I.

ACCOUNT OF EXCAVATIONS IN GROUPS OF CAIRNS, STONE CIRCLES, AND HUT CIRCLES ON BALNABROCH, PARISH OF KIRKMICHAEL, PERTHSHIRE, AND AT WEST PERSIE, IN THAT NEIGHBOURHOOD. By JOHN STUART, Esq., Sec. S.A. Scot.

A description in the old Statistical Account (repeated and amplified in the first volume of Chalmers' "Caledonia") of the remains at Balnabroch, long ago excited my interest in them, and an inspection of the locality in the autumn of 1864 increased my desire for their investigation. The notice in the Statistical Account is as follows: '—

"In the middle of a pretty extensive and elevated heathy moor stands a large heap of stones, or cairn, 90 yards in circumference, and about 25 feet in height. The stones of which it is composed are of various sizes, but none of them, as far as they are visible, large; and appear to have been thrown together without order. They are in a good measure covered with moss, and in some parts overgrown with weeds. This circumstance argues the great antiquity of the cairn; for the circumjacent ground being covered with heath, and of a firm mould, a long time must have elapsed, before so much earth or dust could have been collected by the wind, and lodged among the stones, as to form soil for the nourishment of plants. Round this cairn are scattered, at different distances, a great number of smaller cairns. They are generally found in groups of eight or ten together. They are all covered more or less with moss or heath. About a furlong to the westward of the great cairn are the vestiges, quite distinct, of two concentric circular fences of stone, the outer circle being about 50 feet, and the inner about 32 feet in diameter. There are also the vestiges of six, perhaps more, single circular enclosures of stone, from 32 to 36 feet in diameter, lying at different distances in the neighbourhood of the cairn. Two parallel stone fences extend from the east side of the cairn, nearly in a straight line, to the southward, upwards of 100 yards. These fences are bounded at both extremities by small cairns, and seem to form an avenue or approach to the great cairn of 32 feet in breadth. There can be little doubt that all these are reliques of Druid-

¹ Sinclair's Statistical Account of Scotland, vol. xv. p. 516.

ism; that the great cairn is one of those at which they celebrated their solemn festivals in the beginning of summer and the beginning of winter, when they offered sacrifices, administered justice, &c.; and that the circles and lesser cairns must have been the scenes of some other religious rites, of which the memory and knowledge are now lost. Similar cairns are to be seen in the neighbouring parishes, and in different parts of the Highlands; but this parish has to boast of a more uncommon and remarkable monument of Druidical superstition.

"About a mile N.E. from the above mentioned great cairn, on a flattopped eminence, surrounded at some distance with rocky hills of considerable height and steep ascent, stands one of those rocking stones which the Druids are said to have employed as a kind of ordeal for detecting guilt in doubtful cases. This stone is placed on the plain surface of a rock level with the ground. Its shape is quadrangular, approaching to the figure of a rhombus, of which the greater diagonal is 7 feet, and the lesser 5 feet. Its mean thickness is about $2\frac{1}{2}$ feet. Its solid contents will therefore be about 51,075 cubical feet. As it is of very hard and solid whinstone, its weight, reckoning the cubical foot at 8 stones 3 pounds, may be reckoned to be 418 stones 5 pounds, or within 30 pounds of 3 tons. It touches the rock on which it rests only in one line, which is in the same plane with the lesser diagonal, and its lower surface is convex toward the extremities of the greater diagonal. By pressing down either of the extreme corners, and withdrawing the pressure, alternately, a rocking motion is produced, which may be increased so much that the distance between their lowest depression and highest When the pressure is wholly withdrawn, the elevation is a full foot. stone will continue to rock till it has made 26 or more vibrations from one side to the other, before it settles in its natural horizontal position. Both the lower side of the stone and the surface of the rock on which it rests appear to be worn and roughened by mutual friction. every reason to suppose, from the form and relative situation of the surrounding grounds, that this stone must have been placed in its present position by the labour of men. It will hardly be thought, therefore, an extravagant degree of credulity to refer its origin to the same period with those other tribunals of a similar construction, mentioned by writers who have treated of the customs of the ancient Celts. This opinion is, how-

ever, the more confirmed from finding, in the neighbourhood of this stone, a considerable number of other Druidical relics. On the north side of the stone, at the distance of 60 yards, on a small eminence, are two concentric circles similar to that already described, and a single circle adjoining to them on the east side. Beyond this, at 37 yards distance, on another small eminence, is another pair of concentric circles, with a single one adjoining to them on the east side. Beyond these, at 45 yards distance, is a third pair of concentric circles, with their adjacent circle on the east side. Farther on to the north-east, at the distance of 90 yards, is a single circle, and beside it, on the west side, two rectangular enclosures of 37 feet by 12; also a cairn 23 or 24 yards in circumference. and about 12 feet high in the centre. Several small cairns are scattered in the neighbourhood: 120 yards west from the rocking stone is a pair of concentric circles, with a small single circle beside them of 7 feet in diameter. All the pairs of concentric circles are of the same dimensions, the inner one being about 32 feet, and the outer about 45 or 46 feet in diameter; and all of them have a breach or doorway 4 or 5 feet wide on the south side. The single circles are, in general, from 32 to 36 feet in diameter, and have no breach. The vestiges of all those structures are perfectly distinct, and many of the stones still retain the erect posture in which all of them had probably been placed at first. Cairns and circles similar to those described are to be seen in other hills of this parish, particularly between Strathardle and Glenderby. The elevated situation and cold exposure in which these ruins lie have preserved them from being ever disturbed by the plough, which has effaced, and probably destroyed ruins of the same kind in other places. There are likewise several tall erect stones, called here in Gaelic Crom-leaca, or Clachshleuchda, stones of worship. Some of these are 5 and some 6 feet above the ground, and may be sunk a considerable way under the surface, from their remaining so long in the same position; for a superstitious regard is paid them by the people, none venturing to remove them, though some of them are situated in the middle of corn fields."

Through the kindness of Mr Allan Fraser of Blackcraig, I was enabled to make a thorough examination of these and other neighbouring remains in the month of September last. The permission of Mr Hagart, the proprietor of Balnabroch, was readily obtained, and a band of between

twenty and thirty workmen was placed at my disposal for three consecutive days, with an intimation that I need not hurry my operations, and that the men were at my disposal till the necessary operations were thoroughly completed. The workmen entered thoroughly into the spirit of the work, and, while eager for discoveries, were careful in carrying out the instructions for watchfulness. Many of the workmen were servants sent by Mr Fraser, Mr Trotter of Woodhill, Mr Constable of Balmyle, Mr Macdonald of Ballintuim, and the number was made up by labourers hired by Mr Fraser.

The moor of Balnabroch probably has been the site of an early fortified site or "Broch," of which, however, no memory is preserved. It is a platform at the west end of the base of the Knock of Balmyle, and slopes down to the Water of Ardle, which runs to the south through a narrow glen. The remains on the moor and its neighbourhood seem to attest the existence of an early and considerable population settled here. Cultivation has been encroaching on all sides, and many cairns and hut circles have been obliterated within a recent period. The appearance which the moor still presents is very impressive. In the centre a cairn of enormous dimensions lifting up its weatherbeaten crest; and on the west, north, and east sides are many flat cairns and hut circles, of varying size and design; and on the east is a circle of pillars.

The central cairn goes by the name of the GREY CAIRN, and is described as formerly measuring 90 yards in circumference and 25 feet in height. The popular belief is that a mermaid is buried beneath it. This mermaid used to throw stones at people who were coming from church at Kirkmichael, and she could only be seen through a hole in the knot of the pine tree. At last she was chased to the hill at Balnabroch on her flight to the waters of Loch Marech, on the other side of the hill, and there killed, when the Grey Cairn was raised over her.

It was plain, on looking at this cairn, that an earlier examination of it had been made, and on inquiry I found that it had been conducted by Dr Wise and Principal Campbell of Aberdeen, a few years ago. At this time a passage formed of slabs on or slightly above the surface of the ground, so large that a person could creep into it, led from the outer side towards the centre of the cairn. According to Dr Wise's statement it led to no chamber. No trace of this passage remained.

The stones of the cairn were all turned over, with no result till the surface of the ground was reached, when it was found that the bottom of the cairn was paved with large boulders, below which, about the centre, and several yards around, were many traces of burning,—charred wood, and black stuff which had penetrated the yellow subsoil as if in streams. On turning over the stones a circular disc of stone with a hole in the centre was found, as also a small boulder with a cup on its flat face.

The ground around the Grey Cairn is studded with cairns to the east and south, and with groups of hut circles to the west. The latter often occur in groups of two together, in size from 28 to 30 feet in diameter, the walls from 2 to 3 feet thick, being defined by concentric lines of large boulders set on end. The entrances are to the south, going through the walls, and are defined by flags on end.

A hut circle on the south-west of the Grey Cairn was dug into around the entrance, in the belief that in this situation articles would probably have been thrown out, but with no result. In the centre, charred wood and minute fragments of bones were found.

Two hut circles on the west of the Grey Cairn were thoroughly trenched, without result, except the appearance of charred wood, and on the west side a fragment of bronze like the pin of a brooch.

A hut circle in the corner of the improved ground on the north of the cairn was examined, and much charred wood was found in the floor. It was one of two which were probably enclosed by a wall, as at Persie; but the neighbouring one had been removed when the field was improved. A hut circle on the north-west of the big cairn was trenched all round the walls, which were removed, with no result; but many flags were found on the floor.

The cairns were of varied plan; but none of them were conical, the whole being flat in shape. On the south-east of the large cairn was one about 9 yards across, defined by large boulders, with a raised ridge around, and a cup in the centre. The raised ridges and centre were all formed of small stones and earth. A trench was cut through it from the southeast, which showed that in the centre, at a depth of 2 feet, a deposit had been made, of which the remains were charred wood and fragments of charred bone, with traces of blackish matter, which had filtered into

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the yellow subsoil, as in the case of the graves at Hartlaw. Many fragments of white quartz pebbles appeared near the centre, as in other cairns to the east.

North-east of the big cairn among the small cairns is a circular structure of about 18 feet across. Is was defined by an external circle of large stones; an inner wall of large blocks went round at about 6 feet inwards from the outer one. A trench from the north-east towards the centre showed a rude pavement, several large flattish flags, and great quantities of white quartz pebbles. One small cairn north-east and near the large cairn, on being trenched through, showed no result.

Farther to the north-east, among the small cairns, is a circle of stone pillars, many of them now prostrate. It consists of nine pillars or boulders in a circle of about 8 yards in diameter. A trench across it showed, towards the centre, fragments of charred wood in the subsoil, and also towards the south margin burned bones, and charred wood in the subsoil; and always where this occurs the subsoil is blackened around for a bit, as if saturated with some liquid. Many of the small cairns around this were examined, and nothing was found.

Farther north on the moor are two hut foundations of the usual size and construction, with entrances. Near them a round cairn about 20 feet across, and many smaller ones around. The large one was dug into, and charred wood appeared. In the centre was a pit filled with calcined bones and charred wood. This cairn almost abutted on the outside wall of one of the hut circles.

One of the hut circles north of the large cairn had a flagstone in the centre. A small space enclosed by stones near to it was found to be filled with about 2 feet of black unctuous earth.

Among the cairns east of the Grey Cairn is one about 30 feet in diameter, defined by large boulders, and slightly raised in the centre. A trench made from the west through the centre showed a central cist lying south-east and north-west, measuring 3 feet 8 inches in length, formed of great flags. The covering flag had been removed before, and the cist was filled with rubbish. It had no slab in the bottom, and the earth in it was rich and unctuous. Many small cairns were around it.

The deposits in some of the hut circles of charred wood and fragments

Proceedings, vol. vi. p. 55.

of burned bones were so much the same as those in the cairns, as to suggest that burials may have taken place in them after they were disused for houses.

On crossing over the moor northwards about a mile from Balnabroch, to a point on Dalrullion where a view is opened up the Blackwater towards Mountblair and Glenshee, is another group of stone circles. They are concentric, and are defined by boulders or slabs, set in rows about 14 feet from each other, leaving a central space of from 25 to 30 feet within. The entrance of about a yard in width is always on the southeast, and is defined by slabs set in the earth. On each side of the entrance the space between the rows of stones is filled up with a heap of small stones like a cairn.

Some of them occur in twos together. There is also a very small circle of about 12 feet across, with a central space of about 8 feet, and circular walls, defined, as in the other cases, by boulders in the earth. Here the entrance was probably to the north, as the other side is sheltered by a projecting knob of rock.

The large boulder resting on a mass of rock, which has been termed a Rocking stone, is in the neighbourhood of the hut circles, and the hill-side is covered with boulders and rocky projections.

On the ridge of moor at West Persie, about a mile to the south-east of Balnabroch, is another group of circles. This group had been enclosed by a protecting wall, of which the line in front on the west side remains.

In two cases another wall ran from this external boundary, and enclosed two of the hut circles. The huts, measuring 21 to 27 feet in diameter, are defined by large slabs in the earth, with entrances on the south. At the entrances were found paving flags in the ground, and in the centre of some were found traces of rude pavement. At the door of one, fragments of charred wood and burned bones were found, and the same in the centre of an adjoining one, where a large boulder with a hollow, as if for grinding, was also found.

In the floor of one of the huts of the enclosed groups were found seven holes surrounded by stones, leaving an empty space in the centre sufficiently large to contain a good stout post. A similar small hole was in the centre of the circle. On the north side of this hut were several sharping stones, and round balls of quartz were found in different places

on the west side, also large fragments of charred wood. The adjoining circle was paved in the doorway and inwards for a little way. Some of the circles here had only a single wall.

On the slope to the west are some small cairns of stones, but they and the surrounding walls have been dilapidated for the sake of building materials. It is probable that the walls and hut circles were continued to the north, but if so, planting and cultivation have obliterated all traces of them.

The remains now described seem to be those of early British settlements. They occur partly on lofty exposed moorlands, and partly in sheltered hollows. I heard of several similar groups in the same neighbourhood on the high grounds and in their glens.

Most of the sites selected were on exposed platforms, but there they were probably the only grounds cleared of wood, and their elevation enabled their occupants to keep watch over the surrounding districts. They were dry, and had an abundant supply of water in the neighbourhood.

The mixture of cairns and hut cirles seems to indicate a practice of burying the dead in the midst of the abodes of the living. Of this mixture there are other similar instances on upland moors on the skirts of the Mounth. I have examined a line of groups of cairns and pillars on the Torrocks, near the kirk of Lintrathen, extending in length about a mile and a half, and half a mile in breadth. Many of the cairns here are about 15 feet across, although some are about twice that size. They are almost flat, the stones being laid close together, packed like pavement, and surrounded by an outside line of boulders. Some of them have been opened, without any trace of deposit; others show in the centre remains of burned wood and unctuous earth.

If this is not a mixture of hut circles and cairns, as at Balnabroch, it must have been a cemetery of great importance, evidencing a change of custom from that which prevailed when the dead were buried in isolated cairns and cists.

A careful examination of these cairns, and of the other groups to which I have referred, is greatly to be desired.

The thickness of wall in some of the circles on Dalrullion is remarkable. It seems probable that the space between the two rings of boulders

was filled up with stones and earth to a certain height, and that on this wall the roof of hurdle-work and branches rested. The walls of houses in Tiree and other islands of the Hebrides are even in our own day constructed on the same plan, and to attain the same end. Two walls are erected at a distance of six to eight feet apart, the space between being filled up with sand or turf, and the roof is perched on the top on the inner side, leaving the flat top of the broad wall outside.

The country people in Strathardle have no knowledge of the Druidical character ascribed to these circles.

They believe that they were houses, and that in the space between, the cattle were sheltered.

The Rev. Mr Allan Stewart, who applied the Druidical theory to the circles and "Rocking" Stone, is inclined also to believe that we may have to thank the Druids for giving the name to Glenshee. He finds out that they had a practice of holding assizes in the most convenient part of the country, and that the officers who performed this duty were called Sithichean, or peacemakers. A round hill in the head of the glen, called Sithichean, the hill of peace, may have been, he says, one of the places for holding these courts of justice, and hence the whole glen may have got its name. To those who stumble at this suggestion, my namesake offers another, that Sith-dhun may have been the place of concluding and ratifying a peace between two contending tribes or clans.

On the subject of the Rocking Stones I may remark, that while it is far from unlikely that in occasional cases, large boulders, deposited by glacial agency, may lie in such a way as to permit of their motion, yet in most cases, when their history is investigated, it turns out that they have for some time ceased to rock, and a wicked mason or idle shepherd is introduced into the narrative, who is known to have chipped off a corner, and so ruined the motive powers of the stones.

¹ Statistical Account of Scotland, vol. xv. p. 507.