

I.

AN UNDERGROUND GALLERY RECENTLY DISCOVERED IN THE ISLAND OF TIREE; WITH A NOTE OF ANOTHER IN THE SAME ISLAND, FROM A PLAN BY SIR HENRY DRYDEN. BY GILBERT GOUDIE, F.S.A. Scot.

In the month of April last year Mr John M'Intyre, tenant of a small farm at Kilkenneth, on the west side of Tiree, when engaged in ploughing, came upon a stone beneath the surface, his examination of which led to the discovery of the subterranean passage which it is the purpose of this paper to describe. The discovery was soon noised about in the district, vague newspaper announcements following; and shortly afterwards it was brought under the notice of the Society by Lady Frances Balfour, an aunt of the Duke of Argyll, the sole proprietor, interested in all matters connected with the district, and who has a residence in the island.

I had previously arranged to make a tour of exploration among the isles of the Outer Hebrides at the time; and when the proposal was made that I should visit the spot in Tiree, inspect the relic of antiquity, and do anything that might be necessary in regard to it, I willingly consented. Leaving Glasgow by the steamer *Hebrides*, the passage was made under Admiralty war regulations, by a detour along the Irish coast through Rathlin Sound, and on the 1st of June I was on land in Tiree.

Tiree, 12 miles in length and of an average breadth of 3 miles, lies to the west of the larger island of Mull in Argyllshire. Its general character is flat, but with five or six hills of no considerable height. The population by last census was 827.

The ecclesiastical antiquities of Tiree are numerous, in the shape of ancient chapels and burying-grounds, with some examples of sculptured stones. The island has, indeed, been regarded as one of the sacred spots connected with the life and labours of St Columba. In this view it was in Tiree (*terra Heth*) that he is supposed to have founded a monastery shortly after his coming to Iona in the year 565. But the civil antiquities, with which we are at present concerned, are also numerous, consisting of hill forts and circular "dunes," for the most part the equivalents in Celtic of the broughs, or "brochs," of the Scandinavian districts of Scotland—simply the modern form of the Norse term *borg*, or fortification. The dunes and other remains in the island have been amply described and illustrated by Mr Erskine Beveridge, LL.D., in his important volume *Coll and Tiree*, and his exhaustive treatment of these antiquities has made the island his own special province of research. The issue of this work in 1903 was, however, more than a dozen years earlier than the time when

the structure now under notice was discovered, and it is therefore new to scientific inquiry.

This underground gallery is not less interesting or mysterious than are the dunes. Similar structures are already known in other of the Western Isles—in Lewis, Harris, Uist, and Benbecula; and examples have been found on the mainland in Sutherland, Aberdeen, Inverness, Perth, and Forfarshire, and in Midlothian and other counties.

By far the largest and most massive of these underground structures is that at Pitcur in Forfarshire, near to Coupar Angus, carefully described and illustrated by Mr MacRitchie in his monograph *The Underground Life*, privately printed in 1892, based upon his own communication to this Society of 8th January 1900. This Pitcur gallery in height and width materially surpasses all the others which have been explored, and one cannot enter it without wonder approaching to awe. Another, circular in form, and also larger than usual in dimensions, is the Cave of the Raitt, near Kingussie, described in vol. v. of the *Proceedings* of this Society (1865). A later discovery is that on the farm of Crichton Mains, near Gorebridge, described by the late Lord Rosehill in a paper read to the Society on 8th March 1869, and printed in the *Proceedings* of that year (vol. viii. p. 105). In its size, extent, and structural form it closely resembles the gallery in Tiree with which we are now dealing. It has one peculiarity—the presence in its walls of some squared and chiselled stones exhibiting the dressing of Roman masonry, an indication of post-Roman date in its construction, if these stones were indeed part of the original building.

The site of the underground structure in Tiree now discovered is close to the dwelling-house on one of the small farms in the township of Kilkenneth, in the parish of Hylipol, on the west side of the island; and its discovery by Mr John M'Intyre, the tenant, may be stated as nearly as may be in his own words:—

“In the month of April last (1916) I was ploughing ground for oats at the back of the house, about 15 feet away, when the plough struck a small stone. I began to dig it out, and a lot more of stones appeared immediately underneath. I thought this was the foundation of an old house, but when a few of the stones had been dug out I came upon what I found to be a lintel. On lifting it up, I found there was below it an opening into the ground, so low that I could scarcely squeeze myself into it until some more of the earth had been removed. I got a candle and saw that this was the opening into a long passage. The opening was blocked up with lots of stones and earth. This I removed and cleared away for about three feet in past the entrance. I was then able to crawl onward for a long distance till I found the inner end was filled up with

earth gradually sloping upwards until at the back it was about as high as the top of the side walls at the roof."

The prevailing language in the district is Gaelic, but the School Board education has made the younger generation familiar with English, and all explanations necessary were clearly and distinctly given to me.

When I reached the island I hastened to the spot, a distance of about eight miles from Scarinish, the landing-place from the steamers, where a comfortable inn awaits the traveller. At Island House, more than half way on, I was joined by Mr M'Diarmid, factor for the Duke; and after



Fig. 1. Site of the Earth House at Kilkenneth.

inspection, arrangements were made for a formal investigation, and excavation as far as might be necessary. Driving to Kilkenneth the following day, I secured the services of the discoverer and his brother, who were set to work on the difficult and disagreeable, if not also perhaps dangerous, job. Fig. 1 shows the site in the field in relation to the farm cottage, and the opening to the underground passage, at the commencement of operations. At the time when the occupancy, or use otherwise, of the gallery was discontinued, it would appear to have been left perfectly free, unencumbered by stones or refuse or derelict material of any kind, except at the inner end, as will afterwards be shown; and the accumulation on the floor, to the depth of 6 inches or so all over, is seemingly the undisturbed gathering, by percolation from the upper surface, during subsequent ages. I regret that a photographic view of the underground

interior, to note its general appearance and the character of the masonry, could not be obtained, the light of the local artist employed having failed. All that could be done was to observe the prominent features and ascertain the structural dimensions, before work was set to.

Commencing at the opening, by a steep descent from the surface, we find the entrance 3 feet 5 inches in height, underneath a substantial lintel, 13 inches thick and 3 feet in length, the passage in front narrow and dark, and the flooring a mass of wet mud. This opening would appear to have been the original entrance, the ground leading down to it as if by steps, and the covering of earth above the lintel to the surface of the field being only about 18 inches deep. Besides, from this entering point the underground passage slopes gradually downward for some distance until the normal level is reached, after which this is steadily maintained. A further excavation at the right hand of the entrance would have made the proportions more clear, but to do so would have encroached upon the field of oats, under the border of which the gallery was constructed.

For a short distance from the entrance the passage proceeds in a southerly direction then bends with a curve to the south-east, curvatures in varying directions being a curious and almost invariable feature in these structures.

The walls are of rough but well-built dry masonry, converging as they approach the top, and roofed in with strong slabs, forming a thoroughly substantial structure through which one may pass without difficulty or apprehension of danger. The passage at the commencement of operations was scarcely 5 feet in height all through, with an average width of, say, 5 feet 4 inches. At one point, about 27 feet inward from the entrance, it contracted to a width of only 20 inches, with a height underneath the lowered lintel of only 35 inches; and through this restricted opening the passage had to be negotiated with something of a squeeze. The contraction may probably have been intended to form an inner door, to be closed by a stone slab for protection against intruders, and its height was increased by about 6 inches through the removal to the surface of the accumulation there as elsewhere upon the floor, leaving the opening 3 feet 5 inches high, with a width of 20 inches as before.

The clearing out of the floor at other points, with the view of determining the original normal height of the passage, resulted in showing that the height of the side walls may now be taken at 5 feet to 5 feet 6 inches as they would stand if the floor accumulation were wholly removed. The partial clearing was accomplished by the removal to the surface of some cart-loads of earth and mud, a laborious process requiring to be done in a crouching posture, from the impossibility of standing

upright in a passage so low and so narrow, and in total darkness but for a glimmer of candle-light; and in this way the accumulation could only be collected and brought to the surface in small quantities.

The length of the gallery and its dimensions otherwise having been ascertained, the next point for consideration was the condition of its inner end, as it seemed doubtful whether the closing obstruction might be the actual termination, or merely blocked the continuation of the passage to a further distance beyond. The excavation here was more than usually tedious, a distance of about 5 feet in front of this apparent end being filled up with a mass, closely compacted, of fine clay with some admixture of earth. Sufficient of this was released and removed, accompanied with excavation to a limited extent of the harder blocking face beyond, to satisfy me that this obstruction was not the termination of the gallery but either the opening to a chamber beyond, not unusual in such structures, or, a prolongation of the gallery itself. Uncertainty as to what the condition of the roof might be made me hesitate to expose the workers to possible danger in attempting further excavation. Without express authority from His Grace, or from the Society, I did not see my way to proceed further. But it would certainly be desirable that the terminal obstruction should be removed whenever this can be conveniently done, and the character of the entire structure be demonstrated. If the floor, say about 240 feet of superficial area, were cleared out to the depth of about 6 inches, as has already been partially done by the work which has been described, the whole passage would be made free of obstruction, and could be traversed from end to end with comparative ease; and an excavation of no very serious kind at the further end could determine whether the continuation beyond is a chamber or a prolongation of the gallery. In the meantime, by rain and wind at the exposed entrance, and by dust and water percolation downward through the roofing, a continuous filling up upon the floor must be looked for.

The earth as removed from the floor to the surface was carefully turned over by myself, without any animal remains being discovered, or any relics of human industry or use except fragments of pottery, for most part of a coarse kind, some hammer-stones more or less abraded, and a portion of a small vessel of dark pottery. Some pieces of a smooth pink-coloured stone were also noticed, but this, still known as "Balaphetrish marble," is said to be the product of a quarry in the neighbourhood. The fragments of pottery, etc., recovered were left in the keeping of Mr M'Intyre, the discoverer, along with items formerly secured by himself, in case the Duke of Argyll might desire to see them on the spot, or in case any part of them, though of only trifling interest or value, might seem worthy of acquisition by this Society.

The dimensions of the structure, as it now stands after the partial clearance of the interior, may be tabulated here:—

Length of gallery	say, 50 ft.
Height of entrance, underneath lintel	3 ft. 5 in.
Width of do. do.	2 „ 4 „
Height at highest point of passage (12 ft. 10 in. from entrance)	5 „ 6 „
Width at do. do.	5 „ 4 „
Height at narrowest point (26 ft. 10 in. from entrance)	3 „ 5 „
Width at do. do.	1 „ 8 „
Height at foundation near entrance	4 „ 5 „
Do. at inner end	4 „ 6 „
Lintel at entrance 13 in. thick, 20 in. broad, and 3 ft. in length.	

I apprehend that my function concluded with the partial clearance which has been described, and taking the dimensions as recorded. But it may be expected that some reference should be made to the supposed origin and use of such mysterious structures in the economy of ancient life in Scotland, for to Scotland they seem characteristically to belong.

It may be affirmed that the date of their construction is, as yet, outside any certainty of human knowledge, and that associated relics are neither so numerous nor so definitively significant in character, or in assurance of connection with these remains, as to throw indubitable light upon their purpose or use, or whether they were communal property or belonged to individuals. Pennant, writing in 1799, regarded them as “repositories for the ashes of sacrifices.” Some have contended that they were human habitations—“erde (or earth) houses,” and “Picts’ houses,” as they have been for long termed where found in Aberdeenshire and elsewhere in the north of Scotland. It must, however, be clear to any unprejudiced inquirer, as was pointed out by Dr John Alexander Smith at a meeting of this Society in 1868, that “having no opening for light or ventilation, they could scarcely have been used as a permanent dwelling, but probably only as a place of occasional occupation for concealment for man or cattle, or for the storage of food or valuables.” In point of fact, the accommodation might be pronounced almost prohibitory for human occupation unless for a quite limited period; and any cattle finding shelter within its walls could be of a very diminutive type only. The presence at the inner end of a large quantity of clay in plastic condition, soft and smooth, as if ready for being fashioned into any fictile vessel, would seem to afford reasonable indication that the gallery had, at all events at a late period in its history, served as a place for the manufacture of pottery. But the clay in the island is of excellent quality for the potter, and large quantities of pottery fragments are found almost

everywhere, the latest local maker of earthenware "Craggans" having died in 1896, according to information gathered by Mr Beveridge. It may therefore be unwise to assume that this collection of workable clay is necessarily of a remote antiquity coeval with the erection, or even the customary use, of the structure. The same remark applies to the so-called "Samian" ware and the "querns" or hand mills which have occasionally been found on similar sites. If these could without doubt be accepted as having been there contemporaneously with the original building, these underground galleries might with some reason be ascribed to post-Roman times. But the evidence on the point is indefinite and not wholly beyond question, and it may be well to reserve judgment on the subject in the present state of our knowledge. We may, however, cherish a hope that if a more thorough excavation of this Tiree specimen were completed in the way indicated, some further light might be thrown upon the structure itself; and upon the whole question of the age, the object, and the use of these mysterious remains.

POSTSCRIPT.

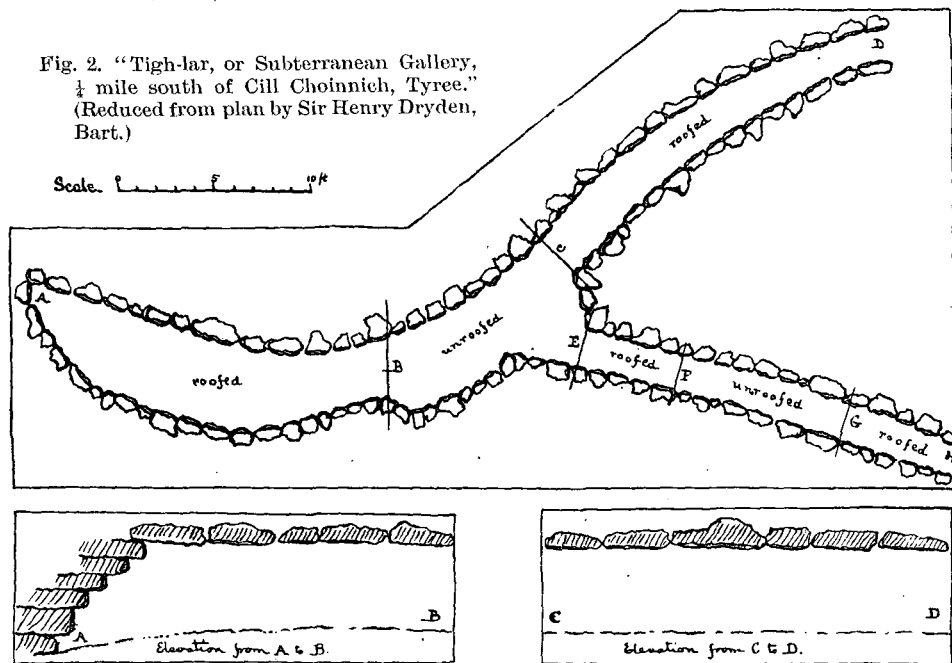
Since the foregoing was written there has been brought to my notice, preserved in the Library of the Society, a carefully drawn plan, here reproduced (fig. 2), by the late Sir Henry Dryden, Bart., an Honorary Member, of another underground structure at a short distance from that which has been described, and somewhat similar in character. It is given as "Tigh-lar, or Subterranean Gallery, $\frac{1}{4}$ mile south of Cill Choinnich, Tyree;" with scale 5 feet to an inch. "Cill Choinnich" is simply the Gaelic form of Kilkenneth; and though the site is so near to the spot of my investigation, all memory of the existence of such a structure there appeared to have been lost among the natives with whom I came in contact. I am, however, indebted to Mr H. M'Diarmid, factor to the Duke of Argyll, for the following, in explanation:—

"I believe this gallery was not like the one you explored in Kilkenneth. It was on Greenhill, the neighbouring farm to Kilkenneth, and about thirty or thirty-five years ago what was then left of it was pointed out to me. To my recollection it was on a much smaller scale than the Kilkenneth structure, and only looked like a big covered drain. It was near the shore of Greenhill farm, and in a sand-bank. Owing to sand drifting, no one now seems to know the exact locality of this underground structure. What I saw of it was partly uncovered. It would be at least half a mile from the gallery in Kilkenneth. It never occurred to me to mention it to you; in fact, I had forgotten about it on account of the long period of time since it was pointed out to me."

The present seems a favourable opportunity for putting on record in

our *Proceedings* the particulars which have been preserved of the character and dimensions of this now vanished structure.

The plan shows it to be bifurcated in form, with the stem, representing the main gallery, terminating in a point and trending slightly to one side, and the forks representing passages leading into it. The extreme length to the end of either of the arms is 50 feet, but at neither extremity of the arms is there any indication given of an actual termination or of a specially constructed entrance. The distance between the outer ends of



the branch passages is shown as about 20 feet, and their respective lengths from the point of bifurcation similarly 20 feet. At each outward extremity the width of these passages is about 2 feet, and along their respective courses their width varies from 2 feet to 2 feet 6 inches.

With the meeting of the two passages a greater breadth is given to the main gallery, it having a fairly uniform width of 4 feet, except at the extreme end, and at a point B on plan, where an intake occurs on one side, narrowing the space between the walls to 3 feet.

A study of the plan favours a supposition that the passage opening to the right on leaving the main gallery has been a secondary construction. It will be observed that the walls of the opposite passage follow out truly

the curves of the sides of the main gallery, and this is made all the more apparent by a slight projection of the corner of the wall at a point on the right at the commencement of the right-hand passage, where it joins in to the main gallery at a sharp angle, and from which it is straight in direction outward to its termination.