I.

EXCAVATION OF TWO BRONZE AGE BURIAL SITES IN AYRSHIRE, By ALEXANDER G. McLEOD, M.A., F.S.A.Scot.

In the course of frequent journeys with me to Loch Doon via New Cumnock and Dalmellington to explore the ruins of the mediæval dwellings on Donald's Isle, Mr Archibald Fairbairn of Wellwood used to scan the surrounding moorland for traces of ancient monuments,

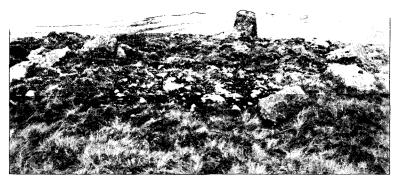
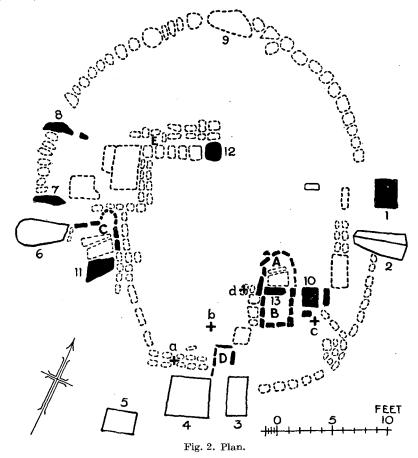


Fig. 1. Stone Circle at Beoch, Ayrshire.

and one day his observant eye noted a prominent upright stone at the top of a slight elevation in the rising ground close to the main road on the left. We proceeded to the spot and observed that several large stones, mostly prostrate, were arranged roughly in the form of a circle (fig. 1), and that within this circle the grass was short and green, whereas all around the moorland grass was long and white. In the following summer of 1937, having obtained permission from the tenant-proprietor of the sheep-farm, Mr Hamilton of Maneight, on whose land the stone circle was situated, we carried out a detailed investigation. In addition to Mr Fairbairn and myself, the late Mr William Macintyre, F.S.A.Scot., Cronberry, and Mr James Mair, Cronberry, took an active part in the work of excavation.

The site of the stone circle and burial cairn is on high ground 40 yards south of the road from New Cumnock to Dalmellington, at a

distance of $3\frac{1}{2}$ miles from Dalmellington and $7\frac{1}{4}$ miles from New Cumnock, at an altitude of 1053 feet above O.S. datum (O.S. Sheet XLVII.). The stone circle is surrounded by bare moorland, through which project many large boulders of granite. South-west of the cairn site are the



remains of an old fail dyke. At a distance of 140 yards to the southeast are the foundations of a steading, and farther to the east is a large rectangular sheep-fold, containing in its walls, doubtless, many stones from the vanished cairn.

The base of the cairn (fig. 2) is circular, measuring 35 feet in diameter. Nine large stones project above ground or lie partly exposed around the kerb, as shown on the plan. Of these nine the largest, numbered 6 on the plan, is a massive, prostrate slab, resembling a tombstone, 5 feet

long, 1 foot thick, and of maximum breadth 3 feet 6 inches. It tapers downwards to an oblique base, and must have fallen outwards when the cairn was removed. Stone number 2 is also a massive, prostrate, tapered stone, 4 feet 6 inches long, 1 foot 8 inches wide, and 2 feet thick. Stones numbered 4 and 5 are flat rectangular slabs, 8 inches thick. 1 and 3 the flat upper surfaces alone show above the turf, but both were found later to be deep-seated. Of the narrow keeled stones 7 and 8, 2 feet appear above the turf, but their bases turned out to be broad and Of the irregular flat slab numbered 9, 4 feet long and 1 foot thick, the rounded portion only at the western end shows above Within the circular base are three more large stones, of which the one numbered 10, the most prominent, measures 1 foot 5 inches by 1 foot 9 inches, and stands 2 feet 6 inches above turf-level. Stone number 11 is irregularly lozenge-shaped and stands 1 foot above the Both these stones are stable and apparently extend down to Stone number 12 projects 6 inches above the turf in line with stone number 9 at a distance of 10 feet. In line with stones 12 and 9, two more stones appear above the turf beyond the circle towards the road at intervals of 10 feet. In line with pillar-stone number 10, and at right angles to its longest edge at a distance of 1 foot 6 inches, appears above the turf a slab numbered 13, 2 feet long and from 7 to This slab has parallel vertical sides and is firmly 9 inches in width. fixed in position. On the eastern side of stone 10 another long, narrow stone rises above turf-level, and two smaller square stones just appear south and west of it.

A trial section was first opened north-west of the centre, near stone 12, where there was a large depression. On the removal of the thin surface layer of turf, a compact mass of assorted stones was revealed. No regular plan was disclosed, but large boulders lay in confusion where they had been thrown when the cairn was disturbed. Later this test section was extended southwards beyond the centre, and at the place marked b on the plan, some burnt bones and scattered fragments of probably three cinerary urns were encountered among black earth of a fine texture between the boulders. One of these had been made of a red clay intermingled with grains of crushed granite. So far as can be ascertained, it has had a diameter of about $9\frac{1}{2}$ inches at the mouth, the lip being flat with slightly rounded edges. There has been a slight shoulder, and from the lip downwards the vessel has been decorated externally with an incised lattice pattern, but how far this pattern extended beyond the shoulder it is impossible to say. What may be a second vessel, of which only two small fragments of the wall remain,

shows decoration consisting of circular markings impressed on the soft clay by means of a hollow bone or reed. The third vessel is represented by small fragments only of what was probably a cinerary urn of rather coarse clay.

The ground west of the prominent pillar-stone number 10 appeared less disturbed, and a line of stones at surface level was suggestive of rough masonry. Accordingly this region was next stripped of its turf and cleared of loose boulders and black earth. On the northern side of stone slab number 13 was disclosed a cist, A, partially paved with two flat stones, at a depth of 1 foot and bounded on its western and



Fig. 3. Cist A. Beoch Stone Circle.

northern sides by a line of stones on edge, inclined inwards and firmly held in position by an external retaining wall (fig. 3). At the northern end, 3 feet 3 inches from the stone slab, a pit was exposed filled with black earth to the depth of 2 feet. The eastern side of the cist had been disturbed. Lying on the floor was a narrow dolerite block (fig. 4) 1 foot 11 inches long and triangular in section, two faces being 7 inches wide and the other $5\frac{1}{2}$ inches. On the narrow face are two sets of concentric rings, and between them three arches, the upper arch joining with the outer ring of each set, the second arch merging with the outer ring of the set on the left, while the lower arch stands alone. On the edge of the stone above the arches is another incomplete set of rings, and at the extreme end of the block are three incomplete rings with a central boss, which appears to have marks of pecking. All the rings

have probably been incised, although the natural wear and roughness of the stone makes this a little uncertain. The block is probably a fragment of a larger stone.

Another unpaved cist, B, was uncovered on the southern side of slab number 13, 2 feet 6 inches square and entirely enclosed by lines of stones. It contained black earth, but neither burnt bones nor fragments of pottery. Beyond the western wall of this cist were found three flat stones lying horizontally a foot beneath turf-level. A few irregular flat stones formed a continuation of the line of slab number 13. When they were removed, a heap of burnt bones was disclosed lying among

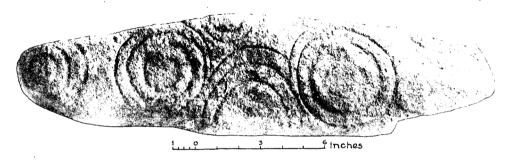


Fig. 4. Ring-marked Stone from Cist A.

black earth and small fragments of charcoal upon a flat stone slab, beneath the stone marked d on the plan. The excavation was extended south of pillar-stone number 10, where fragments of a different type of urn, thicker, coarser, and darker in colour, were found at C. Southeast of the pillar-stone a compact portion of the kerb was exposed. The ground between stones 3 and 4 was also excavated, and the excavation continued towards the centre, disclosing five flat stones set on edge, enclosing a pit, D, full of boulders and black earth.

Attention was next directed to the northern portion of the south-western quadrant between stones 6 and 11, and around the latter stone, which protruded 1 foot above the surface. The area between this stone and the large prostrate stone number 6 was partly paved at the depth of 1 foot with a long flat slab, 2 feet 9 inches long, from 7 to 8 inches thick, and from 1 foot to 1 foot 4 inches wide. This slab had parallel smooth sides, and appeared, like slab 13, to be part of the walls of a cist. It had probably been thrown down when the cist was disturbed. This area was enclosed on the east and north by lines of stones, at the junction of which, 3 feet 6 inches from stone number 6, and 4 feet 6 inches from

pillar-stone number 11, we exposed a semicircle of six flat slabs, of an average width of 9 inches and 1 foot 4 inches high, all set on end and wedged closely together. They partly enclosed a small pit (fig. 5), 18 inches in diameter and 2 feet deep, paved with three small flat stones. Upon these stones lay a heap of burnt bones, surrounded by black earth, but neither charcoal nor pottery was found in the pit. Some of the vertical stones were made up to the uniform height of 1 foot 4 inches by courses of small flat stones, as if it were the intention to cover the pit with a slab or slabs, but no cover-stone was found. Excavation was now carried northwards as far as the line from stone number 8 to stone



Fig. 5. Cremation Pit. Beoch Stone Circle.

number 12. A large flat stone, 3 feet by 2 feet, was uncovered in line with stone number 7, and 2 feet inwards were exposed two adjacent inclined flat stones, one 3 feet by 1 foot, and the other 4 feet by 2 feet 6 inches, both of which were 1 foot thick. Beyond the larger of these stones a line of large boulders extended up to stone number 12, and immediately behind it was found a double line of smaller boulders, placed end to end, turning sharply at right angles south of the large inclined stone and supporting the semicircular structure. North of the line of large boulders ending at stone 12 and at an average distance of 1 foot from it, extended an irregular parallel row of stones. At one point in the narrow passage between these rows, three large stones with flat faces partly enclosed a space, E, which, on excavation, yielded nothing but black earth. The remaining portion of the south-west

quadrant was next excavated, and it was discovered that the inner row of the double line of stones east of stone number 11 was continued south-eastwards. Another double line of stones was exposed parallel to the inner edge of the prostrate square stone number 4. In the course of the removal of this row of stones, fragments of pottery were found at a distance of 1 foot 8 inches from the north-west corner of stone number 4, at the point marked a. It consisted of the base and wall fragments of a small vessel of reddish clay, probably a beaker urn. A small portion of the rim, which survives, shows that the lip was bevelled slightly to the inside. Externally the vessel has been decorated from lip to base with small punctulations made with a pointed tool, those near the lip and at the bottom in parallel horizontal lines, but on the body with irregularity. The wall of the vessel is $\frac{5}{16}$ -inch in thickness, and the diameter of the base $3\frac{1}{8}$ inches. The external diameter at the mouth may have been 5 inches, but the fragment of rim is so small that an accurate estimate cannot be made. The fragments lav among black earth, but no trace of burnt bones or charcoal was observed in the vicinity. The remainder of the base of the cairn was stripped of turf, but not further explored, as no sign of internal structure was re-A semicircle of boulders at the kerb on the northern side was laid bare.

While the excavation of the base of the Beoch cairn was in progress, another enclosure bounded by standing stones was brought to our These stones were situated near the summit of the long ridge of Rig Hill on the other side of the road 1 mile to the north-east, on Waterhead Estate, on ground belonging to Nith Lodge sheep-farm. Mr John Smith, the tenant of the farm, had observed these upright stones and willingly acceded to our request for permission to excavate Permission was also obtained from the proprietor of the the site. estate, the late Mr Catheart Christie, through the factor, Mr John Graham, solicitor, Cumnock, who took a keen interest in our work Accordingly the party proceeded along an old footpath, which had once been a cart track, up Rig Hill—a wedge of high ground separating the valley of the Beoch Lane from the upper valley of the Nith—and inspected the site at an altitude of 1097 feet, half a mile north-west of Nith Lodge. From this point of vantage a noble prospect is commanded on a clear day. Towards the south-west the grey hills rise ridge upon ridge, with the cone of Windy Standard towering over Northwards the High Mount of Corsgailoch with its two circular plantations fills the foreground, while far away on the north-western skyline loom the serried peaks of distant Arran. Rig Hill is composed of an intrusive mass of granite which crops out frequently above ground in lines of weathered jointed blocks, resembling heavy dry masonry. An outcrop of granite rises to the surface at the north-western kerb of the irregular ellipse formed by the standing stones, and another, larger outcrop rises above the surface only 6 feet distant from the southeastern kerb. Between the kerb and this outcrop there is a distinct Another cart track passes west of the enclosure along the crest of the ridge, and can be followed down to the road and in the opposite direction over the summit to the roofless ruin of a farmhouse. The deep ruts of the track alongside the standing stones were probably

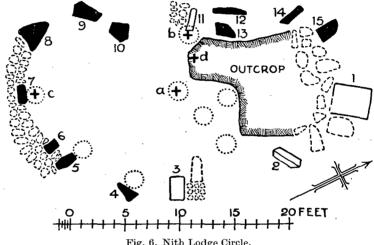


Fig. 6. Nith Lodge Circle.

made by a cart heavily laden with boulders. East of the enclosed burial-ground extends a peat moss, while the bare moorland stretches away on the other side down the long slope, which once was covered The enclosed area is 30 feet by 15 feet, the long axis of the ellipse being parallel to the direction of the outcrops, which doubtless determined its abnormal shape. Most of the fifteen stones face towards The largest, numbered 1 on the plan, is a massive prostrate slab, measuring 3 feet 6 inches by 2 feet 9 inches, and 9 inches thick. Stones numbered 2, 3, and 11 are also prostrate, while numbers 10 and 13 have fallen inwards. Of the upright stones the tallest stands only 2 feet above turf-level. Long grass is growing luxuriantly in the enclosed area, which is uniformly depressed towards the centre. are in the habit of congregating and sheltering here in stormy weather and at night, which accounts for the fertility of the soil. The upper soil is dark and peaty; but the subsoil consists of reddish clay, grading downwards into layers of stiff, compact, grey boulder clay intermingled with stones. The subsoil is deepest in the south-western half of the enclosure. Along the western half of the minor axis of the ellipse an outcrop of bed-rock rises abruptly to less than a foot below turf-level. In most of the north-eastern half, only a shallow layer of clayey soil rests on bed-rock, save for three circular depressions on the eastern side. Each of these circular pits contained a cremation burial, covered over with hard packed clay. The bed-rock rises towards the northern end, where many large boulders were encountered beneath the turf,

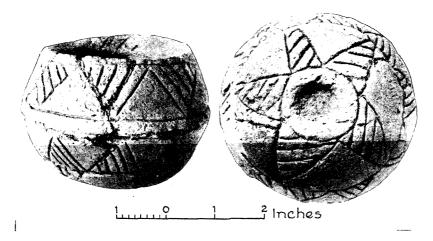


Fig. 7. Incense Cup-Urn from Stone Circle at Nith Lodge, Ayrshire.

and on the north-eastern side two large stones were exposed, which probably had been standing erect originally.

A trial section was opened first from the central minor axis southwestwards. At the depth of 1 foot 9 inches, black earth, mingled with many small pieces of burnt bones, was reached, and large fragments of a broken urn of "incense-cup" type were found near the centre at the spot marked a. The urn (fig. 7) is made of a light reddish-coloured clay, and measures $3\frac{1}{8}$ inches in height, $3\frac{1}{8}$ inches in external diameter at the mouth, $4\frac{1}{2}$ inches at the shoulder, and 1 inch across the base, which is cupped. The lower part of the vessel is globose and divided from the upper portion, which slopes steeply inwards at an angle of about 60° , by a raised moulding. The lip is bevelled sharply towards the interior, being $\frac{3}{8}$ inch in breadth and decorated with incised oblique vol. LXXII.

lines. There are three zones of ornamentation on the body, one above the shoulder and two below, divided one from the other by incised lines. All contain reversed triangles, plain and hatched alternately. Immediately below the raised moulding the urn has been pierced by two holes 2 inches apart.

Two months later the trial section was extended. At the base of stone number 11, at a depth of 2 feet, was found a pit of cremated bones, surrounded by black earth, charcoal (willow), and red ashes,

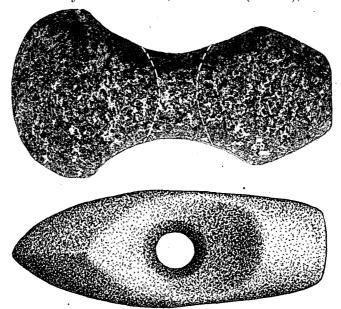


Fig. 8. Axe-hammer from Stone Circle, Nith Lodge.

covered by packed clay and protected above by three flat stones. At the point marked d, at a depth of 9 inches, lying near the edge of the granite outcrop, was found a perfectly shaped polished axe-hammer of dolerite (fig. 8). It measures $4\frac{29}{32}$ inches in length, $1\frac{5}{8}$ inch in thickness opposite the perforation, and $2\frac{3}{32}$ inches by $1\frac{5}{16}$ inch at the butt. From the cutting edge, which is $2\frac{19}{32}$ inches in breadth, and from the butt the axe contracts evenly to the centre of the perforation, where it is $1\frac{3}{16}$ inch in width. The extreme end of the butt is circular and flattened, being 1 inch in diameter. The hole, which has been bored from both sides, is equidistant from either end and measures $\frac{7}{8}$ inch in diameter externally, but tapering to $\frac{1}{2}$ inch in the centre of its interior.

Afterwards the whole of the enclosed area was examined, and, in

all, eight cremation burial-pits were exposed, as shown by dotted circles on the plan. All but one were found at a uniform depth of 2 feet, occupying circular hollows from 18 to 20 inches in diameter. The heap of burnt bones in all cases but one was surrounded by a ring of black earth mixed with charcoal, and all were covered over with packed clay. Two of these circular pits were found at the bases of stones 4 and 5. Further exploration of the pit, b, beneath stone 11, revealed fragments of another "incense cup." Nearly half of the

vessel remains (fig. 9). It has been biconical in shape and is made of a light red-coloured clay. It has measured $3\frac{1}{4}$ inches in height, $3\frac{5}{8}$ inches in external diameter at the mouth, $5\frac{1}{8}$ inches at the widest part of the body, and $3\frac{1}{8}$ inches at the base. The lip, $\frac{1}{2}$ inch in breadth, is slightly bevelled inwards and is decorated at intervals with single radial lines between which are double and triple horizontal lines. The upper part of the urn contains two rows of inverted triangles alternately



Fig. 9. Incense Cup-Urn from Stone Circle at Nith Lodge.

plain and hatched, and a raised moulding or shoulder all bordered by incised lines. The moulding is ornamented by lines sloping obliquely from left to right and has been perforated by two holes.

At the base of pillar-stone number 7, 3 feet below turf-level, an inverted urn was found at the spot marked C on the plan. The pit in which this cinerary urn was found measured 18 inches in diameter. The urn was completely covered with packed clay. When removed, it was found to be full of incinerated bones. The vessel (fig. 10) is made of a reddish-brown coloured clay, with an overhanging rim and constricted neck immediately below. It measures $6\frac{5}{8}$ inches in height, $5\frac{7}{8}$ inches in external diameter at the mouth, $6\frac{1}{2}$ inches at the bulge, and $3\frac{1}{2}$ inches at the base. The lip is bevelled downwards towards the interior, and the overhanging rim is decorated with oblique lines made by the impression of a twisted cord, the remainder of the body being Finally the kerb of packed boulders outside the irregular ellipse was also uncovered in three sections and found to extend beyond the standing stones for an average distance of 3 feet. The low burialcairn, which would be required to protect the bones from wild beasts, must have been entirely removed with the exception of the kerb.

About half-way between the highest point of Rig Hill and the main road, on a level spur of the hill on its south-eastern slope, there is a small circle of eight stones, 9 feet in diameter, the stones projecting less than a foot above the turf. Within this circle on the eastern side is a large rectangular stone, 3 feet 6 inches long, from 1 foot to 1 foot 3 inches wide, and 1 foot 6 inches deep, with smooth vertical sides.



Fig. 10. Cinerary Urn from Stone Circle at Nith Lodge.

This slab formed one wall of an empty cist 2 feet 9 inches square, surrounded on the other three sides by stones placed close together and containing a considerable quantity of black earth, but neither burnt bones nor pottery. Rig Hill and its continuation as high ground across the road had evidently been selected as a burial-ground, probably on account of the dry nature of the soil as contrasted with the marshy, mossy, undrained valleys on either side, and also because the windswept ridge would likely be bare of all save stunted shrubs, whereas the valleys would be well wooded. Both cairn-sites seem to be family burial-grounds of the Bronze Age, and both exhibit a ring of standing

stones around the periphery. In both cases some of the standing stones are clearly associated with the burials. In the case of the Beoch cairnsite nothing was found below the undisturbed clay floor, whereas at the Nith Lodge burial-ground the incinerated bones were buried beneath At the Beoch cairn-site no incinerated bones nor fragthe hard clay. ments of cinerary urns were found within the two eastern cists, A and B. But the horizontal paving-stones on the floor of cist A seem to suggest that they were intended as bases for cremation burials, while the flat stones found lying beyond the western edge of cist B may have been placed originally on its floor to serve a similar purpose. cinerary urns, the fragments of which were discovered not far from the walls of cist B, may have been in the cists when the latter were opened, the urns broken, and their fragments scattered. These urns would be crushed under the weight of the cairn, unless they had been placed in cists protected by heavy cover-stones. The beaker urn, the fragments of which were discovered near the prostrate square stone numbered 4. may have originally lodged in cist D. The lines of stones, laid end to end on the eastern and northern sides, served as walls of cist C. ably the fall of stone number 6 would have destroyed the western wall of this structure. The large stone slab found on the floor, so remarkably similar to stone slab 13, may have discharged a similar function. The two distinct remaining lines of stones probably preserved the remarkable semicircular stone structure at their junction, half-enclosing the cremation burial-pit. The line of large boulders extending to stone 12, and the inner line of smaller boulders at right angles to the above line and extending along the edge of the large inclined stone, may have been two of the sides of another rectangular enclosure, but the other sides were not discovered, the base of the cairn being greatly disturbed in this area-a decided depression at the surface revealing the extent of the disturbance. If, as seems probable, this area were the site of another cist, then all three inner stones, 10, 11, and 12, would be asso-At the Nith Lodge burial-ground no such cists were ciated with cists. erected, the cremation burials being protected solely by coverings of clay.

In both sites neither flint artifacts nor cores were found, nor were any weapons or personal ornaments of bronze discovered. Neither were the sites of the actual cremations located.

The excavating party desire to place on record their grateful thanks to Mr Andrew Hamilton, Mr John Smith, and Mr John Graham for their helpful advice and friendly interest in the work of excavation, and to Mrs Christie and Mr Hamilton for kindly presenting all the relics discovered to the National Museum of Antiquities of Scotland.