

ART. XXI.—*Some Ancient Dials in the Diocese of Carlisle.*

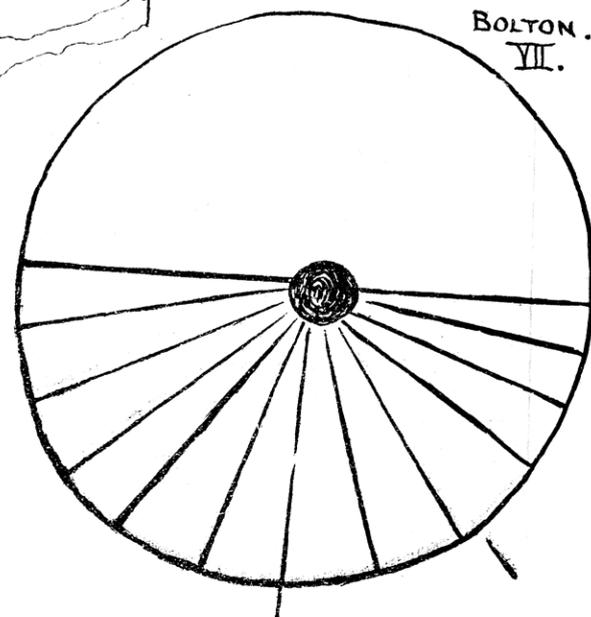
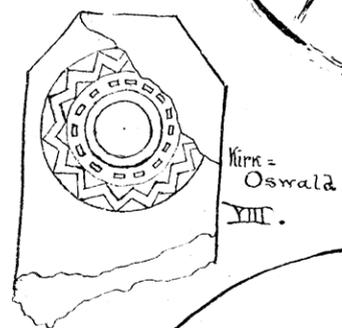
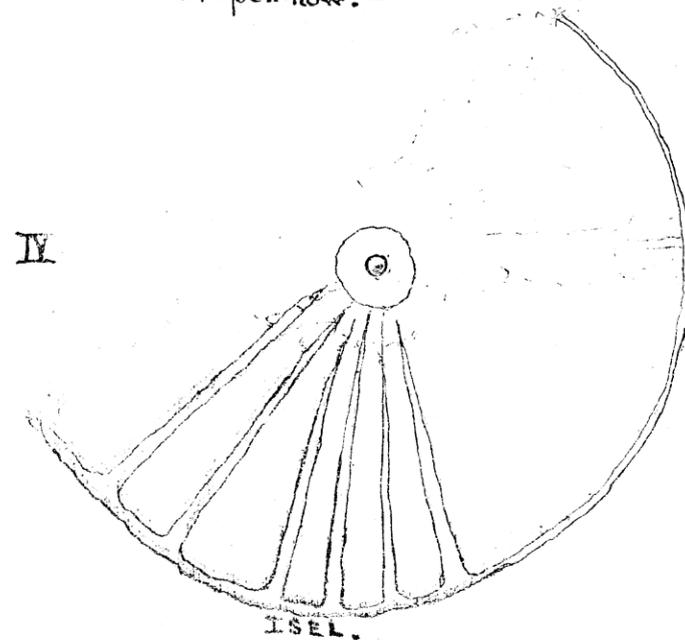
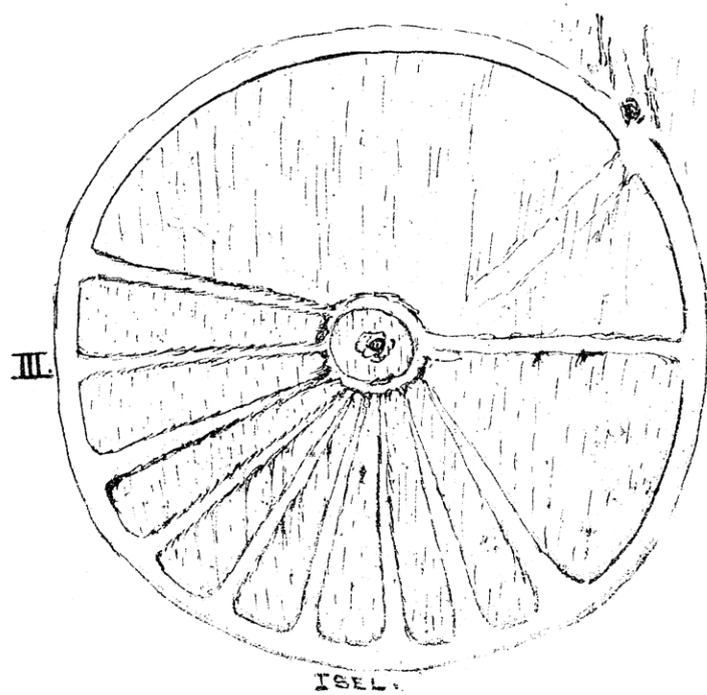
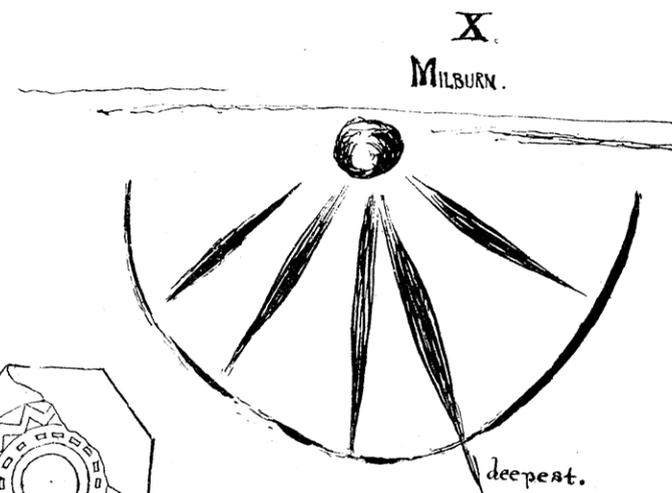
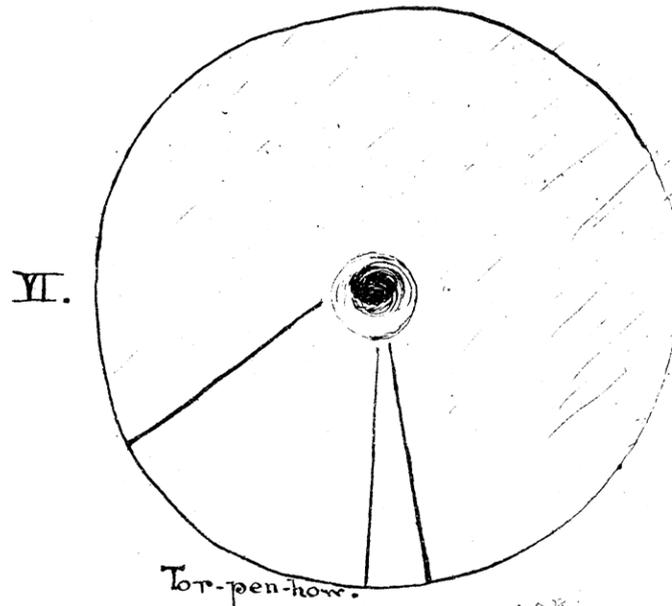
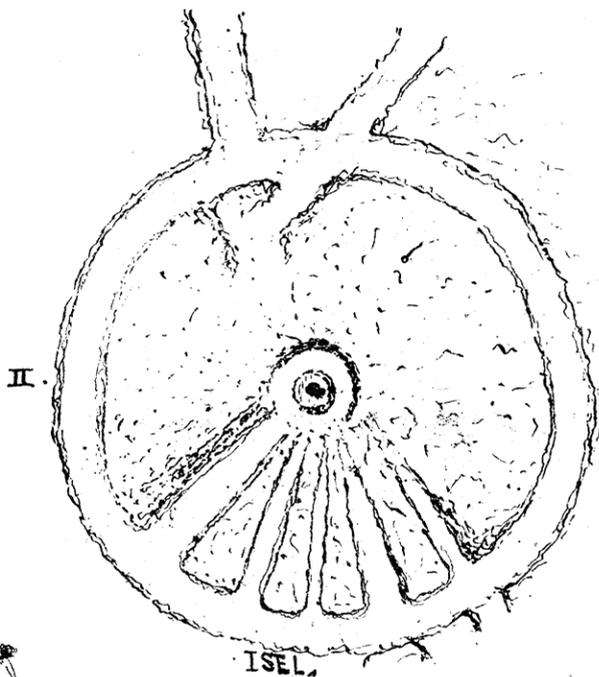
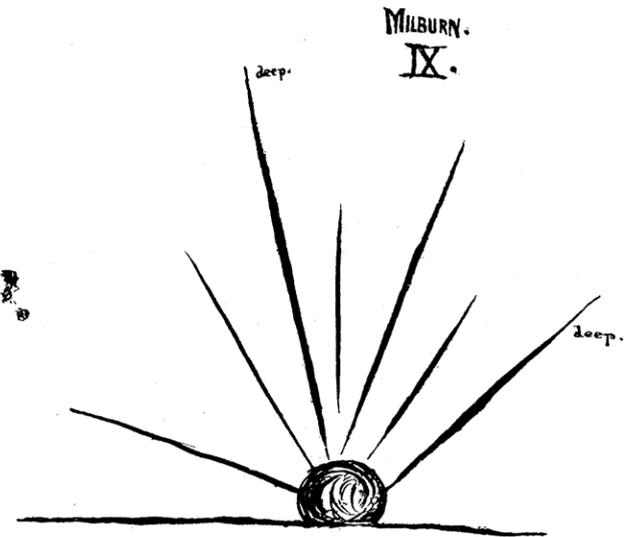
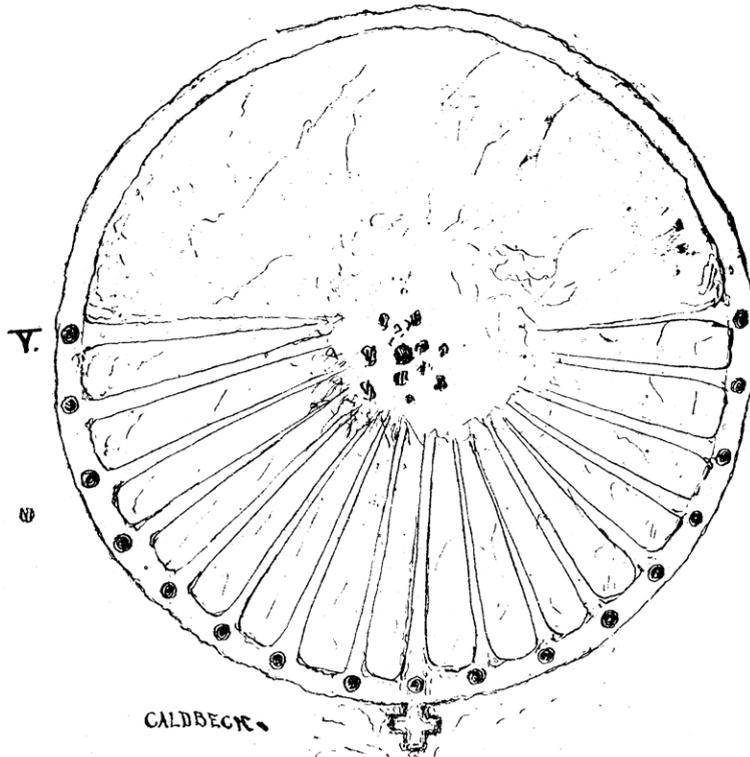
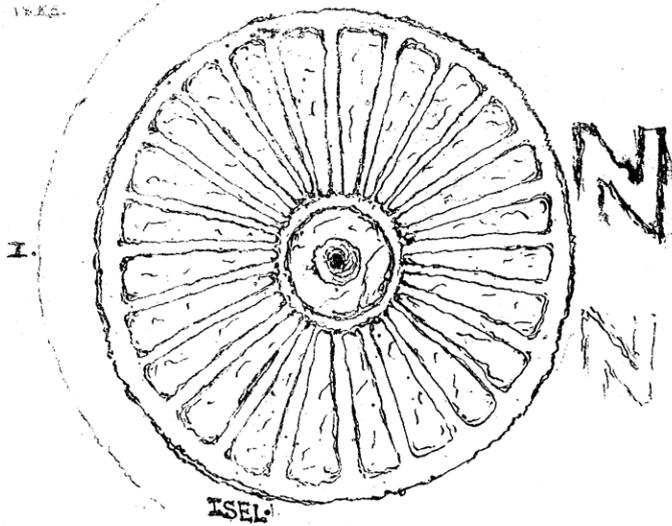
By REV. W. S. CALVERLEY, F.S.A.

*Communicated at Alston, July 10, 1884.*

NOS. 1, 2, 3. of these drawings are intended to represent rubbings of incised dials (stone), built into the west jamb of a south window of the chancel of Isel Church, near Cockermouth, Cumberland. A rough outline drawing of part of this window accompanies these notes, and shews the position of the dial stones in the window jamb. These dials were revealed to me upon the removal of the whitewash after the late restoration of the church by the exertions of the vicar, the Rev. W. H. Sharpe, and under the directions of C. J. Ferguson, Esq., F.S.A., of Carlisle, both of whom have taken pious care of the old details of this most interesting and most ancient little church, whose wonderful history has yet to be written.

No. 1, the uppermost in the jamb, is cut in red sandstone, has *twenty-four* division marks; the letter N is clearly cut, apparently done at the time of the cutting of the dial; on the right, and beneath it, another N partially obliterated; the whole has been most carefully worked. I have marked an arrow head (*a*) to show the line of shadow falling from a pencil placed in the hollow which formerly held the gnomon, exactly at 3 p.m., July 15th, 1882. I think this dial may have been used as a horizontal dial before being placed in its present position. The N may have marked some special shadow or limit in the sun's course, and the stone may have been built into this jamb the wrong way about, in which case the two N's might mark the divisions indicated on the left of the similar dial engraved in the Reverend Daniel Haigh's paper on Yorkshire dials (*The Bottesford Dial*, Yorkshire Archæological Journal, vol. v., p. 210).

No. 2.



No. 2. The lithographs have been taken from full sized facsimilies of rubbings. I offer no opinion as to the mark across the upper part of the circle, or the nearly obliterated N to the left and opposite the ray which would mark about 9 a.m. The arrow head (*a*) on the outline drawing marks 1 p.m.

No. 3. At the point (*b*), outline drawing, an iron nail has been driven into the circle. The rays appear to mark from 6 a.m. to 3 p.m. and 6 p.m.

No. 4 is cut on the east jamb of the west doorway. Part of the circle is not visible, and some of the rays are scarcely traceable. They appear to have marked the hours between 9 a.m. and 3 p.m. A porch has been built over this doorway.

I take these three last-named dials to have been used to mark canonical hours, and shall refer to the numbers as marking types.

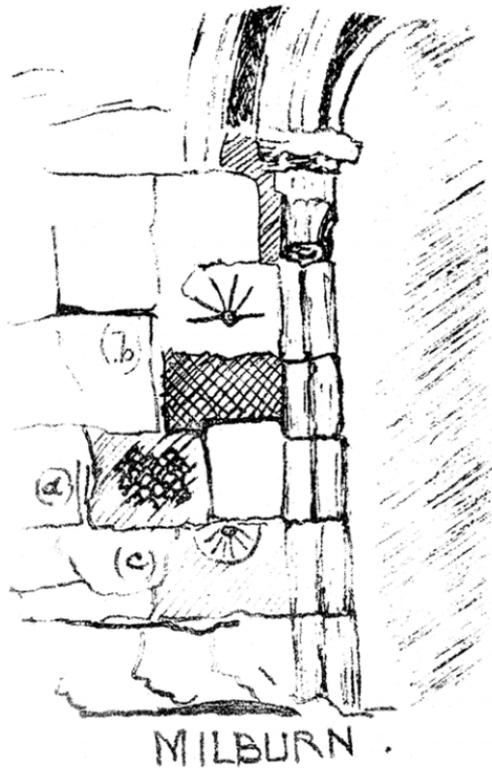
No. 5 is cut on a stone built in the wall, to the east of the lintel of the priests' doorway, in the south side of the chancel of Caldbeck Church. The stone has been removed from some other window or door, or other place, and put in its present position when the lancet window was restored. I first discovered it on the visit of this Society, August 23, 1883. This is a most remarkable and interesting dial, and I hope this notice of it may lead to further profitable research. The circle is clearly cut, and each ray in the lower half is marked by a round hollow drilled into the stone. In the centre remains still the iron of the gnomon, which has been broken off; the lead which has been rammed well around it to keep it in its place, has nails hammered into it. The centre ray, downwards, proceeds beyond the circle and takes the form of the cross. To the right, outside the circle, are four drill marks which remind one of the N on the Isel dials. To the left also may be seen one of these round drill holes, which appears to be of the

the same date as the dial and intended for some real purpose. The number of rays and stops is *seventeen*, but one ray is evidently marked *beyond* the diameter as in No. 3, making the number of divisions in the real half circle *sixteen*, in the whole "day-night" thirty-two, and thus bringing us into contact with the "octaval system" of "time division" common among the Angles (Yorkshire dials p. 159). in which daynight is divided into eight equal parts, subdivided into sixteen, and again subdivided into thirty-two.

No. 6 was discovered by me after the restoration of Torpenhow Church by Mr. Cory, the Rev. C. H. Gem being vicar. Both vicar and architect have spared the holy relics, and treasured them carefully, or this strange witness of old times could never have been seen. Here has stood an old church before the days of Norman conquerors. The walls of this old church have been partially removed, and a south aisle added; and the building stuff of the original wall has been again used for the new south wall of what is now a very ancient aisle, and so it has come to pass, that *inside* the church, between the two square windows of the south aisle, and two and a half feet west of the top of the more eastern one of the two, you may see the traces of a dial which was once cut on the *outside* of the church, and served to guide, perhaps, our earliest Christian *fore-gangers* in the matter of the hours of divine service. At the restoration of this church, the workmen left the stone bare of plaster and whitewash, and peeled it off so tenderly that the rays of this tell-tale dial have not been chiselled out of recognition.

No. 7 is from a drawing by J. G. Goodchild, Esq., and is built into the south face of Bolton Church, Westmorland. South-west angle. This is not its original position.

No. 8 is also from a drawing by Mr. Goodchild, and was found buried in the wall of the north aisle of Kirkoswald Church,



Church, 1879. It is a stone 4 inches thick,  $10\frac{1}{2}$  inches broad, and  $15\frac{1}{2}$  inches high. The number of divisions, fifteen, seem to preclude the idea of its having been intended to represent a dial: if there had been sixteen such divisions the resemblance would have been very striking between it and the representation of the construction on the Mull mountain in the parish of Rushen, Isle of Man, figured p. 159 of Mr. Haigh's Yorkshire dials, and in which the sixteen divisions of "day-night" are marked by parallelograms of four stones each, similar to the parallelograms round the centre of No. 8, and in which only the Maypole as a gnomon is required in the centre. If No. 8 were thus divided into sixteenths, the zig-zag border would subdivide the circle again into thirty-two parts, and we should have another testimony to the use of the octaval system of time division at *Kirkoswald*. But the stone may be a memorial slab. It is worth careful preservation in any case. Possibly the divisions *are* sixteenths.

Nos. 9 and 10 end our illustrations, and no doubt they might, with profit, be added to; and I venture to ask all readers to be on the look out for dials such as these, which are only likely to be found near the site of pre-Norman churches or buildings, though they may have become parts of more modern structures. 9 and 10 are built into the west jamb of the west doorway of Milburn Church. I have produced a rough outline drawing of this doorway from a drawing by Mr. Goodchild, and in it may be seen something of the character of the walling. At (*a*) the face of the square walling stone is ornamented by a rude diaper pattern, plainly taken from a former building, and used here as building stuff. At (*b*) is a very early dial *upside down*. No. 9. Its alternate rays being more deeply cut and longer than the intermediate rays, as though the greater time divisions had here once been sub-divided. The stone was a good one and the mason made use of it when he  
inserted

inserted this transitional Norman doorway, as he also used the carved diaper work at (a), and no doubt any other useful stones which came to hand. Luckily the quiet sculptures on these stones did not protrude sufficiently to excite his wrath, and so they got built in face outwards; whereas a thousand others have been scabbled past recognition, or built with their faces inwards, bedded in lime, and buried alive. Below, at (c), is another *removed* dial, for it is too low to allow us to think that this was its original place. It is No. 10. Right side up, much like the upper one, its rays vary in depth, the one which should probably mark about one o'clock, appears to have crossed the circle, but as this stone has been re-cut to form the second coign from the foundation of the jamb, we cannot be certain that this ray now marks the hour it was first intended to mark, nor indeed that the mark beyond the circle is in this case a part of the dial at all.

At Dearham Church there is a doorway of the same character, and on either side, on the noble coign stones, are the traces of dials similar to Nos. 2 and 4. The porches are additions in every case of a much latter date.

At Newton Arlosh, where is no porch, traces of the dial are found on a stone in the east jamb of the west doorway. Worked freestone.

Of any other really ancient dials in the diocese of Carlisle, I should be glad of information. There must be many unknown as yet, and each find may prove of great historical value.