AN ACCOUNT OF THE EXPLORATION OF A REMARKABLE SERIES OF SUBTERRANEAN CHAMBERS SITUATED ON THE ESTATE OF ROBERT J. E. MOONEY, ESQ., J. P., THE DOON, TOWNLAND OF DOON, PARISH OF LIS, BARONY OF GARRYCASTLE, KING'S COUNTY.

BY CHARLES H. FOOT, ESQ., BARRISTER-AT-LAW.

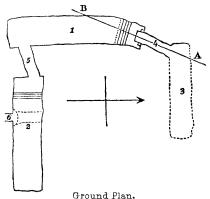
THE following account of these interesting structures is given, without any presumption of being able to impart definite information as to their age or use, but simply to call attention to their size and

peculiarity of construction.

These chambers or "caves" (to use the local designation), are situated about three feet below the summit of a rath, on the top of a hill, rising about 200 feet above the level of the surrounding country. This hill is a partly isolated point in the great chain of "Eskers," or low hills, running obliquely across Ireland, from northeast to south-west; and this rath must have been one of the strongest military positions in the neighbourhood, where many smaller raths appear, not only from its great height, but also by reason of two sharply-scarped terraces running all round it. Until forty years ago, it was covered with thorn-trees; but now, together with the entire hill, it is thickly overgrown with natural ash and fir. what time the existence of these chambers was first discovered does not appear; but they have been open for more than a century and a half, according to the testimony of the venerable woodranger, who (although not the "oldest inhabitant" on the estate), may, from the fact of his being in his eightieth year, while his father and grandfather attained, the one to ninety-six, and the other to ninety-seven years, be considered to be a good authority.

Until the beginning of the present century, there was but one entrance into these chambers (No. 4, ground plan), when the then owner of the Doon estate broke an entrance through the roof into the second chamber (indicated by dotted lines across chamber No. 2, ground plan); and although his object was to ascertain if more chambers existed, strange to say, the huge flagstones and rubbish, which then fell in, so completely covered and concealed the entrance of the gallery marked (6 on the ground plan), that its existence was unknown until the 16th of September, 1859. But, from the time that this entrance was rudely formed, the old entrance by the passage (4 ground plan) fell into disuse; and as but few persons visited these gloomy chambers, while of those who did so, a very small proportion felt suffient interest in such works as to creep on their hands and knees through the passage (5 on the ground plan), into No. 1, the

original entrance through the passage (No. 4) became choked up.



The badgers now held their revels in these lonely galleries; and having burrowed through the walls of chamber No. 1, in two or three places, by their constant experiments in tunnelling, with the exception of a very small space, they filled that chamber with sand, completely burying the mouth of passage 4, and the platform afterwards described; nor were the rabbits idle outside: they succeeded in filling up the entrance of the passage No. 4, and in raising the ground about it, so effectually, that the lintel-stone of the entrance was more than eighteen inches underground.

While on a visit with my cousin, the present proprietor of Doon, in the month of September, 1859, we both agreed to thoroughly clear out and explore these interesting remains of the architecture of a race who, although they have left behind them no trace of their language, have written in stone the history of their modes of fortification, sepulchre, and, it may be, of their domestic dwellings or store-houses. We commenced with the chamber No. 1, and, as all the gravel which had accumulated inside had to be removed through the narrow low gallery (No. 5, ground plan), on a little wheeled truck, the process occupied nearly three days, during which time upwards of twenty tons of gravel and sand were taken out. We carefully repaired the walls where broken through, and at last our labours were rewarded by beholding the full extent and proportions of the chamber.

We found, at the northern extremity of the first chamber, a very curious structure, which has never, as far as I can learn, been found in similar chambers, being a platform, of the dimensions indicated on

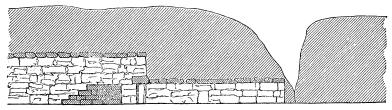
¹ See a somewhat similar arrangement for defence, or concealment, occurring in rath chambers, as described and illustrated by T. L.

Cooke, Esq., Parsonstown, in the "Transactions" of the Society, vol. i., first series, pp. 294-7.—Ed.

the ground plan, approached by four narrow steps; and cut into this platform, as it were, was the mouth of the passage or gallery (No. 4, ground plan). The length of this chamber, from end to end, is 33 ft., 7 in.; being, not a perfect parallelogram, but a segment of the circumference of a very wide circle, its width varies, being but 5 feet at the end next the platform, while it is 6 ft. 9 in. across the opposite end; that its present height, 5 ft. 8 in., is within an inch or thereabouts of the original height, may fairly be presumed, from the fact that although we carefully searched for it, we could find no trace of a fifth step to the platform. The walls are splendid specimens of Cyclopean masonry, being composed of stones of various sizes and shapes, in some cases fitting closely to each other, in other places small stones are wedged between larger ones, to retain the latter in the perpendicular; there is not a trace of mortar or any cement having been used. The side walls are about three feet thick; but to the roof the attention of the visitor is at once attracted. formed of enormous stones, some of them 9 feet in length, and 5, or 6 feet in width, resting on other huge stones, which project, on the average, 2 feet from the side walls; and over the junction of each pair of the larger stones another huge flag lies; this construction appears at the place where the roof of the chamber No. 2 is broken through at the dotted lines on the ground plan. From time immemorial a trench (No. 3 on the ground plan), has existed; but before we commenced to excavate it, it appeared scarcely credible that any connexion existed between it and chamber No. 1. But on digging down some five feet, we came to and cleared out the entrance of the gallery I have before mentioned, as running up to the platform in No. 1 chamber; having removed the hard gravel which choked up this gallery, we found it to be 8 feet 9 inches in length, 2 feet 3 inches high, and the same in breadth; the roof of this passage is constructed of stones of equal size to those forming the roof of the chambers. In consequence of the space left in the construction of the platform, a man entering by the gallery, on his hands and knees, can easily mount up upon the platform, and so descend into chamber No. 1.

The construction of this mode of access will be more easily understood by glancing at the sectional elevation of the platform given at p. 225, where is shown the immense size of the lintel-stone, which forms a projection, on which, if a heavy flag were placed, covering the aperture, all entrance to the chamber might be effectually prevented. No trace of niches in the walls appeared, nor did we find any traces of remains of any description, save a few very minute bones, most probably those of rabbits; nor is there any tradition in the neighbourhood of anything having ever been found in the chambers. "A quantity of" brass money," of King James the

Second's coinage, was found some years ago within this rath, not far from the entrance broken into chamber No. 2.



Section on A, B.

We next directed our attention to chamber No. 2, on ground This chamber had never been filled up to the degree the other had been: its construction is exactly similar to that of the chamber just described. A similar platform presents itself, with the same mode of entrance into the gallery leading to the other The measurements are almost identical, as will be seen from the ground plan. The stones composing the roof are somewhat larger—one in particular, forming the extreme eastern end, is at least 10 feet long and 7 feet wide, and 2 feet thick. enormous size and weight of the roof-stones was fully demonstrated when clearing out the debris where the roof had been broken in: for ten strong men with great difficulty were able to raise onehalf of a roof-stone, which we split before attempting to remove it. When these stones were raised, and carefully removed to the summit of the rath, a cry was raised that another gallery was discovered; and then, for the first time, we became aware of the existence of the gallery marked No. 6 on the ground plan. Its entrance was exactly similar to that into chamber No. 2. We set to work to clear out the gravel with which it was choked, with all the eagerness of adventurers discovering a vein of gold, but were doomed to meet with a sad disappointment; for we found that the gravel ran in as fast as we cleared it out, from some point about 5 feet from the mouth of the gallery. On dipping down outside, we were able to run down a crowbar into the passage; and as, after a most careful search, we could find no trace of a stone roofing to the passage beyond some 5 feet, we abandoned the attempt to explore this gallery. Unfortunately it seemed to terminate under the huge mass of gravel which had been thrown out of the chambers; so that for the present all explorations in that direction were discontinued. We then turned to the open trench No. 3, on the ground plan, and excavated it to the level of the floor of the gallery No. 4, and in length for some 25 feet, until we came to undisturbed soil. We found no trace of any end wall; but we found that this trench had evidently been once lined with stone walls, exactly similar to those of the chambers; but we came upon no stones of equal size with those forming the roofs of the latter, nor any trace of a platform.

Is this stone-lined trench to be viewed as a third chamber, dismantled of its roof? For, if not, can we presume that the Firbolg, or Tuatha de Danaan architects expended so much labour in lining with stone an uncovered passage to the entrance of chambers which, whatever their use may have been, were evidently intended to be concealed? Yet there is no local tradition of the roof-stones having been used for any building purpose. There are no large stones in the immediate neighbourhood of this rath; and as all the stones are a hard sandstone grit, they could not have been burnt for lime. Again, assuming that this trench was once a complete chamber, into which access could only be obtained through the gallery No. 4, and that it formed the last and most remote of the series, to which the entrance would then be through the newly-discovered gallery No. 6, the whole construction of the two platforms, as regards defence, would be thrown away; -nay, more, the platforms could be converted into means of blockading the occupants of the chambers. Therefore I trust your readers will be able to offer some suggestion as to the probable use of this stone-lined trench, as I confess I myself have not been able to arrive at any satisfactory conclusion regarding its purpose. As to the particular object for which these chambers were constructed,—in the first place, it seems clear that they were not constructed for sepulchral structures, for reasons very clearly given by that eminent antiquary Mr. W.R. Wilde, in his work, "The Beauties of the Boyne and Blackwater," at page 114 of which, when describing some ruins in the neighbourhood of Clady, county of Meath, he says:—

"In an adjoining plantation, and not above a stone's-throw from the church, were lately discovered two subterranean chambers. Each of these crypts is formed entirely of unhewn stones, arranged in the shape of a bee-hive dome, but without mortar or cement, the arch being formed by each tier of stones projecting somewhat within, or beyond that beneath, and the summit completed by a large flag, the whole structure being preserved by the pressure and weight of the surrounding earth; for these chambers are quite below the surface; and it was owing to the accidental circumstance of a cow having pressed in one of the stones, that a knowledge of their existence was discovered. The first chamber is 9 feet broad, and the walls are not indented with niches or minor crypts. From the floor to the summit measures upwards of 9 feet; but owing to the drifting of some fine sand into the interior of these chambers and passages, their apparent altitude is much less. A small quadrangular passage, 9 feet in length, 21 high, and 3 broad, and roofed with large flag-stones laid upon the flat, runs in a northerly direction to another chamber, exactly similar in every respect, but without any other passage leading from it. From the first chamber a second gallery branches off in a westerly direction, to a distance of about fifteen feet, where its dimensions increase considerably; but from the roof having fallen in, it is not possible at present to investigate it much further. We understand that these chambers were found in this condition when first opened, a few years ago, and did not contain either weapons, ornaments, or any animal remains, which could in any way assist us in pronouncing upon their probable use. Still the antiquary will speculate upon the purposes for which such structures were erected, their ages, and the people by whom they were built. They differ from the sepulchral caves, in that the dome springs directly from the floor, and not from a course of upright pillars, such as we find at New Grange, Dowth, and elsewhere; and in not possessing niches, or minor chambers, which some of the smallest of those latter do, as that in Netterville Park, to which we shall presently allude. The stones are also much smaller, and totally devoid of carvings; and the existence of passages from one to the other, as well as these chambers being sunk in the earth, and not surrounded by a distinct mound of clay or stones, serve to distinguish them from those of the sepulchral class. There can be little doubt that they are to be referred to Pagan times, before the use of the arch, or the advantages of mortar, were known, and were probably employed by some of the very early people of this island as places of security, temporary habitations, and granaries, for which latter purpose their dryness well fitted them. The two chambers and the passages just referred to are, in all probability, but portions of a large collection of other souterrains adjoining; and some elevations of the ground in the neighbouring plantation, which have a remarkably hollow sound, lend probability to this conjecture. It is not unlikely to have been a troglodyte village, used as a granary, as well as a hiding-place, by some of our Firbolg or Tuatha de Danaan aborigines. Several subterranean chambers and passages, some of them similarly constructed, exist in Connaught and Munster; they are generally found in the raised embankment, or within the precincts of an ancient fort or rath, and are by the peasants invariably attributed to the Danes, although we have no authority whatever for such a supposition. Within some of these have been found quantities of animal remains, those of goats and oxen in particular,—quantities of charcoal, and very often small tobacco pipes. Sir Thomas Molyneux gave a very accurate description of these caves and galleries, upwards of 120 years ago."

I here append Sir Thomas Molyneux's observations, made in his "Discourse concerning the Danish Mounts, Forts, and Towers in Ireland," published, together with Boate's Natural History of Ireland, in 1726. Having described those raths which were evidently intended for places of sepulchre, such as those at Dowth and New Grange, he proceeds:—

"Many of the larger sort have caves contrived within them, underground, that run in narrow straight long galleries; some of these above 26 feet in length, 5 in height, and as many broad. These make several returns, and join to one another in almost right angles. Where they meet, the passage is enlarged, and at the corners form a sort of closets, that are square in some mounds, and in others round. The walls and

sides of these galleries are made of stones laid flat on one another, without any mortar to join them, like our dry walls; and the passage is covered above with flag-stones laid across, that rest with their ends on the sidewalls, which, being underground, and no ways exposed to the weather, are very durable, and far less subject to decay, than the strongest walls of lime and stone. These close and hollow passages, lying underground, so straight and small, without all light, could never be designed to accommodate men, nor can we anyways suppose them fit for their reception; so that they must have been constructed for the convenient disposal only of their stores, their arms, provisions, and such warlike necessaries, that here lay secure from weather, and at hand, still ready for their use, and under such guard that kept them safe from their enemies."

A remarkable identity in the proportions of the connecting galleries described by Dr. Wilde at Clady, with those that I have mentioned, will be observed. There are but a few inches difference; but there is no mention of any such novel feature as the platforms which appear in the Doon caves; which, from the peculiarity of their construction, would enable the inhabitants of this rath to make a last stand against their enemies, or would enable the wives and children of the garrison to defend themselves, if surprised, during an expedition of their husbands and fathers to fill their larder from the herds of some neighbouring enemy. I have been informed that near Dysart, not far from Mullingar, there is a complete subterranean village, consisting of upwards of ten bee-hive-shaped chambers, each enclosed by a long narrow gallery; and that, in consequence of the rath under which they lay having been cut away, they are now all exposed to view. It was at one time intended to use their materials in building, but happily a sting of remorse (if not some much less worthy motive) stayed the destroyer's hand; but it is to be feared that they will not long remain perfect.

In one of the roof-stones in chamber No. 1 occur faint flutings, exactly similar to those appearing on one of the stones in the gallery leading into the celebrated tumulus at New Grange, Co. Meath; but, like the latter, appear to have arisen from long-continued action of water or the atmosphere (see woodcut, p. 194, "Beauties of the Boyne and Blackwater"). It must be observed that, in addition to having the platform within them, the Doon caves are of unusual shape and size. The labour employed in their construction must have been very great; for, besides the ignorance of mechanical powers, which must have existed at that distant period, every one of the huge stones used in these chambers had to be conveyed a distance of upwards of one mile and a half in a straight line, as at that distance from the rath, and there alone, a thick crop of these sandstone boulders has been sown by some glacier which grounded on an esker, or ridge of limestone gravel. But in that far distant era a lake covered nearly all the intervening country, as would appear from

the discovery there of a long canoe, formed out of a single tree, eight feet below the solid clay, during the execution of drainage works some ten years ago. Now, it is not likely that the shipwright who built his canoe out of a single tree would know how to build a raft capable of floating stones and rocks so large as those described. It is far more probable that the stones had to be conveyed by land, by a route at least three miles long, crossing the head of the ancient lake, at a place where, until lately, a very old bridge stood, over the now narrow streamlet which once fed the lake. That a ford of some sort existed here in very early times may reasonably be inferred from the name of a village about two hundred yards distant from the site of the present bridge. Togher is the modern designation of this hamlet, and Togher in the Irish means a "causeway." The bringing of these stones to the top of the rath, which is very high and steep, imposed a further task; and unless they filled the trenches with clay, and having dragged, or rolled, the roof-stones into their proper positions, then excavated them afresh, it is very hard to conceive by what mechanical process these chambers were built, in so barbarous and rude an age.1

Many raths in the neighbourhood sound hollow, when struck with a crowbar; and the name "Doon," i.e. "cave," [Quære, ED.], points to the existence of caves in this locality, either of such size, or

in such numbers, as to give a title to the townland.

I trust that this narrative may elicit from the members of the Kilkenny Archæological Society some suggestion as to the uses of the platforms I have described, or some statement as to whether any person has witnessed or heard of similar features in subterranean chambers. If it does so, or that any reader, before uninterested in the preservation of these specimens of domestic architecture of the race who built for war the massive circular fortresses in Kerry and in Arran, shall henceforth seek to preserve the rath, as well as its contents, one of the principal objects of this communication will have been accomplished.

THE OGHAM "ROSETTA" STONE.

[The following paper, with its illustration, is copied, by permission, from that admirably conducted publication, the "Archæologia Cambrensis," third series, vol. VI. pp. 128-36, in order that the Members of the Kilkenny and South-east of Ireland Archæological Society may have before them a record of this valuable landmar

¹ Mr. Mooney has taken every means to intends to pursue the investigation of galpreserve these chambers from injury, and levy No. 6, and to explore the entire rath