

I.

TWO DAYS' DIGGINGS IN SUTHERLAND. BY THE REV. JAMES JOASS,
EDDERTOUN, ROSS-SHIRE. COMMUNICATED BY PROFESSOR J. Y. SIMPSON,
M.D., F.S.A. SCOT. (PLATES XIII., XIV., XV.)

Hearing from my friend Sheriff Mackenzie, Dornoch, of the existence of an ancient fort, with dome-roofed chamber attached, and surrounded by earthworks and a ditch, on the farm of Kintradwell, beyond Brora, I resolved to take an early opportunity of inspecting it; and arrangements for that purpose having kindly been made by my informant and Mr Houston of Kintradwell, who placed a party of six good men at my disposal, excavations were commenced on the forenoon of Wednesday, the 20th January.

The building occupies a commanding position on the edge of a sandy terrace, once an old coast-line, and the stone-work is now covered to a considerable depth with turf. Work was begun at E (Plate XIII. fig. 2), which had been previously opened by chance. When the rubbish had been cleared out, an elliptical dome-roofed chamber was exposed, formed of courses of dry stone, each tier overlapping that below till the walls approached sufficiently to be capped by one large flag, which had been removed on the previously mentioned occasion. At the bottom of this chamber a passage, 2 feet wide by $1\frac{1}{2}$ feet high, and roofed with large flat stones, communicated with the interior, as shown at E (fig. 3). Buried in black mould at F (fig. 2), and about one foot below the surface, were found jaws of pigs and deer, with part of the frontal bone and horn-core, as well as other bones of a large animal of the ox tribe, besides fish bones and shells of the limpet and periwinkle.

On discovering that one of our diggers had assisted at the excavation of Maeshowe, Orkney, under Mr Farrer, and knew, therefore, what he was about, I left him with instructions to dig at G (fig. 2), while I accompanied Mr Houston to H (fig. 1), a point in the sandy slope of the same terrace, and about a hundred yards distant, where a cist, containing human remains, had been discovered a short time previously by the blowing away of the sand. Near this I found a number of human bones, including portions of the skull, and a detached piece of the upper jaw without teeth; also a few vertebræ, the *os coccygis*, part of the pelvis, the ulna and radius of one arm, and some of the smaller bones of the hand and foot. On further digging at the cist, the leg bones only were found. In this cist, on its first exposure, was found a piece of deer's horn, perforated in its long axis at one end as if to be used as a knife-handle. This has been lost. Also the brow-antler of a red deer's horn, of very large size. The main horn has been cut through above this tine, evidently by a blunt (stone?) instrument, as shown by the marks of several hacks that failed to pierce to the porous interior, which seems to have been broken across. This horn is apparently very old, and almost crumbles to the touch. It adheres to the tongue as if it had parted with its animal matter, and is so light as to be probably little but phosphate of lime.

Close to the cist a flint-flake, of irregular form, was found. The highest rocks in the district are the Liassic reefs along the coast, and there are no beach flints.

Near the cist stood a rough sandstone slab, bearing incised ornamental markings, as shown (Plate XIV. fig. 4).

This probably belongs to the period embraced in Mr Stuart's monograph on the "Sculptured Stones of Scotland." Not having had an opportunity since my return from Sutherland of consulting that very valuable work, I do not know whether this stone is figured there.

Returning to the tumulus, we found that the diggings at C (Plate XIII. fig. 2) had resulted in the exposure of a chamber G (fig. 3), corresponding in all respects to that at E. The buttress-like prominences at I and J (fig. 2) probably indicate the existence of other similar cells. This, I regret to say, our time did not permit us to prove, the evening coming on before we had done more in the interior circle than to dig down upon the passage E (fig. 3).

Leaving further excavations at this locality till the arrival of warmer weather, we next morning sat in council over the mouth of an underground passage, opening in the hill-side, and averred by the majority of our men to have been traced to Dunrobin, seven miles away; whilst the utmost concession to our mildly expressed scepticism on this point could go no further than to diminish the distance to 400 yards, throughout every foot of which the passage had positively been followed by the uncle's wife's father of one of our party, accompanied by his collie, and carrying a candle. The opening in question occurs about four feet from the top of a high and steep slope forming the western side of the ravine in which runs the river of Kintradwell. The passage, built on each side with undressed and uncemented stones, and roofed with rude slabs of granite, is at first about two feet square; but at the distance of seven feet the height diminishes to 18 inches. This much we could see from the outside. Sending in a trusty clumber spaniel and a keen little terrier, to serve "notice to quit" upon all cats and other possible vermin not pleasant to encounter at a disadvantage, and being assured by their return that the premises were unoccupied, save perhaps by serpents, of which the poisonous variety is numerous in the neighbourhood, but which, if present, were probably asleep just then, I made some little preparation, in the way of clothing, for the occasion, and, pushing a lighted candle before me, crawled and finally dragged myself into a chamber A (Plate XIV. fig. 5), 5 feet high by 4 broad at its widest part, and 10 feet long.

After a very careful examination of the side walls, where, save the place of a stone or two fallen on the floor, I could find no orifice nor anything suggestive of a passage leading to Dunrobin or elsewhere, I found at B (fig. 5) a wall, about two feet high, separating the chamber A from C, another apartment of the same size. Being now joined by Mr Houston and a friend, with a lamp, we discovered, on the perpendicular face of a stone in the upper course of the barrier-wall B, certain markings (fig. 6), which were undoubtedly artificial, and which we at first thought had been made in the act of sharpening stone or other implements. On more careful examination by daylight, their resemblance to early Scandinavian letters was noted, although I have since failed to identify more than one or two of the characters with those of any such alphabets

to which I have access. If indeed I have read aright any of these letters, if letters they be, some of them seem to be inverted as to the position of the stone when found, which is that given in the sketch. This stone is now at Kintradwell, a quarter of a mile from the Howff, and nearly a mile from the tumulus or fort.

At D (fig. 5), the chamber C was found to be filled up to the roof with loose black earth, which was partially removed by digging down upon and raising the roof-flag above; the last, as it turned out. Numerous shells of the limpet and periwinkle, with animal bones, and portions of very hard black peat, were found in the mould at D.

From this point to E the side walls were exposed, but could not be traced farther, even after the removal of seven slabs arranged like steps, the ends of which were built into the side walls, and which terminated the building.

As I was obliged to set out for home early next morning, and was anxious to examine several sepulchral-like tumuli which I had on the previous day observed scattered over the hill-side, about a mile off, we made a rapid push for the place, and selecting three of the most likely, set to work at once to dig a trench right through them to the level of the apparently undisturbed boulder-clay. This we did, but discovered nothing save that the mounds were evidently of artificial construction, the interior of one containing several large slabs set on edge, and forming a rectangular enclosure about 10 feet long. This mound, the largest, seemed to have been previously disturbed.

Darkness was now approaching, accompanied by the first hints of a sharp shower of sleet, and we left the ground, somewhat disappointed, but yet convinced that the examination of a few more of these tumuli would probably well repay the labour of a summer's day, since their sepulchral origin seems beyond question,¹ the idea being untenable, that, placed as they are on the rugged slope of the hill, surrounded by peat-moss and rocks, drift-boulders and heather, they could ever have been formed in the course of clearing the ground for the purposes of agriculture.

¹ I have since discovered many similarly situated Tumuli in Sutherland, several of which contained Cists.

Postscript.—In general construction, the subterranean dwelling at Kintradwell resembles one into which I penetrated some months ago. It occurs about four miles up the Helmsdale water, near the burn of Kill-Pheadar, and not far from a good specimen of the so-called Pictish tower (Plate XV. fig. 7). This latter stronghold or signal-tower, or both, occupies a prominent position on the shoulder of a hill, and commands a very extensive view towards the N.E., W., and S. Its inside diameter is 33 feet, and its wall, in which there are traces of a passage 2 feet wide, is 13 feet thick at a height of 12 feet, whilst there lies, all about, enough of debris to account for a former altitude of possibly 30 feet. It is surrounded by an elliptical ditch 28 feet wide, and which measures in its long diameter from the outside of the ditch, on the left, to the entrance on the opposite side, 216 feet.¹

On a terrace somewhat lower, and about 600 yards distant, there is a circle, the boundary of which, formed of stones and earth, is 2 feet high, and near which there are no heaps of stone or other indications of its having been but the base of a higher structure. In the inner circumference of this rath, of which the diameter is 40 feet, a small opening, A, leads gradually downwards into a chamber which, with a height of 5 feet and breadth of $3\frac{1}{2}$, follows underground the curvature of the upper circle to a distance of 33 feet, where it is built square up. The sides are constructed with uncemented stones, and in the roof, which is formed of rude granite slabs, there occurs, at 4 feet from the further end, an oblong opening or trap 2 feet by $2\frac{1}{2}$, now built up, but once doubtless a way to the surface, here probably about 4 feet above. This was perhaps the winter residence of those who lived in the circle in summer.

In the bottom of the strath, and about a mile down the river side, there are several circles and cairns, in one of which I found portions of a human skull, along with a periwinkle, some bits of charcoal, and a piece of beach-rolled fossil coral from the oolitic rocks at Navidale, on the nearest coast. Near this, on the flat top of a bluff 150 feet above the sea, there occurs a good example of the ancient Kitchen Midden, in which shells of the periwinkle and limpet are very numerous, along with

¹ The number of such towers in the county is very great. Plate XV. fig. 8 shows the interior of one in Dunrobin Glen.

bones of birds, beasts, and fishes, all mingled with scorched stones and charred wood, and buried in black mould to the depth of 18 inches. No implements of any sort were found here, after a careful search on two occasions, unless we accept as such some ovoid, flattish, water-worn bits of porphyry and gneiss, which looked handy for hammers, and were probably used in smashing many of the larger bones among the fragments of which they were found.

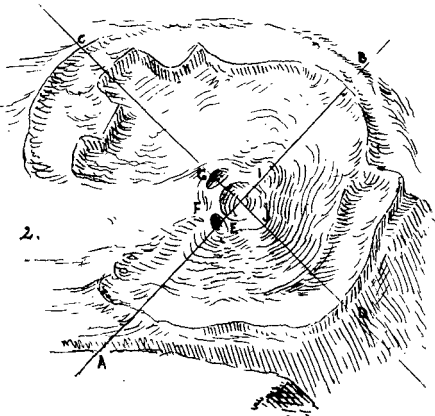
Mr ROBERTSON said, he felt that he was only expressing the feeling of the meeting in recognising the great value of Mr Joass' paper, and the beauty of its illustrations. From the description of the fort, and of the remains found in its débris, it seemed to be of the same character as some in Orkney, at whose excavation he had assisted, and he trusted that Mr Joass might be able to complete his examination, so that we might have full data for comparison. He suggested that search should be made for early ecclesiastical vestiges, as from the name Kintradwell there was no doubt that the site had been one dedicated to St Triduana, as had been the case at Dunfallandy and Restalrig.

Mr STUART adverted to the richness of the district in early remains, and remarked that Mr Rhind had been induced to leave a sum to the Society for the purpose of carrying out *systematic* excavations in this and the neighbouring county of Caithness, where such remains also abounded, in the hope that a more definite result would be attained than from the casual explorations on which we had hitherto been mostly dependant.

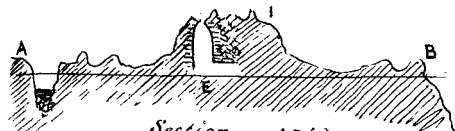
1.



Sketch in the line AB.(2).

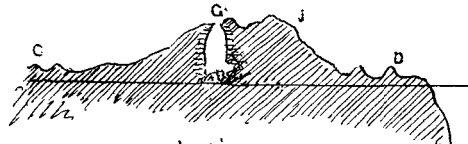


2.



Section on AB(2).

3.



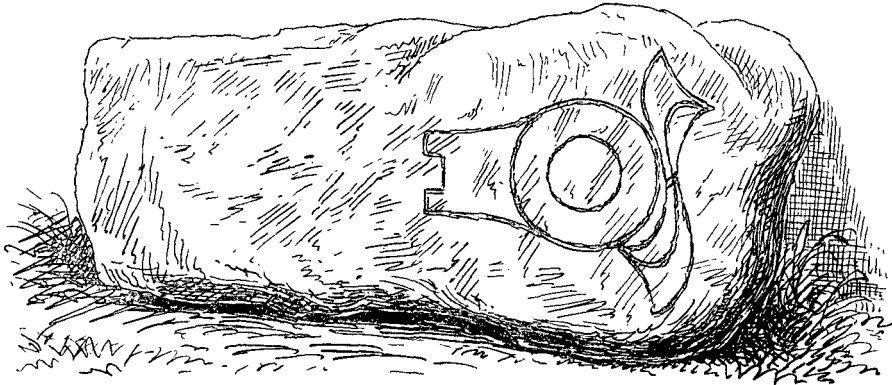
Section on CD(2).

50 Feet.

OLD FORT AT KINTRALWELL, SUTHERLAND.

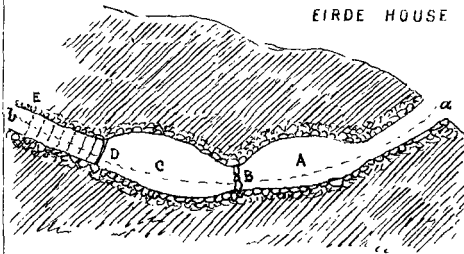


Sculptured Stone. 4 Kintradwell.



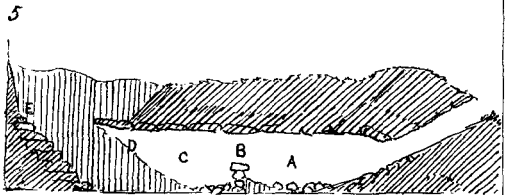
2 feet.

EIRDE HOUSE KINTRADWELL.



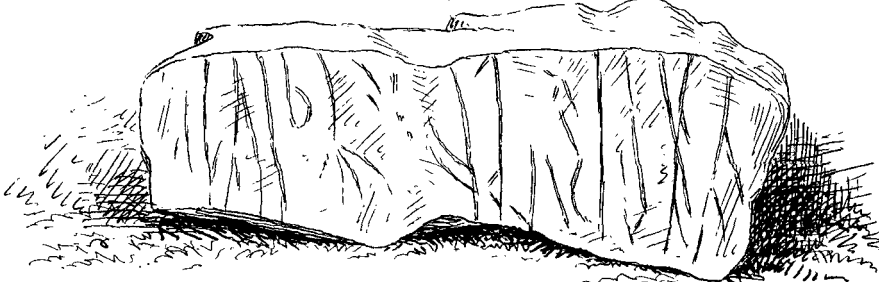
Ground Plan.

10 feet.



Section on *ba*.

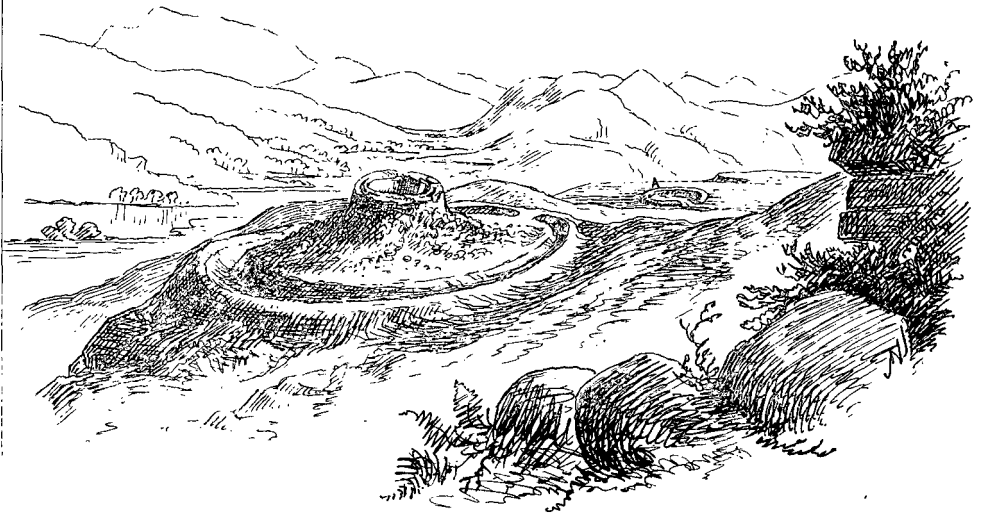
Stone Round 6 in Eirde House



1 foot.

7.

HILL FORT NEAR HELMSDALE, SUTHERLAND.



*Interior of Round Tower in
DUNROBIN GLEN.*

8.