THE ROUND TOWER OF ABERNETHY, WITH DRAWINGS. BY RICHARD ROLT BRASH, Esq., Architect, Cork.

The town of Abernethy, in Perthshire, is situated at the foot of the Ochil Hills, that bound Strathearn on the south. It lies close to the railway station, from whence can be seen its ancient Round Tower, rising gray and melancholy above the glaring red-tiled roofs of the surrounding houses, its old familiar form looking to me like a timeworn exile in a strange land.

Abernethy is a burgh of barony under Lord Douglas, coming in place of the Earls of Angus. It has a charter from Archibald, Earl of Angus, dated August 23, 1476, which was confirmed by charter of William, Earl of Angus, bearing date November 29, 1628. The "Pictish Chronicle" has ascribed the foundation of Abernethy to Nethan I. A.D. 458, in the third year of his reign; the Register of St Andrews to Nethan II., about A.D. 600. Fordun and Wintoun assign it to Garnat, or Garnard, the predecessor of Nethan II. Abernethy existed as a royal seat before Christianity; for we are informed that Nethan sacrificed to God and St Bridget at Abur-ne-thige, and that the same Nethan, king of all the provinces of the Picts, gave as an offering to St Bridget Abur-ne-thige till the day of judgment.

Bede informs us that Nectan III., A.D. 711, wrote to Ceolfred, Abbot of Jarrow in Northumberland, asking for architects to build a church, which was to be dedicated to St Peter; Ceolfred complied with his request, and despatched competent architects, who erected a church after the Roman manner.

Abernethy was the seat of an episcopal see. Kenneth II. translated it to St Andrews. The Culdees, according to the Priory-book of St Andrews, had a college here; A.D. 1273 it became a priory of Canons regular from the abbey of Inchaffray. It has been said that the Highlanders call this place Obair-Nechtain, i.e., the work of Neachtain, or Nectan, but the name is more probably derived from the confluence of the Nethy with the Earn, which takes place a short distance from the town; Abernethy, the confluence or mouth of the Nethy. Camden mentions Abernethy thus: "At the confluence of the Earn and the Tay, the Tay becomes wider, and views on its bank Aberneth, anciently a royal and populous city of the Picts, which, as we read in an old fragment, 'Nectan, king of the Picts, gave to God and St Brigit till the day of judgment, with its bounds reaching from a stone in Abertrent to a stone by Carsul, i.e., Loughsol, and then quite to Ethan.'"

In the "Historia Brittonium" of Nennius, as edited by Dr Todd for the Irish Archæological Society, I find the passage as follows, page 161: "Nectan-mor-breac, son of Eirip xxxiii., annis regnavit. Tertio anno regni ejus Darlugdach abbatissa Cille-Dara de Hibernia exulat pro Christo ad Brittaniam [secundo] anno adventus sui immolavit Nectonius anno uno Apurnighe Deo et santæ Brigidæ præsentæ Darlugdach quæ cantavit alleluia superistam [hostiam]."

Upon this passage the editor has the following note: "The statements which follow are false and out of chronology; Pictland and Abernethy were not then Christian, nor was St Bridget yet born, nor was Darlugdach yet Abbess of Kildare. Very long after the death of both these ladies, and about 608, Nectan II. founded the church of Abernethy. 'Register of St Andr.' cit. Pink. i. 296; ii. 267. Fordun (iv. c. 12) ascribes the foundation of Abernethy to St Bridget and her seven virgins, but places it in the reign of Garnard Makdompnach, the successor of the Bruide, in whose time St Columba preached to the Picts, which is, of course, more probable."

The Round Tower.

This ancient and very curious structure has been but slightly noticed by Scottish antiquaries and topographers. The first mention I can find of it is by Gordon, in his "Itinerarum Septentrionale." Lond. 1727. He writes, "I went directly to Abernethy, the ancient capital of the Pictish nation, to see if I could find any traces of the Picts hereabouts, but could discover nothing except a stately hollow pillar without a staircase. so that when I entered within and looked upward, I could scarce forbear imagining myself at the bottom of a deep draw-well. It has only one door or entrance facing the north, somewhat above the basis, the height of which is eight feet and a-half, and the breadth from jamb to jamb two and a-half. Towards the top are four windows, which have served for the admission of light; they are equidistant, and five feet nine inches in height, and two feet two inches in breadth, and each is supported by two small pillars: at the bottom are two rows of stones projecting from beneath, which served for the basis of a pedestal. whole height of the pillar is seventy-five feet, and consists of sixty-four rows, or regular courses of hewn stone; the external circumference of the base is forty-eight feet, but diminishes somewhat towards the top, and the thickness of the wall is three feet and a-half. This is by the inhabitants called the Round Steeple of Abernethy, and is supposed to be the only remains of a Pictish work in these parts."

Gough, in his additions to Camden, gives but a meagre notice of Gordon's description.

Grose, "Antiquities of Scotland," vol. ii. 683, gives a short account of Abernethy, and repeats Gordon's notice and measurements of the tower; he gives two plates, which show the tower what it is at present, a nearly undiminished pillar without any roof covering.

Chalmers, in his "Caledonia," vol. i., Lond. 1807, says, "At Abernethy, in Strathearne, the supposed capital of the Picts, there is a very ancient church, which was built in an age that is beyond memory; but while its origin defies conjecture, it was certainly dedicated to St Brigid by the command of the zealous Neaton. There is here, also, as well as at Brechin, a round tower of great antiquity and of very remarkable proportions, being 8 feet 2 inches in diameter and 72 feet in height."



X

Mr David D. Black of Brechin, in his valuable and interesting history of that place, gives a much more accurate and faithful description of Abernethy Tower than any of the preceding writers.

The "Ulster Journal of Archæology," 1857, page 210, gives a short but truthful account of the Towers at Abernethy and Brechin from the pen of Dr Wise, F.S.A. Scot. Such of the above writers as have expressed any opinions on the origin and uses of these mysterious structures, have generally adopted some one or other of the theories put forward by the Irish School of Archæologists who have written on the subject.

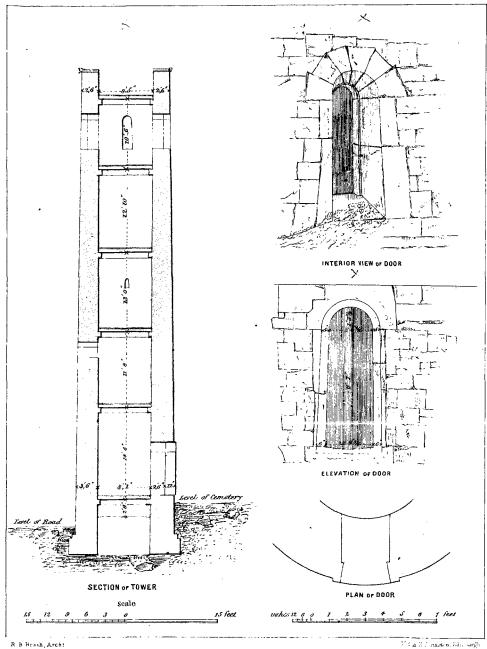
The Round Tower of Abernethy stands nearly in the centre of the town, and in the angle of the cemetery of the Established Church, adjoining the entrance gate. It is partly in the graveyard, and partly on the narrow road leading up to the sacred edifice.

The first glance showed me that this tower is wanting in that graceful symmetry of outline which is the distinguishing characteristic of the Irish examples, the entasis being exceedingly slight—in fact, from the sills of the attic windows upwards there is none, but rather an appearance of outward inclination, which all slight and lofty structures have that are not carried up with strict attention to that taper, or, as it is technically called, batter, which is known by practice to obviate such optical illusions. (See Plate XXXII.)

The above appearance is particularly observable approaching the tower from the Railway Station. It is also to be noticed, that there is a considerable difference of level between the roadway and the cemetery, the former being some feet lower at the outside base of the tower than at the side of the doorway, which is inside the graveyard.

The masonry of the tower, both external and internal, is composed of hammer-dressed ashler, in courses varying from twelve to sixteen inches in height, the beds horizontal, and joints vertical: the stones are dressed to the curve, both outside and inside.

It is to be remarked, that for about twelve courses in height from the external ground line, the material used is a hard, gray sandstone, little injured by the weather, while the remainder of the edifice is of a bright buff-coloured freestone, much weather-worn at the joints, and arrisses, which are pinned and spalled in many places. Strange to say, the



ROUND TOWER AT ABERNETHY.

internal masonry is even much more weather-worn and dilapidated than the external, for which I cannot account; every stone is more or less disintegrated, many of them to a depth of nine and ten inches; numbers have the whole surface of the block worn away to a depth of three and four inches.

In the upper part of the tower, there is an appearance of two vertical cracks, which were pinned up with red spawls and mortar; the masonry also in various parts has been pinned, particularly a large breach at right-hand side of doorway.

In passing judgment on the workmanship of those ancient structures, we must always make allowance for the weather-wear of age. Masonry that was finished clean, sharp, and neatly wrought from the hammer or chisel of the workman, will naturally, after the lapse of from thirteen hundred to two thousand years as the case may be, have a very different appearance. Joints originally close and tight will, from the action of rain, frost, and wind, become open and gaping, owing to the wearing away of the arrisses of the stone.

I noticed only one block of red sandstone in the base of the tower, at which side, and close to the Kirk-gate, fastened into the stone work, is an iron joug or pillory, with a huge padlock attached thereto.

The height of the tower at present, measured from a flat stone at its base on the road side to the top of the present coping, is 72 feet. Gordon, in his "Itinerarium Septentrionale," states the height to have been 75 feet; and he may have been right in his time, as I have no doubt a portion of the tower base has been covered by the accumulation of the road material in constant repairs.

The thickness of the walling at the side of doorway I found to be 3 feet 6 inches; and the internal diameter, as near as I could judge, owing to the dilapidation of the masonry, 8 feet 1 inch. The circumference of the base, owing to the inequality of the ground, I could not take; but allowing the thickness of wall at base to be 3 feet 9 inches, the increase of batter being near three inches, and the internal diameter 8 feet 1 inch, it will give the extreme diameter at the base 15 feet 9 inches, and the circumference, consequently, 48 feet 11 inches.

The diameter at top is 8 feet 5 inches, thickness of walling 2 feet 72

inches, giving the out and out diameter there as 13 feet 8 inches. This, deducted from the diameter e^+ base, leaves 2 feet 1 inch, which divided by two gives $12\frac{1}{2}$ inches, being the batter or entasis from base to summit, equal to one-sixth of an inch to the foot. The entrance faces the north, and the sill is but $2\frac{1}{2}$ feet from the present level of cemetery, which has been considerably raised by interments from time to time, as is evident by observing that the level of ground at base of tower outside the cemetery is over 3 feet lower; I should say the top of door-sill was originally 6 feet over the ground level.

The door has converging jambs, and a semicircular head; width at sill, 2 feet $7\frac{3}{4}$ inches; at spring of arch, 2 feet $4\frac{1}{2}$ inches; height to springing, 6 feet 7 inches; ditto to soffet, 7 feet 8 inches: it has a plain flat band round it externally, $6\frac{1}{4}$ inches wide at base and $5\frac{1}{4}$ at springing: it has a projection of about 2 inches: there is also an external reveal to jambs 12 inches wide; $1\frac{3}{4}$ inch deep. (See Plate XXXII.)

The sill is in one stone much broken; the right-hand side is formed of two stones, the left of three, all thorough stones, but having very little bond in front. The arched head is cut out in one stone, which, however, is very shallow, being no deeper than the reveal; the remainder of doorway is covered by a hammered arch, which has no regular keystone, the interior ring being formed of six stones of irregular widths. The right-hand jamb is perforated with a number of small holes, and one rectangular mortice. They are evidently modern, and were used for shooting the various bolts into, round and square, that from time to time were used in the doors.

I have before spoken of the disintegration of the stone facing of the interior, which exposes the mortar cementing this structure together. It is exceedingly hard and compact, and, like that of many or most of the towers I have examined in Ireland, is composed of shell lime, sand, and pebbles.

The tower being for some time past, and at present, used as a belfry to the Established Church, there are timber floors resting on the old stone string courses which mark the various storeys, with access by ladders from floor to floor. The first string course, and the most perfect, is thirteen inches below the sill of doorway; it is 10 inches deep on face, with $5\frac{1}{2}$ inches projection. I measured the various storeys from top to top of the

string courses respectively. The basement floor, owing to the filling in of the interior, is but three feet under the top of the first string course.

The first storey, then, measures 14 feet 8 inches; the second, 11 feet 8 inches; the third, 13 feet 2 inches; the fourth, 12 feet 11 inches; the fifth, 10 feet 8 inches to the top of last string course; and from thence to the coping of parapet, 5 feet 2 inches; thus the entire height internally is 71 feet 3 inches. These string courses, with the exception of the basement one, are much worn away and dilapidated, in some spots having entirely disappeared; their average dimensions were from 10 to 12 inches deep, and from 5 to 6 inches projection; they are perfectly plain, being without chamfer or moulding of any kind.

Window Opes.—In the second storey facing the south, and 7 feet 5 inches from top of string course, is the first ope, angular-headed, cut out of one stone, 10 inches wide at sill, 9 inches wide under the head, and 2 feet high from sill to apex.

In the third, facing the west, and 7 feet 3 inches above string course, is a semicircular-headed ope, 17 inches high, 6 inches wide, sides slightly converging.

In the fourth, facing east, and 6 feet above the string course, is an ope of similar form and dimensions. These last two are very rudely constructed. Upon this story is placed a clock, the dial of which faces west, for the benefit of the good folks of the ancient borough of Abernethy, thus making the reputed mausoleum of the Pictish toparchs do double duty, as a clock-tower and belfry.

The fifth is lighted by four windows facing the cardinal points. They are semicircular-headed, being 1 foot 8 inches wide at base, and 1 foot $5\frac{1}{2}$ inches at spring of arched head, and 4 feet 9 inches high to springing of arch; they are revealed externally, and were originally ornamented with hook shafts in the reveals. The size of the windows is unusually large, their characteristics more like doors than windows. Only one of them preserves the nook shafts, this feature being worn off in the others; there are no remains of caps or bases. The church bell is hung in this storey, and from the great size of the apertures, answers, I am sure, the purpose very well. Over this is a wooden platform sheeted with lead, and supported on the top string course, above which rises a parapet

coped with stone in slabs, covering the whole thickness of wall and projecting 6 inches externally, finished with an ogee moulding; this coping and the upper portion of the parapet is perfectly modern.

It is worthy of remark, that the materials of which this tower is built are not found in the neighbourhood. The stone composing the Ochil Hills, in the immediate vicinity, is Whin. Tradition states that the building materials were brought from the Lomond Hills, some six miles distant, and that they were conveyed by a line of men stretching from the quarry, over hill and vale to the tower, the stones being handed from man to man. Also we have here a repetition of the legend so current among the Irish peasantry respecting most of the towers in that country, namely, that it was built in one night. This tradition is almost universal wherever there is a round tower. They are sometimes called "Fause-an-aon-oidhche," the growth of one night. This legend I find also prevails in India respecting buildings whose origin and uses are lost in the mist of antiquity.

It is to be regretted that the majority of persons who have written on the Round Tower controversy have not been practically qualified for the examination of these curious structures, and that many others have been uncandid enough to suppress certain particulars in their construction and details because that such points had a tendency to invalidate the opinions which they laboured to establish. On a personal examination of many of the Irish towers, previously described by authors ranking high in the Archæological world, I have been astonished to find how loosely they have been described, and how many important details have been omitted. This fact has determined me on a plan of investigation and description respecting these buildings, which in the present instance I have endeavoured to carry out.

And now, having described this building as it at present exists, it may be expected that I should institute some comparison between the Scoto-Hibernian and the Scoto-Albanian tower. I would first make a few remarks, suggested by my examination of that at Abernethy; and first in its position, standing in a corner of the cemetery partly within and partly without the grave-yard precincts, it is akin to the great tower at Clonmacnoise, called O'Rorke's Tower; to the tower at Clones, Co. Monaghan; to the tower at Kilrea, Co. Kilkenny; to that

at Kells, Co. Meath. The round towers at Cloyne, Co. Cork, at Rattoo, Co. Kerry, and Roscrea, Co. Tipperary, stand outside their respective cemeteries. In all these cases, where the towers are partly in and partly out the grave-yard, the surface of ground inside is invariably raised several feet over the external surface as at Abernethy; the natural inference being, that the towers were erected before the ground was used for ecclesiastical purposes, and that these towers were not looked upon with feelings of reverence, as structures devoted to religious or Christian uses, otherwise they would have been included within the sacred precincts.

Secondly, There are some peculiarities in its masonry. It is built, as before stated, in courses of ashler of various heights; the spaces between the internal and external lining is filled up with a grouting of small rubble, gravel, sand, and lime. Ashler-built towers, hearted with rubble grouting, are found at Aghaviller, Co. Kilkenny; Ardmore, Co. Waterford; Clonmacnois, Queen's Co.; Devenish, Co. Fermanagh.

Thirdly, The extraordinary size of the doorway as compared with those of the Irish towers, its great height and width. The diminutive size of the latter has been a subject of remark and speculation, as for example the semicircular-headed doorway of the round tower of Glendalough is 5 feet $7\frac{1}{2}$ inches high, 2 feet wide at base, and 1 foot $9\frac{1}{2}$ inches at springing of arched head. That of Donoughmore is 5 feet 2 inches in height, breadth at sill 2 feet 3 inches, at springing of arch 2 feet.

That of O'Rorke's, or the Great Tower at Clonmacnoise, is but 5 feet 3 inches in height, 2 feet 5 inches wide at sill, and 2 feet 3 inches at springing; while the doorway of Abernethy is 7 feet 8 inches in height, 2 feet $7\frac{3}{4}$ inches in breadth at sill, and 2 feet $4\frac{1}{2}$ inches in breadth at springing. The doorway of the round tower at Kilmacduagh is the only Irish example that at all approaches in size that of Abernethy; it is semicircular-headed, and of the extraordinary elevation of 26 feet from the ground; it is 6 feet 10 inches in height, 2 feet 10 inches wide at sill, and 2 feet 7 inches at springing of arch; yet this, the largest round tower doorway in Ireland, is fully one foot lower than that of Abernethy, and its unusual size was, I am sure, designed by the builder of this tower to produce an optical effect, as at its great height it looks barely the usual size, whereas if it was constructed smaller it would look diminutive, and out of all proportion.

The head of the Abernethy doorway is semicircular, cut out of a single stone on the external face, and backed with a hammered arch internally. Of semicircular-headed doorways cut out of a single stone, we have examples in the round towers of Glendalough, Co. Wicklow; Killree, Co. Kilkenny; Armoy, Co. Antrim. The heads of all these are thorough; but I know of no instance where the external solid head is backed by a hammered rubble arch, as at Abernethy.

String Courses.—The towers at both Brechin and Abernethy have internal string courses, apparently for the support of the original floors. The provision for the support of floors in the Irish examples are various, sometimes by string courses, in others by offsets—that is, the thickness of the wall diminishing over each storey, leaving an offset, or set off, of from three to six inches. Examples of the latter are found at Clones, Co. Monaghan; Cloyne, Co. Cork; Fertagh, Co. Kilkenny; Kells, Co. Meath; Lusk, Co. Dublin, &c.

Of towers provided with string courses we have Clondalkin, Co. Dublin; Rattoo, Co. Kerry. It is a singular fact that several of the Irish towers have neither strings, offsets, nor corbals. What were the material and description of the original floors at Abernethy, we have no means of judging; I am inclined to think, and there is more than supposition for it, that the original floors of all round towers were of stone, either formed of large slabs tailed into the wall, as at Kinneigh, or constructed upon the arch principle, as at Meelick, Co. of Mayo; Castle Dermot, Co. Kildare; and at the tower on Torry Island, Co. Donegal. At Castle Dermot there is about two-thirds of a floor, and a small portion of another remaining; the portions that remain have very little of the arch character in them, their strength is derived from the extreme tenacity of the cement. It is my conviction that all towers showing string courses and offsets had stone floors. We know well how strongly the Celtic builders, both Pagan and Christian, affected the use of stone in their cashels, their duns, their clochans, or stone-walled and stoneroofed dwellings,—in their pillar towers, their stone-roofed primitive cells or churches, their crosses, &c. It was not even until the Anglo-Norman invasion that they finally relinquished the cherished and age-honoured stone roof, for the timber framing, and copper, lead, or shingle covering

of mediæval times. If we look at our round towers, they are essentially stone structures, stone-walled, stone-lintelled, stone-roofed; the men who built them built for eternity, and would not place perishable wood in so important a position when they knew how to construct floors of stone, and did construct them as I have shown above.

The first string course, both at Brechin and Abernethy, is placed below the sill of entrance door; in the former about 11 inches, in the latter about 12 inches. This is usually the case in Irish examples. It is my firm opinion that this tower has been rebuilt at some time subsequent to its original foundation; my reasons for holding these opinions are as follows:—

First, Because the tower for a height of near 14 feet from its base, or about twelve courses of its masonry, is built of a different stone from the rest, and to a close observer the masonry shows a different handling.

Secondly, Because the body of the tower does not present that symmetry of outline invariably found in all other towers, and particularly so in the other Scottish example at Brechin. This want of symmetry in Abernethy Tower is owing to this fact, that the internal diameter at top is from five to six inches more than at base, whereas it should be, according to the usual proportions, at or near two feet less; thus at Brechin the internal diameter at base is 8 feet, while at the top it is but 6 feet 6 inches; at Clondalkin, Co. Dublin, diameter at base 7 feet 6 inches, at top 6 feet 4 inches. Ardmore Tower, diameter at base 9 feet, at top 4 feet 10 inches; this tower, be it remembered, is 91 feet high. Cloyne Tower, at base 9 feet 2 inches, at top 7 feet 2 inches. Kilkenny Tower, at base 7 feet 9 inches, at top 5 feet 9 inches. These dimensions, taken in connection with thickness of walling and perpendicular heights, give these towers a grace and symmetry peculiarly their own, and which is conspicuously wanting in Abernethy. I have before stated the ratio of batter in this tower to be one-sixth of an inch to the foot: but this latter is not equal all through; it is greatest at the base, and least in the upper parts, as I before explained. The inference is this, that at some remote period the ancient structure became insecure from age, was struck by lightning or injured by storms, perhaps had been lying in ruin for years. It was rebuilt from the twelfth course upwards. A different material was used. Men no longer built for eternity; they had not the sagacity in the selection of material of the old Celtic masons; they chose a softer material, easier worked; they carried up the proportions of the original base to a certain height; they found this would not answer the purpose to which the tower was now to be devoted—it would be too narrow, too confined in the top for bells to swing in; they began to diminish the batter and decrease the thickness of wall, whereby they got a diameter in the attic storey greater than in the basement, and answering the object they had in view.

Thirdly, Because of the disproportion and irregularity of the openings. I have before shown the unusual size of the doorway, comparing it with. the other examples, though the form of this doorway is of ancient character; yet I am of opinion that it is of the same era as the portion of the tower rebuilt, it is also of the same material. In all probability, if the original door was in existence, it was considered too small for the intended uses of the tower, and the present commodious one substituted, perhaps, too, an enlarged copy of the original door. The great disproportion between the door of Brechin Tower and this is remarkable: the former is but 1 foot $10\frac{1}{2}$ inches wide at sill, while the latter is 2 feet $7\frac{3}{4}$ inches; a better idea of the difference of size can be formed when I state the superficial area of the former to be 10½ superficial feet, and of the latter 19 feet, or nearly double. I think I need say no more to prove that this door is not the original one; yet I may add, that the material of the doorway is different from that in the base of the tower, but a similar stone to that of which the upper portion is built.

Fourthly, From the unusual character of the windows. There is but one window ope in this round tower that can be called a characteristic round tower window, and that is an angular-headed one in the second story. As I have before described, windows of this form, and of much the same proportions, are found in many of the Irish towers, as at Cashel, Co. Tipperary, and several others. Two opes, semicircular-headed and of rude construction, the sides nearly parallel, and only six inches in width, are in the third and fourth storeys. Opes of this proportion are not found in any round towers that I have seen; there is nothing like them at Brechin.

The four window opes in the upper storey are, as I before stated, of unusually large size, being $5\frac{1}{2}$ feet high, and 2 feet 6 inches wide externally. No Irish towers exhibit attic windows of any such size; for com-

parison I subjoin the dimensions of some. Ardmore Tower, angular-headed, 3 feet 10 inches high, 1 foot $3\frac{1}{2}$ inches mean breadth. Clondalkin, quadrangular, 3 feet 7 inches by 2 feet. Cloyne, quadrangular, 3 feet 8 inches by 1 foot 4 inches. Many of the towers have even smaller attic windows than those above named.

These windows are externally revealed, and had small columns in the angles. Portions of these columns remain, but no caps or bases. I need not say that the window is of pure Romanesque character, and of the eleventh or twelfth century; we have no example of such a form of window in any Irish towers. Our window opes are apertures of the most ancient and simple forms, angular or semicircular headed, or quadrangular, without reveals, mouldings, or any attempt at ornament whatsoever. The only instance of anything of the kind is in the lesser tower at Clonmacnoise, where the small quadrangular opes have a shallow rebate of about $2\frac{1}{2}$ inches square cut round them, and carried in a semicircular form over the square head. This was evidently an afterthought, and intended to make the simple opes and severe lines of the tower harmonize in some degree with the round-headed architecture of the Romanesque church, subsequently erected alongside of it.

From these peculiarities in the construction of this tower, I am led to the conclusion that a very ancient round tower existed at Abernethy; that at some period between the commencement of the eleventh and latter end of the twelfth century it had become ruinous, either from age or violence, and was then rebuilt as a belfry, the proportions being altered, and the door and attic windows considerably enlarged; the former for convenience of ingress and egress, the latter to aid in the more effectual distribution of sound.

Ample evidence exists that a great number of the Irish examples have been partially rebuilt, and otherwise altered to suit ecclesiastical purposes, as was the one under consideration; and that these reparations have many of them been of a very remote antiquity is incontestable. I shall refer to a few which I can authenticate from a close personal examination; and I respectfully claim for my opinions such consideration as a long practical knowledge of masonry and building construction professionally entitle me to, as well as an extensive personal acquaintance with various buildings of antiquity. The round tower of Agha-

viller, county of Kilkenny, has been altered by the addition of a second doorway, level with the ground, the original door being fourteen feet from the surface, and therefore inconvenient for the purposes to which in mediæval times it was applied.

The same addition was made to the round tower on Scattery Island, as also to Drumiskin, Co. Louth, and to Ram Island Tower, Co. of Antrim, and nearly two-thirds of the height of the tower of Inniskeen, Co. Monaghan, has been rebuilt, the masonry being quite of a different age and workmanship.

Tower at Tulloherin, County Kilkenny.

This tower has been rebuilt from the sills of the attic windows upwards. The material of the body of the tower is a silicious breccia in courses: the portion rebuilt is of limestone rubble work. At the time of this reparation, it would appear that the original four windows were not considered sufficient for the emission of sound, as they then inserted eight rectangular opes. Four of these fell with a portion of the attic storey some time since; the other four remain.

Kildare Tower, Kildare.

The lower part of this tower, to a height of eight feet, shows evidence of great antiquity, being built of granite ashler in courses, looking old and weather-worn; the stones inlocked as in the most ancient examples of Irish masonry. From this to within fifteen feet of the top, the masonry is of coarse spalled rubble, the material a mixture of sandstone and limestone: the upper portion, which is probably modern, has five window opes in the attic, and is embrasured. Here, as at Tulloherin, the restorers increased the facilities for the emission of sound.

Clonmacnoise, Queen's County.

The Great Tower, called also O'Rorke's Tower, and, by the natives, Clogaus-mor, has had two reparations. The tower is original to about one-half its height, the masonry of fine close-jointed ashlar in nearly regular courses. From thence to the sills of the attic windows the work is inferior, the joints wider, and the courses more irregular. The upper part, including the attic windows, is of coarse spalled rubble.

The lesser tower at Clonmacnoise, now connected with a small church of the eleventh or twelfth century, called Teampuil Fineen, also bears positive marks of its appropriation to ecclesiastical purposes. The diminutive chancel was built against the tower, and the lower portion was converted into a sacristy: the original doorway has had its jambs and arch chiselled away, leaving only a few inches of the original arch and dressings. The same treatment has been adopted to the lower window, in order to admit more light; and, last of all, the interior face of wall has been chisselled away to a depth of six or seven inches all round to the height of about six feet.

I could multiply these examples, were it necessary, but I trust the above will be sufficient to show that the opinion I have advanced respecting the rebuilding of a great portion of Abernethy Round Tower at a very remote period is something more than a mere probability.

Legends.

The current legends respecting this tower are as follows:—That it was the work of one night, in Erse Fause-an-aon-oidhche, literally, the growth of one night; that it was erected by the Peyhts, who, towards morning, were about completing the work by putting on the roof, when an old woman, looking out of a window, prematurely frightened them from their work, and it was never completed to this day. The Peyhts seem to be considered as a weird or necromantic people among the peasantry of Scotland, as are that mysterious race, the Tuatha-de-Danans, among the Irish. legends to the above are general throughout Ireland in connection with Thus it is related of the tower on the island of Innisround towers. caltra, in Lough Dearg on the Shannon, that it was built in one night by the good people; that an old woman passing by at an unusually early hour in the morning, and omitting the customary benediction of "God bless the work," so incensed the workmen, that they threw the stones they were in the act of setting down, and killed her on the spot.

A similar tradition exists respecting the round towers at Ardmore, Cloyne, Kinneigh, and several others. At Kilkenny hill, near Dundalk, County Louth, are the remains of a curious structure, called Fas-an-aon-oidhche. It stands on an artificial mound, and is an oval structure

44' 99" by 21 feet: the walls are seven feet thick. (See "Wright's Louthiana.") Several of our towers are traditionally stated to have been erected by a weird personage, called the Gobhan-saor, or Gobhan the artificer. The name is in the mouths of the peasantry all over Ireland, as the builder not only of the round towers, but also of abbies, castles, &c.

Dr Petrie has tried to prove the actual existence of, and age in which the Gobhan lived. His evidence is however conjectural and unsatisfactory; and the fact of several personages named Gobhan being found in Irish history, makes it difficult to ascertain who this legendary builder was, or when he lived. It is certainly food for speculation; the mysterious and supernatural origin attributed to those singular structures in the traditionary lore of both countries, and the almost perfect identity of these legends; nothing (except the similarity of their forms, dimensions, and details) can be a stronger proof of the fact, that the Scoto-Albanian and Scoto-Hibernian towers were erected by the same race.

As is usual, Pagan remains and indications are found in the neighbourhood of this tower. Mr Black says—Above Abernethy, a little to the south-west, is a hill called the Castle Law Hill, upon the top of which are the remains of a vitrified fort, which we visited, and among the names of places in the neighbourhood, we find Pittendreigh, Pittendrioch, &c., and below the hill, on the south side, we saw, if we mistake not, the remains of a Druid temple. Similar names of places and similar Druidical remains are to be found in the immediate vicinity of Brechin. The tradition of this tower having been the sepulchral monument of the Pagan kings of Pictland induced some gentlemen to excavate the inte-The result is given by the Rev. Mr Small of Edesrior of the tower. The excavation took place on 10th May 1821, in the head, Abernethy. presence of the Doctor and several other gentlemen. When about four feet below the surface were found "plenty of human bones and the fragments of a light green urn, with a row of carving round the bottom of the neck, and that, digging still further, they came to three broad flags, which either served as the bottom of the first coffin or the cover of another, and by removing one, which seemed the largest, we found that there was plenty of human bones below."

I shall reserve my observations on this discovery for the close of my



paper on Brechin Tower, when I intend to give a résumé of the remarkable discoveries made in the excavation of several of the Irish Round Towers.

This being the last meeting of the Session, the Chairman stated he had much pleasure in congratulating the Members on the improved prospects and position of the Society. He also directed attention to the many valuable donations exhibited, for which their thanks were duly recorded. Among these was the curious collection of Silver ornaments and coins recently discovered in Orkney—whose interest could hardly be overrated—presented by H. M. Exchequer, with many other relics of Treasure Trove, through the Queen's Remembrancer. In consideration of the valuable services rendered by Mr Henderson in the maturing of the recent Treasury arrangements in reference to the important subject of Treasure Trove, he begged to propose a cordial vote of thanks of the Society to John Henderson, Esq., Queen's and Lord Treasurer's Remembrancer. The proposal was unanimously agreed to.

Thanks being voted to the Office-Bearers, the Society adjourned to the commencement of the next Winter Session.