

**On the horned cairns of Caithness : their structural arrangement, contents of chambers, &c. ; / by Joseph Anderson.**

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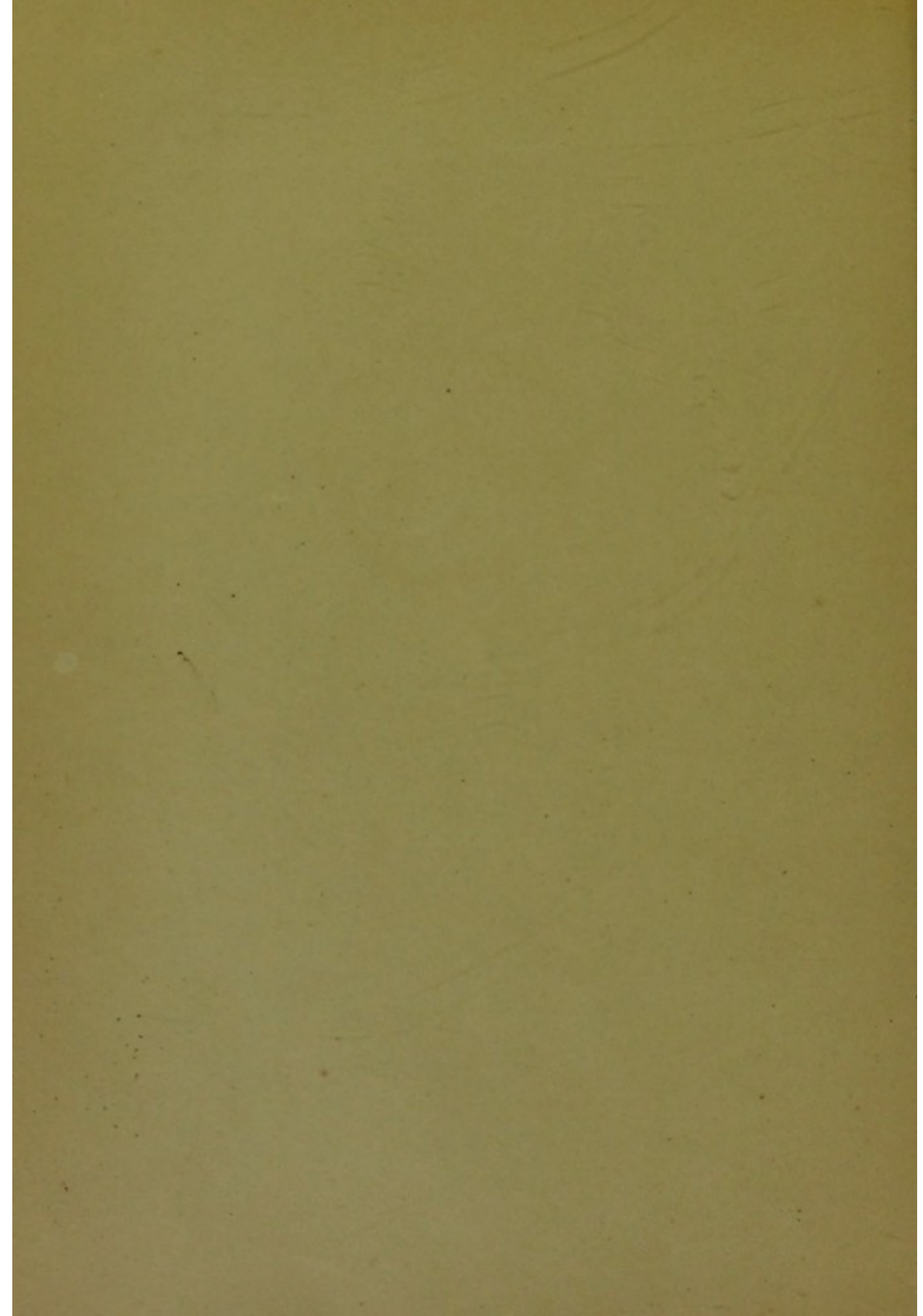
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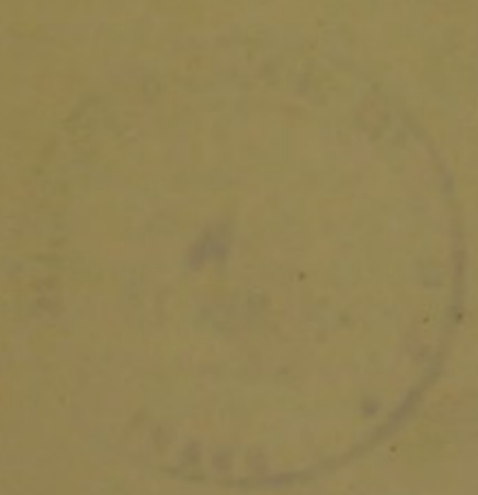


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ON THE HORNED CAIRNS OF CAITHNESS: THEIR STRUCTURAL  
ARRANGEMENT, CONTENTS OF CHAMBERS, &c. BY JOSEPH  
ANDERSON, COR. MEM. S.A. SCOT. (PLATES LX.-LXIII.)

In a previous paper on the Chambered Cairns of Caithness, I have stated that, in the course of a series of explorations among them, conducted conjointly by the writer and Mr R. I. Shearer for the Anthropological Society of London, an entirely new type of cairn structure had been met with, and several examples are therein briefly described. Since that paper was written, we have explored other examples of the same type; and the purpose of the present communication is to describe more fully the peculiarities of structure and contents presented by the two classes of horned cairns.

The common idea of a cairn is that of a simple heap of stones, agglomerated without regard to any definite structural plan. The design thus implied would be nothing more than the raising of a heap, as the stones might arrange themselves over a funereal deposit, placed in the

centre of the cairn, or under it, enclosed in a cist, or occupying an internal chamber, constructed with much care and labour. But the archæologist can have as little knowledge of the design of the cairn-builders, with reference to the peculiarities of form and varieties of type exhibited in the construction of cairns of different classes, as they could have had of his special theory on the subject. He can see, however, that they *had* fixed ideas, which they wrought out with great persistency, both in the external configuration and in the internal arrangements of their sepulchral structures. Whether horned or merely circular, whether covering a chamber or a simple cist, all the cairns that have been examined in this district (except those composed of small, broken, and burnt stones) have been regularly constructed buildings, which, through lapse of time, have assumed externally the appearance of mere heaps, as the brochs have done. The basal outline is generally found to be as distinctly defined, by a single or double wall, as the foundations of a modern house. These sepulchral cairns may thus be classified as to their external form as follows :—(1.) Cairns of a circular form externally, and of small size, covering a central deposit, placed in a small rudely-formed cavity among the stones, or in a regularly constructed cist of slabs. (2.) Cairns of large size, circular or oval as to external form, covering a central chamber usually divided into three compartments, and having a lintelled passage leading into it. (3.) Cairns of still larger size, cornuted at the extremities, and also covering tri-camered chambers and lintelled passages.

*Two classes of Horned Cairns.*—These latter are of two classes—long and short cairns. The long cairns are the more numerous. We have found four examples in the parish of Wick, three of which we have explored. The fourth, unfortunately, has been completely destroyed by being used as a quarry. Of the short cairns we have only found two.

The external characteristics of the long cairns are, their great length in proportion to the breadth of the body of the cairn, their lying more or less nearly east and west, and their being much higher at one end than at the other. The higher end is always placed towards the east; and, notwithstanding the immense length of the cairn, there is, in three out of the four instances, only one interior chamber, situated in the higher or eastern end. From this chamber the passage opens exteriorly midway between the two horns in front of the high end of the cairn.



In the short cairns, the body of the cairn is nearly as broad as it is long. The chamber is in the centre of the cairn, and the passage opens midway between the two larger horns. The short cairns both face to the south-east, and while the long cairns are either placed on a level hill-top, or along a ridge, the short ones are situated, one on the side of a hill (though on the crown of a smaller eminence), and the other in a hollow surrounded by hills.

*Situation and Dimensions of the Horned Cairns.*—No. 1, long cairn,

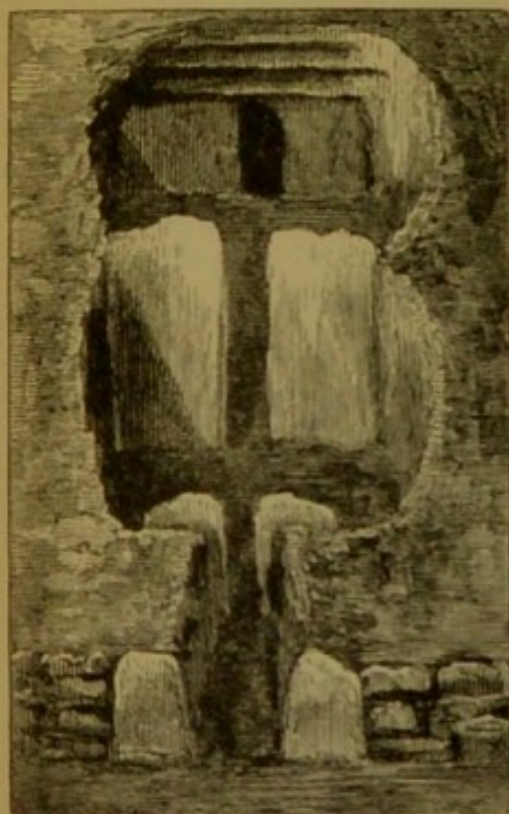
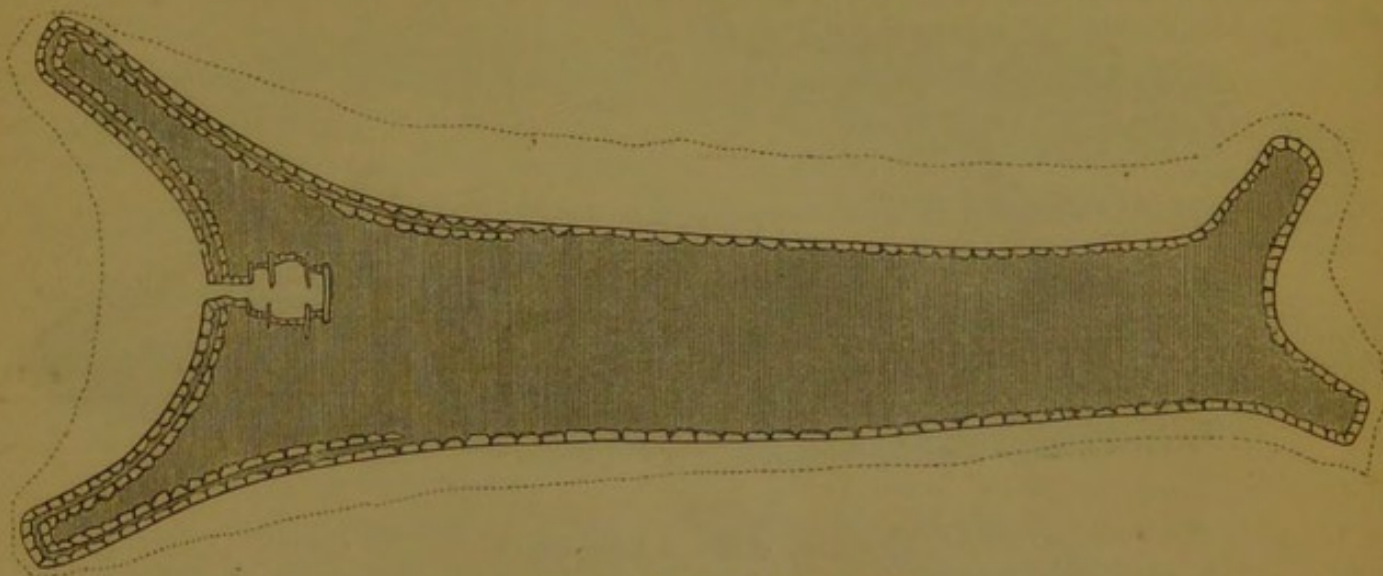


Fig. 1. View of Passage and Chamber of No 1 Long Cairn, Yarhouse.

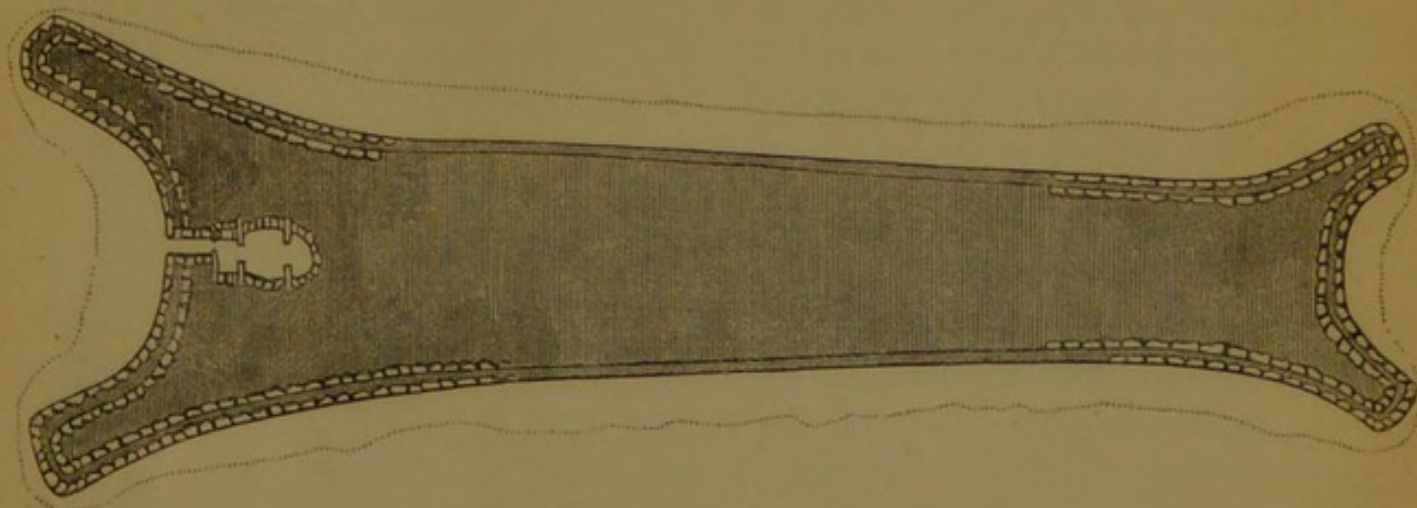
lies across the flat hill-top, above the loch of Yarhouse, Thrumster. Its extreme length is 240 feet. The body of the cairn at the wider end is 66 feet across, narrowing to 36 feet at the smaller end. The horns project about 30 feet in front of the entrance, which lies midway between them; and the line across their tips is 90 feet from point to point. The rear horns project about 12 feet behind the cairn, and the line across their tips is 50 feet.

The passage at the entrance is 2 feet wide, and the side jambs  $2\frac{1}{2}$  feet high. The lintels were gone. Ten feet of a passage leads into the chamber, which is tri-cameral. The first compartment is  $4\frac{1}{2}$  feet wide at the end next the passage, and 6 feet wide at the insertion of the first

pair of divisional slabs. These are set up at about  $3\frac{1}{2}$  feet from the faces of the stones flanking the entrance from the passage. The one rises 7 feet, and the other  $7\frac{1}{2}$  feet above the floor, the passage between their edges into the second compartment being 2 feet wide. In the second compartment the width of the chamber expands to about 6 feet, and the floor of this compartment is about 6 feet square. The opening into the third compartment is only 2 feet 4 inches high, by about 20 inches

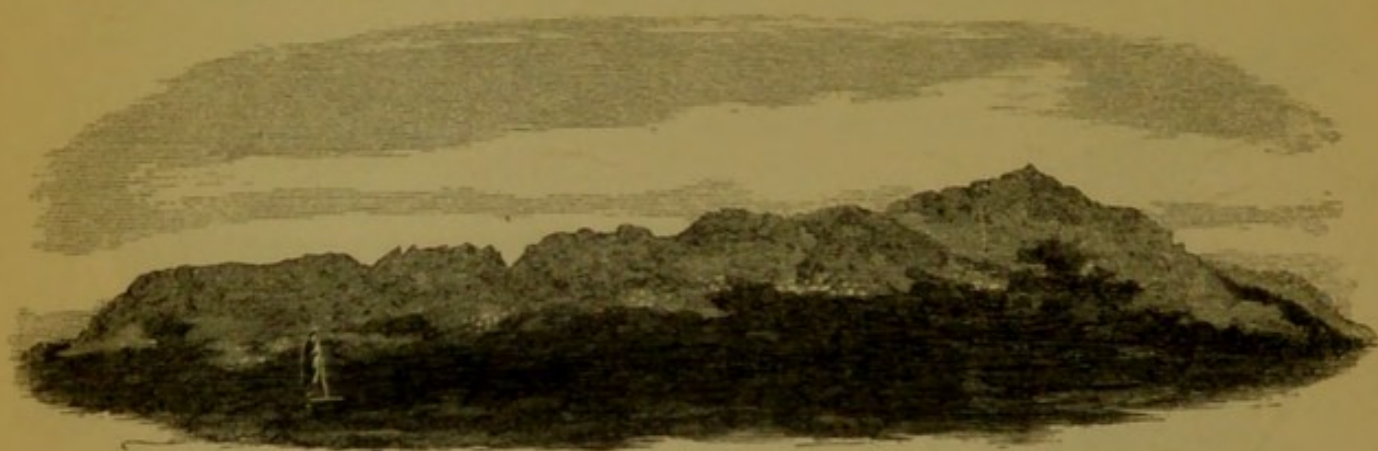


Ground Plan of No. 1 Long Cairn.  
(240 feet in length.)

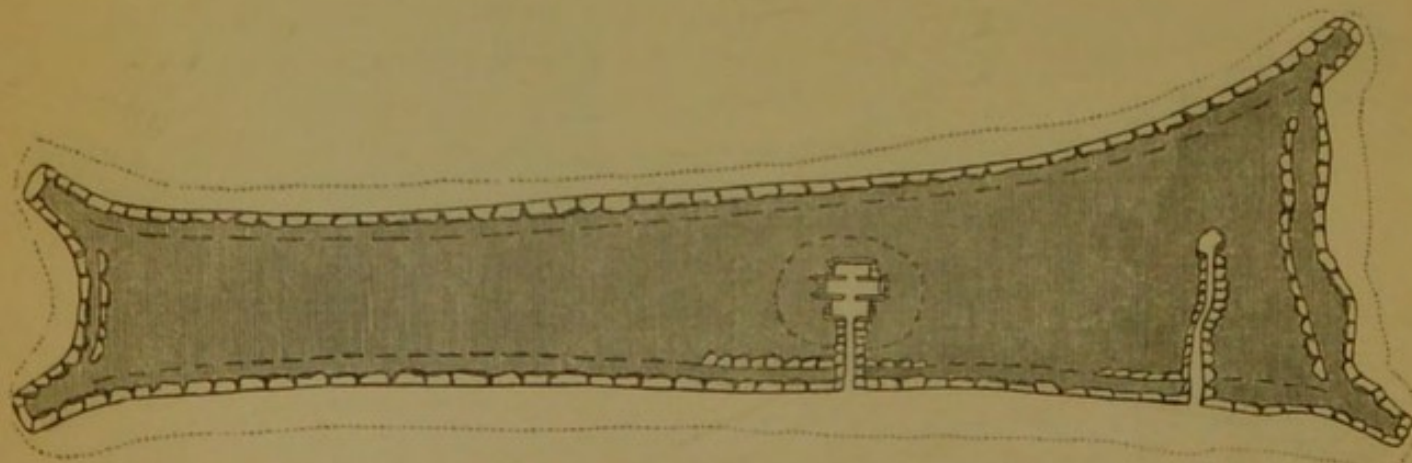


Ground Plan of No. 2 Long Cairn.  
(190 feet in length.)





Elevation of No. 3 Long Cairn.  
(195 feet in length.)



Ground Plan of No. 3 Long Cairn.  
(195 feet in length.)

wide. This compartment, which is roofed by a single block of enormous size, measures interiorly 4 feet 8 inches by 2 feet 4 inches, and 2 feet 4 inches high. No other chamber exists in this cairn, so far as we have ascertained by digging down in several places between the chamber and the smaller end of the cairn.

No. 2, long cairn, is on the same hill-top, about 200 yards distant. Its extreme length is 190 feet; greatest breadth across the body of the cairn, 45 feet; least breadth at the smaller end, 25 feet. The horns in this cairn are shorter, and had been somewhat spoiled at the tips, by removing the stones for building purposes. Enough remained of their foundations to determine their shape and dimensions. For the same reason, the middle portion of the cairn was destroyed, but fortunately the chamber and its contents had escaped.

The passage entered, as in the former case, between the horns of the larger end, and was 9 feet long and 2 feet wide. The first compartment of the chamber was nearly square, being  $5\frac{1}{2}$  feet by 4 feet 10 inches, and the side walls about 5 feet high. The second compartment was 8 feet wide in the centre, by 7 feet; and the third compartment was nearly semicircular, about 6 feet 8 inches across the chord, and 5 feet from the entrance to the back.

No. 3, long cairn, is at Camster, and lies along the ridge of a hill, close to the large circular cairn figured and described in my former paper.<sup>1</sup> Its extreme length is 195 feet; breadth at the wider end 64 feet, and at the narrower end 32 feet. The horns in this case are extremely short, but well defined. It differs from the other long cairns in having more than one chamber, and the passages leading into them opening out to the side of the cairn, instead of to the higher end between the horns.

The first chamber is a simple bee-hive cell, situated under the apex of the higher end of the cairn. It is reached by a long, low passage, the opening being 30 feet along the side of the cairn from the north-east end. This passage, which was little more than 2 feet high at the entrance, and about the same width, ran straight across the cairn for 17 feet, where it was turned to the right by two stones set on end on opposite sides, similar to the jambs usually found at the entrance to a chamber; but instead of being set at right angles to the passage wall, they were

<sup>1</sup> Proceedings, vol. vi. p. 449.



set at an angle of about  $45^{\circ}$ , and parallel to each other, the passage turning to the right between their faces. It continued for 6 feet further, before it entered the chamber by an irregularly arched doorway.

The chamber itself was of an irregularly pentagonal form, the sides being defined by slabs set on edge, over the tops of which the walls were carried upwards, and brought gradually to an approximately circular form. At the height of about 4 feet above the floor, the walls begin to converge by the overlapping of the stones; and at the height of 6 feet the apex of the dome is covered in by a stone about 9 inches square. If the floor were circular, it would be less than 6 feet in diameter. The chamber was floored by two large slabs, an unusual feature in these cairns.

Fifty feet further along the side of the cairn, another passage opened leading into a chamber of the usual tri-camered form. This passage was remarkable for its unusual height and width, and also because its outer part was rudely arched by overlapping stones, instead of lintelled. The lintelled portion was 4 feet high, and  $2\frac{1}{2}$  feet wide; and where the roof came over the first compartment of the chamber, instead of being continued in line with the lintelling of the passage, and the lintels resting on the jambs at the entrance, they were carried over them fully 2 feet higher; and the roof of the first compartment was formed by the lintels overlapping each other from front to back of the chamber, like the reverse side of a stair. The length of the passage was  $10\frac{1}{2}$  feet. The arched portion was narrower than the lintelled part, the minimum width being 18 inches towards the entrance, widening to  $2\frac{1}{2}$  feet as the maximum further in.

The first compartment of the chamber was 4 feet 3 inches square on the floor, the side walls being slightly curved in the centre. The entrance to the second compartment was  $2\frac{1}{2}$  feet wide between the edges of the divisional slabs, but narrowed to less than 2 feet by the insertion of a pair of false jambs, with a lintel across them, and a threshold slab set on edge across the bottom. These fell away when the floor was excavated.

The second compartment was 7 feet 10 inches by 5 feet, the side walls bulging outwards, and slightly curved. The divisional stones were 6 to 7 feet in height, and the highest part of the wall remaining was not much more.



The third compartment measured on the floor only about 5 feet by  $2\frac{1}{2}$  feet; but the great slab which formed the lower part of the back wall was considerably inclined outwards, and this made it more roomy above. From the signs of convergence of the walls all round, and the height of the last pair of divisional slabs not exceeding 5 feet, it was plain that the second and third compartments had been covered by one dome-shaped roof, as in the circular cairn close by (see woodcut, p. 496). From the appearance of the cairn, I am convinced there are other chambers in the part between this second chamber and the lower end of the cairn; but circumstances over which we had no control have prevented its further exploration.

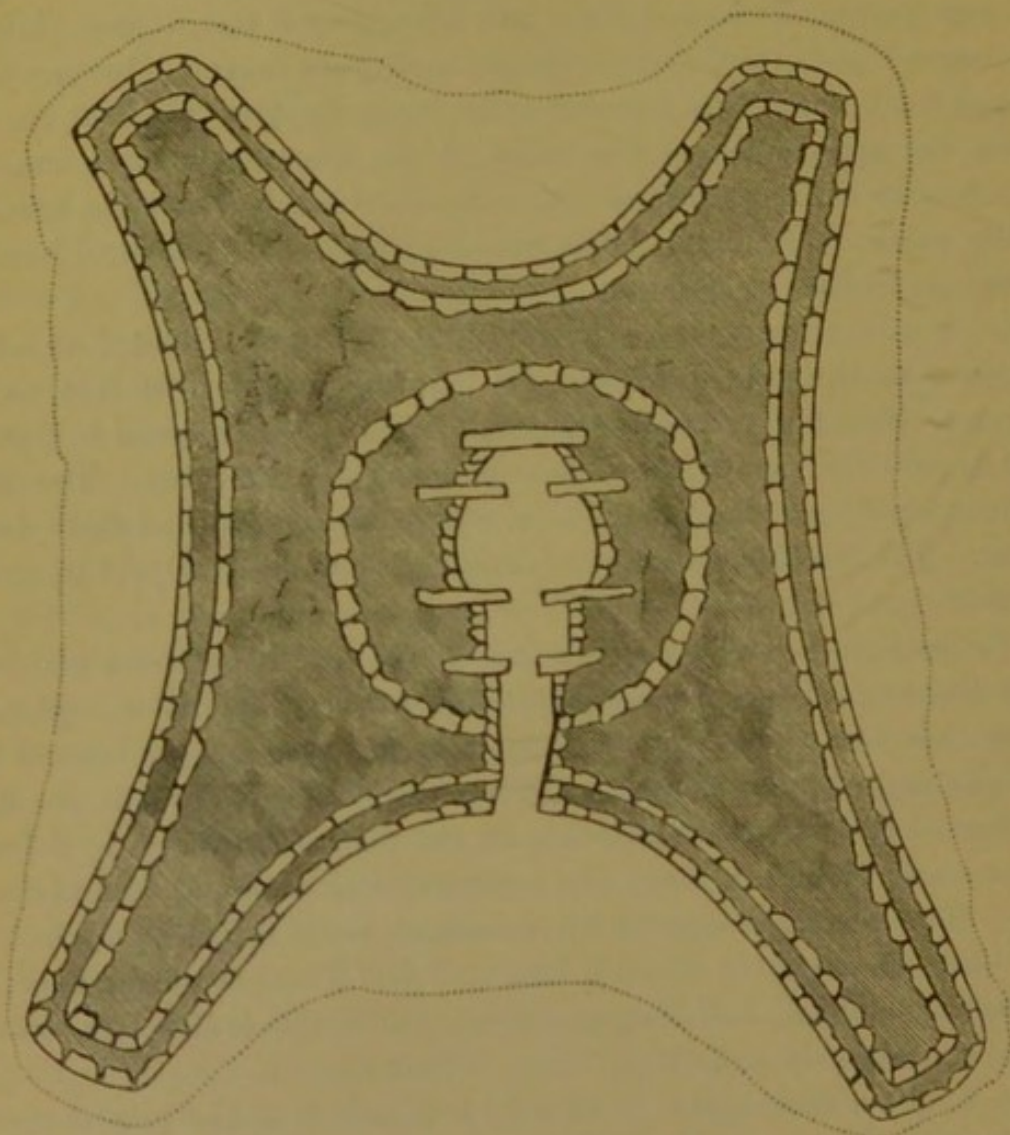
No. 4, a short cairn, is at Ormiegill, near Ulbster, situated on a small eminence on the side of a hill. Its extreme length is 66 feet, and the extreme breadth very nearly the same. The horns expand in front till they are 50 feet apart, those behind being 37 feet apart. The horns in front are 8 feet broad at the tips, which are convex, and those behind 9 feet. The circular wall surrounding the chamber is 80 feet in circumference.

The passage opening between the horns is 10 feet long and 2 feet wide, and seemed to have been lintelled over. The first compartment of the chamber, which is small, appears in this case to have been at least partially arched by overlapping courses projecting inwards in the upper portions of the walls. It measures on the floor about 3 feet by 4 feet 10 inches; and there are signs of convergence at about  $3\frac{1}{2}$  feet above the floor. The second compartment measures about 8 feet by  $6\frac{1}{2}$  feet, and the third compartment about 5 feet by 2 feet 3 inches on the floor; but the slab at the back, inclining greatly outwards, makes the cross measurements considerably more when taken higher up.

No. 5, also a short cairn, is situated in a hollow at the base of the hill fortification, known as Garrywhin, near Bruan, and on the estate of Clyth. Its extreme length is about 80 feet, and greatest breadth about 60 feet. The horns project about 20 feet in front, and about 15 feet behind.

The passage entering between the horns is 11 feet in length, and about  $2\frac{1}{2}$  feet high at the entrance. The width at the entrance is about the same as the height, but it widens about 6 inches farther in. It seemed to have been lintelled.





No. 4, Short Cairn. (66 feet in length.)

SHORT CAIRN, ORMIEGILL. CAITHNESS.

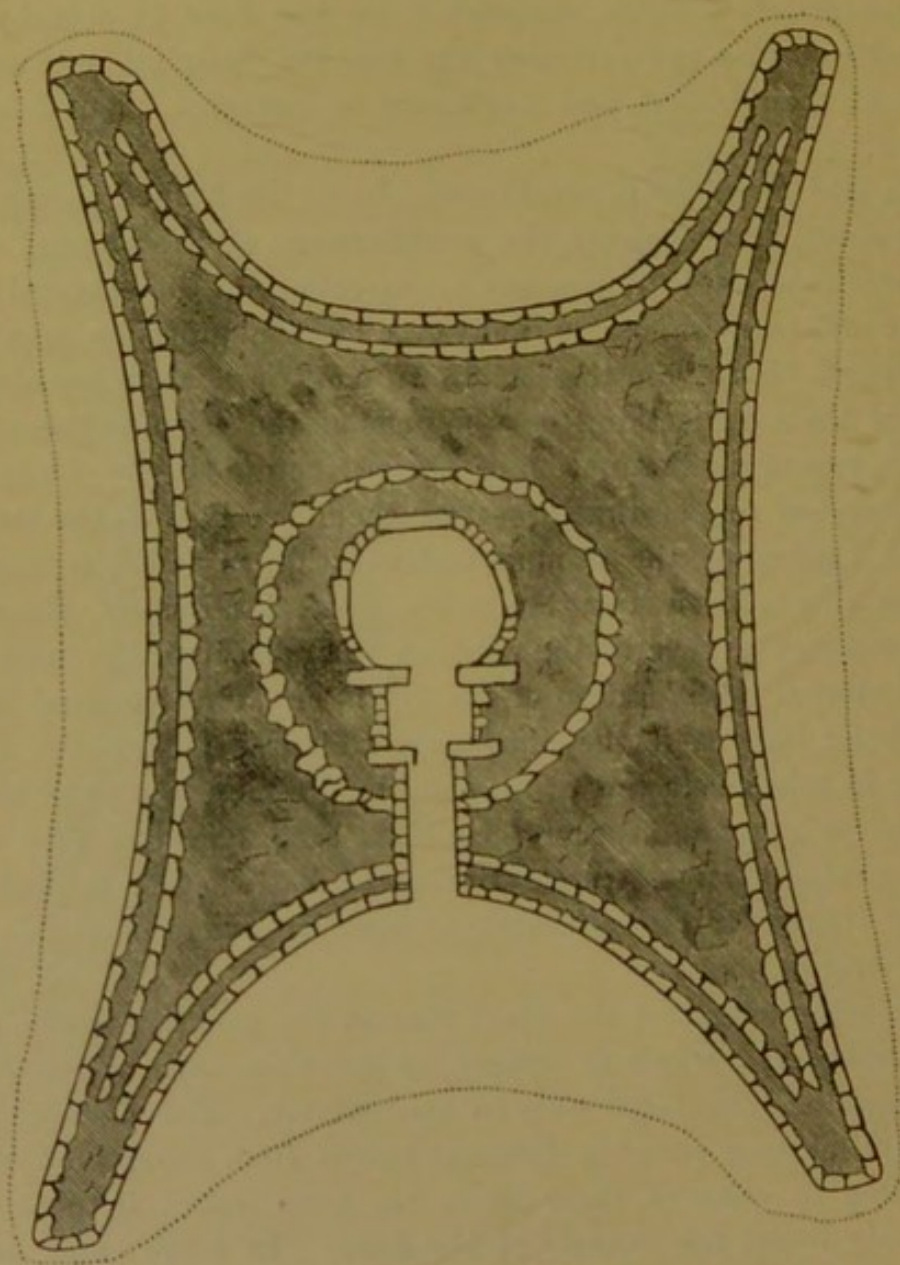
The first compartment of the chamber, which in this case is bi-cameral, measures about 6 feet by  $4\frac{1}{2}$  feet on the floor. The second compartment is approximately circular, measuring on the floor 11 feet by 10 feet. The walls of this compartment are concave, bulging outwards in the middle of their height, and beginning to converge about 5 feet above the floor.

*Form and Structure of the Horns.*—In all the horned cairns, whether long or short, and whatever the modifications of the internal chamber, the characteristics of the peculiar prolongations of the external structure to front and rear, which, for want of a more appropriate appellation, I have termed 'horn,' are the same. In fact, while their tapering curvature, and their projection from the ends of the cairn, suggests the idea of horns, repeated examination of their structure in every way, even to the removal of one of the largest of them bodily from the foundation, and the digging of the ground underneath, has failed to suggest the slightest clue to their function in the general structure, the reason of their similarity as regards the mode of their construction with relation to the external configuration of the cairn, or their structural intention, or symbolic import, if they had any. Their persistency of type, and position in relation to the cairn, and their almost complete identity of constructive plan and general contour, are suggestive of a symbolic meaning rather than a structural purpose; but whether symbolic, structural, or ornamental, they furnish no positive evidence on the question of their original purpose.

In both the long and the short cairns, the peculiar configuration of the structure as a whole is defined by a double wall, or rather by two parallel walls, both faced only to the outside. The distance between their parallel faces varies in different cairns from about 30 inches to 3 feet. One or other of these walls has been traced in each instance completely round the outline of the cairn. In some cases, as in the Ormiegill short cairn (No. 4), both walls remain complete without a break. In others, the outer wall is partially gone; and in some we have failed to find the inner wall at one part of the cairn, though both have been distinctly traced for considerable distances in other parts.

These parallel walls define the outline of the horns, as well as of the sides, and the concave ends of the cairns. The horns are not pieced





No. 5, Short Cairn. (80 feet in length.)

SHORT CAIRN, GETT, CAITHNESS.

on to the general structure, but form an integral part of the complete external configuration. The building is continued along its peculiar outline without a break. Owing, as I believe, to the falling outwards of the stones from the upper part of the cairn, the parallel walls are always found within what is now the base of the mass of the cairn (shown by the dotted lines on the plans), although they may have originally defined its outline. The greatest height to which we have found them standing has always been between the horns in the higher end of the cairn. In the Camster long cairn (No. 3) the outer walls in the centre of the curvature between the horns in the high end rose 7 feet; and in No. 2 they were entire for 5 feet above the foundation, becoming gradually lower towards the tips of the horns, where we have not found more than 2 feet to  $2\frac{1}{2}$  feet of their height remaining. Nor would the quantity of the debris in which we found the horns in all cases enveloped (and out of which their outline had to be excavated), indicate that they had ever reached more than a very moderate height at the extremities. The greatest height to which any part of the double retaining wall remained standing was about half the extreme height of the cairn. The faces of the walls of the best preserved example have a considerable inclination inwards, so that, as none of the horns are more than 9 feet broad at the points, their opposite outer walls must have come very close together at no great height, if continued upwards.

In most cases the double wall of the horns (which was continued all round the cairn) was built of stones selected for the purpose, long and flat, forming a stable and well-knit structure. The doubling of the wall was most likely a precaution against the dilapidation of the cairn, by the falling down of the outer one in course of time. Generally, the inner wall now stands higher than the outer, and it may have been so originally; but as in no case have we found the whole of the original height of either remaining, this may be simply the result of the more extensive dilapidation of the outer wall.

*Proportions of the Horns.*—The dimensions of the horns have no definite proportion to the size of the cairn. The pair in front, however, are usually larger, and enclose a wider curvature than those in rear of the cairn,—the base of the cairn being usually wider in the passage end, and the appendages necessarily farther apart. A species of rude sym-



metry in the proportions of the separate pairs is discernible, the measurements of each one of a pair generally agreeing pretty closely, while the contour is as roughly symmetrical as the nature of the ground will admit. The contour differs in different cairns; but there is always a striking similarity of contour between the two pairs of the same cairn. Some of the cairns have short, squat projections, with small curvature; and others have narrower horns, with longer curves, and a wider expansion. In some cases the horns are of almost uniform breadth, from the insertion in the body of the cairn to the tips; while in others they are wide at the insertion, narrowing towards the tips. In the longest cairn the horns project an eighth part of the total length of the structure in front, and about a twentieth behind. In the second longest cairn the horns project only about one-fortieth of the extreme length of the structure; and the projection in front and rear is almost the same. In one of the short cairns the projection of the horns is about one-fourth of the total length of the structure in front, and about one-fifth behind; while in the others it is more than a third in front, and more than a fourth behind. There is, therefore, nothing in these relative measurements on which to base any principle of proportion, in the relation of the horned part of the structure to the size of the cairn, unless that the short cairns have this peculiar feature much more largely developed than the long ones.

*Orientation of the Cairns and Horns.*—There does not appear to have been any strict rule observed in the placing of the horns with reference to the cardinal points. While the long cairns lie with the highest ends looking more or less towards the east, yet the direction of the axes of the cairns varies between N.E.<sup>1</sup> and E.S.E.; and in the short cairns, the opening of the passage between the front horns looks in the one case S.S.E., and in the other S.S.W. Standing in the centre of the Ormiegill (short) cairn, the rearward horn on the right points due north, and that on the left N.N.W., while the two flanking the entrance point E.S.E. and S.S.W. respectively. But beyond the broad fact that the long cairns lie with the chambers looking more or less to the south or north of east, and the short cairns with their chambers looking to the east or west of south, there does not seem to be any distinct generalisation deducible

<sup>1</sup> The bearings are all given by compass without correction for deviation.



either from the direction of the cairns themselves or their cornuted appendages. Perhaps the variations may be accounted for, by supposing the different cairns to have been constructed at different periods of the year, with a rough attempt at orientation.

*Internal Structure.*—It will be observed, on reference to the plan of the Ormiegill cairn (No. 4), that a circular wall, 80 feet in circumference, surrounds the chamber. This wall is built of square and heavy blocks, and presents a very marked contrast in this respect to the exterior walls, which are of light, thin, flat slabs. As has been previously remarked, the selection of these long, thin, and flat slabs for the construction of the outer walls, so as to produce a building that would be most firmly knit together and least liable to dilapidation, accords entirely with their purpose in the structure. If the purpose of the circular wall surrounding the chamber was to hold the central chambered portion of the cairn together, and resist the weight and thrust of the dome-shaped roof, the reason of the selection of large, square, and heavy blocks for its construction is at once apparent. As this circular wall evidently served an important structural purpose in the general plan of the building, there is no reason for assigning to it any symbolic significance; but, on the other hand, there is no reason why a symbolic intention and a structural purpose should not be fulfilled together. Indications of a similar circular wall appear in the long cairns (see fig. 3). It may be perhaps conjectured, as the Ormiegill cairn appears to comprehend a common chambered cairn of the circular type within the horned structure, that both the short and the long cairns may have been originally chambered circular cairns, similar to those described in my former paper,<sup>1</sup> the horned structure having been subsequently added to them. It is true that, if the whole of the cornuted outside structure be removed from the Ormiegill cairn, there remains a chambered cairn of the circular type complete. But then the passage would be very much shorter, and the mass of the structure round the chamber very much smaller than in any known instance of a chambered circular cairn in the district. The fact also that these had all a double circular retaining wall round the outside, favours the presumption that the double, and not the single, wall was the original external finish to the structure in the

<sup>1</sup> Proceedings, vol. vi. p. 444.



horned as well as the circular cairns. If this be so, the horned structure must be regarded as part and parcel of the original design, and not as a later addition to a common chambered cairn of the circular type.

*Structure and Arrangement of the Chamber.*—The horned cairns, whether long or short, present the same characteristics in the arrangement of the chamber as the circular cairns with which they are associated. The distinctive feature of all the chambered cairns of this district<sup>1</sup> is the tri-cameration of the chamber, effected by large slabs set on end, in pairs, projecting across the floor, while a single slab, of very large dimensions, always stands as part of the back wall opposite the entrance. Sometimes, also, slabs are built flat into the side walls of the chamber, so as to form part of the wall. From the manner in which the walls are filled in between these megaliths, it would appear that they had been placed in position first of all, and that the structure of the cairn had then grown up around them, adapting itself to their form and position. The most common arrangement of what I may call the megalithic skeleton of the chamber, both in the horned and in the circular cairns, is one in which the three compartments of the chamber are defined by seven standing stones, set up with their faces parallel to each other, as seen in No. 4.

In some instances, in which the typical form of the chamber is departed from, the number of megaliths in the skeleton of the chamber is the same, though differently arranged, as in the cairn of Gett, No. 5; in which, in consequence of the last pair of megaliths being set in the wall of the chamber, instead of at right angles to it, the arrangement is bicameral. A chamber similarly arranged occurs in a round cairn near it. Another arrangement is seen in the chamber of No. 2 (long cairn), in which the number of megaliths is eight, and the large slab at the back is wanting, the third compartment being semi-circular.

My friend, the Rev. Mr Joass of Golspie, has sent me a sketch of a group of standing-stones at Rhives, which I took to be the skeleton of a tricameral cairn. In this instance, the sides of all the compartments are filled up with slabs, making the number thirteen. Mr Joass says, "One large slab is wanting, but I discovered it in a wall near, and think that the many walls all about may have been built from the cairn." It

<sup>1</sup> Proceedings, vol. vi. p. 444.



may be, however, that as the sides are filled in with slabs, there never was a cairn; and the erection, as it stands, is suggestive of the use of a tri-cameral chamber without a superimposed cairn. Although we thus find that there can hardly be any symbolic idea in connection with the frequent recurrence of the mystic number seven in the megaliths composing the skeleton of the chamber, I am strongly inclined to believe that there must be some symbolism in the persistent arrangement of the chamber in a tripartite form.

In none of the horned cairns have we found a tripartite chamber with the roof remaining, but a very distinct convergence of the upper part of the walls is evident in most of them. The passage, in one instance (No. 3), was partly lintelled, and partly arched by overlapping stones. In other cases, from the absence of lintels, it would seem as if the whole passage may have been thus arched; but in the circular cairns a lintelled passage is the rule.

The first compartment of the chamber, in the circular cairns, appears to have been usually lintelled over at about the same height as the passage, although, in one or two instances in the horned cairns, it seems to have been at least partly arched. In No. 3, it is roofed by transverse slabs rising above each other inwards, like the under side of a staircase.

The second and third compartments seem, in some cases, to have been covered by one truncated dome, or barrel-shaped roof (as the last pair of divisional slabs did not rise more than breast high), as in the Camster circular cairn, the ground-plan and section of which are here given for the purpose of comparison<sup>1</sup> (figs. 2 and 3). This being the only cairn over whose tripartite chamber the roof remains, it is impossible to say with certainty whether the division of the tri-partite ground plan into chamber and ante-chamber, by roofing the second and

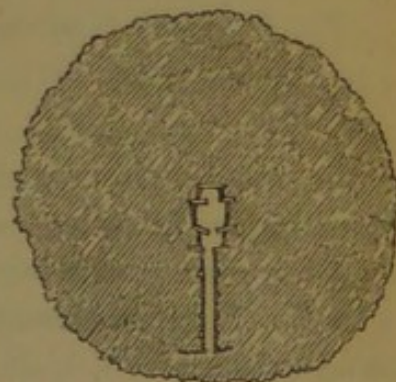


Fig. 2. Ground-plan of Circular Cairn, Camster.  
Scale  $\frac{1}{2}$  in.

<sup>1</sup> For the use of these two cuts, which are from the *Memoirs of the Anthropological Society of London*, vol. ii. p. 226, I am indebted to the Anthropological Society.



third divisions under one dome, and the first compartment with lintels, laid flat from wall to wall (like the passage), was the general rule; but the chamber of the horned cairn No. 1, at least, presents a marked exception. Here we have the third compartment roofed by an immense block, weighing several tons, and thus forming a cromlech-like crypt behind the main part of the chamber (fig. 1, p. 482). In No. 3, too, we have a small, pentagonal, bee-hive chamber occurring in the same cairn, with one of the common tricameral type.

*Contents of the Chambers.*—In all the horned cairns, the roofs being gone from the chambers (with the single exception of the small, bee-hive cell in No. 3), we found the chamber completely filled with stones. Even the roofed cell seemed to have been filled with stones nearly



Fig. 3. Section of Circular Cairn, Camster, showing Passage and Form of Chamber. Scale,  $\frac{1}{16}$ .

to the roof. The passages also, even those on which the lintels remained, were filled with stones from end to end. This packing of stones must have been introduced purposely.

In No. 1, after clearing the chamber from stones and rubbish, we found a floor of blackish clay and ashes, having the appearance of being hard trodden. On the top of this floor lay a few animal bones, and some fragments, apparently human.

The floor, to the depth of nearly 6 inches, was entirely composed of ashes, caked on the undisturbed clay below, and partially mixed with it. In some parts, traces of an irregular paving of flat stones remained, having ashes both above and below them. Wood charcoal and comminuted and calcined bones were most plentifully intermixed with the whole substance of this floor, and uncalcined but equally comminuted



fragments of bone were also of frequent occurrence. The singular feature of the floor of this chamber was the comminution of the bones—no fragment exceeding the size of an inch in length, and half an inch in breadth. Two fragments of unornamented pottery, well-curved, but hand-made, and indicating a vessel of considerable size, occurred, and about a dozen very small flint chips. The scantiness of the yield of relics was out of all proportion to the expectations excited by the vast size of the cairn, the only manufactured object found besides the pottery being a small conical core of flint, less than half an inch in length, wrought into facets all round its circumference.

In No. 2, there lay on the floor of the chamber a small quantity of animal bones, unburnt, but broken and splintered, and among them human bones, also broken and unburnt. Among the latter were the fragments of an upper jaw, and several phalanges of fingers and toes. These occurred in the second or main compartment of the chamber. In the third compartment, on the top of the floor, lay the fragments of at least one human skeleton. The bones were much broken, and of the skull only the frontal portion remained. It was of a very low type; and a friend to whom I showed it, and whose acquaintance both with ancient and abnormal types of crania is very extensive, remarked that it was, without exception, the lowest he had ever seen. As in the other compartment, broken and splintered bones of animals lay scattered over the surface of the floor, along with the human bones, all unburnt.

In the left hand side of the first compartment, there was a cist set on the floor (see ground plan No. 2, page 483), apparently, however, a secondary construction in relation to the cairn and its chamber. Interiorly, the cist was about 3 feet long by 20 inches wide, and about 9 inches deep. It was covered over by two slabs. The interior was filled with blackened clay, in the midst of which was a layer of white ashes. At the east end, next the entrance, an urn, apparently about 6 or 7 inches high, lay on its side, in a state of extreme decay. It had an everted rim and was ornamented by parallel bands of the twisted thong pattern, the impression of the strands showing distinct marks of the fibrous texture of the string, when examined with a magnifying glass. Along with the urn, a necklace of beads of lignite (probably the Oolitic lignite of Brora) had been deposited, of which seventy were recovered



by washing the clay. These beads were bugles of various lengths, from 1 to 3 or 4 lines. A few of them (now in the Museum) are represented of the actual size in fig. 4. No traces of bones (if the whitish ash-looking layer was not decayed bone) were found in the cist.



Fig. 4. Beads of Lignite.  
Actual Size.

These were the contents of the chamber above the floor. The floor itself, which, like that of No. 1, appeared to have been hard trodden, was almost the

same in character and composition, but more irregularly interspersed with charcoal throughout its substance. It presented in some places a layer of clay and ashes fully 6 inches in depth. Burnt bones occurred frequently, as well as bones unburnt, both human and animal, imbedded in it. In each of the four corners were a number of human teeth, unburnt, but with the enamel only remaining entire. A few teeth were also found here and there on the floor, as if skulls had lain in different spots till they had all decayed except the crowns of the teeth. Not a vestige of pottery, nor a single chip of flint occurred, either in or on the floor, the cist excepted.

In No. 3, although there were two chambers, the relics were extremely few. In the bee-hive chamber, a single fragment of bone, apparently of a large animal, was all that was found. The floor of slabs was taken up, but the clay beneath was undisturbed, and unmixed with any traces of fire. Nor were there any traces of ashes at all in the chamber. In the tri-cameral chamber there were found on the floor a few fragments of human skulls and other bones of the skeleton, unburnt, and mingled with broken bones of the horse, ox, deer, and swine, also unburnt. The floor itself, which was harder trodden (apparently) than any of the others, was also much more sparingly intermixed with ashes and charcoal, and burnt bones were fewer in this chamber than in those of No. 1 and No. 2. The ashes, instead of being spread through the mass of the floor, occurred in spots here and there. Neither fragments of pottery nor chips of flint were found in this chamber.

The contrast between the poverty of the long cairns and the richness of the short ones, as regards the yield of relics, is very marked.

In No. 4, a short cairn, we found a large quantity of unburnt bones,



human and animal, lying on the floor of the chamber—the human bones fragmentary, and the animal bones broken and split. The floor consisted of a layer of ashes, scarcely intermixed with clay in many parts, but compacted, and bearing that trodden appearance so characteristic of all the floors of these cairns. This layer of ashes was in some parts fully a foot thick. A pavement of slabs had at one period been laid in the chamber, and subsequently disturbed, as in some places there were portions of it wanting. The bed of ashes and bones, of which the compacted floor was composed, extended both over and under this pavement; and the natural clay beneath was pitted in some places, and the hollows filled with ashes. The quantity of burnt bones imbedded in this compacted ash-bed was very great. We recognised about thirty fragments of human skulls of all ages, some little thicker than card-board. Perfectly calcined bones of the human hand and foot and charred fragments of skulls were very plentiful. The long bones were often burned in half of their length only, the other half remaining uncharred. Among the fragments were the palates (broken) of two children. The animal bones, so far as we could identify them from the teeth, were those of the horse, ox, deer, dog, and swine, and a small fowl. A layer of the bones of a very small animal, of which there must have been a great many thousands, as the layer was in some parts 2 inches thick, puzzled us very much. They may have been the bones of the vole, which have been found abundantly in the tumuli of northern and central England. Fragments of pottery of various make, but all without ornamentation, were extremely numerous, and flint chips were also plentiful — few of them burned. In the central compartment of the chamber were found, imbedded in the ashes of the floor, a beautifully polished hammer of grey granite perforated for the handle; the point end of a very finely-finished flint



Fig. 5. Polished Hammer of Grey Granite from Cairn No. 4.



knife, ground sharp along the cutting edge; an arrow-head of flint, of a triangular form; a wrought flint, with an unground edge, that might have served as a knife; and a few well-made "scrapers," of the usual forms. In the first compartment of the chamber, another-arrow head, (fig. 6), resembling the single barbed form, and an unfinished one, of the flat triangular shape, were found.

In No. 5, also a short cairn, there were found, on the floor of the first compartment, a number of unburnt skeletons with the heads all laid to the right side of the chamber (E.S.E.), and the bodies huddled across the doorway. Of the skulls, four were pretty entire, and, judging from the fragments, there must have been at least three or four more. Those that were most entire were capacious, well-formed, and well-arched crania, as well-looking skulls as many that are to be seen on the shoulders of the men of the present day. The other bones of the skeletons were broken and much decayed. The skulls were partially saved by being close to the wall; but over the bones in the centre of the compartment there lay some tons of stones and rubbish.



Fig. 6. Arrow Heads, single-barbed and leaf-shaped, actual size.

The best preserved of these skulls has been thus described<sup>1</sup> by C. Carter Blake, D.S., F.G.S., Lecturer on Comparative Anatomy and Zoology, Westminster Hospital:—

"The skull is of great size and weight, the osseous structure being very dense. All of the teeth were in place at the time of death, and show signs of being much worn. The age of the individual was probably about fifty, and the sex male. The orbits are large, and the nasal bones forwardly produced. The forehead is large and capacious, and the parietal tubers broad and prominent. The coronal suture is partially obliterated, and the sagittal suture entirely so—a rainure (Pruner Bey) or depression extending throughout its posterior two-thirds, and forming

<sup>1</sup> Memoirs read before the Anthropological Society of London, vol. iii. p. 243



slight supra-lambdoid flattening. The upper part of the supra-occipital bone is well produced, and the semicircular line is prominent. The mastoids are small; and on the right side a small paroccipital has been developed from the jugular eminence. The foramen magnum is rounded in form, and the pharyngeal tubercle is much towards the left side. The impressions for the insertion of the masseter muscle are large. The supra-orbital ridges are not developed. The inferior maxilla is very large and massive, the chin being excessively prominent. The inferior border is very thick and rounded, the posterior angle of the ascending ramus being rather obtuse. The sigmoid notch is not shallow. The molar bones are thick, but not forwardly prominent; and the canine fossæ are remarkably shallow.

Greatest length,	183 millimetres.	Cephalic index,	·76
„ breadth,	140 „	Facial angle,	80° "

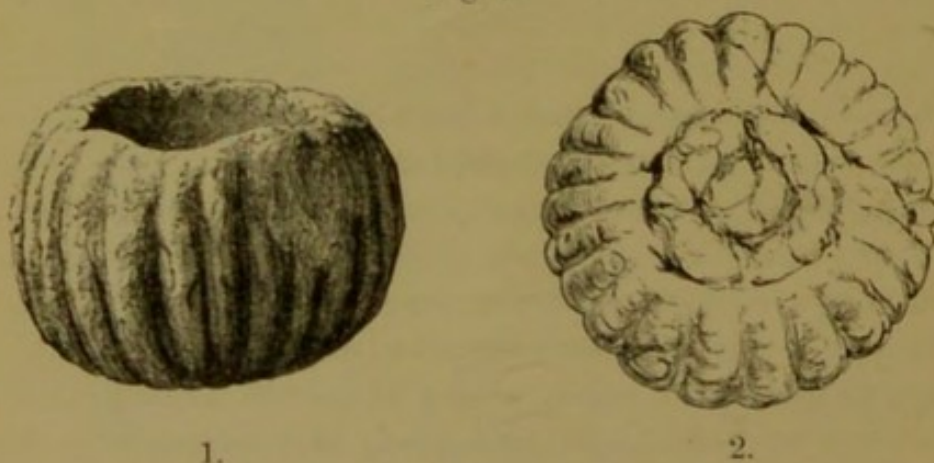
The floor of this chamber was a mass of ashes of charred wood and bones, with very little intermixture of stones or earth. In the deepest part it was fully 18 inches thick. The quantity of burnt and broken and splintered bones of animals, and of burnt and unburnt human bones, imbedded in this mass was quite surprising. The animal bones (some of which, of very large size, we judged to be the urus) were those of the horse, dog, ox, deer, and swine, with perhaps the sheep or goat. The human remains were of all ages, and mostly very fragmentary, the pieces of skulls imbedded in the ashes never exceeding an inch or two square. An immense number of flint chips, and fragments of pottery, chiefly unornamented, occurred throughout the mass, the flint chips being in many cases thoroughly burned. Two flint arrow-heads of the leaf shape were also found. One of these is shown in fig. 6.

*Association with other Early Remains.*—The horned cairns are associated with a number of other sepulchral structures, and early remains of the primitive inhabitants of the district. The long cairns, Nos. 1 and 2, are within a few hundred yards of a fine broch, built in the edge of the loch of Yarhouse, which they overlook. A little to the north was a chambered cairn, which seems to have been of large size, long, and possibly horned. It was unfortunately totally destroyed many years ago, by being used as a quarry. In it was found a finely polished stone axe,



perforated, and having one of its ends shaped to an axe-like edge, along with the fluted cup or bowl of sandstone here figured (fig. 7). A little above the loch, on the other side of the valley from the long cairns, there were three small cairns, with central cists, arranged in a line at a short distance from each other, and below them a fourth with a very long cist. These were all opened long ago by idlers out of mere curiosity, and all contained skeletons. On the hill-top, above the long cairns, are three large circular cairns, two of which are chambered. These are figured in my former paper. The third contained a kist-vaen, in which was found a skeleton and a bronze dagger or spear head, now in the British Museum. Over the hill, about a quarter of a mile, are two large standing stones, about four yards apart; and close by, a small circular cairn,

Fig. 7.



1. Stone Cup found in a Cairn at Breckigo, Caithness.
2. Under side of Cup, showing rudely incised pattern.

with central cist, also rifled long ago. Nearer the loch is another chambered cairn, locally called MacCoul's Castle. Tradition connects this cairn with the standing stones as follows:—Fin MacCoul, when building his castle, was crossing the hill with the two standing stones on his shoulder, his wife following him with an apronful of stones. Her apron string broke, and the stones all fell down in a heap. MacCoul stuck the two large lintels he was carrying into the ground, on end, while he went to his wife's assistance, and there they remain to the present day.

No. 3, long cairn, is associated with the large and finely-preserved



round cairn described as the Camster round cairn in my former paper. Near it, there was a small cairn with a central cist about 4 feet 9 inches square and 2 feet deep. The ends were of slabs set on edge, the sides built, and slightly convex. The cist lay N.E. and S.W. The smallest diameter of the cairn was about 25 feet. On the S.W. side of the cairn, and at a little distance, are the remains of an alignment of small standing stones, the highest not being more than 2 feet above ground, disposed in irregularly parallel rows. Thirty stones remain, and the rows converge towards the cairn. The cist contained unburnt bones,—probably of two skeletons,—but had been opened before we examined it.

No. 4, short cairn, is not far from a very large green cairn, presumably a broch. Nearer to it is a chambered cairn, which has been destroyed; and close to it a very large semicircular or crescent-shaped cairn, the highest part of which does not now exceed 3 feet. A score or more of small round cairns are scattered about close by. A number of these we have opened, without finding any traces of a cist or deposit. The Ulbster sculptured stone is about a quarter of a mile distant.

No. 5, short cairn, is close to the rath, or enclosed hill top of Garrywhin, and in the compass of a few yards on its south-east side are four short cists set in the ground. Near by are the remains of three small cairns. A few yards from the cists there is a small cairn which contained no cist, but had a skeleton laid on a flat stone, 2 feet long by about 10 inches in its least breadth. In a cavity among the stones of which the cairn was composed, and resting on this flat stone, were the remains of the skeleton, the long bones being all laid together as if the legs and arms had been doubled up in front. At a little distance, in the edge of a small loch, there is another small cairn with a central cist rifled long ago. On the other side of a narrow valley there is a small cairn about 30 feet in diameter and less than 3 feet high in the centre, which was found to contain a cist, with an urn, ornamented with the "twisted thong." Two oval chipped flints, with sharply chipped edges and thick backs ("scrapers"), were also found in the cist. This cairn had also a relative alignment of small standing stones diverging from the south-west side in irregularly parallel rows. Of these about fifty stones are yet remaining. At a little distance to the south there is another small cairn of the same kind, containing a central cist formed of four



slabs, with a large covering stone, and measuring internally 5 feet long,  $2\frac{1}{2}$  feet broad, and 20 inches deep. To this cairn also a relative alignment of small standing stones has been attached, diverging, as in the other two cases, from the south-west side; but only a few stones remain. On the top of the hill there is a large chambered circular cairn, peculiar from its being bicameral, and having a small side chamber. Not far to the north is a very large broch. In fact, there are cairns or brochs all around; and one can scarcely go a quarter of a mile in any direction among these hills without meeting with ancient structural remains of one kind or other.

*Analogy with Sepulchral Structures of other Countries.*—Worsaae's description of the Hunengraber, or "Giants' Graves," which occur on the north and east coasts of Denmark (rarely on the west or in the interior), answers pretty nearly to the general features of the long cairns I have described, except that the chambers are roofed, without domes, by great flat blocks. The Hunengraber are mostly 60 to 120 feet in length, by 16 to 24 feet in breadth; the largest varying from 200 to 400 feet in length, and from 30 to 40 feet in breadth. They lie most frequently east and west, and are surrounded at the base by single or double enclosures of stones on end. In those that have but one chamber, it is usually placed at one end of the grave-mound. They differ, however, from the Caithness long cairns in being composed of earth and stones, and there is no mention of any appearance of concave curvature at the ends of these mounds.

The Caithness structures present a still closer analogy to the "long barrows" of Yorkshire, Berkshire, Gloucester, Wiltshire, and Somersetshire, in England. Of the long barrows of Wiltshire, Mr Cunnington observes that they nearly all stand east and west, the east being the wider end; and that, out of eleven which he opened, nine had skeletons at the east end. Sir Richard Colt Hoare says, "We have invariably found the sepulchral deposit placed under the east end of the tumulus." The Rev. W. Greenwell, speaking of the remarkable nature of the "long barrows," says, "they are nearly always placed approximately east and west, and have the interments at the east end;" and that, "in districts where stone is found of a kind suitable for such a purpose, they contain a long chamber at the east end, formed of large slabs, and in



some cases having offsets." These are features common to the long cairns of Caithness; and if the long barrows of England are not "horned" like those of this district, they have a further feature of external structure, which is very suggestive of similarity of type. In the case of the Scamridge "long barrow," Mr Greenwell states that it was formed of oolite rubble, lay nearly east and west, was 165 feet long, 46 feet broad at the west end, and 54 feet at the east end; and he adds that, about 5 feet from the exterior on the north side, it had a regularly built wall of flat limestone flags. The chambered "long barrows" at Stoney Littleton, Somersetshire, and Uley, Gloucestershire, had a dry wall of horizontal courses of stones, from 2 to 3 feet in height, running round them. The long barrow at West Kennet, in Wiltshire, had a similar wall of horizontal courses, with large upright stones at intervals. A double dry wall ran completely round the long barrows of Rodmarton and Ablington. It may be possible that some of these may have been "horned," although the horns may have become so much obliterated as not to attract the notice of the explorers. In none of the cases described is the character of this dry walling at the corners, or around the ends of the cairn, specified.

[Since this paper was written, I have read with pleasure the exhaustive account of the long barrows of the south of England, by John Thurnam, M.D., F.S.A., in "Archæologia," vol. xlii. It is there stated that further researches may show that the double enclosing wall was a general feature of these chambered long barrows. I am glad to notice, also, that in the chambered long barrows of Uley, Littleton Drew, Rodmarton, and Stoney Littleton, a double curvature at the wide end of the cairn has been made out, differing, however, from the cornuted ends of the Caithness cairns in being convex instead of concave outwardly, thus giving the wide end of the cairn the appearance of "the top of the figure of the ace of hearts." The passage opens at the junction of these opposing curves. In the Uley "long barrow" the curves are double, one within another, as are the cornuted projections of the Caithness cairns. The West Kennet long barrow has yielded pottery ornamented with the "thumb-nail pattern;" and this and the leaf-shaped arrow-heads of the long barrow of Rodmarton are similar to the ornamented pottery and leaf-shaped arrow-heads of the horned cairn of Get, in Caithness.]



As regards the peculiar form assumed by the external outline of these horned cairns, and adhered to with such persistency as to suggest a deeper meaning than any mere structural reason would convey, I can find nothing in Britain resembling it, with the single exception of a cairn at Annaclogh Mullen, in Ireland, figured in the Appendix to "Archæologia," vol. xv. p. 409, as a Druidical temple, but which seems unfortunately to have been very imperfectly explored.

Bresciani, in his work, "Dei Costumi della Sardegna," describes the "Giants' Graves" of that island as having been originally (like some of our own cromlechs) covered by earthen tumuli; but their peculiar feature is a low, semi-circular, double wall of large stones set on edge, and close to one another, which runs out in front of the chamber from either side of the entrance—is similarly placed and similar in form to the "horns" of these peculiar cairns. The purpose of this, says Bresciani, is to serve "*per aia sacra al defunto*." The chamber or "cistvæn" in these tombs is formed of large slabs. It measures from five to ten metres in length, and (as in the case of the long cairns) the entrance, with its outspreading cornuted appendages, is turned towards the east. Traces of similar sepulchres are found in the Balearic Islands. The appearance of this cornuted structure, in connection with the early sepulchres of Sardinia and the Baleares, is the more remarkable, as being associated with another class of edifices peculiar to these islands, and known as "Nuraghes." These edifices are circular towers, and, as described by Bresciani<sup>1</sup> and Micali,<sup>2</sup> they are singularly suggestive of an architectural "cross" between the Picts' houses of Orkney and the brochs of the North of Scotland.

Captain Meadows Taylor, in an admirable and suggestive paper read before the Royal Irish Academy (May 12, 1862), traces a remarkable similarity of construction and contents existing between certain classes of cairns and cromlechs, &c., in the Dekkan and the ancient sepulchral structures of the British Isles. The ground plan of one of those which he figures, near Mundewallee, Shorapoor, is diamond-shaped externally, and has a circular enclosure set within a double diamond-shaped outer

<sup>1</sup> Dei Costumi della Sardegna, capo vi.

<sup>2</sup> Storia degli Antichi Popoli Italiani, capo xx.



circumvallation. This is an approximation to the type of the short cairn (No. 4) at Ormiegill, so far as the double exterior wall and inner circular wall are concerned. I merely point out these remote resemblances as suggestive.

Perhaps, if I were inclined to broach a theory, it would be that the form of these singular structures points to the probability of a Turanian origin. If the short cairns were terraced externally (as it seems not improbable they may have been), they would present a strong resemblance to the topes of Sanchi, Manikyala, and Amravati, described<sup>1</sup> as double-walled domical structures, with a raised terrace or "procession path" running all round. The characteristic cella on the summit of the topes is a feature of which we have no evidence in connection with sepulchral cairns in this country, but it is singular that the only construction that at all resembles the "horns" of the Caithness cairns is still in use in connection with sepulchral architecture in Mantchooria and the Tartar provinces of China. It is described by Fortune and others as a horse-shoe shaped platform with a high back, in the centre of which is the opening to the tomb, the semicircular walls sloping off to nothing at the points of the horse-shoe. This construction is usually in the side of a hill, but it is also *imitated* on plain ground. Some of the ancient Tartar barrows in Russian Tartary, described by Demidoff and Strahlenberg, appear to have had the peculiarity of a triply divided chamber, which is such a striking feature of the Caithness cairns, and the sepulchral usages appear to have been in many respects very similar.

In the structure of their chambers, I have already remarked that the horned cairns are similar to the chambered circular cairns of the district, and that these are analogous to the chambered cairns of Ireland. The extensive group of chambered cairns recently explored by Mr Conwell at Slieve-na-Calligh appear to be of somewhat the same type internally as the Caithness chambered cairns, though differing in the details of the arrangement of the chamber. The constant recurrence of the tri-partite chamber here, however, has always suggested to my mind a symbolism of some kind.

*Sepulchral Usages in the Horned Cairns.*—While the long cairns thus present a close analogy with the Hunengraber of Denmark, as

<sup>1</sup> Ferguson's History of Architecture.



regards the length and direction of the cairn and the position of the chamber, and have even a closer resemblance to the chambered long barrows of England; yet the burial usages, as indicated by the contents of the chambers, appear to have been quite different. In the Hunengraber only unburnt skeletons, with weapons of flint, are found. In the long barrows of England, too, the bodies have been generally deposited unburnt. In the Caithness long cairns, we have not found *proof* of the deposition of unburnt bodies having preceded sepulture after cremation, although indications are not wanting which lead to the presumption that unburnt bodies may have been deposited on the original floor of the chamber previous to the accumulation of ashes and burnt bones, by which it is usually characterised. For instance, it was common, on digging up the layer of ashes in the chamber floor, to find unburnt bones under and through it, and usually in the corners of the compartments a quantity of unburnt teeth. But although we had nothing but presumptive evidence of unburnt burials previous to the general cremation of the floors, we had, in all cases, the clearest evidence of the deposition of unburnt bodies subsequent to the cremation of the chamber floors. This accords with the experience of the Rev. Mr Greenwell of the Argyleshire chambered cairns, from which he concludes, "contrary to the general opinion," that there the age of cremation preceded, and perhaps long preceded, the age of burial. Unquestionably, the latest mode of sepulture in the whole of the chambered cairns of Caithness, of whatever form, was by depositing unburnt bodies on the top of a floor formed of the remains of burnt bodies, and apparently trodden till the burnt bones and fragments of urns were impacted with the ashes into a solid layer. All the fractures of the pottery imbedded in these floors are old fractures. Unburnt, but broken and splintered, bones of animals accompany the unburnt human remains on the floor, just as burnt, but equally broken and splintered, bones of animals accompany the burnt human remains below. In the case of No. 2, long cairn, we have an interment after cremation secondary to the general cremation of the floor, and accompanied by an urn and beads enclosed within the cist. The order of the different modes of sepulture in this chamber would thus be presumably—(1.) Burials unburnt; (2.) burials after cremation, possibly extending over a very long period, but with-



out accompanying urns, weapons, or ornaments; (3.) a single burial (secondary to the cairn), in an enclosing cist, with urn and ornaments; and (4.) simple burial (possibly contemporaneous with burial 3), by depositing the bodies unburnt on the floor of the chamber.

The difference in quantity of the contents of the chamber in the long and short cairns is very marked. In both the short cairns the accumulation of ashes and burnt bones in the floors was very great. In the long cairns the floor was composed nearly as much of clay as of ashes and bones. In the short cairns the quantity of broken pottery was very large. Pottery only occurred in one of the long cairns, and then only two small fragments were found—the secondary cist and its contents in No 2 being excepted. In both the short cairns flint chips and worked flints were numerous, and finished weapons were found in both; but no vestige of worked flint was found in any of the long cairns except the small conical core in No. 1, and even chips were extremely rare.

While, therefore, cremation seems to have been practised sparingly in the long cairns, it becomes the principal feature of the chamber in the short ones, and along with it the deposition of weapons and ornaments seems to have taken place only in the short cairns. In both the long and the short cairns, whether burial unburnt may have been the first sepulchral usage practised or not, it most certainly was the last, although it is quite possible that the same people may have used one form of burial for certain ranks or classes, and another for others—may have burned the higher ranks (as rank then was), and only buried meaner men.

*Whose Sepulchres are they?*—It has been conjectured that the chambered cairns are the sepulchres of the broch-builders. This remains yet to be proved. Although there is a certain undefined resemblance in the general character of the masonry of the two classes of structures, yet the type is so totally distinct, that it is difficult to conceive of them as being the work of the same people, unless, indeed, it be supposed that they were impelled by a strong religious sentiment to construct the sepulchres of their dead in harmony with some symbolic idea, the working out of which had no reference to the architectural notions which guided them in the construction of their dwellings of strength. The later constructions found in connection with the brochs present one striking feature, which is also



present in the chambered cairns—the frequent use of long flat stones set on end across the wall, and of large flat stones built into the face of the wall—the intermixture of ortholithic with common walling. The horizontal arch is common to all the primitive structures, and affords no criterion of their relative antiquity. The relics obtained from the brochs are chiefly domestic, while those of the cairns are chiefly personal,—weapons and ornaments—thus affording no materials for comparison. Although we have found small conical cores of worked flint in the broch of Yarhouse and in the long cairn (No. 1) immediately above it, and pottery of the same ornamentation<sup>1</sup> has been found in the broch and in one of the short cairns, these are too slender data upon which to found conclusions.

Whether these horned cairns, and, indeed, all the chambered cairns, were originally constructed as sepulchres or as dwellings is another question, on which there may be some difference of opinion. For my own part, I have no hesitation in coming to the conclusion that their original purpose was rather that of honourable mansions for the dead than of serviceable dwellings for the living. I cannot conceive of the expenditure of the enormous amount of labour implied in the construction of a building (as a dwelling) in which the chamber should be placed, as in Nos. 1 and 2, and should occupy only about a hundredth part of the capacity of the structure; while, if shelter or defence, or both, had been the object, the chamber (which is the primary object of a building for habitation) could have been made stronger and more serviceable with less than a hundredth part of the toil. If these chambers were ever occupied as habitations, we have found no household implements on their floors, such as are obtained in the brochs—nothing but weapons, ornaments, and pottery, and the common accompaniments of the funereal rites. But, on the other hand, the desire to honour and perpetuate the memory of the mighty dead is motive sufficient to account for the expenditure of any amount of laborious toil, and only those who have seen these enormous cairns and their situations can have any idea of the vast amount of labour expended upon them.

<sup>1</sup> The point of a finger or thumb nail thrust obliquely into the clay, a style of ornamentation common on the pottery of the Swiss lake dwellings.



Wherever, among the revolving centuries, the date of these mighty monumental structures may be found, the people that reared them were no despicable barbarians. They are the work of a people possessed of no inconsiderable constructive skill, ingenuity, and resource,—a people numerous, united, and energetic,—and a people, too, of strong reverential feelings and sentiments regarding the sacredness of the remains and memories of those who were dear to them in life, and who may also have been in their day “the terror of the mighty in the land of the living.”

## CONTENTS OF THE CHAMBERS IN THE HORNED CAIRNS.

*Long Cairns.*

- No. 1. On the floor, broken human and animal bones, mingled, unburnt.  
Imbedded in the floor of ashes, a large quantity of comminuted and burnt bones.  
A few flint chips, small-sized.  
One small conical worked flint.  
Two pieces of pottery, unornamented.
- No. 2. On the floor, broken human bones and bones of animals splintered, mingled, unburnt.  
Also, a cist with enclosed urn, ornamented with twisted string impression, and deposit of seventy beads of lignite.  
Imbedded in the floor of ashes, a large quantity of bones, human and animal, broken and splintered, chiefly burnt.  
No flint chips, no pottery.
- No. 3. One fragment of bone of large animal in small chamber, with floor of slabs of stone. No ashes.  
In tri-partite chamber, on the floor, human and animal bones mingled, broken and splintered, unburnt. Bones of horse, ox, deer, and swine.  
Imbedded in the floor of ashes, bones, human and animal, broken and burnt. No flints and no pottery.

*Short Cairns.*

- No. 4. On the floor, broken and splintered bones, human and animal, unburnt.  
Imbedded in the floor of ashes, an immense quantity of bones, burnt, human and animal, the latter those of horse, ox, deer, and swine, with dog or fox and small fowl; of the long bones, only the joint ends remaining, the rest in splinters; also bones of the rat or vole in immense quantities.  
Pottery, ornamented and plain, five or six varieties.  
Flint chips, several scores, some partly worked.  
One polished hammer of grey granite, perforated.



The point end of a finely-wrought flint knife, ground to an edge.

One flint (knife), unground.

Several scrapers of flint, one finely worked.

Two triangular arrow-heads of flint, one single-barbed.

No. 5. On the floor, a number of skulls, four nearly entire; broken bones, human and animal, unburnt.

Imbedded in the floor of ashes, a very large quantity of burnt bones, human and animal, the animal bones being those of the horse, ox (both of very large size), deer, sheep or goat, dog or fox, and swine, with a large species of fowl—all burnt or partially burnt. Rat bones (or vole) in layers of an inch thick occurred here and there throughout the floor.

Pottery, in large quantity, ornamented and plain; ornament, the thumb-nail pattern.

Flint chips, in large quantities, burnt and unburnt, some partially worked.

Two leaf-shaped arrow-heads.