

HIGHLAND REGIONAL COUNCIL



FIELD MONUMENTS

ARCHAEOLOGICAL SITES AND MONUMENTS RECORD

4 DISTRICT INVERNESS		5 PARISH CROY & DALCROSS		1 SITE CODE H N H 74 S E O O 4	
7 AREA STATUS NTS		8 SITE STATUS GUARDIANSHIP		2 NGR N H 7 5 6 8 4 4 3 8	
11 CONCORDANCE OS NH 74 SE 4		12 FORM STANDING STRUCTURES		3 QUAL C E	
16 RELATIONSHIP OF ELEMENTS		17 CONDITION MUTILATED		6 SITE NAME BALNUARAN OF CLAVA	
20 LAND USE SCRUB = OPEN WOODLAND		21 GEOLOGY		10 GENERIC TYPE BURIAL CAIRN, BOUND, KERBED, CHAMBERED, CLAVA, STONE CIRCLE, CONCENTRIC, CUP MARKS, STONE BURIALS, ORNED?	
22 SOILS		23 VEGETATION		14 PERIOD/DATE NE = BA	
24 HYDROLOGY/DRAINAGE		25 RELIEF SPUR ABOVE VALLEY FLOOR		15 DATING METHOD TYP	
28 EXCAVATION (EXCAVATOR: DATE: EXTENT: QUALITY) 1. CAMPBELL: 1828: PARTIAL: UNSCIENTIFIC		26 ASPECT NE		18 SHAPE SUB-CIRCULAR	
29 BIBLIOGRAPHY (AUTHOR: DATE: TITLE: JOURNAL OR PUBLISHER: VOLUME: DETAIL) "SEE BIBLIOGRAPHY LIST OF THIS SECTION FOR REFERENCE"		27 ALTITUDE 105 = 110m O.D.		19 THREAT AND DATE	
30 GROUND PLAN NO.		31 GROUND PHOTO NO.		32 SLIDES NO.	
32 SLIDES NO.		33 HR. AP. NO.		34 NMR. AP. NO.	
34 NMR. AP. NO.		35 OTHER AP. NO. SOURCE		36 ARCHIVE AND LOCATION	
36 ARCHIVE AND LOCATION		37 GEOPHYSICAL SURVEY		38 SAMPLES	
37 GEOPHYSICAL SURVEY		38 SAMPLES		39 PALYNOLOGY	
39 PALYNOLOGY		40 NUMERICAL DATES: RANGE: LAB NO.		41 SMALL FINDS POTTERY + CALCINED BONES	
41 SMALL FINDS POTTERY + CALCINED BONES		42 MUSEUM/LOCATION LOST		43 OTHER	
43 OTHER		44 NAME & ADDRESS OF OWNER		45 ATTITUDE OF OWNER	
44 NAME & ADDRESS OF OWNER		46 NAME & ADDRESS OF TENANT		47 ATTITUDE OF TENANT	
46 NAME & ADDRESS OF TENANT		48 ACCESS & RESTRICTIONS		49 NAME & ADDRESS OF FINDER/RECORDER: DATE	
48 ACCESS & RESTRICTIONS		49 NAME & ADDRESS OF FINDER/RECORDER: DATE		50 RECORDER: DATE GS: 2.12.1986	
49 NAME & ADDRESS OF FINDER/RECORDER: DATE		50 RECORDER: DATE GS: 2.12.1986		51 CHECK: DATE ES: 17/12/1986	

52 TEXT

" (4) Balnuaran of Clava, NH 756 444, Situated 20m WSW of (3), this unusual structure consists of fifteen small contiguous recumbent stones forming a rough circle about 3.6m in diameter. One of the stones on the E bears at least fourteen cup-marks, one of them surrounded by a single ring. Excavations in 1953 revealed, within the interior, what appeared to have been a shallow grave partly overlain by a scatter of quartz pebbles." (24)

"NH 7571 4443, a STONE CIRCLES & CAIRNS (URNS CONTAINING CALCINED BONES FOUND)" (12)

"NH 7568 4438, CHAMBERED CAIRNS, STONE CIRCLE, CUP MARKED STONE" (22)

"NH 752439 - NH 760445, CLAVA CAIRNS, STONE CIRCLES" (25)

"See continuation cards for text & illustrations"

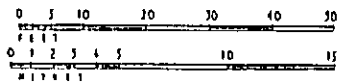
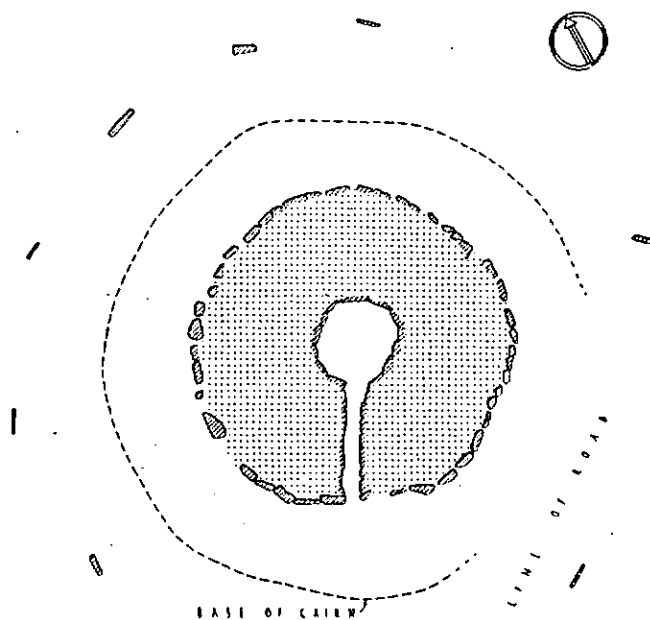
BOX 29.

BIBLIOGRAPHICAL REFERENCES FOR CLAVA BURIAL CAIRN COMPLEX

1. LAUDER, R.: 1830: THE MORAY FLOODS: : CHAPTER ONE, APPENDIX VII+ILLUSTRATIONS.
2. ANDERSON, G.: 1831: ARCHAEOLOGICA SCOTICA: VOL. 3: pp 211-222.
3. CAMPBELL, A.: 1841: NEW STATISTICAL ACCOUNT: 14: p 457.
4. INNES, C.: 1857-1860: PROC. SOC. ANT. SCOT.: VOL. 3: pp 47-50, + ILLUSTRATIONS.
5. MACLAGAN: 1875: STONE CIRCLES AND HILLFORTS OF SCOTLAND: : : p
6. JOLLY, W. : 1875-1880: TRANS. INVERNESS SCI. SOC. + FIELD CLUB: VOL. 1: pp 31-32.
7. JOLLY, W. : 1881-1882: PROC. SOC. ANT. SCOT.: VOL. 16: pp 303-311 + pp 320-321.
8. FRASER, J.: 1883-1884: PROC. SOC. ANT. SCOT.: VOL. 18: ppps 341-346, 347-350+p 360.
9. ANDERSON, J.: 1886: SCOTLAND IN PAGAN TIMES: D. DOUGLAS: VOL. 1: pp
10. BAIN, J.: 1893: HISTORY OF NAIRNSHIRE: : p 39.
11. MUNRO, R.: 1899: PREHISTORIC SCOTLAND: BLACKWOOD + SON: pp 310-312.
12. ORDNANCE SURVEY: 1906: 6" MAP.
13. PIGGOTT, S.: 1954: NEOLITHIC CULTURES OF THE BRITISH ISLES: : pp 257-262.
14. PIGGOTT, S.: 1954-1956: PROC. SOC. ANT. SCOT.: VOL. 88: ppps 188-192+195, PLAN.
15. LISOWSKI, F.P. : 1955-1956: PROC. SOC. ANT. SCOT.: VOL. 89: pp 83-90.
16. WALKER, I.C.: 1962-1963: PROC. SOC. ANT. SCOT.: VOL. 96: pp 87-106.
17. HENSHALL, A.S.: 1963: CHAMBERED TOMBS OF SCOTLAND: EDINBURGH U.P.: VOL. 1: pp 12-39, 361-6.
+ ILLUSTRATIONS.
18. MELDRUM, E.: 1971: THE CLAVA CAIRNS (BOOKLET) + ILLUSTRATIONS + PLAN.
19. BURL, A. : 1972: SCOTTISH ARCHAEOLOGICAL FORUM: GLASGOW U.P.: VOL. 4: pp 1-17.
20. RITCHIE, J.+MCLAREN, A.: 1972: SCOTTISH ARCHAEOLOGICAL FORUM: GLASGOW U.P.: VOL. 4: pp35+
40-41.
21. HENSHALL, A.S.: 1972: CHAMBERED TOMBS OF SCOTLAND: EDINBURGH U.P.: VOL. 2: pp182, 205, 273.
22. ORDNANCE SURVEY: 1975: 1/10 000 MAP.
23. BURL, A.: 1977: STONE CIRCLES OF THE BRITISH ISLES: YALE U.P.: pp 160-167, + PHOTO.
24. SOC. ANT. SCOT. : 1979: ARCH. SITES + MONS. OF NE INVERNESS: RCAHMS: pps 7,8,9,10. Nos. 5,
14, 27, 28, 31.
25. HBM (SDD): 1985: LIST OF SCHEDULED MONUMENTS.
26. ROSS, D.W.: 1981: DISCOVERY AND EXCAVATION IN SCOTLAND: CBA (SCOTLAND)::p.20
27. BARBER, J. : 1982: DISCOVERY AND EXCAVATION IN SCOTLAND: CBA (SCOTLAND)::p.14

52.

CLAVA SOUTH-WEST



(14)

52.

10 BALNUARAN OF
 CLAVA,
 SOUTH-WEST
 (Clava passage-grave)
 In the parish of
 CROY AND DALCROSS
 Location in
 STRATHNAIRN
 5 m. E of
 INVERNESS
 Map reference
 NH/756443
 Sheet XIII NW; NH 74 SE
 References
 P.S.A.S. LXXXVIII (1954-56)
 195¹;
ibid. XVIII (1883-84) 341-46²;
ibid. XVI (1881-82) 309-13³;
 LAUDER, T. D. (1830) 15,
 418-19⁴;
 T.I.S.S. I (1875-80) 31-32
 Plan after PIGGOTT⁵
 (fig. 89)
 Excavation MRS. CAMPBELL
 1828
 Visited 15.4.57

Description. The cairn is one of the group of three at Balnuaran and lies only 80ft. SW of the Central cairn. It is very similar to the NE cairn, but the circle of monoliths and platform round the cairn have been disturbed by making the road which skirts the SE side of the monument though it does not interfere with the cairn itself.

The kerb of large boulders is almost complete and encloses a cairn 52ft. 6in. in diameter, though a flattening of the kerb at the entrance reduces the diameter on the axis of the chamber to about 50ft. The kerbstones are largest by the entrance where they are 3ft. 6in. high above the ramp and dwindle to 1ft. 3in. high behind the chamber. The cairn of bare stones stands over 9ft. high. There is a very distinct platform of stony material stretching 12ft. to 15ft. 6in. outside the kerb except where it has been partially destroyed on the SE side.

The entrance is from the SW. The passage, 19ft. 9in. long and 2ft. wide, is constructed of two rows of upright boulders with one or two courses of masonry above, giving a total height of up to 4ft. The chamber is not exactly circular in plan, measuring 11ft. 6in. by 13ft. in diameter. The walls are similarly built with a foundation course of boulders. These are graduated in size, with one exception, from either side of the entrance to the NE side. Beside the entrance they are square blocks 4ft. high, higher than the adjacent stones of the passage, and at the back 2ft. 4in. high. All the stones have fairly flat inner surfaces. The walls stand to a total height of 6ft. 9in., with a maximum of six courses of flattish but irregular stones, slightly oversailing, their outer ends projecting well back into the cairn.

The surrounding circle of standing stones now has ten monoliths remaining, all but four of which are known to have been reset.⁶ The three stones to the W of the entrance had fallen and were re-erected about 1876, the next stone is probably in position, the NW stone has been 'restored'. The second stone to the E of the entrance has been moved to be parallel with the road, and the E stone has been turned to form the end of a wall. All these stones are sandstone slabs, but a large rounded boulder incorporated into the wall of the road represents a missing monolith on the ESE side.⁷ The circle seems to have been set 24 to 28ft. outside the kerb. The stones, clockwise from the entrance, are 4ft. (? broken), 7ft. 2in., 5ft. 4in., 4ft. 9in., 6ft., 4ft. 9in., 1ft. (broken), 4ft. 3in., 6ft. (prone), 5ft., and 6ft. 9in. high. Only one stone seems to be missing, from the gap on the NE side. (17)

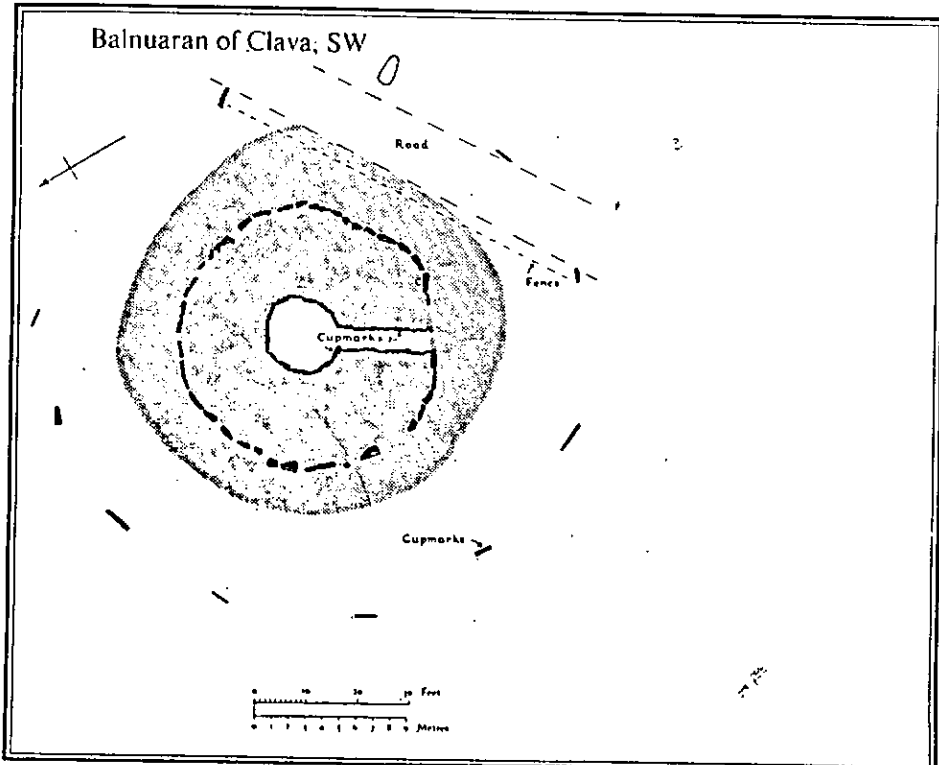


FIG. 89

(17)

Cup-marks are said to occur on a number of stones.³ On the boulder forming part of the foundation of the chamber to the w of the entrance there are certainly twelve cup-marks. The surface of the sandstone slab in the corresponding position on the s side of the entrance has now flaked away so much that no cup-marks can be seen. On the third stone on the s side of the passage there are perhaps two or three cup-marks, but the stone has a very irregular surface. The loose stone noted as having two cup-marks which formerly lay in the centre of the chamber is no longer to be seen. Of the three monoliths reported as cup-marked those on the ssw and nnw are so weathered that no definite marks could be seen, but the monolith now set upright on the w certainly bears three, if not more, on its inner surface.

The chamber floor was examined about 1828.

Finds

Artifacts. Lost. In the chamber were parts of two pots, probably secondary flat-rimmed ware (illustrated⁴). The more perfect pot 'was about 18 in. below the earth, exactly in the centre of the circle. It was found in a broken and very mutilated state, the whole body of the stones having lain upon it. A quantity of calcined bones were in it and about it, all of which we have. The clay is of the coarsest kind, and the vase is of the rudest make. It has, apparently, had no cover, but is rounded at the top like a garden pot, which it resembles more than anything else. The bottom is flat, the inside very black, from having been burned, the outside red; across the exterior of the bottom it measures 6½ in., and across the interior exactly 5 in., and the height, in its fractured state, is 4½ in. After clearing away the stones the interior of

the cairn was found to be composed of gravel, but the vase and bones were enclosed in a portion of clay quite distinct from the natural soil' (letter from Miss Campbell, quoted⁴).

Skeletal. 'A quantity of calcined bones' in and round the pot. (17)



52.

Some 80ft (24M) south of the centre cairn is the passage-grave cairn known as Balnuaran South-West, situated immediately on the west side of the roadway which in fact has been laid through the south-east side of the monument, disturbing the outer ring of monoliths, one of which is fallen. There had been 12 standing stones; one on the east side is missing. The boulder kerb-stones of the cairn are about 25ft (7.6M) within the outer circle, and there is a platform of stones almost entirely surrounding the cairn, which is 52ft (15.8M) in diameter and, although partially denuded of stones, is still about 7ft (2M) high at the central chamber. The entry passage from the south-west is 2ft (600mm) wide and 20ft (6M) long, leading to the almost circular burial chamber, about 12ft (3.6M) in diameter. Its walls still indicate towards the top the inward corbelling which had originally formed a domed structure completely covered by the cairn material. There are 12 cup-marks on the large stone to the west of the entry to the central chamber from the passage. Built into the garden dyke of nearby Balnuaran farmhouse on the north side of the small gate, is a heavily cup-marked stone, evidently taken from one of the cairns.

(18)

(18)

52.

Cairn No. 3.—The great cairn near this one to the south-east (herein called cairn No. 3) is almost as entire as No. 1, though it has been sadly despoiled, the central chamber still existing up to 8 or 10 feet in height, as well as the south-west passage. The stones forming the tumulus itself and the three concentric stone circles, are of the same type as the other two just described. A rough plan is given on fig. 6, with the position of the cupped stones found there, of which there are several, at least seven, more or less good. One of the stones marked (=) was removed from its original position a little to the west, when the present road was, with utilitarian vandalism, run right across the outer circle; as I am informed by the proprietor, Mr. Davidson. I mention this to prevent future error.

(7)

6. One cup-stone, which is at the inner end of the passage on the right hand facing towards the chamber, and forms the last of its lower course of larger blocks, was discovered by Dr. Grigor of Nairn in 1862. It is figured in Simpson's book (pl. x. No. 3), and its position shown (pl. x. No. 1). Though better done than the former one from the first cairn, figured by

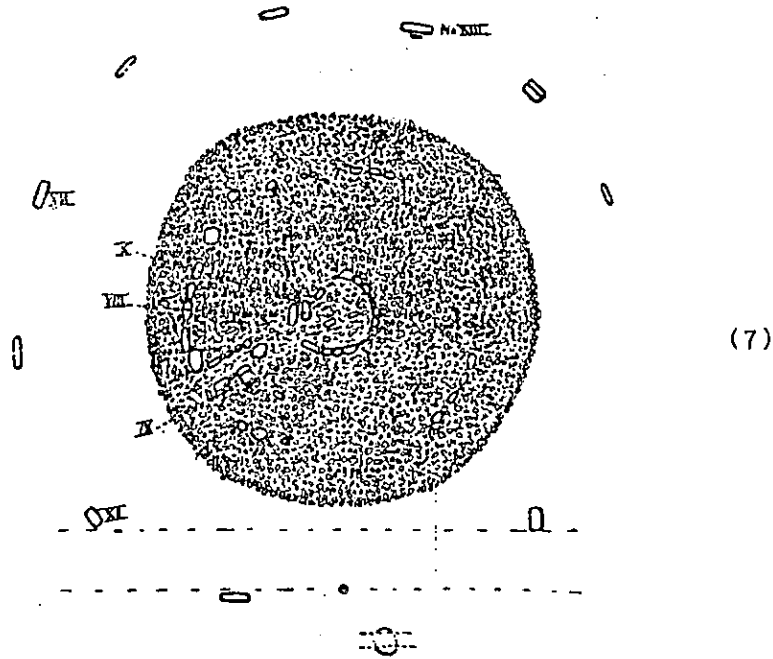


Fig. 6. Cairn No. 3 at Clava.

Simpson on the same plate, it is not quite correct,¹ there being fourteen cups instead of twelve, and two of these having connecting gutters, as shown here on fig. 7. The dimensions of the chief cups are these:—

	Diam.	Depth.		Diam.	Depth.
No. 1.	3½ in.	× ½ in.	No. 4.	2 in.	× ½ in.
" 2.	2 "	× ½ "	" 5.	2½ "	× ½ "
" 3.	2¼ "	× ½ "	" 6.	2½ "	× ½ "

They occur on a yellowish sandstone slab, from the immediate neighbourhood, 1 foot 2 inches thick, and roughly 3 feet square. The cups are unusually distinct, deep, and well formed, and are much more squared in outline at the base than is common, being more or less of this shape □, instead of the usual egg shape U or the lower half of O. The cups also give very distinct indications of being hollowed, or *dabbed*, out by some sharp-pointed instrument, the pitted marks of which still remain in several cases. Other examples of similar pitted hewing will be found afterwards.

7. In the passage of the same cairn, on the third stone from the outer end, on the right hand, which is a grey granite block, two cups occur (see fig. 8) quite distinct, with indications of a third below.

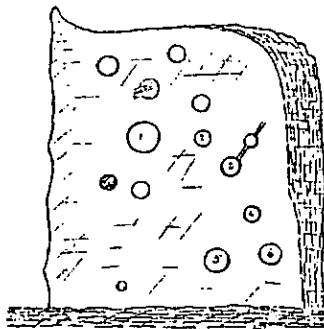


Fig. 7. At Clava.

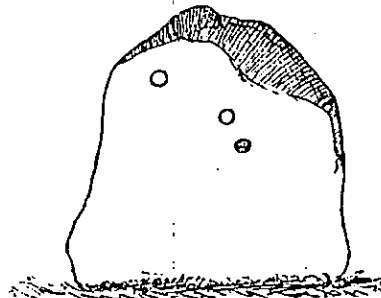


Fig. 8. At Clava.

8. In the same cairn, at the inner end of the same passage, on the last stone on the right hand of the inner circle, forming the counterpart of the stone figured by Simpson, but on the opposite side of the passage, indications of several cups are seen; but from the fissile character of the yellow sandstone on which they were formed, the surface has peeled off to some extent, and the cups are less distinct

9. In the same cairn a flat slab of the same yellow sandstone, 3½ feet by 2½ feet, lies on the top of the rubbish that fills the inner chamber

¹Of course, the stone to the left of the cupped stone in Simpson's drawing does not

opposite that on fig. 7. It contains two distinct though shallow cups.

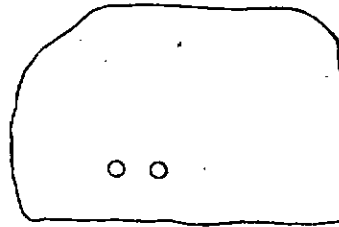


Fig. 9. At Clava.

They are shown on fig. 9.

10. Cups occur on three of the blocks that form the outermost, enclosing, separated circle. The largest monolith, which stands close by the road a little to the south-east of the opening of the passage, consists of a handsome oblong slab of the same yellow sandstone, 7 feet high, 3 feet

broad, and 1 foot 2 inches thick. It contains a large number of cups on

(7)

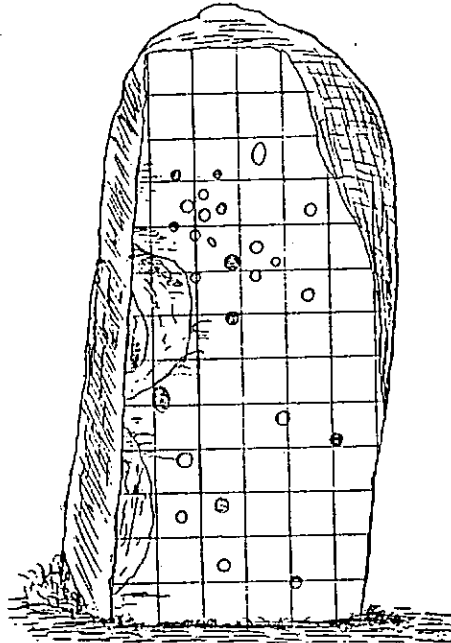


Fig. 10. At Clava.

its outer surface, but these have been greatly obliterated by weathering, which acts strongly on such soft material, the stone facing towards the rainy quarter. They are, however, quite distinct, and are shown on fig. 10.

(7)

11. The next stone to the west of this, in the same circle, consists of a similar but reddish sandstone, 9 feet 3 inches long, 4 feet 2 inches broad, and 1 foot 1 inch thick. It has eight cups on its surface, shown on fig. 11. These are quite apparent, but their distinctness has been affected by the tendency of the stone to peel off in thin layers. When first sketched by me, with some others in the same circle, it lay flat on the ground; but, along with all the other prostrate blocks in the Clava circles, as already mentioned, it has lately been put erect once more. Unfortunately, in this

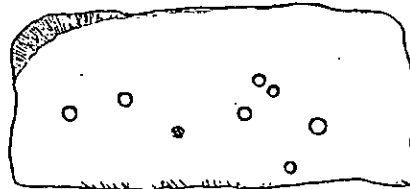


Fig. 11. At Clava.

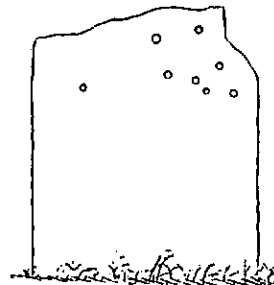


Fig. 12. At Clava.

and in at least one other instance in the same cairn, if not in other cases, the stone has been set on its wrong end; so that the cups, instead of being (as they always are in such cairns round Inverness) on the outside of the stone, facing away from the cairn, they now look *towards* it. Such errors make one question the wisdom of tampering in any way with these monuments, which it would be wiser, for many reasons, to leave in their present dilapidated condition.

(7)

52.

Circle No. 10.—The western circle of the Balnaran of Clava group (fig. 9 and fig. 10), may be concisely described as follows:—

The outer ring is 108 feet in diameter outside, and consists at present of eleven standing stones (as seen in fig. 9, and developed view, fig. 10), but there is a vacant space for a twelfth pillar. Four of these fell to the ground, and have been restored;¹ and two others have been slightly shifted, to make room for the road across the south side of the circle. All except one of the stones of the

(8)

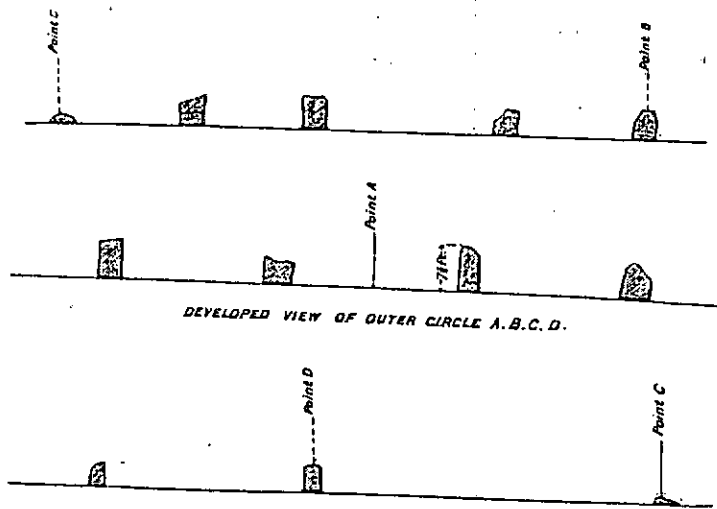


Fig 10. View of outer ring of Circle No. 10, in the direction C, B, A, D.

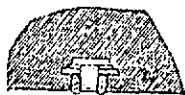
outer ring are of the shaly sandstone flags found plentifully, *in situ*, in the district. The intermediate ring which forms the base of the central cairn is 53 feet in diameter outside, and consists principally of granite

(8)

¹ Of the four that have been restored to the standing position, one appears to have been tilted up inwards, instead of outwards, by a mistake as to the direction in which it fell. Another was twisted a little, to stand parallel with the road made across the south side of the circle, and another twisted to stand square to the head of a new stone wall of which it forms the head on the other side of the same road! It is a great pity that the whole group of circles in this locality have been so much interfered with in recent times.

52.

and gneiss boulders, covered in some places by small stones which have rolled off the cairn. The inner ring is $12\frac{1}{2}$ feet in diameter inside, and is made of stones better selected. On this inner ring is built this circular chamber. The wall of the chamber is vertical for a height of about 4 feet, and is then built in the form of a dome, with the stones laid horizontally, and each slightly overhanging or projecting beyond the course below it. The masonry is of good flat stones, but otherwise of a rude description, and not well bonded nor closely jointed. The present height of the chamber is $7\frac{1}{2}$ feet; and it would require to be 4 or 5 feet higher in order to form a complete dome. The cairn of loose stones is heaped up around the chamber, and the highest point of the cairn is at



CROSS SECTION OF ENTRANCE.

Fig. 11.

present 9 feet above the surface of the ground. There is an entrance to the central chamber from the south-west (S. 39° W.), 2 feet wide at the outer end (fig. 11), and 3 feet at the inner end, and which appears to have been from 4 to $4\frac{1}{2}$ feet in height. The chambered cairn of this circle is the one that was opened by Mrs Campbell, then residing at Kihavock Castle, in 1828 or 1829.¹ The result of clearing it out is given by Sir Thomas Dick Lauder in his book on the *Moray Floods*, as follows:—

"I received a most interesting communication from Miss Campbell, informing me that the fragments of two earthen vases were found in the chamber in the interior of the Druidical circle opened at Clava, by Mrs Campbell's orders. 'It was about 18 inches below the earth,' says Miss Campbell, speaking of the more perfect of the two, 'exactly in the centre of the circle. It was found in a broken and very mutilated state, the whole body of the stones having lain upon it. A quantity of calcined bones were in it and about it, all of which we have. The clay is of the coarsest kind, and the vase is of the rudest make. It has apparently had no cover, but is rounded at the top like a garden pot, which it resembles more than anything else. The bottom is flat, the inside very black, from having been burned, the outside red; across the exterior of the bottom it measures $6\frac{1}{2}$ inches, and across the interior exactly 5 inches, and the height, in its fractured state, is $4\frac{1}{2}$ inches. After clearing away the stones, the interior of the cairn was found to be composed of gravel, but the vase and bones were enclosed in a portion of clay quite distinct from the natural soil.'"

¹ It has been sometimes stated that it was the eastern circle that was opened by Mrs Campbell; but that is not the case, as may be still ascertained from people on the spot.

(8)

(8)

52.

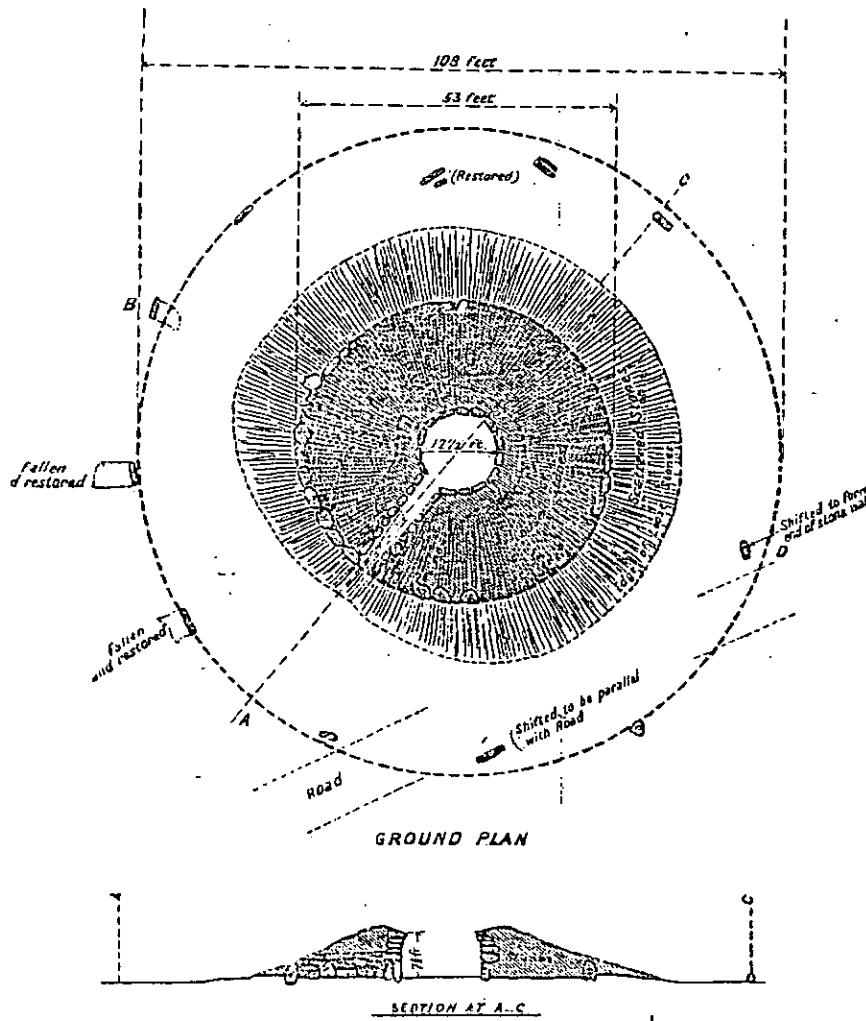


Fig. 9. Western Circle No. 10, at Balnuran of Clava (with central Cairn).

(8)

52.

Fragments of two earthen vases were found in the central chamber. Mrs Campbell's daughter, writing to Sir Thomas Dick Lauder, and describing the more perfect of the two, says—

"It was about eighteen inches below the earth, exactly in the centre of the circle. It was found in a broken and very mutilated state, the whole body of the stones having lain upon it. A quantity of calcined bones were in it and about it, all of which we have. The clay is of the coarsest kind, and the vase is of the rudest make. It has, apparently, had no cover, but is rounded at the top like a garden-pot, which it resembles more than anything else. The bottom is flat, the inside very black, from having been burned, the outside red; across the exterior of the bottom it measures $6\frac{1}{2}$ inches, and across the interior exactly 5 inches, and the height, in its fractured state, is $4\frac{1}{2}$ inches. After clearing away the stones, the interior of the cairn was found to be composed of gravel, but the vase and bones were enclosed in a portion of clay quite distinct from the natural soil."

(6)

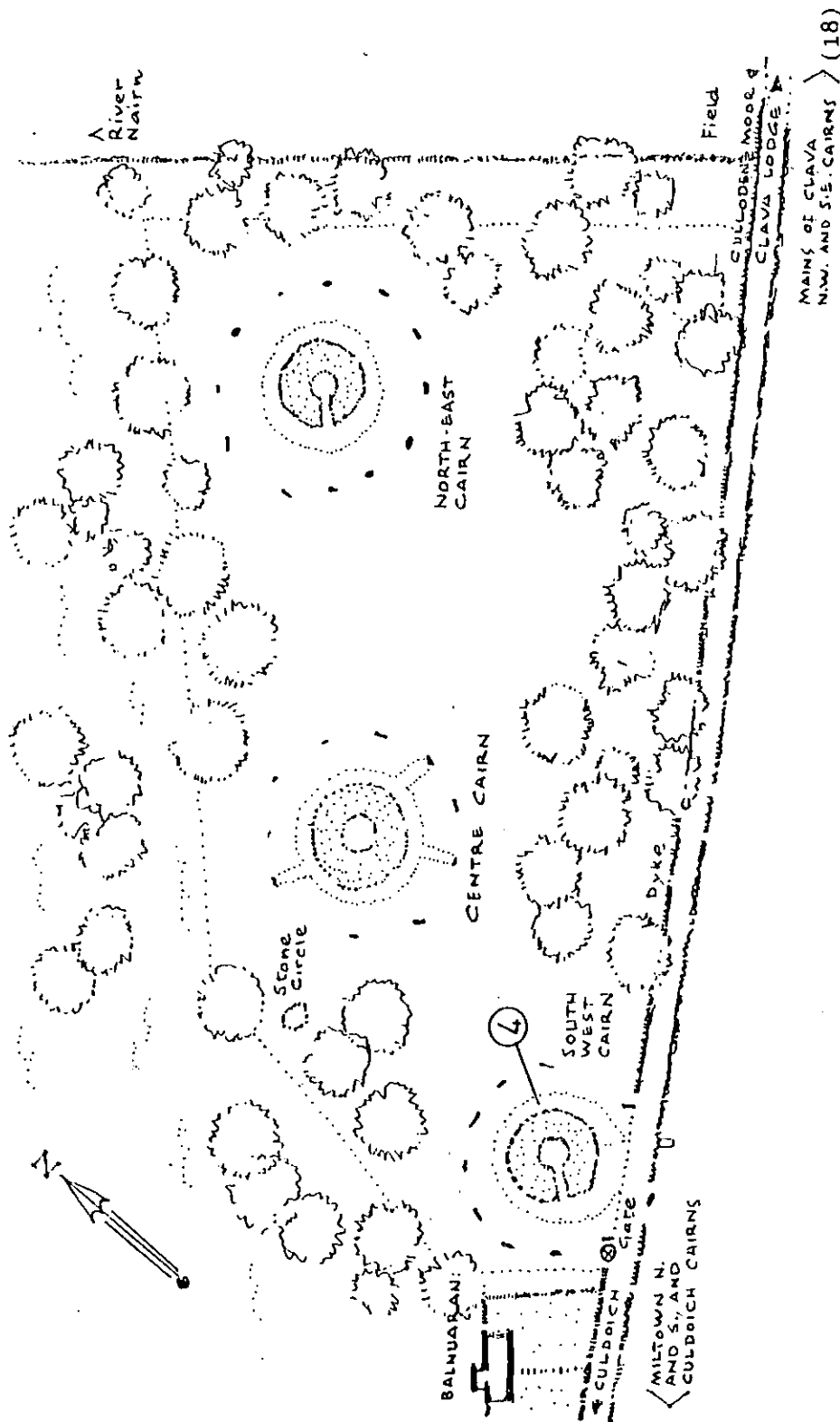
Sir Thomas accurately describes the circular apartment as measuring 12 feet in diameter, the wall converging to the centre in a rude dome, about 12 feet high, the foundation being formed of fourteen large stones, surrounded by courses of uncemented masonry. At the excursion, Mr Jolly stated that he had personally made measurements, according to which the wall of the inner chamber in this circle is six feet from the centre; the outer circle is other 18 feet distant, or 24 feet from the centre; and the standing stones are 24 feet from the outer circle, or 48 feet from the centre. The original number of standing stones was eleven, but only ten remain. Mr Jolly contended that all so-called Druidical circles are simply dismantled cairns. They may be seen in all stages—some of them perfect cairns, others partially dismantled, and others totally dismantled. The size of the cairns is supposed to indicate the rank of the person interred. The large cairn is the sepulchre of a chief; a smaller size contains the remains of a man of inferior authority, and rude stone circles mark the graves of the common people.*

* Since the above excursion took place, the proprietor of the soil, Mr Davidson of Cantray, has caused a number of the standing stones that had fallen to be re-erected. They stand exactly in their original positions. In one of the cairns there is a stone with distinct cup-markings, and others may yet be found.

(6)



PLATE XI.—WEST CAIRN, CLAVA, COUNTY OF NAIRN. (5)

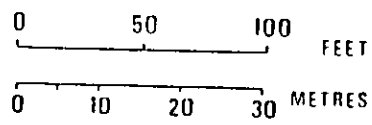
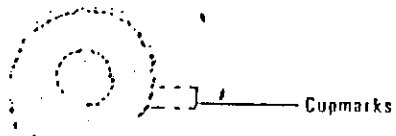
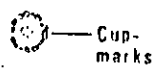
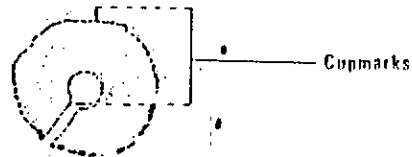
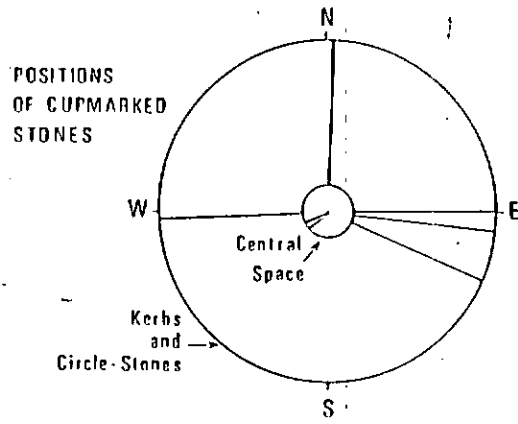


THE CLAVA CAIRNS .

MAP SHOWING LAYOUT

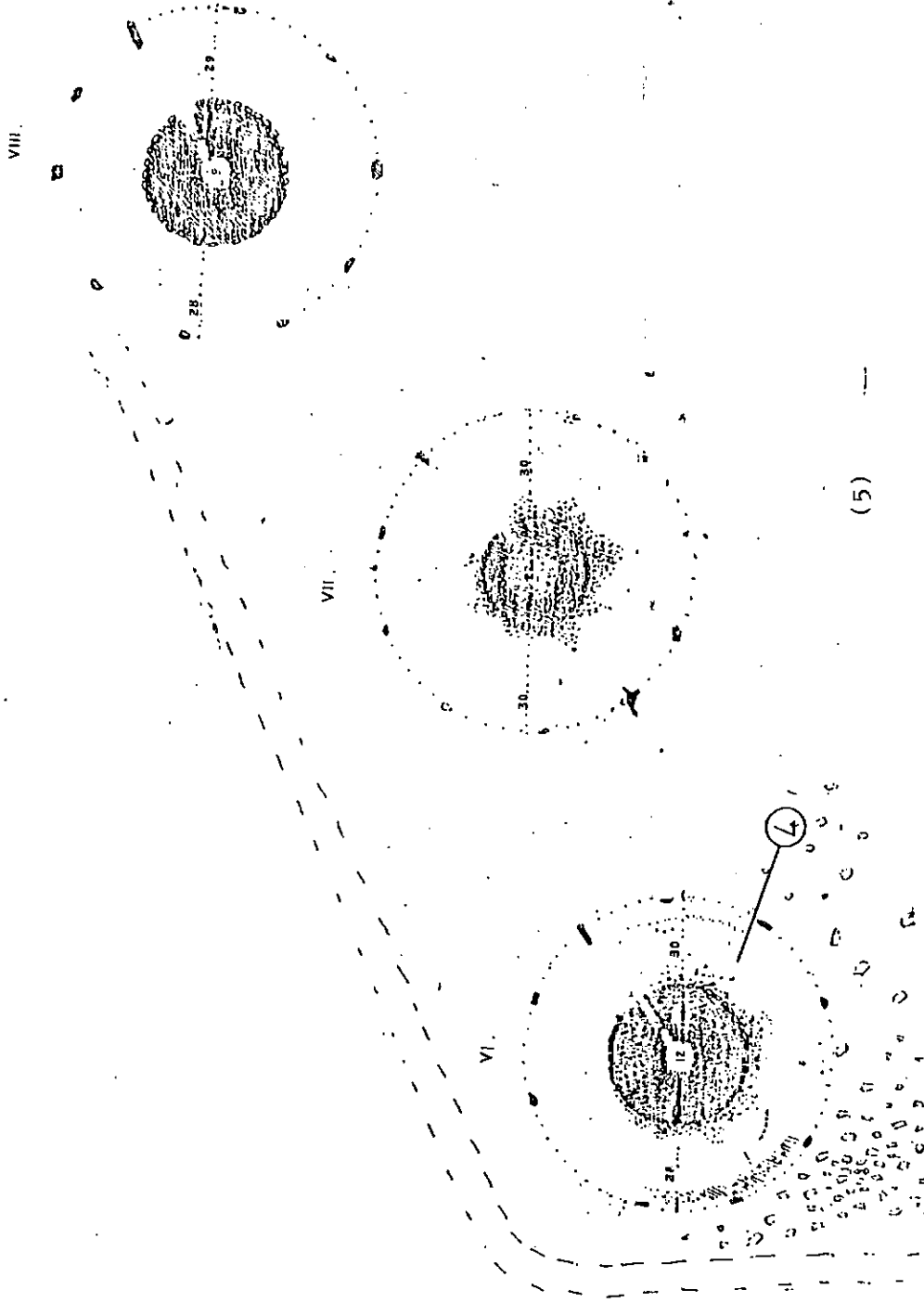
Distance between South West and North East Cairns : 100 Yards

Sam '90.



(23)

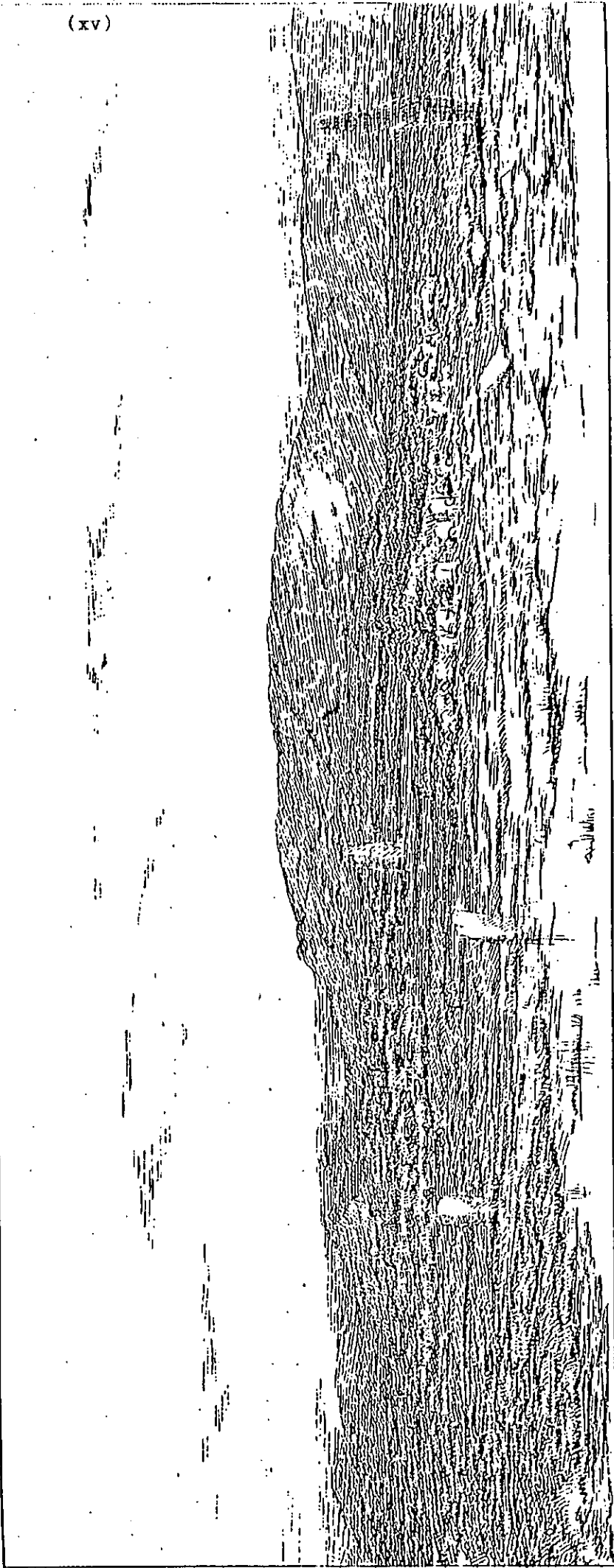
Fig. 26. The Complex of Two Passage-Graves and a Ring-Cairn at Balnuaran of Clava, Inverness (Highland). The small kerb-cairn is to the west of the ring-cairn.



(5)

Ground Plan of Circles at Clava.

Plate XXV.



CLAVA VALLEY & THREE CAIRNS, INVERNESS-SHIRE. (5)