#### III.

#### ON THE CAIRNS OF ARRAN—A RECORD OF FURTHER EXPLORATIONS DURING THE SEASON OF 1902. By THOMAS H. BRYCE, M.A., M.D., F.S.A. Scor.

In a paper submitted to the Society last session I described a group of cairns which occur in the South-West corner of Scotland, and which I defined tentatively as follows:—"A class of sepulchral cairns not certainly known to have either a definite ground plan or setting of standing stones, containing a segmented megalithic structure built of large lateral slabs without walling of smaller stones ; probably in all cases covered by large flagstones, and divided by septal slabs into a series of independent compartments or cists, to which there is no approach by means of a passage ; in each compartment are found multiple burials by inhumation, perhaps in some cases after cremation, associated with the remains of animals, chiefly of the domestic mammals, with implements of stone, and pottery consisting invariably of round-bottomed vessels."

In this group, which occurs in Arran, Kintyre, and Islay, I included two cairns near Kilmartin in Argyleshire, described many years ago by Canon Greenwell and Rev. J. R. Mapleton.

In my paper of last year, I expressed the hope that further exploration in Arran would supply the evidence wanting for the reconstruction of this type of cairns. This hope has been in a measure fulfilled by this season's excavations. I have examined five examples of the class. Of these I have explored four; the fifth had been previously much disturbed, and I contented myself with planning it.

#### I. CARN BAN, KILMORY WATER.

About six miles from the sea, at the very head of the Kilmory Water, high up above the stream, close to the 900-foot contour line, stands a very large cairn of loose stones. It is far beyond the limits of cultivation, in the heart of the hills, and the nearest cottage is more than a mile away. It has been little interfered with, and retains in all probability much of its original character.

## THE CAIRNS OF ARRAN.

The cairn is peculiarly placed. It stands on the steeply sloping side of the glen (fig. 1), below the brow of the hill. At its lower end it rises 15 or 17 feet above the slope, but runs out to the ground level at its upper end. In shape it is roughly rectangular, the sides being straight; the total length is 100 feet and the average breadth 60 feet. The long axis is directed approximately W.N.W. and E.S.E. At the east or upper end, between the top of the cairn and the steeper slope of the hillside, is a nearly flat area of about 30 feet in diameter, of



Fig. 1. Carn Ban, Kilmory Water-looking South.

circular shape, partially marked off by a series of upright stones (fig. 2). These rise above the present ground level from a few inches to 2 feet. Many of the stones are now missing, and there is some doubt as to what may have been the original shape of the setting. Some stones extending north and south form two lateral arms, and the cairn extends up towards them on either side; but as it runs out to the ground level here, it is difficult to define exactly its limits. The impression conveyed is that the lateral arms form the upper limits of the cairn laterally, while in the centre it is hollowed out into a bay, bounded by the stones

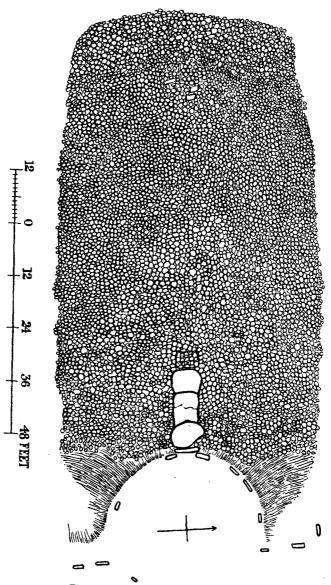


Fig. 2. Plan of Carn Ban, Kilmory Water.

arranged circumferentially. If this were so, the arrangement would be similar to that observed in the horned cairns of the northern series. On marking out the diameter, however, to discover if the setting were semicircular or circular, I found one small stone arranged exactly on the circumference, and so placed that it may have formed a member of a circular setting. This single stone may be fortuitously placed, and I must leave the question open, remarking merely that every analogy points to a semicircular rather than a circular setting being the original structural plan.

The outermost stone of the northern arm is placed with its axis in a line with the long axis of the cairn, and it seems likely that it may have represented one of a series of stones mapping out the outline of the cairn. I could not, however, determine the presence of any other members of such a series standing free, and I excavated both at the lower and northern lateral edges of the cairn, to ascertain whether there might have been a retaining wall or peripheral setting, but with negative results. Returning to the semicircular setting at the upper end of the cairn, the largest stones of the series, which are 2 feet 2 inches and 3 feet 4 inches broad, and 1 foot 8 inches and 1 foot 4 inches thick, respectively, stand in the axial line of the cairn, and the space between them, 3 feet 5 inches across, forms, as will be explained later, a portal into a chamber which was found to occupy the upper end of the cairn.

Immediately behind this pair of stones is a somewhat conical stone on edge, which forms a kind of lintel to the portal. It is 5 feet 9 inches long, 1 foot 10 inches thick, and 2 feet 2 inches deep. Resting against this, on its horizontal face, is an irregular block of schist, 5 feet 9 inches long, by 5 feet 8 inches broad, and 1 foot 2 inches thick. It overlaps a second large flag of soft sandstone, 7 feet 2 inches long, by 5 feet 2 inches broad, and 8 inches to 1 foot thick. This stone has been broken across, and the upper part has also been split longitudinally and its two lateral parts are tilted up, forming the supports of the first flag. This second flag in turn overlaps, by 2 feet 6 inches, a large

irregular slab of granite which measures 6 feet long, by 6 feet broad, and is 1 foot 4 inches thick. These three slabs thus overlapping one another are exposed on the surface of the cairn, but from the fact that the cairn is higher below it is probable that they were at one time covered over—though it is certain that they cannot have been buried to any great depth.

Such was the information which it was possible to gather before excavation. I commenced the excavation by sinking a hole into the cairn beyond the granite slab. After clearing away the loose stones to the depth of 2 feet, a flat sandstone slab was bared, about a foot below the level of the granite slab. This was raised and removed. Below, we found loose earth and smaller stones, and when this was removed to a depth of 18 inches the upper edge of a sandstone flag, set transversely, was revealed and defined. It measured 2 feet 8 inches broad. Having ascertained that beyond this stone there was no structural arrangement, but only the loose stones of the cairn, the space was cleared to its upper side. Here it was discovered that there was a central trench-like space filled with loose earth and stones, and bounded on each side by carefully built walls of sandstone flags, set horizontally and piled on top of one another. The upper tier of small flags projected considerably over the lower tiers (fig. 4). The trench was now cleared, room to work being obtained by removing the projecting flags. At a depth of about 4 feet it was found that the built structure ceased, and the walls were formed by large flags, such as have been described in all the denuded megalithic structures in Arran. An attempt was now made to work up under the large granite slab, but when the earth was taken away, being on the slope, it showed signs of sliding, and the attempt had to be abandoned. I had meantime removed the surface and earth opposite the portal, but it was impossible to work in from that end, because the side stones quickly approached one another below the ground level, and there was barely room for a man to squeeze through the space. It was decided, therefore, to remove the roof by levering over the large slabs. When this was accomplished, they were found to rest on a series of sandstone slabs of irregular shape,

but roughly rectangular, and reaching outwards for varying distances, from 2 feet to 4 feet. They were arranged like the steps of a stair (fig. 3), from the upper end into the centre of the cairn. The interval left between their mesial edges was only 18 inches. No progress could therefore be made till these were in turn removed, but when this was done it was found that the walls of the chamber were vertical, and it was possible to clear it out in its whole depth without further disturbance. The trench was filled with earth and stones, some of large size; and as the wash from the hill had run through it, the earth in the deeper parts

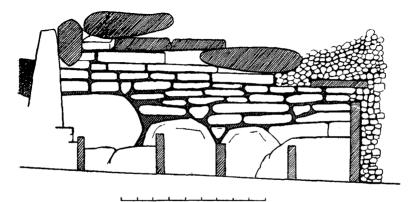


Fig. 3. Sectional Plan of Chamber, Carn Ban.

had been converted into tenacious claggy clay. This made the operations very difficult, and rendered it impossible to riddle the material thrown out. At all levels charcoal in particles and larger pieces was observed, and the bottom of each compartment was covered by a charcoal layer of about 2 inches thick. I shall now describe the structural features of the chamber by aid of the sectional and ground plans made on the spot (figs. 3, 4, 5).

The whole chamber from the portal to the end stone measures 18 feet 8 inches, and the general depth is about 9 feet. The upper 3 to 4 feet of the walls is formed of flags and blocks of sandstone of varying size.

built after the fashion of a dry stone dyke, while the deeper part is formed of very large flags of irregular shape and size, set on end or edge.

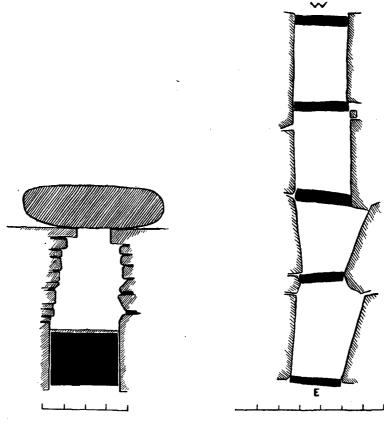


Fig. 4. Sectional Plan of Chamber, Carn Ban.

,

Fig. 5. Ground Plan of Chamber, Carn Ban.

Of these there are four pairs set opposite to one another, and at or about their junctional points transverse septal slabs are placed, dividing the chamber into four compartments in its deeper part. The west end is closed by a tall slab 5 feet high, placed on end, while the upper compartment is completed below the level of the portal by a low transverse stone. It is not necessary to give the details of the measurements of the component stones. It will suffice to say that the compartments from the portal at the east end inwards measured—

> The lst, 4 feet 8 in. by 2 feet 2 in. to 3 feet 8 in. ,, 2nd, 4 ,, 4 ,, by 3 ,, 6 ,, to 5 ,, ,, 3rd, 3 ,, 10 ,, by 2 ,, 10 ,, ,, 4th, 3 ,, 8 ,, by 2 ,, 8 ,,



Fig. 6. View of the Portal of the Chamber, Carn Ban.

The longitudinal (fig. 3) and sectional (fig. 4) plans show that between the septal stones and the roof there was clear headroom of 4 feet at the lowest, to 6 feet at the highest point.

Fig. 6 represents the entrance to the chamber after the roof was removed. The left-hand stone is 2 feet 2 inches broad at the apex, by 1

foot 8 inches thick, but broadens rapidly to the base, which is 6 feet 6 inches from the apex. The right stone is 3 feet 1 inch broad by 1 foot 5 inches thick, and also broadens at its base. The space between the stones, which is 3 feet 5 inches above, is thus much reduced below, and no passage is possible save through the upper part. The bases of the stones are, further, 2 feet 6 inches above the floor of the chamber, so that the access to it was very considerably raised above the floor level.

Owing to the wetness of the soil in the interior of the compartments, any osseous remains must long ago have been dissolved away. A fragment of burnt bone was picked up, but it was impossible to say whether it was human bone or not, and another unburnt fragment was probably from a human long bone. No pottery was seen, and the only possible relics of the builders found were a worked piece of flint, and a flake of Corriegills pitchstone.

Though the excavation was a blank as regards relics, it throws considerable light on the nature of these megalithic structures in Arran; but I shall postpone discussion on this point until I have described the other structures explored.

### II. "GIANTS' GRAVES," WHITING BAY.

The megalithic structure known popularly by this name is the largest of the denuded structures of this class in Arran. It stands on a ridge 400 feet above the sea, overlooking the bay on the south, in a commanding and romantic situation (fig. 7).

The cairn in which the structure must at one time have been embedded is now in great part removed, the base alone remaining. It rises about 2 feet above the general level of the flat terrace on which it rests, and is 98 feet in length by 60 feet in breadth. The megalithic structure is at the northern end, in the long axis of the cairn which runs N.N.E. and S.S.W. Close to the northern corners of the cairn there are two standing stones (fig. 8). The eastern stone is 5 feet broad and 1 foot 3 inches thick; it stands 4 feet above the ground, with its long axis east and west. The western is smaller, 3 feet 6 inches broad by 6 inches thick, and 3 feet above the ground. The long axis is directed north and south. On each side of the north end of the megalithic structure there is a recumbent stone, the one measuring 5 feet by 4 feet 7 inches and the other 5 feet 7 inches by 3 feet 7 inches. It is now impossible to say definitely what relation these four stones may have had to one another originally, but in the light of the Carn Ban setting, it is not at all improbable that they may have been members of a series such as

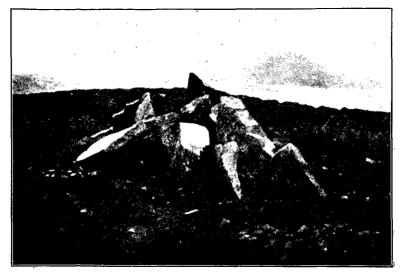


Fig. 7. "Giants' Graves," Whiting Bay, from the South.

is found at that cairn. If this were so, they would have the same relation to the portal of the megalithic chamber.

The megalithic chamber itself is 24 feet over all. At the north end it is bounded by two stones which form a narrow portal; the eastern stone is 6 feet high, 2 feet 6 inches broad, and 1 foot thick; the western is 4 feet 4 inches broad, and stands 4 feet 9 inches above the ground. The interval between their mesial edges is 18 inches, affording a very narrow entrance to the chamber. Between these stones and the end of

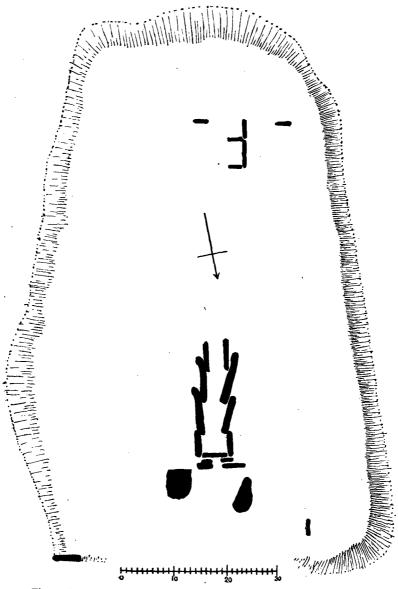


Fig. 8. Ground Plan of Cairn known as "Giants' Graves," Whiting Bay.

the chamber proper there are two smaller stones wedged. This portal is 16 feet from a line joining the two stones at the corners of the cairn.

The chamber is open at the south end, and there is now no roof; but leaning against the western wall is a huge flag of irregular shape, measuring 7 feet in both diameters. There seems little doubt that this must have formed a roofing flag, but it is difficult to see how it could have been displaced, as it must weigh some tons. If, as seems to me probable, the chamber had, as at the Carn Ban, an upper section of smaller flags, it follows that when the cairn was demolished and the supports of these smaller stones were thereby removed, the weight of the large roofing flags would cause a collapse of the walling, and that this stone would naturally slide into the position which it now occupies.

The lateral walls of the chamber (fig. 9) are formed of four pairs of very large and irregular blocks set on edge. Beginning at the south end, the first pair lie nearly parallel; the east stone is 6 feet 6 inches broad, 6 inches thick, and 4 feet 2 inches deep; the west is 6 feet 7 inches long, 7 inches thick, and 4 feet 7 inches deep. The space between them is 3 feet 6 inches, narrowing to 3 feet 4 inches. The second pair overlaps the first on their outer sides; the west block is the largest of the series, measuring 9 feet long, 2 feet thick at its base and 10 inches at its apex, and it stands 5 feet 4 inches above the floor; the east member is 7 feet 8 inches long, 9 inches thick, and is 4 feet deep. The ends of these stones are 2 feet 7 inches apart at the north ends, and diverge much from one another. In like manner, the third pair overlap the second. They measure-the east 9 feet long and 6 feet 2 deep, the west 6 feet long by 3 feet 4 inches deep. The fourth pair are narrower stones—the east 3 feet 4 inches broad, 1 foot 3 inches thick, and 6 feet 2 inches high; the west is 5 feet broad, 2 feet thick, and 6 feet 3 inches in height. I give these measurements in detail to show the massive character of the stones forming the chamber-which deserves the term megalithic more than any other of the Arran structures. The great irregularity in the height of the chamber walls is again specially to be noticed.

Whether the trench between the lateral stones was ever subdivided into compartments, it is now impossible to say. In digging it out we came only on one transverse stone. It was lying inclined into the space

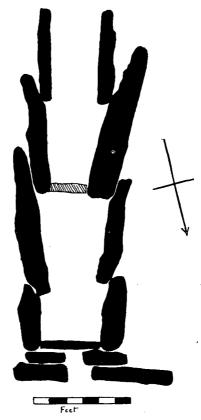


Fig. 9. Ground Plan of Chamber, "Giants' Graves."

between the second pair from the portal, and when levered up it fitted the interval between the ends of the third pair, where I have placed it in the plan.

The breadth of the chamber varies at different parts, from 5 feet at its

#### THE CAIRNS OF ARRAN.

broadest, to 2 feet 7 inches at its narrowest. At the north end it is completed by a slab 4 feet broad, and standing 2 feet 2 inches above the floor, about 4 feet therefore below the tops of the side stones.

The soil in the trench was cleared out from the open end. There is no doubt it had been previously disturbed to some degree, and it is not possible to speak very definitely as to the position of the deposit. This consisted of great quantities of burnt bone, nearly all in small fragments, and along the bottom there was a charcoal layer. The bones were most numerous in the space between the two southern pairs of lateral stones, and lay especially thick along the sides of the stones, but there was no

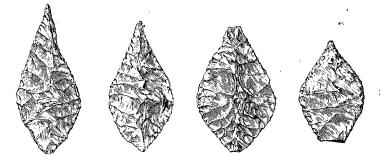


Fig. 10. Group of leaf-shaped Arrow-heads from Chamber, "Giants' Graves."

regular arrangement. Nothing whatever was found in the northern half of the trench, and I suspect that the efforts of previous diggers had been directed to that part of the chamber. In the riddlings of the soil thrown out, four arrow-heads and three large flint knives or scrapers were recovered, as well as fragments of pottery.

The arrow-heads are represented in fig. 10. No. 1 is of light brown flint, is leaf-shaped, is  $1\frac{9}{16}$  inches long, has a very long tapering point, and is finely worked and thin. No. 2, of the same colour and general character, is  $1\frac{5}{16}$  inches long. No. 3 is more lozenge-shaped, but is also thin and finely worked, and of the same light brown flint. No. 4 is of whitish clear flint; it is a broadish leaf-shape, is  $1\frac{1}{16}$  inches long, and vol. XXXVII. 4

is less finely worked. The flint knife represented in figure 11 is  $3\frac{7}{8}$  inches long by  $1\frac{3}{8}$  inches broad, is made of light brown flint, and is slightly concave, being worked all over the convex surface. That represented in fig. 12 is of the same coloured flint, is  $4\frac{1}{16}$  inches long and  $2\frac{3}{16}$  inches broad; it is finely curved along both edges, is flat, and with the longer edge more completely worked. The third specimen (fig. 13)

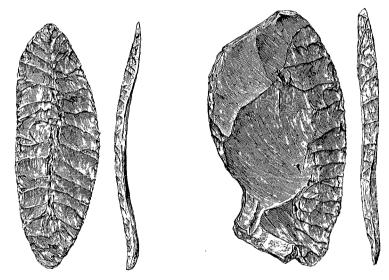


Fig. 11. Flint Knife, 3<sup>7</sup>/<sub>5</sub> inches long, from Chamber, "Giants' Graves."

Fig. 12. Flint Knife, 4<sup>1</sup>/<sub>16</sub> inches long, from Chamber, "Giants' Graves."

is also of light brown flint, is  $3\frac{3}{8}$  inches long by  $1\frac{11}{16}$  inches broad, and shaped to a fine curve along one edge, but the greater part of the surface has the natural 'skin' left untouched.

It is very unfortunate that the fragments of the pottery are so small in size and few in number. One fragment, without decorative pattern, and made of dark coloured ware, shows the flat rim characteristic of some Stone Age pottery, such as the urns found at Achnacree chambered cairn by Dr Angus Smith, and like that figured on page 107 of my previous memoir.

A second fragment of the rim of a vessel (fig. 14) shows a chevrony pattern of impressed lines, making a design round the rim very similar to that on a vessel from the Pyrenees represented in plate iii. (No. 2) of my previous paper. Another fragment (fig. 15) of the side of a vessel shows a pattern of parallel lines drawn diagonally across each other over the surface; while still a fourth portion (fig. 16) of another vessel shows

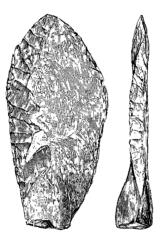


Fig. 13. Flint Knife, 33 inches long, from Chamber, "Giants' Graves."

a design of lines of squarish impressions placed parallel to one another, as if made by the teeth of a comb-like instrument.

It is not possible to say what the shape of these vessels may have been. No portion of a rounded under surface was recovered, and one fragment was undoubtedly a portion of a vessel with a flat bottom.

Thirty-three feet from the south end of the megalithic structure and 23 feet from the south end of the cairn, there is a short cist (fig. 8), lying open and rifled of its contents. It measures 5 feet long by 3 feet broad, the long axis lying north and south; the east stone is absent, and the north

~

stone has this peculiarity that it stands 2 feet 6 inches higher than its companions, forming a headstone, as it were. The depth of the cist, which contained only loose earth, is 2 feet 6 inches. Beyond this cist, and in a line with its west wall, is a stone 2 feet  $4\frac{1}{2}$  inches long and standing 1 foot 9 inches high. A few feet east of this stone there is a small slab on edge, and another to the west, both set with their long axis east and west. Another large flag lies on its face to the south of the cist. I caused the space under this to be explored, in the hope that it might cover a short cist, but there was no structure underneath it. There is no very obvious explanation for the disposition of these stones, but it may be

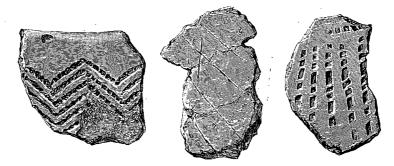


Fig. 14. (actual size). Fig. 15. (scale  $\frac{2}{3}$ ). Fig. 16. (actual size). Fragments of Pottery from Chamber, "Giants' Graves."

that those placed with their axes in line with the breadth of the cairn, represent survivors of a series marking out the original outline of the cairn.

Sixty feet south of the large cairn is a smaller one, which measures 40 feet by 32. In this cairn there is a ruined and rifled cist. It is formed of several small flags placed serially. It is 8 feet long by 2 broad, the long axis running east and west. At the western end there is an upright stone, standing 4 feet above the ground. The east end is open. The narrow trench is not subdivided by septal stones, and contained only soil and stones, with no signs of charcoal or bones, and no relics were observed.

### ) THE CAIRNS OF ARRAN.

## III. MONAMORE CHAMBER.

This structure stands on the high moor, about a mile to the south of the Monamore Burn. The ridge on the edge of which it is placed is

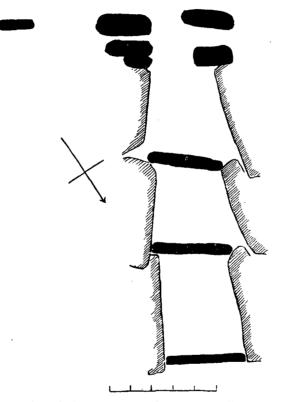


Fig. 17. Ground Plan of Chamber, Monamore Glen, Lamlash.

400 feet above the sea, and forms the southern lip of the deep glen in which a small tributary of the Monamore Burn runs.

It has been much disturbed by some previous excavations, and merits only a brief description, though it is important in respect of the evidence it shows of a portal leading into the chamber (fig. 17). The limits of

the cairn are now unrecognisable. The megalithic structure is 14 feet in length, and its axis lies N.E. and S.W. It is formed of three pairs of lateral stones, and it is divided by septal slabs into three compartments. The northern end is in this case the closed end; the southern is open. Here three upright stones remain as the possible survivors of a larger series. Two of them form the side posts of a portal. The east stone stands 4 feet 4 inches above the level of the top of the side walls of the chamber; it is 2 feet broad and 10 inches thick. The west stone is 2 feet 6 inches broad, and 6 inches thick, and is lower than its neighbour, being only 2 feet 8 inches higher than the chamber. Three feet to the east is a third stone, 2 feet 6 inches broad, with its long axis standing in line with the two portal stones.

The height at which these stones stand above the chamber itself, the fact that the structure is placed on the edge of a ridge, with a flat surface in front of the portal, may suggest that in all probability the chamber was originally such a one as explored in the Carn Ban. If this were the case it must be concluded that all the superstructure has been removed, and only the deeper megalithic portion of the chamber left.

The soil thrown out was carefully riddled, but only a few fragments of pottery, and some chips of Corriegills pitchstone, were recovered in the way of relics.

The fragments of pottery are composed of dark ware, and show no decorative design. They are too small to permit of an opinion as to what may have been the shape of the vessel.

In the glen of the Monamore Burn a cairn is marked on the 6-inch map, close to an old sheepfold, a short distance above the mill. It is now practically obliterated, only a slight elevation marking the spot. There is nothing to show what may have been its nature, and no cist or megalithic structure now remains.

## IV. GLENRICKARD CISTS, GLEN CLOY.

This megalithic structure stands close to the cottage called Glenrickard, on the open moor above Kilmichael House. It has been a playground for generations of children, and, I was informed, has been dug into and disturbed more than once. I contented myself, therefore, with measuring and planning it (fig. 18).

The constituent slabs are considerably smaller than in most of the other structures of the class in Arran, corresponding more closely to the Torlin structure than to any other. The lateral slabs are, moreover, nearly on the same level, and the whole is rather a series of cists than a chamber. It measures nearly 20 feet over all, and its long axis runs nearly due north and south. At the south end are two small transverse stones, 2 feet and 2 feet 9 respectively, with a space of 7 inches only between their mesial edges-so that they cannot represent a portal. The ground plan shows the arrangement of the stones now standing above the present ground level; from this it will be clear that, though much disturbed, the structure has had the same general plan as the other structures described. The compartments are, however, smaller, the breadth of the third from the south end being only 2 feet wide by 3 feet 10 inches

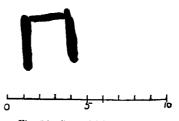


Fig. 18. Ground Plan of Cists at Glenrickard, Glencloy.

long. The gap of 2 feet 6 inches between this and the next cist to the north is difficult to explain. There is no sign of any intervening stones now present. Ten feet to the north, and set at a different angle, is another cist, 3 feet long by 2 feet wide. It has more the appearance of a short cist, but it is not carefully constructed, and the stones are not exactly on the same level, and there is nothing in the proportion of the stones to distinguish it from the cists of the main series considered separately. In the ruined state of the structure it is impossible to give an opinion as to its true nature, but it rather appears to me that in it we must see some secondary modification of the original type of segmented chamber.

On the moor between Glen Cloy and Glen Lag a Bheith, half a mile due east of the cists just described, a cairn called "Carn Ban" is marked both on the 6-inch and 1-inch maps. It has now been entirely removed, the site being marked only by a slight elevation, with some scattered stones on the ground level.

## V. MONYQUIL CAIRN AND CISTS.

This cairn stands at the mouth of Glen Suidhe, near Monyquil farm. It has been largely removed in the reclaiming of the land round it, and now only one side remains (fig. 19). It measures 100 feet over all, with its long axis placed roughly east and west. The southern edge is straight and stands about 3 feet above the general level of the field; the north edge has been encroached on, and runs out in irregular fashion on to the ground level. The broadest part is now about 43 feet.

The special feature of the cairn which attracts attention is the arrangement at the N.E. and N.W. corners of a setting of stones as if to mark out the boundaries of the cairn (fig. 20). The corner stones are slab-like blocks, set rectangularly. The eastern limit of the cairn is marked by a line of similar slabs, but no such line now marks the western end. The south edge shows along a rather irregular line, and placed at irregular intervals a series of large blocks, which marks off

#### THE CAIRNS OF ARRAN.

in a sense the limits of the cairn. I dug into the sloping edge to the level of this line, but did not find a continuous row of slabs or stones. I cannot speak positively as to the significance of this row of stones, but there is no doubt that the smaller flags shown in solid black in the plan represent the remains of a setting of flags marking the outline of the cairn.

Eighty-seven feet to the north of the cairn is a large standing stone, 8 feet above the ground, 3 feet 5 inches broad, and 1 foot 8 inches

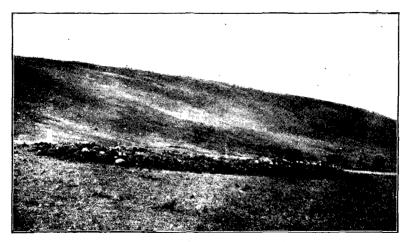
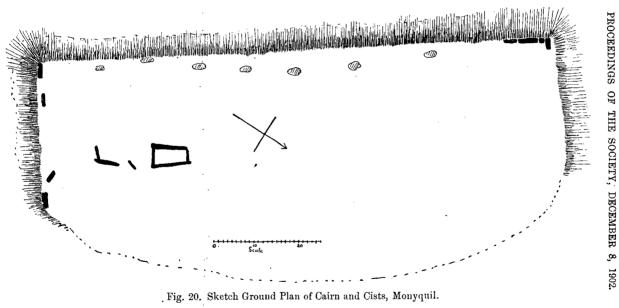
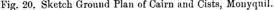


Fig. 19. View of Cairn and Standing Stone at Monyquil, from the South.

thick. If we suppose that the cairn was originally 60 feet broad, that is, of the same size as the Carn Ban in Kilmory Water and the cairn at Whiting Bay, the original distance of this stone from the cairn would have been somewhere about 60 feet. Now 50 feet to the west of the cairn is a large stone of much the same shape lying on its face. It measures 9 feet by 4 feet 6 inches. I made an opening in the ground and probed the space beneath it, and as I found no cist I inclined to the view that this was a fallen stone, possibly a second of a larger series, of which the single upright pillar is the only survivor.





#### THE CAIRNS OF ARRAN.

The excavation of this cairn was disappointing. Near the west end there are a number of large flags, arranged without order or symmetry, which I believe are stones thrown down here when the northern part of the cairn was demolished. At the east end there are the ruined remains of a series of cists, only one of which is now entire. It is 5 feet 5 inches long, by 2 feet to 2 feet 5 inches broad. The lateral stones are 5 feet long; the end stones are 2 feet and 2 feet 5 inches. The west stands 4 feet high from the bottom of the cist, the east only 2 feet 8 inches. The lateral stones are also unequal in height, the south being 4 feet 3 inches from its lower edge, the north only 3 feet. The unequal heights of the stones distinguish this from a single short cist, and to the east there are some displaced slabs which are the remains of a series in that direction. T take it therefore that this is an example of the segmented structure described in so many other cases, but none of the component slabs are massive like those of the "Giants' Graves" at Whiting Bay or the structure at Tormore.

No relics of any sort were recovered.

The excavations which I have detailed above are relatively poor in results as far as relics are concerned; and in the matter of human remains, the recovery of which was my primary motive, they are a complete blank; but the increase in knowledge of structural detail they have afforded is of much importance. Many features described in my last paper get now a satisfactory explanation, and we are in a position to realise what the original condition of this interesting series of monuments may have been. Before gathering together the data I must again refer to the Argyleshire examples.

A brief visit to Ford during the summer gave me an opportunity of visiting the cairns near Kilmartin at Largie and Kilchoan. These two structures, though similar in general plan, present certain features of difference in the roof construction.

The Largie cairn contains a chamber (fig. 21) to which there is no

passage of approach; access to the chamber is obtained by a low portal 3 to 4 feet above the level of the floor. This portal is seen in the photograph from the inside, through a blank in the south-west wall of the chamber. It is bounded by two upright stones. The south end is closed by a tall upright stone corresponding to the whole depth of the chamber. Its upper part is seen in the photograph, which is



Fig. 21. View of Chamber at Largie Farm, Kilmartin, Argyleshire, from the South.

a view from the south. The roof is formed of six large slabs of irregular shape, which rest on the upper edges of the lateral stones. Some of these are of sufficient height to reach from floor to roof, others are smaller blocks placed on edge, one above the other, while in other places the wall is formed solely of smaller flat slabs, placed horizontally and piled upon one another till the requisite height is reached. This feature is well seen in the photograph. The chamber is subdivided by slabs set on edge, into four compartments, so that the ground plan is identical with the Arran structures.

The top sides of the septal slabs are placed from 5 to 6 feet below the roofing slabs. The walls do not converge towards the roof; the roofing slabs rest on the lateral stones when these extend the whole depth of the chamber, and in the intervals between these, on the piles of horizontal blocks, which do not overlap one another as in true chamber vaulting.



Fig. 22. View of Megalithic Structure at Kilchoan, near Kilmartin, Argyleshire.

The Kilchoan structure (fig. 22) forms an interesting contrast to the Largie chamber. It is built of irregular flags, placed opposite one another in series, and the intervening trench-like space is subdivided by septal slabs into compartments. These septal slabs are only slightly lower than the lateral stones, and thus, if the roof were absent, the appearance would be that of a series of cists placed end to end. The roof is formed of large flagstones, which are supported on stones placed outside those of the structure itself. Little headroom is left below the roof, but the space was probably sufficient to permit of entrance from

one end. It is further possible that, as originally built, there may have been some building of smaller stones to complete the walls.

Returning to the Arran structures, it is obvious that when the roof has been destroyed and the megalithic structure stands denuded, it is not possible to tell which method of roofing had been adopted; but it seems highly probable that the majority of the structures described in my former paper, and certain of these described in this, may have had an upper section of small flags piled or built up on one another to support the roof.

The Largie chamber differs from that in the Carn Ban only in one respect—that the building with smaller slabs' placed horizontally is employed only in certain parts of the walls to bring them up to the level of certain tall stones which reach from floor to roof.

The Clachaig chamber, again, is closely akin to the Largie chamber in this respect, and in my last paper I referred to the possibility that there had been some kind of built roofing structure, on account of the large number of small slabs that were found within it. At Tormore cists there lie beside the chamber two large flagstones, and I referred to the difficulty of understanding how they could have rested on the tops of the unequal lateral blocks, and I suggested that accessory struts for their support, as at Kilchoan, may have been present. It seems to me now more probable that the structure represents merely the deeper part of the Kilmory chamber.

Close to the Sliddery cists there is a standing stone which last year I was unable to account for. It now seems probable that it may be the survivor of a crescentic setting; and the upright stone placed at the northern end of the series of cists is doubtless the survivor of a pair of stones bounding the portal into the chamber.

There is some doubt as to whether or not the cairns had their outline marked out by a setting of flags like those of the northern series of chambered cairns, but the disposition of the small flags round the cairn at Monyquil, and also at the Carn Ban and Giants' Graves, suggest that some such arrangement originally prevailed in all.

Looking at the group of structures as a whole, in the Carn Ban of the Kilmory Water we have the prototype, and from its features and the data gathered by the exploration of the less perfect examples, we may with considerable confidence describe the structure in its typical form thus: It is a large rectangular cairn, with a definite ground plan marked off by a setting of flagstones. At one end this setting is disposed in a semicircle, and bounds a space leading to the portal of a chamber which occupies one end of the cairn. The chamber is formed of two sections,a deeper, built of huge stones set on edge, bounding a trench-like space divided into compartments by septal slabs; and an upper, built of small flags placed horizontally. The object of this upper section is twofold : to afford head-room within the chamber, and to provide a level surface for the roofing flags to rest upon. The portal of access is some distance above the chamber floor. The compartments are vaults, in which the remains of the dead were placed, sometimes without cremation, sometimes after cremation.

I believe that most of the Arran structures which now stand denuded represent only the deeper megalithic section of the Carn Ban chamber, and that in the process of demolition the roofing slabs and upper built section have been taken away.

The upper built section may not in all cases have been so regular and complete as at the Carn Ban, for when any of the lateral stones were tall enough to reach the roof, building with smaller flags was employed only between them.

On the other hand, the Kilchoan structure proves that this method of supporting the roof was not always adopted, and it may be that the roofs of some at least of the segmented chambers may have been carried in the manner seen at Kilchoan.

The elaborate structural features of the perfect cairn, circle, and chamber bring the Arran type of sepulchral cairn into line with the chambered cairns elsewhere, but there are some special features peculiar to it.

There is no approach passage; access to the chamber is obtained

through a low portal placed some distance above the floor, and before the portal is a space bounded by a semicircular setting of upright stones. The chamber itself is invariably in part megalithic, and subdivided into compartments by complete septa placed opposite the ends of each pair of lateral stones.<sup>1</sup>

The hypothesis that the cists may have been built in series as each became filled up, in the cases where the septal stones are on the same level as the lateral stones, is untenable in the light of the new observations, and there is no doubt that each of the megalithic structures was an elaborate sepulchral vault covered by a roof, which permitted access from time to time through a narrow entrance, and that it was covered in by a cairn of such a size as made the whole a stupendous monument, when it is considered how limited were the means at the disposal of these early people.

The character of the implements found during this series of explorations fully bears out the conclusions drawn from earlier work. The flint arrow-points are of the same leaf-shaped type; the large knives or scrapers, of the same material, are similar in their characters to those found on the other sites. No implements or objects of metal were discovered. At the Giants' Graves, Whiting Bay, a small oval piece of metal, probably silver, was picked up, smooth on one surface and with two ridges on the other. It is not like any modern object save possibly a sleeve-link, and as it occurred in a disturbed deposit, there is nothing to prove that it In every situation save Monyquil, flakes or fragments of the is ancient. greenish mineral identified as Corriegills pitchstone were found, and similar flakes were found in the Tormore cists last year. The regular occurrence of these in the deposits is curious. No implement or object made of this mineral has been seen, yet these broken fragments or flakes can hardly be regarded as stones occurring incidentally in the soil.

The pottery found is in such minute fragments that little can be

<sup>1</sup> A cairn with a chamber having in some respects a strong resemblance to the Arran type of structure is illustrated in *Archæologia*, vol. xv. (1806). It stood at Anna Clough, Mullen, in the parish of Kilstevy, Ireland.

determined regarding the class of vessel to which the pieces belonged. Some of the pieces found at Whiting Bay belong unquestionably to the class of vessel found on various Neolithic sites. They are composed of the same dark ware, and have the broad flat rim characteristic of certain examples of Stone Age pottery. There being no part of the bowl of a vessel, it cannot be determined for certain whether they were rounded in the bottom or not. Fragments of one vessel show that it had possessed a flat base, but there are too few pieces to permit of its reconstruction; and as the site was much disturbed, it cannot be confidently stated that it belonged to the primary interment.<sup>1</sup>

It is not part of my purpose to give a complete survey of the Arran cairns, but I have visited, and I believe identified, all the sites of cairns marked on the 6-inch map, and have now described all those of the megalithic chambered class which I know to exist in such a state of preservation as to make a description possible. I may, in conclusion, refer briefly to three cairns marked on the map at the mouth of Sannox Glen. One is on the ridge above the "Rocking Stone." to the south of the glen. It is now entirely ruined, and there are exposed three rather rudely built but apparently short cists, which have long ago been rifled and broken down. They are arranged in line with one another, but lie several feet apart, and do not fall into the class which I have described above. In the mouth of the Glen, on the edge of the old sea-beach terrace, is the base of a large cairn of stones which has been encroached on all round by the ploughed land. No megalithic structure exists. and no cist is exposed. It is possible that all the stones of a chamber have been removed to the neighbouring dikes, or it may be that some-

<sup>1</sup> In a paper published in *The Reliquary*, vol. ii., 1896, to which my attention was drawn after my last paper was in print, Mr Hugh W. Young described fragments of pottery found at Roseisle which in shape and ornamentation correspond with certain examples of the Neolithic pottery therein referred to. They were found along with stone implements, and among wood ash and charcoal, in two "remarkable pits," placed 18 inches apart from one another. The pits were 5 feet in diameter at the top and nearly 5 feet deep, were "lined with stones" and "built round apparently with rough stones." It is possible that these "pits" may have represented the remains of a "segmented structure" such as I have described.

VOL. XXXVII,

 $\mathbf{5}$ 

where under the base a short cist may lie concealed. I judged that the prospects of finding such a cist undisturbed were so small, that the labour of turning over the whole area was not justified.

The third cairn in this district is placed on the north bank of the North Sannox Water, close to its mouth, and a short distance from the shore. It is a considerable mass of stones, standing 2 to 3 feet above the general ground level, nearly circular in shape, and about 20 to 30 feet in diameter. It seemed worth while to turn this cairn over, but as the weather broke down and stopped our work, I was unable to accomplish it.

#### CIRCLE AT AUCHELEFFAN, KILMORY WATER.

On the moor above the farmhouse of Aucheleffan, 5 miles up the Kilmory Water from Lagg, there is a perfect little circle (fig. 23), consisting of four stones set exactly in the cardinal points of the compass. The stones are fairly regular, rectangular pillars of granite. The north stone is 3 feet 6 inches broad, 1 foot 10 inches thick, and stands 3 feet 8 inches above the ground; the south stone is smaller, 2 feet broad (14 inches thick) and 2 feet 6 inches high; the west stone is 2 feet broad, 1 foot 4 inches thick, and 3 feet 6 inches above the ground; the east stone is 2 feet 4 inches broad, 1 foot 7 inches thick, and stands 3 feet 4 inches above the ground. The area bounded by the standing stones is 16 feet in diameter.

As there was no record and no tradition of the circle having ever been opened, I spent a forenoon in digging within it. A hole sunk in the central point, to the hard undisturbed till, revealed no sign of a central cist. Four trenches were then cut from the central excavation to the bases of the pillars, but absolutely nothing was revealed. There were several large boulders in the soil. This was loose, and easily dug for 2 to 3 feet deep, but below that it was very hard to move the subsoil, which had obviously never been disturbed. Our trenches were fully a foot deeper than the bases of the stones, which were embedded to the depth of about 2 feet, so that their whole height was approximately 5 feet. If this circle is not sepulchral, it is exceptional to the rule in Arran. I saw no other stones in the neighbourhood to indicate that



Fig. 23. Small Circle above Aucheleffan, Kilmory Water, Arran.

it belonged to some larger structure. Its nature and purpose must therefore remain a riddle, unless indeed it be that one of the intervals between our trenches, in which I satisfied myself there was no cist, contained a cinerary urn which we were unfortunate enough to miss.