IV.

EXCAVATION OF A GALLERIED STRUCTURE AT LANGWELL, CAITHNESS. By A. O. CURLE.

If you leave the main north road over the Ord of Caithness just where it assumes a steep gradient down to Berriedale, and follow a track to the left, along the top of the high bank of the Langwell water, you will reach at a distance of about \frac{1}{2} mile from the road, a ravine with a small burn flowing in the bottom of the hollow. On the far side of the burn, and towards the head of the ravine, are the ruins of the broch of Burg Langwell, which has been partially excavated. Some 200 yards north-west from this broch, and just within the birch-wood which stretches upwards from the river-bank, is situated the galleried dwelling, the subject of this paper. When I first saw it, in the summer of 1910, its main features could be made out, consisting of a circular enclosure like a hut circle, with a curved oblong chamber adjoining (fig. 1), within which there protruded, from a mass of huge stones thickly covered with moss and grass, five upright pillars to a height of about 3 feet 6 inches, three along one side, and two on the other, while a sixth lay displaced towards the inner end. One pillar supported the end of a cap stone, whose other extremity rested on the top of the surrounding wall. At the lower end of the structure, and more within the hut circle than the galleried chamber, lay a great cairn-like mass of stones, measuring some 20 feet in diameter and 3 feet 6 inches in height, on which several birch trees had established themselves. No ruins encumbered the interior of the hut circle.

In order to obtain details of the plan, and if possible to recover relics that might throw light on the question of the period of occupancy of this class of structure, I decided to excavate the ruin as far as possible. This, by the kind permission of his Grace the Duke of Portland, who afforded me every facility, and with the aid of a small grant from the Society, I was enabled to do.

Reference to the plan (fig. 2) will show the form of the construction with its two main divisions.

The hut circle is almost circular, measuring 27 feet across by

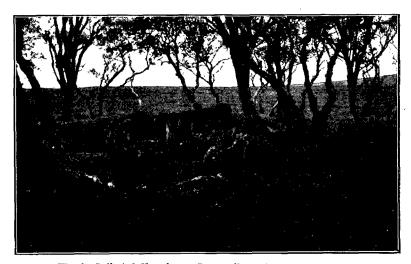


Fig. 1. Galleried Chamber at Langwell previous to excavation.

28 feet from front to back. It is surrounded by a low stone wall, with an average width of 6 feet, and completely overgrown with turf. The level of this wall is very regular at about the height of a single boulder such as is used to face it; that is to say, about 18 inches. On the north-west is a curved recess extending inwards for 6 feet, with a breadth of 2 feet.

From the north-east a passage through the wall, some 2 feet 2 inches in width, leads into the circle from the outside, while another passage from the circle itself communicates with the galleried

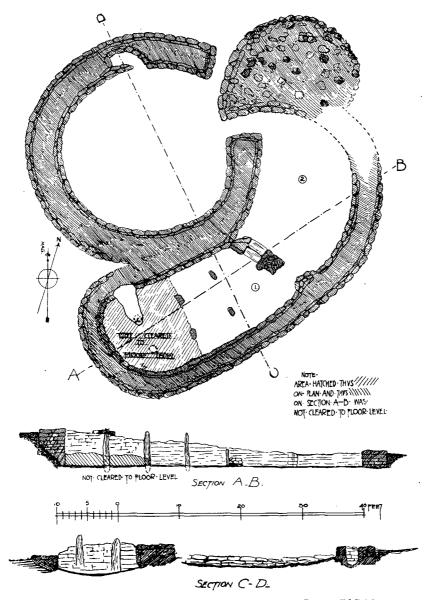


Fig. 2. Ground Plan and Sections of Galleried Structure at Langwell, Caithness.

chamber at its lower end. The latter chamber did not appear to have had a separate entrance from outside, but the wall where left blank on the plan was untraceable, owing to the trees growing on the top of it. Lying parallel with the hut circle on its east side. with a common wall, is the galleried chamber, which has an extreme length from back to front of 48 feet. It is divided into two parts by a cross wall at about 21 feet from the lower end, pierced by a doorway. The outer division appears to have formed a courtyard, probably open to the sky, and slightly broader than the back division. with a greatest breadth of 16 feet. The inner division measures some 12 feet 6 inches behind the cross wall, and slightly expands towards the inner end, which is rounded. The general slope of the ground is towards the east, and the whole chamber has been to some extent dug out, so that, at its inner extremity, the floor level lies some 4 feet to 5 feet below that of the ground outside, while at the opposite end the difference in level is only about 2 feet. Commencing with the excavation of the outer division, we found the old floor level, at a depth of about 2 feet beneath the present surface, covered with an accumulation of soil and occasional large stones. One of these stones was deeply pitted with holes seemingly made by limpets, thus indicating the source from which it had been brought. Most of the larger stones appeared to have been quarried. The floor was firmly compacted and discoloured, and covered with a black deposit to a depth of from 1½ inch to 2 inches, containing numerous particles of charcoal, but no trace of shells or bones or of any food refuse or pottery were found in it. The light-coloured sand of the subsoil made the floor level easily distinguishable. Near the centre (2 on the plan) lay the upper half of a rotary quern, with two perforations in the axial line made from both sides, each showing a slight constriction near the centre, and there came to light, also, half of a flat disc-shaped stone, 7 inches in diameter, with a small concavity in the centre, measuring 21 inches across, marked with numerous small pittings. A view

of the inner division is shown in fig. 3. The divisional wall was some 4 feet in thickness, and was much broken down. The entrance through it towards the west side, 3 feet wide, was flagged, and there stood on either side of it, at its inner end, an upright stone, 3 feet 8 inches in height, with a sharp-edged sill between, 5 inches in depth. Towards the east side there occurred a broad gap in the wall, some 3 feet in width, blocked with a mass of earth



Fig. 3. Galleried Chamber at Langwell after excavation.

and stones, on the top of which two large slabs lay horizontally, though evidently not in situ. Possibly one originally stood upright, and the other, which was partially superimposed on it, may have been a cap stone resting upon it. That the gap had not been built over was evident from the discoloration of the floor within it. Behind the wall onwards to the back of the chamber the floor was covered, to a depth of several feet, with massive slabs, some of which, from their length of 6 feet to 7 feet, had evidently been cap stones from the walls to the pillars, or had been laid transversely, while certain squarish VOL. XLVI.

blocks had probably been used to complete the roofing. As will be seen from the plan, the two rows of pillars do not maintain throughout the same relative position to the walls of the chamber, but deflect towards the entrance. These pillars stand each about 6 feet in height above floor level, are set from 2 feet 3 inches to 4 feet 7 inches distant from the walls, and leave a central nave between the rows, varying in width from 4 feet between the inner pair to 5 feet at the opposite end. On only one does the cap stone still rest (fig. 4). The wall of the structure, where remaining fairly complete, is well built, the stones increasing in size towards the top, some of them in that position measuring 2 feet to 3 feet in length by 1 foot to 1 foot 4 inches in thickness; this arrangement being evidently adopted to provide solid imposts for the ends of the roofing slabs. So massive were the stones which encumbered this chamber, that it was found impossible, towards the inner end where the wall was higher, to move them without the assistance of a crane. The area shaded on the plan was therefore not cleared, though the actual floor level was at one point exposed at the back for the purpose of obtaining a section. It was not possible to ascertain if the central nave had been roofed, but from the stones found I am inclined to think that if it had been so a stone roof was not used. In the front portion of this division, the area behind the wall, there were found a sufficiency of large slabs to admit of a partial roof, but not for a complete roofing, nor was there any indication of the removal of a pillar, and without some such support the span between the terminal pillar and cross wall on the east side would be too large to have been covered by stone in the method here employed. floor, as in the outer division, was covered with a black deposit containing charcoal, and at the spot marked (1) on the plan there was found in situ resting immediately on the uncontaminated sandy subsoil a saddle quern (fig. 5), measuring $18\frac{1}{2}$ inches in length by 14 inches in breadth at the upper end and 10 inches at the lower. At the latter extremity the stone was much worn away. Near it was found the

rubber, a round granitic pebble, irregular and rough except on one face, which was worn smooth by contact with the quern. The fact



Fig. 4. Upright Pillar and Cap Stone in the Galleried Structure, Langwell.

that the sand beneath the quern was in a condition of natural purity implies that it had always rested where found during the period of occupation. No trace of pottery was found here either, nor of food refuse, unless the two bones and a tooth, probably of a deer, can be counted as such. One small piece of slag was recovered. In neither division was there a definite hearth exposed. The hut circle was not cleared, but excavations were made at several places within it, which disclosed no signs of occupancy. The recess in the wall was thoroughly examined; traces of charcoal were found within it; and fragments of



Fig. 5. Relics from the Galleried Chamber, Langwell.

shaley stone picked up outside it showed the influence of heat, suggesting that it had been used as a fireplace or furnace. The cairn-like mound at the entrance is difficult to account for, except on the supposition that it represents the material excavated from the galleried chamber. Where it faces the interior of the hut circle and chamber its outline is marked by large flat boulders carefully laid to follow the lines of the structures.

As noted elsewhere. this is an example of a class of structure of which some eighteen examples were observed in the county of Caithness, and these all in the parish of Latheron. The inaccessibility of situation seems to be a feature as well as the peculiarity of the interior arrangement, for the majority of them were found up the straths which lay in the hilly region dominated by Morven. plans take two marked forms—circular and oblong. The first form presents an analogy to the structure at Uishnish, in South Uist, described by Capt. Thomas,2 where for the pillars and cap stones are substituted built radial piers and beehive roofs, and to kindred remains found by Mr Erskine Beveridge, and described by him in his recent work on North Uist. The second or oblong form has curving ends and restricted breadth, so that the area of occupation gains by length what it loses by departure from the circular form. This latter plan affords another advantage which would lead me to suspect that it is a later development. The circular variety with its surrounding gallery presents a space in the centre of some 17 feet diameter, and has, moreover, a full interior diameter of from 17 feet to 55 feet, an area too large to be spanned either by single blocks of stone or by a beehive roof. If such a roof were possible, however, it would have risen to a great height and have required much material of which there was no trace in the interior of any of the circular examples. The second plan, with its undiminished accommodation, restricts the space between the parallel rows of pillars to some 4 feet to 5 feet, a space which could be roofed, if desired, without difficulty, and is supplied with an outer court, as seen in the Langwell example, which would correspond to the open space in the centre of one of the circular structures. It is worthy of remark that these buildings are usually to be found in pairs or forming part of a larger plan, as in the instance described above. The attached construction in that case is, to all

¹ See Ancient Monuments Commission's Report, etc., Caithness, pp. 39 and 40,

² Proceedings of the Society of Antiquaries of Scotland, vol. vii. p. 173.

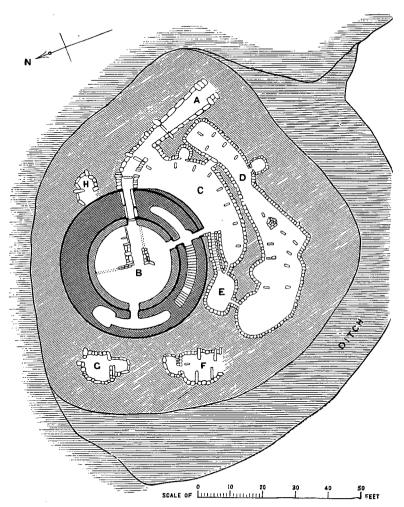


Fig. 6. Plan of the Broch of Yarrows, showing Galleried Structures alongside the Broch.

appearance, a hut circle differing in no particular from many others to be seen in the adjacent county of Sutherland. Adjoining the broch of Yarrows, when excavated by Dr Joseph Anderson in 1866-67, there were noted a number of outbuildings erected against the broch and enclosing it on one side. In two of these, which took an irregular curving



Fig. 7. Interior of Galleried Structure at Broch of Yarrows, showing fallen pillars.

oblong form, there occurred along the side, set parallel to the walls, upright pillars, dividing the chambers as it were into stalls. These, I have no doubt, were the supports of roofing slabs of a galleried dwelling. The plan reproduced (fig. 6) indicates the arrangement very clearly, while the illustration (fig. 7) shows a number of the pillars now laid prostrate—a fate which has overtaken almost the whole of them, and fig. 8 shows their original appearance when the broch was excavated.

These outbuildings were found to rest on food refuse presumably

thrown out of the broch, and on that account were declared to be secondary, consequently in this instance demonstrating the erection of one of these galleried dwellings at a period subsequent to the original construction of the broch of Yarrows. From the scanty relics recovered in the Langwell dwelling we can draw no definite conclusions. The rotary quern and the saddle quern are both domestic utensils

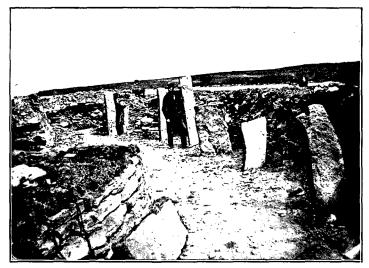


Fig. 8. Original appearance of the Pillar Slabs in the galleried structure outside the Broch of Yarrows. (From a photograph taken by Mr Johnston, Wiek, in 1867.)

found in brochs, and, while the former existed in use until the nineteenth century, we know not when the latter, its predecessor, ceased to be employed. The disc-like stone with the pitted concavity is an object of indefinite use, examples of which have been found on the Culbin Sands and many other inhabited sites.

The resemblance of the circular galleried structures to hut circles is obvious to anyone familiar with the forms of the latter, and they may, to some extent, be regarded as derivatives of that type of dwelling;

but as the surrounding galleries supply analogies to the underground houses, their development may have sprung from both types. It is characteristic that, wherever found, they are in part, at least, dug out, and thus in a modified sense subterranean. In unexcavated examples the extent to which this is the case is not evident, as the pillars stand above ground to a height of only 3 or 4 feet, or are even covered, as at Houstry of Dunbeath, to within 18 inches of their heads, though, as demonstrated in the Langwell structure, they may extend to a height of 6 feet above the floor. In the neighbouring strath of Kildonan, in Sutherland, there are a number of cases of associated hut circles and earth-houses, the latter entering from the interior of the former and passing underneath the bank, which is usually extended in bulk to cover it. Now, though these earth-houses are narrow and devoid of air and light to such an extent that one is tempted to question their use as human habitations, it seems a short step from the hut circle with enlarged bank on one side covering a purely subterranean gallery to such a structure as this, at Langwell, consisting of a hut circle and contiguous intercommunicating chamber partially subterranean. The covered-in portion of this structure at its inner extremity when complete cannot have projected from the surrounding level more than a couple of feet or thereby, and covered as it no doubt was with heather or turf, it must have been an inconspicuous object, and very cave-like in appearance, viewed from the entrance.

This brings me to the last link, an etymological one, which shows the resemblance the two classes of structure bore, if not to each other, at least to a common prototype. To the galleried structure the name "wag" in former times was evidently applied and still remains in use, though now transferred from the structure to the place or site, e.g. "Wag-more rig," "Wag burn," and "the Wag," with in each case one or more of these ruins in the immediate neighbourhood. "Wag" is the Gaelic "Uamhag," the diminutive of Uamh, a cave, which in its turn we are familiar with as applied to an earth-house in the Anglicised form of "Weem."