EXCAVATION OF BRONZE AGE BURIAL MOUNDS AT QUANDALE, ROUSAY, ORKNEY. BY WALTER G. GRANT, F.S.A.Scot.

Between the road which runs round the west side of the island of Rousay and Scabra Head, a beetling cliff that rises sheer out of the Atlantic near the south-west corner of the island, is a wide stretch of pasture-land which is known as Quandale. This ground was partly under cultivation until 1850, when the then proprietor cleared away forty-one small holdings and threw the whole area into the farm of Westness. Many of the farm buildings were rased to the ground, and only their grass-grown foundations remain to show where they stood. Parts of some of the buildings of a few survive and are used as shelters for stock. Many of the stones have gone, presumably to build a fine dry-stone dyke which runs down from the side of the road to the seashore, a distance of about 1150 yards. Its upper end commences about 120 yards north of where the road makes a sharp change of direction from north-north-west to north-east, and provides a convenient datum line for locating the monuments about to be described (fig. 1).

Eleven burial mounds were examined, and a twelfth which was opened a good many years ago will be included. There had been no wholesale interference with the monuments by the old population, as they stood on the uncultivated parts, but some of them had been dug into and cists had been exposed.

In the area north of the dyke four mounds are marked on the O.S. map as antiquities, "Knowe of Dale" and "Tumulus" three times. Three of these, including the Knowe of Dale, are "burnt mounds," ¹ but the fourth, which lies highest up the slope and not far from the road, is a burial mound, and will be mentioned as No. 5 in the following list.

At a place called Knap Knowes, which is 300 feet above sea-level and some 200 yards from the roadside, the dyke runs over the centre of a burial mound, the second of a group of five. Adjoining the first of the mounds to the south-east are the grass-covered foundations of

¹ Burnt mounds are large heaps of fire-fractured stones of small size, sometimes with an admixture of soil. They are very numerous both in Orkney and Shetland, but their purpose or period has not yet been satisfactorily explained. Also see *Ancient Monuments Comm. Inventory—Orkney and Shetland*.

one of the old steadings. A mound here which was thought to be sepulchral was excavated, but it was found to cover the lower part of the farm kiln for drying corn and malt. About 290 yards south-south-west of this group of mounds, and 200 yards north-west of the

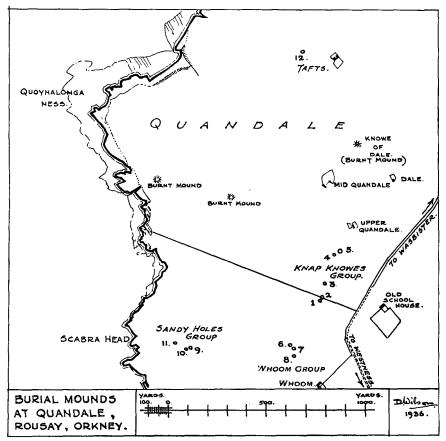


Fig. 1. Burial Mounds at Quandale: Map.

buildings at Whoom (pron. Home), is a group of three more, while some 540 yards down the slope from the Whoom group, and within 90 yards of the surveyors' cairn above Scabra Head, are other two raised on the summit of a short ridge with steep sides, called Sandy Holes. Near the foot of the landward side of the ridge are two small mounds, which on examination proved to be non-sepulchral, although a few small pieces of charcoal were found in them. Their small dimensions and their position on a steep slope hardly suggested that they

contained burials. A single mound lies close to the surveyors' cairn just referred to, and another 1570 yards to the north-north-east, and 155 yards west by north of the ruins of the steading of Tafts.

Mounds Nos. 1, 2, 4, 6, 7, 8, and 10 consist of heaps of yellowish clay with its natural admixture of small stones covered with a few inches of soil. Nos. 3, 5, 9, 11, and 12 are formed of earth and stones, but they are not true cairns. This, probably, is the cause of their preservation, as, if they had been made entirely of stone, they would most likely have been cleared away for building material.

To save repetition and to give some of the salient features at a glance, the following table is submitted:—

	No. of Mounds.	Diameter.	Height.	Cists.	Remarks.
		${ m ft.} { m in.}$	ft. in.		
Knap Knowes	1	21		1	Cramp.
	$egin{array}{c} 1 \ 2 \end{array}$	18	$egin{array}{cccc} 2 & & \ 2 & 3 & \end{array}$	$\frac{1}{2}$	Crossed by dry-
					stone dyke,
	j j				cramp in both
					${ m cists.}^{ au}$
	3	16	2		Clay urn packed
					round by
			•		stones, cramp.
	4	•••		1	Mound spread
			1	ĺĺ	out, cramp.
	5	•••	•••	1	Opened previ-
					ously-mound
	1	'			$_{ m spread}$ out,
		.		_ '	clay urn.
Whoom	$\begin{array}{c c} 6 \\ 7 \end{array}$	15		1	Built cist.
	7	23	4	1	Built cist.
	8	18	2	1	Steatite urn,
					amulets and
O 7 TT 1					cramp.
Sandy Holes .	9	•••	•••	3	Mound spread
					out, cramp in
	10			1	two cists.
	10	•••	•••	1	Mound spread
C - 1 - T - J	4.1	10		1	out, cramp.
Scabra Head .	11	18	•••	1	Surrounded by
				1	kerb, mound removed.
Tafts	12	21	2	1	Three individ-
raius	12			1	uals, cramp.
Ģ				1	uais, cramp.

Cremated human remains were found in every mound, and cramp, a vitreous material formed during the process of cremation in ten of the graves. In many cases the cramp adhered to the burnt bones, and in many others, pieces of bone were embedded in it.

Knap Knowes Group.—This group consists of five mounds set almost in a straight line running from slightly east of north to slightly west of south, the distance between the extreme members being about 260 yards (fig. 1 and Pl. IV.).

No.1, the most southern of the group, measured 21 feet in diameter and 2 feet in height. In the centre was a cist carefully made of four thin slabs, with another for a cover and one for the bottom. It formed an almost perfect rectangle, with the side slabs projecting beyond those at the ends. The cist measured 15 inches in length, $8\frac{3}{4}$ inches in breadth, and 17 inches in depth. The cover, quadrangular in form and measuring 21 inches by 18 inches by 1 inch, was fractured, and lay 15 inches below the surface of the top of the mound. In the cist were three and a half handfuls of burnt bones, many small pieces of cramp up to $1\frac{1}{2}$ inch in length, and six small unworked pieces of flint.

No. 2, which lay 8 yards distant, measured 18 feet in diameter and 2 feet 3 inches in height. In the centre, right under the dyke, was a well-made cist measuring 12 inches by 12 inches by 15 inches deep. It was almost a perfect square, and, again, the two side slabs projected beyond those at the ends. There were two superimposed cover-stones, the top one being the thicker; there was another slab for the bottom. Two double handfuls of incinerated bones with cramp were found in this grave. About 5 feet to the north-north-east, on the slope of the mound, was another cist which had been opened previously, as the cover-stone had been removed and only the four slabs on the sides and ends remained, the bottom being of the natural clay. The slab forming the south-east end was inserted between those on the sides, but the one at the opposite end projected beyond them. rhomboidal, being widest at the south-west end, and measured 1 foot $10\frac{3}{4}$ inches in length, 10 inches in breadth at the north, 16 inches at the south, and 14 inches in depth. The sides measured 20 inches in height and the ends 14 inches, so that, as we shall see later, the coverstone had been carefully fitted to rest on the ends with the side slabs projecting above it. Only two tablespoonfuls of incinerated bones and one small piece of cramp were found in the cist. Two hammerstones were also recovered, but as the cist wanted the cover it could not be said definitely whether they formed part of the original deposit.

¹ Distances are measured from centre to centre of the mounds.

Evidently most of the remains had been taken out when the cist was first opened.

No. 3 lay 62 yards farther on. It measured 16 feet in diameter and 2 feet in height. Near the centre were the remains of an urn of clay with small flat stones carefully built around it, placed upright upon a flag measuring 2 feet 6 inches by 1 foot. The base of the vessel, which stood tilted slightly to the west, was 2 feet below the surface of the The upper part was amissing, and the part of the body remaining was full of cracks. Four double handfuls of cremated bones, many with cramp adhering, were found in the vessel. The urn, which was made of very dark, friable ware, had to be removed piecemeal, but though several fairly large fragments were got out, their edges were so crumbly that they could not be fitted together. When complete the vessel must have been a large one, of flower-pot shape, with a wide As it lay in its cavity it measured internally $8\frac{1}{2}$ inches across the base, and 11 inches in height on the best preserved side. height an internal diameter of nearly 15 inches was indicated. wall measured $1\frac{1}{8}$ inch in thickness and the base $1\frac{5}{8}$ inch. no ornamentation on the surviving part of the vessel.

No. 4.—The first three mounds stood quite close to each other, but No. 4 was 153 yards away from No. 3. It was much spread, but maintained a height of 2 feet above the bottom of a cist found at the centre. This cist was a most interesting and carefully built structure, formed of four slabs and a cover-stone, the floor being the natural sub-soil. At the bottom it measured $9\frac{3}{4}$ inches in length and 9 inches in breadth, but at the top, owing to one end and one side slab sloping slightly inwards, the length at the mouth was only $7\frac{1}{2}$ inches and the breadth $7\frac{3}{4}$ inches. Its depth was $15\frac{1}{2}$ inches. The side slabs projected beyond the end ones, which were 4 inches taller, and the cover was neatly fitted so as to rest on the former. One double handful of burnt bones and some fragments of cramp were recovered from this cist.

No. 5.—This mound, which lies 30 yards from the last, had been interfered with many years ago and was considerably scattered. Two slabs which probably indicated the presence of a central cist, a few pieces of incinerated human bones, a flint scraper, and a number of fragments of an urn of very friable, reddish-brown ware were recovered.

Whoom Group.—This group consists of three mounds lying generally north-north-west and south-south-east, within a distance of 170 yards. The central mound lies a little to the north-east of the line connecting the other two (fig. 1, and Pl. IV.).

No. 6, the most northerly of the group, measured 15 feet in diameter,

and, as it had been disturbed in the centre, it showed little height. The remains of a cist, which had a slab 18 inches high at the south-west end, and the sides and other end formed of built stone, were exposed. The cover had been removed and the south-east side, which was best preserved, was reduced to 9 inches in height; only one stone remained on the opposite side and at the north-east end. The bottom was of soil. The cist measured 1 foot 10 inches in length and 1 foot 6 inches in breadth, and the floor was 1 foot 9 inches below the present surface. Any relics, human or otherwise, had been completely removed.

No. 7.—This mound, which was very prominent, measuring 23 feet in diameter and 4 feet in height, lay 17 yards from the last. It also had been dug into at the centre and its contents cleared out. Here the remains of a built cist were revealed, but the cover was gone and it was much reduced in height; the north-west end was entirely destroyed. The cist had been at least 3 feet $7\frac{1}{2}$ inches in length, and was 2 feet $6\frac{1}{2}$ inches in breadth. The best preserved part showed a height of 18 inches. A flagstone formed the bottom, and it lay 4 feet from the top of the mound. No bones were found, but part of a rude stone clublike implement of the Orkney and Shetland type was found in the cist; but again, owing to the grave having been interfered with, it might have fallen in after the disturbance. This, however, does not necessarily follow, as such objects have been recorded from other Orkney cists.

No. 8, the most northerly one of this group, which was separated from the last by a distance of 43 yards, proved the most interesting in the matter of the relics it contained. Unlike the others, which were practically all rectangular, the cist in the centre formed a parallelogram, the ends being inserted at a slight angle to the sides, which overlapped them at both ends. It was formed of four slabs, with a stone cover resting on the sides and the end stones projecting 5 inches above them. The floor was of the natural clay. A heap of thirty stones, the size of one's fist, were piled to a height of about 9 inches on the cover-stone. The cist measured 15 inches in length, $13\frac{1}{2}$ inches in breadth, and 12 inches in depth, the bottom being of clay.

An urn of steatite (fig. 2) containing about five double handfuls of cremated remains and a dozen pieces of cramp was found in the cist, as also were three small cut objects of steatite (fig. 3).

The urn was rather small in size and was about two-thirds full of the burial deposit. As the vessel was very badly cracked and part of one side and of the base had disintegrated, it fell to pieces on handling, but on reaching the Museum, Mr Edwards had no difficulty in restoring it. The urn has an irregularly oval mouth and it is rather lop-sided, one wall being nearly vertical and the opposite one leaning outwards in a convex curve. It measured from $6\frac{1}{2}$ inches to 7 inches in height, from 7 inches to $7\frac{7}{8}$ inches in cross diameters at the mouth, and from $4\frac{5}{8}$ inches to 5 inches at the base. The lip is flattened and varies from $\frac{7}{16}$ inch to $\frac{1}{4}$ inch in thickness. Just below the brim it is encircled by two shallow grooves having a rounded moulding, about $\frac{1}{4}$ inch wide,

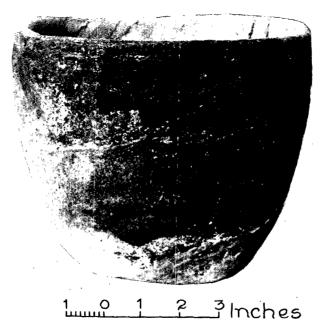


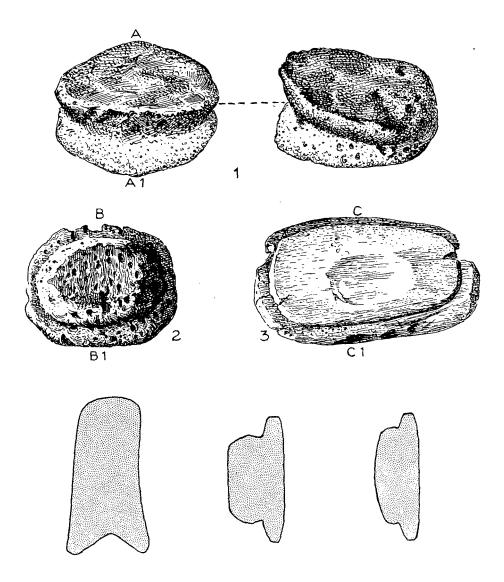
Fig. 2. Steatite Urn from Mound No. 8 at Quandale.

between them. One part of the wall, where broken, showed a thickness of less than $\frac{3}{16}$ inch.

The mouth of the vessel was covered by two small pieces of flagstone, the lower, which was of rude hexagonal form, measuring 9 inches by $7\frac{3}{4}$ inches by $\frac{1}{2}$ inch, and the upper, which was of irregular shape, $8\frac{1}{4}$ inches by 7 inches by $1\frac{13}{16}$ inch.

Three objects of steatite, probably amulets, were found in the bottom of the cist—one under the urn and one about 2 inches inside from the south and east corners (fig. 3). All were of oval discoid form. The first, which was rather thicker on the one side than on the other, measured

¹ The illustration does not show the full extent of the lop-sidedness.



Sections A-A1, B-B1, and C-C1.

Fig. 3. Steatite Amulets from Mound No. 8 at Quandale. ($\frac{1}{1}$.)

 $1\frac{3}{4}$ inch by $1\frac{1}{2}$ inch in diameter and $\frac{13}{16}$ inch in greatest thickness, and had a groove cut round one side and both ends. The two others were completely encircled by a groove, with the upper part slightly smaller than the under. They measured $2\frac{3}{8}$ inches and $1\frac{9}{16}$ inch in length, $1\frac{3}{8}$ inch and $1\frac{1}{4}$ inch in breadth, and $\frac{1}{2}$ inch and $\frac{5}{8}$ inch in thickness.

Sandy Holes.—Mounds Nos. 9 and 10 had been greatly disturbed, the soil being scattered and the cists they contained exposed (fig. 1, and Pl. IV.).

No. 9.—In the centre of the mound, which was still about 2 feet high, was a fine large cist, almost square, formed of four long flags. at one corner, that to the south, did one stone project beyond the others. The cist measured 3 feet 6 inches in greatest length, 3 feet 3 inches in greatest breadth, and 1 foot 8 inches in depth. The cover was gone, and the bottom was the natural soil. A smaller cist, practically $15\frac{1}{9}$ inches square and the same in depth, had been inserted against the north-east side of the larger one, 5 inches from its east corner. slab of the larger cist formed one side of the insertion, and three other flags completed its other sides. Two double handfuls of incinerated bones and a few pieces of cramp were all that remained of the original deposits; there were also a few pieces of charcoal and some ash. bones were found under the intruded cist.

About 2 feet 3 inches to the north-west was the eastern side slab of another cist which measured 2 feet 3 inches in length, and a small part of its built south end, which had been at least 1 foot 8 inches in length. Two double handfuls of burnt bone with some cramp were obtained here.

No. 10.—At the centre of this mound, which stood 7 yards from No. 9, was a nice cist formed of four slabs, one end of each projecting beyond the adjacent stone so as to suggest a swastika design. It measured 1 foot 6 inches in length, 1 foot 2 inches in breadth, and 10 inches in depth. The side slabs were higher than those at the ends and a cover-stone was fitted in nicely to rest on the latter. This is well brought out in fig. 4. The floor was of beaten clay which had been brought in. In the other cists where the floor was of clay it was just the natural sub-soil.

In the cist were found five double handfuls of incinerated bones and more than a dozen pieces of cramp.

No. 11, which lay above Scabra Head, had been cleared away, leaving exposed a circular kerb formed by a single row of stones 1 set on edge, measuring 18 feet in diameter, and a central cist wanting the cover, but with a slab bottom. The cist was rectangular and had two side and two end slabs, the former projecting beyond the latter at both ends.

¹ It may be recalled that a mound excavated by me at Nears, Rousay, was encircled by a built wall of which three to six courses remained (Proc. Soc. Ant. Scot., vol. lxviii. p. 68).

The cist measured $14\frac{1}{2}$ inches in length and $10\frac{1}{2}$ inches in breadth at the bottom; its depth had been about 11 inches, although the slab at the south-east end was 6 inches higher. More than a double handful of burnt bones and a few pieces of cramp were found in it.

Tafts.—The outlying mound, No. 12, near Tafts (fig. 1, and Pl. IV.), measured 21 feet in diameter and 2 feet in height, and contained a rectangular cist in the centre measuring 2 feet 4 inches in length, 1 foot 7 inches in breadth, and 1 foot 7 inches in depth. The end slabs projected beyond those at the sides, and every one of them had been dressed to a convex top. The bottom was of the natural sub-soil. The cover slab was of irregular

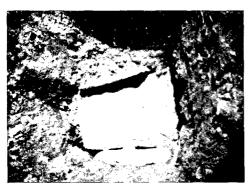




Fig. 4. Cist with and without Cover in Mound No. 10 at Quandale.

shape and overlapped the whole of the mouth of the cist. A considerable quantity of burnt bones representing two adults and a child, with some cramp, were found in the cist.

Every one of the cists which had not been partially destroyed was carefully formed of thin flags of the local Old Red Sandstone, which splits regularly, usually with straight edges. They ranged, generally, from $\frac{3}{4}$ inch to $1\frac{3}{4}$ inch in thickness, but in the largest cist they were 2 inches, and one slab in No. 10 was 3 inches. Six of the cists lay northwest and south-east or north-east and south-west, and four nearer north and south or east and west.

The three objects of steatite found in Mound No. 8, which I have suggested may have been amulets, seem to be unique. Small objects of stone have rarely been found in Bronze Age graves in Scotland, but a small rectangular plate of slate with a perforation at two corners was discovered in a cinerary urn at Seggiecrook, Aberdeenshire, and two

small pendants with a single perforation were found in the urn-field adjoining the stone circle at Loanhead of Daviot, Aberdeenshire.¹

MOUND ON WARD HILL.

Near the surveyors' cairn on the summit of Ward Hill, which lies about 1200 yards almost due north of Westness House, and rises in steep slopes, faced near the top with rocky bluffs, to a height of over 600 feet. are the remains of a mound which has been considerably reduced in It stands within 10 yards of the edge of the cliff to the southwest, and now measures 26 feet in diameter and 1 foot 6 inches in height. About the centre are the remains of a large cist, which seems to have been almost square on plan, with the longer axis lying north-east and south-west (Pl. IV.). The cover has been removed, but the sides and the Three of the sides are formed with long single slabs set slab floor remain. on edge, but two have been utilised to form the fourth—that on the northeast. Generally the flagstones used for the sides and ends of the cists just described had straight upper edges, but in this one the slabs on both sides of the northern corner and on the south side of that on the east were irregular, and the vacancies caused thereby were built up with small pieces of flags so that the mouth of the cist should be brought up to the The south end of the slab on the south-west side has been forced out about I foot, but the original length of the grave seems to have been 3 feet 3 inches, while the breadth is 3 feet 2 inches; its depth has been 2 feet.

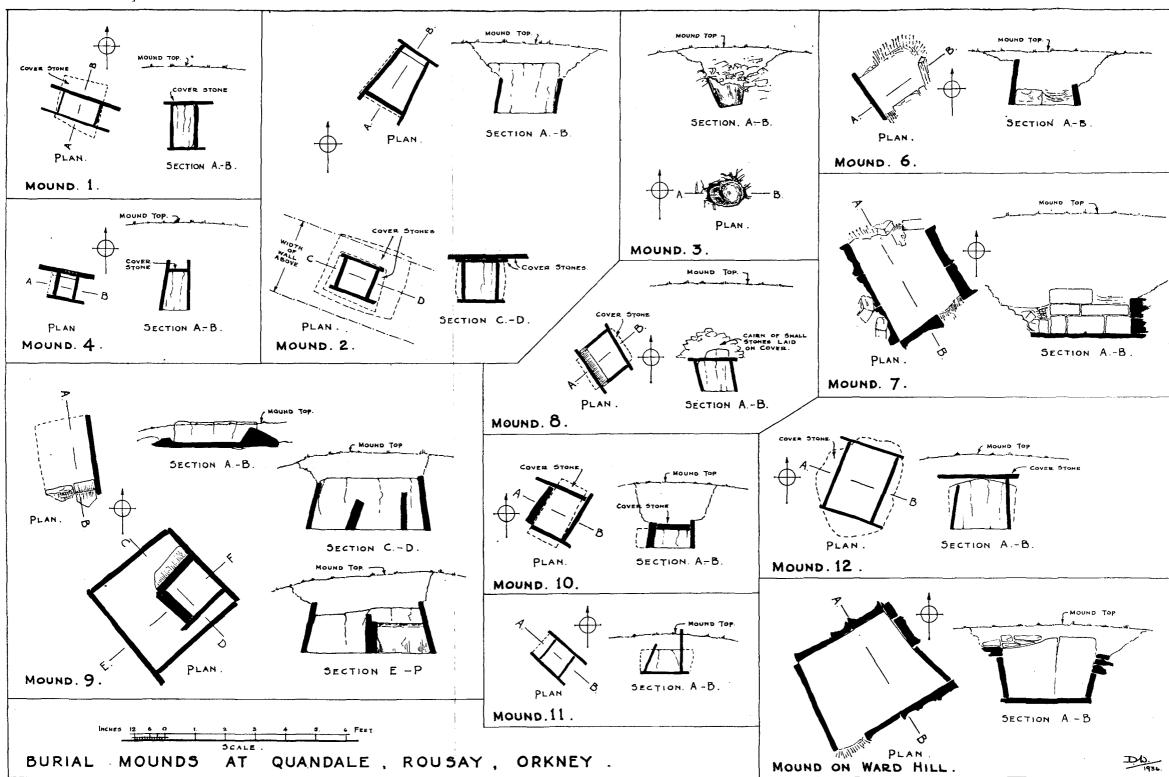
When first opened and the covers removed the cist had been completely cleared out, as no traces of burnt bones, which were probably buried in it, have been left.

INVENTORY OF SKELETAL REMAINS FROM QUANDALE, ROUSAY, ORKNEY, 1936. By Professor Alexander Low, M.D., F.S.A.Scot.

Each parcel contains cremated bones, and in many instances "cramp" is present. The very fragmentary and warped condition of the pieces of bone make identification difficult. No animal bones have been identified, but in every case some part of the human skeleton is present.

Mound No. 1.—Many fragments of cremated bone, amongst which can be recognised pieces of flat bones of human skull. Impossible to say whether more than one individual. Pieces of cramp.

¹ Proc. Soc. Ant. Scot., vol. lxx. p. 300.



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Mound No. 2.—Many small pieces of cremated bone, parts of human skull identified; probably one individual. Fragments of cramp.

Mound No. 2A.—Fragments of human limb bones; small piece of cramp.

Mound No. 3.—"Found in clay urn." Fragments of human bone identified, but not possible to say whether more than one individual; many fragments of bone with cramp attached.

Mound No. 4.—Fragments of human skull can be recognised; probably remains of one individual; separate pieces of cramp in some instances adhering to the bone.

· Mound No. 8.—"Found in steatite urn." The cremated remains consist of many fragments of bone, among which can be identified some twenty pieces of the flat bones of the skull; the right and left petrous bones; fragments of vertebræ; ribs; limb bones including a piece of the head of a humerus and a femur; the remains of one adult skeleton. Quite a number of the fragments are embedded in cramp which is actually fused with the bone.

Mound No. 9.—"Found in big centre cist in Mound No. 9 on Scabra Head." Small quantity of very fragmentary cremated bone; some pieces of parietal, frontal and lower jaw can be identified as human, as well as one or two ribs; probably remains of one adult human skeleton. Some pieces of charcoal and of cramp.

Mound No. 9A.—"Found inside larger cist No. 9." Small quantity of fragmentary cremated bone; some twenty pieces of the flat bones of skull can be identified, and evidence of charcoal. Probably the remains of one adult skeleton.

Mound No. 98.—"Found in cist 3 feet 3 inches west of big cist in centre of Mound No. 9." Fragments of cremated bone; number of pieces with cramp fused to bone; numerous small pieces of the vault of a rather thin-walled skull, and fragments of limb bones can be identified; probably remains of one adult skeleton; seven pieces of cramp at least.

Mound No. 10.—"Bones found in cist." Large quantity of fragmentary cremated bone; cramp adherent to many pieces of the bone; pieces of the flat bones of skull; 3 molar teeth; pieces of limb bones and fragmentary finger bones—no duplication of parts, so probably one individual.

Mound No. 11.—Small quantity of cremated bone, amongst which can be identified some pieces of human parietal; rib; shoulder blade; ulna. The remains of one human skeleton.

Separately, a small quantity of fragments of cremated bone; pieces

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which can be identified are femur and rib. There is also a certain amount of cramp-like material.

Mound No. 12.—Many fragments of cremated bone, among which can be identified pieces of most of the bones of the human skeleton. Duplication of parts of bones make it evident that at least three individuals are represented; for instance, there are two pairs of petrous bones and an odd one. The remains are those of two adults and one child; some pieces of cramp.