

II.

NOTICE OF THE OPENING OF A SEPULCHRAL CAIRN AT BALNALICK,
GLEN URQUHART, INVERNESS-SHIRE; WITH NOTES ON CUP-
MARKED STONES IN GLEN URQUHART. By ANGUS GRANT,
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The cairn occupies the whole width of the top of a low, birch-clad ridge, about 200 yards S.W. of the farm-house, and is 800 feet above sea-level. It is almost a perfect circle; the diameter N.E. and S.W. and the diameter N.W. and S.E. being respectively 54 feet and 53 feet; and the height of its centre above the natural surface is 4 feet. The stones, of which it is exclusively composed, are small, with the exception of a row of large irregular blocks, 3 and 4 feet in length, round the circumference. These have successfully served as a retaining wall for the lighter material enclosed; but they were neither carefully set nor placed in the order of their size, as in the rings of stone in the so-called Druidical circles. The field on the N.W. comes up close to the cairn; and, between it and the field on the S.E. side, there is a narrow space which is used as a cart track. Careful examination of the

undisturbed ground on the other two sides, and inquiry made in the district, failed to find any trace of an outer circle of standing stones.

Towards the end of July last, the farmer, in an idle moment, began removing the stones at the centre of the cairn; and soon came upon a flag, which covered a large urn containing bits of bone mixed with something which he supposed to be earth. In trying to remove the urn, it came away piecemeal, and appeared to him to be "perfectly rotten." The contents having been turned over, a bronze blade was discovered. When the urn and its contents were disposed of, digging was resumed and a cist exposed. Nothing was found in it save "bits of bone and earth." The lid, which was broken in the lifting, was then carefully replaced; the fragments of the shattered urn and the bones, all but a few bits kept as specimens, were thrown into the hole; and the mass of removed stones hurled in after them.

On the 6th of August an Oxford gentleman, then resident here, and I re-opened the cairn, at the farmer's invitation, and carefully examined it in his presence. We dug down the centre, and found that the urn had been placed just in the middle, and rested on stones, about a foot above the natural surface. About 2 feet N.W. of it was the near edge of the cist. It is 2 feet long, 15 inches broad, and 7 inches deep, inside measurements. Its greatest length lies N.E. and S.W. The sides and ends are composed of six flags on edge, and the bottom flag was placed inside, and not under, the sides. On the bottom there was a depth of about an inch of earthy matter mixed with chips of bone. After carefully examining this deposit, and retaining the larger pieces of bone, we raised the lower flag, and found a similar layer of earthy matter and bone fragments, 2 inches deep, with a few angular pieces of clear quartz of different sizes, scattered over it. Below this, and lying upon the natural surface, there was a layer of about 2 inches of ashes and charcoal. On removing one of the side flags, it was seen that the same layers extended beyond the cist on all sides; and that the side flags themselves, although sunk almost to the natural surface, had the same materials under their edges. These appearances suggested the idea that the cist was built upon the top of the ashes and other débris; and that the sides of it, which were about 14 inches long, were pushed down by

the superincumbent weight, thus making the cist shallower. We carried away all the pieces of bone which were considered large enough to be of use for indicating or establishing the species. I submitted them to Dr M'Kenzie, Morpeth, who pronounces two of the species to be human, one small long bone to be that of some small quadruped, as a dog, and the rest doubtful. The small long bone was found underneath the cist, and so was also the fragment of charcoal. As the contents of the urn were scattered, and probably got mixed up with the contents of the cist, I regret it cannot now be said, with any certainty, which of the other specimens of bone belong to the one, and which to the other. The farmer says that some pieces in the urn were easily recognisable as parts of a skull.

The Urn.—The flag which covered the urn is 18 inches by 15 inches, and 4 inches thick. The farmer reports that the width of the flag was almost "flush" with the width of the urn, thus indicating the diameter of the latter to be about 15 inches; and that the brim of it, when exposed, appeared to be quite circular. We carried away all the pieces that could be found, with a view to reconstruction; but the greater part seems to have been quite pulverised. The pottery is coarse, brown outside and light slate-colour inside. The clay was mixed with crushed hornblende rock for sand. Numerous boulders of this rock are met with in the district, and even in the cairn, and when sufficiently weathered are easily converted into a sharp sand. The fragments of the urn recovered are from $\frac{1}{2}$ inch to a little less than $\frac{3}{8}$ inch thick. It was hand made, the marks made by the papillary ridges of the finger tips being wonderfully distinct on the inside; and so are also the marks of the nails, where some parts of the interior were moulded backhanded by the operator. These fragments show no attempt whatever at decoration, with the exception of a rude collar about an inch from the top, which seems to have been made by pressing two shallow parallel grooves into the soft clay with the points of the fingers, and leaving an irregular ridge between.

About 6 inches of the brim has been reconstructed by cementing together parts whose fractures coincide; and, assuming it to be circular, the diameter must have been very nearly $14\frac{1}{2}$ inches. Two small

segments of the base have also been found, one $1\frac{1}{2}$ inch, and the other $1\frac{1}{8}$ inch long, which indicate a basal diameter of some 6 inches. From these fragments of top and bottom, and a careful examination of the contour of the other pieces in my possession, I have attempted the restoration shown in fig. 1, at one-fifth of the natural size. If my



Fig. 1. Urn found at Balnalick, Glen Urquhart
($13\frac{1}{4}$ inches in height).

restoration is correct, the dimensions of the urn would have been as follows:—

Outside diameter of mouth,	$14\frac{1}{2}$ inches.
„ „ bottom,	6 „
„ height,	$13\frac{1}{4}$ „

The Bronze Blade.—This is in a state of excellent preservation, except the point and edges, the former of which is broken off, and the latter

corroded and broken into a serrated outline. The sides are beautifully polished, and free from rust. Following out the curves of the edges, it would appear that about half an inch of the point is amissing. As it is, the length of the blade to the shoulder of the tang is $2\frac{3}{4}$ inches; the tang is $1\frac{1}{2}$ inch more, or a total of $3\frac{1}{2}$ inches; the breadth is 1 inch, and the greatest thickness $\frac{3}{16}$ inch.

Both sides (as may be seen in fig. 2) are neatly ornamented with geometrical designs, similar to those on the Rogart blade. That on one

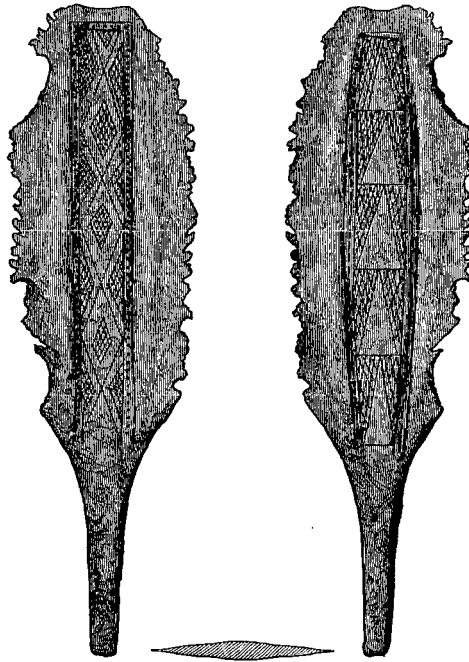


Fig. 2. Bronze Blade found in the Urn at Balnalick, Glen Urquhart
(actual size).

side consists of an oblong panel nearly $\frac{3}{8}$ inch wide at the point end of the blade, and tapering slightly towards the other. Within the fillet of the panel, other fillets, crossing each other, form a lattice enclosing a row

of $3\frac{1}{2}$ lozenges of varying size. Both the lozenges and the vacant spaces between them and the sides of the panel are neatly and minutely "cross-hatched." The fillets, or frame of the panel, have a dotted line running along their middle, while those of the lattice are similarly relieved, not, however, by dotted, but by continuous lines. The design on the reverse, though similar, is neither so elaborate nor so well executed. It also consists of a panel, which is unequally divided into five compartments by transverse straight lines. Each of these lines is the base of an isosceles triangle, whose vertex extends to the next transverse line towards the point of the blade. There is thus a row of five triangles, with their vertices towards the point. The empty spaces, between them and the sides of the panel, are filled up with "cross-hatched" lines. The slightly curved fillets of this panel are ornamented with a row of short lines instead of points. The fillets of both panels next the tang, if ever there, are now quite obliterated. The sketches are, after careful drawings to scale, by Mr Burgess, banker here, who takes a keen and intelligent interest in the antiquities of the district.

CUP-MARKED STONES IN GLEN URQUHART.

The following cup-marked surfaces in Glen Urquhart are not included in the paper read by Mr Jolly, 9th May 1881:—

1. A stone, built into the dike along the road between Drumcore and Upper Drumbuie, shows two markings—one 2 inches in diameter and $\frac{1}{4}$ inch deep; and the other, which has been fractured, was about 3 inches diameter, and somewhat deeper than the former. The stone is a fragment of a carried boulder of gneiss, which lay upon the great conglomerate in the adjoining field until it was broken up a few years ago and cleared off.

2. Between Easter and Wester Achtuie, and in the moor just beyond the dike, there is a long ridge of compact close-grained sandstone, running E.N.E., and covered with stunted heather. The strata dip down the western slope of the ridge at a steep angle, and their tilted-up edges form the eastern slope. The whole surface has been glaciated, and the stone has preserved the marks so well that it is by far the best

example of glaciation in the district. The bevelled edges of the strata on the eastern slope have been extensively cup-marked; but to what extent it is impossible to say, as the most of the cups discovered were hidden under the matted turf. A few patches of the underlying rock are exposed; and, while admiring the ice-marks upon one of these, three years ago, I observed the first cup. I visited the spot frequently since, and succeeded in finding, up till now, a total of 88 cups varying in size, from 3 inches diameter and $1\frac{1}{8}$ in depth, to surfaces an inch in diameter simply "roughened" over with a pointed tool. Fortunately, the markings are not on the "bed" or surface of the strata (where the presence of the ripple marks would make it difficult sometimes to distinguish the natural from the artificial), but on the polished edges where the least artificial marking is detected.

The sculptured surfaces arrange themselves roughly about an imaginary line drawn obliquely N.E. and S.W. along the slope, and measuring 40 yards in length.

On surface No. 1 there is one cup $2\frac{1}{2}$ inches diameter and $\frac{3}{4}$ inch deep.

No. 2 has 5 cups—the first 4 smoothed and rounded more than any of the others on the ridge.

The following are the dimensions :—

No.	Diameter.	Depth.
1	3 inches	1 inch
2	3 "	$\frac{3}{4}$ "
3	$2\frac{1}{2}$ "	$\frac{3}{4}$ "
4	$2\frac{1}{2}$ "	$\frac{3}{4}$ "
5	2 "	$\frac{3}{4}$ "

No. 3.

1	$2\frac{1}{2}$ inches	$\frac{1}{2}$ inch
2	2 "	$\frac{3}{8}$ "
3	1 "	pitted surface
4	1 "	pitted surface

No. 4.

The four markings are all about 1 inch diameter, and quite shallow.

No. 5.

No.	Diameter.	Depth.
1	$1\frac{1}{4}$ inches	$\frac{1}{4}$ inch
2	$1\frac{1}{2}$ "	$\frac{1}{4}$ "
3 and 7	1 "	$\frac{1}{2}$ "
4, 5, 6, 8,	} 1 "	very shallow
9, 11, 12,		
13 and 14,		

Two others, not numbered, are pitted surfaces, 1 inch diameter.

No. 6.

The 15 marks on this surface vary from a little over an inch to $\frac{3}{4}$ inch in diameter, and are all shallow pitted surfaces.

No. 7.

No.	Diameter.	Depth.
1	2 inches	$\frac{1}{4}$ inch
2	2 "	$\frac{1}{4}$ "
3	$1\frac{1}{2}$ "	- "
4	1 "	- "
5	3 "	$\frac{3}{4}$ "
6	$2\frac{1}{2}$ "	$\frac{1}{2}$ "
7	2 "	$\frac{1}{2}$ "
8	3×2 "	$\frac{1}{2}$ "
9	1 "	$\frac{1}{2}$ "
10	$1\frac{1}{2}$ "	$\frac{1}{4}$ "
11	2 "	$\frac{5}{8}$ "
12	$1\frac{1}{2}$ "	$\frac{1}{4}$ "
13	$2\frac{1}{2} \times 2$ "	$\frac{3}{8}$ "
14	$3 \times 2\frac{1}{2}$ "	$\frac{3}{4}$ "
15	1 "	- "
16	$2\frac{1}{2} \times 2$ "	$\frac{3}{4}$ "
17	a beginning.	
18	$2\frac{1}{2}$ "	$\frac{1}{2}$ "
19	2 "	$\frac{1}{2}$ "
20	$2\frac{1}{2}$ "	$\frac{3}{4}$ "

No. 8.

No.	Diameter.	Depth.
1	$2 \times 1\frac{1}{2}$ inches	$\frac{1}{2}$ inch
2	2 "	$\frac{1}{2}$ "

No.	Diameter.	Depth.
3	$1\frac{1}{2}$ inches	$\frac{1}{4}$ inch
4	2 "	$\frac{1}{2}$ "
5	2 "	$\frac{1}{2}$ "
6	$1\frac{1}{2}$ "	$\frac{1}{4}$ "
7	1 "	- "
8	$3 \times 3\frac{1}{2}$ "	$1\frac{1}{8}$ "
9	$2\frac{1}{2} \times 2$ "	$\frac{3}{4}$ "
10	$2\frac{1}{4} \times 2$ "	$\frac{3}{4}$ "
11	$2\frac{1}{2} \times 2$ "	$\frac{1}{2}$ "
12	$2\frac{1}{2}$ "	$\frac{5}{8}$ "
13	$2\frac{3}{4} \times 2\frac{1}{2}$ "	$\frac{3}{4}$ "
14	$2\frac{3}{4} \times 2$ "	$\frac{3}{4}$ "
15	} 1 "	pitted surface
16		
17	3 "	$\frac{3}{4}$ inch
18	2 "	$\frac{1}{4}$ "
19	$2\frac{1}{2}$ "	$1\frac{3}{8}$ "
20	2 "	pitted surface
21	} 1 "	pitted surface
22		

No. 9.

Only one cup, 3 inches diameter and $\frac{1}{2}$ inch deep.

With the exception of those on surface No. 2, referred to above, almost all the other cups and markings are irregular in outline and rough of surface. The pitted nature of the surface shows clearly that they were punched out by a pointed, but not very sharp, tool. The strokes must have been delivered with a firmness and precision attainable only by the use of a mallet.

I examined a number of markings to find whether the workman left the mark of his tool beyond the bounds of the cup, as even the most careful workman would be liable to do by a slip; but I am not satisfied that there is any such mark.

A number of them were under turf 6 inches thick. In No. 7, almost all the cups are made on a crack or other fault; while in No. 8 they are placed on the more solid parts of the edge, and keep clear of the faults.

The latter surface is also remarkable for the great number of dots all

over the surface, which seem to have been made by striking with the workman's tool, aimlessly, as a child might do to amuse itself.

No other kind of sculpture has been found yet. This is the only instance, in this district, of cup-markings on the rock *in situ*, or even on sandstone.