fourth pit, reaching the top of the rock, had been dug by the early excavators of the site, but elsewhere, fortunately, they had only disturbed the upper levels of the cairn.

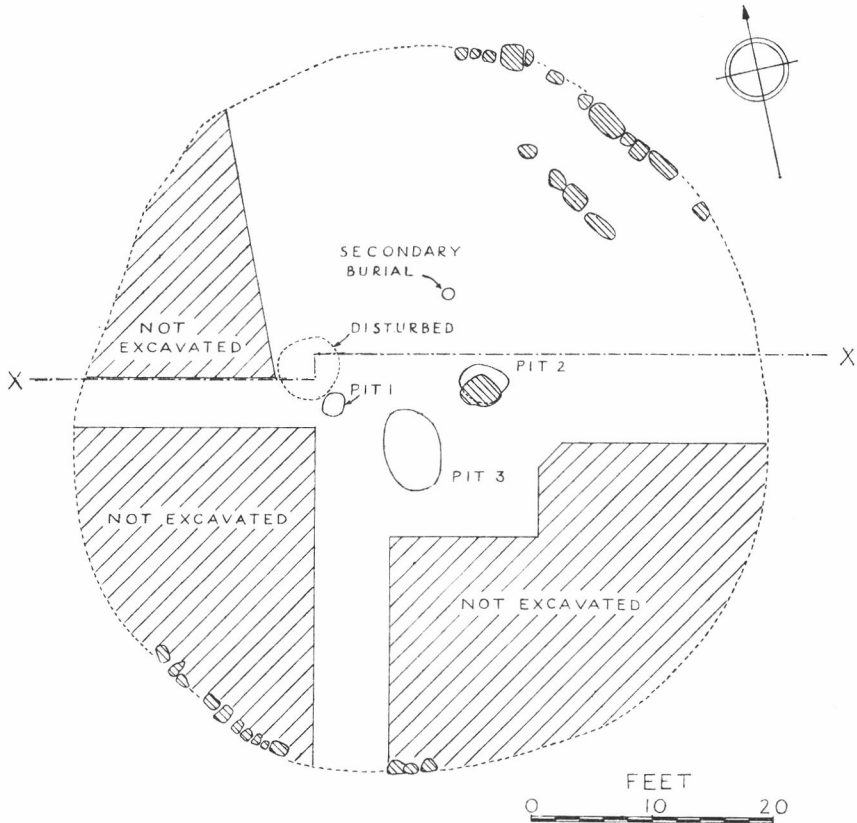


FIG. 3. Plan of cairn showing area excavated, pits, placed stones at edge and four stones of supposed inner ring.

The pits and remains of burials

In view of the extensive disturbance of the upper parts it is fortunate that there remained intact an interesting series of burials in the pits below the cairn and a burial under a large urn in the body of the mound. At least two burial deposits however had probably been destroyed, for in the disturbed parts were found scattered pottery fragments.

A large number of small broken pieces of burnt bone were recovered from

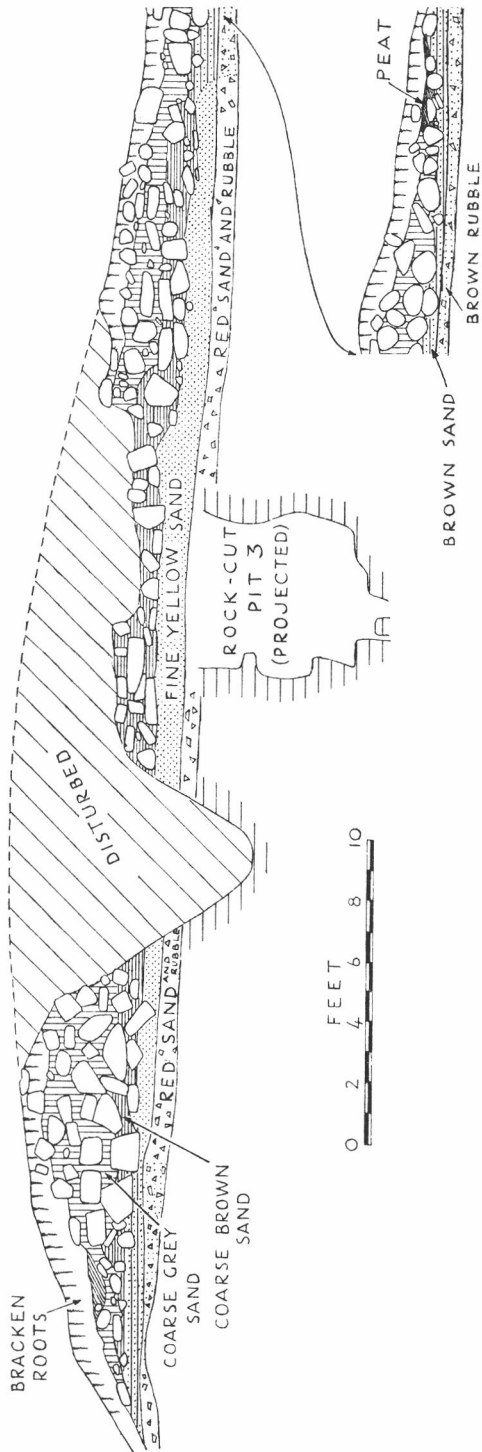


Fig. 4. Section of cairn on line X-X shown on plans (figs. 2, 3).

the pits and the base of the cairn. Mrs. Betty Westley of the Institute of Archaeology, University of London, has kindly examined this material and her report is given in appendix II. All identifiable bones were human.

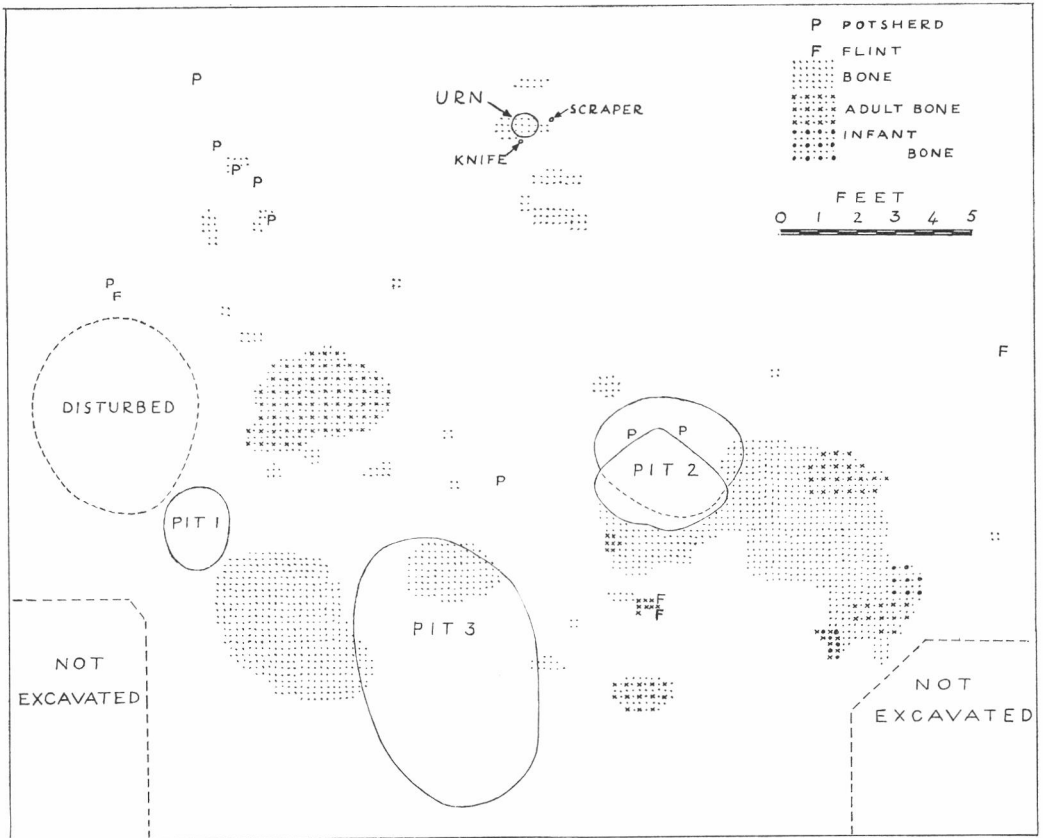


FIG. 5. Plan of central area showing pits, scatter of bones and position of small finds.

A. *The scatter of burnt bone (fig. 5)*

The lowest levels of the cairn in a zone measuring about 18 ft. by 10 ft. in area and from 8 to 12 in. in depth contained a scatter of small fragments of burnt bone in the sand between the stones, and in some instances under the basal stones of the cairn. It appeared that while the first layer of stones was being put in position, bone fragments (all apparently human) had been scattered in certain places.

Fig. 5 shows the distribution of bone fragments, the largest quantity of which came from two areas:

- (a) about 4 ft. north of pit 3, where 7 oz. of bone was recovered, among which remains of a young adult were recognized;

(b) south of pit 2, where the total amount of bone collected was 15 oz.

Both adult (in one case a young adult) and infant bones were identified.

The quantity of bone found in the area between pits 1 and 3 was small, and there were no identifiable pieces.

B. *Shallow pits containing food vessels* (fig. 6)

Pit 1 was about 21 in. in diameter and 9 in. deep, and was filled with pale yellow sand only slightly darker than the surrounding layer of fine pale yellow sand. An undecorated food vessel (fig. 8, no. 1) was found inverted and partly filled with sand; it contained a single scrap of burnt bone.

Pit 2, which was 3 to 4 ft. across, irregular in outline and about 10 in. deep (fig. 6), was dug through the fine pale yellow sand into the orange red layer below. It was partly covered by a small boulder weighing about 3 cwt., which was rolled aside only with the aid of a crowbar. The upper filling of coarse brown sand contained many fragments of charcoal and burnt bone, and in the lower part was an elongated deposit of burnt bone about 28 in. long. Below this were some patches of almost white sand with occasional bone fragments, and at the base was a layer of pink or orange red sand (resembling the adjacent undisturbed sand) in which were charcoal fragments but no bone. This red layer extended outside the pit for about 2 ft. on the south and west sides, and overlaid the fine pale yellow sand in this area.

Bone fragments from individuals of 7-10 years and of adult age were identified in the general pit filling and in the deposit of burnt bone in the base of the pit. The weight recovered totalled 5 lb. 15 oz.

Three fine plano-convex flint knives were found. Two were near the centre of the pit, an unpatinated specimen (fig. 11, no. 1) in the upper filling and a burnt knife (no. 3) in the deposit of burnt bone. The third (no. 2) which had a finely serrated edge, was in the end of the deposit of burnt bone, but was not affected by fire.

The north-eastern part of the pit was not covered by the boulder, but lay immediately below the lowest stones of the cairn, and when these were removed two food vessels were exposed. Both had been deposited base upwards, but while one was almost intact (fig. 9), the other had been smashed (fig. 8, no. 2). A considerable part of the broken vessel remained in what appeared to be its original place, and the rest, with the exception of part of the base, was recovered from the pit filling at various points, as follows:

- (a) two pieces were between the edge of the boulder and the intact food vessel, almost resting on the latter;
- (b) several pieces were near or under the edge of the boulder and near the supposed original position;
- (c) two pieces of base and other fragments were found under the large stone but above the deposit of burnt bone;
- (d) a small piece was in the lowest layer of the cairn about 9 in. above the fragments in the supposed original position.

The sequence of events when the pit was filled seems to have been:
 first — quantity of burnt bone was deposited in pit with one burnt and one unburnt flint knife, and two food vessels were placed in position;
 second — sandy filling with charcoal and burnt bone fragments was put in pit;

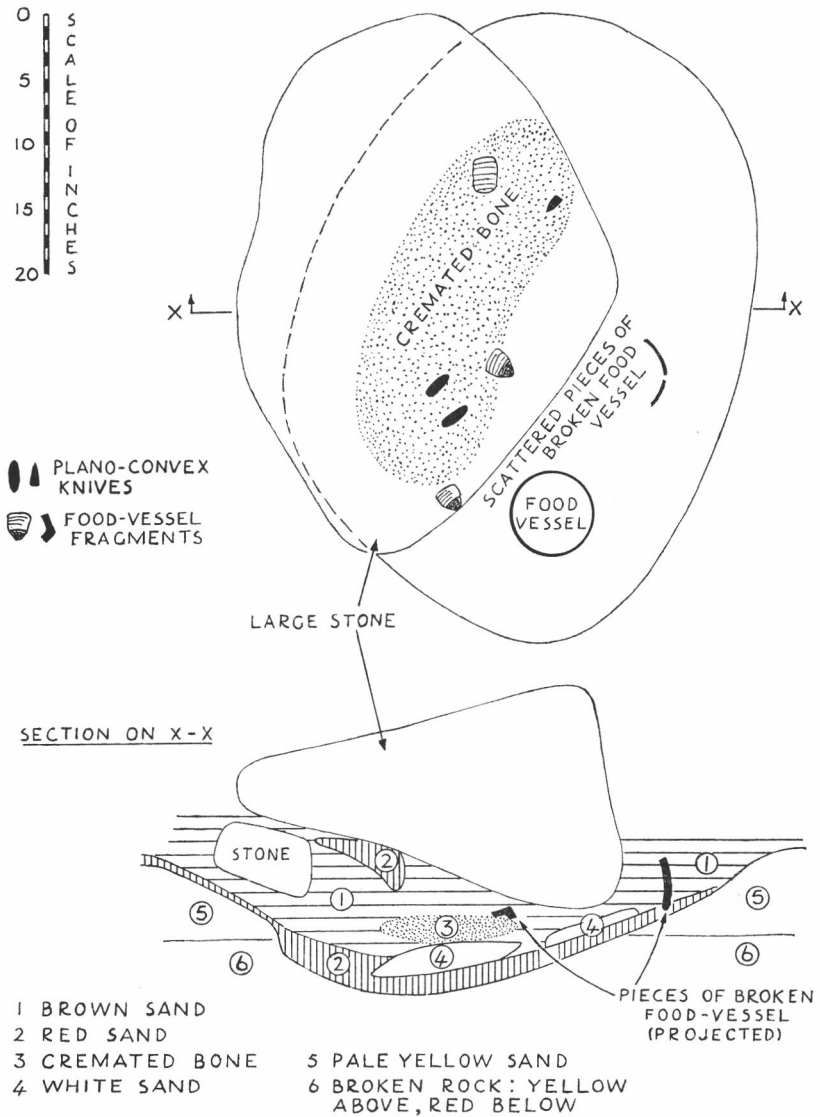


FIG. 6. Pit 2 — plan and section.

- third — one food vessel was broken, presumably by a blow on its inverted base, and fragments left in various parts of pit;
- fourth — rest of sandy filling and third flint knife were put in pit;
- fifth — boulder was rolled into position, covering cremation deposit;
- sixth — stones were placed on part of pit filling not covered by boulder.

Sufficient charcoal was collected from the pit for a radiocarbon date to be determined in the British Museum laboratory (reference BM 178) through the good offices of Mr. G. D. Lewis of Sheffield City Museum. The date obtained was 3440 B.P. \pm 150 years, i.e. 1490 B.C. \pm 150 years.

C. *Pit 3. The deep rock-cut pit (fig. 7)*

This pit, which was much larger and deeper than the others, measured 6 ft. 6 in. by 5 ft. 3 in. at the top; the sides were more or less vertical. The depth was 6 ft. 6 in. below the base of the cairn, the lower 5 ft. being cut in

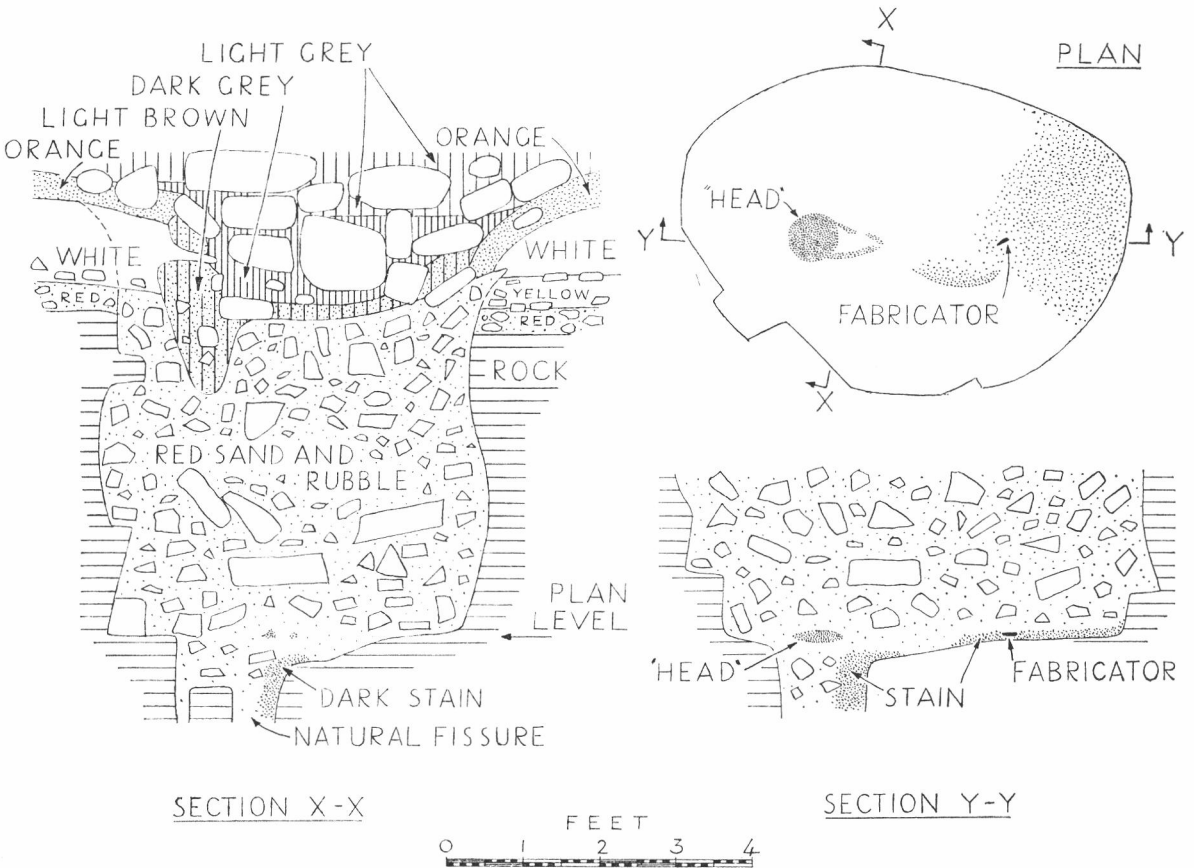


FIG. 7. Pit 3 — plan of base and sections.

hard rock, the surface of which was the same orange-red as the basal layer of sand previously described. The battered appearance of the south and west sides suggested that the pit had been largely excavated by pounding, that is, repeated blows by heavy stones on the same spot. A vertical cleavage in the rock in the base of the pit at its eastern end had probably extended higher, and its presence had probably enabled large pieces of rock to be removed as the pit was deepened, thus assisting a laborious task. The considerable quantity of crushed rock present in the fine pale yellow sand layer beneath the cairn must surely originate from pit 3 and its presence makes it almost certain that the pit was pounded out.

The upper filling consisted of large weathered stones, similar to those of the cairn, in a matrix of coarse dark grey sand. Below was a mass of orange-red sand with small fragments of reddish stone and some larger slabs of rock of the same colour. There were occasional voids in this filling. Most of the rock fragments in the orange-red sand had a freshly broken appearance which suggested that the pit had been largely refilled with rock fragments and sand quarried out of it.

Around the pit a layer of orange-coloured sand was interposed between the grey sand in the base of the cairn and the fine pale-coloured sand (here almost white in colour). This layer extended for a width of one to three feet around the pit, being most extensive on the west side. A similar layer of reddish sand occurred to the west of pit 2. In both cases the red or orange sand above the white or pale yellow sand probably remained from material excavated from the pit.

Fragments of burnt bone occurred frequently in pit 3. A total of 1 lb. 9 oz. was collected, but while recognizable as human cremated remains, the only comment possible was that they probably came from an adult. The bone was mainly in the eastern half of the pit and in the upper four feet of the filling; elsewhere it was present only in small quantities.

Charcoal was scattered throughout the filling, some of the fragments being quite large ($\frac{1}{2}$ in. to 1 in.), and a second radiocarbon date (BM 210) was determined by the British Museum, the figure obtained being 3700 B.P. ± 150 years, i.e. 1750 B.C. ± 150 years. This date of 1600-1900 B.C. overlaps with the pit 2 date of 1340-1640 B.C.

The only objects found were three small pieces of undecorated pottery scattered in the upper half of the layer of red sand and broken stone and a much worn fabricator of black flint which was found very near the base of the pit.

There was much dark staining at the base of the pit, some of which was conjectured to show the former position of a body in a crouched position. Most of this silhouette may have been due to the deposition of water-borne material, but this could not have been the explanation of the so-called "head" which was a patch of dark sand 5 to 6 in. across and up to an inch thick enclosed by an envelope of dark matter about $\frac{1}{16}$ in. thick. Analysis shows a significantly high phosphorus content, but very little in samples taken elsewhere in the base of the pit or in the upper filling (see appendix III by Dr. R. G. Newton).

D. *Secondary burial*

Ten feet to the north-east of the centre of the mound was a large inverted collared urn (fig. 10, no. 1), crushed by the weight of the overlying rocks. Below it and at the level of the base of the cairn was a pile of burnt bone fragments in a matrix of brown sand, surrounding which and between the lowest stones of the cairn was a scatter of bone in an area of about 4 ft. by 2 ft. The bone, which weighed 1 lb. 11 oz., represented a young adult, perhaps female. A small plano-convex type flint knife and two small flint flakes were found in the deposit below the urn, and a short distance away, but 4 in. below the base of the deposit was a large flint side-scraper.

It is presumed that this burial was secondary, although no evidence that

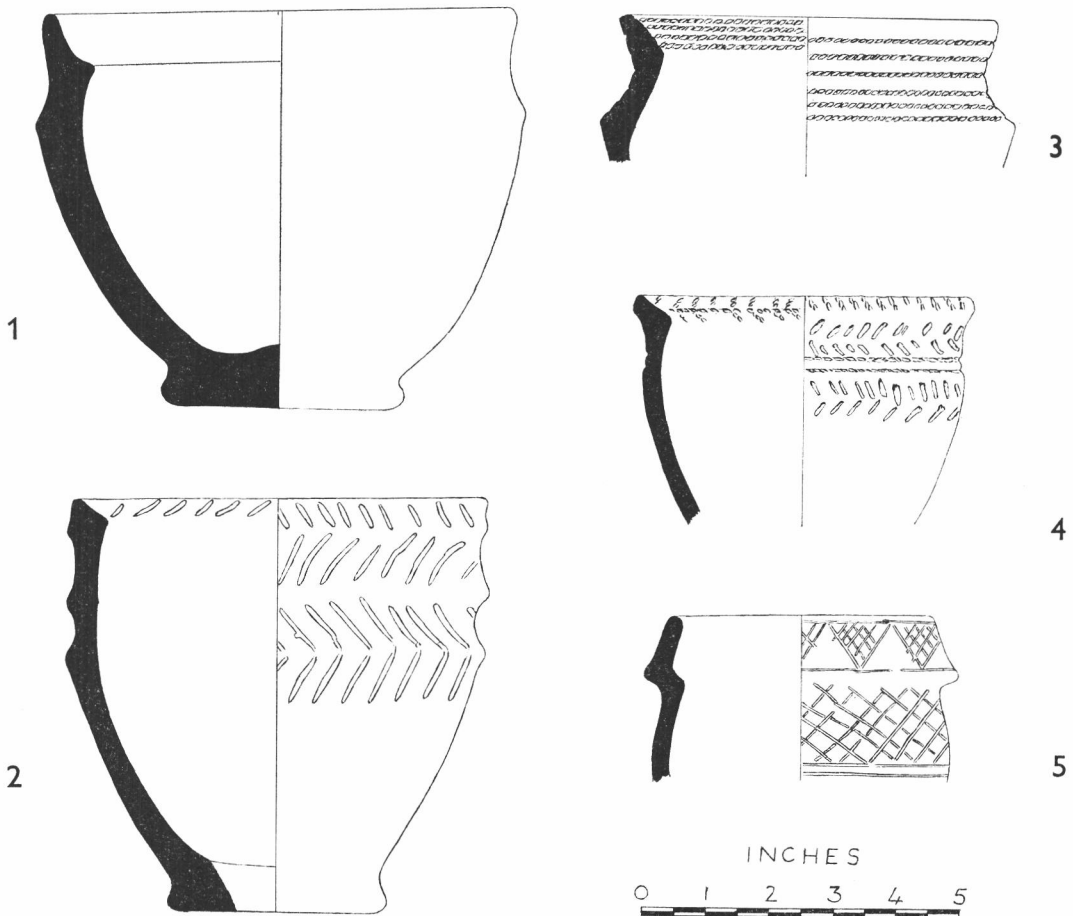


FIG. 8. 1. Food vessel 1. 2. Food vessel 3. 3. Food vessel 5.
4. Food vessel 4. 5. Urn 2 ($\frac{3}{4}$).

this was the case was obtainable from the section, which was much disturbed at this point.

E. *Traces of burials in the disturbed area*

The disturbed part of the site yielded $\frac{3}{4}$ lb. of bones, several large fragments of a food vessel (fig. 8, no. 4), one piece of a second food vessel (fig. 8, no. 3), and fragments of a large (fig. 10, no. 2) and a small urn (fig. 8, no. 5). It seems possible that this pottery came from a pit with food vessels like pit 2, and a secondary burial with a large urn. A further fragment of the small urn was found apparently undisturbed in the sand between the basal stones of the cairn during the Hunter Society excavations, and this urn may have been broken up when the mound was being built.

F. *Sequence of pits and burials*

The excavation, or rather pounding out, of the large rock-cut pit appears to have been the first stage in the sequence when the barrow was being constructed. During the refilling of the pit, charcoal and burnt human bones were included in the sand and rubble thrown back. A spread of sand partly formed from pulverized rock and containing some charcoal then remained round the pit, and in this sand were dug shallow pits in which were placed food vessels. At least two individuals (one adult and one child) were cremated and buried, accompanied also by some fine flint knives in one of these pits, the refilling of which was quite an elaborate procedure, completed by the placing of a boulder on top. The lowest stones of the cairn were then put in position together with sand, the burnt remains of an adult and a child, charcoal and a few flint flakes and fragments of pottery. Finally the rest of the cairn was piled up, and apparently later a secondary burial was inserted with large urn, cremated bones of a young adult and flint implements.

DISCUSSION OF THE CAIRN AND THE BURIALS

Distribution of food vessels and collared urns in the Peak District

It has been recognized for many years that the beaker burials in Derbyshire and Staffordshire were concentrated on limestone country. Food vessel burials also occur mainly on limestone, but there are exceptions, the best known being the group of eight food vessels found on the millstone grit at Stanton Moor and Harthill Moor. Collared urns accompany burials on limestone but are also numerous on sandstone country. This distribution is paralleled in eastern Yorkshire, where beakers and food vessels are found largely on the chalk wolds, and collared urns occur not only on the wolds but also in considerable numbers on the sandstone on the North York Moors.

The discoveries on the sandstone of Beeley Moor extend a little the pattern of the earlier discoveries. The food vessels may be considered as outliers of the Stanton Moor group, while the collared urns may be included with the similar discoveries made in recent years on the sandstone moors west and south-west of Sheffield.

Dimensions of barrows

Peak District barrows cover a wide range of sizes, as shown by the following table, which summarizes dimensions given by Bateman in *Ten Years' Diggings*,² Heathcote's records of Stanton Moor³ and C. E. Exley's survey of Ramsley Moor, between Sheffield and Baslow.⁴

<i>Diameter</i>	<i>Bateman</i>	<i>Stanton Moor</i>	<i>Ramsley Moor</i>
Up to 10 ft.	—	2	14
10 — 19 ft.	3	13	34
20 — 29 ft.	3	1	1
30 — 39 ft.	16	—	1
40 — 49 ft.	20	—	—
50 — 59 ft.	14	1	—
60 — 69 ft.	18	—	—
70 — 79 ft.	8	—	—
80 — 89 ft.	4	—	—
90 — 99 ft.	4	—	—
Over 100 ft.	3	—	—

From these figures it appears that there are two classes of barrows, the larger generally 30 to 70 ft. in diameter, and the smaller normally 10 to 20 ft. The Beeley mound falls into the larger class. Further, many of the larger class excavated by Bateman were Early Bronze Age in date, and the smaller barrows on Stanton Moor were Middle Bronze Age, containing collared urns. The Beeley barrow with its food vessels fits in well with the larger, Early Bronze Age type. The classification cannot be pressed too far but probably has a limited significance.

Rock-cut pits

Undoubtedly the most interesting feature of the Beeley cairn was the deep rock-cut pit, the excavation of which must have been a very laborious task in such hard rock. Eight pits comparable in depth may be cited from the barrows described by Bateman in *Ten Years' Diggings*, particulars of which are as follows:

1. Shuttlestone near Parwich (34). "Grave . . . cut to the depth of at least 8 ft. below the natural surface". Skeleton at base with bronze dagger and flat axe.
2. End Low near Hartington (38). Pit "cut in rock to the depth of 6 ft. beneath the natural surface". Skeleton at base with bronze dagger.
3. Low Moor, Parwich (49). Barrow with disturbed grave "sunk through the natural soil into the rock to a further depth of 6 ft."
4. Vincent Knoll, Parsley Hay (68). Grave cut in the rock to the depth of four feet with two crouched skeletons accompanied by flint implements.

² Bateman probably obtained dimensions of barrows by pacing, since they are given in yards, but his measurements seem adequate in the present context and record many mounds which have now disappeared.

³ *D.A.J.*, LI (1930), 1-44; LVII (1936), 21-42; LX (1939), 105-28. The table ignores very elongated mounds such as Heathcote's Tr3.

⁴ *Trans. Hunter Arch. Soc.*, VIII, pt. 2 (1960), 70.

5. Smerrill Moor (102). "Large grave of irregular shape sunk in the rock to the depth of 5 feet; its average dimensions were 8 feet by 6". At the base a crouched skeleton with beaker, flint dagger, etc.
6. Deepdale, Grindon (115). Very large grave 6 feet wide by at least 10 feet long, cut at least 3 feet into the rock, which was only partially emptied by Bateman. Crouched skeleton with bronze dagger.
7. Calton Moor (118). Rock grave apparently 3 to 4 feet deep. Skeleton with bronze dagger.
8. Cauldon Hills (153). Disturbed grave 9 feet by 4, sunk 4 feet deep in the rock.

Derbyshire limestone is a hard rock probably as difficult to penetrate as the Beeley sandstone, and the eight pits listed above seem comparable with the Beeley pit. The presence of bronze daggers in four of the eight pits is significant.

Date

The date of 1490 B.C. \pm 150 years gives the food-vessel burial in pit 2 an age in accordance with the dating of food-vessel graves arrived at before the radiocarbon method was known.⁵ The somewhat earlier date of 1750 B.C. \pm 150 years obtained from the pit 3 filling may suggest that this pit was earlier than the food-vessel graves, but as already mentioned the upper limit of the pit 2 dating overlaps the lower limit of that for pit 3 and perhaps the more logical explanation of the facts available is to date the whole complex to about 1600-1640 B.C., the overlap of the two radiocarbon dates.

Cremations and inhumations

All Bateman's rock-cut pits contained inhumed burials, but at Beeley the human remains found in pit 3 and elsewhere were cremated. It is possible that there had originally been an inhumed burial in the base of pit 3 at Beeley, which had been dissolved by the acid waters of the site, but no conclusive evidence was obtained.

Cremation was a normal rite for Peak District burials with which food vessels were deposited. A count of the food vessels recorded gives 21 associated with cremations and 22 with inhumations. The food vessels from pits 1 and 2 bring the number with cremations to 24. Cremations and inhumations were thus present in more or less equal numbers.

THE POTTERY (figs. 8, 9, 10)

Food vessels

Three food vessels were recovered from pits 1 and 2, and Mr. C. Gregory obtained pieces of two others before excavation of the site began.

- 1 (fig. 8, no. 1) Roughly finished and distorted shape. Pitted and badly crazed surface, reddish brown colour, fabric tempered with grit and fragments of crushed pot.

⁵ S. Piggott, *Neolithic cultures of the British Isles*, chronological table opp. p. 380.

- 2 (fig. 9) Crazed surface of reddish brown colour, soft fabric containing occasional specks of mica.
- 3 (fig. 8, no. 2) Smooth, hard fabric containing occasional specks of mica, surface reddish brown colour.
- 4 (fig. 8, no. 4) Rather hard fabric, containing crushed pot, uneven surface, reddish brown outside and dark brown inside, black core.
- 5 (fig. 8, no. 3) Rough, rather soft fabric, containing crushed pot and grit, reddish outside, brown inside, dark brown core.

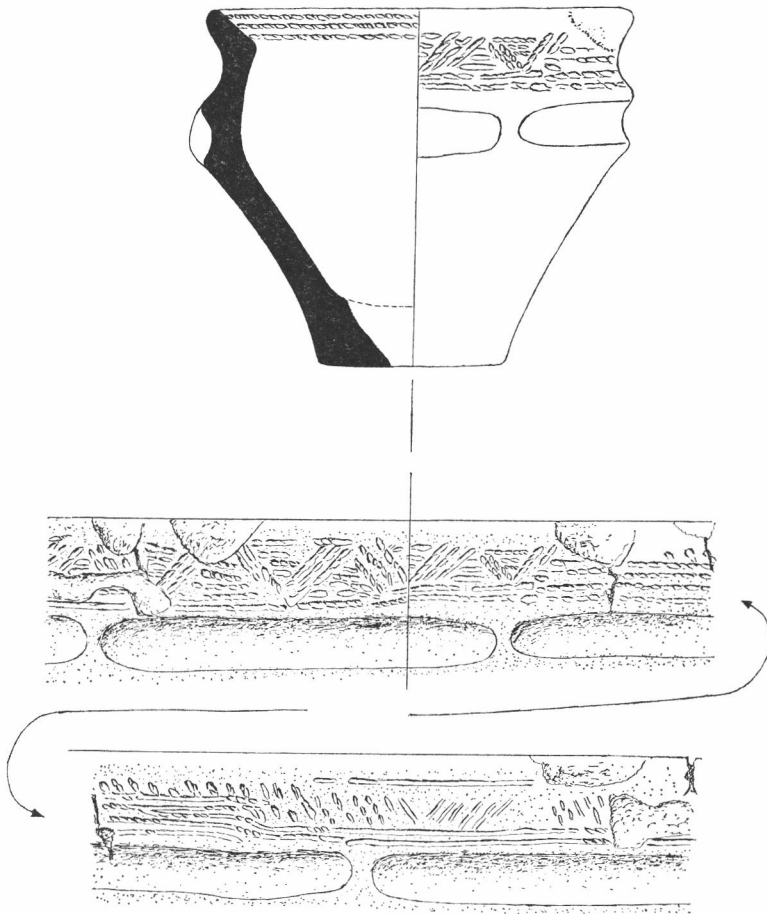


FIG. 9. Food vessel 2 with detail of decoration ($\frac{1}{4}$).

Pot no.	Where found	Abercromby type	Manby type	Height	Outside diameter at rim	Decoration
1	Pit 1	3	3(iv)	6.2 in.	7.5 in.	Undecorated
2	Pit 2	1(a)	1a(ii)	5.6 in.	6.7 in.	Cord
3	Pit 2	2	2(ii)	6.5 in.	6.6 in.	Incised
4	Not recorded	3	3(iii)	?	c. 5.4 in.	Cord and incised
5	Large fragment not recorded; small fragments in base of cairn	3	3(iv)	?	c. 6 in.	Cord

Types 1(a), 2 and 3 are the usual varieties of food vessel found in Yorkshire and Derbyshire, and pots nos. 2 and 3, both of which came from pit 2 and which are therefore of the same date, though of different shape, are characteristic specimens of the "Yorkshire vase". It has long been known that types 1(a) and 2 were contemporary; for example, the cremation in the central cist of a barrow at Great Longstone, Derbyshire, excavated by Bateman on 29 August 1848 (*Diggings*, 42) was accompanied by an example of each type, rather similar in appearance to the Beeley Moor vessels.

The cord impressed decoration of no. 2 varies in different parts of the circumference of the pot and consists of:

- (a) about 8 in. of alternate triangles filled with horizontal lines;
- (b) about 5 in. of horizontal lines with a fringe of short strokes;
- (c) about 7 in. with a damaged pattern of lines at 45° to the horizontal.

This lack of symmetry is unusual.

The three examples of type 3 include an undecorated and somewhat mis-shapen vessel (no. 1) from pit 1 and fragments of two decorated pots (nos. 4 and 5) found by Mr. Gregory. Two small scraps of pot no. 5 were obtained from the sand between the basal stones of the cairn on the eastern side, so this pot must have been broken anciently.

Undecorated food vessels are not often found with burials. Manby's list of Peak District food vessels includes only two undecorated examples in a total of 56, neither of which is a typical form.⁶ Better parallels come from the East Riding, where Mortimer's list of 166 food vessels includes five undecorated pots, all of type 3.⁷

The four decorated food vessels were rather sparsely ornamented since none appears to have had any markings on the lower part of the body (not of course certain in the case of the fragmentary pots). A plain lower portion is often seen on food vessels, though it is more usual for the whole outer surface to be ornamented.

Collared urns (figs. 8, 10)

A large urn was found with a burial in a secondary position in the barrow, and there were fragments of two broken urns.

- 1 (fig. 10, no. 1) Slightly pitted surface, outside lightly burnished, colour light brown outside, dark grey inside, black core.
- 2 (fig. 8, no. 5) Smooth and fairly hard beaker-like fabric, light brown coloured surface, black core.
- 3 (fig. 10, no. 2) Rough and flaky fabric, tempered with unusually large quantity of crushed pot, brown surface, black core. To judge from the appearance of the fabric, the fragment with a cloth impression came from this urn.

⁶ T. G. Manby, "Food vessels of the Peak District", *D.A.J.*, LXXVII (1957), 1-29.

⁷ J. R. Mortimer, *Forty years' researches . . .*, figs. 29, 396, 594, 933, 942.

<i>Urn no.</i>	<i>Where found</i>	<i>Height</i>	<i>Outside diameter at rim</i>	<i>Decoration</i>
1	Secondary burial	16 in.	11 in.	Cord, incised and pit marks
2	One fragment in base of cairn, rest in disturbed area	?	c. 4 in.	Incised
3	Disturbed area	?	c. 10 in.	Cord

Urn no. 1 is a well formed "tripartite" vessel with deep collar and internal bevel to the rim. The height is above average since urns generally vary between 4 and 15 in. in height. This pot was included in the list of urns with primary characteristics given in a recent paper by I. H. Longworth,⁸ but on further study it seems that it is to his secondary series, not the primary, that the urn should really be assigned.

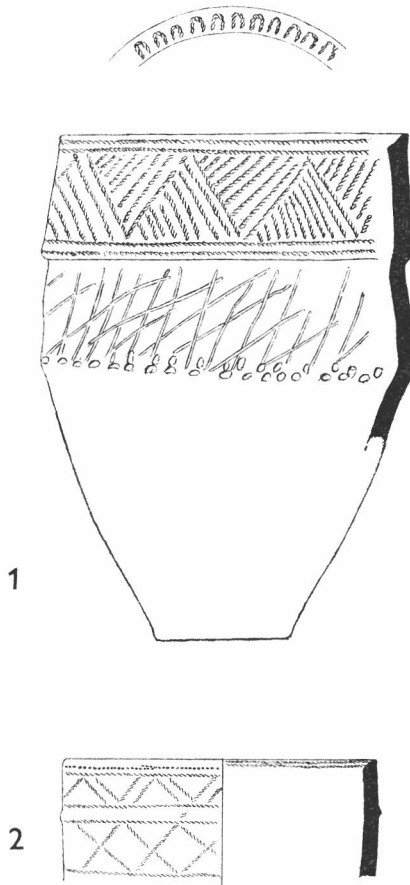


FIG. 10. 1. Urn 1. 2. Urn 3 (1/6).

⁸ I. H. Longworth, "The origins and development of the primary series in the collared urn tradition in England and Wales", *P.P.S.*, XXVII (1961), 263.

It appears that urn no. 2 was deposited in a fragmentary condition during the construction of the barrow, and it is therefore presumably early. The only piece found *in situ* was in the sand between the stones at the base of the cairn and among a scatter of burnt bones.

The large cordoned urn no. 3 is a late type, on the other hand, and was probably deposited with another secondary burial, disturbed by the early excavators of the site. Cordoned urns are less common in Derbyshire than in Scotland, but there are local parallels, for example the cordoned urn from Darley Dale.⁹

Pottery fragment with cloth impression

Among the pottery found by Mr. Gregory in the disturbed part of the cairn was a fragment, probably from a collared urn, bearing a cloth impression. Miss Audrey Henshall of the National Museum of Antiquities of Scotland kindly examined the fragment and reported as follows:

“Regarding the Harland Edge sherd — I took a plasticine cast of the cloth impression. The cloth was clearly plain weave, with about 20 threads per inch in one direction and about 24 in the other. The impression of the yarn is very distinct but I cannot make out the direction of the spin. It appears to be a fairly coarse cloth but fairly regularly spun and woven.”

FLINTS (fig. 11)

Plano-convex knives

This collection of flint knives affords another example of the well-known association of plano-convex knives and food vessels, though it is worth remarking that nearly all such groups come from barrows in the East Riding of Yorkshire.

The three carefully made knives from pit 2 were all different.

Fig. 11, no. 1 was long ($2\frac{3}{4}$ in.) with rounded base.

Fig. 11, no. 2 was short ($1\frac{7}{8}$ in.) with square base and a finely serrated edge (about 25 teeth to the inch). The shape may have been caused by the thin flake from which it was made.

Fig. 11, no. 3, which was burnt, was long ($2\frac{3}{4}$ in.), with rounded base and a serrated edge (about 12 teeth to the inch).

The burnt fragment (fig. 11, no. 8), which was associated with burnt bone in the base of the cairn in the area south of pit 2, appears to have been similar to nos. 1 and 3.

A much rougher specimen (fig. 11, no. 7), found with burnt bones below the collared urn, is presumably later than nos. 1-3 which were associated with food vessels. It illustrates the persistence of the custom of placing a knife with a burial during the Early and Middle Bronze Age.

Fabricator

At the base of pit 3 was an implement of the type traditionally called a fabricator (fig. 11, no. 4), which had seen considerable use, being much worn and abraded at both ends and to a lesser extent along the sides at the intersection of the chipped edge and the flat undersurface. The whole implement was smoothed by use and parts of the undersurface were polished to quite a high gloss.

⁹ Abercromby, *Bronze Age pottery*, II, fig. 481.

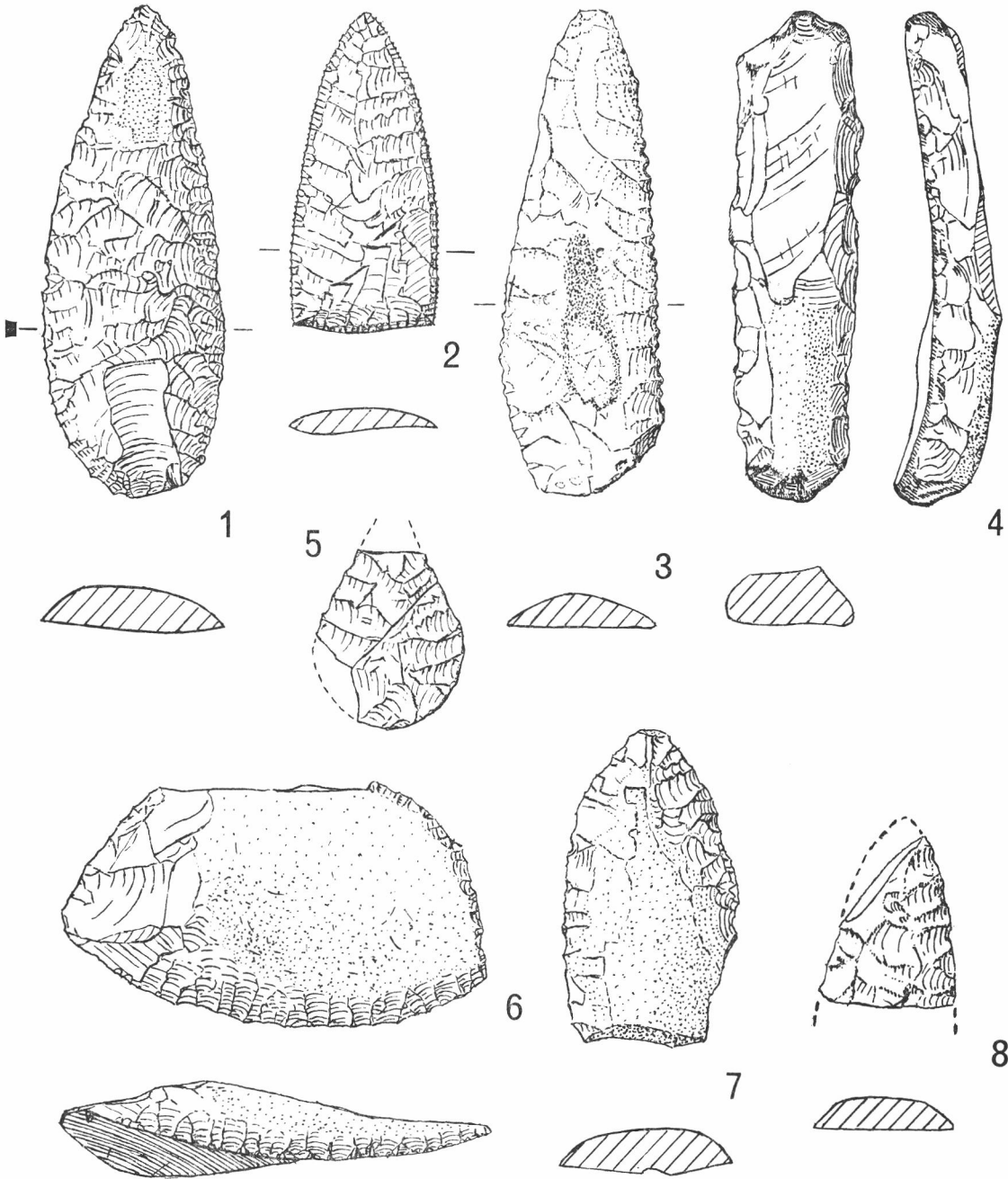


FIG. II. Flint implements (1/1).

Flint scraper

The large side-scraper (fig. 11, no. 6) was found almost beneath the collared urn and is probably but not certainly part of the burial deposit. This scraper, which is an unusual type for Derbyshire, is unpatinated and shows no sign of use; the white cortex on the upper surface resembles that on flint fresh from the chalk.

Arrowhead

The broken leaf arrowhead (fig. 11, no. 5) was picked up from the surface of the mound after the peaty surface layer had been removed. It had been broken anciently, perhaps by hitting a stone of the cairn when it fell to earth after being shot. It apparently provides further evidence of the use of leaf arrowheads in the area during the Bronze Age.¹⁰

Flakes

Three pieces of flint were found under the cairn, including a core trimming of black flint and a large, square flake of chert. A few flakes of flint were found in the disturbed area.

Acknowledgements

The writer would like to acknowledge the help given in the rather long drawn out work of excavation by Mr. and Mrs. D. Cutts, Mr. C. E. Exley and Mrs. M. L. Machin and many others too numerous to mention.

APPENDIX I

REPORT ON BURNT BONE FRAGMENTS BY MRS. BETTY WESTLEY
(INSTITUTE OF ARCHAEOLOGY, UNIVERSITY OF LONDON)

PIT 2

(a) *Deposit of bone in lower part of pit. Weight 1 lb. 11 oz.*

There appear to be remains of one adult and one child. About 16 fragments of an adult skull, showing a well-marked brow ridge, are obvious, with the sutures, where there are any, fairly well open. The thinness of the skull, the appearance of the sutures and a barely fused ulnar epiphysis, make it likely that the adult was very young, probably under 20 years. One incisor tooth remains recognizable but too burnt to judge its condition of life and one or two phalangeal pieces can be recognized.

The child remains comprise about 20 skull fragments, 15 fragmentary phalanges, one condyle of the mandible, 5 vertebral pieces, remains of a few incisor teeth, 2 milk molars and one permanent molar. The thickness of the skull and the appearance of the sutures give the impression of a child about 7 or 8 years. This would agree with the deduction of an age of this same range from the teeth, supposing that the molar appearing among the milk teeth is MI.

(b) *Bone scattered in upper filling of pit. Weight 1 lb. 12 oz.*

Probable remains of one adult, not necessarily a different individual from that whose bones were found in the deposit in the lower part of the pit. To judge from the thinness of the skull and the condition of a suture, of which however only one inch is still

¹⁰ There is evidence of the survival of leaf arrowheads till the Middle Bronze Age in the locality, e.g. the leaf arrowhead found in a collared urn at Crookes, Sheffield.

visible, the bones belonged to a young person. There are about 12 small skull fragments only, a maxilla fragment showing two alveoli, one small molar, and recognizable fragments of radius, humerus and femur, but all too shrunken and warped by fire for any deductions to be made as to their owner.

(c) *Bone from both upper and lower levels of pit, removed before the deposit at the base was isolated. Weight 2 lbs. 8 oz.*

Recognizable material comprises 20 skull fragments, milk molars, 6 vertebral fragments, 10 teeth, burnt and distorted, and 20-30 fragmentary phalanges, apparently from a child, presumably the same individual as the child referred to above.

PIT 3

Bones largely from the upper filling. Weight 1 lb. 9 oz.

Recognizable only as human cremated remains, all indeterminate, but probably adult.

Scatter of bone in lowest levels of the cairn

(a) *Area about 4 ft. north of pit 3. Weight 7 oz.*

The remains appear to be adult, but not old, since the (very small) skull fragments bear well marked sutures.

(b) *Area south of pit 2. Weight 15 oz.*

The material is well burnt and much broken but it is possible to distinguish infant bones and those of a youngish adult. The infant bones include occipital (under one year) and other skull fragments and mandible fragments. Adult bones comprise a piece of radius (about 1 inch), a possible humerus fragment and a number of other long bone fragments, a tooth root, two phalanges, an odontoid process of the axis, a zygomatic skull fragment and several small pieces of young adult skull with well marked sutures.

Bone from secondary burial accompanied by collared urn. Weight 1 lb. 13 oz.

Probable remains of one individual, with the following fragments still recognizable: 10 vertebral (adult), 10 teeth, burnt but obviously teeth, from the root still preserved, 2 toe phalanges (3rd), 16 other phalanges, incomplete, numerous skull fragments, 3 with open sutures that indicate an individual not over about 30 years of age.

APPENDIX II

REPORT ON THE DEPOSITS BENEATH THE CAIRN ON HARLAND EDGE, BEELEY MOOR

By Dr. S. R. EYRE (Department of Geography, University of Leeds)

In the light of alleged "entombed soils" which have been described beneath other barrows in Britain (e.g. G. W. Dimbleby, *Historical status of moorland in north-east Yorkshire*, *New Phytologist*, 51, 1952, 349), this deposit was particularly interesting. A layer of unconsolidated material beneath an artifact pavement, whose age can be approximately determined, must always excite the curiosity of pedologists and ecologists, as well as archaeologists. This deposit invited special study because of its conspicuous coloration. It is present beneath the whole of the central part of the mound but is generally thicker on the downslope, western side than on the upslope,

eastern one. At its thickest it achieves a depth of about 18 in. but locally it is no more than 6 in. deep. The local decreases in depth are due to the fact that some of the overlying pavement boulders are more deeply embedded in it than are the majority and not to shallowings of the rock floor. The latter is fairly flat and featureless.

The deposit was everywhere differentiated into two quite distinct horizons, the upper one being an extremely pale yellowish grey in colour and the lower one a bright orange-brown. The junction between the two horizons was generally very sharp and, even where a certain merging occurred, the transition layer was no more than an inch in thickness. Black mottles and streaks were apparent at frequent intervals in both horizons and the same black material formed a coating of appreciable thickness on most of the millstone grit fragments embedded in the deposit.

The site was visited by Mr. W. N. Townsend of the Department of Agriculture, the University of Leeds, on 23 April 1964. He examined the profile as it appeared in trenches cut into the western, northern and eastern sides of the cairn and collected a number of samples from different parts of the profiles and from soils surrounding the site. On the basis of his observations and analyses he reached the following conclusions.

He felt that the sand bed showed a number of features which have all developed subsequent to deposition and that they all provide evidence for the operation of clearly-defined soil-forming processes. The light-coloured upper horizon has been leached by rain water percolating through the capping peat, so that any pre-existing iron oxide coatings of sand grains have been mobilized and redeposited on sand grains in the lower horizon. This commonly happens in natural soils in highly podsolized areas. The fairly sharp boundary between the bleached horizon and the stained layer appears to coincide fairly closely with the general level of the surface around the cairn and probably represents a boundary between an upper, predominantly aerated régime and a lower, more frequently waterlogged one. Indeed, on the day when the site was visited, moderate rain in the previous 24 hours had caused the water table to rise, and the surface of standing water in the trenches was almost exactly coincident with this boundary in the profile. The alternating wet and dry condition of the situation is reflected in the appearance of the black particles and dark stained mottles. These are accretions of manganese dioxide, a characteristic phenomenon of pedological development under conditions of alternating wetness and dryness.

The more uniformly dark stained sand beneath the periphery of the cairn is simply humus-stained material arising from a fairly close proximity to the peat capping. This humus-stained sand is directly analogous to the leached horizon in the natural soil around the site and, indeed, is very similar in appearance to it.

Microscopic examination of the sand beneath the centre of the cairn shows a wide range of particle sizes with both angular and sub-angular particles present. The finer fraction is dominated by angular particles however. There is no suggestion that the sand has been water-sorted or water-rounded to any significant degree; the whole is more consistent with being mechanically ground rock. Indeed, pulverization of a rock sample from the overlying boulders gives a very similar type of sand.

The sand bed, as it occurs, is most unlikely to be natural. The site is not appropriate for a sand deposit; the material is neither wind-borne nor water worn. Furthermore, it is too uniformly broken down to be the result of weathering of millstone grit. Sand from leached horizons of the surrounding soil contained approximately 10 per cent by weight of particles greater than 2 mm. diameter and 28 per cent greater than 1 mm. diameter; the corresponding figures for the sand deposit were 2.9 per cent greater than 2 mm. and 9.1 per cent greater than 1 mm. Mr. Townsend's final conclusion was that, although since being laid down it has been pedogenically modified, the evidence points to an artifact layer of artificially pulverized rock.

APPENDIX III

SOIL SAMPLES FROM PIT 3, HARLAND EDGE BARROW, BEELEY MOOR

By Dr. R. G. NEWTON

		%P ₂ O ₅
Sample I.	Control. Depth 8 ft. 4 in. below datum (about 1 ft. 4 in. above soil silhouette).	0.04
Sample II.	Control. From edge of pit at c. 3 ft. below datum.	0.08
Sample III.	Polyvinyl acetate in toluene with teepol used to strengthen parts of silhouette.	0.0002
Sample IV.	From inside "head" of silhouette.	0.87
Sample V.	From "leg" of silhouette.	0.08
Sample VI.	Dark stained sand to north of head at edge of the base of pit.	0.03