

I.

FURTHER EXPLORATIONS OF THE ANCIENT LAKE DWELLINGS IN
THE LOCH OF THE CLANS, ON THE ESTATE OF KILRAVOCK,
NAIRNSHIRE. BY JOHN GRIGOR, M.D., NAIRN. WITH A PLAN AND
SCALE. PLATE XXII.

At one of the meetings of the Society last spring Mr Stuart read a communication of mine on the discovery and appearance of these Crannoge remains, and exhibited the half of a stone cup, a whetstone, and a hatchet, which had been found. In October I had the benefit of Mr Cosmo Innes's presence and advice, along with that of the proprietor, Major Rose, in directing the first day's exploration. On getting down into the cairn, with the "oak beams and sticks cropping out of it," we found, as I had expected, that all the wood in sight was chiefly the remains of rafters, and inclined upwards at about an angle of 25 deg., so as to form an upright roof. These however, had been broken across (as represented in the sketch), no doubt by their own partial decay and the superincumbent weight of stones. On further clearing and digging we came upon four sides or walls, each about three feet in height, and making an irregular square. These were formed of trees of oak comparatively sound, and about thirty years' probable growth. On the west side there were seven trees piled horizontally, one above the other; the third from the ground had another alongside it. Seven trees also formed the east side. The north side was made up of a foundation of small boulders, then two horizontal trees, over which projected a few rafters, and then another tree. At the east end of this wall there was a mortised opening, in which, in all probability, an upright support had been placed. The south side had been, to all appearance, partially removed when that end of the cairn was carted off by the tenant farmer, as noticed in my previous communication, and only one tree at the bottom was seen. These sides are correctly represented in the accompanying sketches, and the scale renders it unnecessary to particularise measurements. The floor was the mud bottom of the old loch, and there were two small trees stretching from east to west, with the appearance of decayed brushwood

throughout, and a boulder stone here and there. Not exactly in the centre, but nearer the south-east corner, lay a few boulders bearing marks of fire, and having portions of charcoal around them. This was all that could be seen as a hearth, and I was inclined to think that the other stones shown in the sketch had been an entrance way; but the previous interference with the south side did not tend to clear up this matter.

Nothing of any interest was found in the work of clearance. There were portions of decomposed bones, a bit of pottery (evidently modern), the mouthpiece of a horn spoon, and a cockle-shell, and these probably had fallen through the cairn. At a depth of 11 feet from the surface, but still at the receipt of air and moisture, a few frogs and toads were observed.

Around the outside of the low wooden walls, and between them and the sloping-up rafters, as marked G in the general plan, there was a considerable space filled up very much with bits of burned wood, charcoal, and sand; and at G, on the west side, I found some peat dross mixed with small seeds like buckwheat.

To all appearance the rafters started from the ground in three tiers, having different angles of inclination, though those of the roof seemed to have run up pretty much together near the ground. These were bound down by beams crossing and recrossing in all directions, which imparted greater strength. Beyond two mortised openings no other mode of fastening could be seen.

It was evident that the foundations, &c., of the tenement were strongest at the north side, which was nearest the old lake margin; yet from the quantity of wood and débris reported to have been removed, it may have been equally so on the south side, whilst it was clear that less care had been bestowed on the east and west sides. The foundations of the erection seem to have been below the level of the water, and the distribution of the beams and cross-beams, and the remnants of beam filling below, evidently appear to have been done with the intention of keeping out the water. The rafters may have been supported from within; but the inclination upwards had been very much given by their slanting insertion into the ground, and then rendered firm and secure by layers of stone over.

The nature and uses of the structure, as well as the kind of its inmates, I fear can only be guessed at, for, so far as I can learn, there seems to be no record of anything exactly similar. Mr Cosmo Innes had not known anything like it, neither had the two best Crannoge authorities in Ireland, viz., Dr now Sir William Wilde of Dublin, and the Rev. James Graves, Honorary Secretary of the Kilkenny and South-East of Ireland Archæological Society, who wrote me concerning the cairn covering the construction of young trees. "I have never heard of one like it here; but frequently the oak platforms of oak houses and mills of a very early date are found. Could your stockade have been a dwelling strengthened outside by heaving stones over it?"

He writes again—"Could it be a burial cairn? The Danes made chambers of oak logs in their tumuli, *e.g.*, Queen Dagmar's grave, that in which the famous Dagmar Cross was found, of which our Princess of Wales was presented a fac-simile by her father; or could it have been a sort of cellar or store-house? In our earthworks or raths, subterranean chambers of stone are common."

Mr Forel, of the town of Morgues, on the Lake of Geneva, near Lausanne, whose Keltische Pfahlbauten treasures I lately had the pleasure of examining, has not seen or heard of a similar place in Switzerland, and he, too, is good authority.

In my previous communication, and before the cairn was opened, I was, like the Rev. Mr Graves, inclined to think that it would be found to be a sepulchral demonstration, but from the absence of all remains or relics of the dead I have no cause to think so now, or reason to believe that it had been anything but a primitive dwelling, with upright roof covered with turf, and further strengthened inside by having the stones over it.

The fact of the burned wood and charcoal being found principally outside the main dwelling, between its low walls and the rafters, arrested my attention very much, and suggested the question, Could the inmates have cast the charcoal, &c., over these low walls, and made this place a sort of refuse bin? I am again, however, inclined to think that this wooden castle, at any rate its roof, had been originally much higher than its present crushed ruins would lead one to suppose, and perhaps that a few of the retainers of the predatory chief, or whoever he may have

been, had occupied those spaces on all sides, just as the "kanat," or the space betwixt the walls of an Indian tent, is often made use of.

As regards the remains of the pile habitation in the marshy ground to the south east of the crannoge just described I have little new to tell. A portion of it was dug into, but the ground was, and will be, till further drainage is effected, too wet for any satisfactory exploration; and beyond small bits of bones and charcoal, with faggage and chips of saturated wood, I got nothing of any interest. The Rev. James Graves also remarks on this place:—"It is quite evident that you have come on a lake dwelling identical in character with those so common in the lake districts of Ireland. The piling, &c., are just as with us, and there might be a rich find if the soil outside the stockade was searched. The articles now found with us have been generally dropped into the water, or sank into the liquid mud at the edge of the artificial mound when occupied." I had one of the oak piles drawn up—it measured 13 feet in length. With Mr Forel I saw piles only 3 feet in length, taken from the Lake of Geneva, and I think the longest from any of the lake habitations in Switzerland were said by him not to exceed 10 feet. The peculiar splitting of the outer wood was the same as in mine.

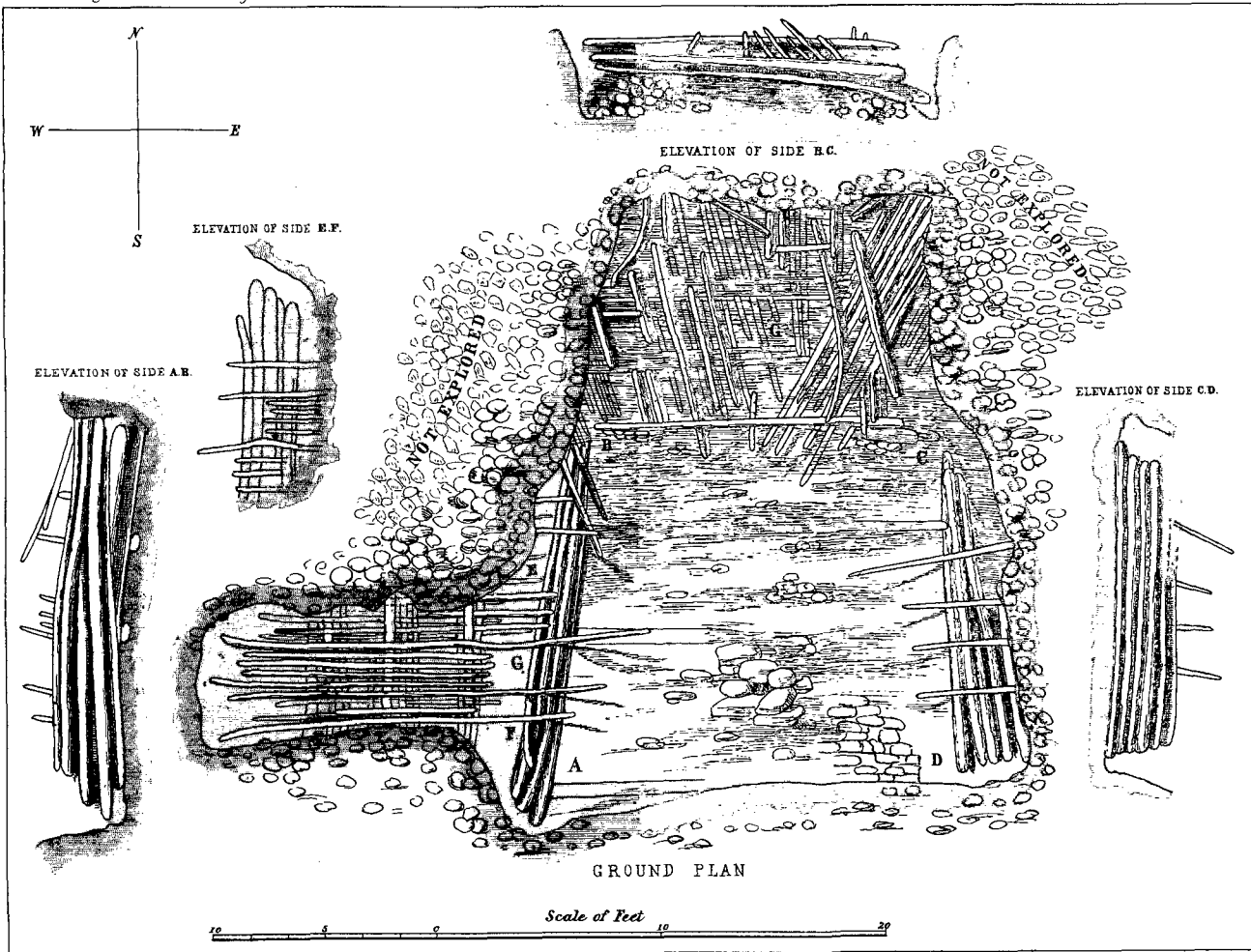
Whether the pile had been pointed by a stone hatchet or not I cannot say. When raised from the water the cutting seemed to me to be of that character. When the wood dries, however, the peculiar marks very much alter, and Mr Forel did wisely in taking his plaster casts from the pile ends when freshly drawn and saturated with water.

The proprietor has laudably enclosed the cairn and remains of the habitation, and planted pines in and around it.

I have been told that the original name of the loch was not "of the Clans," but "Loch Chlamant," meaning the Loch of the Kite.

The paper was accompanied by detailed plans and drawings, which added much to its interest.

Mr STUART and Mr ROBERTSON made some remarks on the rapidly accumulating evidence of the great number of Crannoges in the Scottish lochs, and the value of such correct descriptions as that furnished by Dr Grigor.



LARGE MOUND, - LOCH OF THE GLANS.

NAIRNSHIRE.

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