

NOTICE OF THE EXCAVATION OF A CIRCULAR CHAMBER AT  
TAPOCK, IN THE TORWOOD, STIRLINGSHIRE.

By BRIGADIER-GENERAL LEFROY, R.A., F.R.S.

ABOUT five miles west of the Forth at Airth, and three miles north of the Wall of Antoninus (Graham's Dyke) in Stirlingshire, there runs a low range of sandstone hills, terminating at the northern extremity in an eminence locally known as Tapock, and which commands an extensive view to the north, east, and west. Its actual elevation above the Forth is 396 ft. At this point, which may be described as a hillock, about 110 ft. in diameter at the base and 70 ft. by 50 ft. across at the summit, there had long been observed an opening on the surface some 4 ft. in depth, exhibiting on two sides a rude wall of large moss-covered stones, on a third side a narrow opening crossed by two large blocks of stone, like the lintel of a doorway. The rest of the surface of the mound bore a luxuriant growth of heather and whortle-berry plants, with a conspicuous group of Scotch firs on the northern side. One of them had been blown down, and in its fall shown that it was rooted over a confused mass of large loose stones. A Roman road is marked on the Ordnance Map (Stirlingshire, Sheet XXIII—IV) as passing very near the spot, but is not easily recognizable. Torwood<sup>1</sup> itself, however, is a very ancient physical feature of that region. Thus, we read in Barbour's poem :—

“ Leave I the Bruce sore moved in his intent,  
Good Wallace soon again to his host went  
In the Torwood, which had their lodging made,  
Fires the bait, that was both long and braid,  
Of nolt and sheep they took at sufficiency,  
Whereof full soon they got their sustinence.”

<sup>1</sup> Choill = wood, tor = eminence: Choill-tor—the Gaelic name.

The ruined baronial residence in the wood, although probably considerably later in date than the thirteenth century, is called Wallace's Castle, and may mark the site of some residence of his.

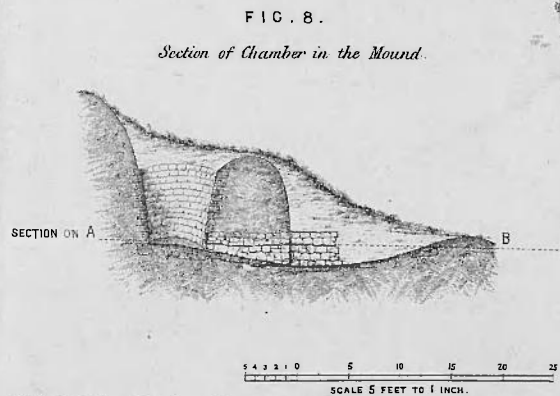
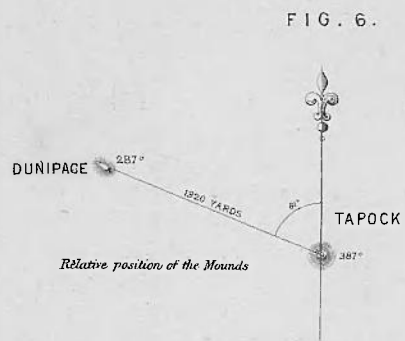
At this spot, in August 1866, the proprietor, Lieut.-Colonel Dundas of Fingask, commenced excavations, which were immediately rewarded by the discovery of the flight of steps shown on the plan, the opening having been fortunately at the adjacent angle,  $\kappa$ .<sup>2</sup> The passage,  $\kappa$  L,  $11\frac{3}{4}$  ft. long, was then cleared out, and the point reached at which the trending of the walls to right and left showed that a large chamber was entered. Here the labour of getting out large stones from a depth of nine feet was found so great, combined also with a good deal of risk to the workmen, that the plan of operations was changed, and the excavation commenced at the top. They resulted in the unexpected discovery that the hillock, or at least the upper portion of it, is entirely artificial, and in the disclosure of a nearly circular chamber, 106 ft. in circumference, which occupied it.

The accompanying plan shows the exact form and dimensions of this chamber.<sup>3</sup> The steps, at E, ten in number, enter from the slope of the mound, and descend 4 ft. 3 in., to the general level of the floor. There are indications at the corner of convergence in the upper courses of stones, which make it doubtful whether the passage was flat roofed or vaulted, but two top stones spanning it remain *in situ* near the entrance to the chamber, forming the apparent doorway of fig. 5. To span the passage securely, the stones must have been at least 4 ft. long, and as none such were got out, it seems probable that the passage was stepped over. Thirteen feet to the right of this entrance, another passage was discovered, 4 ft. 8 in. wide in the widest part, but contracting to 2 ft. 10 in., 9 ft. high, and nearly 18 ft. long. It followed the natural slope of the east side of the mound, descending 3 ft. to a true doorway which was doubtless the main entrance to the chamber, and is on a scale that may be called grand. It is shown in the accompanying illustration. Each jamb side-post is a single stone; the

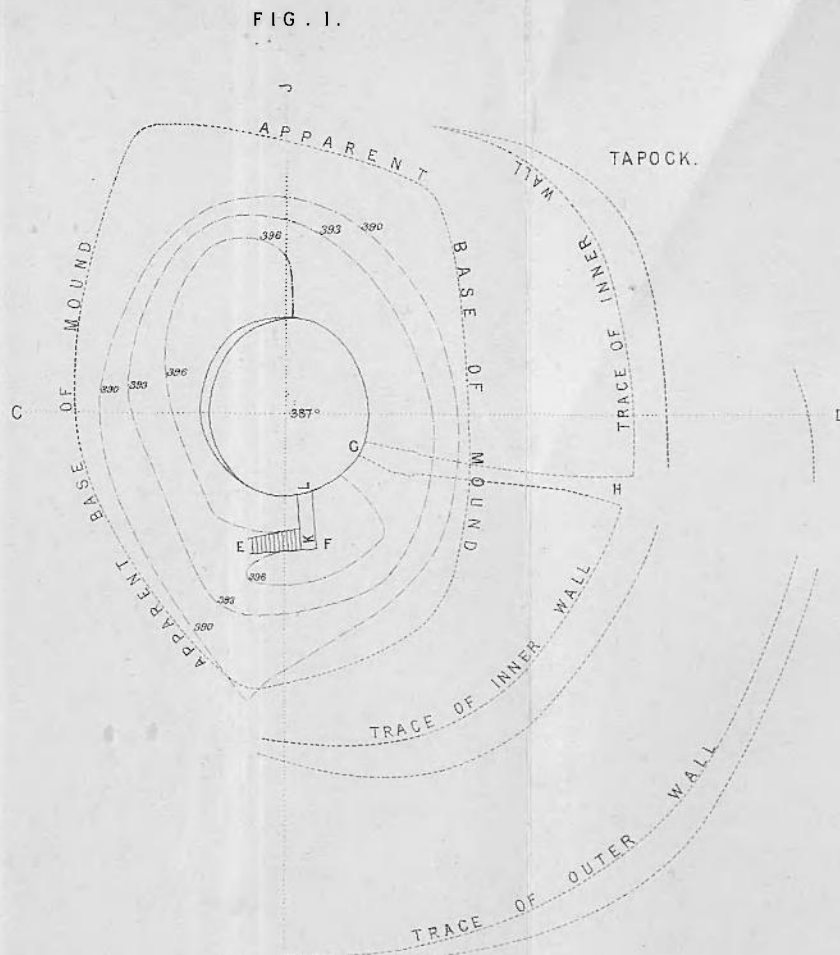
<sup>2</sup> A memoir on this excavation was communicated in March, 1865, by Col. Dundas to the Society of Antiquaries of Scotland, and it has been printed in their

Proceedings, vol. vi. p. 259.

<sup>3</sup> The scales upon the plan refer only to the sections.



*See also p. 36, Old Torry, E.C.*





Interior view of the doorway leading from the passage and steps, Tapock.

From a drawing by Col. Joseph Dundas, F.S.A. Scot.

one on the left is 6 ft. 6 in. high, the one on the right 5 ft. 7 in., each about 17 in. square; the larger therefore contains nearly a ton of stone. A stone 14 in. thick is added at the top of the latter to gain height, and then the whole is spanned by a massive lintel about  $5\frac{1}{2}$  ft. long, 10 in. deep at one end and 16 in. at the other. This fine feature is represented in the section, fig. 5. The passage, always descending, continues 10 ft. further, and runs out at the foot of the mound opposite an opening or depression in the boundary wall, which seems to have been the exterior gate of the position.

Nine inches from the stone door-posts, at 3 ft. from the ground, there is a rude bolt-hole in the wall on each side; the one on the left runs back 6 ft., and evidently contained a stout bar, but it is not so easy to guess the nature of the barrier it closed: the space suggests a rude door of young trunks of trees bound together perhaps with withes; but there is no appearance of any fastening of hinges, therefore we may suppose that it was only closed in time of danger.

The architecture of the chamber is of a primitive description: blocks of the readily cleavable sandstone of the neighbourhood are laid without any kind of cement, and with little attention to the fitting of joints, in about nine courses; the largest are  $3\frac{1}{2}$  ft. long, and 1 ft. thick; at intervals of 3 or 4 ft., sometimes on one course sometimes on another, two stones are purposely separated a few inches to form a notch. Of these recesses there are nineteen, but all were empty. The only noteworthy feature was the circumstance that the wall from E to K is not in one plane, the upper portion falls back about one foot behind the lower. The courses of this upper portion were so regular, and the face so perfect and vertical, that it does not appear as if a facing of stone had fallen in, still less as if the upper courses had been thrust back, which could hardly have occurred without disturbing them. With respect to the roof, I see no way of avoiding the conclusion that the whole chamber formed one vault, startling as it appears, when we consider the span of it and the consequent height. It may, however, like Arthur's Oven, have been open at the top, which would very considerably diminish the height.<sup>4</sup> Not the slightest

<sup>4</sup> Arthur's Oon or Oven, of which no trace now remains, was on the river Car-

ron about 3 miles to the N. E. of Tapock, and is described by Gordon in the *Itine-*

appearance of divisional walls was detected, or of columnar supports. The entire chamber was filled to the level of the ground with flat stones intermixed with a great deal of small rubble, such as would be used for filling in, the whole amounting to at least 400 tons; and it was observable, wherever the operation exposed a section, that many of the stones inclined inwards and downwards to the centre, as would be the case if the vaulting caved in at about half its height. Upon this supposition, the interior height cannot well have been less than 40 ft.; but it will be remembered that the New Grange chamber, in Ireland, measuring only 15 ft. across, is 20 ft. high. The immense weight of the stone, which can only have come from the roof, precludes the idea of wooden supports, which are, besides, unknown to these structures; the fate of Damocles would be enviable compared with that of a Celt with 400 tons above his head depending on wooden props.

The excavations of the chamber were nearly unproductive of interesting remains. Among the stones three were found incised with circular markings nearly resembling those to which Dr. Collingwood Bruce, Mr. G. Tate, and Sir J. Simpson, have directed attention.<sup>5</sup> They appear to have been *in situ* on the rock from whence the stone was quarried, and, if this point could be established, would tend to prove that they were the work of an earlier race than the builders of the chamber, and one whose monuments had ceased to be respected: the exact position in which they occurred among the *debris* was not identified. It may here be mentioned that the excavation, which occupied a month, was conducted

rarium Septentrionale as a Roman sacellum for the custody of the Ensigns of the Legions. It was "made without cement, but so composed of rough stones that part of every upper one is in a manner locked within the lower, so that the whole work mutually joined supports itself by the weight of the stones from top to bottom, growing narrower by degrees from below towards the summit, where the fabric is open." Quoted by Gordon, p. 27, from Buchanan's Hist. Scot. I.

Arthur's Oven was 19½ ft. in internal diameter, and 22 ft. high. The aperture at the top was 11½ ft. in diameter. Arthur's Oon, corruption of the Gaelic Ardhe-nan-Suainhe: Ardhe = Locus excel-

sus: Suainhe = Insignia. Arthur's Seir, between Murray and Ross = Ardnan Seir. Arthur's Seat. Ardhe-nan-Saidhè, signifying a convenient high ground to shoot from with bows and arrows. Gordon, p. 31.

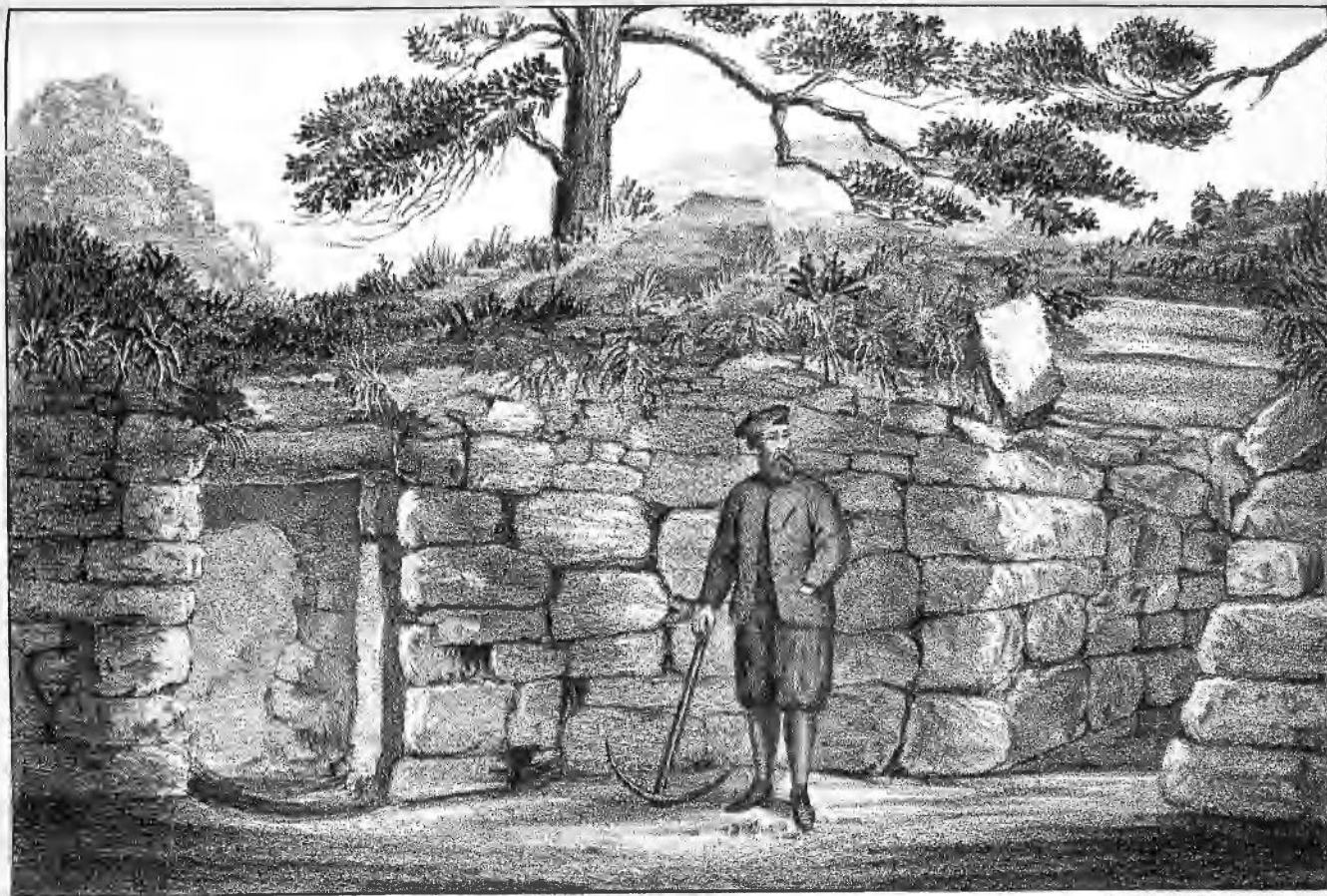
<sup>5</sup> The subject was first brought before the Institute by Dr. Bruce, Dec., 1863; Arch. Journal, vol. xxi. p. 87. See also Ancient British Sculptured Rocks of Northumberland; by George Tate, F.G.S., Alnwick, 1865. Archaic Sculpturing of cups, circles, &c., upon rocks in Scotland, and other countries: by Sir J. Y. Simpson, Bart., M.D. Edinburgh, 1867; an Appendix to the Proceedings of the Antiquaries of Scotland, vol. vi.





Interior of the Chamber, Tapock.

From a drawing by Col. Joseph Dundas, F.S.A. Scot.



*W. H. Sturt, del.*

*Shedden & Co. Litho. 46, Ab. St. N.Y.*

INTERIOR OF THE CHAMBER AT TORWOOD SHEWING THE DOORWAY.



by a very intelligent bailiff, and visited nearly every day by the writer or the proprietor. It is scarcely possible that interior walls, such for example as those of the Picts' House



Querns, balls, and stones marked with circles. Found near the centre of the floor.

at Kettleburn, could have escaped detection, or that any vertical fall of material from above could have obliterated them. The face of the wall exhibits no signs of the bonding in of cross walls, being perfectly smooth and continuous.

About a handful of small bones in a very decayed state were collected. The floor towards the centre exhibited clear marks of fire, consisting of burnt clay mixed with a little charcoal. Two iron axe-heads were found, of which one may have been of an ancient period. One pair of querns, and three single stones turned up among the *debris*; some small fragments of coarse pottery, three or four clay saucers of the rudest kind, egg-shaped stones, mostly formed of pudding stone, three whorls, such as are used with the distaff; some perforated clay-balls, a perfectly good and polished hone-stone, and last, not least, a perforated slate marked with scratches which suggest the idea that the matrons of the period sharpened their needles upon it.

It is, I think, clearly shown that the builders of this structure had the command of metallic implements. The large door-posts, and many other masses, are too regularly shaped to have been cut in any other way; but a more convincing proof is afforded by one of the large stones of the *vallum*, which has four deep notches in it, evidently cut preparatory to splitting it; three of them are in one line,

the fourth is at right angles to it. They are all precisely of the size and shape which would be cut by an ordinary kelt or palstave, and could not have been cut by any sort of stone implement. The work seems connected with a line of similar works running parallel to the wall of Antoninus, at three or four miles distance, and has all the character of a frontier fort, or defensive retreat. But the Pictish frontier was far in advance of this line in the fifth century, and behind it in the second. It seems, therefore, legitimate to conclude that it belongs to the period between A.D. 170 and A.D. 426, when the British held this line, and that it was constructed by workmen who had learned their art from the Romans.