In The Footsteps of Thomas Ross

Tracking the Ancient Sundials of Scotland

By Dennis Cowan

A joint digital publication of the British and North American Sundial Societies

Marking the presentation of the 2024 Sawyer Dialing Prize to Dennis Cowan

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Foreword

Frederick W. Sawyer III

NASS President and BSS Patron

Each year, the North American Sundial Society presents the Sawyer Dialing Prize to an individual for accomplishments in, or contributions to, Dialing or the Dialing community. For 2024 the Prize is awarded to Dennis Cowan in recognition of his project *In The Footsteps of Thomas Ross* – locating and documenting large numbers of iconic Scottish sundials.

Thomas Ross was a 19th century Scottish architect and coauthor (with David MacGibbon) in 1892 of *Castellated and Domestic Architecture of Scotland from the Twelfth to the Eighteenth Century*. Ross had developed an interest in the iconic style of sundial found throughout Scotland, and he recorded his findings and drawings in a *Scottish Sundials* section of volume 5 of their joint work.

Since these sundials were 'in the wild', they have not been conserved in any museum or protected from removal or destruction; in the time since they were seen by Ross, they have been subjected to more than a century of the ravages of weather and the whims of an array of owners.

In 2004 Dennis Cowan happened upon a magnificent obelisk with 76 distinct sundials in the garden of Drummond Castle. From this beginning, he challenged himself to locate, document and photograph as many as he could of the sundials previously recorded by Thomas Ross. The result was a series of 40 articles published in the *Bulletin of the British Sundial Society* from 2012 to 2022.

The present volume includes all 40 of those articles as well as the *Scottish Sundials* section of *Castellated and Domestic Architecture of Scotland*. Each of Cowan's articles includes quotes excerpted from Ross' original text (along with reproduced drawings to compare to modern photographs). Printed next to each such quote is the relevant page number in Ross' text; clicking on that number will open that page. On the newly opened page with the quoted text, there is also a link to return the reader to the starting point in Cowan's article.

NASS thanks the British Sundial Society for its permission and collaboration in this volume. We also thank and congratulate Dennis Cowan for his work *In The Footsteps of Thomas Ross* and for being the recipient of the 2024 Sawyer Dialing Prize.

Foreword

Frank H. King

BSS Chairman and 2012 Recipient of the Sawyer Dialing Prize

This collection of documents is a truly remarkable publication. As the title page suggests, it is about *the Ancient Sundials of Scotland* but there is much more to savour than the sundials themselves. In taking the reader on his travels round Scotland, Dennis Cowan provides entertaining notes on history and architecture and many other items of interest.

For sundial enthusiasts, there are scores of Thomas Ross drawings and descriptions and, where the dials still exist, there are usually corresponding modern photographs taken by Dennis, invariably accompanied by additional description. Occasionally, Dennis notes an ancestral link of his own to a sundial or an associated building or sundial maker.

Dennis quotes extensively from the fifth volume of Thomas Ross's Castellated and Domestic Architecture of Scotland and that entire work is appended to the collection of 40 articles published by Dennis in the British Sundial Society Bulletin over the period 2012–2022. Moreover, adjacent to each Thomas Ross quotation in an article, there is a link which takes you to the relevant page of the original work. To ensure that you don't get lost, there is a further link which takes you back to the point in the article where you left it. Many thanks are due to Fred Sawyer for assembling all the material in such an elegant way.

To those of us on the Editorial Team of the *Bulletin*, Dennis's articles were a godsend. For almost every issue over 10 years we could rely on a core article to build around. More importantly, Dennis's articles required very little editing. Generally, the only details in the submitted copy that I felt needed attention were in the Thomas Ross quotations; of course, we had to leave those alone.

There was a time when there was an annual poll of the *Bulletin* readership to identify the most enjoyed articles of the previous year. We had to abandon this practice for fear that the winner would always be Dennis Cowan!

If I had to identify my own favourite article, or dial within an article, it would have to be the south-facing dial at Inveresk (near Edinburgh) which is one of the sundials described in *Part 15: Sundials on Scottish Churches*. Thomas Ross correctly notes that this dial 'is, scientifically speaking, of complicated construction;' but fails to enlighten us further. This sundial so intrigued me that I used it as my subject for a talk at the British Sundial Society conference in Oxford in 2017.

An immense amount of work went into preparing the articles and I enthusiastically echo the President of the North American Sundial Society in congratulating Dennis Cowan on being the recipient of the 2024 Sawyer Dialing Prize.

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IN THE FOOTSTEPS OF THOMAS ROSS

Pt 1. Scotland's Oldest Sundials – the forerunners to lectern sundials?

DENNIS COWAN

etween 1887 and 1892, the architects David MacGibbon and Thomas Ross produced their definitive work, a five volume piece entitled 'The Castellated and Domestic Architecture of Scotland'. The fifth and final volume was published in 1892 and the latter half of it contained details and sketches of the ancient sundials that they had seen during the production of their work.

In 1890, Thomas Ross presented a shorter version of the sundial section to the Society of Antiquaries of Scotland. This was published by them that year and for this reason, although the junior partner, Ross is mostly credited with the production of the whole section on sundials.

I have given myself the task of tracking down 'his' sundials and photographing them in their current locations. It is not always an easy task as his descriptions of the sundials often lack detail of the locations, many have been moved to other locations and many more are now missing. But it does take me to many interesting places that otherwise I would not visit. My wife, Evelyn, although she has no interest in sundials at all, thoroughly enjoys accompanying me to these out-of-the-way locations.

Scotland's oldest reliably-dated and authenticated sundial is the multi-faceted example from 1623 at Dundas Castle near South Queensferry, a few miles west of Edinburgh (SRN 1209). However, Ross identified three sundials which were almost certainly from the 16th century; those at Cockburnspath in the Scottish Borders, and Oldhamstocks and Seton

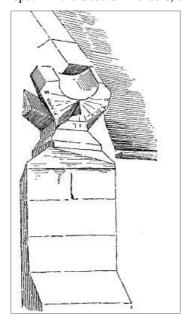


Fig. 1. Cockburnspath dial, sketched by Thomas Ross in the late 19th century.

Fig. 2. The Cockburnspath dial now.

Palace both in East Lothian. They were all of a similar type and he described the first two at length as follows:

This is perhaps the proper place to introduce the two very remarkable dials which are found on the churches of Cockburnspath and Oldhamstocks, situated about two miles apart.

These are sloping dials, and, so far as our observation goes, they are unique amongst attached dials, which are all upright; and as these two dials probably date from early in the sixteenth century, they may be regarded as the forerunners of the "lectern" dials, to be considered under a separate head.

The dial at Cockburnspath [Fig. 1] forms the terminal of the angle buttress at the south-west corner of the church; its face leans forward, and the sides are splayed away; the upper surface slopes backwards to the skew of the gable, and is hollowed like a half cylinder. A singular piece of stone sticks out like the stump of an amputated arm from the west side. Whether this was meant to tell the time by its shadow on the gable cannot be determined, as the wall is "harled" over. The west end of this church, including the buttress and the singular round tower as well as the east end, probably date from about the beginning of the sixteenth century, and without doubt the dial is a part of the original structure.

Ross's "stump of an amputated arm" is still in place (SRN 1230, Fig. 2) and the harling noted by him has since been removed from the church wall. However, I can say that although it seems possible, there is no evidence at all that this arm's purpose was to cast a shadow on to the gable as there is nothing visible on the wall that would indicate this.



Its purpose must remain a mystery for now. The hour lines and Roman numerals from 6am to 6pm can be easily seen on the main face of the dial, but only a slight stub remains of the gnomon. Otherwise everything is as described by Ross.

Ross continues as follows:

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The Oldhamstocks dial [SRN 1231, Fig. 3] is placed on the south wall of the church at the west corner; it leans forward, and has the top hollowed like a cylinder. Its proclining face having been cut out of a square stone, sufficient material has been left to form a gnomon, which is moulded like a Gothic rib. The face of the gnomon has itself formed a dial. Stone gnomons are of frequent occurrence on unattached dials, but are rare in those of this class. The stone is notched out and splayed away on each side, and has dials on the splays. Above each splay a portion of the stone is left square like horns at each side of the dial face; these horns act as gnomons.

The dial is still pretty much as Ross described it in 1892 although there are no longer any signs of hour lines or numerals on the main dial face or on the gnomon as indicated by Ross and his sketch. Faint hour lines can still be seen on the east facing right hand 'splay' and the effect of the 'horn' gnomon can be easily seen in Fig. 4.

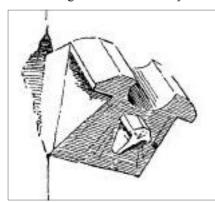


Fig. 3. The Oldhamstocks dial by Ross and, below,

Fig. 4, the dial today.



Ross continues once more:

Cockburnspath [Fig. 5] and Oldhamstocks [Fig. 6] churches seem to be both of the same date.
Oldhamstocks has a square projecting tower-like belfry in the centre of the west end, the position occupied by the round tower at Cockburnspath. It has a chancel with





Fig. 5 (top). Cocksburnpath church. Fig. 6 (bottom). Oldhamstocks church.

an east window filled with rude flowing tracery. Alongside this window there is an inserted stone with arms, and the date 1581, "probably," writes the Rev Mr Hutton, "the date of the death of Margaret Sinclair, wife of Thomas Hepburn, incumbent of Oldhamstocks."

Without doubt the chancel is earlier than this date, and it is almost equally certain that the west gable is also earlier. The body of the church was partly rebuilt and repaired in 1701, that date being over the doorway in the south wall. Now, this is too late a date for the angle buttress at Cockburnspath, where buttress and dial are part of the original structure; and as there can be no doubt but that both dials are contemporaneous, the date 1701 is out of court altogether, and we have to fall back on some date previous to 1581 as the period of these dials. They measure horizontally about 20 inches in breadth.

Ross went on to describe the dial at Seton Palace, which is about twenty-five miles north-west from the previous two, as follows:

This dial [Fig. 7], of the same type as the two last mentioned, has not been so well preserved. It stands on a bastion tower, built at an angle formed by the walls of the old garden of Seton Palace. The tower is probably about 10 feet high. There have been cylinders on the upper sloping surface, but they have been smashed and broken so as hardly to be recognisable. On the flat top of the stone there is a horizontal dial seen from the inside of the bastion by ascending a stair.

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Fig. 7. The Seton Palace dial by Ross and

Fig. 8, the dial today.

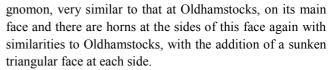


Seton Palace is near to Longniddry and stands beside the main A198 between North Berwick and Musselburgh and the dial (not in *Register*, Fig. 8) is easily seen from the roadside. It still stands on the bastion tower but unfortunately it is badly eroded as indicated by Ross. Possible hour lines reminiscent of a mass dial can be seen on the proclining surface. No other markings are visible. It was not possible for me to be able to ascend to the top of the tower so I was unable to determine whether the horizontal dial as identified by Ross is still in place.

But there is a fourth dial of this type of which Ross was not aware. It is situated on the church at Fogo, a tiny hamlet in the Scottish Borders about twenty miles south-west from Oldhamstocks and Cockburnspath. Fogo is off the beaten track and can only be reached, regardless from which direction you approach, by narrow single track roads.

It is unclear when this church was built for there are no surviving records, but the foundations and the lower walls are thought to be well over 800 years old. It is possible that the current building was built around 1570² and it is known that there were extensive alterations in the late 17th century.

The dial itself (not in *Register*, Fig. 9) is located on the south west corner of the church adjacent to the unusual outside stairs to the 'Laird's Loft' (Fig. 10) and it is very similar to the three dials described earlier. It is, however, badly eroded and no hour lines or numerals can be seen on the main proclining face. It does have the remains of a stone



With the exception of the very few mass dials in Scotland, it is almost certain that these four dials are the oldest in Scotland. Were these four dials all made by the same hand? It seems that is possible – they are all similar, probably of a similar age and their locations are not too far apart. Were they the forerunners of the lectern dials? Again, it seems possible – Ross certainly thought so. There are similarities between aspects of these four dials and the later lectern dials such as the half-cylinders and the sunken geometric faces, but it is likely that we will never know.

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- Text in *italics* is reproduced from D. MacGibbon and T. Ross: The Castellated and Domestic Architecture of Scotland, David Douglas, Edinburgh (1892).
- 2. British Listed Buildings: www.britishlistedbuildings.co.uk/sc-10512-fogo-kirk-church-of-scotland-including-in.



Fig. 9. The dial at Fogo.

Fig. 10. Fogo church with the dial next to the steps to the 'Laird's Loft'.



IN THE FOOTSTEPS OF THOMAS ROSS

Part 2: The Sundials at Craigiehall

DENNIS COWAN

raigiehall is a late 17th-century mansion house which is located some six miles west from the centre of Edinburgh and is currently used as the Head-quarters of the British Army's 2nd Division. It has been in use by the military since the start of the 2nd World War when it was requisitioned by the Army and indeed Germany's surrender of its forces in Norway in 1945 was negotiated and signed there. It is rumoured that Rudolph Hess was there for a short while after his flight from Germany in 1941, but like Bonnie Prince Charlie before him, he is rumoured to have been everywhere! The mansion house is now used as the Officer's Mess.

There are two sundials at Craigiehall – a wonderful four metre high obelisk on the lawn in front of the Officer's Mess, and a horizontal dial to the rear. In the *Castellated and Domestic Architecture of Scotland*, obelisk sundials are described as follows:

"The constant parts of these dials are a square shaft, a bulged capital, and a tapering finial. Where the dial is of the normal type and unaltered, the shaft is divided on each side into five horizontal spaces by incised lines, thus presenting twenty compartments. These compartments are hollowed out with cup-shaped, heart-shaped, triangular, and other sinkings, which are generally lineated so as to mark the hours, and were without doubt always meant to be so. The sharp edge of the figure casts the shadow, which is especially distinct in the angular shapes and at the top of the heart sinkings,

where there is often a certain amount of undercutting. Stone gnomons of various forms are frequently left in the cup-hollows, and metal stiles are to be found in all the dials. Occasionally some of the spaces are left blank, and on the north side initials, dates, and arms sometimes occur.

The capital is always bulged out so as to form an octagon in the centre, with an upright facet on each of the eight sides, having a dial on each. Above and below each facet over the four sides of the shaft are sloping facets, with a reclining dial or a proclining dial on each the former being those dials whose faces slope towards the sky, and the latter those whose faces slope towards the ground. The eight triangular pieces formed by the meeting of the square and octagon are cut out, and most effective shadows, from an artistic point of view, result from this arrangement, giving an air of dignity to the capital, which is wanting in the one instance (at Drummond Gardens) where this arrangement is departed from. The upright facets of the octagonal part have heart-shaped and cup-shaped sinkings, as in the shaft; but the proclining and reclining parts seldom have sinkings. Nor has the tapering finial, although usually covered with dials, ever any sinkings; like the shaft, this part is divided by horizontal incised lines, the number of spaces, for which there appears to have been no rule, varying according to the height of the finial."

Ross goes on to describe the obelisk dial at Craigiehall:

"This dial [Fig. 1], which is one of the normal type, has undergone a considerable transformation. When the



Fig. 1 (left). The obelisk dial at Craigiehall as drawn by Thomas Ross.

Fig.2 (right). The obelisk dial now.



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mansion-house was rebuilt about the middle of last century by the Hon. Charles Hope Vere, second son of the first Earl of Hopetoun, the dial, which was probably broken, was set up on a new and most original base, consisting of a globe about 2 feet 2 inches in diameter, into which the shaft is fitted, burying the whole of one of the five spaces. The globe is supported on a rounded base, and the whole rests on a square plinth. The upper portion was also renewed, but not strictly after the old form, a slightly curved outline without division lines having been given to it. The whole of the renewed work is of white sandstone, while the original dial is of red sandstone. The height from the ground to top of globe measures about 4 feet 8 inches, thence to top of capital about 4 feet 5 inches, and the renewed top 2 feet 11 inches; total height is about 12 feet. The width of the base at the ground is 2 feet 2 inches. The dial stands in the park, and is protected from the cattle by an iron railing."

Ross's hopes that the dial would be protected in its enclosure did not materialise as the sundial was discovered in pieces in 1965 within an enclosure of old railings to the south of the Officer's Mess.² It was subsequently restored by the Ancient Monuments Branch of the Ministry of Public Buildings and Works and re-erected at its present site on the lawn in front of the Officer's Mess – see Fig. 2.

As to its current condition, it appears to be still much the same as Ross saw it some 120 years ago. The only noticeable differences to me are that the lines on the globe are hardly legible now, but Ross may have enhanced them in his sketch, and the red sandstone parts may now be more worn. As in Ross's day, there are no gnomons remaining, but I counted stubs of some twenty-four, plus numerous cup hollows and geometric sinkings (Fig. 3), all of which functioned as sundials.



Fig. 3. Detail of the obelisk.

It was probably made in the late 17th century, but it is unique since its modification in the 18th century by the addition of the globe base. Obelisk sundials are few and far between, only twenty-six known complete examples exist in Scotland, and there are no other obelisk sundials quite like this one.



Figs 4 & 5. The horizontal sundial with the dial by John England.



As previously said, the other sundial at Craigiehall is a horizontal dial (see Fig. 4) and is located behind the Officer's Mess, just to the side of the west lawn and in front of the tennis court. Its pedestal is of carved stone, about one metre high, with a brass octagonal dial plate as shown in Fig. 5. It can be dated fairly accurately, as an inscription on the dial plate reads "Made by England, Instrument Maker to Her Majesty Ann, Charing X London". Anne was on the throne from 1702 to 1714 so the sundial must be from that period.

This date is further confirmed in that John England was known to be a mathematical instrument maker working from Charing Cross between at least 1703 to1708. A 10 inch astronomical ring dial, signed by him and dated 1703, is at Trinity College, Cambridge. He also made a number of

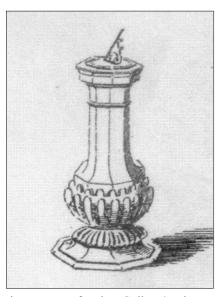


Fig. 6. Ross's drawing of the horizontal dial.

instruments for that College's observatory including a ring dial, a sector and an analemmatic dial, all now at the Whipple Museum.³ Samuel Saunders⁴ was at one time apprenticed to England.

The dial has now fading Roman numerals from 4am to 8pm, but more interestingly it also has an Equation of Time table, which dates it to after 1672. Unfortunately the table on the dial plate is now quite faint and is difficult to read, but if you look carefully, the months of the year can be seen at the top of each column of figures. The dial also includes the arms of the Marquis of Annandale quartered with those of his wife, Sophia Fairholm of Craigiehall, whom he married when she was only fourteen. It was this marriage that eventually resulted in Annandale taking ownership of the Craigie estate.

Ross says of this dial:

"The horizontal dials at Craigiehall [Fig. 6] and Hopetoun are almost identical. The carved work on the pedestals was probably wrought by the same hand. On the

first-named is the inscription MADE BY ENGLAND, INSTRUMENT MAKER TO HER MAJESTY AT CHARING X, LONDON, with the arms of the Marquis of Annandale quartered with those of his wife, a Fairholm of Craigiehall."

It can be seen that there is a difference of opinion regarding the word following 'Majesty' in the inscription, but the words are faint and either could be correct. However, it doesn't change the likely date of the sundial.

Ross mentions the dial at nearby Hopetoun, but does not provide a description, other than it was almost identical to the one at Craigiehall. Neither does he provide a sketch. Both of these mansions were built at the same time, both designed and overseen by the same architect, Sir William Bruce. According to contemporary reports, they suffered from the same problems that we have nowadays, in that tradesmen were often taken from one to work on the other and vice versa.

In July 2011, following a Defence Basing Review carried out by the Ministry of Defence, it was announced that Craigiehall would be closing in 2014/2015. Who knows what will happen to the mansion house and grounds, but more importantly from my point of view, what will happen to the sundials? Let's hope that access to these two wonderful sundials will be preserved in the future.

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- 1. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 2. There is some dispute regarding this date. Some sources say that it was discovered in pieces in 1972.
- 3. Jill Wilson: *Biographical Index of British Sundial Makers from the 7th century to 1920.* 2nd edition. BSS Monograph 2 (2007).
- 4. M. Lose: 'Samuel Saunders a study of a London sundial maker' *BSS Bull.*, 24(i) and 24(ii), (March & June 2012).

IN THE FOOTSTEPS OF THOMAS ROSS

Part 3. The Sundials of James Gifford

DENNIS COWAN

ames Gifford was a 17th century stonemason from the village of West Linton, situated about 18 miles southwest of Edinburgh, in what is now the Scottish Borders region. A number of his sundials feature in The Castellated and Domestic Architecture of Scotland" 1 although Ross does not actually name Gifford in this work. Gifford's house in West Linton was demolished in 1864, but a cube sundial (Fig. 1) surmounted with a sphere on four scrolls and attributed to Gifford² is on the stone cottage near where his house once stood. This sundial appears to have had dials on all four faces. The south face, which is the only face that can be clearly seen to have hour lines and numerals, has Arabic numerals and the remains of a





Figs. 1 & 2. Two different cube-and-sphere sundials, only 40 yards apart in West Linton.

gnomon. All other gnomons are missing although their positions can be seen. There is damage to the upper left part of the south dial face and the corresponding upper right part of the west face which has been crudely repaired, losing all marks in the process. The sphere has faint lines marked.

Also on the gable wall of this house are three elaborately carved stone panels featuring Gifford and his wife and carved by him. These stone panels originally adorned the inside of his own house.3

Another cube sundial, again surmounted by a sphere (Fig. 2), is mounted on the south-west corner of a building only 40 yards further up the road and is also presumed to be by Gifford. This dial is similar in design to the previous example but without the four scrolls. It has Roman numerals on the south face with the remains of a gnomon. The east and west faces have Arabic numerals whilst the detail on the north face can not be easily seen. There does appear to be some very faint markings on the sphere.

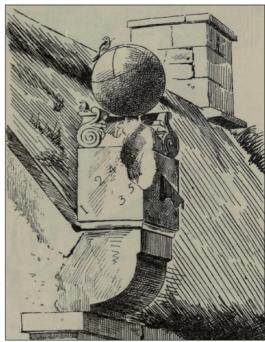


Fig. 3. The sketch by Ross of the dial shown in Fig. 1.

Ross mentions the West Linton dials only briefly by saying "Dials forming terminations at the eaves or lower ends of 387 gables are of common occurrence, and a good example is shown from a one-storied cottage at West Linton" (Fig. 3). It can be seen quite clearly that this is the same dial as shown in Fig. 1.







hall.

Fig. 5 (left). Close-up of the

Fig. 4 (far left). Sketch by Ross of the multi-facet dial at New-

Fig. 5 (left). Close-up of the Newhall facet head.

Around four miles north-east of West Linton lies Newhall House and the grounds of this private estate, in which the actor Robert Hardy once lived, contain two sundials. There is not a great deal of opportunity to see these sundials as the grounds are currently open only on one afternoon a year for charity, under Scotland's Garden Scheme.

The first is a large elaborate multi-faceted sundial adjacent to the house. This dial is not by Gifford as it dates from 1810, far too late for him, but as it is described by Ross it is worth mentioning here. He describes it thus: "This dial, which may be regarded as a monument to Allan Ramsay, stands in front of the mansion-house of Newhall. Its appearance will be easily understood from the sketch" (Fig. 4).

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He goes on to recite some of the many inscriptions on the dial which was erected in memory of the poet Allan Ramsay and of his poem *The Gentle Shepherd* in particular, which was based on Newhall. This sundial still stands in its original position, its eight dials having a mixture of Roman and Arabic numerals (Fig. 5). It is in rather good condition despite its dial faces becoming encrusted with moss and lichen.

One of the inscriptions on the sundial reads "Observe how fast, time hurries past, then use each hour, while in your power, for comes the sun, but time flies on, proceeding ever, returning never."

The other sundial at Newhall is in the walled garden (Fig. 6). It consists of a globe sitting on top of a hollow cylinder which acts as the gnomon of the horizontal sundial underneath. It has a late 17th century octagonal shaft with figures of the seasons. This shaft is attributed to Gifford, but there is some discrepancy as to the age of the dial itself, which may or may not be Gifford's work.

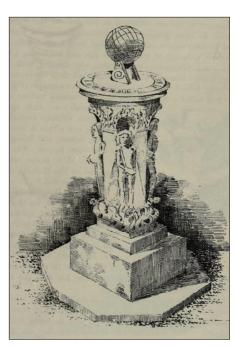
There are hour lines on the sphere with the hours marked in Arabic numerals, whilst the half and quarter hours are also marked (Fig. 7). The stone horizontal dial face is badly obscured by moss and lichen, but it appears to have Roman numerals. This is confirmed by Ross's sketch of the dial.

Ross says "This dial [Fig. 8] may be classed with those of the horizontal type, although the globe supported by the 505 hollow cylinder-shaped figure which forms the gnomon is a feature unusual in such dials. The dial is probably the production of a local sculptor, specimens of whose work may





Figs. 6, 7 & 8. The horizontal and globe sundial at Newhall.



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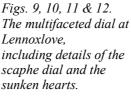
be seen scattered about the village of West Linton. A dial there bears a considerable resemblance to this one, and they are probably by the same hand."

So Ross thought that these dials were by the same hand and there is evidence to support the fact that the hand belonged to Gifford.

But Gifford's crowning glory is surely the multi-faceted dial at Lennoxlove near Haddington in East Lothian. Again, although Ross did not attribute this dial to Gifford in *The Castellated and Domestic Architecture of Scotland*, there is evidence provided by Ross to support the fact that this is Gifford's work.⁴ When Ross sketched this dial (Fig. 9) it was at North Barr House in Renfrewshire and he described it as follows:

"This singular and graceful sundial stands in the centre of the old-fashioned, semi-decayed gardens of North Barr, at a distance of a few minutes' walk up the Clyde from Erskine Ferry. There is something extremely droll and quaint in the conception of the lady who supports the dialstone, with her remarkable headpiece and picturesque seventeenth century costume, as she stands gracefully holding a rose at her breast and smiling on the spectator. The two hair curls standing out in relief very considerably heighten her odd effect, and at the same time give apparent



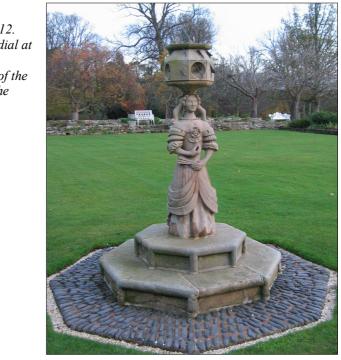


strength to her slender neck to carry the overhanging and weighty dial."

"The dial itself is an octagonal block with seventeen faces. On the perpendicular faces there are cup-hollows alternating with plain face dials. The gnomon of the west hollow is a piece of metal stretched from side to side [Fig. 10], with its under edge serrated like a saw. The hollows on one of the east faces [Fig. 11] are four heart-shapes, disposed somewhat as they are at Holy rood. On the horizontal dial, which is 14 inches wide, there occur the initials of Donald Macgilchrist, with the date 1679.

Ross's detailed description of the sundial is quite precise and the only thing that can be added is that all the hour lines and numerals, which are in the Arabic style, can still be clearly seen. The heart-shaped hollows to which Ross also refers, whilst quite common on obelisk and lectern dials, are much less so on other types of sundial.





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This wonderful sundial, which just has to be my favourite, now stands in the sunken garden to the east of the house of Lennoxlove (Fig. 12) and remains in excellent condition. It dates from 1679 and I wonder how it has managed to survive virtually intact for the last 330-odd years as the dial stone itself is in a very precarious position.

According to Andrew Somerville⁶ it was moved from North Barr House to Lennoxlove early in the 20th century. This fits in with the date of 1912 when the sunken garden was designed by the architect Sir Robert Lorimer, who was commissioned by Major William Baird to carry out the restoration of Lennoxlove in that year.

This sundial is a fine testament to the skills of James Gifford and it is said that the young lady supporting the dial stone bears a strong resemblance to his wife. She is certainly dressed in a very similar fashion and strikes a similar pose to Gifford's statue of her in West Linton.

There is another sundial at Lennoxlove identified by Ross, but this sundial is not by James Gifford. This is another example of problems in trying to trace Ross's sundials. Not only do the sundials move from place to place, but houses change their names! It was only recently that I found out that the original name of Lennoxlove was Lethington Castle. Ross identified a two-faced dial on the south-east corner of Lethington Castle as follows:

"On the south-east corner of the latest part of the castle may be seen the dial shown [Fig. 13]. The date (1644) shows that this portion of the building was erected after Lethington passed from the Maitlands into the possession of the ancestors of the present proprietor, Lord Blantyre."

I have not yet had the opportunity to return there to see if this dial still exists. Hopefully it does.

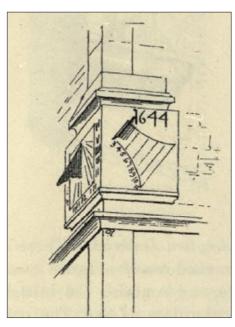


Fig. 13. Ross's sketch of the wall dial at Lennoxlove.

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- British Listed Buildings Website www.britishlistedbuildings.co.uk/sc-12888-west-linton-main-street-gifford-stones-ho
- 3. Thomas Ross: *James Gifford and Some of his Works in Tweeddale*, Proceedings of the Society of Antiquaries of Scotland, Edinburgh (1899) p147.
- Thomas Ross: James Gifford and Some of his Works in Tweeddale, Proceedings of the Society of Antiquaries of Scotland, Edinburgh (1899) p159.
- 5. Ross refers here to the multi-faceted sundial at the Palace of Holyroodhouse in Edinburgh.
- 6. Andrew Somerville: *The Ancient Sundials of Scotland*, Rogers Turner, London (1994).

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 4. The Hidden Sundials of South Queensferry

DENNIS COWAN

outh Queensferry, now part of the City of Edinburgh, is a village situated on the banks of the River Forth between the Forth Bridge and the Forth Road Bridge, about seven miles from the centre of Edinburgh.

I was always intrigued by Thomas Ross's mention in *The Castellated and Domestic Architecture of Scotland*¹ of a sundial in South Queensferry (Fig. 1). He states only that it "is built into a chimney-stack on the south side of a house near the east end of the village. It has had rough usage, and the ledge projecting at the base has been broken as indicated. The dial is about level with the road behind the house, and is not visible from the street."

I had looked out for it several times, but I had never seen it and I was beginning to think that the house and sundial no longer existed. But I decided to have one last attempt to find the sundial, this time putting a bit more effort into it. Using Ross's scant information regarding its position, I scoured the Ordnance Survey map and discovered that a narrow lane that I previously was unaware of led from the east end of the village towards the village centre. The clue was in Ross's words and I should have found it earlier, but the lane wasn't easily seen. It ran parallel to and on the south side of the houses that were on the main street

Fig. 1. South Queensferry sundial – Ross's sketch.

Fig. 2. South Queensferry sundial and the Forth Bridge.

through the village. It appeared to me that if the house and its sundial were not on this lane, then they had definitely gone for ever.

Foolishly I started walking the lane from the centre of the village, and it was only when I had reached the second last house that the sundial suddenly appeared on the roofline to my left. Why did I start walking from the village centre? I should have started from the east end of the village and I would have found it virtually right away!

The roofline had changed since Ross's day, but it was unmistakably the same dial (Fig. 2) and still sat on a chimney stack. Photogenically, it was in a perfect position with the Forth Bridge framed behind it, but as in Ross's day, it still could not be seen from the main street.

It is a two-faced stone dial with a pyramid capping and a flower above with a winged head below. One gnomon is missing whilst a tiny part of the other can just be seen. It has Arabic numerals from 6am to 9am just visible on the south face and 2pm to 7pm just visible on the west face. The other numerals can no longer be seen and the hour lines are only just visible.

To say that I was pleased to have found it at last was an understatement. I was delighted to have discovered that it still existed.

On the eastern edge of South Queensferry, Barnbougle Castle sits within the Dalmeny Estate, owned by the Earl of Rosebery. A footpath that is open to the public runs along







Fig. 3. The beach at South Queensferry.

the coastline from South Queensferry to Cramond, and Barnbougle Castle is about half-way along on the coastal side of the path. This 4½-mile Shore Walk from South Queensferry to Cramond is open all the year round. The walk is full of interest throughout, with beautiful and everchanging views over the Forth to various islands and the coastline of Fife. The immediate grounds of the castle are private, however, and should not be entered without obtaining the relevant permission beforehand.

It is a delightful walk from South Queensferry to the castle, and who would have thought that such a beautiful beach (Fig. 3) existed not six miles from the centre of Edinburgh? It was virtually empty, even though it was the middle of summer on a warm sunny day.

Although the history of the castle stretches back to the 13th century, the present castle is the result of the extensive rebuilding in 1881 by the 5th Earl of Rosebery who was Britain's Prime Minister from 1894 to 1895. Apparently he practised his speeches here in a gallery especially built for the purpose.

The dial identified by Ross was an obelisk and he writes "when this dial [Fig. 4] was sketched it was standing in a

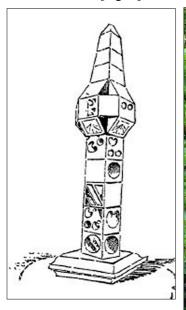


Fig. 5. Barnbougle horizontal sundial.

garden in front of the cottages Lang-green, not far distant from Barnbougle Castle, to which place it was removed a few years ago when the castle was rebuilt. It has a base a little deeper than is shown by the sketch, the lower part having been partly concealed. The dial is about 7 feet 2 inches high, and including the base 8 feet 4 inches, with a shaft 10 inches square. On one of the spaces of the shaft, on the north side, are the Cunnyngham arms."

On entering the castle grounds, a sundial (Fig. 5) can be spotted almost right away, but disappointingly this was obviously not the one identified by Ross. It was a simple square horizontal stone dial on a short pedestal with no numbers or hour lines visible. The metal gnomon is still in place.

But where was Ross's sundial? I couldn't see it anywhere. And then I spotted it. It was well hidden, and virtually surrounded by thick bushes (Fig. 6). Only on the north side was there a space where the sundial could just be seen. Even then, you had to be directly in front of it before it was visible.







Far left: Fig. 4. Barnbougle Castle sundial – Ross's sketch.

Left: Fig. 6. Barnbougle obelisk sundial. Above: Fig. 7. Detail of the Barnbougle obelisk sundial.



Fig. 8. Barnbougle obelisk sundial scaphe.

The dimensions are as described by Ross. There are no numerals to be seen on the dial faces now, but some hour

lines remain as well as many gnomon stubs (Fig. 7). It has numerous heart-shaped and other sinkings (Fig. 8) on its many faces and is one of only twenty-six known complete examples of obelisk sundials in Scotland.

Both of these sundials at South Queensferry may be hidden, but at least they still exist. I imagine that Thomas Ross would have been pleased.

ACKNOWLEDGEMENTS

Grateful thanks to Lord and Lady Rosebery for allowing me access to Barnbougle Castle grounds.

REFERENCE

1. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).

IN THE FOOTSTEPS OF THOMAS ROSS

Part 5. The Fettes College Sundial

DENNIS COWAN

ettes College is a leading independent boarding and day school in Edinburgh. It is often referred to as a Public School, but as the Public School Acts apply only to England and Wales, that is actually a false description. It is probably most widely known as the former school of ex-Prime Minister Tony Blair but also includes many luminaries amongst its former pupils including at least four winners of the Victoria Cross, Britain's highest award for gallantry.



Fig. 1. Drawing of the Fettes College dial. After MacGibbon & Ross.²

The school was designed by David Bryce and has been described as his Scottish Baronial / French Gothic masterpiece. It was built between 1864 and 1870 using funds bequeathed by Edinburgh Lord Provost and Merchant Sir William Fettes. I have to say that it is a magnificent looking building.

Within the grounds of the school, in the Sunken Garden adjacent to the Headmaster's house, is a multi-faceted sundial originally from Warriston House in Edinburgh. The sundial is 'A' Listed and is described by Thomas Ross in volume 5 of *The Castellated and Domestic Architecture of Scotland* of 1892 as follows:

"The dial here [Fig. 1] is probably all that remains of the old mansion-house of Warriston. It has had a stepped

base, but only a portion of it now remains; otherwise the dial is perfect. On the top of the remaining step there is a square pedestal ornamented with Oriental-looking heads, above which rises the moulded baluster for supporting the dial-stone, which rests on a point. Round the centre the dial-head is six-sided, with flat dials on its numerous faces, except on one side, where there is a cup-hollow. The height of the dial and baluster is 5 feet 3 inches, and the pedestal measures about 1 foot 10 inches above the steps."

It is unclear whether Ross was describing this dial when it was still in the grounds at Warriston House or at its next location at Inverleith House. Reputedly dating from 1642, it was moved from its original location at Warriston House to the terrace of Inverleith House (now in the grounds of the Royal Botanic Garden), just a short distance from Fettes. It was subsequently moved from there to the school in 1893, and placed as a central feature within the ornamental sunken garden adjacent to the Headmaster's house, where it remains to this day (Fig. 2).



Fig. 2. The dial in its current position.



This polygonal sundial still looks as it did in the sketch of 1892. There are fourteen dials in total, including one cup hollow or scaphe dial (Fig. 3), but many of the gnomons are now either broken, bent or missing (Fig. 4). The visible numerals on all dials are Arabic in style and the cup hollow dial still has its hour lines visible. Two of the upper faces have some damage, but otherwise it is in reasonable condition. It is remarkable how it has managed to survive for so long perched only on a single point.

The moulded baluster which supports the dial still sits on the square pedestal with its Oriental-looking heads, as it did in Ross's day, with the remaining part of the stepped base underneath.

I wonder if any of the school's pupils ever dared to attempt to clamber over the sundial – probably not, considering its proximity to the Headmaster's house! On the off-chance, I contacted the Office of Tony Blair to see if he could recall the sundial and if he or his fellow pupils ever attempted any stunts on it. There was no response.

It is always very pleasing to be able to locate one of Ross's sundials when it is no longer in the location where he recorded it. It is difficult enough as he was not always specific regarding its location, and when they are moved to another location it is doubly so. They are not always easy to find, although this one, I'm pleased to say, has been reasonably well documented.

REFERENCES

 In Scotland, an 'A' Listed structure is defined as "of national or international importance, either architectural or historic, or fine little-altered examples of some particular period, style or building type".



Fig. 4 (above). Detail of one of the proclining faces, with a bent gnomon.

Fig. 3 (left). Detail of the scaphe dial on the vertical south face. Other bent gnomons can be seen.

2. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).

IN THE FOOTSTEPS OF THOMAS ROSS

Part 6: The Sundials of Robert Palmer, Schoolmaster

DENNIS COWAN

obert Palmer (Fig. 1) was the schoolmaster in Currie, a village just outside Edinburgh, for forty years from 1828 until his death in 1868 at the age of seventy-one. By all accounts he was an exceptional man of great character and intellect, full of enthusiasm for eve-



Fig. 1. Robert Palmer, from: 'The History of Curling' by John Kerr, pub. David Douglas, Edinburgh (1890).

rything he did, and he had abilities that would have made him stand out in any profession that he chose. He excelled in English, Latin, Greek and mathematics. He was the local Registrar, responsible for recording births, marriages and deaths. Additionally, he was also an Inspector of the Poor, and in this capacity he would examine requests for poor relief from within the parish. In his spare time he was an excellent and passionate curler.

He was a founder member of both the Currie Curling Club and the Caledonian Curling Club, later to become the Royal Caledonian Curling Club, the governing body of the sport in Scotland. His fame as a skip in that sport is illustrated in Charles Lee's famous painting of the Grand Match¹ at Linlithgow in 1848, where he is seen welcoming the stone as it is making its way to the tee. He invented the tee-ringer, said to be one of the most useful of curling appliances.

He was also a keen astronomer, but it is as a maker of sundials that I first came across him. In the Book of Sun-Dials,² Mrs Gatty writes "at Riccarton Castle, Midlothian, there is a dial of grey stone inscribed 'Robert Palmer fecit, 1829', most scientifically constructed, and another by the same maker is in the neighbouring churchyard of Currie. This was presented by Palmer to the parishioners and heritors in 1836"

He is mentioned in The Castellated and Domestic Architecture of Scotland³ where Thomas Ross says "two dials of very scientific construction one at Currie and another at 511 Riccarton were made in 1836 and 1829 respectively by the village schoolmaster, Robert Palmer, who taught the elementary principles of astronomy, and had the walls of his schoolroom painted with astronomical diagrams".

When the old school was renovated around 1989, hemispheres of the world were found painted on the walls underneath layers of wallpaper. One room had the Americas on its walls whilst another room had Asia. Unfortunately no photographs of the maps were taken and the walls were covered again.

Ross does not provide us with any sketches of Palmer's dials, probably because they were not ancient sundials; to him they were fairly modern and not architecturally important. He probably referred to them only to illustrate the teaching of the scientific principles of dialling and other mathematical studies in the Scottish parish schools of the time.

Palmer was known to have been friendly with Sir James Gibson Craig, the owner of the Riccarton estate on the western fringes of Edinburgh, who shared his interest in curling. Palmer was new to the area having left the south west of Scotland to take up his teaching appointment in Currie. He probably wanted to make an impression with the



Fig. 2. Riccarton sundial pedestal, now without its dial.

local landowner, so perhaps it is not surprising that he made a sundial for his new friend, given that his extensive knowledge of astronomy and mathematics would surely have been discussed.

Palmer's sundial for Sir James was placed in the sunken garden at Riccarton, adjacent to the curling pond. The curling pond no longer exists, although its outline can still be clearly seen today.

Riccarton Castle was originally a 16th-century tower which was extended in the 17th century and altered and added to between the years 1823 and 1827. The estate was requisitioned by the military in 1939, but by the mid-1950s the house had fallen into a state of disrepair and had become structurally unsound and so was demolished in 1956. In that same year it was reported that Mrs Sudlow, then owner of the estate, had removed the sundial from its pedestal and taken it with her to Somerset. Unfortunately, nothing more is known of this sundial after its departure from Riccarton⁴ and it is presumed lost.

The estate was sold to Midlothian County Council who subsequently gifted it to Heriot Watt University in 1969. The estate now forms the Edinburgh Campus of the University and the sundial pedestal (Fig. 2) is still in place and is a prominent feature within the sunken garden.



Fig. 3. The Currie sundial.

Fortunately we do know the whereabouts of Palmer's second sundial (Fig. 3) which is still in the churchyard of the parish church of Currie, as it was in Ross's day. It has an extremely detailed circular metal dial plate (Fig. 4) on a moulded stone shaft sitting on a circular plinth. It includes Roman numerals from 4am to 8pm with a one minute scale and has noon markings for around fifty places all over the world including Trafalgar, Waterloo, Quebec, Mecca, Mauritius and London.

Waterloo was an interesting inclusion, but perhaps not surprising given that Palmer was a schoolmaster. There is no doubt that the Battle of Waterloo, which took place eight miles from Brussels in 1815, would have formed part of the curriculum of the school some twenty years later. It was a



Fig. 4. Detail of the Currie dial plate, with missing gnomon tail.

very famous victory for the British where the Duke of Wellington's army, well supported by the Prussians, finally defeated Napolean's French army.

In a similar vein, in 1805 Trafalgar was the scene of Admiral Lord Nelson's great victory over the combined fleets of the French and Spanish navies. Perhaps too, Quebec was included for a similar historical reason, as the important British victory against the French in the Battle of Quebec in 1759 paved the way for the eventual creation of Canada. Sixteen points of the compass are marked around the outer rim of the dial and part of the gnomon remains in place. It has equation of time details and has many inscriptions including "this dial calculated drawn and engraved by Robert Palmer schoolmaster inscribed 1836".

Unfortunately the dial face is now rather weathered and some parts are difficult to read. Palmer gifted the sundial to the parishioners of Currie.

But these two sundials were not the only ones made by Robert Palmer. He made another one, recorded by neither Ross nor Gatty.

Palmer had made an earlier sundial in 1826 in Kirkcudbrightshire (now Dumfries and Galloway) near to his birthplace, before he took up his new teaching position in Currie. This sundial is situated just outside the churchyard at Kirkbean, a few miles south of Dumfries, and the birthplace of American naval commander John Paul Jones, the so-called father of the American navy. For anyone interested in American history, Kirkbean and its small museum is well worth visiting for this reason alone. Palmer was the schoolmaster in nearby Southwick and his sundial was possibly a wedding gift to Thomas Grierson, who was the minister of the church in Kirkbean at the time. Like Palmer, he too shared an interest in curling and even composed a few songs in honour of the game.

A two hundred and fifty mile round trip to Kirkbean to see the sundial was unfruitful as the sundial was missing at the time of my visit in the summer of 2012, although the fluted red ashlar pedestal was still in place (Fig. 5). Later investigations revealed that the church had been recently sold and the sundial was removed from its pedestal by one of the church elders for safe keeping.



Fig. 5. The Kirkbean pedestal.

This earlier sundial, like the Currie dial, has equation of time details and indicates the time of noon at various locations around the world including Canton, Siam, Calcutta, Madras, Bombay, Isle of France, Ispahan, Bagdad, Jerusalem, St Petersburg, Athens, C. G. Hope, Rome, London, Gibraltar, Cork, St Mary's, C. St Roque, Rio Janeiro, Cayenne, Barbadoes (sic), Quebec, Jamaica, N. Orleans, Acapulco and California.

It includes zodiac symbols and is also inscribed "anno domini 1826" with the motto "Cito labitur Helas" and "Robert Palmer fecit" as well as "TG" possibly for Thomas Grierson for whom it was believed to have been made.

The dial also includes the words of Psalm X1X V.4-5 as follows:

"Their line is gone through all the earth, Their words to the world's end. In them He set the sun a tent; Who, bride-groom like, forth goes, From's chamber, as a strongman doth To run his race rejoice."

It is the reference to bride-groom within the psalm, the date of 1826 and the initials of T.G. which give rise to the possibility that this dial was a wedding gift to Thomas Grierson, who married in 1827.

These are the only three sundials that Palmer is known to have made. He is buried in the churchyard at Currie not twenty yards from his last sundial. He was obviously a highly respected member of the community and Palmer Road and Palmer Place in Currie reflect this, both having been named in his honour.

He appears to have been a remarkable man.

ACKNOWLEDGEMENTS

Many thanks to Robert Whitton of the Currie and District Local History Society and Graham Dane of the Currie Community Council who very kindly provided background details of Robert Palmer and of the Riccarton estate. Many thanks also to Kaye Gilbert of the Kirkbean Parish Heritage Society who provided details of the Kirkbean sundial.

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- 1. A Grand Match, or Bonspiel, takes place outdoors and only if the ice is thick enough, normally 7 inches, as there can be several thousand players and spectators on the ice. There have been only three matches since 1935 and none since 1979 although one "nearly" took place in the winter of 2010/2011. See this website article on the subject: http://royalcaledoniancurlingclub.org/curling-history/grand-match/. Lees' painting is said to be worth in the region of £500,000 and is owned by the Royal Caledonian Curling Club. A campaign to raise the £45,000 needed for the restoration of the painting is currently underway. Palmer can be seen at the left hand side of the painting with outstretched arms facing the centre. http://royalcaledoniancurlingclub.org/charles-lees-painting-restoration-appeal/.
- 2. Mrs Gatty: *The Book of Sun-Dials*, George Bell and Sons, London (1890).
- 3. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 4. 'Lost in Somerset' BSS Recorder, Cheltenham Edition (2012).

IN THE FOOTSTEPS OF THOMAS ROSS

Part 7: Scotland's Grandest Sundials

DENNIS COWAN

n his travels, whilst gathering information for the 'Castellated and Domestic Architecture of Scotland', Thomas Ross saw and sketched many sundials, but four of them were out of the ordinary and were of a truly grand nature. Ross obviously thought so, as he described all four of them at length.

Included within this select band of 17th-century sundials was the magnificent example at Glamis Castle, north of Perth, one time home of the Queen Mother. Ross says:

"This dial [Fig. 1] has been classed with those of the facetheaded type, as it has their distinguishing feature in a very pronounced form. It may be regarded as certainly one of the finest monumental dials in Scotland, befitting the majestic castle beside which it is erected."

In 'The Book of Sun-Dials' Mrs Gatty writes "perhaps the most beautiful dial which the world can show is at Glamis Castle, that place of mystery and legend. It is simply a masterpiece; nothing so grand can be seen anywhere else".²

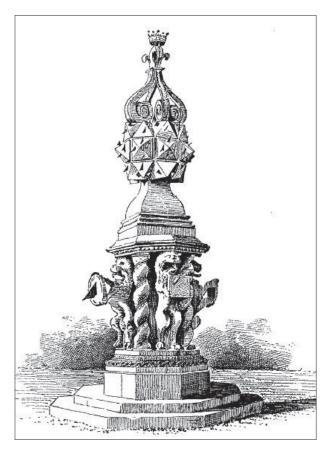


Fig. 1. Sketch of the Glamis Castle dial, drawn by Thomas Ross.¹



Fig. 2. Photograph of the Glamis dial from a distance.

Unfortunately at the time of my visit, access to the lawn on which the sundial sits was not allowed, and despite my pleas, I was only able to take long distance photos of this magnificent sundial (Fig. 2) using my telephoto lens.

Tentatively dated to around 1683 (but it may be much earlier) it contains eighty-four separate dials, eighty of which are on the 'pineapple top' (Fig. 3), properly called a stellar rhombicuboctahedron. It was fully described and illustrated by David Gauld in his excellent article in a *BSS Bulletin* in 2009.³

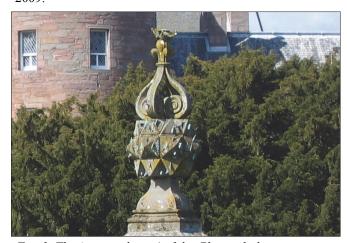


Fig. 3. The 'pineapple top' of the Glamis dial.

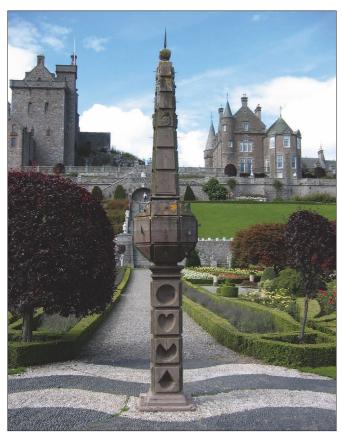


Fig., 4. The Drummond Castle obelisk dial.

It was the truly fabulous obelisk sundial at Drummond Castle Gardens (Fig. 4) at Muthill near Crieff in Perthshire, that grabbed my interest in the first place and got me hooked on sundials. I didn't know that anything like that existed. There are only twenty-six known complete examples of obelisk sundials in Scotland and this is the oldest known of its type. It is from 1630 and was by John Mylne III at a cost of £32 18s. Ross describes it as follows:

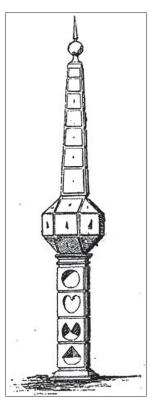


Fig. 5. Ross's sketch of the Drummond Castle dial.

Fig. 6. The boss and finial of the Drummond Castle dial. Most of the individual dials still have their gnomons in place. "This dial stands [Fig. 5] in the centre of the splendid gardens at Drummond Castle. Its upper part is considerably higher than the shaft, and the whole dial is cut into plaques which correspond to the spaces of the normal type. On the shaft only they are enriched with hollow figures, some of which are new and different from those hitherto met with. The shaft contains four spaces instead of the usual five in the height, and for the first time we have a neck-moulding beneath the capital, while the triangular spaces at the angles of the obelisk are not cut out, thus losing the effective shadows so conspicuous in the dials of the ordinary type.

"The dial finishes with a stone ball having a metal point, while its base consists of a thin spreading moulding. A Latin inscription informs us that it was erected by the second Earl of Perth in 1630; and from the Dictionary of Architecture we find that it was made by John Mylne (the third of the name), who was the architect of extensive additions at Drummond Castle. The dial contains five stanzas of rhyme in which the hours as sisters descant on the flight of time."

It is said to contain around seventy separate dials, but I have to say that I have not managed to count them. There are cup hollows of various shapes, 'normal' vertical dials, reclining and inclining faces as well as dials with pin gnomons on the upper part (Fig. 6). It is unlikely that the dials with pin gnomons can now tell the correct time. They rely on the length of the pin and these are unlikely to be of their original length due to some corrosion.

That said, it is in excellent condition considering that it is nearly 400 years old and it is a truly remarkable sundial. As a bonus, it is situated in magnificent surroundings which are said to be one of the finest formal gardens in Europe.



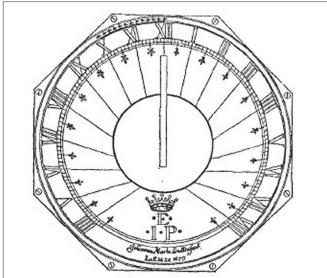




Fig. 7. Copy of the rubbing made by Ross of the John Marke dial at Drummond Castle and

Fig. 8. Recent photograph of the dial.

There are two other sundials at Drummond Castle, both of the horizontal type, which should not be ignored. They are both similar and sit on the terrace overlooking the gardens and Ross provides a rubbing of one of them (Fig. 7). It is by Johannes Marke of London and is dated 1679. The dial is marked with the latitude 56° 20′ which is spot on for its position. It also contains the initials of John, Earl of Perth which are surmounted by an earl's coronet (Fig. 8).

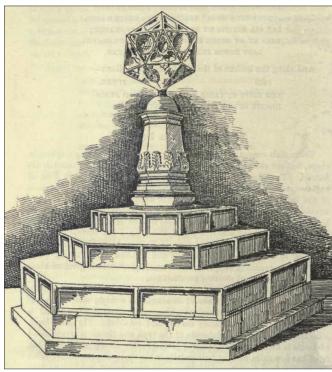
The third of these grand sundials is at the Palace of Holyroodhouse in Edinburgh, the official home of the Queen in Scotland. Ross tells us:

"This dial [Fig. 9] is situated in the grounds of Holyrood Palace; it stands on a high, wide-spreading base, consisting of three moulded steps. The support of the dial is hexagonal, and it is delicately carved and moulded. The facethead, with its dials, is the most elaborate of the type.

"At top and bottom the head has five sides, and cut horizontally in the centre it presents ten sides. This results from the alternating triangular arrangement, in which we have a triangle resting on its base, then one resting on its apex, and so on. The dials are hollowed out with figures of vari-

ous shapes. In one the gnomon is formed by the nose of a grotesque face; in another by the points of a thistle-leaved ornament. The under surfaces have no dials, except on one small heart-shaped lozenge, but are decorated instead with heraldic and other devices. These comprise the royal arms as borne in Scotland, with the collar and badge of the Thistle. There are also the initials of Charles I and his queen, Henrietta Maria, for whom Charles is said to have had the dial made.

"We learn that this sundial was made by John Mylne, the king's master mason, in 1633, with the assistance of his two sons, John and Alexander, for which he was paid the sum of £408 15s 6d Scots."





Figs 9 & 10: Ross's sketch of the Holyroodhouse polyhedral dial and a modern photograph of it.

"The dial and pedestal measure 6 feet 7 inches high, and the total height, including the base, is 10 feet, and the width at the ground is 10 feet 3 inches. It is stated that this dial was lying broken and uncared for, and that it was put in order by command of the queen."

The Queen referred to above was Victoria. This sundial consisting of twenty faces currently sits in the North Garden (Fig. 10) and was visited by a number of BSS members during the BSS Edinburgh Conference in 2013 where free access to the grounds of the Palace was organised by Chris Lusby Taylor. Fig. 11 shows the grotesque face mentioned by Ross as well as the small dial on the heart-shaped lozenge underneath. There is one of these small dials on each of the five declining faces.



Fig. 11. The grotesque face on the Hollyroodhouse dial.

It will be noted that there was a huge difference in price for the dials at Drummond Castle and Holyroodhouse, even allowing for their difference in styles – did Mylne consider that the King could afford to pay substantially more and set his price accordingly?

This sundial was already over 100 years old when Bonnie Prince Charlie⁴ established his headquarters at Holyroodhouse in 1745, whilst his troops occupied Edinburgh during the Jacobite Rebellion. I have always found it difficult to visualise the contrast between the skilled mason crafting these beautiful, intricate and mathematically correct sundials on the one hand, with the kilted highlander with claymore and targe (sword and shield) rampaging through the streets of Edinburgh on the other hand.

These three sundials, at Glamis Castle⁵, Drummond Castle⁶ and the Palace of Holyroodhouse⁷ are certainly very grand sundials and are all worthwhile paying a visit. All of the grounds in which they sit are open to the public; Glamis Castle and Holyroodhouse throughout the year, and Drummond Castle during the summer months. However, if you do plan to visit, ensure that you check beforehand as the Palace of Holyroodhouse is closed when the Queen is in attendance, normally for a couple of weeks towards the end of June and the beginning of July each year.



Fig. 12. Ross's sketches of the Dundas Castle dial.

Fig. 13. The Dundas Castle dial and fountain in operation.



The final sundial of this remarkable group is at Dundas Castle near South Queensferry on the western outskirts of Edinburgh. Dundas Castle is currently run as an up-market wedding venue and conference centre within a private estate and is not open to the public. This is a great shame as its fountain with its integrated sundial is truly remarkable. Ross says:

"This combined fountain and dial [Fig. 12] well illustrates the magnificent ideas which prevailed during the seventeenth century with regard to the monumental accessories considered desirable for the adornment of pleasure grounds and gardens, and we learn from the inscriptions on the fountain that many more objects of the kind once existed here which have been swept away. The fountain and dial do not appear to be in their original position, as is evident from an unpublished drawing in the possession of the Royal Scottish Academy. They were probably shifted when an old house which stood here was taken down.

"A flight of ten steps leads up to the dial, which is supported on an octagonal shaft adorned with winged figures; above this is the swelling basin of a second fountain, out of which rises the dial proper. It contains the usual features,



Fig. 14. Close-up of the dial and fountain at Dundas Castle.

with certain peculiarities which can easily be seen on examination of the sketch. The principal fountain, which is square, measures about 7 feet each way by about 7 feet high to platform, above which the dial and pedestal rise to a height of 5 feet 8 inches. From an inscription seen on the drawing we learn that the structure was built in 1623.

"There are numerous initials and other inscriptions on the fountain; the former are those of Sir Walter Dundas, and his lady, Dame Ann Menteith; and the latter, amongst other things, advise visitors to behave themselves seemly, to forbear to do harm to the fountain, nor yet should'st those inclined to injure the signs of the dial."

In 'The Book of Sun-Dials', Mrs Gatty goes a little further and provides a translation of one of the inscriptions as follows:

"Sir Walter Dundas in the year of our Lord, 1623, and the sixty-first of his own age, erected and adorned, as an ornament of his country and family, sacred to the memory of himself, and as a future memorial of his posterity, as also an amusing recreation for friends, guests, and visitors, this fountain in the form of a castle, this dial with its retinue of goddesses, and this garden with its buildings, walls and quadrangular walks, surrounded with stones, piled on high, rocks having been on all sides deeply cut out, which inconveniently covered the ground.

"Whoever thou art, who comest hither, we, so many halffiendish specters, are placed here lately by order, expressly for bugbears to the bad, so that the hideous show their visages, lest any meddling evil disposed person, should put forth his hand on the dial or garden. We warn robbers to depart, burglars to desist, nothing here is prey for plunder! "For the pleasure and enjoyment of spectators are all these placed here: but we, who rather laugh with joyous front to a free sight, we bid frankly the kind and welcome friends of the host. Boldly use every freedom with the master, the dial, the garden, and the garden-beds and couches – him for friendship and conversation, them for the recreation of the mind and thought. With ordinary things to content us here, is to be even with others, we envy not their better things."

This dial is of the lectern type and its date of 1623 identifies it as the oldest of its type in Scotland and the second oldest overall. However, this view was not shared by Andrew Somerville who commented in a letter to the NMRS (National Monuments Record of Scotland)8 "To my mind it sits rather uneasily on the top basin of the fountain, with the jets hard up against it so that their pattern would have been spoilt, and there are no water marks on the dial as one might have expected if the dial had been in place when the fountain was operating. This suggests to me that the dial was not part of the original structure but was added later when the fountain had ceased to be operational. However, the Latin inscription on the fountain dated 1623 undoubtedly mentions the dial, though if one reads it carefully it does not necessarily imply that it was an integral part of the fountain; it could merely have been one of the other furnishings of the garden. And of course it need not necessarily have been the dial which is present now".





Figs 15 & 16. Scaphe dials and the star dial at Dundas Castle.

So is the sundial original to the fountain or not, or does it matter? Reading the translation provided by Mrs Gatty above, I can see where Somerville was coming from, but you could also read it the other way too, in that the dial was an integral part of the fountain. Either way, it is still a grand structure (Fig. 13). Nowadays the fountain is operating correctly and it currently sits to the right of the castle. The jets on the fountain referred to by Somerville are not interfered with by the sundial in any way (Fig. 14).

The sundial on top of the fountain contains 35 separate dials of several different types including cup hollows (scaphe), heart shaped and geometric sinkings, cylindrical and vertical dials (Fig. 15). The star on top has dials in each angle as well as its top surface (Fig. 16). All of the gnomons are missing except two, all visible numerals are Arabic and the majority of the hour lines are still visible.

So that's it – four sundials, three of them in the grounds of castles and another in the grounds of a palace. These fabulous sundials are all situated in the best of surroundings as befits their status as Scotland's grandest sundials.

ACKNOWLEDGEMENT

Many thanks to Lucy Scillitoe, Commercial Director at Dundas Castle, for allowing me access to view and photograph their sundial.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 8: The Haddington Bowl

DENNIS COWAN

his sundial was hard to find. It was described by Thomas Ross in volume 5 of *The Castellated and Domestic Architecture of Scotland* ¹ of 1892 as follows:



Fig. 1. Sketch of the Haddington Bowl by Thomas Ross. 1

"This dial [Fig. 1] in its general conception is unique, although its parts are to be found in many others; but from its general idea it may be classed as a facetheaded dial. The cup-hollows on each of its octagonal faces are not unlike those found on the horizontal dial at Pinkie; and in the same way as at Pinkie, Newbattle, and other places, certain of the hollows have faces acting as gnomons. Between each of the hollows there is a mask. The peculiarity of this dial consists in its vase form, being hollowed out in the inside, and lineated so as to form a horizontal hollow dial. There is a hole at the bottom of the vase to allow the rain to escape.



Fig. 2. The dial now, in its damaged and repaired state.



Fig. 3. The west-facing scaphe.

But where was it today? All of my investigations were fruitless until a chance e-mail from David Anderson of East Lothian Museums (Haddington is the main town in East Lothian) with a query relating to Scottish sundials. In my response to him, I took the opportunity to ask if he was aware of the Haddington Bowl or Vase. To my surprise, he advised that it was in the museum's storage facility in Haddington! It certainly hadn't travelled far since Ross's day.

He gave me contact details for Claire Pannell, the museum's Collections Officer and a few weeks later I visited the store. And there it was, on the bottom shelf surrounded by old curling stones and several pieces of old architectural stonework.



Fig. 5. The markings on the inside of the bowl.

Claire appeared with a fork lift and she moved several of the pallets out of the way whilst I shuffled the dial to a position more suitable for photography. It was certainly far too heavy to lift.

It was still as Ross described it, but at some point since Ross's day it had been severely damaged and very poorly restored (Fig. 2), but it is still a fine unusual decorative dial. Two of the cup hollows have faces acting as gnomons as described by Ross (Figs 3 and 4) whilst two of the other six cup hollows have considerable damage. Fig. 5 shows the internal markings of the bowl.



Fig. 4. The east-facing scaphe.

I have never seen an old sundial in this form and I'm sure that it is unique in Scotland at least, and I'm mighty pleased that I was eventually able to locate it.

ACKNOWLEDGEMENTS

Many thanks to David Anderson and Claire Pannell of East Lothian Museums.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 9: The Mercat Crosses of Scotland and their Sundials

DENNIS COWAN

mercat cross, as a market cross is known in Scotland, signifies that the right to hold a regular market was granted by the monarch or a bishop. The cross was the place around which market stalls would be arranged and where merchants would gather to discuss business. It was also the spot where state and civic proclamations were publicly read. To this day, royal proclamations are still ceremonially read in public at the mercat cross in Edinburgh's Royal Mile, including the calling of a general election and succession of a new monarch.

The essential element of the market cross is not a cross, but a shaft often crowned with an appropriate heraldic or religious emblem. Heraldic beasts, armorial bearings and sundials are popular subjects for the capital and finial of market crosses. In many cases the cross is topped by a royal unicorn or lion, symbols of the Scottish monarchy.

There are somewhere between one hundred and one hundred and twenty-six such crosses in Scotland¹ and I have so far identified that seventeen have sundials incorporated into them. In *The Castellated and Domestic Architecture of Scotland*² Ross describes and sketches ten of them. He states that:

"we are not surprised to find that many of the marketcrosses erected during the seventeenth century have been adorned with dials; the sentiment peculiar to a dial is well fitted for such a symbolic structure". In the Scottish Borders, Ross describes the mercat cross in Peebles as follows:

"The Peebles cross is an octagonal shaft about 12 feet high, and is dated 1699 [Fig. 1]. It has an iron vane on the top, with open figures of date 1662. The shaft rose from the top of an octagonal building about 10 feet high and 12 feet across, in which Dr Chambers, in his 'History of Peebles', says there was an inside stair which led up to the platform. But in a paper read before the Society in February 1861, Mr James Drummond asserts that there was no stair leading to the platform. This cross was taken down so as not to obstruct the traffic on the street of Peebles, and is now in the Chambers Museum."

Despite Ross's comment that the cross is dated 1699, it is probably 15th-century and has had several sites in its history. The cube sundial was added in 1662 to mark the restoration of Charles II to the throne. In 1807, the Cross was in such a ruinous condition that the council ordered its removal but the town's people were opposed to the decision. Eventually, in 1858, it was placed in the quadrangle of the Chambers Institution. It was re-erected on its former site at the junction of Eastgate, Northgate and High Street in 1895 minus the octagonal building referred to by Ross, and was moved slightly to the east in 1965 where it remains today on a traffic island (Fig. 2). The four dial faces are octagonal with Arabic numerals and all gnomons are intact (Fig. 3).

Figs 1, 2 & 3.
The Peebles
cross. L to R:
Thomas Ross's
sketch; a general
view and the
north-west and
south-west faces.









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Figs 4 & 5. The Nairn Cross.

the square head is no longer recognisable as a sundial. The ball finial is missing, but some traces of decorative moulding remain on the cornice. It was removed from its original position in the centre of the High Street and re-erected on the pavement at the manse wall. In 1968 it was moved again and now stands once more on the High Street, on the pavement outside the Courthouse (Fig. 5).

There is a fine mercat cross in Inverkeithing in Fife on the north side of the Firth of Forth. Ross tells us that:

"this beautiful market cross [Fig. 6] was illustrated by Mr James Drummond and from 395 the heraldry on the shields on the capital (The Royal and Drummond Arms Impaled – and of the Earl of Douglas) he connected the cross

with Anabella Drummond, queen of Robert III, and says, 'May not this cross have been a gift of the queen on the occasion of the marriage of her son, the Duke of Rothesay, with the daughter of the Earl of Douglas, in 1398, as the heraldry suggests?' There is no reason for doubting Mr Drummond's conclusion, and his suggestion is extremely probable, so far as regards the cross proper, with the unicorn on top, but in this case the dial is without doubt an addition of the seventeenth century. The height from the base of the pillar to the top of the unicorn is 14 feet 6 inches."

Ross says that the cross at Nairn in the Highlands is:

"in a very dilapidated condition, and is entirely given over to the use of the billsticker, behind whose handiwork it can hardly be recognised. The top ball is broken away and the dials and capital are very much defaced. The height of the whole structure is about 7 feet 6 inches" (Fig. 4).

If it was dilapidated in Ross's day it is certainly more so now. It is dated 1757 and replaced an earlier mercat cross. It is on a circular shaft on a round base, but unfortunately





Figs 6, 7 & 8. The Inverkeithing Cross. Although Ross's drawing seems to indicate a direct south face, the photograph shows the dials do not face the cardinal directions but decline significantly.



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Despite some claims that the cross is from around 1400, it is probably 16th-century with the sundial and unicorn probably being added in 1688. Like many mercat crosses, this cross has moved around over the years. Originally standing in the High Street, it was moved a short distance to Townhall Street in 1799 before moving to its present position at the top of Bank Street in 1974 (Fig. 7). The cross underwent restoration in the second half of the 20th century with a replacement stone for the shaft, whilst the capital, sundial and unicorn have been recently re-painted. The sundial has four octagonal faces but only the north face has the remains of a gnomon; the others are all missing (Fig. 8).

The High Street of Airth near Falkirk is now bypassed by the main road a hundred yards or so to the east, so not many travellers see the mercat cross standing in the old town centre. Ross states that:

"This fine market cross [Fig. 9] stands in the centre of the village. On the top of the shaft a square architectural composition, which resembles an old-fashioned eight-day clock, contains two sundials. Over one of them is the date 1697. On the other two faces there are first the Elphinstone arms and motto DOE WELL LET THEM SAY, and above are the initials C.E. On the other face are quartered the Elphinstone and Bruce arms, above are the initials, probably of Richard Elphinstone, eldest son of Sir Thomas Elphinstone of Calderhall; along with his initials are those of his wife, i.e., Jane Bruce, heiress of the estate of Airth."

This mercat cross seems to be still in its original position (Fig. 10). It consists of a stepped octagonal pedestal, an octagonal shaft with a splayed base, and a square head with a finial apparently representing an acorn. Its total height is just over seven feet. The SW and SE faces of the head bear shield-shaped sundials, the latter bearing the date 1697 (Fig. 11), and there are heraldic devices on the NE and NW faces as described by Ross.

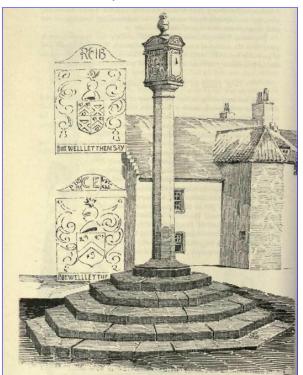


Fig. 11. The Airth Cross.



Back up north to the county of Moray, Ross describes the mercat cross in Elgin as:

"this sundial [Fig. 12] surmounts what is known as the 'Little Cross'. There is a dial on each of the four faces, and the north face bears the date 1733. The shaft and steps are supposed to be much older, and to have been erected at the expense of Alexander, third son of the Lord of the Isles, about 1402; but this date appears to be extremely doubtful. The steps and shaft are circular on plan. The height of the former measures 3 feet 8 inches, and to the top of the capital from the ground 12 feet 4 inches, the total height being about 15 feet."



Figs 9 & 10. The Airth Cross.

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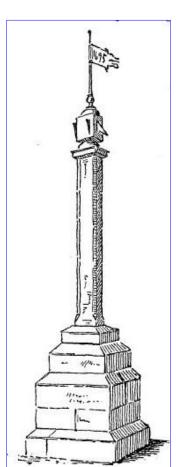


Figs 12 & 13. The Little Cross at Elgin.

This cross is known as the Little Cross as Ross says, as there is a larger mercat cross (without a sundial) called the Muckle Cross nearby, 'muckle' being Scots for 'large'. The Little Cross stands in the High Street across the road from the Elgin Museum (Fig. 13). In its present form it consists of a tall column set on a flight of steps and capped by a sundial dated 1733, during which year the Cross was

probably re-built, but the copestone with carved figures is from an earlier structure. The original sundial and top of the column are now across the road in the museum having been copied and replaced in 1941.

Back in the Scottish Borders, Ross informs us that the upper part of the mercat cross at Galashiels (Fig. 14):





Figs 14, 15 & 16. The Galashiels Cross.



"was brought to the ground by the foolish freak of a young man who climbed to the top and overbalanced the vane and sundial. They were, it appears, little damaged, and the youth escaped with a broken leg. When the cross was subsequently restored, it is supposed that the dial was renewed after the original pattern. The date on the vane is 1695."

The Galashiels cross does not stand in the town centre, but is a short distance away at the junction of Church Street and Scott Crescent (Fig. 15). Built in 1695, it was restored in 1887. It consists of an eight feet high octagonal shaft of red freestone set on a newer base. The capital is also newer but it supports the 17th century sundial surmounted by a spherical finial with a wrought-iron vane pierced with the date 1695 (Fig. 16). It has declining dials on all four faces, all with Arabic numerals, and is in excellent condition.

A fine mercat cross stands in Pencaitland in East Lothian and Ross states that:

"this market cross [Fig. 17], surmounted by a dial, stands in the centre of the village. It is a good example of its kind, and is doubtless of late seventeenth century work."

This cross may date from 1695, when the village became a burgh, but to me it looks much older. It comprises of a tapering octagonal shaft with a cubic top bearing sundials on each of the four faces (Fig. 18) set on a tall square pedestal of much-weathered ashlar and a base of five shallow steps (Fig. 19). A plaque on the pedestal tells us that Pencaitland was one of the last places in Scotland where body snatching was attempted. A party of watchers caught two body snatchers in the very act and tied one of them to the cross where he received very rough treatment from a very angry crowd, many of whom were women.



Fig. 18. The Pencaitland Cross in East Lothian.



Ross describes the cross at Dryburgh Abbey in the Scottish Borders by saying:

"This dial [Fig. 20], situated in the abbey grounds, is not unlike some of the market crosses just described, and more especially the one at Houston, the dial being the termination of an octagonal shaft. There are four faces. The one to the south has at the top of the dial the round face of the sun, with a goat above, and the motto WATCH WEEL. On the north side, in a position corresponding to the sun, is carved a rude figure, bearing a cross in one hand and something like a bell in the other, with the motto above FIDUCIA CONSTANTE. On another face are the Scott arms, with the initials T.H., and on another the Campbell arms first and fourth, girony; second and third, a galley, with the initials J.C.



Figs 17 & 19. The Pencaitland Cross in East Lothian.

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"As regards the conjunction of the Scott and Campbell arms on this sundial, the only circumstance known to us as at all likely to account for it is that Walter Scott, well known as "Beardie," the paternal great-grandfather of Sir Walter, married, in 1690, Mary Campbell, a niece of the Blythswood family. But as telling against the theory that this dial was set up by them we have to point out that the initials accompanying the arms on the dial do not correspond with theirs."

This dial gave me a bit of bother to say the least. Other than Ross's words, I could find no record of a mercat cross at Dryburgh, a visit there was fruitless and the staff at the Abbey could not help either. Then in the summer of 2013, my wife and I visited the newly re-opened home of Sir Walter Scott at Abbotsford. This house has undergone a multi-million pound refurbishment and is well worth a visit, but even more so when I saw the totally unexpected cube dial in the South Court at the front of the house (Fig. 21). I immediately recognised it as the missing dial from Dryburgh Abbey although it was not on a mercat cross.

Figs 20, 21 & 22. The Abbotsford Cross.

Reading Ross's words again, although he describes it within his section on mercat crosses, he does not actually say that this dial was on a mercat cross, only that it is not unlike some of them described! He did like to make things difficult for me sometimes. Subsequent discussions with the curator at Abbotsford revealed that the dial had come to them from Drygrange near Melrose in 1989. Abbotsford and Melrose are only about three miles apart with Dryburgh Abbey a further ten miles distant. How and when it had made its way from Dryburgh Abbey to Drygrange is

not known. However, Andrew Somerville³ identifies that it was taken from Dryburgh to Nenthorn House near Kelso in the 1920s so perhaps it made its way from there to Drygrange. The dial (Fig. 22) is much more weathered today and although the hour lines and numerals are clear enough, the mottoes and other depictions are difficult to decipher.

Interestingly, parts from Edinburgh's original mercat cross, demolished in 1756, are incorporated into the South Court garden wall at Abbotsford. The current mercat cross in Edinburgh is of Victorian origin, although it is understood that parts of the original stone shaft are embedded in its structure.

Houston is a lovely village to the west of Glasgow. Ross says only:

"This is a simple village cross [Fig. 23] with a square block on the top having dial faces"

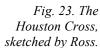






Fig. 24. The Houston Cross.

Fig. 27. The south face of the Fettercairn Cross.



It can be seen that there is a ball on top and that the gnomons survive, but they are replacements. The south face has a \maltese for the noon mark (Fig. 24).

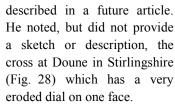
Ross identified and described one other mercat cross at Fettercairn in Aberdeenshire. He says:

"This market cross [Fig. 25] is an octagonal shaft, surmounted with a capital having a sundial on its southern face. It bears the coroneted initials of John, first Earl of Middleton, and his arms (a lion rampant within a double tressure flowered and counter-flowered with fleur-de-luce, all countercharged), and on its north side is the date 1670. This cross stood originally in the now decayed village of Kincardine, which lost its prestige by the courts being removed to Stonehaven in the year 1600. It is probable that the shaft only was brought from Kincardine, and that the Earl had the present capital made for it then. On the shaft, as will be seen by the sketch, there is a representation on one side only of the standard Scotch ell, 3 feet 1½ inches long. This cross was noticed by the Queen in the 'Leaves from the Journal of Our Life in the Highlands'."

Queen Victoria travelled widely in this area whilst staying at Balmoral, her Scottish Highland residence. The cross now stands on six octagonal steps (Fig. 26) as it did in Ross's day, and the single dial face is now rather worn and has lost its gnomon (Fig. 27). A reminder of past times is the iron hasp with two links still attached. Those guilty of

minor crimes were locked into an iron collar, 'the jougs' and chained to the cross.

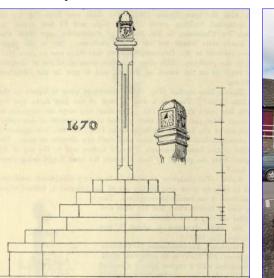
He also mentioned separately the mercat crosses at Leven and Lochgoilhead, but these are obelisks and will be



There are also sundials on the mercat crosses at Duns (Fig. 29) - on a huge shelf and wrongly orientated; Lochmaben (Fig. 30); and Cumnock, which I have not yet visited, none of which Ross mentioned. Neither did he identify the cross at Melrose which also had a sundial. Restoration after 1986, when it was known that the sundial was present, appears to have replaced virtually the whole cross other than the base and



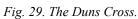
Above: Fig 28. The eroded mercat cross at Doune.





Left: Figs 25 & 26. The Fettercairn Cross.









Left: Fig. 30. The Lochmaben Cross.

the unicorn on top, and in doing so replaced the dial face with the numerals of a clock face (Fig. 31)!

You can't win them all.

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1. Wikipedia identifies that there are 126 mercat crosses in Scotland, but only lists 100 of them. John W. Small identifies

- 106 mercat crosses in *Scottish Mercat Crosses*, Eneas MacKay, Stirling (1900).
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IN THE FOOTSTEPS OF THOMAS ROSS

Part 10: A Mixed Bag of Sundials in Edinburgh

DENNIS COWAN

ohn Knox was a 16th century Scottish clergyman who was the leading figure in the Scottish Reformation which resulted in the Protestant religion eventually replacing Catholicism as the major religion in the country. His house is situated in Edinburgh's Royal Mile and is a major tourist attraction today, but not many of the thousands of people who visit it or pass by it each day notice the two-faced vertical sundial (Fig. 1) on the corner of the building.

However, it did not escape the notice of Thomas Ross who described it in *The Castellated and Domestic Architecture of Scotland* ¹ as follows:

"On the south-west projecting corner of this house there is a remarkable piece of sculpture, containing a dial [Fig. 2] which does not appear to have been hitherto recognised. It contains a figure, very skilfully twisted round the corner of the house, representing Moses kneeling on the top of a mount pointing with his right hand to a figure overhead of the sun in glory, on which is carved, in Greek, Latin, and English, the name of God. The sun's rays are represented as flames of fire. The left arm of Moses is bent backwards, and the hand rests on one of the tables of the law."

The dial is not contemporary with the house, however, and appears to be a later addition. It has Arabic numerals from 1 pm to 8 pm on the left-hand west-facing dial and was restored by Alexander Handyside Ritchie in 1850. A plaque to the left of the dial has the initials "IMMA" for James Mossman and his wife Mariota Arres. James was one-time owner of the house and a supporter of Mary Queen of Scots and who paid with his head for his loyalties. This dial was visited by delegates from the BSS Edinburgh Conference in April 2013.

Still in the Royal Mile, but further down the hill towards the Palace of Holyroodhouse, is the Canongate Tolbooth. Ross records that there is a sundial on the tower and says:

"There is a very weather-worn dial on the south front of the tower of this building. The date of the tolbooth is 1591, but the dial has the appearance of having been inserted at some later time."

Unfortunately there is no sign of the sundial today. Similarly, higher up the Royal Mile, Ross recorded a sundial on the famous St Giles Cathedral by saying:

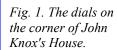




Fig. 2. Ross's sketch of the John Knox dials – note the difference in the hour lines and gnomon on the left hand dial.





Fig. 3. Huntly House multi-faceted dial.

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"In a view of this church, painted in 1790, and now in the possession of the Town Council, there is a large dial, surmounted by a cross, shown on the apex of the gable of the Chepman aisle."

So apparently the dial was missing in Ross's day too as he does not provide a sketch and makes no comment as to having seen it.

Almost opposite to the Canongate Tolbooth is the Museum of Edinburgh, otherwise known as Huntly House. In a closed gated courtyard off Bakehouse Close which runs underneath Huntly House is a fine multi-faceted dial (Fig. 3). Luckily for the BSS delegates at the Edinburgh Conference in 2013, arrangements were made to open up the courtyard. The museum staff had no knowledge of the provenance of this dial other than that it originally came from either Grange House or Saughton House. However, I now understand that this dial is almost certainly an 1886 copy of an Archibald Handasyde dial from 1732 that used to stand at Cramond Tower in Edinburgh's western outskirts as Ross's description of the Cramond dial indicates:

"This is a most remarkable dial [Fig. 4], and possesses certain peculiarities giving it a distinct character of its own within the type. It stands on a graceful square baluster, nicely moulded and carved, on which rests its peculiarly facetted double head. On the lower part of the head there are four circular upright dials with grotesque faces between and sloping dials above. The upper part of the head is of the form peculiar to the type. On one of the round dials is carved the name SIR ROB DICKSON, and the date 1732. Sir Robert was a descendant of the well-known David Dickson, Professor of Divinity in Edinburgh University. His father acquired the estate of Carberry and Sornbegg, now designed Inveresk, and sold the latter to the

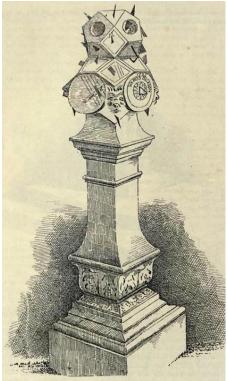


Fig. 4. Ross's sketch of the Cramond dial of which the Huntly House dial is a copy.

Duchess of Monmouth at the beginning of last century. Sir Robert was the chief bailie of Musselburgh during the rebellion of '45. He died in 1760. On the other side of the dial occurs the inscription ACH HANDASYDE FECIT. The same name occurs on one of the two dials lying in the churchyard of Inveresk, and others are mentioned as being known to be by the same maker. We are thus able to identify Handasyde as a dial-maker. Although the dials at Inveresk and Cramond are widely different in design, they have a point of resemblance in their open gnomons.

"A few years ago this dial was found lying in an outhouse, broken in several pieces, and we were then informed by the gardener that it once stood in the neighbouring grounds of Lauriestoun. In 1886 it was repaired and placed in the grounds of the Edinburgh Exhibition, and on being returned to Cramond it was set up in front of the house. It now bears a modern finial, which is the "poppy-head" of a cast-iron railing. While in the Exhibition it was copied, at least once, and a copy, with a different support, was shown in the Exhibition of Decorative Handiwork held in Edinburgh in 1888. The height of the square base is 9 inches, above which to the top of the cornice is 3 feet 2 inches, and from thence to the top of the dial (not including the finial) 2 feet 2 inches. The total height is 6 feet 1 inch."

I believe that the Huntly House dial is the one mentioned above with the different support. The Cramond dial was moved many years ago and was last heard of at the House of Aldie in Fife.

Edinburgh's West Kirk, otherwise known as St Cuthbert's Church, lies at the west end of Princes Street and Ross states that:

"This finely-cut dial [Fig. 5] is placed on the west face of the steeple, and in design is not unlike those in Inveresk Churchyard. It has a bead and hollow moulding round its four sides, and has an open iron gnomon; above is the

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Fig. 5. Ross's sketch of the West Kirk dial.



Fig. 6. West Kirk dial today.

motto VIVITE FUGIO, with the date 1774. The dial and its frame appear to be made of stones from different quarries. The builder and supposed designer of the church was a Mr. Weir."

This church is not to be confused with the church on Princes Street itself but is to the immediate south of and behind this building. The vertical dial has a single face with a complete simple open gnomon and has Roman numerals from 11 am to 9 pm (Fig. 6).

Moving on to another church, this time in Corstorphine, now a western suburb of Edinburgh, Ross (and Mrs Gatty²) had it wrong when he said that "there are seven dials on this church, all similar to the one shown in [Fig. 7]". Only the one on the SW corner was ever a dial – the others are all blank, and unlike the SW dial are not canted in the proper direction, and are just square to the building. There are three dial faces whilst the north face is blank (Fig. 8).

At Liberton House on the southern outskirts of Edinburgh, there is a fine stone dial set into the corner of the house. Liberton House was rescued from ruin by the current owners after a fire in 1991. They now run an architectural practice from an annex to the house. The house is home to one of the few ghosts that have been successfully photographed – the picture appeared in the *Scotsman* in 1936.

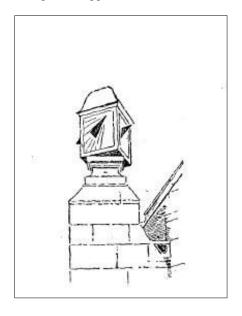


Fig. 7. Corstorphine Church dial sketch.



Fig. 8. Corstorphine Church dial today.

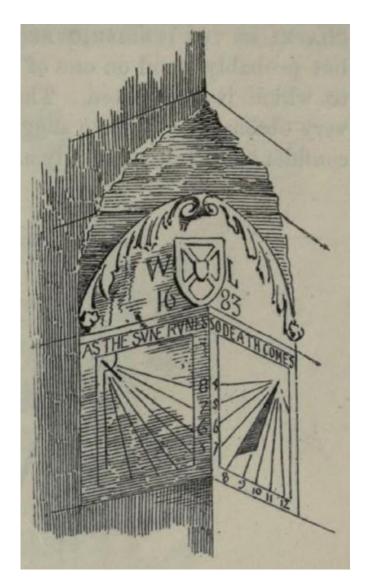


Fig. 9. Ross's sketch of the Liberton House dial.



Fig. 10. Liberton House dial today.

The ghost has not been seen since the fire in 1991; however, its ghostly voice is still heard now and again. It appears to have developed a habit of interfering with electrical equipment which frequently malfunctions for no obvious reason.

Ross records that:

"On the south-west corner of this house, the ancient mansion of the Littles of Liberton and Craigmillar, there is a fine angle dial [Fig. 9], round the top of which is the motto AS THE SVNE RVNES SO DEATH COMES. Above the dial the corner is rounded and enclosed with a carved scroll containing the arms of Little (a saltire with an inescutcheon) betwixt the initials of William Little and the date 1683."



Fig. 11. Ross's sketch of the precarious-looking Hudson Cottage dial.



Fig. 12. Hudson Cottage dial looking rather more solid today.

The dial appears to be a little more worn nowadays (Fig. 10) but the west-declining face numerals can be seen to be Arabic from 1 pm to 8 pm although the gnomon is broken. The south-declining face has Arabic numerals which are a little indistinct today, but from Ross's sketch are from 4 am to noon.

Still in Liberton, but on the road back towards the centre of Edinburgh, a cube dial sits atop the gate leading to the garden of the house known as Hudson Cottage. According to Ross:

"This sundial [Fig. 11] now occupies a peculiar position over a gateway leading through a small garden to a house on the roadside. It is supported on an arched bar of iron thrown between the gate pillars in the manner shown. The dial is of neat workmanship, but the finial on top is not original."

The dial today (Fig. 12) is almost as described by Ross except that it is supported by two iron bars, and probably was in Ross's day too. It has Roman numerals from 4 am to 2 pm on the east-declining face and 10 am to 8 pm on the west-declining face.

Finally in Edinburgh's northern seaside Spanish-sounding suburb of Portobello, a large cube sundial stands in Brighton Park. In Ross's day, however, it stood at Portobello Tower (now desecrated by an ugly amusement park butted up against it), and Ross records that:

"There is a large collection of carved stones from various old buildings gathered together at this place, and amongst them is this sundial [Fig. 13]. It stands in front of the tower, and the steps are concealed with a garden rockery. The faces of the dial are very large, and consist of separate slabs cramped together; it is finished with a moulded tapering top, surmounted with a Scotch thistle."

It no longer sits on its high shaft as sketched by Ross, and now sits much lower to the ground. All four dial faces have Arabic numerals (and some graffiti) and all four gnomons are now missing (Fig. 14), but at least it still survives.

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- 2. Mrs Gatty: *The Book of Sun-Dials*, George Bell and Sons, London (1890).

Dennis Cowan is married and lives in Fife, Scotland. He recently retired from his job as a Contracts Manager. His main sundialling



interest is tracking down and photographing ancient Scottish sundials, especially those identified by Thomas Ross. His other main interest is in climbing all of Scotland's Munros (mountains over 3,000 feet) and he is a member of the Cioch Mountaineering Club. His website is www.sundialsofscotland.co.uk and he can be contacted at dennis.cowan@btinternet.com

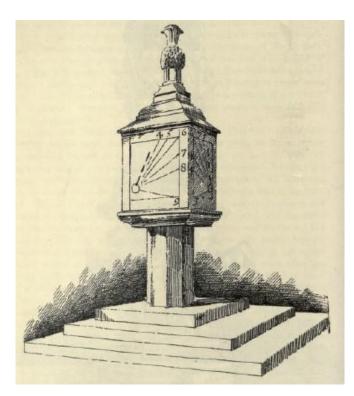


Fig. 13. Ross's sketch of the Portobello dial.



Fig. 14. Portobello dial minus its tall shaft.

IN THE FOOTSTEPS OF THOMAS ROSS

Part 11: The *Dyallis* of William Aytoun

DENNIS COWAN

ot much is known of William Aytoun. We do know though that he was assistant to William Wallace, the master mason who was responsible for Heriot's Hospital in Edinburgh; on Wallace's death in 1631, Aytoun took over as master mason. He was also responsible for Innes House in Morayshire in 1641 and we know that he probably died in 1643. Other than that, nothing appears to be known of his life. Much more research is needed.

However, we do know that both Heriot's Hospital and Innes House have a large number of sundials incorporated into their respective buildings.

For more than 350 years George Heriot's School in Edinburgh has served as one of Scotland's most distinguished schools. Today, it flourishes as an independent co-educational day school.

Originally known as Heriot's Hospital, it was founded from a bequest by George Heriot, also known as 'Jinglin' Geordie' on account of his vast wealth, and the rumour that his pockets were always full of gold. Heriot was a native of Edinburgh, coming from a family of goldsmiths. He rose through the ranks and moved to London, eventually becoming Jeweller and Goldsmith to King James VI (James I of England). He died childless in London in 1624 and was buried in St Martin-in-the-Fields.

After payment of considerable private legacies of about £6,826, he bequeathed the remainder of his estate for the purpose of founding a hospital¹ in his native city for the

upbringing and education of "puire faitherless bairnes, friemenes sones of that Toune of Edinburgh". His bequest amounted to some £23,625 and represented a huge fortune in those days.

The plan for the building is of special significance. It was the first completely regular design in Scotland with four equal ranges of buildings around a central quadrangle, with a square tower at each of the four corners rising a storey higher (Fig. 1). No other building in the country had previously been conceived on such a scale and it was the first prominent building to be built outside Edinburgh's city walls.

The foundation stone was laid on the north-west tower on 1 July 1628. There are eleven sundials, each with two declining faces, incorporated into the design of the original building: three on the inner walls facing into the quadrangle and eight on the outer walls. There are another two dials elsewhere in the grounds of the school.

But when I entered the grounds of the school, it was not a sundial that first caught my eyes, it was the view of Edinburgh Castle. The castle is most often viewed and photographed from the northern aspect from Princes Street, but George Heriot's lies to the south of the castle and it was the castle from this direction that dominated the skyline (Fig. 2).

When I was able to draw my eyes away from the castle, I started to contemplate the reason for my visit. It was to see the sundials identified and described by Thomas Ross.



Fig. 1. George Heriot's School from Edinburgh Castle.



Fig. 2. Edinburgh Castle from Heriot's.

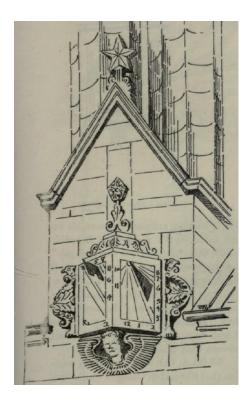


Fig. 3. Sketch of dial on Heriot's west-facing inner wall.

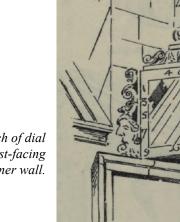


Fig. 4. Sketch of dial on Heriot's east-facing inner wall.

In volume 5 of *The Castellated and Domestic Architecture* of *Scotland*,² Thomas Ross describes the sundials as follows:

"Perhaps the finest specimens of attached dials in Scotland are to be seen on this building. There are eleven of them, eight being on the outside walls and three facing the courtyard. They are all of the same general form.

[Figs 3–5] represent those of the courtyard. Those on the

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outer fronts are similar to the above, and they all differ from each other chiefly in their supporting brackets. One has this feature rounded, as shown by [Fig. 6]. Others have brackets, consisting of cupids' heads with wings, similar to [Figs 3 and 5], and to the dials at Peffermill. Others have demons' heads, with wings similarly disposed; and one on the east side [Fig. 7] rests on what appears to be intended for an elephant's head."

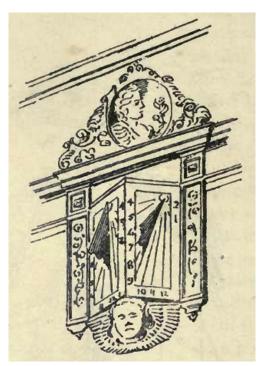


Fig. 5. Sketch of dial on Heriot's south-facing inner wall.

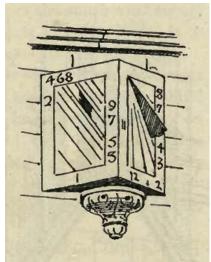


Fig. 6. Sketch of dial on Heriot's west-facing outside wall showing rounded support.



Fig. 7. Sketch of dial on Heriot's east-facing outside wall showing elephant support.

Photographs of the inner courtyard dials are shown at Figs 8–10 and those on the outer walls are shown at Figs 11–18.



Fig. 8. Heriot's west-facing inner wall dial.



Fig. 9. Heriot's east-facing inner wall dial.

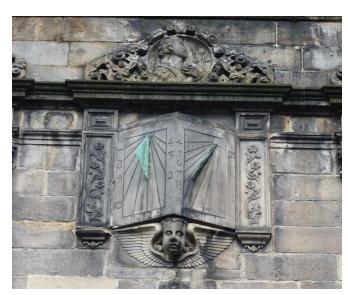


Fig. 10. Heriot's south-facing inner wall dial.



Fig. 11. Heriot's north-facing outside wall dial.



Fig. 12. Heriot's north-facing outside wall dial.



Fig. 13. Heriot's east-facing outside wall dial.



Fig. 14. Heriot's east-facing outside wall dial with elephant's head support.



Fig. 15. Heriot's south-facing outside wall dial with demon's head support.



Fig. 16. Heriot's south-facing outside wall dial.



Fig. 17. Heriot's west-facing outside wall dial.



Fig. 18. Heriot's west-facing outside wall dial.

Ross continues:

"These dials seem to have been made by William Aytoun, who succeeded William Wallace as architect and superintendent of the hospital buildings in 1631–32. In the contract between Heriot's Trustees and Aytoun, the latter was bound 'to maik and carve his Majesties portratt or any other portratt he beis requyrit to mak in that wark; and to mak all sort of dyallis as sal be fund fitting for samyn."

The date of 1631 ties in nicely with the beginning of the rise of sundials in Scotland and it is perhaps no surprise that the Trustees wished that their new building should be so adorned.



Fig. 19. Heriot's lost (and found) multi-facet dial.

Ross continues again:

"There ought to be another dial at Heriot's Hospital, but it seems to have disappeared. In 1679 'Mr. Alexander Burton, laitly ane of the doctors of the High School, had gifted freely to the hospital a dial for the hospital garden, which he is to put up at his own expense.'

"Dials are very liable to get broken, and during repairs and alterations they are apt to disappear; while coveting and taking away a neighbour's dial is not an unknown offence, as we find from Scott's History of Berwick, p. 306, that 'Johne Orde the younger' was charged 'for taking away the dyall that was at the Newgate, which is now standing in his garden. As also the same hath taken away the sone dyall that Thomas Smith sett up on the church wall which was a benefit to all persons that came that way."

Unfortunately the theft of sundials is not a modern phenomenon!

Luckily though, according to the *Sundials of the British Isles*³ edited by Mike Cowham, the sundial referred to above appears not to have been stolen, but simply lost and then found again, having been excavated in the grounds of the school in the 1970s. It is now in a small quiet area of the school grounds well hidden from view. It is a large multi-faceted dial (Fig. 19) with 25 separate dial faces with a cup hollow/scaphe dial on each of the cardinal faces. Unfortunately, the maker of this sundial is unknown.

There is yet another dial at Heriot's, this time a modern direct south-facing dial situated on a wall of the primary school (Fig. 20), which features a bird on a ball looking at a mouse on the end of a tee square, in memory of an architect. Nowhere in Scotland are there so many sundials to be seen in one location, and BSS members took full advantage when access was arranged with the Governors of the school during the Edinburgh conference in 2013.



Fig. 20. Heriot's modern south-facing dial.

Moving up north, Innes House near Elgin in Morayshire provides us with another five sundials, four of which are attributed to William Aytoun. Now owned by the Tennent family, Innes House is a private home built in 1641.

Ross says:

"There are numerous dials on this house, which is one of great interest, as it is known, from an account of the building kept by the laird, to have been designed by 'William Aytoun, maister massoun at Heriott his work.' As might be expected, the dials here resemble those on Heriot's Hospital."

Unfortunately Ross does not provide any sketches of the dials at Innes House but he does provide a sketch of the house (Fig. 21) where, if you look closely, three of the dials can just be seen between first- and second-floor levels.



Fig. 21. Ross's sketch of Innes House showing dials between first and second floors.

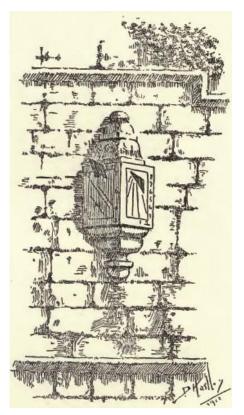


Fig. 22. Henslow's sketch of an Innes House dial.



Figs 23–26. Innes House dials – the last (Fig. 26) with missing face.



Fig. 27. Innes House icosahedron.

However, in Ye Sundial Booke^{4,} Geoffrey Henslow does provide a sketch (Fig. 22) of one of the four dials. Photographs of the four dials are shown at Figs 23–26, the last of which appears to be the one in Henslow's sketch. Although the sketches in Henslow's book are not always accurate in terms of the background and placement of the dials, it appears as though this one has probably been repositioned and lost one of its faces in the process.

We don't know the maker of the fifth dial at Innes House, which is a splendid icosahedron with triangular dial faces and complete gnomons, probably of 18th century on a later pedestal (Fig. 27).

When Ross described the dials at Heriot's he made

reference to Peffermill House, which is but a short distance from George Heriot's School and is believed to have been built in 1636. Ross says:

"There are three dials on this house, all of the same design [Fig. 28]. They have a considerable resemblance to those of Heriot's Hospital... and as the house is contemporaneous with Heriot's, being dated 1636, and only two miles distant from it, the dials may be the work of the same designer."

As Ross says, the dials at Peffermill and at Heriot's are so similar that they could very well have been designed by William Aytoun.



Fig. 28. Ross's sketch of a Peffermill House dial.

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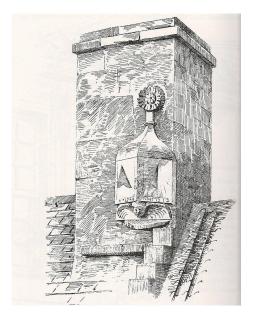


Fig. 29. Ross's sketch of the South Queensferry dial.

Unfortunately, to date I have been unable to obtain access to the house which has changed ownership within the last couple of years. The gates are always locked and my letters have been unanswered.

It is interesting to note that a sundial at South Queensferry⁵ is similar in design to these Aytoun dials. Ross describes it thus:

"The dial from South Queensferry, Linlithgowshire [Fig. 29], is built into a chimney-stack on the south side of a house near the east end of the village. It has had rough



Fig. 31. Detail of the South Queensferry dial.



Fig. 30. South Queensferry dial showing altered roofline.

usage, and the ledge projecting at the base has been broken as indicated. The dial is about level with the road behind the house, and is not visible from the street; it is doubtless of the same age as the Heriot's Hospital examples."

It took me several months on and off to find this sundial – as can be seen above, Ross did not give many clues as to its exact whereabouts, and for some time I was virtually certain that it no longer existed. But I eventually found it, although the roofline had changed in the intervening 120 years or so (Fig. 30). It seems possible that this too was an Aytoun dial; at the very least it is in the same style with its winged cherub below and flower above. See Fig. 31 for a close up photograph.

So there we have it – William Aytoun, master mason, who probably died in 1643 and was responsible for eleven dials at Heriot's, four dials at Innes House, probably three dials at Peffermill House and possibly another at South Queensferry. He deserves to be better known.

ACKNOWLEDGEMENTS

Many thanks to the Governors of George Heriot's School and to the owners of Innes House and the house at South Queensferry for allowing me access to their grounds to view and photograph their sundials.

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- 1. In Scotland at that time a hospital, as referred to here, was in fact a school.
- 2. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- M. Cowham: Sundials of the British Isles, M.J. Cowham, Cambridge (2005).
- 4. T.G.W. Henslow: Ye Sundial Booke, E. Arnold, London (1914)
- 5. Previously described in BSS Bulletin, 25(i) (March 2013).

IN THE FOOTSTEPS OF THOMAS ROSS

Part 12: A Foray into England

DENNIS COWAN

hat, Thomas Ross identified sundials in England? Well yes he did. Actually no he didn't. Well he did, sort of.

He did identify and provide sketches of two dials in Berwick-upon-Tweed, which changed hands between Scotland and England more than a dozen times. But although Berwick has been in English hands since 1482, there have been many anomalies since then.

Even though Berwick-upon-Tweed is now in England, the county of Berwickshire, until its dissolution in 1975, was in Scotland. Many organisations in Scotland that were in the old county of Berwickshire still have Berwickshire in their names, such as the *Berwickshire News*, the Berwickshire Housing Association and the Berwickshire Sports Council.

Indeed both Berwick's football and rugby teams play within their respective Scottish systems and not in England. It is nearer to Edinburgh than to the nearest city in England and many people believe that Berwick should rightly be in Scotland. It appears that Thomas Ross was one of them. As recently as 2008, the Scottish National Party made calls in the Scottish Parliament for Berwick to become part of Scotland again.

We may find in the future that not only Berwick, but the whole of Northumberland, will join Scotland in the new United Kingdom of Scotland and Northumberland. The capital of course will be Edinburgh and the name of the country will probably be shortened to Scotland!

In volume 5 of *The Castellated and Domestic Architecture* of Scotland ¹ of 1892 Thomas Ross described the dial on Berwick Parish Church as follows:

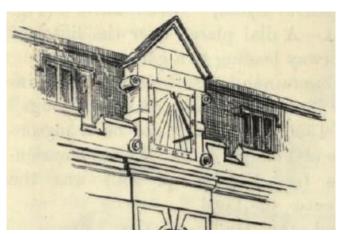


Fig. 1. Ross's sketch of the dial at Berwick Parish Church.



Fig. 2. The dial at the renamed Holy Trinity Church in Berwick today.

"This fine dial [Fig. 1] forms the termination of the south aisle wall of the nave, immediately over the compartment of 394 the third window from the west end. The face of the dial is of a white stone and measures about 4 feet 8 inches square; the width across, including the frame, is about 5 feet 10 inches; and the height to the apex of the gablet is about 8 feet 2 inches. The gnomon is of iron, and projects 2 feet 4 inches. The church was erected in 1652."

That last sentence is interesting. It was one of the very few churches to be built in England during the Commonwealth of Oliver Cromwell.

Now known as Holy Trinity Church, the dial is very much as it was in Ross's day (Fig. 2) although it was restored around 1991. However, it does not have the appearance of white stone as described by Ross. It is a direct south-facing dial mounted high above the south doorway of the church. It has Arabic numerals from 6 am to 6 pm with a simple open gnomon.

Next we move on to the Old Bridge that crosses the River Tweed at Berwick. Ross says:

"The dial here, shown by a plan and elevation [Fig. 3], is similar to the one just described at Ayr. It is placed on the down-stream parapet, in a recess over the first pier from the Berwick side. The bridge dates from 1624, and the dial, it is believed, was put up about the beginning of this century; but whether it replaced an older one or was then quite new does not appear to be known."

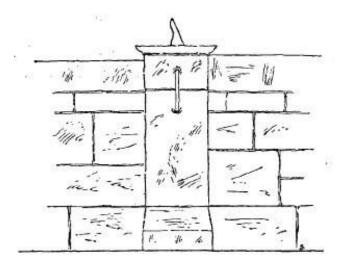


Fig. 3. Ross's drawing of the dial on the Old Bridge in Berwick.

When Ross stated that the dial was put up about the beginning of "this century", he was of course referring to the 19th century. The dial that is in this position now is not the dial from Ross's day. The story goes that in 1953, a salmon fisherman tied his net to the sundial. It was evidently pulled into the river. It must have been a large salmon! The current dial, according to a plaque fixed to the pillar, was restored at the behest of Ruth Lister of Berwick-upon-Tweed in 1995. It is a simple circular metal dial about 8 inches in diameter with Roman numerals from 5 am to 7 pm, but with no hour lines (Fig. 4). The gnomon is in the shape of a sail, but its angle is not correct for the latitude of Berwick. It should be 55° 47′ N whereas the gnomon is set at somewhat less than that.

Did Ross actually visit Berwick though? Probably not, as he thanks a Mr W.D. Purves for procuring drawings of these two dials. However, he did consider them to be ancient sundials of Scotland.



Fig. 4. The modern dial on the Old Bridge.

Apparently Berwick is at war with Russia. As Berwick changed hands between Scotland and England several times, it was often regarded as a separate entity. Some proclamations referred to England, Scotland and the town of Berwick-upon-Tweed. One such was the declaration of the Crimean War against Russia in 1853. When the peace treaty was eventually signed, Berwick-upon-Tweed was left out. Accordingly, Berwick is still at war with Russia. When the London correspondent of *Pravda* visited Berwick in 1966, a mutual declaration of peace was made with the Mayor of Berwick. The Mayor said "Please tell the Russian people through your newspaper that they can sleep peacefully in their beds".

Is it a true story? I don't know, but it's a good one.

REFERENCE

1. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).

IN THE FOOTSTEPS OF THOMAS ROSS

Part 13: The One That Got Away – Nearly

DENNIS COWAN

ome of the sundials identified by Thomas Ross in volume 5 of *The Castellated and Domestic Architecture of Scotland* ¹ are very easy to find today, others less so.

But when I read what Ross had to say about the dial at Polton House in Midlothian I just knew that it was going to be difficult. He said:

"This drawing shows the ruins of what has been either one or two dials, apparently of exceptional design. They are now built up against the garden wall so as to form a rockery, and are here sketched as they appear [Fig. 1].

"The three lower dial-stones have been part of one structure. They are unusually fine in workmanship and design, all the figures and ornaments being raised in relief. The lowest stone is a cube of about 22½ inches, and has large cup-hollows of about 13 inches diameter. The next two tiers of dials are each cut out of one stone, the lower being a square of 13 inches by 22 inches in height, containing the date 1685; the next, of a polygonal section, is 9¼ inches high, with faces of about 6 inches in breadth. On one of the exposed sides are the initials I.I. and A.M. These have all formed part of one dial, and when the exceptionally large size of the lowest stone is considered, along with the careful finish and beauty of the whole, we are warranted in concluding that this must have been one of the finest of Scottish dials.

"The dial-stone immediately above, with the figure of Death and his scythe encircling the globe, appears to have belonged to a different structure. The two carved stones on either side are suggestive of having belonged to a dial similar in design to those of Newbattle," the left-hand figure would fit such a position as those standing on the pedestal of the latter, while the carved head on the right hand, reclining on the scroll, recalls the similar features on the upper part of the Newbattle dials, and so likewise does the carved tapering finial. The lintel-like stone on which this latter rests may or may not be a part of the dial. It contains the date 1672."

So these dials were built up as to form a rockery. Would that rockery still be there one hundred and twenty-three years later? But after a little more investigation, when I found that Polton House was demolished in the 1970s, this interesting dial went straight into the missing file.

A couple of years later, whilst I was in the Scottish Borders, I recalled that I had previously noted that there

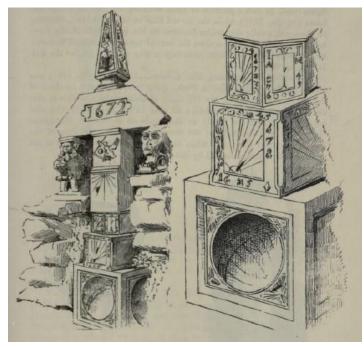


Fig. 1. Ross's sketch of the Polton House dials.

was a sundial at a house called Birkinshaw near Traquair. My wife and I were in that area, so I decided to see if I could find it.

After a few false starts, I eventually found the house. I was surprised to find that it was a relatively modern 1950/60s bungalow. It didn't look too promising but I rang the doorbell anyway. No-one answered. So that was that.

A few days later I carried out further investigation on the internet as I wasn't sure that it was the right house. It turned out that it was the right house, but more interestingly I uncovered a planning application from 2011 to move a sundial together with some 'stones' from Birkinshaw to a new location — Arniston House in Midlothian.

This sounded very interesting especially when the planning application noted that the 'stones' originally came from Polton House. Could this possibly be Polton House's missing sundial?

A covering letter from Mrs Dundas-Bekker, the owner of Arniston House, in support of the planning application tells the story better than I can.

An abridged version of this letter says:

"As the owner of Arniston House, Midlothian, I can confirm that it is my intention to re-erect the sundials and stones at Arniston. My daughter and I conduct tours round our home and inform visitors on the Dundas connection with Polton House.

"The stones from Polton House were presented by my father Sir Philip Dundas, to one of his younger brothers, James Dundas, in about 1946. James Dundas eventually set up the stones in the garden of his new house, Birkinshaw at Traquair in 1957.

"In view of the imminent sale of Birkinshaw, my cousin (and heir of James Dundas), Davina Findlay, wishes to return the stones to Midlothian. Although Polton House was sold by my father in 1946 and demolished by the subsequent owners in the 1970s, the archives and a number of other artefacts from Polton survive at Arniston. The stones will be re-united with these other records of Polton and will be well cared for in their new location at Arniston."

What a stroke of luck, although the letter seemed to major on the stones and not the sundial, this must surely be the sundial described by Ross, but I had to see it to be certain. I should note that the planning application was approved, so the sundial hopefully was now at Arniston.

I eventually made contact with Henrietta Dundas, the daughter mentioned in the above letter. She indeed confirmed that the sundial was at Arniston and that although it was in her mother's private garden, I was welcome to visit to see it.



Fig. 2. Arniston House.

A couple of weeks later, my wife and I visited Arniston (Fig. 2), and as soon as we entered the private garden I could see that this almost certainly was the missing Polton House dial. There were changes, the lowest (and largest) dial was missing, but the two tiers of dials above as described by Ross were there, albeit now mounted on a newer column (Fig. 3), with the uppermost having gained a horizontal dial on top. Actually, on closer inspection it was only decorative. A gnomon was in place but there were no



Fig. 3. The dials today on their newer column.

numerals or hour lines on its surface (Fig. 4), and a number of the other dial faces also had replacement gnomons.

As can be seen from Fig. 5, which more or less corresponds to Ross's sketch, the date of 1685 on the north-east face of the cube dial can be seen as can the initials of I.I. and A (but the M cannot be clearly seen) on the north face of the six-sided polygonal dial above. This was definitely the same dial. What a stroke of luck that was in finding that planning application!

Unfortunately, although the new gnomon on the horizontal surface is set correctly with respects to the rest of the dial, and despite the assistance of Historic Scotland in setting up



Fig. 4. The horizontal surface with the added gnomon.



Fig. 5. The north-east face showing the date of 1685.

the dial in its new location, it is set to the south-west rather than north!

But what of the other parts of the dial that sat in the rock garden at Polton House all those years ago? Luckily, leaning against a wall nearby, was the topmost dial with the figure of Death and his scythe encircling the globe above (Fig. 6). It was in a poorer condition than the other parts of the dial, having much lichen, but some hour lines can be seen as well as the gnomon root.

Also nearby are the 'stones' which have accompanied these dials for more than a century or even longer (Figs 7 and 8). However, the lower and larger dial at the base of the original structure as seen by Ross is missing and the owners of Arniston House have no knowledge of it. There is also no sign of the finial or the date stone of 1672 that stood below it. A great pity, but nevertheless the hunt for the Polton House dial has been a great success with a great deal of luck thrown in.

ACKNOWLEDGEMENT

Many thanks to Mrs Dundas-Bekker and her daughter Henrietta Bekker for being most helpful and welcoming me to their home at Arniston House.



Fig. 6. The topmost dial with the figure of Death above.





Figs 7 and 8. The 'stones'.

REFERENCE and NOTE

- 1. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 2. The Newbattle dials will feature in a future article.

IN THE FOOTSTEPS OF THOMAS ROSS

Part 14: Aberdour Castle

DENNIS COWAN

berdour Castle (Fig. 1) is located on the southern coast of Fife on the northern bank of the Firth of Forth. Parts of the castle date back to the early 13th century and it was extended in the 15th, 16th and 17th centuries. It is one of the oldest datable castles still standing in Scotland. However, only the 17th-century wing is still roofed and the tower has mostly collapsed. The castle has been owned in turn by the Mortimer, Randolph and Douglas families and is now in the care of Historic Scotland. The Earls of Morton, the last owners, were part of the Douglas family.

In volume 5 of *The Castellated and Domestic Architecture* of Scotland ¹ of 1892 Thomas Ross identified a vertical dial built into a niche in the corner of the castle. He said:

"This quaint dial [Fig. 2] is placed in a kind of niche formed on a projecting corner of the castle; it cuts diagonally across the corner, and faces in a south west direction. Over one of the windows in this part of the castle are the initials of William, Earl of Morton, who built it between the years 1606 and 1648, the year of his death. Since the sketch of this dial was made, it has been pointed out that on the upper corners it contains the initials of William, Earl of Morton, and Anne, Countess of Morton, with the date beneath 1635. These are all faintly cut, and easily escape observation."

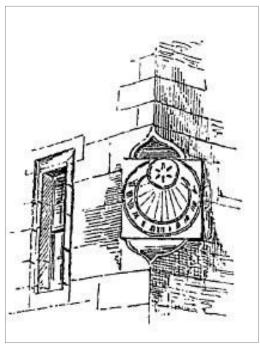


Fig. 2. Ross's sketch of the vertical dial.



Fig. 1. Aberdour Castle.

It can be seen from Fig. 3 that in a recent restoration, the initials mentioned by Ross have been picked out and can be easily seen today, but the date of 1635 has been lost. A gnomon, missing in Ross's day, has been added. Despite Ross's note that the dial faces in a south west direction, today it faces due south.

However, this is not the only sundial at this location, although it was the only one in 1892. Ross did record a horizontal dial at Aberdour House, also known as "The



Fig. 3. The vertical dial today.



Fig. 4. The horizontal dial showing the vertical dial in the background.



Fig. 5. Ross's sketch of the horizontal dial.

Place" next door to the castle, and this dial is now in the castle's garden (Fig. 4). Ross said:

"This quaint dial [Fig. 5], drawn from a sketch by Mr. John D. Michie, artist, stands in the gardens of "The Place" of Aberdour. It belongs to the second class of horizontal dials. Its square ornamented pedestal, resting on four large balls, is similar in idea to the pedestal of the dial at Pitreavie, about four miles distant, and both rest on a raised pavement, which is of a circular form here, and octagonal at Pitreavie. From information supplied by Mr. Patrick Borrowman, it appears that on the north-west face of the pedestal there is a coronet with the insignia of the Order of the Garter, and the motto HONI SOIT QUI MAL Y PENSE, and on the south-west face the Douglas heart. The south-east face contains what appears to be a clamshell, and the north-east face a grotesque and undecipherable sculpture. The dial is set north-east and



Fig. 6. Detail of the horizontal dial showing the remains of the gnomon and the numerals going all the way around the dial

south-west, so that twelve o'clock falls exactly at the northeast corner of the stone. The letters are on the edge of the stone, and a circle contains the degrees numbered on it within."

Ross's comment that this dial belongs to the second class of horizontal dials merely reflects the fact that the dial is carved directly on to the stone table of the pedestal, rather than having a metal dial placed on it.

This stone dial has unfortunately lost its second replacement gnomon in recent years through vandalism (Fig. 6), but it is correctly orientated. Unusually, the Roman numerals go completely around the 24-hour clock.

The dial mentioned by Ross as being at Pitreavie is now at Inveresk Garden in East Lothian and will be included in a future article. Interestingly, there is another dial with a similar pedestal only about one mile away at St Colme House, also on a raised pavement, this time of square form. Three similar pedestals within a few miles – could all three pedestals be the work of the same mason?

There is yet another dial at Aberdour Castle, this time in the centre of the walled garden. It was originally at Castle Wigg, now a ruin, north of Whithorn in the very south west of Scotland and was moved here in the 1970s.

Ross obviously did not visit this location himself, as he says:

"We are indebted to Mr. Galloway² for a sketch of this fine sundial [Fig. 7]. It is of square, massive construction, 484 8 feet 5 inches high, and has four dial faces, each about 16 inches square (on one of which there is a table from which the difference between Greenwich and local time may be calculated). On the top ball there is a central line divided to indicate time by the shadow travelling round the ball itself, a divided circle with a gnomon at top, and another on one side at bottom."

There are a couple of errors with this description and sketch, as no mention is made of the four reclining dials

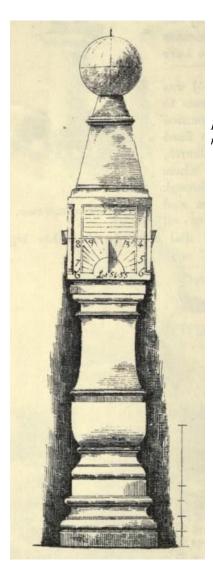


Fig. 7. Sketch of the multi-faceted dial.

Fig. 8. The multi-faceted dial showing the reclining faces.



(Fig. 8) that sit above the main cube and they are not shown on Mr Galloway's sketch. They do appear to be contemporary with the rest of the dial. Also his sketch shows Lat 54/55 on the north face of the cube whereas it is actually 54/45 (Fig. 9), the correct latitude for Castle Wigg.

There has been considerable damage to the south reclining face, which was poorly restored in the 1970s, and this is likely to be when the gnomons on the dial were replaced. Many of these copper gnomons aren't seated properly against the dial face but have a slight gap, and many are wrongly positioned.

I was originally confused, however, regarding the table on the north face which can be seen in Fig. 9, and Ross's (or Galloway's) statement that its purpose was to calculate the difference between Greenwich and local time, as I couldn't make any sense of it. (Castle Wigg is around 20 minutes behind Greenwich Mean Time.) However, if you accept that "Greenwich time" in this instance meant Local Mean Time and "local time" meant Local Solar Time then it makes sense that this is an Equation of Time table.

That indeed is what it looks like, but the figures on it did not immediately make sense. I would have normally expected that the first column would have been dates of the



Fig. 9. The north face of the multi-faceted dial showing the latitude and the non-intuitive EoT table.



Fig. 10. Part of the EoT table for four dates in October (1, 7, 15 and 29). 'Oct' is written running upwards on the left of the block of eight numbers and the 'SC' which follows 'Oct' stands for 'Slower Clock'.

month whilst the second column would be the minutes fast or slow. This obviously wasn't the case, as the figures appear to be all over the place. But thanks to some expert advice, it does make sense, but not in an intuitive way.

For each month (see Fig. 10 where October is taken as an example) there are eight numbers arranged in four rows. The first and third rows are dates of the month and the second and fourth rows are the corresponding EoT values. These are appropriate for the first half of the 18th century using the Julian calendar, which was replaced by the Gregorian calendar in 1752.

The fact that the table uses the Julian calendar ties in nicely with the dial's probable early 18th-century date. Aberdour Castle is well worth a visit and is open every day, but closed on a Thursday and Friday during the winter months.

ACKNOWLEDGEMENTS

I acknowledge gratefully the expert advice from Frank King and John Davis, particularly regarding the definition of Greenwich and local time as described by Galloway, and the interpretation of the EoT table on the north face of the multi-faceted dial.

REFERENCES and NOTES

- D. MacGibbon and T. Ross: The Castellated and Domestic Architecture of Scotland, David Douglas, Edinburgh (1892)
- 2. William Galloway was an architect practising in Whithorn, which is only a few miles from Castle Wigg. He provided plans for ten of the castles and churches, including Castle Wigg, that MacGibbon and Ross described in *The Castellated and Domestic Architecture of Scotland* and *The Ecclesiastical Architecture of Scotland* (published by David Douglas in 1896). He was born in 1832 or 1833 and died on 11 September 1897.

IN THE FOOTSTEPS OF THOMAS ROSS

Part 15: Sundials on Scottish Churches

DENNIS COWAN

Ithough I have seen around sixty-five sundials on Scottish churches, Thomas Ross recorded only around thirteen of them in volume 5 of *The Castellated and Domestic Architecture of Scotland*. Four of them have previously been covered in other articles in this series,^{2,3} and another will be the subject of a future article, so this article will only concern itself with the remaining eight locations.

The sundials that I have seen on English churches have in the main been south facing and mounted on either the tower or the porch, but this is not generally the case in Scotland, particularly on 17th-century churches. These are almost invariably mounted on the south-west corner with many having a pair of dials on the south and west sides of the corner as at Legerwood (Fig. 1), indicating to me that services probably tended to be held in the latter part of the day rather than in the morning. There was a practical purpose too – where there was an external bell rope, it was always to be found hanging down on the west side of the church (Fig. 2). Very convenient – check the time on the sundial and walk backwards a few feet to ring the bell.



Fig. 2. The external bell rope at Legerwood.



Fig. 1. A typical 17th-century Scottish church with a twofaced sundial wrapped round the SW corner. This dial is at Legerwood in the Scottish Borders where I later found that my great-great grandmother was christened in 1830!

However, only one of the eight sundials described below follows this exact pattern.

Ross says of the dial on the church at Yarrow in the Scottish Borders:

"The sketch of this dial [Fig. 3] is taken from the Reminiscences of Yarrow. It contains the motto WATCH AND PRAY TYME IS SHORT, with the initials I.F.M. with M. above and 1640 below. The maker's name is concealed in the monogram, R.M. FECIT."

The dial has Roman numerals and looks very much the same today (Fig. 4) except that part of the gnomon is missing. There is some dispute as to whether this dial is original to Yarrow, but as the church was built in 1640 and the dial is dated 1640, I suspect that the dial is original to the church. Despite what I said above, in Yarrow's case the church bell is unusually at the centre of the church; however, the polygonal apse including the bell and its

Fig. 3. Ross's sketch of the dial at Yarrow.







Fig. 4. The Yarrow dial today.



Fig. 5. Yarrow church showing the polygonal apse and tower that were added in 1906.



Fig. 6. Ross's sketch of the dial at Cortachy made from a rubbing provided by Mr George Miln.

tower were only added in 1906 (Fig. 5). The church's most famous worshipper was the 19th-century poet and writer, Sir Walter Scott.

Moving up north to Cortachy in Angus, Ross commented that:

"the dial here [Fig. 6] is surrounded with an ornamental frame in the convoluted style of the seventeenth century. On either side of the frame are the initials K.C., which



Fig. 7. The Cortachy dial today.

probably mean either Kortachy Church or Kirk of Cortachy; on the lower side the motto UT HORA FVGIT VITA, and on the top the date 1675. The gnomon is fixed in the centre of a figure of the sun. This sketch is made from a rubbing kindly made for us by Mr. George Miln, architect."

Today the dial, which has Arabic numerals, is still as it was in Ross's day apart from some flaking most notably in the bottom left-hand corner (Fig. 7). This church was built in 1828 on the site of a medieval church so was still fairly modern to Ross. Perhaps the dial, dated 1675, came from the earlier church.

At Inveresk in East Lothian, only a few miles from Edinburgh, Ross says that:

"there are two dials here, lying loosely against the walls of the church. One of them [Fig. 8] is of very great interest, as it bears the inscription ARCHIBALDI HANDASYDE PISCATORII FECIT MDCCXXXV, with the motto SIC TRANSIT GLORIA MUNDI. Piscatorii is a classical form

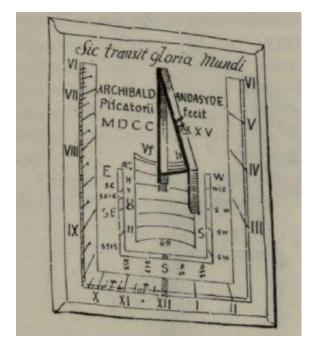


Fig. 8. Ross's sketch of the south-facing dial at Inveresk showing the detail.

of the name of the neighbouring village of Fisherrow, where Handasyde lived at that time. He was fond of classical names, and he invented the name of "Conchi Polensis" for the town of Musselburgh when he lived there. Handasyde was evidently a regular dial maker, and probably made the plain dial lying beside the above one [Fig. 9] ... The chief dial at Inveresk has a rounded moulding on the edge, and is, scientifically speaking, of complicated construction; the gnomon is open, and made of hammered iron, with a slight artistic touch in the centre. The companion dial has a similar moulding round its sides, and has also a wrought-iron open gnomon.

Fig. 9. Ross's sketch of the westfacing dial at Inveresk.

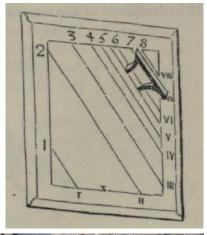




Fig. 10. The main entrance of Inveresk church showing the two dials.

Like the church at Cortachy, this church was built on the site of an earlier medieval church in 1806. It is not known though where these two dials originally came from. Today they are mounted on either side of the main entrance to the church (Fig. 10), obviously incorrectly as one is a south-facing dial (Fig. 11) whilst the other is west facing (Fig. 12)! The south-facing dial dating from 1735 with Roman numerals is much weathered and is badly flaking around the gnomon, whilst the west dial is in better condition and has both Arabic and Roman numerals. I must claim these two dials as my heritage as I have links to the 18th-century Handasydes of Musselburgh, although I still have to make a direct link to Archibald the maker of these dials, but I will keep trying!



Fig. 11. The south-facing dial at Inveresk today.



Fig. 12. The west-facing dial at Inveresk today.

Several miles south of Inveresk is the small village of Borthwick. Ross doesn't say much about this dial other than:

"this neat dial [Fig. 13], dated 1707, is inserted in the southwest corner of the south porch or transept of the church, which probably dates from the fifteenth century".

It might have been neat in 1890, but nothing much remains of it now other than the framework and the gnomon stubs (Fig. 14), but it still sits in its niche in the south-west corner of the transept.

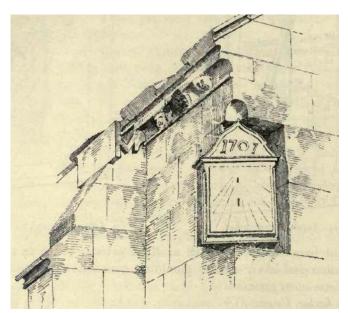


Fig. 13. Ross's sketch of the Borthwick dial.



Fig. 14. The remains of the Borthwick dial today.

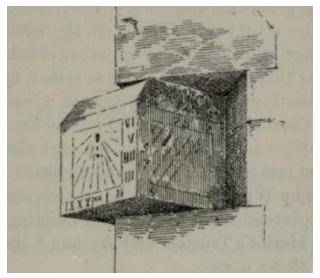


Fig. 15. Ross's sketch of the dial at Prestonpans.

Ross comments on the church at Prestonpans in East Lothian that:

"on the south-west corner of one of the south aisles of this picturesque church there was a projecting angle dial [Fig. 15]. The aisle has been taken down since the sketch was made. The Old Statistical Account says that this church, with the exception of the steeple, which is much older, was rebuilt in 1774."

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As Ross indicates, this dial is no longer there as the aisle on which it was mounted has been removed (in 1891). It is not known what became of the dial.

Some ten miles east of Berwick-on-Tweed lies the town of Chirnside. Of the dial on the church, Ross says:

"the dial here [Fig. 16] is not unlike the one above referred to at Prestonpans, both in design and position; it bears the motto HOC AGE DUM LUMEN ADEST, and the date 1816; but the dial itself is older than the lettering. The church dates from the Norman period, and some work of that time is still left; but it has undergone many transformations and repairs, and on the north gable there is a stone inscribed REPAIRED 1705. This is a much likelier date for the dial than 1816, the date it bears. Dr. Stuart, Chirnside, states that there are several old dials in the village, and that a man named Dunbar was in old times in the habit of making them."

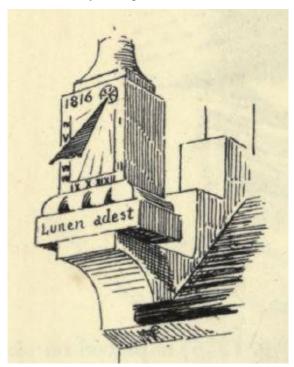


Fig. 16. Ross's sketch of the Chirnside dial with all the detail that is missing today.

There may have been several old dials in the village in Ross's day, but I have been unable to locate any of them other than this one on the church which has undergone significant changes since Ross's day. In 1904, following the death of Lady Tweedmouth and her burial in the churchyard, her husband Baron Tweedmouth built a hall, a new vestry and added a new tower to the church.



Fig. 17. The Chirnside dial today in its new position in a niche on the tower.

To facilitate the new tower, the dial was removed. Fortunately, unlike the dial at Prestonpans, a new position for the dial was created in a niche on the tower, where it remains to this day (Fig. 17). However, it is in very poor condition and the date can no longer be seen, as is the case with the numerals and hour lines. All that remains on this stone cube with two dial faces are parts of the motto, the gnomon roots and part of a sun motif.

Jim Clark, the Formula 1 racing driver who was killed in a crash at Hockenheim in Germany in 1968, is buried in the churchyard, and there were fresh flowers at his graveside at the time of my visit.

Auchterhouse is situated around ten miles north-west of Dundee, but its church is nearly two miles further away in the nowadays larger village of Kirkton of Auchterhouse. Ross says that:

"this very interesting Gothic church has two dials—one, perfectly plain, on the south-east corner of the chancel; the other, on the gable [Fig. 18], may appropriately be introduced here. It consists of a semi-cylinder sunk into the stone with a triangular hollow on each side. On the same gable occurs the stone with the date 1630."

Not much is left of the canted south-facing dial (Fig. 19) other than some very faint hour lines and the gnomon root. The other dial (Fig. 20) is still as sketched by Ross and some hour lines can be seen on the semi-cylinder.

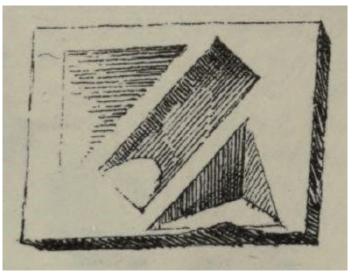


Fig. 18. The semi-cylinder dial at Auchterhouse as sketched by Ross.



Fig. 19. The canted south-facing dial at Auchterhouse today.



Fig. 20. The Auchterhouse semi-cylinder dial today.

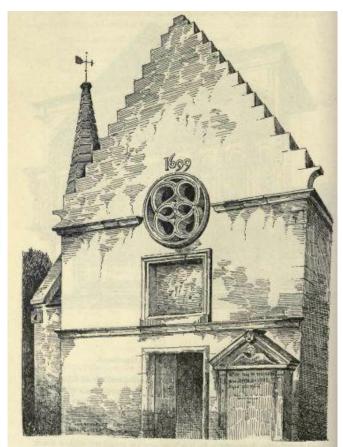


Fig. 21. Ross's sketch of Glencorse church showing the dial at the left-hand side.

At last Ross records a typical Scottish church sundial at Glencorse in Midlothian, wrapped as it is round the southwest corner of the church. He did not provide much detail though and it can only just be seen at the left-hand side of his general sketch of the church (Fig. 21). He says:

"on the south-west corner of this abandoned church there is a very simple dial of this type [dials with two faces on angles of buildings]. The date on the Woodhouselee aisle of the church is 1699."

The church today is inside a private estate and is sometimes used for wedding ceremonies. The gates of the estate are kept locked and access was difficult as the owners never answered my e-mails. However, I was lucky as on the second time that I turned up hoping to gain access, the gate was open as a tractor was just leaving. When I explained why I was there, the driver wasn't keen but I eventually managed to convince him that I would be in and out within ten minutes.

The dial is in a poor condition today with only some of the Arabic numerals and hour lines visible including the cross patty for noon on the south-facing dial (Fig. 22). The west-facing dial isn't any better with only some Arabic numerals and the remains of a bent gnomon. But it has survived.



Fig. 22. The typical Scottish church dial at Glencorse wrapped round the south-west corner.

REFERENCES and NOTES

- D. MacGibbon and T. Ross: The Castellated and Domestic Architecture of Scotland, David Douglas, Edinburgh (1892)
- D. Cowan: 'In the footsteps of Thomas Ross. 1: Scotland's oldest sundials – the forerunners to lectern sundials?', BSS Bulletin 24(ii), 31–33 (June 2012).
- 3. D. Cowan: 'In the footsteps of Thomas Ross. 10: A mixed bag of sundials in Edinburgh', *BSS Bulletin* 27(i), 33–37 (March 2015).
- 4. Frank King comments that the "artistic touch" that Ross refers to appears to be a nodus. The dial plate in Ross's sketch clearly includes constant-declination lines, so a nodus would be required. Comparison of the sketch and the dial as it survives today shows that the sketch is not a very faithful representation. It shows eight constant-declination lines and the equinoctial line is not quite straight. Ross appears to have got tired when making this sketch. The morning hours are meticulously subdivided. All have half-hour and quarter-hour tick marks and many show tick marks at five-minute intervals. At XII there is clear evidence of a noon gap but, for the entire afternoon, only hour lines are shown, with no sub-divisions at all. Between the panel containing the constant-declination lines and the main chapter ring, there is a scale labelled with compass directions. The tick marks of this scale appear to radiate from the base of the horizontal strut that supports the gnomon. If we assume that the dial as a whole is direct southfacing then, at an equinox, this scale just about plausibly serves to indicate azimuth. The sun rises due east (when the shadow falls on the tick mark labelled 'E') and sets due west (when the shadow falls on the tick mark labelled 'W'). In between, the tick mark labelled 'S' is extra wide, echoing the noon gap in the hour scale. Most of the other azimuth tick marks and their labels in the sketch are somewhat awry but the surviving tick marks and labels of the dial appear to be correctly placed. This seems to be a most unusual azimuth scale, functioning as it does only two days a year.

IN THE FOOTSTEPS OF THOMAS ROSS

Part 16: Easter Coates House

DENNIS COWAN

he architects David MacGibbon and Thomas Ross co-wrote *The Castellated and Domestic Architecture of Scotland*, a five-volume work published in stages between 1887 and 1892. As we know, the second half of volume 5 concerned itself with the sundials that they had encountered during the course of gathering information for their work.

Thomas Ross is generally given the credit for the section on sundials, probably because he presented a paper entitled *The Ancient Sundials of Scotland* to the Society of Antiquaries of Scotland, which was subsequently published in 1890.² In that paper he stated that the illustrations had all been made by himself either from sketches or from photographs. These same illustrations were used in volume 5 of *The Castellated and Domestic Architecture of Scotland* as well as the text virtually word for word, apart from some additional dials that were included in the later work.

Just occasionally a sundial would find its way into one of the other volumes of MacGibbon and Ross's work, but then it would also normally be referenced in volume 5. However, at least one example was missed.

East (or Easter) Coates House (Fig. 1) is only included in volume 2 of *The Castellated and Domestic Architecture of Scotland*.³ Of the house, Ross says:

"This old country mansion of the seventeenth century was formerly in the western suburbs of Edinburgh, but during the last fifty years the town has greatly extended in that direction, and has completely surrounded the old mansion. It now stands in the grounds attached to St. Mary's Episcopal Cathedral, having been bequeathed, along with the lands adjoining, by the late Misses Walker for the purpose of building and endowing the Cathedral.

"The angle turrets of the south gable are very large for their position, and reduce the gable to a small slip of wall between them. This is a good example of the manner in which the gable came to be engulfed by the angle turrets. As often happens in late houses, the angle turrets are of sufficient size internally to be used as small dressingrooms.

"The dormers are finished in the simple manner not uncommon in seventeenth-century work, i.e. the gablets are built with ashlar, the edges of which are cut so as to form the skews, without any moulding or separate coping on the slope, but with a small moulding at the 'putt' or springing. They are also crowned with the pattern of finials, then

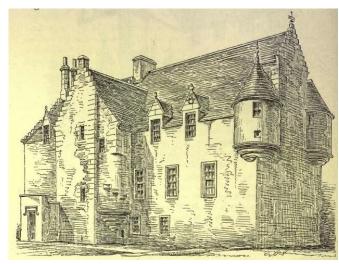


Fig. 1. Ross's sketch of Easter Coates House showing the sundial on the nearest turret.

almost universal, viz., the Rose, the Thistle, and the Fleur-de-lis; and the south-west angle turret bears the never-failing sun-dial.

"The southmost dormer in the sketch contains a shield, with the date 1615, and the initials I. B. and M. B. [Fig. 2]. The former are those of John Byres, an Edinburgh merchant of eminence, by whom the house was built as a country residence. It is not clear for whom the initials M. B. stand. They would in this position naturally represent the proprietor's wife, but the monument in the Greyfriars'



Fig. 2. The southmost dormer today showing the date and initials.



Fig. 3. The Easter Coates sundial on the south west angle of the building.

Churchyard to the memory of 'John Byres of Coites' mentions that it was erected 'by his wife A. S. and children.' ⁴ Sir John died in 1629, after having filled for six years the office of Treasurer of the City, for two years that of City and Suburban Bailie, six years Dean of Guild, and two years Lord Provost.

"Amongst other changes which this old mansion has undergone, a north wing has been added to it, in which many of the quaintly carved stones with curious inscriptions from the demolished houses of the Old Town of Edinburgh have been introduced and preserved. It is said that amongst other stones here inserted was the lintel from the town house of the worthy merchant, situated in Byres' Close (doubtless named after him), and which was demolished about fifty years. The lintel is stated to have contained the initials of Sir John and his wife, with the motto, 'Blessit be God in all his gifts', but no trace of it is now to be found. Carved stones from 'the French Ambassador's Chapel' and other buildings taken down when the 'South Bridge' over the Cowgate was erected, have also been preserved, either in the building or in the grounds of Coates House."

In the quite extensive text, only part of which is reproduced here, there is only the briefest mention of the sundial with no description of it whatsoever. This is surprising considering that it is, in my opinion, a fairly important example. So why was it virtually ignored?

Volume 2 was published three years before Thomas Ross presented his paper on *The Ancient Sundials of Scotland* and five years before volume 5 was published. Could it be that Ross had not yet developed his interest in sundials? In fact, in *The Ancient Sundials of Scotland*, Ross says that it was his publisher David Douglas who suggested that he produce the paper in the first place, and presumably was keen for it to be included in the later work too.

Or could it have been that David MacGibbon was the lead on Easter Coates House and Ross had no involvement? Notice the spelling that was used (sun-dial). This spelling was in common use in Victorian times, but it was not a spelling that Ross used either in *The Ancient Sundials of Scotland* or in volume 5.

My own view is that it was probably a combination of both of the above. MacGibbon was the lead on Easter Coates House whilst Ross had not yet developed his interest in sundials, and because of the very brief mention, he missed it when he compiled his initial paper.

But what of the sundial itself? The only comment made is that it is on the south-west angle of the building (Fig. 3). This is in common with many 17th-century Scottish churches, although as can be read from the description above, Easter Coates House was a private dwelling and never a church.

The dial does bear some resemblance to a type of which there are only four known examples, three of which are on churches (Figs 4, 5 and 6) with another at Seton Palace in East Lothian (Fig. 7). The significant difference is the lack of a semi-cylinder on the Easter Coates example although there are other differences. The main similarity, other than the general shape of the stone block, is the proclining face on each of the dials.



Fig. 4. The sundial at Cockburnspath.



Fig. 5. The sundial at Fogo.



Fig. 6. The sundial at Oldhamstocks.



Fig. 7. The sundial at Seton Palace.



Fig. 8. Easter Coates sundial's proclining face.

The Easter Coates dial's proclining face is south facing and several Arabic numerals and hour lines can still be seen as well as the remains of the gnomon (Fig. 8). It also has east-and west-declining dials with only the east-declining dial having any remaining Arabic numerals (Figs 9 and 10), but both dials have gnomon holes. There is no evidence that

there have been dials on the vertical faces at the cardinal points.

How old is this dial? The three similar dials on churches are thought to be contemporary with their buildings and this would make them late 16th or possibly early 17th century. This ties in nicely with Easter Coates House's date of 1615. So was it part of the original building? Well, maybe but maybe not.

As can be noted from the description of Easter Coates House, many carved stones from the demolished houses in Edinburgh's Old Town were preserved at Easter Coates, although mostly at the north wing. Of course if the sundial was one of them, it wouldn't have been sited to the north at Easter Coates but would have been placed logically in its current position. It could possibly have been relocated from an Old Town church, or could it have come from the French Ambassador's chapel mentioned by Ross? However, that doesn't necessarily change its likely date which I am still inclined to think is early 17th century.



Fig. 9. Easter Coates sundial's east-declining face.



Fig. 10. Easter Coates sundial's west-declining face.

My original article ended here, but I still had a nagging thought that maybe the upper horizontal surface of the dial block contained a sundial. The only way to find out would be to gain access to the window in the turret above the dial.

The house in recent times has been used for the Cathedral's music school, so I thought the best option would be just to turn up at the door. Alas, when I did so, it was being used as a nursery school. Using the intercom, it was suggested that I phone their Head Office and I was given their phone number. The young lady there said as they only leased the building I would need permission from the Cathedral. On contacting the Cathedral they said that it was OK with them, but I would need permission from the nursery. When I phoned the nursery's Head Office again, I was asked when I would like to make an appointment. On explaining that I was standing at the door, she quickly said that she would get Paul the janitor to meet me and take me up to the turret.

Paul arrived very quickly and immediately asked if I knew of the sundial at Pilrig House in Edinburgh (Fig. 11). When I said that indeed I did and thought that it was a fine example, he said that he was a stonemason by trade and that he had carved it in the 1980s and was paid £1,800 for it. We were best friends from that point on!

When we arrived at the turret room, it was full of the nursery's soft play equipment which we started to remove. Immediately one of the young children asked why we were getting the soft play stuff out, as it wasn't time for it yet!



Fig. 11. The sundial at Pilrig House carved by the Easter Coates janitor in the 1980s.



Fig. 12. The upper horizontal dial face at Easter Coates viewed from the small window above.

At last we gained access, but the window was jammed. Undaunted, my new friend Paul pulled a screwdriver from his pocket and soon the window was open. There was a sundial (Fig. 12) on the upper surface!

In my mind, that changed things. If you were to site a sundial under an upper floor window in the 17th century, then you would logically have a dial face on its upper horizontal surface, so that you could just pop your head out of the window to check the time.

So although the dial could have come from a similar building in the Old Town, I now conclude that the sundial is original to Easter Coates. However, like the Courts of Law in Scotland's ability to have a 'not proven' verdict, there is insufficient evidence to support my conclusion.

ACKNOWLEDGEMENTS

Many thanks to the young ladies at the nursery's Head Office and at the Cathedral who responded positively to my request when I gave them no advance notice at all, and in particular to Paul the janitor/stonemason who likewise was most helpful.

REFERENCES and NOTES

- 1. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 2. T. Ross: 'The Ancient Sundials of Scotland' *The Proceedings of the Society of Antiquaries of Scotland*, 161–273, Neill and Company, Edinburgh (1890).
- D. MacGibbon and T. Ross: The Castellated and Domestic Architecture of Scotland – Vol 2, David Douglas, Edinburgh (1887).
- 4. What Ross didn't realise was that John Byres had been married twice. The initials are those of his first wife, Mary Barclay.
- 5. Dennis Cowan: 'Scotland's oldest sundials the forerunners to lectern sundials?', *BSS Bulletin*, <u>24</u>(ii), 31–33 (June 2012).

Part 17: Some Sundials of East Fife

DENNIS COWAN

he eastern part of the region of Fife is located between the Firth of Forth and the Firth of Tay, more or less between Edinburgh and Perth, and east of the M90 motorway which runs between these two cities. In volume 5 of *The Castellated and Domestic Architecture of Scotland*, ¹ Thomas Ross mentions a number of dials in this area, and six of them will be covered in this article.

Setting off along the north shore of the Firth of Forth and heading east, we come to Kirkcaldy, once famous for the manufacture of linoleum. Ross makes a brief mention of a dial at Dunnikier House, "a mansion at the eastern end of the town". He says:

"The dial on this house [Fig. 1] is similar to the one just described.² The house faces the road, on the top of the hill at the east end of Kirkcaldy, and is dated 1692."

The present Dunnikier House is a hotel to the north of Kirkcaldy, and a visit there confirmed my suspicions that it was not the building with the sundial. However, by a lucky chance, when just passing one day several months later, driving east out of Kirkcaldy, I noticed a sundial on the corner of a building (Fig. 2) known as Path House.

Although not immediately recognised as one of Ross's dials, when I returned home and looked at my photographs,

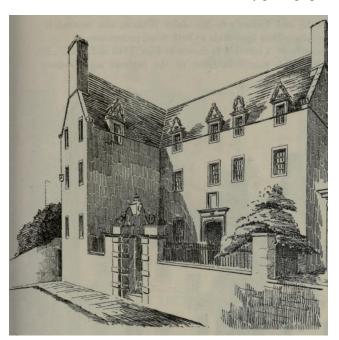


Fig. 1. Ross's sketch of Dunnikier House with the dial at the left of the sketch.



Fig. 2. Dunnikier House today, now known as Path House.

even though the photograph and sketch are from different angles, there was no doubt that Path House and Ross's Dunnikier House were the one and same. Ross did not provide a detail sketch of the dial but the dial today showing both the south-east and south-west faces is shown at Fig. 3.



Fig. 3. Detail of the Dunnikier House / Path House dial.

Further east along the coast, the seaside villages of Earlsferry and Elie lie side by side without any gap between them and Ross identifies dials in both places. Firstly, of the dial in Earlsferry (Fig. 4), Ross says only that it "is neat and graceful in design".

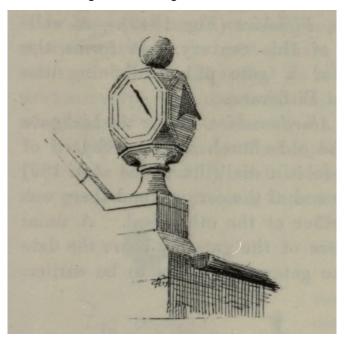


Fig. 4. Ross's sketch of the Earlsferry dial.



Fig. 5. The Earlsferry dial today.

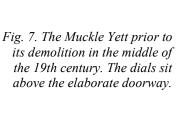


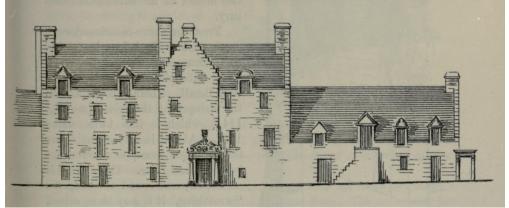


Fig. 6. The Earlsferry dial showing its position on the gable.

As can be seen from Fig. 5, it is a stone cube with octagonal dials on the south-east and south-west faces, but a comparison between Fig. 4 and Fig. 6 shows that the dial now appears to be in a different position to where it was in Ross's day, as it is now half-way up the gable as opposed to the gable foot.

Moving along to Elie, Ross has this to say:

"Elie, like most of the Fife towns bordering the Frith³ of Forth, seems at one time to have contained a great many stately old Scottish houses, of which the Muckle Yett [Fig. 7] may be taken as an example; but the hand of the philistine has been laid heavily on them, and Elie has now become a commonplace, modern, seaside resort, with whatever of architectural or historical interest it ever had almost crushed out of it."



Elie wasn't his favourite place, then! He goes on to say:

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The Muckle Yett [English – Big Gate or Door] was a fine old Scottish house in Elie, which, as it projected some 10 or 12 feet into the street, had to be taken down about thirty years ago. On the projecting part there was an elaborate doorway which contained a curious terminal dial, of which a drawing is shown at [Fig. 8]. The dial and doorway are still preserved. The former unites some of the peculiarities of the unattached dials with those of its own class, such as proclining and hollow cup-dials with upright ones. On the doorway is the date 1682, and the initials of Alexander Gillespie, and his wife, Christian Small."

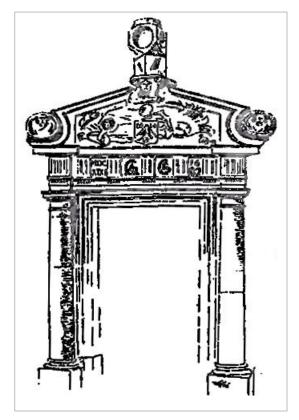


Fig. 8. Ross's sketch of the Muckle Yett doorway and the sundial above.



Fig. 9. The top of the Muckle Yett doorway today.



Fig. 10. Detail of the Muckle Yett dial showing four of the seven dial faces.

The doorway (Fig. 9) and its dials (Fig. 10) are today located rather anonymously in their new location in South Street. The dial has seven dial faces in total, two of which, like the previous two dials discussed, are vertical and south-east and south-west facing. This is quite a common configuration in Scottish sundials. There are three cup hollow (scaphe) dials above these two dials, facing east, south and west. In addition, there are two triangular proclining dials again facing south-east and south-west. It has to be said that the whole is in a rather poor condition.

A few miles north-east of Elie but lying inland is Kellie Castle, a National Trust for Scotland property. Ross merely directs us to Volume 2 by saying:

"A sketch is given in Vol. II. p. 127 of a square dial at Kelly Castle, with an ogee top, which serves to mark one of the corners of the garden wall."

He provides no detail sketch of the dial, but it can be seen on the wall at the lower right-hand side of his sketch of the castle at Fig. 11. This cube dial, which is dated 1722, now

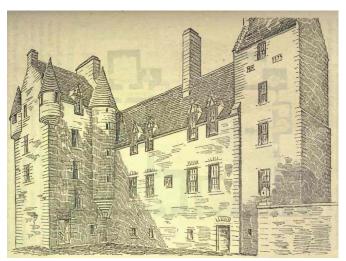


Fig. 11. Ross's sketch of Kellie Castle showing the dial on the wall at the lower right.

sits on top of the doocot (English – dovecote) in roughly the same position (Fig. 12) although it has lost its ogee top. Detail of the south and east faces is shown at Fig. 13 and the north and west faces at Fig. 14.

Fig. 12. Kellie Castle dial sitting on top of the doocot.



Fig. 13. South and east faces of the Kellie Castle dial.



Fig. 14. North and west faces of the Kellie Castle dial showing the date of 1722.

Back to the coast and just a few miles or so north-east of Crail is Balcomie Castle, said to be haunted by a boy playing a tin whistle. Of the dial here, Ross notes that:

"This is a very modest dial, hardly seen beside the rich heraldic carving which fills the three adjoining panels over the entrance gateway. The initials on it are those of John Learmonth of Balcomie, and his wife, Elizabeth Myreton of Randerston, whose arms occupy the panels. On the frieze above the panels is the inscription (EXCEPT) THE LORD BVLD THE HOUSE THEY LABOVR IN VAINE THAT BUILD IT. The date of the gateway, which faces the south, is 1660."

His sketch is shown at Fig. 15; again there is no detail sketch, but it can be seen from Fig. 16 that it is very much in the same position today. However, Ross's comment that the gateway faces south is puzzling as the gatehouse today faces just slightly north of east, and the clearly east-facing sundial today (Fig. 17) reflects that by being canted slightly. There is no evidence that the gateway has been

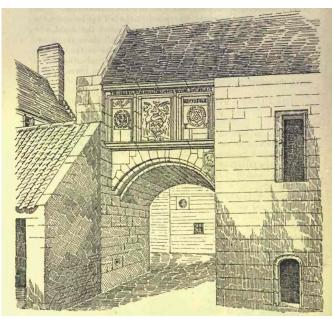


Fig. 15. Ross's sketch of Balcomie Castle gateway with the dial visible under the right-hand panel.



Fig. 16. Balcomie Castle gateway today.



Fig. 17. Detail of the Balcomie Castle dial.

moved, certainly not since Ross's time. Looking at the very small image of the dial in Ross's sketch in Fig. 15 it does look to be canted, but does not appear to be delineated in the manner of the current dial. My guess is that it is an artistic impression rather than an accurate reflection of the dial, but I cannot explain Ross's comment that it faces south.



Fig. 18. Ross's sketch of the St Mary's College dial.



Fig. 19. The St Mary's College dial today in its position on a lawn.

Following the coast, the next place we come to is the university town of St Andrews and it is the dial in St Mary's College quadrangle that interests us. St Mary's College is the home of the Faculty and School of Divinity



Fig. 20. Detail of the south and west faces of the St Mary's College dial.

within the University of St Andrews and students have attended there since 1579.

Strangely, Ross makes no mention of this dial at all, other than including a sketch of it (Fig. 18) on the very last page of the section of his work on sundials where it sits against a wall. The sundial today is on a lawn (Fig. 19) and is a stone cube with four vertical faces on top of a circular shaft. It is dated 1664 and carries the initials of Dr Walter Comrie (Fig. 20) who was Principal of the College at that time. It too is in a very poor condition with no hour lines or clear numerals visible, with the W of DWC (Dr Comrie's initials) also missing.

REFERENCES and NOTES

- D. MacGibbon and T. Ross: The Castellated and Domestic Architecture of Scotland, David Douglas, Edinburgh (1892).
- 2. The dial that Ross says was "just described", is at Fountainhall in East Lothian and will be covered in a future article.
- 3. In Victorian times, it was common to use the term "Frith of Forth" rather than "Firth of Forth".
- Ross interchangeably used the spellings "Kelly" and "Kellie" throughout his work.

Part 18: The Kelburn Castle Obelisks

DENNIS COWAN

elburn Castle, the ancestral home of the Earls of Glasgow, has been in the family since the 13th century. It is in North Ayrshire on Scotland's west coast just a little south of the seaside town of Largs, and about 33 miles from Glasgow. Since 1977, the estate has been a Country Park open to the public.

In 2007 it was found that the harling which covers the walls of the castle was causing problems with the stonework





Figs 1 and 2. Kelburn Castle and its Brazilian graffiti paint job.

underneath and would have to be removed. But before that had to happen, the current Earl's children had the idea to give the harling a paint job. The Earl decided to bring in four graffiti artists from Brazil to carry out the work. As can be seen from Figs 1 and 2, the result was a little out of the ordinary!

But the reason for my visit, remarkable as the paint job was, was to see the two obelisk sundials which were in the grounds of the estate. Incidentally, Kelburn was the venue in September 1978 for BSS founder member Andrew Somerville's first foray into searching out Scotland's ancient sundials. It was an inauspicious start as it was pouring with rain. It apparently caused a great deal of laughter with the park wardens when Andrew said that he was there to see the sundials.¹

In volume 5 of *The Castellated and Domestic Architecture of Scotland*,² Thomas Ross had the following to say about Scotland's ancient obelisk sundials, of which only twenty-six complete examples are known to exist.

"This name, while it fairly describes the appearance of the dials of this class, has a further fitness from the circumstance that the Egyptian obelisks are believed, amongst other purposes, to have acted as gnomons.

"The constant parts of these dials are a square shaft, a bulged capital, and a tapering finial. Where the dial is of the normal type and unaltered, the shaft is divided on each side into five horizontal spaces by incised lines, thus presenting twenty compartments. These compartments are hollowed out with cup-shaped, heart-shaped, triangular, and other sinkings, which are generally lineated so as to mark the hours, and were without doubt always meant to be so. The sharp edge of the figure casts the shadow, which is especially distinct in the angular shapes and at the top of the heart sinkings, where there is often a certain amount of undercutting.

"Stone gnomons of various forms are frequently left in the cup hollows, and metal stiles are to be found in all the dials. Occasionally some of the spaces are left blank, and on the north side initials, dates, and arms sometimes occur.

"The capital is always bulged out so as to form an octagon in the centre, with an upright facet on each of the eight sides, having a dial on each. Above and below each facet over the four sides of the shaft are sloping facets, with a reclining dial or a proclining dial on each the former being those dials whose faces slope towards the sky, and the

latter those whose faces slope towards the ground. The eight triangular pieces formed by the meeting of the square and octagon are cut out, and most effective shadows, from an artistic point of view, result from this arrangement, giving an air of dignity to the capital.

"The upright facets of the octagonal part have heart-shaped and cup-shaped sinkings, as in the shaft; but the proclining and reclining parts seldom have sinkings. Nor has the tapering finial, although usually covered with dials, ever any sinkings; like the shaft, this part is divided by horizontal incised lines, the number of spaces, for which there appears to have been no rule, varying according to the height of the finial.

"The obelisk-shaped dials are generally set on some kind of base, consisting either of steps or a pedestal; the former frequently alternate, being set square and diagonally as they ascend. The pedestals have a general resemblance to each other, being frequently ornamented with representations of the sun and moon."

The first of the two obelisks at Kelburn sits on three steps and is in the private garden just west of the castle. Ross tells us that:

"These companion dials adorn the gardens which surround the fine old castle of Kelburn. They seem to be in their original positions, and they are in no way designed to balance or harmonise with each other, not being visible from any point at the same time. The shafts are set diagonally on a moulded base. The obelisk of one of these dials [Fig. 3] terminates with a wrought-iron vane of delicate design and workmanship, enclosing the entwined and coroneted monogram of the Earl of Glasgow and his wife, the whole being surmounted with a Scotch thistle

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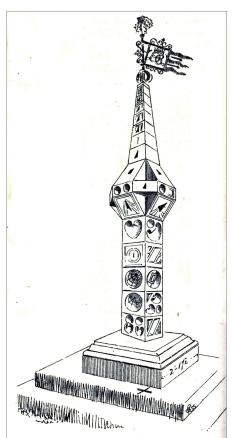


Fig. 3. Ross's sketch of the first obelisk.





Fig. 4. The vane on top of the finial today.

[Fig. 4]. This is beautiful piece of wrought-iron work; it was loose and otherwise worn by time, but the Earl of Glasgow has just had it carefully restored.

"There is the date 1707, with the initials EDG and CLC. These stand for David Boyle of Kelburn, who was created Lord Boyle in 1699, and Earl of Glasgow in 1703, and his first wife, Margaret Lindsay Crawford, daughter of the house of Kilbirnie.

"The dimensions of the dial are height of shaft, 3 feet 8 inches; height of capital, 1 foot 8 inches; height of finial, 2 feet 5½ inches; height of moulded base, 9 inches; total, 8 feet 6½ inches. The moulded base is 2 feet 1½ inches square, and the breadth of the shaft is 9½ inches."

This dial is still in the same location today and looks to be virtually the same although some gnomons appear to have been replaced (Fig. 5). As with all obelisk dials, there are







Fig. 6. Close-up of the capital's east face.

many cup hollows and heart and geometric sinkings as well as reclining and proclining dials. A close-up of the east face of the obelisk capital is shown at Fig. 6.

Somerville obviously thought highly of this dial as he saw fit to use an illustration of it on the cover of his book, *The Ancient Sundials of Scotland*.³

The second obelisk is some distance away in what is now known as the New Zealand Garden, also private but occasionally open to the public. Ross says:

"The other dial [Fig. 7] is generally of the normal type, but certain deviations therefrom seem to show that it has been altered. The shaft has only four spaces, and there has been

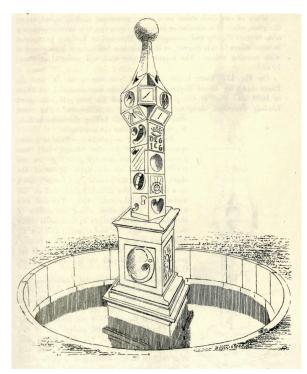


Fig. 7. Ross's sketch of the second obelisk.

mending done on it, and probably a space has been lost; and attention may be drawn to the unusual circumstance that the spaces on each face are not all of one size. The curved finial on the top and the ball termination are no doubt the result of a repair, like the altered finial at Craigiehall. The dial stands angle wise on a pedestal which resembles somewhat that of the Meggatland dial [now believed to be at the Burrell Collection in Glasgow]; on both there will be observed similar figures of the sun and moon.

"Many of our dials stand on a stone pavement slightly raised above the grass, often of a circular or octagonal form, and this feature certainly adds to their dignity and consequence. This dial at Kelburn is superior to most others in this respect, as it stands in a built stone basin supplied with running water. The height of this dial and pedestal is about 10 feet. This dial is undated, but having the same initials [as the other dial at Kelburn], is probably of about the same age."

Unfortunately, this dial has not fared very well. It still stands in the same stone basin that it did when Ross saw it, but the water is very low in the basin and does not appear to be running. Worse than that, the capital and finial have broken off from the shaft (Fig. 8). After a bit of rummaging around, the capital was found to be lying in the undergrowth nearby (Fig. 9). The finial and ball were also lying nearby although they were in many pieces. As Ross says, however, they were probably not original and had no dials on them.



Fig. 8. The broken obelisk today.



Fig. 9. The capital lying in the undergrowth.

Looking at Fig. 8 and Somerville's photograph from 1978 (Fig. 10) which were both taken from approximately the same position, the surrounding vegetation seems to have changed somewhat! The obelisk though looked to be the same in 1978 as it had in Ross's day.

But what about the castle's graffiti paint job? The castle is a category A listed building, so planning permission had to be obtained to allow the work to be carried out. In 2007, Historic Scotland agreed to the project and planning permission was then approved on the basis that the graffiti



Fig. 10. The second obelisk in 1978 (Photo: Andrew Somerville).

would be removed when the castle was re-harled, with a three-year time limit stipulated.

In 2010 the Earl formally wrote to Historic Scotland asking permission to keep the graffiti as a permanent feature as it was now a major tourist attraction. In fact, it had been named as one of the world's top ten examples of street art on a par with that of Banksy's⁵ art in Los Angeles.

Historic Scotland visited the site in 2012 and discovered that the harling was indeed severely damaging the castle walls and urged the Earl to remove it. Despite conflicting reports in the press that it was or was not going to be removed, at the time of writing, some four years later (November 2016), it was still in place.

ACKNOWLEDGEMENTS

Many thanks to John Foad for providing a copy of Andrew and Anne Somerville's writings, and the photograph of the second Kelburn dial.

REFERENCES and NOTES

- 1. A. and A. Somerville: *On the Sundial Trail in Scotland*, Unpublished.
- 2. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 3. A. Somerville: *The Ancient Sundials of Scotland*, Rogers Turner Books, London (1994).
- D. Cowan: In the Footsteps of Thomas Ross Part 2 The Sundials at Craigiehall, BSS Bulletin <u>24</u>(iii), 16–18 (September 2012).
- 5. Banksy is a well-known graffiti artist. See https://en.wikipedia.org/wiki/Banksy

Part 19: Some Sundials of East Lothian

DENNIS COWAN

he region of East Lothian is on Scotland's east coast and borders Edinburgh and Midlothian to the west with the Scottish Borders to the south, and has coastlines on the Firth of Forth and the North Sea. It has more hours of sunshine than any other region of Scotland – perfect for sundials!

In volume 5 of *The Castellated and Domestic Architecture* of Scotland,¹ Thomas Ross mentions a number of dials in this area and six of them will be covered in this article.

Dunglass Collegiate Church is situated in the very southeast corner of East Lothian just off the main A1 road. The age of the church is unclear but it was known to be in existence in 1421. An Act of the Scottish Parliament in 1563 abolished Mass and the church's days as a Roman Catholic chapel were over.

It was used as a parish church until the 18th century when it was sold to a farmer. The building was desecrated at some point thereafter when the east window was 'modified' to make an opening to allow the church to be used as a barn (Fig. 1). In 1807 some dignity was restored when Sir John Hall bought Dunglass; the family later used the south transept as a burial aisle. The church is now in the care of Historic Environment Scotland, so no more 'modifications'.

There is a rather unusual structure within the grounds of the church and Ross describes it thus:



Fig. 1. Dunglass Collegiate Church, showing the 'modification'.

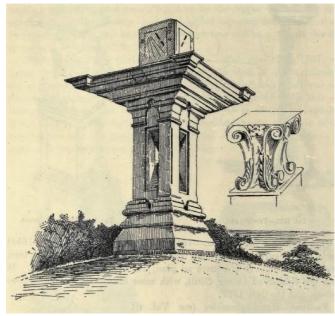


Fig. 2. Ross's sketch of the Dunglass dial, also showing the loose stone.

"This dial [Fig. 2] stands on the summit of a circular artificial mound about fifty yards south-west from the ruined Collegiate Church of Dunglass. It is square on plan, and has very much the appearance of being a fountain, with what seems to be a broad projecting square. The dials

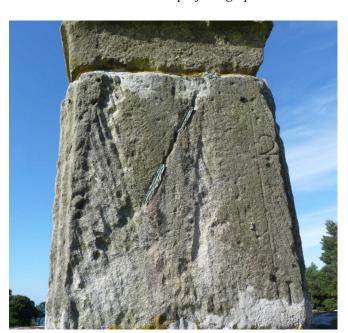


Fig. 3. East face of the Dunglass dial.



Fig. 4. West face of the Dunglass dial.

Fig. 5. The Dunglass dial today.

are on the top of the seeming basin, the upper surface of which is flat; they measure about 15 inches square by about 2 feet high; but it is doubtful if this part of the structure is in its original condition. There are various loose stones, moulded and carved, lying about, one of which is here shown [in Fig. 2], and it seems probable that these are connected with the dial. The height from the ground to top of basin is about 6 feet 2 inches, and across the basin the measurement is 5 feet 1 inch; the width across the pedestal is about 20 inches."

The main difference today, apart from the general deterioration of the dial faces (Figs 3 and 4), is that the loose stone mentioned by Ross and shown in Fig. 2 has now been fitted to the top of the cubic dial stone. As Ross suggests, it was probably part of the original structure and it does not look to be out of place in its current position (Fig. 5). However, the possibility that the structure served some other purpose originally cannot be ignored, as it seems perhaps unlikely that the whole structure was designed as a sundial.

Further west, Fountainhall near Pencaitland dates from the 17th century and is a typical Scottish Laird's house of the period, although it underwent several phases of extension in the next hundred years or so (Fig. 6). Ross describes two dials at Fountainhall, and of the first he says:

"This charming old mansion has a dial [Fig. 7] on the south-west corner. Fountainhall is a seventeenth century building, and the supporting stone seems to be part of the



Fig. 6. Fountainhall mansion house with the large canted dial on the corner.



Fig. 7. Ross's drawing of the Fountainhall dial.



Fig. 8. Close-up of the Fountainhall dial.

original structure, but the dial itself is evidently of later workmanship, and is believed to have been put up by Sir Andrew Lauder about the end of last century. The dial faces due south, and is accurate as a timekeeper."

Today the dial, which has Roman numerals, is in rather poor condition with its face badly flaking (Fig. 8). As Ross says, it does not appear to be original and it may have been a replacement dial. Ross identifies another dial at Fountainhall as follows:

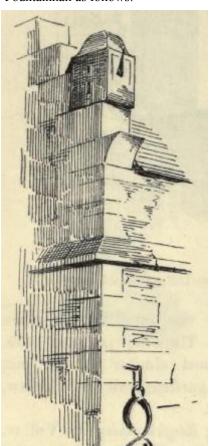


Fig. 9. Ross's sketch of the other Fountainhall dial, also showing the 'jougs'.

"This singular juxtaposition of a dial and 'jougs' [Fig. 9] is to be found on a pigeon-house at Fountainhall. The old mansion-house was the residence of Lord Fountainhall (Sir John Lauder), and the tradition that he held occasional public courts of justice here is not lessened by the presence of the 'jougs' on one of his pigeon-houses. Only one gnomon of the dial remains entire; the stone faces have scaled off, and it is altogether in a neglected state; while the pigeon-house itself has been allowed to fall into total ruin. This and another pigeon-house stand about fifty yards south of the mansion-house, the ancient approach to which passed through between them, so that the 'jougs' and dials were in full view of all visitors."

Given Ross's description it is not surprising that this dial is now missing. The current owners, who have owned the house for only a short time, have no knowledge of it. The remains of a pigeon house are still in place but whether it is the one that had the sundial and jougs, or the other one mentioned by Ross, is not clear.

Less than three miles away lies the village of Ormiston, the location of a sundial recorded by Ross but about which he says only that:

"This simple dial [Fig. 10], supported on a moulded bracket, is placed below the eaves of a two-storied house in 367 the village. It bears the date 1736."

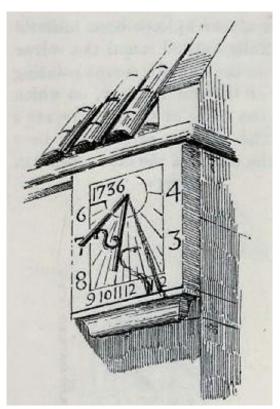


Fig. 10. Ross's sketch of the Ormiston dial.

This sundial today has been replaced by a modern dial (Fig. 11) which appears at first glance to be a faithful copy, particularly regarding the differing sizes of the numerals. However, a closer examination shows that 5pm has been added, the gnomon is positioned too low down and the hour lines do not all radiate from a single point (Fig. 12). I think



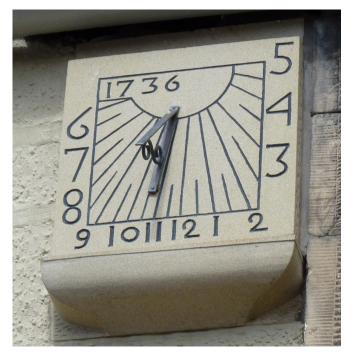


Fig. 11. The modern replacement of the Ormiston dial.

that it was John Allen who originally pointed out the hour line anomaly to me. Unfortunately I have been unable to find out what happened to the original dial.

Ross comments on another dial, at the nearby Ormiston Manse, by saying:

"The dial here [Fig. 13] stands on the top of the garden wall, but, as appears from an inscription on it, DEDICAT TO THIS CHAPEL BE THE (PARISHIONERS?), it is obviously not in its original position, but probably stood on one of the corners of the old church of Ormiston, to which it was

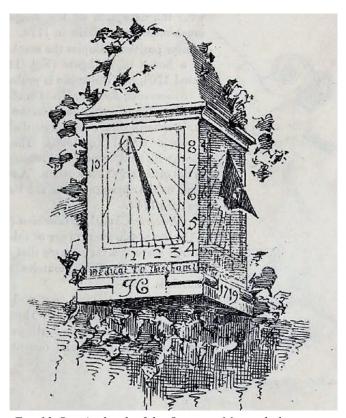


Fig. 13. Ross's sketch of the Ormiston Manse dial.

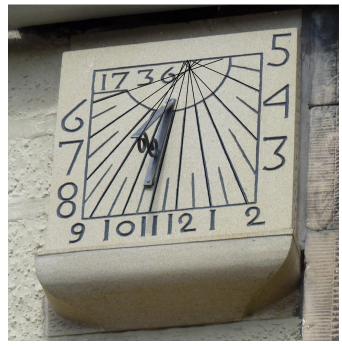


Fig. 12. The Ormiston dial with the hour lines extended.

gifted. The reading of the end of the inscription is very obscure. We have suggested the 'parishioners,' but are not at all confident of this, especially as it also contains beneath the initials J.C., probably some member of the Cockburn family, who would not likely place his private initials on a public gift. It further bears the date 1719."

The manse has been a private house for many years and unfortunately the sundial has disappeared.

The village of Garvald is situated virtually in the centre of East Lothian, and nearby is Nunraw Abbey Tower (Fig. 14) which until recently was the home of the Cistercian monks in Scotland (or at least used by them as a guest house). There is a multi-faceted sundial in the grounds and Ross comments that:

"This dial [Fig. 15] stands in the grounds of Nunraw House, and Mr. Walter Wingate Grey of Nunraw, in sending a photograph, writes: 'The small dials include dials for Cairo, Ispahan, Jerusalem, Mount Sinai, Jamaica, etc., and also Savannah, Philadelphia, etc., which shows that it cannot be more than a hundred years old; also on



Fig. 14. Nunraw Abbey Tower. Photo copyright Renata Edge and licensed for re-use under Creative Commons Licence.

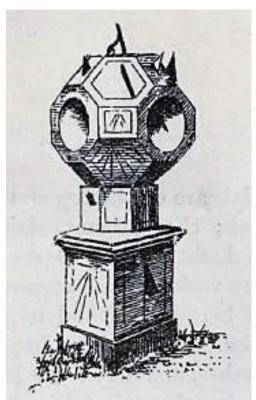


Fig. 15. Nunraw dial by Ross.

one of the sides of the pillar there is a system of figures for making an equation of time.' The upper, or facetted, part has the usual dials, hollowed and plain."

Ross's correspondent probably wasn't far out on his estimation of the age of this dial. Although Savannah was involved in the American War of Independence in the late 18th century, it was probably its appearance as a prominent seaport in the early 19th century that earned it a place on this dial, so that would put its age at around 80–90 years at the time of the original writings.

This dial has three sections and at the time of my visit (in 2009) the dial was lying on the ground in two parts (Fig. 16). The upper faceted part, which has 25 dials, is lying on its own and is in reasonable condition other than some missing and broken gnomons and some lichen growth. It has large vertical scaphe dials on the cardinal points and also has vertical, proclining and reclining dials as well as a horizontal dial on top.



Fig. 16. The two separated parts of the Nunraw dial.



Fig. 17. The east and south-east faces of the octagonal stone with JERUSALEM marked on the south-east face.



Fig. 18. The south-facing dial of the cube.

The other two parts (a cube and an octagon) are still connected in one piece as can be seen in Fig. 16. The octagon has dials on all eight vertical faces and the east and south-east faces are shown in Fig. 17. There is an inscription on the west face of the cube but it is badly flaked and hard to read. This is at odds with Ross's sketch of the west face which appears to show a dial face wrongly delineated. The south face on the other hand has a dial which, although faint (Fig. 18), can be easily read. This is the only dial on the cube, where the north face is blank and the east face contains the equation of time mentioned above.

REFERENCES and NOTES

- 1. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 2. Common at one time in Scotland, a set of jougs was an iron collar normally attached by a chain to a wall. The collar was placed round the offender's neck and fastened by a padlock. Time spent in the jougs was intended to publicly shame the offender. Source: https://en.wikipedia.org/wiki/Jougs

Part 20: The Other Dials of Lennoxlove

DENNIS COWAN

he Lady of Lennoxlove (Fig. 1) is a fabulous multiple dial and has been the subject of at least two articles in the *Bulletin* and has to be my most favourite dial. She appeared in Part 3 of this series of articles, 1 and was more recently extensively covered by Alastair Hunter in his article 'A Scottish Sundial Holding Secrets' in June 2016.2



Fig. 1. The Lady of Lennoxlove.

But there are other dials at Lennoxlove. In volume 5 of *The Castellated and Domestic Architecture of Scotland*,³ Thomas Ross mentions two other dials at Lennoxlove, which he knew as Lethington Castle.

The first is a horizontal dial that sits just to the north of the Lady's garden. Ross provides no sketch and merely says:

"A round horizontal dial with a baluster shaft [Fig. 2] stands in front of this ancient castle; it is undated, but on its metal face is engraved DAVID LYON SCULPSIT."

As can be read above, Ross identifies it as a "round horizontal dial" but as can be seen from Fig. 3, it is clearly octagonal. It is almost certainly the same dial, however, as although the markings are only just legible today, the



Fig. 2. The horizontal dial and pedestal.



Fig. 3. Detail of the horizontal dial.

engraving described by Ross can be seen. There are Roman numerals from 4 am to 8 pm read from the inside on an inner ring. Outside that another ring includes hour, half-and quarter-hour lines, outside of which is a minute scale with ten-minute intervals named. Additionally, "for latitude 56 degrees" can be identified on the dial, which is correct

for Lennoxlove. Unfortunately these engravings did not photograph well!

David Lyon is not a known maker, but Webster's Signature Database⁴ has a record for a barometer maker named Lyon operating out of Edinburgh in 1772. In addition, there is a Hunter Lyon (son or brother perhaps) also operating out of Edinburgh from 1793 to 1803. He was an optician and it is known that both barometer makers and opticians also dabbled in sundials. There is a possibility, therefore, Edinburgh being less than twenty miles from Lennoxlove, that our David Lyon is the one mentioned above or perhaps part of this family.

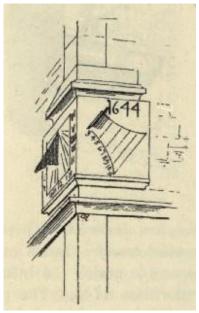


Fig. 4. Ross's sketch of the south and east vertical dials incorrectly showing the east face gnomon on the 3 am hour line.

As to the other dial identified by Ross, he comments:

"On the south-east corner of the latest part of the castle may be seen the dial shown in [Fig. 4]. The date (1644) shows that this portion of the building was erected after Lethington passed from the Maitlands into the possession of the ancestors of the present proprietor, Lord Blantyre." ⁵

His sketch at Fig. 4 is clearly in error, as it shows the east face gnomon on the 3 am hour line. The photograph of the dial today (Fig. 5) shows the gnomon correctly positioned on the 6 am line, where it looks as though the date of 1644 has been re-engraved. The south face of the dial has Roman numerals whereas the east face has Arabic numerals.

This dial is on the left-hand edge of the building underneath the security camera and directly above the Lady in the left foreground of Fig. 6.



Fig. 6. Lennoxlove with the Lady in the left foreground and the south and east vertical dials (circled) above her and underneath the security camera.



Fig. 5. The south and east vertical dials today with the probably re-engraved date.



Fig. 7. The south and west vertical dials (circled) above the lamp on the corner of the house.

There is another dial at Lennoxlove which was not known to Ross. It is similar in design to the previous dial, but has south- and west-facing dials sitting as it does on the southwest corner of the house above the lamp (Fig. 7). Again, like the south-east dial, the south face has Roman numerals whilst the west face has Arabic numerals (Fig. 8).



Fig. 8. Detail of the south and west vertical dials.



Fig. 9. The south-east and south-west dials together.

Finally, Fig. 9 shows the close proximity of these last two dials.

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- 1. D. Cowan: 'In the footsteps of Thomas Ross Part 3: The sundials of James Gifford', *BSS Bulletin* <u>24</u>(iv), 6–9 (December 2012).
- 2. A. Hunter: 'A Scottish sundial holding secrets', *BSS Bulletin* 28(ii), 7–13 (June 2016).
- 3. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 4. http://historydb.adlerplanetarium.org/signatures/
- Since 1946, Lennoxlove has been owned by the Dukes of Hamilton.

Part 21: Pencaitland Parish Church (and Bowden Kirk)

DENNIS COWAN

n Part 15 of this series of articles (on Scottish Churches), I deliberately did not include Pencaitland Parish Church, as I had intended that it would be in a standalone article. At the same time, I mistakenly did not include Bowden Kirk. These omisssions are rectified here.

Pencaitland Parish Church is in East Lothian, situated about 12 miles south-east of Edinburgh. The church is mainly of 16th/17th-century origin with many alterations over the centuries, and probably stands on medieval foundations.

It is unique amongst Scotland's churches in that it has three sundials, all of them different. In volume 5 of *The Castellated and Domestic Architecture of Scotland*,² Thomas Ross says:

"This is an extremely interesting church, presenting as it does examples of architecture ranging over a period of about three centuries. The earliest part—the Winton aisle—is pure Gothic of the fourteenth century, and not being connected with our subject is not shown here. The tower at the west end [Fig. 1] is dated, over the doorway, 1631.

"The main body of the church is believed to have been built soon after 1560. The west buttress of this part, shown in detail in [Fig. 2], contains a fine sundial with three faces. [Fig. 3] shows another dial which terminates the east gable. It will be observed that there is still another dial near the top of the tower, its gnomon being visible in the view."

Perhaps this description was written before Ross developed his interest in sundials as it is included not in the section on sundials, but within an earlier section in this volume specifically on churches. In the section on sundials he merely comments that:

"There are five³ dials on this church. Three are placed on the three faces of the south-west buttress, one on the east gable, and one at the top of the tower."

The first sundial indeed has three faces and is wrapped around the south-west buttress on the main body of the church (Figs 4 and 5). It is in a quite poor condition with no numerals remaining and only some hour lines on the south face, which declines slightly west of south. The hour lines appear to have been re-carved but it is debatable whether

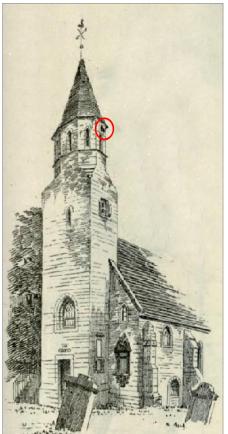


Fig. 1 (left). Ross's sketch of the tower at Pencaitland church with its sundial circled.



Fig. 2. Ross's sketch of the threefaced sundial on the south-west buttress on the church at Pencaitland.

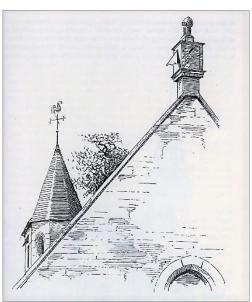


Fig. 3. Ross's sketch of the east gable of Pencaitland church showing the south and east faces of the cube dial as well as the sundial on the tower.



Fig. 4. The south and west faces of the dial on the southwest buttress of Pencaitland church.



Fig. 5. The south and east faces of the dial on the southwest buttress of Pencaitland church.

the east and west faces have ever been marked out. All three faces have metal gnomons but they may have been replaced at some point. I'm not convinced that it ever was a working sundial.

As Ross says, the second sundial is on the east gable (Figs 6 to 8). It is a stone cube with dials on all four faces, and is topped with a pineapple-like finial. All faces have Arabic numerals and are complete with intact metal gnomons. It is without doubt the finest of the dials on this church.

The poorest of the dials is next. This third sundial (Fig. 9) is a south-facing vertical single-face stone dial high on the tower at the west end of the church, which contains an octagonal belfry and a dovecote. The dial is so high that it must have been of no use whatsoever! The metal gnomon

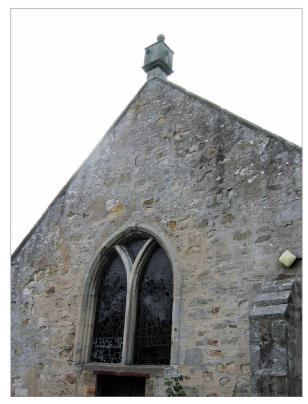


Fig. 6. The east gable at Pencaitland church with the cube dial on top and the north and east faces in view.





Figs 7 and 8. The cube dial at Pencaitland church. Above: the south and east faces; below: the south and west faces.

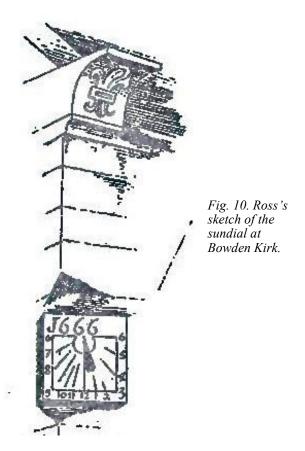


Fig. 9. The dial on the tower at Pencaitland church.

exists but in a precarious state. Only by zooming in closely can some very faint hour lines and a possible Roman iii be seen. I'm not surprised that Ross gives no detailed sketch of this dial.

As to the sundial at Bowden Kirk near Melrose in the Scottish Borders, Ross says:

"A sundial [Fig. 10], a feature very common on the churches of this period, occupies the usual position at the south-west corner [Fig. 11], a few feet below a skew-stone, bearing a fleur-de-lis. The dial is dated 1666, and tells the hours with accuracy."



Although parts of Bowden Kirk are from the 15th century, most of the present kirk dates from the 17th century and Ross comments that as usual for a church of this age, the dial is on the south-west corner. Unfortunately, this sundial is no longer in place. It has been replaced by a modern dial generally of the same design. This new dial shows the years 1766 and 1989 (Fig. 12) and a cross patty for noon. Other than that they are fairly similar.

One noticeable difference, however, is that in Ross's sketch in Fig. 10, it can be seen that the dial is canted to the south (the church faces about 15 degrees to the east of south), whereas the new dial (Fig. 12), which like the original is a south-facing design, is not canted. This is, unfortunately, a major error in the installation.

Although the skew-stone mentioned by Ross is still in place (Fig. 13), there is no longer any sign of the fleur-de-lis.

In order to find out what happened to the original dial and some information on the new dial, I e-mailed the church secretary, but other than a note to say that it had been

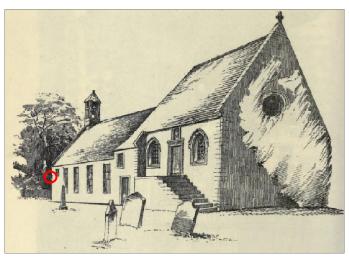


Fig. 11. Ross's sketch of Bowden Kirk with the sundial at the south-west corner (circled).



Fig. 12. The Bowden Kirk sundial today.



Fig. 13. The dial at the south-west corner of Bowden Kirk with the skew-stone above. The external bell rope, a common feature of many 17th-century Scottish churches, can also be seen.

passed on to the Fabric Convenor, no further response was received. So unfortunately I have been unable to find out any relevance to the year of 1766. It is possible that this was a misreading of the date on the original dial which perhaps had deteriorated since Ross's sketch. I assume that 1989 was when the new dial was installed.

BSS member Kevin Karney visited this church a few years ago and was advised by someone at the church that the maker of the dial was Ken Grant, but that is the limit of our knowledge.

REFERENCES and NOTES

- 1. D. Cowan: 'In the Footsteps of Thomas Ross Part 15: Sundials on Scottish Churches', *BSS Bulletin*, <u>28</u>(ii), 20–25 (June 2016).
- D. MacGibbon and T. Ross: The Castellated and Domestic Architecture of Scotland, David Douglas, Edinburgh (1892).
- 3. Confusingly, in this second passage, Thomas Ross is now counting the first sundial as three dials.

Part 22: An Aberdonian Triad

DENNIS COWAN

n volume 5 of *The Castellated and Domestic Architecture of Scotland*, Thomas Ross groups together three sundials from Aberdeen and the surrounding area. These sundials are from Ellon Castle Gardens, about seventeen miles to the north of Aberdeen, Pitmedden Garden, just a few miles to the west of Ellon, and the third in Duthie Park in Aberdeen itself.

Of the dial at Ellon Castle, Ross says:

"This extremely beautiful example [Fig. 1] is one of two sundials which stand in the castle garden. It differs, as will be seen, very considerably from the normal type, but as a graceful object of architectural design it will hold its own with the best examples of its class. The general contour of the dial corresponds with that of the obelisks, but is modified in all its details. Thus, the shaft, instead of rising abruptly from the platform, or resting on a pedestal, has a fine and boldly moulded base.

"The faces of the shaft are richly carved with well-executed ornaments of fruit and flowers hung from open-mouthed masks. A few simple mouldings with a double necking connect the shaft and capital, which contains hollows on all its twenty-four faces—an unusual arrangement, and found only on the Pitmedden dial, figured in the next illustration. The finial, with its neck-moulding and stoneball termination, also resembles the same example, and it is not improbable that the design of the one influenced that of the other, although the Ellon dial is considerably richer and more delicate in its details. The finial of the dial in



Fig. 2. The shaft of the Ellon dial still in its original position in the garden.

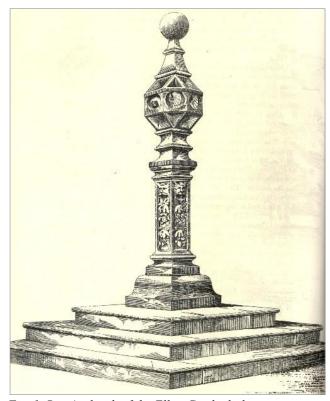


Fig. 1. Ross's sketch of the Ellon Castle dial.

Duthie Park, Aberdeen, appears to have been modelled somewhat after the style of these two dials at Ellon and Pitmedden, indicative of a decided local peculiarity. The Aberdeen dial is dated 1707, but we incline to the opinion that the Ellon and Pitmedden dials belong to the previous century.

"The appearance of the Ellon dial is greatly enhanced by the fine and wide moulded steps on which it stands. The steps, each 7 inches high, measure respectively 8 feet square, 7 feet square, and 4 feet square. The dial itself to top of ball is 8 feet 6 inches high."

My first visit to Ellon in 2014 didn't go well. I turned up at the castle only to find that the gates to the grounds were boarded up, and peeking through a gap I could see that the gardens were in a totally overgrown state. Further investigation, which I should have done before I set off for Ellon, revealed that the castle was in a ruinous condition. This didn't sound good for the sundials.

A couple of years later in 2016 I discovered by chance that a charitable group, Ellon Castle Gardens Board, had been set up to revitalise and conserve the gardens as a lasting

resource for the people of Ellon. This was good news indeed – but had the sundials survived?

Then, early in 2017, I managed to make contact with Elaine Cooper-Willox, the Board Member who is responsible for PR and Marketing at the gardens and she confirmed that both of the sundials mentioned by Ross were indeed still there. We made arrangements for my visit, as the gardens are open only for special occasions at this stage of their conservation.

When I arrived there I found that the shaft of the dial was still in its original position (Fig. 2) on the moulded steps in the garden, but without the capital and finial which had been stored for safekeeping. The carvings on the shaft described by Ross have survived well and can be seen in Fig. 3.

The capital, which was in an outbuilding, has not fared so well. It has serious cracks and is held together with a metal band (Fig. 4), so couldn't easily be moved to get a better view. All of the faces as far as I could see were circular, triangular and square sunken dials. The gnomons, which may have been replaced, appeared to be complete and the numerals that I could see were all Arabic. Unfortunately I wasn't able to see the finial which had been stored elsewhere.



Fig. 3. Detail of the carvings on the shaft of the Ellon dial.



Fig. 4. The capital of the Ellon dial held together with an iron band.

Ross suggests that this dial is very similar in outlook to the obelisk dials, but with differences as he describes above. The main obvious difference, in my opinion, is in the shaft where this example has carvings of masks, fruit and flowers rather than the dial faces to be seen on the typical obelisk shafts.

As Ross says above, there are two dials at Ellon, and although not intended to be part of this triad, it would make sense to include the other dial here. Surprisingly, Ross doesn't provide a sketch of this dial and only says that it is similar to a dial at Forgue (Fig. 5), some thirty miles to the north-east of Ellon. According to Somerville,² the Forgue dial originally came from Foveran which is less than five miles from Ellon. It is quite probable therefore that both of these dials were made by the same hand.

Fig. 5. Ross's sketch of the dial at Forgue which is very similar to the second Ellon dial.





Fig. 6. The second Ellon dial's 'wee hoose' built to protect it from the elements.

This second dial was originally positioned just outside the castle, but today it has its own 'wee hoose' (Fig. 6) designed specifically to protect it from the elements for the time being. The roof was lifted off for me and I was able to see the dial and its granite pedestal (Fig. 7). Like the capital of the other dial, it hasn't fared well. The gnomons that I could see were bent and battered, and the numerals and hour lines were no longer visible. However, its similarities to the dial at Forgue were immediately apparent.

The dial, which is believed to date from around 1717, has four children's heads on top. It is said that it was erected in memory of Bailie Gordon's two sons who were murdered in Edinburgh in 1717 by their tutor, after they saw him take liberties with their mother's maid. Wikipedia wrongly attributes this story to the other dial at Ellon.

The good news is that the Trust intend to restore both dials at some stage in the future.

Situated a few miles to the west of Ellon, Pitmedden Garden is a National Trust for Scotland site and its design and maintenance give it its own unique charm: it must surely be one of Scotland's best gardens. It dates back to



Fig. 8. Some of the clipped box hedging at Pitmedden Garden.



Fig. 7. The second Ellon dial and its pedestal inside the 'wee hoose'. The similarities to the Forgue dial can be clearly seen.

1675 when it was originally laid out, but fell into neglect in the 19th century. The plans for the garden were lost when the original Pitmedden House was destroyed by fire in 1818 but the Trust re-created the garden in the 1950s based on the 17th-century plans for the gardens at the Palace of Holyroodhouse in Edinburgh. There are six miles of clipped box hedging, some of which can be seen in Fig. 8, and 30,000 annual bedding plants are used to make up the colourful designs in the parterres, which unfortunately were not in flower at the time of my visit.

Mr Robert Duthie of Pitmedden House provided Ross with details of this dial and Ross comments:

"In describing the [first] Ellon dial above, the peculiarities of this fine sundial [Fig. 9] are commented on. Its capital being placed on a slender stock or neck, unlike those of the type in general, has a more than usually striking



Fig. 9. Ross's sketch of the Pitmedden dial.



Fig. 10. The Pitmedden dial sitting within the parterres today.

appearance. Mr. Duthie believes the dial to have been made about 1675, about which time the garden walls at Duthie House were erected. We agree in thinking that it is certainly as old as this date. The dimensions are—width



Fig. 11. Detail of the Pitmedden dial.

and height of the capital on the square, 1 foot 11 inches; total height from ground, 8 feet 9 inches; width of lower step, 4 feet 11 inches; width of pedestal, 12 inches."

The dial today (Fig. 10), which is now situated amongst the fine parterres, looks much as it did in Ross's sketch and the similarities to the Ellon dial's capital can be clearly seen in the detail photograph in Fig. 11 with the circular, triangular and square sunken dials. Like the Ellon dial, it has twenty-four dial faces.

An interesting feature in the parterres near to the dial incorporates the words TEMPUS and FUGIT (Figs 12 and 13) elegantly made out in box hedging.



Fig. 12. Tempus...



Fig. 13. ...Fugit.



Fig. 14. The west-facing dial described by Ross as having no special interest.



Fig. 15. The south- and east-facing dials with the wrongly positioned gnomon on the south face.

Ross goes on to say that:

"There are two other dials here on the corner of a garden house, but they have nothing of special interest about them."

Both of these vertical dials are carved directly on to the quoins of the building. One is a single-faced west-facing dial (Fig. 14) and the other is a two-faced dial (Fig. 15): one a direct south face and the other east facing. Both have replacement gnomons, but the gnomon on the south face has been mounted too high. All have Arabic numerals.

Ross says above that these dials have nothing of special interest about them. I disagree and think that they have, but unfortunately not in a good way! Both of these dials appear

to have been carved on separate blocks of stone which can give the appearance of vertical cracks in the dials. The gnomon on the south face, apart from being too high, has been crudely held in place and it really is an example of how not to carry out a restoration.

The third dial of the Aberdonian Triad is in the Winter Gardens contained within Duthie Park in Aberdeen. These Winter Gardens were once the largest indoor gardens in the UK until the advent of the Eden Project in Cornwall, but are well worth a visit. Of the dial, Ross says:

"The dial [Fig. 16] belongs to the city, and stands in a property formerly called Arthur's Seat, now absorbed in the Duthie Park, a public pleasure ground presented to Aberdeen by the late Miss Duthie of Ruthrieston. The dialfaces and the ball on the top are painted a light blue colour, and the lines and figures are gilt; there are shields on each of the four sides of the supporting baluster bearing respectively the initials C.G., G.B., the date 1707, and a representation of a mortar and pestle."

This dial is situated today in an outdoor area of the gardens and the blue colour on the dial faces and the ball mentioned by Ross are still apparent. Unfortunately incorrect gnomons have been wrongly fitted to some of the faces as can be seen on the north-facing upper dial and the sunken dial below it in Fig. 17, and also on the south-facing sunken dial in Fig. 18.

Ross's comment that the dial, in part, was painted raises an interesting question. I have always been of the opinion that Scottish stone dials were not originally painted but this is the first such dial that I have seen that has traces of paint on it, apart from the Mercat Cross at Inverkeithing which was painted white in only relatively recent times. Was the Duthie Park dial painted when new in 1707 or did it have a 19th-century paint job?







Fig. 17. The north faces of the Duthie Park dial with the wrong gnomons.

Fig. 18. The south face of the Duthie Park dial with the incorrect gnomon on the sunken dial face.



This whole question of whether these Scottish monumental stone dials were painted when new is something that I need to investigate at some point in the future.

ACKNOWLEDGEMENTS

Very many thanks to Elaine Cooper-Willox and particularly the staff at Ellon Castle Gardens who were so helpful and accommodating during my visit.

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- 1. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland*, David Douglas, Edinburgh (1892).
- 2. Andrew R. Somerville: *The Ancient Sundials of Scotland*, Rogers Turner Books, London (1994).
- 3. I have attempted to ascertain if the house at Pitmedden was originally called Duthie House but to no avail. So did Ross make an error here and mistakenly name Pitmedden House as Duthie House? He says that the garden walls were erected in 1675 which was when the gardens at Pitmedden were laid out.
- 4. Miss Duthie of Ruthrieston was part of the wealthy Duthie family of shipbuilders in the north-east of Scotland, but there is no evidence that I can find that links her with Mr Duthie of Pitmedden.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 23: West Fife Sundials

DENNIS COWAN

didn't have to step far to follow in Thomas Ross's footsteps to see these four sundials, as two of them are in my home village of Limekilns situated on the northern bank of the Firth of Forth, and the other two are just a few miles away.

However, in volume 5 of *The Castellated and Domestic Architecture of Scotland*,¹ Ross didn't have much to say about the Limekilns sundials. Of the first, he says only:

"On the south-east corner of a house here there is a similar dial bearing the date 1682 [Fig. 1]."

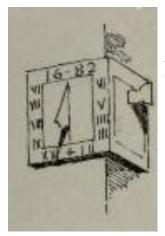


Fig. 1. Ross's sketch of the first Limekilns sundial.

Here Ross was comparing it with a dial at Prestonpans in East Lothian, which has been long lost along with several others in that village. As with the missing Prestonpans dial, it has two faces wrapped around a corner of the building. It can be seen in Fig. 2 that the dial hasn't changed much since Victorian times and it remains in good condition. The most obvious difference though is that both Ross's sketch and his text quote the date as 1682 whereas it now shows 1689. I have studied the dial closely and I believe that 1689 may be correct, but the tail of the 9 certainly doesn't appear to be as deeply cut into the stone, so maybe the painter of the numerals mistook the 2 for a 9. Or maybe Ross mistook the 9 for a 2!

The stone faces have been painted white and the hour lines, numerals and date are black. The south face has Roman numerals and a cross patty for noon, whilst the east face has Arabic numerals from 4 am to 11 am. The sheet metal gnomons are in good condition, having been replaced some years ago. The whole dial has been very slightly canted in order to face due south and east.



Fig. 2. The south face of the first Limekilns sundial today.

The building on which it is situated was originally called Hope Cottage (Fig. 3), but a few years ago its use changed from residential to commercial, and it is now known as the Sundial Café.



Fig. 3. The first Limekilns sundial on Hope Cottage, now known as the Sundial Café.

As to the second dial in Limekilns, Ross compares the dial with some of those at Newstead near Melrose in the Scottish Borders, which were described previously in the *Bulletin*,² by simply commenting:

"The dial at Limekilns in Fife [Fig. 4] may be classed with those from the Melrose district."

The dial has lost its ball finial since Ross saw it, but the addition of harling (pebbledash) on the wall of the house has unfortunately also covered part of the dial's east and west faces (Figs 5 and 6). At least the south face is still in

Fig. 4. Ross's sketch of the second Limekilns sundial with its ball finial.

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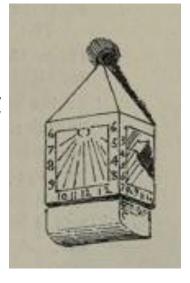




Fig. 5. The west face of the second Limekilns sundial partly covered by the addition of the harling.



Fig. 6. The east face of the second Limekilns sundial significantly covered by the addition of the harling.

reasonable condition (Fig. 7). All three faces have Arabic numerals. Like the other Limekilns dial, its south-facing gnomon has been replaced, although it doesn't look to be at the correct angle for the latitude.



Fig. 7. The south face of the second Limekilns sundial minus the ball finial.

Ross doesn't mention the dial at Culross Palace, a National Trust for Scotland property a few miles further up the Firth of Forth from Limekilns, but the dial is shown (just) in his sketch of the palace (Fig. 8) within Volume 2.³ As this volume was published a full five years before Volume 5 (the sundial volume), perhaps his interest in sundials had not yet developed.



Fig. 8. Ross's sketch of Culross Palace with the sundial circled.



Fig. 9. The sundial is still in the same place on Culross Palace today.



Fig. 10. Close-up of the Culross sundial.

The part of the palace on which the dial is mounted looks just the same today with the dial still in place (Fig. 9). The single-faced stone dial, which has been canted slightly to face south, hasn't fared well. Its gnomon has gone, leaving only the packing in its mounting holes, and the carved Roman numerals and hour lines are now fading somewhat (Fig. 10).

The village of Crossford lies inland from Limekilns and Culross, and the old Pitfirrane estate originally owned by the Halkett family lies on the western edge of the village. It has, however, been the home of the Dunfermline Golf Club since 1953 with the much horribly extended castle serving as the clubhouse (Fig. 11). Of the sundial that resides here, Ross says:

"The dialstone which rested on this fine lion-shaped pedestal [Fig. 12] is lost. The figure holds between his fore-paws a shield, containing a lion passant regardant, over three piles, the cognisance of the Halketts of Pitfirrane. The date on the castle is 1580, but there is nothing to connect this date with the dial.

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"This dial disappeared, and all knowledge of its ever having been at Pitfirrane was lost, till the late Mr. Paton of Dunfermline found it lying in a garden in the neighbourhood, and on Sir Arthur Halkett recognising the arms as his own it was restored to Pitfirrane. The height of the lion is 2 feet 6 inches, and including the base 3 feet 3½ inches; breadth of base 12½ inches; breadth across shield, 9½ inches."

Local belief suggests that the event described above by Ross took place around 1850. Today the pedestal stands



Fig. 11. The Pitfirrane sundial in front of the golf clubhouse.

Fig. 12. Ross's sketch of the Pitfirrane pedestal.





Fig. 13. The replacement Pitfirrane sundial.



Fig. 14. The rather fine "H" for Halkett supporting the gnomon.

outside the clubhouse, on a different stepped base, but still probably in its original position as shown on a contemporary map in the National Library of Scotland. A replacement table and circular dial are now in place on the pedestal (Fig. 13).

In keeping with its history, the dial has the Clan Halkett motto "Fides Sufficit" meaning "Faith is Sufficient" inscribed upon it. It also has the old Scots sundial motto "Tak tent o' time ere time be tint" which can be loosely translated as "Make use of time while you have it". Rays of

the sun take the place of hour lines. However, it does have a ten-minute scale, but no noon gap. Additionally it has a rather fine "H" for Halkett supporting the slightly bent gnomon (Fig. 14).

Ross saw another dial nearby in Crossford, but there is some mystery surrounding it. This will be the subject of a future article.

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- 2. Dennis Cowan: 'The Newstead Sundials', *BSS Bull.*, <u>23</u>(iv), 38–40 (December 2011).
- 3. D. MacGibbon and T. Ross: *The Castellated and Domestic Architecture of Scotland Vol. 2*, David Douglas, Edinburgh (1887).

Part 24: The Carberry House Sundials

DENNIS COWAN

arberry House, variously named Carberry Mansion or Carberry Tower Mansion House or Carberry Tower, is in East Lothian a mile or so south-east of Inveresk, which is itself a similar distance south-east of Musselburgh.

The original part of the house dates from the 16th century but many additions were carried out in the 18th and 19th centuries. The 16th Lord Elphinstone married Lady Mary Bowes-Lyon, sister of the Queen Mother, in 1910 and they made additional improvements to both the house and estate.

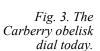
Lady Mary died in 1961 and she bequeathed the house to the Church of Scotland who used it mainly as a conference centre. It has since been sold on twice and is now a hotel.

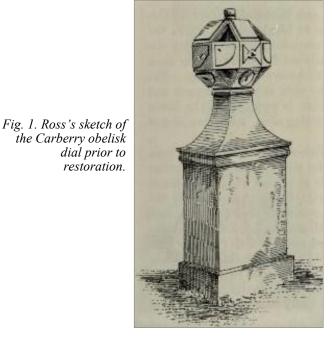
When Thomas Ross visited, he found what he thought was the capital of an obelisk sundial. In volume 5 of *The Castellated and Domestic Architecture of Scotland*, he comments that:

"There are two companion dials in the grounds of Carberry Tower. Of one dial [Fig. 1] only the octagonal capital is old, the pedestal with the curved neck being quite modern, and clearly not according to the original design, as this is evidently the capital of an obelisk dial, and a very remarkable one it is, being pierced quite through in the



Fig. 2. Ross's sketch of the Carberry obelisk dial after restoration with a new finial and shaft.









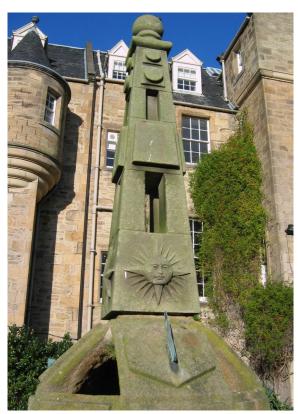


Fig. 4. The finial of the obelisk today showing no evidence of any gnomons or furniture.

manner shown. The raised plaques on the faces are of uncommon shapes. A wooden pin or dowel, the rounded end of which is seen on the top, goes down through the capital into the necking, and the rounded bead seen between the two is of wood. The total height of the dial as it now stands is about 6 feet. [Fig. 2] shows an attempt to restore it to something after its original design, the idea of the open obelisk to suit the open capital being taken from Polton.² The capital is 17 inches high, and the faces of the octagon measure about 6 inches wide by 6 inches high."

When Ross refers to the open obelisk above, he was presumably referring to the open finial of the obelisk. According to Historic Environment Scotland, the work to restore the sundial to something after its imagined original design was carried out to Ross's specification.

As Ross intimates, this obelisk sundial is like no other obelisk dial in Scotland in that the capital is hollow. The faces have been carved in relief as it would obviously not have been possible to carve them in the usual manner. Perhaps this influenced the uncommon shapes mentioned by Ross.

Fig. 3 shows the dial today and at first glance it looks the same as it was after Ross's intervention. However, it is no longer mounted on four balls as it was in Ross's day. Rather more difficult to see are the gnomons on the finial in Ross's sketch in Fig. 2. Looking at the finial today in Fig. 4, it appears that they never existed as there is no evidence of the gnomons nor of any hour lines or numerals.

Fig. 5 shows the capital today and it can easily be seen that it is hollow as described by Ross. Unfortunately, most of the gnomons have gone with only a couple and some stubs



Fig. 5. The hollow capital of the obelisk dial today.

remaining. Hour lines and numerals are not evident but a close inspection reveals some very faint remnants of each.

The shaft today looks much newer than the capital and finial, but I have been unable to uncover any evidence that suggests that it has been replaced again. I have seen a photograph from 1961 in which it appears to be the same as today. In any case, if it is a new replacement it is faithful to Ross's sketch.

There were two dials at Carberry House, and of the other one Ross says:

"This is one of the most quaint and interesting dials [Fig. 6] we possess. The support – a short rounded column – has for its capital a graceful female bust presenting one face to the north, and another (the one shown) to the south, with the Ionic volutes and abacus so frequent in Renaissance work. On the top rests the dial-stone, fashioned to contain upright, reclining, and horizontal dials. There is also an upright round dial at the shoulders of the bust pendant from the volutes. Altogether there are thirteen dials on the structure. The base and steps, as is so

Fig. 6. Ross's sketch of the second Carberry dial.



frequently the case, are set diagonally. The measurements of the dial are height of steps, 18½ inches; shaft and base, 20½ inches; bust and abacus, 13½ inches; total to the top of abacus, 4 feet 4½ inches. Above this the dial-stone is 10½ inches high by 10% inches on the face, and 11 inches in width on the sides. The pendant dials are 5 inches in diameter, and the lower step is 2 feet square."

Ross also provided an architectural drawing of this dial and it is shown in Fig. 7. Neither Fig. 6 nor Fig. 7 shows the numeral for 6 pm. Perhaps it was carved later. Fig. 7 has a small error where the numeral for 2 pm was placed next to 1 pm, making it look as if it was 12 in addition to the cross patty for noon.

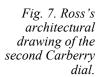
This dial was originally sited in the walled garden at Carberry and was reported to be missing, but it eventually turned up in Darras Hall north-west of Newcastle and fairly near to that city's airport. According to Somerville,³ it made its way to Darras Hall in 1984. However, it was subsequently acquired by the National Museum of Scotland and is now on display with other sundials in the Chambers Street museum in Edinburgh (Fig. 8).

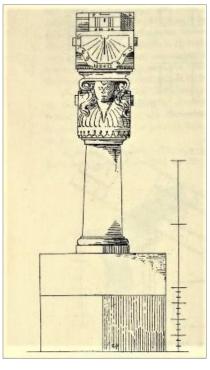
It is not unlike a lectern sundial but it has a horizontal dial on top. As Ross says, it has thirteen dials in all including two on the pedestal and all of the numerals are Arabic, with a cross patty for noon on the south-facing vertical dial. Above this dial face is a fine polar dial (Fig. 9).

The gnomons which have been replaced are in good condition. Altogether the Carberry dials are a very nice pair of dials. It's a pity that they have been split up.



Fig. 8. The second Carberry dial on display at the National Museum of Scotland in Edinburgh.





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Fig. 9. The south face of the second Carberry dial today.

Part 25: The Newbattle Abbey Sundials and their Copycats

DENNIS COWAN

ewbattle Abbey near Dalkeith in Midlothian was originally a Cistercian monastery, but became next a stately home and then in 1937, after being given to the nation by the 11th Marquis of Lothian, a College of Education. It was funded by the State, but the Secretary of State for Scotland announced in 1987 that funding was to be withdrawn. Happily, however, the Abbey has survived thanks to new funding that was established for its use as an adult education centre.

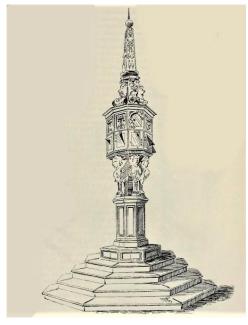
The building underwent several modifications, most notably in 1650 by John Mylne IV who took over from William Aytoun as master mason of Heriot's Hospital in Edinburgh where there are eleven sundials incorporated into the building. In another sundial link, he was the son of the John Mylne III who was responsible for the fabulous sundials at Drummond Castle in 1630 and the Palace of Holyroodhouse in 1633, and it is thought that he assisted his father with this latter commission. However, it is unlikely that he had anything to do with the sundials here as it is believed that they are earlier than 1650 (his involvement with Newbattle), as we shall see later.

There are two identical sundials in the grounds of the abbey, and in volume 5 of *The Castellated and Domestic Architecture of Scotland*,³ Ross comments that:

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"There are two dials here [Fig. 1] of a very monumental description. They are exactly alike in all respects, and stand in the gardens on the east side of the abbey. They are not, however, in their original position, having been moved from another part of the grounds. In appearance they bear a certain resemblance to articles of goldsmiths' design, and the pedestal seems thin for such a massive superstructure; this is, however, compensated for in a great measure by the wide-spreading steps on which the structure stands. The dial part is octagonal, and contains two tiers of oblong spaces. Four of the spaces, however, do not contain dials, but are filled (1) with coroneted initials of William, Earl of Lothian; (2) those of Annie, Countess of Lothian; (3) the arms of the earl; (4) a figure of the sun, the crest of the family. These are all drawn in detail [Figs 2–5], as is also one of the slightly hollowed dials, where the profiles of diagonally opposite faces act as gnomons [included in Fig. 2]. Sir William Ker, of the Ancrum family, married, in 1631, Lady Ann Ker, who succeeded to Newbattle in her own right. He was created earl in the same year, and the dial was doubtless erected between then and 1667, the year in which the countess died*. The gnomons, figures, and

Fig. 1. Ross's sketch of one of the Newbattle Abbey dials.









Figs 2 and 3. Left: the coroneted initials of Earl William of Lothian and the west-facing sunken dial; right: the initials of Countess Annie of Lothian above the north-facing dial.





Figs 4 and 5. Left: the arms of the Earl; right: a figure of the sun with a crown above, the family crest.



Fig. 6a. The west and south-west faces showing the sunken dial-pair, and the family crest, in the upper tier.

lines of the dials have all been gilt. The total height, measuring from the surface of the upper step, is about 16 feet.

"Copies of these dials have been erected by Lord Haddington and Lord Home at their mansions."

"* Since the above was written, Lord Lothian has found, from papers at Newbattle, that the date of the dials is 1635."



Fig. 7. The sundial to the left partially enclosed by a yew hedge.



Fig. 6b. Close-up of the sunken west-facing dial-pair with its two gnomons and two sets of hour lines.

The two dials today are still in the same place as they were when Ross saw them, that is, to the east of the abbey. The confirmed date of AD 1635 has since been carved onto the pedestals of the structures.

The sundials are as Ross described, except for an error in his descriptions of the upper tier, where he mistakenly states that four rather than six of the spaces do not contain dials. Two of the spaces contain the arms of the Earl (NW and SE), two contain the family crest (SW and NE) whilst one each have the coroneted initials of the Earl (S) and the Countess (N).

Each of the other two spaces, on the east and west faces, has a sunken dial-pair with two facial profiles acting as gnomons (Fig. 6a and b). The lower-left dial and gnomon



Fig. 8. The sundial to the right with Newbattle Abbey behind.



Fig. 9. The south face of the Newbattle right-hand sundial and the adjacent south-east and south-west faces, with the dials and decorated spaces above them. Note the huge crack near the top of the south-east face.

are for 6 pm to 9 pm whilst the upper-right dial and gnomon are for 1 pm to 6 pm. As far as I can recall, I have never seen a configuration like this on any other Scottish dial.

A mysterious "65" has appeared in Ross's sketch at Fig. 3. There is no reason for it being there, and this must be an error.

The two sundials today are shown in Figs 7 and 8. The one to the left as viewed from the abbey (Fig. 7) is enclosed on



Fig. 11. The sphinxes supporting the dial block on the Newbattle left-hand sundial.



Fig. 10. The north-east face of the Newbattle right-hand sundial and the adjacent north and east faces, with the dials and decorated spaces above them. Again note the huge crack, this time on the north-east face.

three sides by a yew hedge, whilst the one on the right is more open (Fig. 8), with some remains of a hedge.

The Earl's initials are above the south-facing dial (Fig. 9) and those of the Countess are above the north-facing dial (Fig. 10). All numerals are Arabic.

The dial block is supported by four sphinxes (Fig. 11) above a panelled octagonal pedestal on a stepped plinth. Above the dial block are four faces supporting a decorative obelisk finial with a ball and needle top all sitting on four balls (Fig. 12).

The metal gnomons have been replaced at some point and all still exist, but only in part in some cases. The dials appear at first glance to be in reasonable condition, but a



Fig. 12. The finial complete with ball and needle of the Newbattle right-hand sundial.



Fig. 13. Lord Home's dial in the King's Park.



Fig. 14. The King's Park dial showing the south face with the adjacent south-east and south-west faces, with the dials and decorated spaces above them. Note the differences from the Newbattle dial at Fig. 9.



Fig. 15. The Tyninghame dial in the Italian garden showing the different base.



Fig. 16. Three of the blank faces of the Tyninghame dial with the decorated spaces above them, including the H for Haddington surmounted by a crown.

close inspection reveals some very serious cracks, which should really be dealt with fairly soon.

Some time prior to 1885, these dials must have impressed Lords Haddington and Home, as they both commissioned copies presumably with the permission of the Earl of Lothian.

Lord Home's copy of the sundial was sited at Douglas Castle in Lanarkshire, the former family seat of one-time Prime Minister, Sir Alec Douglas-Home. It was removed to the King's Park in Glasgow in 1930 where it remains to this day (Fig. 13). Douglas Castle itself was demolished in 1938.

The sundial is almost an accurate copy of the Newbattle dials but with some obvious and expected alterations. It has of course the initials and arms of Lord Home and his wife rather than those of the Earl of Lothian (Fig. 14). The date of 1885 has been included, this time on the base rather than the pedestal as in Newbattle's case. In addition, the motto of "Horas non numero nisi serenas" which can be translated as "I count only the sunny hours" is carved around the base.

The Newbattle dials both have a form of cross patty for noon on their south-facing dials, but the King's Park dial does not have this, having a 12 instead. Surprisingly, this dial is not aligned with the cardinal directions; for example the south-facing dial in Fig. 14 clearly declines slightly to the west.

None of the metal gnomons remain on this sundial although most of the stubs exist. The ball and needle top of the finial is now missing.

Historic Environment Scotland's website for this sundial⁴ suggests that three copies of the Newbattle sundials may have been made, but I can find no other reference anywhere regarding this potential third copy.

Lord Haddington's replica sundial was installed in the Italian garden at Tyninghame House in East Lothian (Fig. 15). This mansion was acquired by his ancestor in the 17th century but was sold in 1987 when it was divided into flats and the contents of the house sold. Luckily the sundial survived and remains in the Italian garden.

The big difference, however, is that the eight main dial faces were never marked out, so it is a non-sundial! Obviously it has the crests and arms of Lord Haddington along with an H surmounted by a crown (Fig. 16). It does not have the upper slightly sunken dials of Newbattle and King's Park and the needle at the top of the finial is missing. Also different is the stepped base of these other two dials. Actually I quite like the more formal base of this non-dial.

And so on to the third copy. Is there one, or did Historic Environment Scotland confuse it with the second dial at Newbattle? The investigations continue.

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Part 26: Sundials of Melrose and Nearby

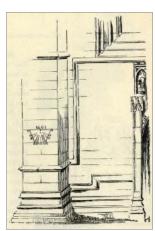
DENNIS COWAN

n volume 5 of *The Castellated and Domestic Architecture of Scotland*, ¹ Thomas Ross identified several sundials in the area surrounding Melrose in the Scottish Borders. This article will look at some of them.

Starting off in Melrose itself, our first port of call is at the abbey. One of a number of ruined abbeys in this part of the Scottish Borders, this abbey was founded in 1136 and was the first Cistercian abbey in Scotland. In 1544 during a battle with the English armies, the abbey was badly damaged and never recovered its former glories. Today it and the other ruined abbeys are some of the main tourist attractions in this part of the country.

Ross, very helpfully, tells us the exact location of the sundial on the abbey:

"On the face of the buttress of the south transept, at the west side of the doorway, the lines and figures of a dial have been cut, with the date 1661 [Fig. 1]. This dial has been merely carved on the face of an existing stone."



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Fig. 1 (left). Ross's sketch of the Melrose Abbey sundial.

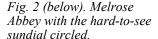






Fig. 3. Close-up of the Melrose Abbey sundial.

It is just as well that Ross told us where it was, otherwise it could very easily have been missed, as you can see from Fig. 2. Once you know where to look it is obvious that it has lost its gnomon although its fixing holes remain (Fig. 3). It has rather fresh-looking Arabic numerals from 6 am to 6 pm with the date of 1661 above.

A couple of hundred yards away, and just off the market square in the centre of town, sits a fishmonger's shop. In Ross's day, however, it was a house and he says:

"This dial [Fig. 4] is placed on the corner of a house near the Market Cross; it bears the date 162--."

Other than the date, Ross doesn't go into any detail, but it is a simple stone cube sundial, with dials on the south-east, south-west and north-west faces sitting on a corbel on the corner of the building. However, the date of 162-- is significant. If it was dated 1620 to 1622 then it would be

Fig. 4. Ross's sketch of the sundial in Melrose which could be Scotland's oldest dated example.

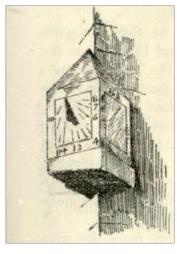




Fig. 5. The southwest and south-east faces of the Melrose sundial. Note that the south-east face has no date, numerals or hour lines visible today.

Fig. 6. The north-west and south-west faces of the Melrose sundial. Note the cross patty for noon on the south-west face.



the oldest dated sundial in Scotland. There are perhaps a couple of earlier contenders but their dates are not considered to be correct. Unfortunately no part of the date, which was on the south-east face as shown on Ross's sketch, is visible today. Likewise all of the hour lines and numerals on this face are gone, which is a great pity (Fig. 5). So we will never know if it was the oldest dated sundial. In any case, it is one of the very oldest Scottish sundials.

On the plus side, the Arabic numerals and hour lines on the south-west and north-west faces, although not great, are still visible and the gnomons still exist. The south-west face has a cross patty for noon (Fig. 6).

Just a mile or so from Melrose is the village of Newstead, where Ross identified six sundials. These were the subject of an article in an earlier *Bulletin* in December 2011,² but at that time, I was only able to find four of the six sundials.

Since then, thanks to my contact in the village, Donald Gordon, another one of the six has come to light and now awaits restoration. He very kindly arranged for it to be brought to his garden where I was able to see it.

Of the sundials in Newstead, Ross says that:

"There are numerous dials in this village, a fact which is accounted for from the circumstance of Newstead having been the home of many first-class working masons, who had the taste to set up dials on their own houses."

Of this fifth dial, Ross states only that it is dated 1751, which can be seen in his sketch in Fig. 7. The sundial, which is in a very poor condition today, is a stone cube with dials on the south-east and south-west faces (Figs 8 and 9). It has Arabic numerals throughout and the date of 1751 can be clearly seen on the south-west face. Now there is only one of the six Newstead sundials identified by Ross still to find.

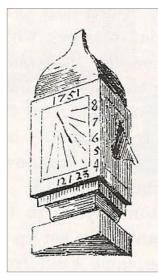


Fig. 7. Ross's sketch of the Newstead sundial showing the date of 1751 on the south-west face.



Fig. 8. The south-east face of the Newstead sundial badly damaged at the right hand side.



Fig. 9. The south-west face of the Newstead sundial with the date of 1751 mentioned by Ross.

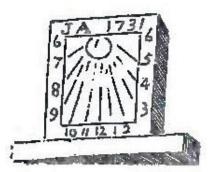


Fig. 10. The St Boswells sundial as sketched by Ross.



Fig. 11. The St Boswells sundial on the main street in the village.

Next we visit St Boswells which is less than five miles south-east from Melrose. Ross says simply:

"A dial [Fig. 10] canted from the face of the wall of the house front. It is dated 1731, and bears the initials J.A."

Ross gave no detail of where in St Boswells this dial was situated, but very luckily I spotted it when driving through the main street of the village (Fig. 11). He probably said as much as could be said about this dial. It does have deeply cut Arabic numerals from 6 am to 6 pm and has the date and initials as Ross said (Fig. 12). The house itself carries the date of 1730, so the dial was likely added just after the house was built.

Finally we head just a few miles east of Melrose to Dryburgh, where another of the ruined border abbeys lies. It was here that Ross identified another sundial which appeared in an earlier article in the Ross series,³ but as I have gained further information on its provenance, I thought it useful to include it again here. Ross tells us:

"This dial [Fig. 13], situated in the abbey grounds, is not unlike some of the market crosses just described..., the dial being the termination of an octagonal shaft. There are four faces. The one to the south has at the top of the dial the round face of the sun, with a goat above, and the motto WATCH WEEL. On the north side, in a position corresponding to the sun, is carved a rude figure, bearing a cross in one hand and something like a bell in the other, with the motto above FIDUCIA CONSTANTE.

"On another face are the Scott arms, with the initials T.H., and on another the Campbell arms first and fourth, girony; second and third, a galley, with the initials J.C. As regards



Fig. 12. Detail of the St Boswells sundial.



Fig. 13. Ross sketched this Abbotsford sundial when it was at Dryburgh Abbey.

the conjunction of the Scott and Campbell arms on this sundial, the only circumstance known to us as at all likely to account for it is that Walter Scott, well known as "Beardie", the paternal greatgrandfather of Sir Walter, married, in 1690, Mary Campbell, a niece of the Blythswood family. But as telling against the theory that this dial was set up by them we have to point out that the initials accompanying the arms on the dial do not correspond with theirs; they are T.H. and J.C."

Unfortunately, at the time of my visit, there was no sign of the dial at Dryburgh and none of the staff at the abbey had any knowledge of it!

However, later investigations revealed that the dial had actually moved around a bit. It transpired that it had been taken from Dryburgh to Kelso in the 1920s before heading some time later to a manor house at Drygrange not far from its original home at Dryburgh. Then around 1989 it was gifted to the mansion of Abbotsford, famous as the home of Sir Walter Scott and well worth a visit, just a few miles to the west of Melrose.



Fig. 14. The Abbotsford sundial, originally from Dryburgh Abbey, stands on the lawn in front of the house.

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Fig. 15. The south face of the Abbotsford sundial. The motto of "Watch weel", directly under the sphere, is hardly legible.



Fig. 16. The pedestal of Sir Walter Scott's sundial. The horizontal sundial has been missing for many years.

It is still at Abbotsford today directly in front of the house (Fig. 14), but it appears that Ross was wrong in assigning it to the Scott family. The arms on the sundial are those of Campbell as Ross says, but the other arms are those of the Haliburton family, which are not dissimilar to those of Scott. The Haliburton motto is "watch weel" and this motto is only just visible on the south face of the dial today directly underneath the ball finial (Fig. 15). The Haliburton arms are on the west face whilst those of the Campbell

family are on the east face. There are replacement gnomons throughout which are all in excellent condition.

Ross was correct to point out that the initials on the dial did not line up with his theory, as this sundial undoubtedly belonged to Thomas Haliburton (1670–1753) who married Janet Campbell in 1701. He died in Dryburgh in 1753, two years after his wife. But Ross was not completely wrong – he just had the wrong great-grandparents, as Thomas and Janet were great-grandparents to Sir Walter through their daughter Barbara.

There is another sundial at Abbotsford not mentioned by Ross. It was acquired by Sir Walter himself but only the pedestal remains (Fig. 16) as the horizontal sundial went missing many years ago. In her book, Alice Morse Earle tells us that an exact reproduction of this dial was made and was installed at a garden called Hillside near Albany in New York (Fig. 17), but the North American Sundial Society have no knowledge of it. This is unfortunate, as the staff at Abbotsford have no idea of what it looked like and would have loved to have sourced an exact replica.



Fig. 17. Alice Morse Earle's photo of the reproduction of Sir Walter's sundial installed at Hillside near Albany in New York.

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Part 27: The Ladyland Sundials

DENNIS COWAN

adyland House is a private home near Kilbirnie in North Ayrshire in the west of Scotland. It dates from the early 19th century and was built in the grounds of the ruined Ladyland Castle. It has changed hands a number of times, most recently in 2017.

Thomas Ross identified two sundials at Ladyland, and in volume 5 of *The Castellated and Domestic Architecture of Scotland*, he says of the first one that:

"This fine specimen of a lectern dial [Fig. 1] is mounted on a pedestal unlike those of the general type, and resembling those often found among the horizontal dials. It is dated 1673, and contains the initials M.P.C., but we are not in a position to say whose they are."

This sundial was originally at the castle and it could be that it was commissioned to commemorate the completion of modernisation works started there in 1669, when a pitched roof was added and other works were carried out to convert the castle from a defensive structure to a more 'modern' home.

The date of 1673, however, is on the pedestal so it is a possibility that it may not refer to the sundial itself, and anyway I am not convinced that it is original to the sundial – the stone just seems to be slightly different. Ross comments that it is not on a pedestal like the others of the lectern type, but I would contest that there is not really a common style of pedestal for these dials as there are several different types used. It is correct to say, though, that the pedestal of this sundial is of the type more commonly seen with horizontal dials.



Fig. 1. Ross's sketch of the Ladyland House lectern sundial, including the monogram and date.



Fig. 2. The lectern sundial today, still on the same four-stepped base as it was in Ross's day.

The sundial today is just off the drive in front of the house and still stands on the four-stepped base that it was on in Ross's day, although the steps now have a significant amount of moss and lichen (Fig. 2). Thankfully none of that is on the sundial itself which unfortunately has lost all of its metal gnomons. Other than that it is in quite a reasonable condition.

Lectern sundials fall into two main types – those with a star on top and those without. This one is of the star type as can be seen in Fig. 3. It has a varied mixture of different types of dial faces (Fig. 4) including reclining, inclining, sunken heart and geometric shapes, hemi-cylinder and vertical, but as usual with lectern sundials, there is no horizontal dial. A fair number of the hour lines survive and the numerals that do are of the Arabic type.

Looking again at Fig. 3, it appears to be a hybrid of a lectern sundial and the capital of an obelisk sundial. The only one that I can think of that has this same feature is at Hensol House near Kirkcudbright. It is thought that this



Fig. 3. Close-up of the lectern sundial showing the star on top and sunken geometric dials.

sundial was originally at Stewarton, which co-incidentally is only about ten miles from Ladyland House.

Like Ross, I have been unable to ascertain the owner of the initials M.P.C. inscribed on the pedestal. However, there may be an additional letter in the monogram, a "D", which I believe can be seen in Fig. 5 with the curve of the "D" hidden behind the right leg of the "M". David Cuninghame owned Ladyland in 1654, so that could be D.C. for David Cuninghame and M.P. or P.M. for his wife. Unfortunately, I have been unable to confirm her name. In any case, I am not entirely convinced, so it will have to remain a mystery for now.

The second sundial at Ladyland is in what was the walled garden, but which now belongs to the privately owned converted stable, and separate from Ladyland House itself. Ross says:

"This dial [Fig. 6], in the garden of Ladylands, has a very graceful pedestal finished with a volute capital. On the pedestal occur the initials of William Cochrane of Ladylands, and his wife, Catherine Hamilton, and on the opposite side the year 1821; but it is believed to be of an older date. The dialstone on the top does not appear to us to be an appropriately formed termination. It will be



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Fig. 5. Close-up of the lectern monogram. Is it M.P.C. or is there a D there too?



Fig. 4. Close -up of the lectern sundial showing reclining, inclining, sunken heart, hemi-cylinder and vertical dials.

observed that it is like the capital of an obelisk dial, and has the appearance of being merely placed there, and not of being specially designed for its position."

I certainly agree that this is the capital of an obelisk sundial and does not belong to the pedestal. It is currently sited in an overgrown part of the garden (Fig. 7) and is quite badly covered in lichen (Fig. 8). There are no visible hour lines or numerals on any of the dial faces.

I am not sure of the relevance of the date of 1821 as according to the Parish records, William Cochrane and his wife married in 1815.

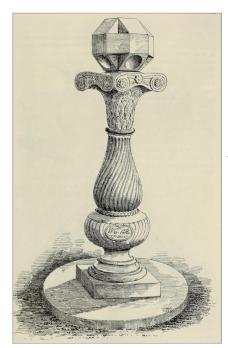


Fig. 6. Ross's sketch of the obelisk capital on its graceful pedestal.



Fig. 7. The rather neglected obelisk capital in the overgrown part of the garden.

There is another sundial at Ladyland not described by Ross, but of no great significance. It too is in the garden now belonging to the converted stable and appears to be a globe with the top third cut off (Fig. 9). The remains of the gnomon can be seen on the horizontal surface (Fig. 10), but nothing else remains. It does not appear to belong to the pedestal on which it sits.



Fig. 10. Close-up of the cut-off globe-shaped sundial showing the remains of the gnomon.



Fig. 8. Close-up of the lichen-encrusted obelisk capital.



Fig. 9. The cut-off globe-shaped sundial that Ross didn't see.

ACKNOWLEDGEMENTS

Many thanks to Mr Gordon Smith, owner of Ladyland House, who made me most welcome at the time of my unannounced visit in 2017, prior to the time of its last sale.

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Part 28: The Lee Castle Sundial

DENNIS COWAN

fter a lecture on sundials by BSS member Kevin Karney back in 2015 in Kelso in the Scottish Borders, Kevin got in touch and advised me that a member of the audience had a sundial that he wished someone to see. A couple of months later I made arrangements with the owner, Michael Turner, to see the sundial, which was located at his house in Leitholm around ten miles from Kelso.

It turned out that the shape of the sundial, a rhombic dodecahedron with all the faces being sunken, was one that I had not come across before. As its name implies, it was a twelve-sided polyhedron but with each face being a sunken diamond shape (Fig. 1). Its overall size was 13 inches wide, 14 inches deep and 17 inches high. Each sunken shape, which was around 10 inches by 6½ inches, was a sundial in its own right and there were Arabic numerals throughout (Fig. 2).

Unfortunately, the pedestal and finial were missing and all of the gnomons had gone, leaving only their roots. Most of the hour lines were still visible, though.

Michael said that his father was a collector of 'things' and that he had acquired the sundial in the late 1970s when he lived at Kinellar House in Aberdeenshire, but he said that he did not think that it was original to that area.

After some discussion, I advised him that if he wished to sell it, Bonhams held an annual Scottish sale in Edinburgh, and that it should fit in well there. Subsequently he entered



Fig. 1. The Leitholm sundial.

it into this sale in 2017 but unfortunately it failed to sell. However, it did find a buyer a couple of months later in a 'Home and Interiors' sale at the same auction house for £312, including buyer's premium. I must admit I was disappointed, as I had thought that it was worth much more than that.

But what has this to do with Thomas Ross? I didn't realise it at the time, but I later found that Ross had identified a



Fig. 2. Detail of the Leitholm sundial showing the hour lines and numerals.





Fig. 3. Ross's sketch of the Lee Castle sundial.



Fig. 4. Ross's second sketch of the Lee Castle sundial.

very similar sundial at Lee Castle in South Lanarkshire. In volume 5 of *The Castellated and Domestic Architecture of Scotland*, he said:

"This capital lion-supported sundial [Fig. 3] stands within a short distance of the castle. The lion carries an enriched cartouch [sic], on which is the Lock Heart, the origin of the cognomen of the family of Lockhart of Lee, and on its head the facetted dial-stone is skilfully poised [Fig. 4]".

Looking at Figs 3 and 4, it seemed to me that the Lee Castle sundial bore a remarkable resemblance to the one at Leitholm. Could it be that they were one and the same? If the sundial was still at Lee Castle, then that would rule that out. I had to find out.

Lee Castle and the associated estate has been owned since 2004 by an absentee American, but I was able to contact the estate manager who said that it would not be possible to arrange a visit, but he did say that there was no sundial present at the house or gardens. This was confirmed by the Historic Environment Scotland website² which stated, "A stone lion, a former sundial, stands in a shrub bed on the gravel approach to the house."

A 'former' sundial, so I presumed that the sundial part was missing, and Ross had said that the sundial was supported by a lion. That confirmed it for me – it was highly likely that the sundial at Leitholm (before it was sold at auction) and the sundial formerly at Lee Castle were one and the same. Michael Turner's father must have acquired it. I was feeling very pleased with myself.

But the story doesn't end there. A few weeks later, I was browsing Anne Somerville's notes³ when I read her comments about the visit that she and Andrew made to Lee Castle in 1984. She wrote, "the lion was there in the centre of the rockery in front of the house, but the young mistress of the house knew nothing of any associated sundial. Andrew and I, standing at either end of the rockery, said

almost immediately: 'How about this?' The block had been divided in two, and flowering plants now trailed from the hollows!"

So my well worked out theory was totally wrong. The sundial, albeit in pieces, existed at Lee Castle in 1984 after Michael Turner's father acquired his one in the 1970s. The estate manager at Lee Castle could have been wrong when he said that there was no sundial there. It may not have been recognised as such by him, just like the mistress of the house at the time of the Somervilles' visit. In any case, there was no sign of a break or crack on the Leitholm sundial. It was totally in one piece so they could not be one and the same.

However, they were so similar, perhaps even identical, that they were most probably made by the same person.

It just shows that when all the available evidence backs a particular theory, there may be another piece of evidence just round the corner which throws it all into the air! I just hope that at some time in the future I will be able to visit Lee Castle to see for myself if the two parts of the sundial block are still present in the rockery.

ACKNOWLEDGEMENTS

Many thanks to Kevin Karney for alerting me to the sundial at Leitholm and to Michael Turner for allowing me to visit to inspect and photograph it.

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Part 29: Some Midlothian Sundials

DENNIS COWAN

n volume 5 of *The Castellated and Domestic Architecture of Scotland*,¹ Thomas Ross mentions a number of sundials in Midlothian, but this article will concern itself with only five of them.

The first three are at Oxenfoord Castle or Oxenford as Ross misnames it. He says:

"There are three dials at Oxenford Castle. The first stands in the centre of the garden; it is a plain circular horizontal dial, with a marble dial-plate. The second stands in the old churchyard adjoining the castle; it is a square horizontal dial, and has also a marble dial-plate, which, in addition to the figures, has the name JAMES ANDERSON cut on it."

Oxenfoord Castle was originally built by the Macgill family and was a typical Scottish tower house. It passed through marriage to the Dalrymple family and in 1780 the famous architect Robert Adam was commissioned to incorporate the tower house into a new building; it was remodelled again in 1842.

Still owned by the Dalrymple family, it was used as a school for more than 60 years, but since 1993 has reverted to being a private house, also being used as an up-market wedding venue.

Unfortunately, Ross does not provide sketches of the first two sundials, but the one currently in the centre of the garden (Fig. 1) is obviously neither of the two mentioned, as it is a much-weathered octagonal stone sundial whereas the two Ross sundials are both marble, and circular and square respectively.



Fig. 1. The octagonal stone sundial at Oxenfoord not seen by Ross.



Fig. 2. The one remaining marble sundial at Oxenfoord, complete with dinosaurs.



Fig. 3. The Oxenfoord marble sundial on its baluster shaft.

However, a sundial in the front garden of one of the estate houses does appear to be the first one mentioned by Ross, as it fits his description of a circular marble sundial. As can be seen from Fig. 2, it must be an old one as it comes complete with several dinosaurs! It sits on a stone baluster shaft (Fig. 3) and has a broken gnomon. There are Roman numerals from 4 am to 8 pm read from the inside and there is a 15-minute scale with three dots on the half hour mark. It also has a noon gap.

Despite checking the churchyard and a thorough search elsewhere, I was unable to locate the other marble sundial. The gardener (who alerted me to the above sundial) was not aware of it either.

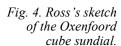






Fig. 5. Oxenfoord's cube sundial today near to the wall of the castle.

Ross goes on to say:

"The third dial, of an extremely simple design, is the one shown by [Fig. 4]. On each face of the square pedestal there is cut a bear evidently the crest of the Macgills of Cousland, from which place this dial was brought. There are three dials on the block above. The dimensions of the dial are height of base (which is modern), 13½ inches; the pedestal, 17½ inches high by 15¼ inches wide; dial, 9 inches high by 8¾ inches wide; total height, 3 feet 10 inches."

This third sundial is still at Oxenfoord, but is located next to one of the walls of the castle (Fig. 5) and is not orientated correctly. As Ross says, it has three dials on the east, south and west faces and there are Arabic numerals throughout. It is in a poor condition and has lost its ball finial. All the sheet metal gnomons survive, although the one on the west face has partly rusted away (Fig. 6).



Fig. 6. The south and west faces of the Oxenfoord cube sundial.

Near to this sundial is a type 2 Pilkington and Gibbs Heliochronometer (serial number 730) with Arabic numerals (Fig. 7). According to the gardener, it was all seized up, which I confirmed, and was inhabited by a large swarm of wasps, which I decided not to confirm!



Fig. 7. The Oxenfoord Pilkington and Gibbs heliochronometer.

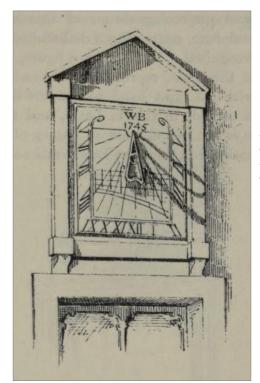


Fig. 8. Ross's sketch of the Dalkeith sundial.



Fig. 9. The Dalkeith sundial today with its fire insurance plaque above (inset).

Moving on, there was not too much to go on with the next sundial other than it was in Lugton, a district of Dalkeith, and the fact that it overlooked the river Esk, if indeed it still existed. Luckily, however, I found it almost straight away.

"There is a dial here, placed over one of the second floor windows of a house overlooking the Esk [Fig. 8]. It is a metal plate, and contains the initials W.B., and the date 1745. The panel with the pediment enclosing the plate are of stone, and date from early in this century."

The sundial today is just as Ross described it, except that he did not mention the fire insurance plaque above it with the number 2466 under shaking hands, which appears to be that of the Hand in Hand Fire & Life Insurance Society (Fig. 9). These were used in the 18th and 19th centuries as a guide to the insurance company's fire brigade, so would have been

present in Ross's day and possibly from 1745 as dated on the dial. However, Ross suggests that the pediment and presumably the fire insurance plaque are early 19th century. The top part of the pediment appears to be lower today than it was in Ross's sketch, but there may be inaccuracies in the sketch.



Fig. 10. The Dalkeith sundial showing its position above the first floor window of the tower.



Fig. 11. The plaque above the Dalkeith sundial showing the date of 1853.

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The vertical sundial itself has Roman numerals from 5 am to 5 pm with a quarter-hour scale, and faces a few degrees east of south. The gnomon with a nodus notch is complete and the declination lines are still just legible.

Ross said that it sat above a second-floor window, but there has never been a second floor on this house. The sundial sits above the first-floor window (Fig. 10). There is, however, a separate plaque above the sundial, again with the initials WB, but with the date of 1853 (Fig. 11). A conversation with the home owner confirmed that the turret on which the sundial is mounted was added in 1853, so that is not the sundial's original position. It is not known whether the sundial came from another building or whether it was simply moved to the turret in 1853. It would have been there where Ross saw it, but I cannot give an explanation of why he got its position wrong.

Next, Ross talked about the sundial at Mid Calder House and he said:

"This dial [Fig. 12] is placed in the garden of Mid-Calder House. At some unknown period it got broken and was in danger of being lost, when Lord Torphichen had it repaired and placed on a new shaft and base. It has the constant features, and, in addition, a central portion, consisting of a narrow octagonal band, which is cut away beneath, and is then splayed out from the octagon to the square with sloping and perpendicular dials. The dialstone is 27 inches high, and the width across the horns of the book part is $13\frac{1}{8}$ inches. The whole height as it now stands is $35\frac{1}{2}$ inches, but it was doubtless higher in its original state. [Fig. 13] shows a side and back view of the dial."

Although Ross recorded this sundial at Mid Calder House (which was in Midlothian in Ross's day but is now in West Lothian), it was missing for a number of years. Apparently the 13th Lord Torphichen became somewhat unpredictable in his old age, and in the 1960s when he sold off part of the estate for a housing development, the sundial went missing. This was some seventy years or more after it was first feared that it might get lost!

Fig. 12. Ross's sketch of the Mid-Calder lectern sundial, now at Culzean Castle.

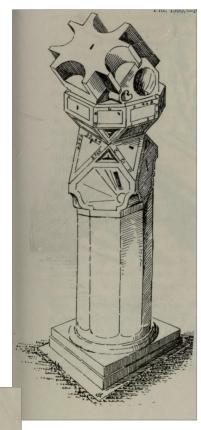


Fig. 13. Sketch showing the side and back of the Mid-Calder (Culzean) sundial.

It later transpired that it was in the possession of the County Council, although how they got hold of it is not known, and in 1971 they presented it to the National Trust for Scotland. The Trust eventually placed it in the walled garden at Culzean Castle in Ayrshire, one of the largest walled gardens in Scotland, where it remains to this day. However, it now stands on a square shaft and base rather than the octagonal ones when it was seen by Ross (Fig. 14).

Fig. 14. The Culzean Castle lectern sundial in the walled garden.





Fig. 15. View showing the north faces and the star on top of the Culzean Castle sundial.



Fig. 16. View showing the hemi-cylinder and south faces of the Culzean Castle sundial.

This sundial is one of the lectern type of which there are only around twenty-eight complete examples still existing in Scotland, and so it is a very important item. Lectern sundials come with or without a star on top and this one includes a star with dials in each of the angles and also on top (Fig. 15). The south face features the usual hemicylinder as well as several direct south-facing dials (Fig. 16).



Fig. 17. East, south-east and south faces of the Culzean Castle sundial.



Fig. 18. West, south-west and south faces of the Culzean Castle sundial.

It is basically octagonal in shape and there are dials throughout on the eight compass points including inclining, reclining, cup-hollows and heart-shaped dials (Figs 17 and 18).

The dial is in quite good condition with Arabic numerals throughout, although lichen is starting to encroach. Although I wasn't able to count them accurately, there are around forty dials with the vast majority of the gnomons complete, although they are replacements. It was last restored in 1984 by George Higgs, one of the very early members of the British Sundial Society.

The National Trust for Scotland are currently (June 2019) redesigning the whole of the walled garden, but it is planned that this sundial will continue to be the main focal point in the new layout.

REFERENCE

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Part 30: Neidpath Castle

DENNIS COWAN

eidpath Castle is a Scottish tower house overlooking the River Tweed just outside Peebles in the Scottish Borders (Fig. 1). The castle has been owned by three famous Scottish border families – Fraser, Hay and Douglas, and subsequently the Wemyss family from Fife. The original castle owned by the Frasers was burnt to the ground by the English during the Scottish Wars of Independence, and the owner Sir Simon Fraser was executed in London in 1306, the year after Sir William Wallace of Braveheart fame.

The present castle was built by the next owners, the Hays who had married into the Frasers, in the late 14th century. It was during the tenure of the Hays that the castle was visited by both Mary Queen of Scots and her son James VI (James I of England).

During the 1660s the castle was remodelled, but it was then sold to William Douglas, first Duke of Queensberry, in 1686. The castle eventually passed to the fourth Duke, known as 'Old Q', who proved to be unpredictable, and in 1795 he cut down all the trees and the hanging gardens that sloped down to the River Tweed. The castle was neglected during Old Q's ownership, and when he died unmarried in 1810 the castle passed to the Wemyss family through the descendants of the first Duke's daughter. It remains in the possession of the Wemyss family and they have improved and maintained it to this day, although part of the castle is still in ruins.

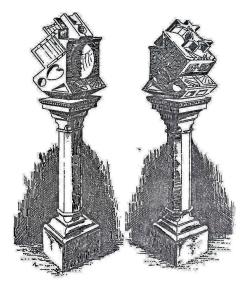


Fig. 2. Ross's sketches of the Neidpath sundial.



Fig. 1. Neidpath Castle overlooking the River Tweed.

As a regular visitor to Peebles, I had long known of Neidpath and that it was occasionally open to the public, but I had never visited it. Almost as soon as I became interested in sundials and was aware that there was a sundial there, it stopped having open days! I learned that the sundial was stored indoors and that no one lived at the castle, and I had no information on how to contact anyone. It appeared that my chance to see the sundial was gone.

But what did Thomas Ross say of this sundial in volume 5 of *The Castellated and Domestic Architecture of Scotland*?¹

"This dial [Fig. 2] has all the permanent features of the type, but the book part, instead of being square as in the normal conditions, is oblong, while the sloping cylinder is closed about half-way down, and on the flat surface thus made there is a cup-hollow. Its other features are all normal. The measured drawing [Fig. 3] of this dial, prepared by Mr. Robert Murray, architect, gives a definite representation not only of it, but of those of the type. This dial belonged to Neidpath Castle, and about the time (1795) when 'Old Q.' began his work of desolation there, his gardener, Mr. Spalding, fortunately got possession of the dial, and his son, a nurseryman in Peebles, erected it in his grounds, where it remained for many years, till it was presented to the Chambers Institute a few years ago, where it now remains, but without the shaft."

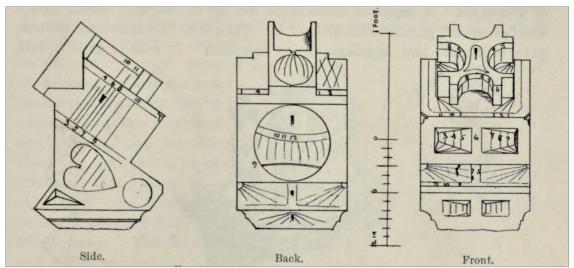


Fig. 3. Architectural drawings of the Neidpath sundial.

When Ross said that the sundial had all of the features of the type, he was of course referring to the fact that it was a lectern sundial of which there are fewer than thirty complete examples left in Scotland. As he explained, it is slightly different from the normal and, of the two main types (with and without a star on top), it is of the type that has a star.

After the gardener 'rescued' the sundial from Old Q it was kept safe in his family before being donated in the 1880s to the Chambers Institute, a museum in Peebles. Subsequently it was acquired in 1912 by E.A. Hornell, one of the famous 'Glasgow Boys' group of artists, and kept at his home at Broughton House in the south-west of Scotland. In 1961 it was returned to Neidpath.

Luckily, a chance encounter in early 2019 while surfing the Internet revealed contact details for Lulu Benson, a member of the Wemyss family. I subsequently made contact with her and she said that although she lived in Edinburgh, she would be delighted to show me the sundial.

When the day came for the visit, the sundial was inside the castle as expected and still without a shaft. It was quite dark inside, so Lulu had moved it to near a window and provided a temporary lamp, but unfortunately the lighting conditions were not ideal for photography. I thought that given its age (probably from mid-17th century), it was in a fair condition, but it had lost its metal gnomons, the star on top was missing some of its structure and many of the numerals were difficult to read, as were some of the hour lines.

On the south face, unusually, the sloping hemi-cylinder ends half-way down and underneath that is a small cup hollow (scaphe dial) which as Ross rightly says is not normal (Fig. 4). What is mystifying though is that both Ross's sketch and the architectural drawing show that underneath the large cup hollow on the south face there are two reclining dials, but the hour lines that can be seen today and the gnomon hole suggest that it was a polar dial (Fig. 5). Underneath this is a proclining dial not seen in the photograph, but it can be seen in the architectural drawing.



Fig. 4. South face of the sundial.



Fig. 5. Close-up of the polar dial on the south face.



Fig. 6. North face of the sundial.

The star on the north side has dials in each of the angles in addition to the dial on the flat surface on top of the star, with sunken, reclining and proclining dials below (Fig. 6).

The east and west faces are mirror copies of each other with sunken triangular, circular and heart-shaped dials as well as the more familiar east and west vertical dials (Figs 7 and 8).

Lulu very kindly gave my wife and me a guided tour of the castle, which is now available to rent on Airbnb,² although it should be mentioned that it sleeps only two and that the bedroom is up several flights of stairs. You have free access to the whole castle and the sundial can also be seen. I have to say that the castle is luxurious and, although expensive, is well worth a one-night stay.

ACKNOWLEDGEMENT

I am very grateful to Lulu Benson for letting me see the sundial and for giving my wife and me a guided tour.

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- 2. https://www.airbnb.co.uk/rooms/33270826? source_impression_id=p3_1569441146_ak1dp5NmiHCP4ddL or go to www.airbnb.co.uk and search for Peebles. Note that there are at least two castles listed. Neidpath Castle is the one that sleeps only two guests.



Fig. 7. East face of the sundial.



Fig. 8. West face of the sundial.

Part 31: The East Coast Obelisks

DENNIS COWAN

ncient obelisk sundials are thought to be unique to Scotland and in volume 5 of *The Castellated and Domestic Architecture of Scotland*, ¹ Thomas Ross had the following to say:

"This name, while it fairly describes the appearance of the dials of this class, has a further fitness from the circumstance that the Egyptian obelisks are believed, amongst other purposes, to have acted as gnomons.

"The constant parts of these dials are a square shaft, a bulged capital, and a tapering finial. Where the dial is of the normal type and unaltered, the shaft is divided on each side into five horizontal spaces by incised lines, thus presenting twenty compartments. These compartments are hollowed out with cup-shaped, heart-shaped, triangular, and other sinkings, which are generally lineated so as to mark the hours, and were without doubt always meant to be so. The sharp edge of the figure casts the shadow, which is especially distinct in the angular shapes and at the top of the heart sinkings, where there is often a certain amount of undercutting.

"Stone gnomons of various forms are frequently left in the cup hollows, and metal stiles are to be found in all the dials. Occasionally some of the spaces are left blank, and on the north side initials, dates, and arms sometimes occur. The capital is always bulged out so as to form an octagon in the centre, with an upright facet on each of the eight sides, having a dial on each. Above and below each facet over the four sides of the shaft are sloping facets, with a reclining dial or a proclining dial on each, the former being those dials whose faces slope towards the sky, and the latter those whose faces slope towards the ground.

"The eight triangular pieces formed by the meeting of the square and octagon are cut out, and most effective shadows, from an artistic point of view, result from this arrangement, giving an air of dignity to the capital, which is wanting in the one instance (at Drummond Gardens²) where this arrangement is departed from. The upright facets of the octagonal part have heart shaped and cupshaped sinkings, as in the shaft; but the proclining and reclining parts seldom have sinkings. Nor has the tapering finial, although usually covered with dials, ever any sinkings; like the shaft, this part is divided by horizontal incised lines, the number of spaces, for which there appears to have been no rule, varying according to the height of the finial.

"The obelisk-shaped dials are generally set on some kind of base, consisting either of steps or a pedestal; the former frequently alternate, being set square and diagonally as they ascend. The pedestals have a general resemblance to each other, being frequently ornamented with representations of the sun and moon. "With this general description of the obelisk-shaped dials, we will now proceed to the consideration of individual examples."

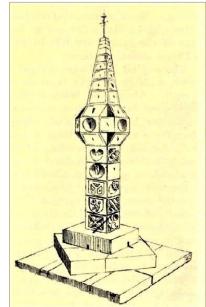
Ross identified ten obelisk sundials in the eastern side of Scotland; four have been included in previous separate articles, whilst three of the remaining six will be described here.

Firstly, Bonnington is a large estate to the west of Edinburgh and a fine example of this type is in the owner's private garden. Of this dial, Ross says:

"This dial is situated in the garden of Bonnington House; it stands on three steps placed anglewise [Fig. 1]. The dimensions of the dial are shaft, 3 feet $10\frac{1}{2}$ inches high; the capital, 1 foot $6\frac{7}{8}$ inches high; and the finial about 3 feet 4 inches high; or 8 feet $9\frac{3}{8}$ inches in all, and including the three steps, 10 feet $2\frac{7}{8}$ inches. The width of the capital is 1 foot $7\frac{1}{8}$ inches, and of the shaft $10\frac{1}{2}$ inches. The remains of an iron finial are visible on the top of the finial. Like the dial at Barnbougle, this one has on one of the compartments of the north side the Cunnyngham arms. A shake fork and the presence of three stars seem to indicate the Cunnynghams of Belton, and on the compartment beneath there is a lion rampant."

This fine obelisk is still in the position where it was seen by Ross around 130 years ago and it follows the normal pattern of the type. It has had restoration to the top section of the shaft and there is damage to the second bottom section as can be seen in Fig. 2. Some of the remains of the iron finial have also gone, leaving only a thin rod of iron.

Fig. 1. Ross's sketch of the Bonnington obelisk sundial.



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Fig. 2. The Bonnington sundial today with the damage to the second bottom section of the shaft visible.



Fig. 3. The shake fork with the three stars and the lion rampant below.

The shake fork with the three stars and with the lion rampant below that are mentioned by Ross can still be clearly seen today (Fig. 3). An interesting section on the east face of the shaft has a cup hollow with a stone gnomon, with two mini cup hollows (and gnomons) on the gnomon itself (Fig. 4). The shaft has five sections whilst the finial has an impressive nine sections; however, the finial is in poor condition with no complete gnomons surviving, and little in the way of hour lines or numerals exists today.



Fig. 4. The cup hollow with two further mini cup hollows on the stone gnomon.

Next we travel over the River Forth to Leven in Fife where Ross describes another obelisk. He says:

"This dial is believed on sufficient evidence to have been the town cross of Leven. All knowledge of its existence was lost till, on the 15th January 1889, Mr. James Anderson of Norton, Leven, observed it broken and built into a garden wall. He had it taken out, and found the shaft in two pieces, with a portion of the centre lost, as well as the upper portion, but the capital was entire. The whole has now been restored, and set on three steps, on one of which is the following inscription: LEVEN CROSS, FORMERLY ON CARPENTER'S BRAE, REMOVED 1767, RESTORED AND REBUILT BY JAMES ANDERSON OF NORTON. 1889. It has been handed over by Mr. Anderson to the custody of the trustees of the Greig Institute. The dial stood on Carpenter's Brae, and it was taken down to allow the passage of Mr. John Gibson of Durie's funeral in 1767. After the burning of Durie House in 1764, Gibson lived in the High Street of Leven. The height of the upper part as restored is purely conjectural, and the whole height as it now stands, exclusive of the steps, is 7 feet 3 inches.

"We have to thank Mr. Andrew Dewar, architect, Leven, for this drawing [Fig. 5]."

Despite what Ross says above, it is unlikely that this obelisk was ever designed to be the town or market cross. It was more likely to have been a sundial that was moved from elsewhere to act as the cross. This is a view shared by John W. Small in his book *Scottish Market Crosses*.⁴

The sundial is no longer at the Greig Institute, as it was moved from the garden there around 1982 to make way for

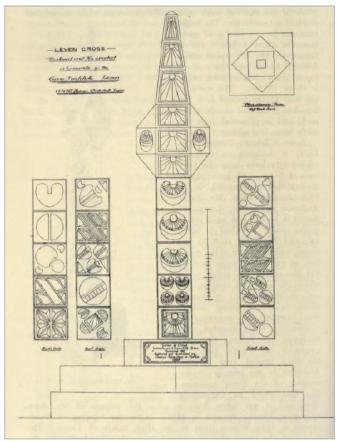


Fig. 5. Ross's architectural drawing of the Leven obelisk sundial.

Fig. 6. The mish-mash appearance of the Leven sundial today.

a road widening scheme. It was placed in the grounds of Fife Council's Carberry House nearby (not to be confused with Carberry House⁵ in East Lothian which also has an obelisk sundial in its grounds).

Ross noted that the restoration of the upper part (the finial) was purely conjectural; unfortunately the architect's drawing showed only the south face of the finial and this design was replicated on all four faces! The difference in the stone of the replacement finial and the original capital is easy to see, and there is no evidence of gnomons ever having been fitted to the finial dials. None of the original metal gnomons on the rest of the structure have survived.

A more recent restoration has replaced much of the shaft in grey sandstone whilst the original parts of the obelisk are in red sandstone. It has however been carried out faithfully to the original architect's drawing. The shaft has five sections and the finial three, but the whole structure, which sits in amongst trees, is orientated nearly 180 degrees out. It has a rather mish-mash appearance today as can be seen in Fig. 6. It is fair to say that it is not one of my favourite sundials.

As part of the millennium celebrations, a near full-sized granite copy, known as the Millennium Cross (Fig. 7), was made and placed in the sunken garden in Letham Glen on the outskirts of Leven. Unfortunately it was never designed to act as a sundial as gnomons were never fitted and the cup hollows on the capital are marked only as circles (Fig. 8).



Fig. 7. Leven's Millennium Cross.



Fig. 8. One of the circles on the Millennium Cross that should have been cup hollows with some of the incorrectly marked out dial faces!

The four south-facing markings on the finial on the original sundial have been replicated here and indeed on every other face that has been marked out.

However, none of the hour lines on any of them are correct and have evidently been carried out by someone with no knowledge of sundials.

The shaft, which has only four sections rather than five, has no dials marked and instead has designs based on the local area (Fig. 9). This is a pity as a great opportunity has been missed after going to so much work and effort, but not completing it as a working sundial.



Fig. 9. Sections of the shaft on Leven's Millennium Cross with designs based on the local area.

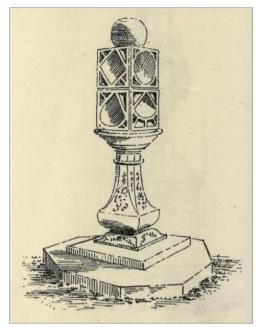


Fig. 10. Ross's sketch of the Panmure sundial now at Brechin Castle.

Further north in the county of Angus, Ross merely refers to a sundial at Panmure House by saying:

"This dial [Fig. 10] appears to us to be a part of the shaft of an obelisk."

Despite what Ross said, I am not convinced that it was ever an obelisk shaft as it just doesn't seem right. There are a number of reasons. The sphere on top is marked out as a dial, although it is difficult to see any detail owing to the lichen, but it looks to me to be original to the rest of the structure. If that is the case it could not have been part of an obelisk as the capital would have stood there. Intriguingly there is a shield-shaped cut-out on the sphere with a piece to fit lying below it (Fig. 11). What was its purpose? There is also a step on top of the shaft below the sphere, which would not be present on an obelisk shaft (Fig. 12). Why just two sections of a shaft when it should have been four or five? Furthermore at least one of the faces does not appear on any other obelisk that I have seen (Fig. 13).



Fig. 11. The sphere of the Brechin sundial with a shield-shaped cut-out and the piece to fit lying below.



Fig. 12. The step on top of the Brechin shaft which would not be present on an obelisk sundial.



Fig. 13. The unusual face on the Brechin shaft.

This sundial resided at Panmure House in Ross's time, but that house was demolished in 1955 and at some point it made its way to Brechin Castle around 15 miles to the north. It is thought to be of 17th century date, but is now on a 19th century octagonal pedestal (Fig. 14) and is much lichen encrusted. This can be seen on the heart-shaped sinking on the east face (Fig. 15) where some of the hour lines are just visible today. However, comparing Figs 10 and 14, it is clearly on a different pedestal from when it was seen by Ross.

Happily though, there was a surprise further on in the garden. A fine horizontal sundial was sitting on what was



Fig. 14. The Brechin sundial today on a different pedestal from the one seen by Ross.



Fig. 15. The lichen-encrusted heart-shaped sinking on the shaft's east face.



Fig. 16. The original Panmure pedestal now with a horizontal sundial on top.

obviously the obelisk's original pedestal. This sundial was not seen by Ross, but there is no doubt that the obelisk's pedestal has been re-used here (Fig. 16).



Fig. 17. The octagonal horizontal sundial now on Panmure's original pedestal.

On top of the pedestal today is an engraved copper alloy octagonal dial (Fig. 17) with a one-minute time scale and Roman numerals from 4 am to 8 pm read from the inside. It is also inscribed with what appears to be "Brechin 56 deg 20 min" or it could be 30 min. Either option is surprising as Brechin is at 56 degrees 47 minutes.

It includes an equation of time in table form, split on either side of the gnomon and is complete with a noon gap. It also shows noon time for various cities around the world signified by a series of XIIs within an inner octagonal chapter ring. Much of the detail though is difficult to read today.

This may be a significant London sundial dating from the late 17th to early 18th century that has not previously been recognised and it certainly requires further investigation.

ACKNOWLEDGEMENT

Many thanks to John Davis for his comments on the Brechin horizontal sundial.

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Part 32: The West Lothian Sundials

DENNIS COWAN

est Lothian is not the most fertile ground for sundials, but in volume 5 of *The Castellated and Domestic Architecture of Scotland*¹ Thomas Ross included the examples described in this article. Of the first, he says:

"This is a massive square dial [Fig. 1], which probably dates from the latter part of the seventeenth century; it stands on a circular stone base, which is flush with the ground, beside the old mansion of Houston."

Here Ross was referring to the sundial at what is now Houston House Hotel in the village of Uphall. Intriguingly there are a couple of inconsistencies in Ross's account. He says that it is a massive square dial, but examination of his sketch at Fig. 1 shows that the dial itself is circular although the abacus is square. Furthermore, it is hardly massive as he suggests.

The sundial today is the same as in Ross's time as can be seen in Fig. 2, even down to the circular stone base being flush with the ground. However, the dial plate is different. Today there is an octagonal dial (Fig. 3), but sitting within the original circular dial's recess. It has Roman numerals viewed from the inside and running from 4 am to 8 pm. There is a noon gap but the gnomon is missing.

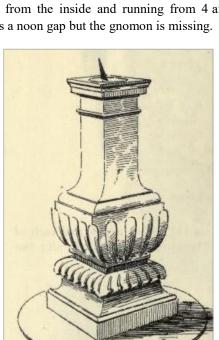


Fig. 1. Ross's sketch of the Houston sundial.



Fig. 2. The Houston sundial today.

Near to the village of Newton, by the southern bank of the Forth of Forth, lies the late 17th century L-shaped house of Craigton. It was built for the Ewings of Craigton, but was acquired by the Hopes in the 18th century and added to the Hopetoun Estate. Of the sundial there Ross says:

"This dial [Fig. 4] is situated in the garden of the seventeenth century mansion-house of Craigton; it has a circular



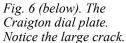
Fig. 3. Close-up of the Houston sundial sitting within the original circular recess.

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Fig. 4. Ross's sketch of the Craigton sundial.

Fig. 5. The Craigton sundial today.







baluster support with boldly cut egg and dart enrichment supporting a square abacus, on which is placed the bronze dial-plate."

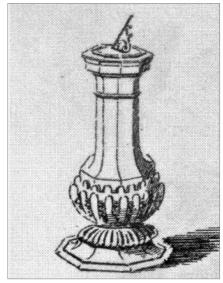
The sundial still exists in the garden and it is clearly the same as Ross saw, as can be seen by comparing Figs 4 and 5. Like the Craigton dial, it has Roman numerals from 4 am to 8 pm read from the inside. Its gnomon too is missing, but judging from the width of the noon gap, it must have been quite substantial (Fig. 6). Unfortunately there is a huge crack in the dial plate which is secured to the abacus by four crudely fixed screws.

Staying on the Hopetoun Estate, there is a sundial situated to the rear side of Hopetoun House itself (Fig. 7). Ross did not provide a sketch of the Hopetoun sundial and he doesn't say much about it other than:

"The horizontal dials at Craigiehall [Fig. 8] and Hopetoun are almost identical. The carved work on the pedestals was probably wrought by the same hand."

Fig. 7. The sundial at the rear side of Hopetoun House.

Fig. 8. Ross's sketch of the Craigiehall sundial which he said is almost identical to the Hopetoun sundial.



1

Both of these great houses were constructed at the same time by the same master mason (Sir William Bruce), so perhaps it is not surprising that Ross thought that these two pedestals were made by the same hand. A full description of the Craigiehall sundial was given in a previous article in this series,² but although the pedestals are similar at first glance, there is a difference. Whilst the appearance and decoration of the two pedestals is almost identical, the Craigiehall pedestal is of an octagonal nature and the Hopetoun pedestal is square. It is not dissimilar to the pedestal at Houston described earlier.



Fig. 9. The Hopetoun dial plate.

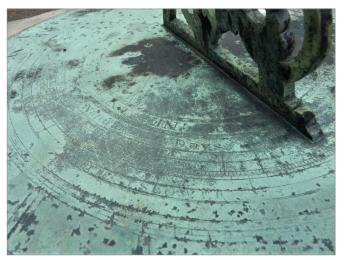


Fig. 10. Close-up of the Hopetoun dial plate.

The dial plates of the two sundials are different, however. The Craigiehall dial is octagonal whilst the one at Hopetoun is circular (Fig. 9). They both have Roman numerals from 4 am to 8 pm read from the outside and both have Equation of Time details. Therein lies the main difference, as the Craigiehall dial's EoT is laid out in tabular form whilst that of Hopetoun is circular around the compass rose. Concentric arcs run around the rose and are labelled "Equation of Natural Days", "Watch Faster" and "Watch Slower" and the months run anti-clockwise (Fig. 10). Each day of the month is marked and the dial has a one-minute time scale.

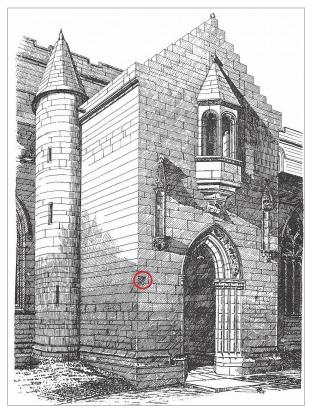


Fig. 11. Ross's sketch of St Michael's church at Linlithgow with the mass dial indicated by the red circle.

The details on the dial are fading and some of the detail is difficult to read. There is a coat of arms, but it is no longer legible. There is a noon gap but the gnomon is quite loose.

There are very few mass or scratch dials in Scotland but one of those is on St Michael's parish church situated next door to Linlithgow Palace, one of the main residences of the Scottish monarchs in the 15th and 16th centuries. Ross simply says:

"A dial similar to the foregoing has been cut on the south porch of this church, on the west side of the doorway. It is seen in the view in Volume 3^3 [Fig. 11], but it is so very small and inconspicuous as hardly to attract attention. It has no date, but being of the same construction as the one at Melrose, it is doubtless of the seventeenth century."

Here Ross was comparing the dial at Linlithgow with that of Melrose, ⁴ but he was wrong in comparing them favourably. They are quite different, the only similarity being that they are both cut into the stonework of the churches. The dial at Melrose is clearly a scientific dial with equal hours and numerals. It is dated 1661 which is presumably why Ross mistakenly dates the dial at Linlithgow similarly.

He was correct though in saying that the Linlithgow dial is small and inconspicuous, as when I visited my companion asked one of the church guides if he knew where the dial was. He was told that there was no sundial on the church, and he took great satisfaction in bringing the guide to where I had already located the dial! It was not surprising that the guide was unaware of it, as it is quite difficult to see, with only the hole clearly standing out to the left of the porch entrance (Figs 12 and 13).

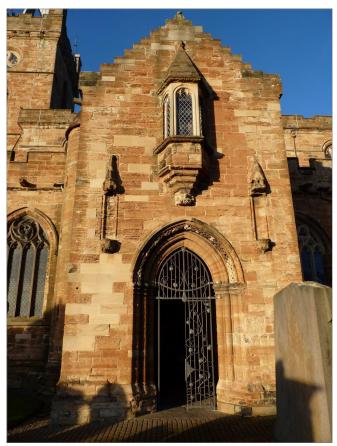


Fig. 12. St Michael's church today. The mass dial is to the left of the doorway.

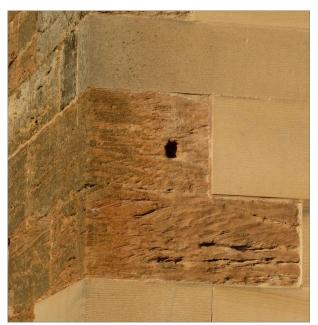


Fig. 13. Close-up of the mass dial at St Michael's church.

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Part 33: The Aberdeen City Sundials

DENNIS COWAN

berdeen is well known today as the United Kingdom's oil capital, but in 1890 Thomas Ross knew none of this. He would have seen it as a fishing port and eventually as a source of three sundials, possibly including Scotland's oldest. In volume 5 of *The Castellated and Domestic Architecture of Scotland*¹ he mentioned the following examples:

"The town-house of Aberdeen was erected in 1730, and on the front of it there was a plain metal dial [Fig. 1] which was transferred to the new building when the old one was taken down about twenty years ago [around 1870]. The gilt gnomon issues from a radiant sun, and is of wrought-iron, ornamented as shown on sketch. Along the top of the dial is the motto UT UMBRA SIC FUGIT VITA. We are indebted for a sketch and photograph of this dial to Mr. John Morgan of Rubislaw House."

The Municipal Building, as the new building is known today, stands in the centre of Aberdeen at the eastern end of its most famous thoroughfare, Union Street, and has several uses including the Sheriff Court. One part of the building is used as the Tolbooth Museum and it is here that the vertical sundial is situated (Fig. 2).

It is in fine condition and has probably undergone a restoration in recent times. As can be seen in Fig. 3, the



Fig. 2. Location view of the Town House sundial.

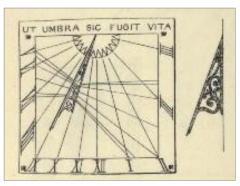


Fig. 1. Ross's sketch of the sundial and gnomon at Aberdeen Town House.



Fig. 3. The Town House sundial today. The original fixing holes can be seen.

original fixing holes indicate that it has probably been moved slightly to the left. The dial face is dark with golden furniture and an ornamental gnomon. It has Roman numerals from 5 am to 4 pm with a one-minute scale and it declines around 25 degrees to the east.

There are seven declination lines; the BSS Fixed Dial Register notes that there are no reports of a nodus and there is no obvious one in Ross's sketch, but there clearly is one today as can be seen in Fig. 4. The tip of the gnomon has been broken off at some point and has been repaired. Gatty translates the Latin motto as "as a shadow so life doth fly".²

Ross notes above that the sundial was originally on the Town House which was demolished and replaced by the current building, where the sundial was resited. I think that it may possibly have been at a lower height on the original building as it is fairly high in its current position and





Fig. 4. Close-up of the Town House gnomon showing the nodus and the repair.

difficult to read at that height, especially so the seven declination lines.

This sundial may not be the original one though, as the Royal Commission on the Ancient and Historical Monuments of Scotland tell us "a sundial was provided for the Town House in 1598, and in 1733-4 a payment was made for a fine peuther³ dial and for cutting, calculating, painting and gilding the same", almost certainly the current dial.⁴ The 1598 sundial would have been the earliest dated Scottish one that we know of today. I wonder what became of it?

Nearby in Upper Kirkgate, Andrew Begg's shop has two sundials sitting on corbels at roof level. Ross shows only one of them and comments simply:

"This dial [Fig. 5], for which we are indebted to Mr. Keith, jun., stands on a house in Upper Kirkgate, and occupies a similar position to the last mentioned." ⁵



Fig. 5. Ross's sketch of one of the Upper Kirkgate sundials.

There are two sundials in Upper Kirkgate, one at each side of the building, which today houses a shop on the ground floor (Fig. 6). The presumption is that this is the same building that the sundials were on in 1892, but it is not necessarily so as the roofline is certainly different today.

Both sundials are stone cubes each with two dial faces. The left-hand sundial faces south-east and south-west and is



Fig. 6. The two sundials at roof level on Andrew Begg's shop in Upper Kirkgate today.



Fig. 7. The lefthand sundial at Upper Kirkgate.

Fig. 8. The south-east face of the right-hand sundial at Upper Kirkgate.





Fig. 9. The north-east face of the right-hand sundial at Upper Kirkgate.

complete with both gnomons (Fig. 7). Both faces have the date 1694, the south-east face showing 3 am to 2 pm whilst the south-west face shows 10 am to 9 pm. They are both quite accurate.

The right-hand sundial faces both south-east (Fig. 8) and north-east and both faces have the initials WTMG with the date 1694. These details take up much of the north-east face with little left over for the dial furniture (Fig. 9). The south-east dial shows 3 am to 2 pm, has its gnomon and is accurate. The north-east dial meanwhile has lost its gnomon and shows 3 am to 9 am. The numerals on all four dial faces are Arabic.

However, we have seen that the sundials are both dated 1694 but the building is later than that, probably late 18th century, so if the date is authentic they must have been mounted elsewhere before they were moved here. Unfortunately I have been unable to find any reference to an earlier location for them.

Moving a mile or so northwards we come to Old Aberdeen and the University, founded in 1494, and it is here at King's College Chapel that we see our next sundial. According to Ross:



Fig. 11. The King's College Chapel sundial seen at roof level at the top of the buttress.

"There is a dial here about 3 feet square, formed of a metal plate set on the face of one of the buttresses of the chapel at a height of about 25 feet from the ground. It appears to be an original part of the structure, which was founded in 1494, and in that case it is probably the earliest example of a sundial known in Scotland."

Evidently Ross never managed to see these three Aberdonian sundials as sketches of the first two here mentioned were supplied by others and he did not provide a sketch of this sundial at the chapel.

Like the Town House sundial, it is dark with golden furniture but its ornamental gnomon has lost its upper part (Fig. 10). There are Arabic numerals and hour, half hour and quarter hour lines. It is in poor condition and is situated high on one of the buttresses at roof level (Fig. 11), but I can't agree with Ross here as I am convinced that the dial is not as early as he suggests. If it were so, it would be the oldest dial in Scotland by some 129 years. It just does not have that feel and I fear that it was probably added later.



Fig. 10. Close-up of the King's College Chapel sundial today.

So there we have it. Two would-be contenders for Scotland's oldest sundial, but one lost and the other unlikely. Pity.

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- 3. Peuther = old Scots spelling of pewter.
- 4. https://canmore.org.uk/site/20154/aberdeen-castle-street-municipal-buildings-and-tolbooth
- 5. The last sundial referred to here by Ross was at East Calder in Midlothian, which I have yet to find. It may no longer exist.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 34: Some Sundials from Cupar, Kinross and Alloa

DENNIS COWAN

reston Lodge is situated in the Bonnygate, one of the main routes into Cupar in Fife. Bonnygate is known to be from the early 16th century and Preston Lodge, which dates from 1623, is its oldest surviving building and sits directly on the street. It is square in plan with two little wings projecting to the south. High on its walls at second-floor level are three single-faced square stone sundials, two facing south and one facing east (Fig. 1). They are thought to be contemporary with the building. If that is so, they could equally be three of Scotland's oldest sundials *in situ*.

In volume 5 of *The Castellated and Domestic Architecture* of Scotland, ¹ Thomas Ross simply says:

"There are three plain dials on this interesting mansionhouse [Fig. 2], situated in the Bonnygate. A stone built into the wall contains the motto SAT CITO SI SAT BENE, along with a merchant's mark, and the date 1623."



Fig. 2. Ross's sketch of Preston Lodge showing two of the sundials.

Although Ross provided a sketch of Preston Lodge itself, he did not sketch the sundials, although two of them can just be seen on his sketch of the building. The motto on the wall can be translated as "soon enough if well enough". As to the three sundials, as Ross says, they are quite simple, but with bevelled edges. Perhaps uniquely the numerals have been placed on the bevels on all three sundials.

The sundial at the western end of the south wall is a direct south dial, but is slightly canted to the east. It has Arabic numerals from 6 am to 6 pm (on the bevelled edges), and



Fig. 1. Preston Lodge today with the three sundials circled. has hour lines and half hour markers. Its sheet gnomon is complete (Fig. 3).

The sundial at the eastern end of the south wall is similar but has a semi-circle running through the hour lines and has lost its gnomon. It too is a direct south dial but strangely it is canted slightly to the west (Fig. 4).

The sundial on the east wall is a direct east-facing dial also with Arabic numerals, this time from 4 am to 2 pm, again placed on the bevels, but it too has lost its gnomon. In the



Fig. 3. The left-hand sundial on the south face of Preston Lodge.



Fig. 4. The right-hand sundial on the south face of Preston Lodge.



Fig. 5. Preston Lodge's east facing sundial complete with overflow pipes.

bottom left corner there is what appears to be a square mark with possibly initials or a maker's mark, but it is difficult to be sure. There are two rather obtrusive overflow pipes sticking out right above this sundial which from a distance I initially thought were badly placed gnomons! It has been canted relative to the walls in the same way as the first sundial (Fig. 5). This suggests perhaps that the middle sundial is wrong. However, that is not the case. The house faces slightly east of south, so it is the middle of the three sundials that is correct. One wonders why the other two are wrongly canted; were they replaced or re-fixed incorrectly at some point?

Moving westwards to Kinross, which is just over the border in Perth & Kinross, we come to Kinross House almost in the middle of the village. There are two sundials here on the walls surrounding the house and gardens. Ross commented: "We are indebted to Mr. David Marshall, F.S.A. Scot., for the following interesting facts regarding the sun-dials here. John Hamilton, mason, servitor to Mr. James Smith, overseer of His Majesty's Works, cut the two sundials still standing on the walls of the office courts to the right and left of the house between 14th April and 24th June 1686. Mr. Smith was son-in-law to Robert Mylne, the king's master mason.

"James Anderson, a local mason, hewed the "basses" for the dials [Fig. 6]."

It is fairly unusual to have a maker's name for ancient Scottish stone sundials, never mind the actual precise dates that they were produced. These two cube sundials with ball finials are identical but do not face the main cardinal

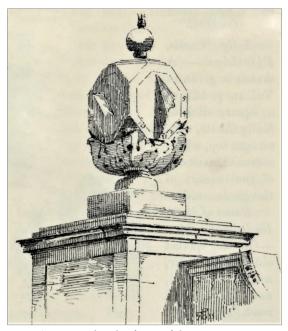


Fig. 6. Ross's sketch of one of the Kinross House sundials.



Fig. 7. Kinross House's left-hand sundial (viewed from outside the walls) showing the declining east face.



Fig. 8. Detail of Kinross House's left-hand sundial (viewed from outside the walls) showing the declining south face.



Fig. 9. Kinross House's right-hand sundial (viewed from outside the walls) showing the declining north and east faces.

points, and instead decline to the SSW, WNW, NNE and ESE. The corners of each face are chamfered into octagons and there are dials on each of the faces with Arabic numerals throughout. All gnomons are complete and the gardener told me they were of lead, but I think it is more likely that they are copper. There are hour lines with half hour markers including three dots and with a ten minute time scale (Figs 7–10).

Kinross House is privately owned and is not generally open to the public, but is available for hire for private functions. However, these two sundials can be easily seen from outside the walls.

Next we continue travelling west to Alloa, the main town in Clackmannanshire, Britain's smallest historic county, where there is a fine diptych sundial on one of the old houses and described by Ross as follows:



Fig. 10. Kinross House's right-hand sundial (viewed from outside the walls) showing the declining south and west faces.

"This very fine dial [Fig. 11] occurs on the front wall of a house [Fig. 12] in the Kirkgate, Alloa. The supporting bracket is quite different from those at Heriot's, and so is the ornament along the top. A shield beneath, surrounded with a nicely-carved wreath, bears the date 1695, with the initials of Tobias Baak, or Bachup, and his wife, Margaret Lindsay. He was a mason in Alloa, and built the handsome house, on which the dial occurs, for himself. The Kirkgate

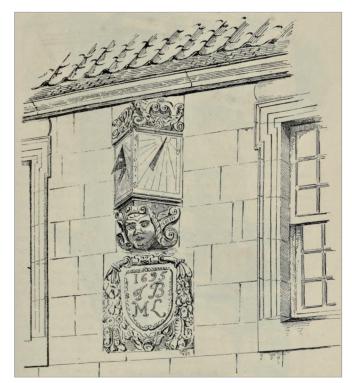


Fig. 11. Ross's sketch of the Alloa sundial.



Fig. 12. The house in the Kirkgate, Alloa with the sundial in the centre of the upper storey.

was at one time the principal street in Alloa, being in the direct route between Stirling and Dunfermline, and doubtless this dial was of considerable importance to travellers two centuries ago."

Typically, the faces are directed to the SE and SW and not unusually are on what was once a main thoroughfare, although it is a very quiet street today. The hour lines are complete with short half hour lines and with a single dot between the hour numerals. There are Arabic numerals with the SE face having 4 am to 2 pm (Fig. 13) whilst the SW face has 9 am to 8 pm (Fig. 14). The face on the supporting bracket for the sundial is rather more grotesque than depicted in Ross's sketch.

Tobias Baak or Bachup or indeed Bauchop was one of the foremost craftsmen of his time in Scotland. He was the architect and contractor for Dumfries Town Hall and supervised a goodly portion of the extension of the town of



Fig. 14. The south-west face of the Alloa sundial.



Fig. 13. The south-east face of the Alloa sundial.

Alloa.³ When he came to build his own house it was considered that the evil-looking face on the sundial (Fig. 15) was the only authentic petrified portrait of the Devil in existence!⁴



Fig. 15. The only authenticated petrified portrait of the Devil in existence!

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 35: The Modern Dials

DENNIS COWAN

n volume 5 of *The Castellated and Domestic Architecture of Scotland*¹ Thomas Ross devotes one whole section to the modern dials. They were modern to him, but to us of course they are now almost 200 years old.

He describes five sundials, but unfortunately these modern dials proved very difficult to find today and not all were successfully located. The first one that he mentions is at The Haining, a stately home near Selkirk in the Scottish Borders. The current house is a Palladian mansion built at the end of the 18th century and extensively re-modelled around 25 years later. In 2009 the house and grounds were bequeathed to the people of Selkirkshire and are now run by The Haining Charitable Trust.

Of the sundial Ross says:

"This is a singular modern example [Fig. 1], and may be well called a masonic dial, since it contains various symbols of the craft – an arch springing from Ionic columns enclosing the all-seeing eye within a wreath, the compass, square, and triangle, and various other figures. The dial is the work of a hewer who was employed at The Haining in 1817, the date on the dial. We are indebted for this example to Mr. Anderson, architect."

Unfortunately this sundial is now missing and the Trust have no knowledge of it. In *The Ancient Sundials of Scotland*,² Andrew Somerville, who describes it as a lectern sundial, states that the then owner remembered it and that it was destroyed, but with no explanation of how that happened. I can see why Somerville listed it as a lectern sundial due to its overall shape, but it is a somewhat simplified version.

The next item in Ross's list of modern sundials was at Amisfield Castle (Fig. 2) near Dumfries. Amisfield is a Scottish tower house dating from around 1600 and has been described as the finest tower house in southern Scotland. Ross says:

"Mr. Roberton, Glasgow, has drawn our attention to a neat modern horizontal dial at Amisfield Castle. The plate contains the inscription "THIS DIAL BELONGS TO AND. COWAN [no relation I presume], J. W. FECIT 1825", together with the motto "DAY GIVES PLACE TO NIGHT, LIFE SOON ENDS IN DEATH, AND TIME WILL BE SWALLOWED UP IN VAST ETERNITY." The dial tells the hours at various towns throughout the world."

A rather sombre motto. Ross did not provide a sketch of this sundial, and unfortunately the current owner, Jane Johnstone, advised me that there was no sundial at

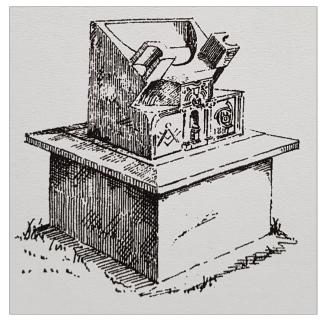


Fig. 1. Ross's sketch of the missing Haining sundial.

Amisfield. She also said that she receives many enquiries from researchers, but mine was her first regarding a sundial! It is a great pity that my enquiry did not bear fruit.



Fig. 2. Ross's sketch of Amisfield Castle.

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Fig. 3. Ross's sketch of the Newhall sundial.

The following sundial at Newhall was described previously in this series of articles,³ but for completeness in this section of modern sundials, I have included it again but with more of Ross's text this time, as follows:

"This dial [Fig. 3], which may be regarded as a monument to Allan Ramsay," stands in front of the mansion-house of Newhall. Its appearance will be easily understood from the sketch. The following information regarding the dial was supplied by Mr. John J. Wilson, banker, Penicuik. There are eight panels on the square tapering shaft, on one of which there is the following inscription:—

HERE ALEXANDER PENICUIK OF NEWHALL, M.D., IS SAID TO HAVE GIVEN ALLAN RAMSAY THE PLOT OF HIS CELEBRATED PASTORAL COMEDY OF THE "GENTLE SHEPHERD."

This explains the contents of the six remaining panels, which refer to the well-known play viz:

- (1) a design consisting of a shepherd's crook and other pastoral implements;
- (2) Habbie's Howe and Mause's cottage;
- (3) the washing-green and Symon's house;
- (4) the Craigy bield and Glaud's onstead;
- (5) a ship enclosed in an oval margin;
- (6) "HERE ALLAN RAMSAY RECITED TO HIS DISTINGUISHED AND LITERARY PATRONS, AS HE PROCEEDED WITH THEM, THE SCENES OF HIS UNEQUALLED PASTORAL COMEDY, AMID THE OBJECTS AND CHARACTERS INTRODUCED INTO IT."

The last panel contains the motto-

OBSERVE HOW FAST, TIME HURRIES PAST, THEN USE EACH HOUR, WHILE IN YOUR POWER, FOR COMES THE SUN, BUT TIME FLIES ON, PROCEEDING EVER, RETURNING NEVER

R. B. 1810."

Newhall lies about four miles north-east of West Linton in the Scottish Borders and this elaborate multi-faceted sundial sits adjacent to the house. There is not a great deal of opportunity to see it as the grounds are currently open only very rarely under Scotland's Garden Scheme and in any case it is in a private part of the garden. It has eight



Fig. 4. The Newhall sundial today.

octagonal shaped dial faces on a tall slender square shaft (Fig. 4) and has eight cherub heads above the dials (Fig. 5). There is a very ornate finial but it is difficult to determine what it represents. The dial faces have a mixture of Arabic and Roman numerals and are in reasonable condition, albeit very heavily encrusted with lichen.



Fig. 5. Detail of the Newhall sundial showing the heavily lichen encrusted dials, cherub heads and ornate finial.

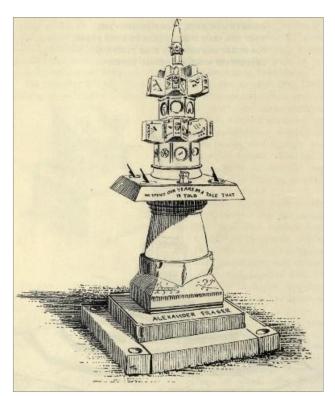


Fig. 6. Ross's sketch of the missing Bredisholm sundial.

Next Ross takes us to Bredisholm in Glasgow and he tells us that:

"In the gardens here there is a dial [Fig. 6] erected in 1840. not unworthy to be classed with the ancient examples. It is entirely the work, both in design and execution, of Alexander Fraser, a north country working mason. The Rev. Mr. M'Millan, Baillieston, having made diligent inquiry, has communicated the following notes, containing all that can now be gathered regarding Fraser. He rented an orchard adjoining Bredisholm House, and built a cottage for himself, where he lived quite alone. Having no knowledge of horticulture, the management of an orchard proved an unsuccessful undertaking. He devoted a considerable portion of his time to dial-making, and in one instance, for a very simple dial, he is known to have received £2. During his residence here, which lasted for a few years, he erected the above dial in his orchard. Removing to Shettlestone, he again built a house for himself, and embarked in the speculation of building a tenement adjoining Camlachie Parish Church, but evidently with little profit to himself. For many years he wrought most of the tombstones and sculpture work required in the locality, and was often seen, Mr. M'Millan says, by the people of Old Monkland passing their doors on his way to the churchyard – a modern "Old Mortality." Whatever his occupation for the time may have been, he appears always to have had a dial on hand. He died about 1870. When Fraser executed this dial, the art as it was understood in olden times may be said to have been extinct, only the commonest horizontal dials being occasionally set up. All the traditions which guided the men who erected the obelisks," the "lecterns," or "facet-headed" dials were lost, so that we are not surprised to find that this dial is based on altogether different lines. It may be described as a massive horizontal dial supporting an octagonal column from which there jut out two tiers of radiating wings. These wings are carved and sliced into innumerable figures and shapes, which will be partly understood by referring to the drawing [Fig. 7], in which is also seen a space for a

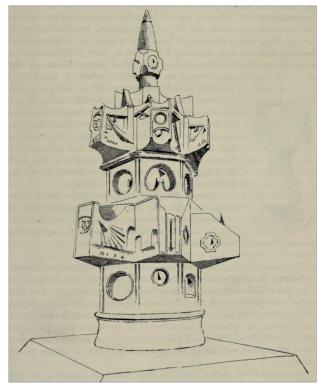


Fig. 7. Ross's sketch of the detail of the Bredisholm sundial where the thermometer can be seen just right of centre on the second level of dials from the bottom.

thermometer. There are dials on each corner of the flat table, three of them carved on the stone, and the fourth consisting of a metal plate. There are other contrivances on the table, some of which it is believed served the purpose of a rain-gauge, and are supposed to be connected with an opening in the base of the dial. Winding round these dials is the inscription IT IS A LIGHT THING FOR THE SHADOW TO GO DOWN TEN DEGREES; NAY, BUT LET THE SHADOW RETURN BACKWARDS TEN DEGREES. It is not unlikely that the arrangement of the table dials may have been suggested to Fraser by the dial at Polmaddie, only a few miles distant.

Bredisholm House was a fine building thought to date from around 1710 but at some point it was sold, and by 1908 it was in use as a golf clubhouse. The golf club fell into financial difficulties at the end of the First World War and was eventually wound up in 1923. The house fell into disrepair and was demolished in 1980, and the M8 and M73 motorways now almost surround the site, of which nothing remains today. Like the main house, Fraser's cottage has not survived and unfortunately it is not known what became of his significant and unique sundial.

As Ross hinted at, the great days of monumental Scottish sundials were gone and by the 19th century had largely moved on to much simpler designs. This example was presumably an effort to return to the days of complex structures. As well as many dial faces in every available space, it even had a thermometer and possibly a rain gauge. All it needed was an anemometer and it would have been a Victorian version of a modern weather station. Has no one thought of that today? Are any of our current sundial makers willing to take on such a challenge?



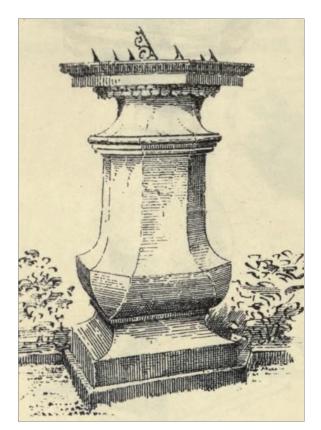


Fig. 8. Ross's sketch of the missing Polmadie sundial.

Ross likened the table of the above sundial to the one at Polmadie (today's spelling) in Glasgow and he had the following to say of it:

"The following interesting account, accompanied by a photograph of this dial, from which [Fig. 8] was made, was kindly communicated by Mr. John Parker, accountant, Glasgow. The pillar and table are of freestone, and in the table a square cavity is cut, in which is inserted a square cube of hard slate on which nine dials are cut. The centre one is for Glasgow alone. Smaller dials at the four corners show the hours at different places, corresponding to the hour at Glasgow. Thus, when the shadow indicates noon at Glasgow, the stile on the upper left-hand circle gives an hour in the morning at Boston or Charlestown, not the same in each, but both morning, while that on the upper right-hand corner gives an evening hour at Alexandria or the Cape of Good Hope. Between these corner dials at each side there are three smaller dials recording the time at only one place each."

This description and sketch sounds and looks very much like the many sundials made by Richard Melville, an Irishman working out of Glasgow during the 1830s and 1840s, so it could well be one of his. However, another maker, Samuel Higginbotham, although not nearly so prolific, was also working from Glasgow around this time and making similar sundials.

Although not included within this modern section, given its likely date, perhaps this example from Polmadie should have been. Unfortunately this sundial too has disappeared as I can find no reference anywhere to any sundial at Polmadie today.

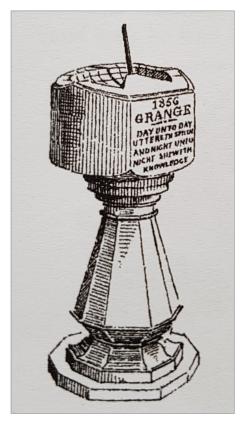


Fig. 9. Ross's sketch of the peculiar Grange sundial.

Finally, Ross refers to the last sundial in his modern dial section by saying:

"The baluster supporting this dial [Fig. 9] is ancient, but the old dial having become dilapidated, the late Mr. Henry Cadell of Grange designed the peculiar horizontal dial shown in the sketch."

The Grange referred to was in Bo'ness in what was then the old county of Linlithgowshire, but finding it gave me some trouble. My initial research found that the house known as Grange was demolished in 1906 so I figured that the sundial had long gone and was now lost to me. I put it to one side but when I returned to my research several years later, I found that there was not one, but two houses called Grange in or near Bo'ness! The first one that I looked at



Fig. 10. The Grange today.



Fig. 11. The Grange cube sundial standing on its square tapering column.

turned out to be a Victorian house in Bo'ness that was now a nursing home. Before I looked into that one any further, I found that the second one called Grange was built in 1907, just a few miles from the Grange that had been demolished! When I found that the family living at this Grange today (Fig. 10) was called Cadell, the same name as the sundial's designer, I felt sure that this had to be the one, and hoped that the sundial had been moved to this new location back in 1907. It was still a long shot, though, as this was well over a hundred years ago.

When I made contact with the owner, Johnny Cadell, he told me that they indeed had not one but two sundials. He was more than happy for me to see them and when I arrived at the Grange few days later, I immediately saw the first sundial.

It was not the one I was looking for! It was, however, a fine cube sundial dating from 1692 sitting on top of a high stone square tapering column (Fig. 11) with dials on the south, east and west faces and with a blank north face. Gnomons, probably replacements, survive on the south and east faces, but the one on the west face is missing. This sundial was in reasonable condition considering its age, but the finial with its four heads was badly damaged with only two and a half of its four heads surviving (Figs 12 and 13), as well as a missing top to the finial.

The whole stone cap, including the finial, sitting on top of the cube looks to be a different stone from the dial cube, with an oval pattern on the west and north sides only (Fig. 14). This suggests that it may once have been the top section of a cube with dials on the SW and SE faces, a



Fig. 12. The south face of the Grange cube with the heads apparently intact.



Fig. 13. The east face of the Grange cube with the heads not looking so good.

common configuration in Scotland, and refitted to this dial at some point.

As I moved away from this sundial and headed down the garden, I suddenly came upon another sundial in a small clearing. I knew straight away that this was the sundial that I had come to see (Fig. 15).



Fig. 14. The south and west faces of the Grange cube showing the oval pattern above the west face.

As I got closer, I could see that Ross was correct: this sundial certainly is peculiar – I have never seen another one like it. There is a part globe holding the gnomon and a bowl with a narrow horizontal rim. Ross called it a horizontal sundial, but surely it cannot be classed as such as that term is used where the plane receiving the shadow is horizontal, and in this case most of the shadow is within the bowl. But what is it?

I could see that the sundial was heavily encrusted with lichen, but with permission of the owner, great grandson of Henry Cadell the designer, I returned two weeks later to give it a bit of a gentle surface clean (Figs 16 and 17) when much of the detail became clearer.



Fig. 15. The Grange sundial today.





Figs 16 and 17. Detail of the Grange sundial before and after gentle cleaning.

So what did it reveal? The sundial is 880 mm high with a diameter of 350 mm. The gnomon is at 56 degrees, which is correct for the location, and has a length of 110 mm. Its width is 8 mm whilst the noon gap is only 6 mm. The rim around the bowl is 34 mm wide and the bowl itself has a drainage hole. The Arabic hour numerals, which are on the rim, run from 4 am to 8 pm with a quarter hour timescale (Fig. 18). The three long arcs on the bowl define the equinoxes and solstices with the horizontal rim defining the cutoffs at sunrise and sunset (Fig. 19). There are no other markings that I could see, apart from the motto on the shaft which reads "Day unto day uttereth speech, and night unto night showeth knowledge" and also the date 1856 and "Grange" (Fig. 20).

The gnomon, which does not have a nodus, sits on the globe, but the globe itself seems to serve no specific purpose. It is quite probable that the gnomon is not original. This is borne out by the difference in width between the gnomon and noon gap. Also the original gnomon would have had a nodus; otherwise there was no reason for the declination lines.

But is it a globe dial or a scaphe dial, or could it be an equatorial dial, which would be extremely unusual for one made of stone? There are some similarities to the Graeco-



Fig. 18. Detail of some of the Arabic numerals and timescale on the Grange sundial highlighted with soapy water.



Fig. 19. Detail of the declination lines and noon gap on the Grange sundial.

Roman hemicycliums, but then they would not have polar pointing gnomons. Indeed, is it a combination of several types? On balance I think that it is probably an equatorial dial but with a globe for aesthetics. If you have any other ideas, I would be delighted to hear from you.

So who was Henry Cadell the designer of this peculiar and unique sundial? He was born in 1812 and died in 1888. He was a geologist, befitting his occupation and ownership of coal and shale oil mines, and was involved in the iron industry. He seemed to have an inventive and mechanical mind and was at one time President of the Royal Scottish Society of Arts and Vice-President of the Edinburgh Geological Society. As far as I am aware, this was the only sundial that he designed and, I have to say, it is a really fine example. If you are going to design only one sundial, make it truly unique!

ACKNOWLEDGEMENTS

I am grateful to John Davis for his thoughts and words on the Grange sundial and to Johnny Cadell for allowing me to visit to see his unique sundial.



Fig. 20. The motto on the Grange sundial.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 36: Some East of Scotland Sundials

DENNIS COWAN

tarting off in Hawick in the Scottish Borders, Thomas Ross says in volume 5 of *The Castellated* and Domestic Architecture of Scotland¹ that:

"On the 25th of December 1888 a sundial was found built into one of the grates in the house of Mr. Francis Scott, 26 High Street, Hawick, who kindly sent us a sketch of the dial. It is a square block of stone with two face dials; the third side contains indistinct lettering, and on the fourth side there is the date, in clear large letters, 1683. On the upper and lower surfaces there is a hole as if for a dowel. In the newspaper report of its discovery considerable importance is attached to the dial, as it was apparently used by the inhabitants, a clock not having been introduced till eleven years later, when the tollbooth was erected."

Surprisingly, although Ross says above that he had a sketch of the sundial, he did not include it. This sundial has since disappeared, but interestingly across the road at no. 25 there is an old Scottish sundial motto built into the dormer level of the tenement which was built in 1898 (Fig. 1).

The website of Historic Environment Scotland² states that at no. 25:

"The escutcheon between the dormers is inscribed: 'TAK TENT O' TIME ERE TIME BE TINT'. No date is visible but published sources state that it is a fragment of a 1683 sundial which had been incorporated into a mid-18th-century building that previously stood on the site."

This motto is a Scottish one appearing on a number of sundials and means roughly "take care of time before it passes".



Fig. 1. The old Scottish sundial motto built into the dormer level of the tenement in Hawick.

Underneath the motto is a monogram, possibly JG, but I can find no reference to it. So there is a wee bit of a mystery here although it must have been a large sundial going by the size of the escutcheon at no. 25. Ross states that it had holes for a dowel at the top and bottom surfaces so that probably confirms that it was a fair size.

Ross did say that the sundial had large clear letters and certainly the escutcheon does too, so it is quite likely that they may well have been part of the same structure.



Figs 2 to 4. The three stone sundials in Hawick museum. Unfortunately none of them was the missing partner to the sundial motto.

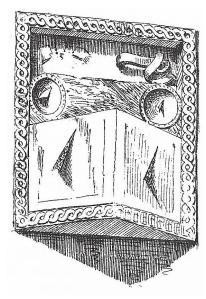


Fig. 5. Ross's sketch of the Jedburgh sundial.

The tenement at no. 25 was built in 1898 just ten years after the fragment was found at no. 26. Maybe the builders or architect obtained the escutcheon at that time and incorporated it into their building.

I got quite excited when I heard that the small museum in Hawick had three examples of stone sundials on display, one of which had been presented to the museum after it was found when a house in the High Street was being taken down. Unfortunately when I visited the museum I found that it was dated 1748 and it was a horizontal dial. The two other sundials were dated 1736 and 1823 (Figs 2 to 4).

Staying in the Borders, but moving to Jedburgh around twenty minutes away by car, one can see a vertical sundial on the front elevation at second floor level of Bonnie Prince Charlie's house in the Castle Gate. It was never Prince Charlie's house, but he was reputed to have stayed there in 1745 on his way down south to attempt to regain the Crown for his father, so from then on it was known as his house. Ross has the following to say of it:

"This is a peculiar dial [Fig. 5]; it is wedge-shaped in the lower part so as to form a double dial like those of Heriot's Hospital, and above this there are two cup-shaped dials on a surface parallel with the wall of the house on which it stands. The dial is in rather a dilapidated condition; it is undated, but has the remains of a riband in high relief bearing the words FUMIT CUNCTUS NOVANTHUS."

This sundial still exists today as can be seen at Figs 6 and 7, but is in a much poorer state than it was in Ross's time. The riband with its motto has now virtually disappeared and the diptych (double) dial has all but gone, but on the plus side, the two cup-shaped dials are still there, albeit without any numerals or hour lines.

In her book,⁴ Mrs Gatty tells us that:

"In the Proceedings of the Berwickshire Naturalist's Club, 1885, there is a paper by Walter Laidlaw, Esq., on 'Armorial bearings and inscriptions in Jedburgh and its vicinity,' and in this Mr Laidlaw states: 'On the front of Blackhills house in Castlegate is a stone, having the appearance of armorial bearings. Having examined it, I found two rather peculiar sun-dials with an inscription on



Fig. 6. Prince Charlie's house in Jedburgh with its sundial.



Fig. 7. Close-up of the Jedburgh sundial.

an iron scroll, Fuerat cuncta novanthus.' No suggestion is made as to the meaning of the words."

The inscription is on stone and not on iron, but this is without doubt the sundial referred to by Ross as the British Listed Buildings website⁵ tells us that the property was originally owned by the Blackhills family. There is a differing interpretation of the Latin motto and I cannot come up with any meaningful translation of either version, but perhaps neither interpretation is actually correct. The above noted website also tells us that the crest of the Blackhills family could at one time be seen on the sundial.

Further north, the harbour town of Dunbar sits at the entrance to the Firth of Forth. A few miles inland, Ruchlaw House is on the outskirts of the small village of Stenton. Ross describes two sundials here, the first of which is a fine example of the lectern type. He says:

"This most graceful dial [Figs 8 and 9] stands in the garden of the old house at Ruchlaw. It has a plain octagonal shaft, with a base and capital supporting the dialstone, which contains about thirty-five gnomons. The shaft is 7½ inches in diameter, and is 3 feet 5½ inches high, and the total height is 5 feet 8 inches. There are two carved window pediments on the old house, one of which has the arms and initials of Archibald Sydserf and the date 1663; the other has the same date and initials, with the addition of those of



Fig. 8 (left). Ross's back view of the Ruchlaw lectern dial.

Fig. 9 (right). Ross's front view of the Ruchlaw lectern dial



his wife, also a Sydserf, and in all likelihood this is the date of the construction of the dial. It was broken and cast aside, till, about the beginning of this century, it was restored and put up where it now stands, and for security the dial-stone was clasped to the capital with iron bands."

A graceful dial indeed, but unfortunately it no longer exists. According to Andrew Somerville, 6 the owner in 1981 said that it had collapsed before he bought the property more than twenty years previously, and that it had been buried beneath the greenhouse! A photograph exists showing the sundial *in situ* in 1920, so it must have been buried sometime between 1920 and 1961. When I spoke with the current owner, he was aware that there had been an old sundial, but that was all he knew. When I told him the story, he said that there was no greenhouse now, but he would try to find out where it had been. Who knows, the sundial may still exist under the soil somewhere and be recovered. Let us hope so.

But there is another sundial at Ruchlaw House and it stands in the centre of the walled garden. Ross says simply:

"This is a typical example of the class [Fig. 10]. It has a marble face inserted in the stone table, which bears the name ARCHIBALD SYDSERF, ROUGHLAW."

The class referred to by Ross is the horizontal type. This dial sits on a fine baluster pedestal (Fig. 11) but it is in extremely poor condition with no hour lines, numerals or inscription visible today. There is not much left of the gnomon either (Fig. 12)! We can, however, still make out the marble face inserted into the stone table.

Moving west to Monkton House near Musselburgh, Ross comments simply that:

"There is a plain dial on the west wall of this house, which probably dates from about the beginning of last century."

Monkton House in its current configuration actually dates from around 1680 with parts of the house being of 16th







Fig. 11. The Ruchlaw horizontal dial on its baluster pedestal with Ruchlaw House in the background.



Fig. 12. The extremely poor condition of the Ruchlaw horizontal dial with the remnants of the gnomon.

century origin. Again, Ross does not provide a sketch of this sundial, and it is no longer in place. There is, however, a sundial on what was the stable block (Fig. 13) across the courtyard from the house. It is a fine vertical declining sundial but it faces due south (Fig. 14). This probably



Fig. 13. The Monkton sundial in situ above the door.



Fig. 14. Close-up of the Monkton sundial.

confirms that it is not original to the building, and came from elsewhere. It almost certainly is not the sundial referred to by Ross as it is not a plain dial and is not designed for a west wall.

It is fairly large, around 600 mm by 300 mm, with gilded numerals and with quarter, half and hour lines. The numerals are Arabic running from 7 am to 6.30 pm except unusually for X, XI and XII, and there are gilded sun and star motifs. At either side of the dial face are representations of thistles in green and blue with gilded crowns above. There are two mottoes also gilded, with "Jamais Arriere" in a semi-circle around the gnomon root and "Through storm & sunshine Lord abide with me" below the sundial.

Jamais arrière, meaning "Never behind", is the motto of the Clan Douglas (a Lowland clan) but I can find no reference to that family or clan at this house. The BSS Fixed Dial Register 2020 notes that this sundial (SRN 1872) appears to be mounted indoors on a chimney breast above a fireplace, but as can be seen from Fig. 13 this is clearly not the case.

We travel north and across the Firth of Forth to Pitreavie in Dunfermline, where there was a fine lectern sundial next to the house. Ross says:

"This dial [Fig. 15] stood on a terrace which ran along the south front of the old house of Pitreavie. A flight of stone steps led up to the dial, which had a wide octagonal paved space around it. This, with the stair and terrace, gave a finished and dignified air to the dial. It stands on a square pedestal, instead of the usual shaft, with carved escutcheons on each face containing the initials of Sir Henry Wardlaw, the family arms, a heart-shaped figure, and the date 1644. This dial is not quite so elaborate as others of the type, but it contains all the permanent features, and is fitted gracefully to the pedestal with a bold, flowing moulding. The pedestal is 10¾ inches square, and

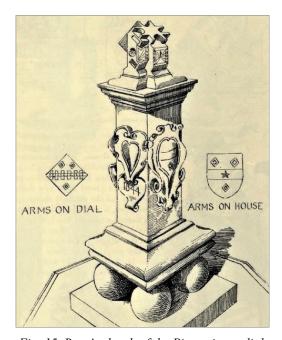


Fig. 15. Ross's sketch of the Pitreavie sundial which was later moved to Inveresk.



Fig. 16. The Inveresk sundial today.



Fig. 17. The Inveresk sundial showing the poor restoration work.



Fig. 18. The star on top of the Inveresk sundial.

measures from floor to top of cornice 4 feet 5¼ inches, and the whole height is 6 feet 1¼ inches."

This sundial is no longer at Pitreavie as it was removed from there in 1968 to the National Trust for Scotland's garden at Inveresk Lodge (Fig. 16), not too far from the previous sundial at Monkton House. It was restored in 1991 but it appears that a rather poor job was made of it as can be seen in Fig. 17. Lectern sundials come in two main types, those with and those without a star on top. This one has a star (Fig. 18) and has dials in every available space. It is worth a visit and the gardens are superb.

A little further west, but on the northern bank of the Firth of Forth is the village of Torryburn. Ross identifies a sundial here, but only says that: "it is recessed in a square niche".

Looking at Ross's sketch at Fig. 19, we can see that it is a stone cube of the usual Scottish type with dials on the south-east and south-west faces. It is topped with a head with what appears to be fairly long straight hair. Torryburn is only a few miles from my house and I visited there several times looking for this sundial. Ross did not give any indication of where it was so I wandered through the old

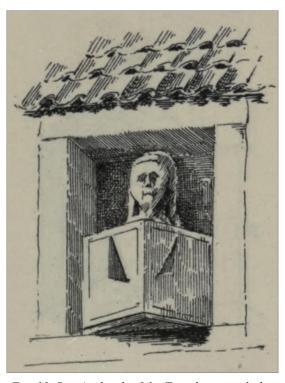


Fig. 19. Ross's sketch of the Torryburn sundial.



Fig. 20. The head and half of the Torryburn sundial on the brick pillar.



Fig. 21. The Torryburn sundial from the south-west.

part of the village, but unfortunately never ever found it. No one that I asked had heard of it, so I assumed that it was long gone.

Then at the end of March this year, I parked the car in the small car park in the village and my wife and I started to walk along the coastal path. Almost immediately I saw what appeared to be a head sitting on a brick pillar



Fig. 23. Ross's sketch of the Cromarty sundials.



Fig. 22. The Torryburn sundial from the south-east.

(Fig. 20). I said to my wife "that's the head of the missing sundial!" When we got closer I could see that not only was it the head, but it was sitting on the top half of the sundial. She said "are you sure it's the sundial?" I must admit, she put doubts into my head.

I did not have my camera with me, but I did have my phone and so took a few photographs. When we got home, I compared them to Ross's sketch and it was clear to me that they were one and the same. It was particularly the hair on the back and sides of the head that were so similar they had to be the same. This was backed up by what appeared to be gnomon remains on the south-east and south-west faces (Figs 21 and 22), although there was not much in the way of hour lines and no numerals at all. What had happened to the bottom half of the sundial?

Frustratingly I have not been able to find out where it had been all these years and who had put it there and when. It had to have been within the last twelve months or so as it was not in place the last time I had been there. I am still investigating though.

Next, we travel much further north to Cromarty in the Black Isle near Inverness, and again to a National Trust for Scotland site, where we see a horizontal sundial made by Hugh Miller,⁷ the famous geologist, palaeontologist and writer. It is located in the garden of what was once his home and which is now a museum. Ross comments:

"The dial seen nearest in the view [Fig. 23] was dismantled and lost, when, early in this century, Hugh Miller, then a boy, dug it out of the earth, and set it up in his uncle's garden as shown. He states that it 'had originally belonged to the ancient castle garden of Cromarty', and remarks about it that as it exhibited in its structure no little



Fig. 24. Photo of a painting in the Hugh Miller museum showing him sculpting the column for his sundial. Photo taken with the permission of NTS staff.



Fig. 25. The square dial plate of Hugh Miller's sundial.

mathematical skill, it had probably been cut under the eye of the eccentric but accomplished Sir Thomas Urquhart.' This is not an unlikely supposition, but, as we see from this treatise, there is nothing remarkable about the dial, there being many others of more complicated design; so that it does not necessarily follow that its construction required any very special skill. He mentions an interesting episode of his life in connection with the dial. When standing beside it, and discoursing on it to some friends, he first saw for a brief moment the young lady who ultimately became his wife.

"The other dial seen in the background is interesting as having been made by Hugh Miller himself [Fig. 23]. He refers to it with some pardonable pride. During a period of convalescence, while still a young man, he tells us that he amused himself in hewing for his uncles, 'from an original design, an ornate dial-stone; and the dial-stone still exists to show that my skill as a stone-cutter rose somewhat above the average of the profession'."

Obviously Ross mentions two sundials above, but the first was lost again and then subsequently found in the garden of a nearby house, but unfortunately I have been unable to make arrangements to see it. It is thought to be in a poor condition.



Fig. 26. Hugh Miller's Cromarty sundial and column.

As Ross says, the sundial's column at the back of the view in Fig. 23 was sculpted by Hugh himself (Fig. 24) and when it was restored in 1998 his name was discovered underneath the metal dial plate, so quite possibly it was also made by him. The dial plate is square (Fig. 25), has Roman numerals from 4 am to 8 pm and is dated 1825. However, the elaborately carved column is inscribed HM MDCCCXXX (1830), so maybe he had acquired the dial plate earlier. The column is of sandstone and looks as though it may have been painted white at some point (Fig. 26).

Hugh Miller started his working life as an apprentice stonemason before moving into banking and writing, but it was as a geologist and palaeontologist that he made his name. He was a troubled soul, though, and committed suicide in 1856 at the age of 54.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 37: The Crossford Conundrum

DENNIS COWAN

rossford is a village near Dunfermline in Fife and only about four miles from my home. There is a fine sundial on the main road opposite the golf club at Pitfirrane and I have passed it many times. It is a sandstone cube with inlaid marble panels on each face, with each face being around 300 mm square, and it is mounted on the central of three gate pillars at the entrances to what are now two houses and a garage (Fig. 1).



Fig. 1. The sundial located on the central of the three gate pillars.

But there has been something strange going on and it was BSS member, the late Robert Sylvester, who first brought it to my attention several years ago. There are three differing views of this sundial available: a sketch from Ross in 1892, a photograph from Sylvester from 1991 and my photograph from 2010, and although similar at first glance, they are all different in some way. Neither Sylvester nor I had been able to speak to any of the residents on our respective visits.

But let's start at the beginning, in 1892. Thomas Ross says in volume 5 of *The Castellated and Domestic Architecture of Scotland*¹ that this cube sundial is:

"A well shaped dial of this century. It forms the termination of a gate pillar adjoining the public road at Pitfirrane."

His sketch shows the south and west faces (Fig. 2). The south face does not look right, though, as it appears to have hour lines above the equinoctial line, which is not correct for a south facing dial, and the gnomon looks to be too low.

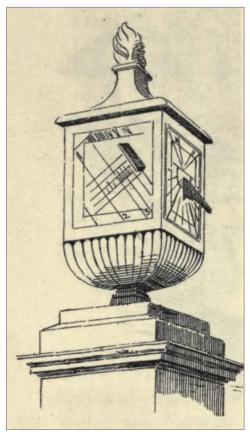


Fig. 2. Ross's sketch showing the south and west faces. The incorrect positioning of the gnomon and the hour lines above the equinoctial on the south face can be clearly seen.



Fig. 3. Sylvester's 1991 photograph of the south face. The east and west gnomons can also be seen.

Moving on to 1991 when Robert Sylvester saw this dial, some things had changed. The finial was missing, the south face marble panel appeared to be held in place by retaining clips (Fig. 3) and there were several cracks in the west face. In Sylvester's photograph there is no defined edge at the bottom of the cube which is quite clear in Ross's sketch. Furthermore, when Sylvester photographed the fluted area underneath the cube, it appeared to be in two parts whereas Ross's sketch clearly showed it as one piece. Although not evident in his photograph, Sylvester confirmed that there were hour lines above the equinoctial as shown in Ross's sketch.

The missing finial, the break in the fluted area and the damage to the west face probably suggests that there had been some major trauma at some point in its history.



Fig. 4. The east face today showing the finial, gnomon and a blank south face.

When I first photographed this dial in 2010, there was a finial present, but a gnomon on only the east face (Fig. 4), whilst in Sylvester's photograph from 1991 gnomons were present on the east, south and west faces (presumably the north face was blank, which I confirmed at a later visit). However, the gnomon currently sits on the 7 am hour line rather than the 6 am where it should be. The numerals are Arabic at the bottom, but Roman at the top. Unfortunately the Roman numerals for 4 am and 5 am are shown as III and IIII respectively (Fig. 5).

Alternatively, it could be that the III and IIII are correct and all the other numerals are wrong. This would mean that the gnomon is on the correct line at 6 o'clock, albeit rather thick and with no gnomon gap. Altogether it is most confusing.



Fig. 5. Close-up of the east face showing the incorrect gnomon position and the wrong Roman numerals for 4 am and 5 am.

The south face is now blank, so that has been replaced, and you could say that the west face is very strange. In his report, Sylvester noted that the west face was cracked in several places. There clearly has been a new panel produced for this face, but the hour lines appear to be copied from the east face and are clearly incorrect, and the

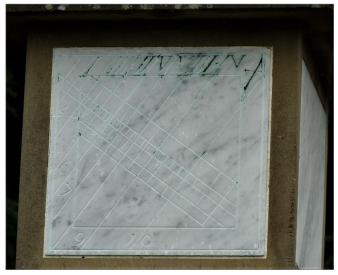


Fig. 6. The very wrong west face probably copied from the east face, and showing the incorrect Roman numerals. No gnomon has been fitted.

numerals are all over the place. Some of the Arabic numerals at the bottom do not correspond with the Roman numerals at the top. Furthermore eight appears to be shown as XIII whilst seven is IIV. A gnomon has never been fitted (Fig. 6).

The roof is more squared off now rather than gently sloping as in Sylvester's photograph and the finial has been replaced, but not as it was in 1892.

So what has happened? The dial certainly appears to have been worked on by someone who has had little or no knowledge of sundials or even of Roman numerals. But why?

I visited the dial again in 2021 and this time I was able to speak to the residents. The left hand drive is shared and leads to houses 12A and 12B. When I spoke to the owner of 12A first, he was not entirely sure whether the sundial was his or not. He did tell me though that he had moved into that house in 1999 and the sundial was then as it is now, so that confirmed that the changes were made sometime between Sylvester's visit in 1991 and 1999. He also told me that these two houses were built in 1978 by Anderson the builder as his last two works, and were built in what was then his builder's yard.

He suggested that I should speak to the owners of number 12B, which I did. They too were not sure to whom the sundial belonged, but said that I should speak to the owners of number 10. This was an older house probably from the 1930s or thereabouts and the right hand drive led to their garage, whilst the pathway to the house was 20 or 30 yards away. Luckily both the owner and his wife were at home and they had no doubt that the sundial was in fact theirs.

Their house has belonged to the Thomsons, a prominent Dunfermline furniture and electrical retailing family, for many years and the current owner inherited it from his aunt. He confirmed that the land on which the other two houses were built once belonged to their family and had been sold to Anderson the builder.

Crucially he did know that the dial had been knocked off its pillar by a delivery van in around 1995 or 1996 and that he had at one time seen the receipt for the repair work by a stonemason. He remembered thinking that it had been quite expensive. Someone also told him that it had been mounted upside down. I said that it hadn't been, but I did advise him of all the problems with it as described previously. This story may serve as a warning not to get restorations to sundials performed, at significant cost, without taking advice from someone who knows what they are doing. Being a good stonemason is not enough!

So there we have it. There have probably been two instances of trauma for this dial. The first one has not been able to be dated, but could it have happened when the grounds were in use as a builder's yard? However, there was clearly some kind of damage caused at some point, as during my 2021 visit I confirmed that the fluted area was in two parts and had been joined together with cement. This was also evident in Sylvester's photograph. This quite possibly was at the same time that the finial was knocked off, and the cracking to the west face maybe happened at that time too.

There is more certainty with the later damage. It is clear now that the differences between 1991 and 2010 were caused by the aforementioned delivery van in the mid-1990s and the dial had subsequently been very poorly repaired.

So at last the problem has been largely resolved, although it has taken some eight years after Robert Sylvester first advised me of the situation. I am only sorry that he is not here to read the outcome of my investigations.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 38: The West Coast Obelisks

DENNIS COWAN

here are 26 known complete ancient obelisk sundials in Scotland, and in volume 5 of *The Castellated and Domestic Architecture of Scotland*, ¹ Thomas Ross has this to say of them:

"This name, while it fairly describes the appearance of the dials of this class, has a further fitness from the circumstance that the Egyptian obelisks are believed, amongst other purposes, to have acted as gnomons. The constant parts of these dials are a square shaft, a bulged capital, and a tapering finial. Where the dial is of the normal type and unaltered, the shaft is divided on each side into five horizontal spaces by incised lines, thus presenting twenty compartments. These compartments are hollowed out with cup-shaped, heart-shaped, triangular, and other sinkings, which are generally lineated so as to mark the hours, and were without doubt always meant to be so. The sharp edge of the figure casts the shadow, which is especially distinct in the angular shapes and at the top of the heart sinkings, where there is often a certain amount of undercutting. Stone gnomons of various forms are frequently left in the cup hollows, and metal stiles are to be found in all the dials. Occasionally some of the spaces are left blank, and on the north side initials, dates, and arms sometimes occur.

"The capital is always bulged out so as to form an octagon in the centre, with an upright facet on each of the eight sides, having a dial on each. Above and below each facet over the four sides of the shaft are sloping facets, with a reclining dial or a proclining dial on each the former being those dials whose faces slope towards the sky, and the latter those whose faces slope towards the ground. The eight triangular pieces formed by the meeting of the square and octagon are cut out, and most effective shadows, from an artistic point of view, result from this arrangement, giving an air of dignity to the capital, which is wanting in the one instance (at Drummond Gardens) where this arrangement is departed from.

"The upright facets of the octagonal part have heart-shaped and cup-shaped sinkings, as in the shaft; but the proclining and reclining parts seldom have sinkings. Nor has the tapering finial, although usually covered with dials, ever any sinkings; like the shaft, this part is divided by horizontal incised lines, the number of spaces, for which there appears to have been no rule, varying according to the height of the finial. The obelisk-shaped dials are generally set on some kind of base, consisting either of steps or a pedestal; the former frequently alternate, being set square and diagonally as they ascend. The pedestals have a general resemblance to each other, being frequently ornamented with representations of the sun and moon."

Here, we will look at four of these obelisks on or leading to the west coast of Scotland, the first of which is at Ballindalloch, about 20 miles to the west of Stirling, and on

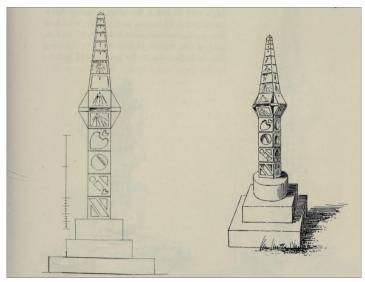


Fig. 1. Ross's architectural drawing and sketch of the Ballindalloch obelisk.



extremely thin octagonal part of the capital.

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the way to the west coast from my home in the east of the country.

Ross has the following to say of this sundial:

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"This dial [Fig. 1] is of the normal type, except that the octagonal part of the capital is extremely thin, being reduced to 1½ inches while it is continued round the cardinal sides as a narrow sinking [Fig. 2]. The dial rests on three steps, the upper one being round. The dimensions of the dial are height of shaft, 2 feet 10½ inches; height of capital, 1 foot 2½ inches; height of top, 2 feet 5 inches; height of steps, 1 foot 9 inches; total height, 8 feet 3 inches. The breadth of the shaft is 8½ inches. For a perspective sketch of this dial we are indebted to Mr. E. Thornton Shiels, architect, and for its dimensions to Mr. A. H. Cooper, W.S."



Fig. 3. The Ballindalloch obelisk standing unusually on one circular and two square steps.

Ross does well to pick out the octagonal part of the capital as being worthy of comment as I do not know of another obelisk with this configuration. Whilst it is normal for these obelisk dials to rest on three steps, to have the bottom two square and the upper one round is also quite unusual (Fig. 3). Today it is in a very poor condition with no gnomons surviving and no hour lines or numerals visible. More seriously there are a number of cracks which are held together with metal ties (Fig. 4).

Several years ago, the previous owners decided to move it thirty yards and it took three men three days to do so. As it is a listed structure, they had to secure all of the necessary permissions beforehand, even to move it that short distance.

Moving on to the west coast, Lochgoilhead sits, as its name suggests, at the head of Loch Goil, which is a sea loch



Fig. 4. The cracks in the Ballindalloch shaft held together with metal ties.

leading on to Loch Long and then to the Firth of Clyde. Of the obelisk here, Ross comments that:

"This is a conspicuous object in the village, and was probably a market cross [Fig. 5]. On the north side, and on the upper space of the shaft, there are the initials $_H^D{}_M$ [Fig. 6]; further down on a shield are the initials S.C.C. [Fig. 7], and on the under space is the date 1626 [Fig. 8]. The dial was overthrown and broken across the middle of the shaft by some Glasgow excursionists about thirty years ago. It was repaired and set up again, and is now protected by an iron railing. The drawing is from a photograph made expressly for the purpose by Mr. John Parker, C.A., Glasgow."

Fig. 5. Ross's sketch of the Lochgoilhead obelisk.

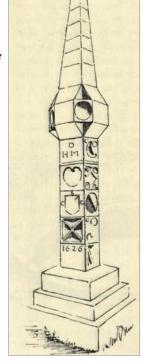




Fig. 6. The initials D.H.M. on the shaft of the Lochgoilhead obelisk.



Fig. 7. The initials S.C.C. (with the 2nd C missing) on the shaft of the Lochgoilhead obelisk.

It sits on top of four square steps and is still protected by iron railings, but I do not think that would protect it from any of today's "Glasgow excursionists" (Fig. 9). There is a serious crack running all the way down the south face of the finial (Fig. 10) and little of the numerals and hour lines has survived.



Fig. 8. The date of 1626 on the Lochgoilhead shaft which was thought to be incorrectly re-carved from 1696.



Fig. 9. The railings protecting the Lochgoilhead obelisk from "Glasgow excursionists".

The initials S.C.C. are believed to be those of Sir Colin Campbell who died in 1709, with D.H.M. for his wife Dame Helen Maxwell. The stone on which D.H.M. is carved, as well as the capital and finial, looks to be a different stone from the bottom four sections of the shaft. Also the style of the letters looks different from S.C.C.,



Fig. 10. The serious crack on the finial of the Lochgoilhead obelisk.

which has lost the second C owing to a poor repair. So something has happened in the past. Has there been a significant repair or is it an amalgamation of two different obelisks perhaps?

It certainly is in a prominent position in the village overlooking the loch (Fig. 11). New gnomons have been added in recent years, but they are not typical (Fig. 12) and although Ross says it was probably a market cross, this is unlikely. As to the date of 1626, this is also unlikely. Historic Environment Scotland say that the date of 1626 was mistakenly re-cut in the 19th century from 1696 and they mention the similarity to the 1695 obelisk at nearby Asknish House.²



Fig. 11. The obelisk overlooking Loch Goil.



Fig. 12. The new non-typical gnomons on the capital of the Lochgoilhead obelisk.

Whilst in the area I took the time to visit Asknish House, not mentioned by Ross, which was not easy to find. Indeed the house and whole estate had been abandoned, including two cars still in the drive. The sundial was sitting almost in a wilderness in what once had been immaculate grounds (Fig. 13). It had seen better days with significant lichen, no surviving metal gnomons and with some serious damage (Fig. 14). Happily the estate was sold in 2017 and hopefully the new owners are bringing the house and grounds (and maybe the sundial) back to their former glory.



Fig. 13. The obelisk in the abandoned estate of Asknish.





Fig. 14. The damage on the middle section of the shaft of the Asknish obelisk.

Whilst researching my trip to the ferry to see the obelisk at Mount Stuart on the Isle of Bute, I noticed that I would be passing the gateway to Ardgowan, but more of that later. A short half hour ferry journey takes you from Wemyss Bay on the west coast to Rothesay, the main town on the Isle of Bute. A lovely drive down the coast leads on to Mount Stuart, a 19th century mansion with huge gardens. Indeed the obelisk here is located in the Wee Garden, which is not so wee at five acres! Ross has the following to say of it:

"The drawings of this dial [Fig. 15], which were kindly lent us by Mr. G. Washington Browne, architect, are so minute as to render description scarcely necessary. The dial rests on a pavement of stones taken from the shore. The shaft and the tapering part of the dial each measure 3 feet 10 inches, the capital is 1 foot 10 inches, and including the pedestal the whole height is 11 feet 4 inches. The capital of this dial differs from those of the normal type in this respect, that the four triangular pieces connecting the octagon with the square are left in on the upper reclining surfaces, and are only cut out in the usual manner on the under or proclining surfaces."

Fig. 16 shows the four sides of the obelisk during my visit. I do not understand Ross's comment regarding the triangular pieces connecting the octagon with the square as they have been cut out in the usual manner on both the reclining and the proclining surfaces. Today it is in a very poor condition with many cracks and much lichen and it is no longer on the pavement of stones. As can be seen in Fig. 17, at some point the gnomons have been replaced and unfortunately south gnomons have been fitted to the dials on the north faces of the finial.

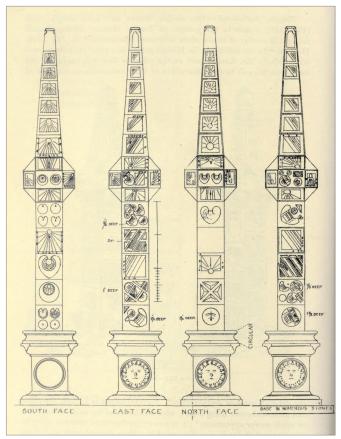


Fig. 15. Ross's architectural drawing of the obelisk at Mount Stuart on the Isle of Bute showing all four faces.



Fig. 16. The four faces of the Mount Stuart obelisk today (South, East, North and West).



Fig. 17. The finial's north face of the Mount Stuart obelisk on the left side with the incorrect gnomons.

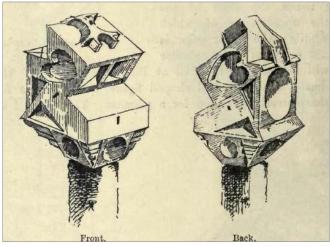


Fig. 18. Ross's sketches of the "mutilated" Ardgowan lectern sundial.

On our return to the mainland I called in to Ardgowan to see the once lost lectern sundial. Ross said:

"This mutilated dial [Fig. 18], which adjoins the old castle, has a considerable resemblance to the Ruchlaw³ and Neidpath⁴ dials."

Somerville recorded this lectern dial as missing⁵ but Sir Ludo Shaw Stewart, the owner, advised me that his mother had stored it away in a room in the ruined castle within the estate. Today it is now located within an outbuilding adjacent to the main house and, as Ross suggests, it is in a poor condition. Unfortunately the lighting in the outbuilding was poor and not conducive to photography and it was far too heavy to turn or move outside, so I could



Fig. 19. The west face of the Ardgowan lectern sundial today in the outbuilding.

only get a poor photograph of the west face (Fig. 19). However, I am glad to record that it is no longer missing and Sir Ludo plans to have it restored at some point in the future.

There is another sundial here at Ardgowan, not mentioned by Ross, and it is positioned in the formal garden to the south-west of the house. It is a stone cube sundial on a high pillar that is decorated with swags and tails and foliage



Fig. 20. The Ardgowan cube sundial high on its decorated pillar.



Fig. 21. The north and east faces of the Ardgowan cube sundial with the three Atlas figures holding the globe aloft.

(Fig. 20) and thought to date from 1766. There are dials on all four sides with the Roman numerals all carved in relief and the four oversize gnomons are all complete. On top of the cube, three lead Atlas figures hold a globe aloft on their shoulders but with the weight taken by a metal rod (Fig. 21).

A fine end to my long trip to the Isle of Bute.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 39: The Ecclesiastical Sundials

DENNIS COWAN

e all know that Thomas Ross and David MacGibbon collaborated to write the five-volume *The Castellated and Domestic Architecture of Scotland*¹ published between 1887 and 1892, and in volume 5 they (mainly Ross) included the sundials that they saw in the course of their travels. But did you know that they collaborated again to write *The Ecclesiastical Architecture of Scotland*,² a three-volume work which was published between 1896 and 1897?

In this later work which, as the title suggests, was all about churches, they mentioned some fourteen sundials, five of which were previously covered in their earlier work and therefore included in earlier articles in this series.^{3,4,5} Here we will look at the other nine, the first of which is at Edrom, a hamlet in the Scottish Borders. Ross comments:

"An aisle of some interest is attached to the church. It contains in a panel occupying the position of a niche on one of the buttresses a modern inscription giving the history of the aisle, viz.: — "Founded by Robert Blackadder, Archbishop of Glasgow, in the year 1499." The only portions of the aisle still preserved which are of any interest are the two angle buttresses [Fig. 1]. Both of these have had niches with canopies and corbels for supporting figures. The canopy of one is gone, but a sundial occupies its place."

Perhaps Ross had by now lost interest in sundials as he does not say anything about this one, other than noting that

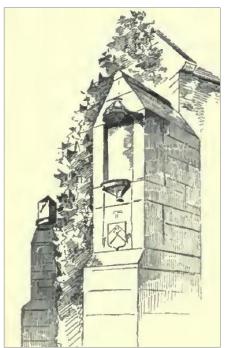


Fig. 1. The two angle buttresses at Edrom with the sundial on the left-hand one as sketched by Ross.

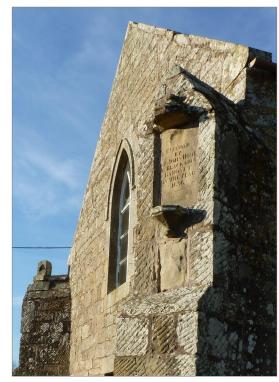


Fig. 2. The sundial on the left-hand buttress at Edrom today.



Fig. 3. The Edrom sundial with the bell tower behind and showing the south-east and south-west faces.

it is there, and as we will see he says very little about any of the others that are included in this latest work.

The Edrom dial is a stone cube with dials on the south-east and south-west faces and it is there today in the same position (Fig. 2). Both dial faces are very worn, but the south-east face is slightly better with the Roman numerals from 4 am to 2 pm showing (Fig. 3). No numerals or hour lines are evident on the south-west face and both faces have gnomons, but badly infected with rust.

Smailholm is a small village about six miles from Kelso in the Scottish Borders. The church there has a sundial and Ross says that:

"Merely the shell of this building is Norman. It was greatly altered in the seventeenth century, when probably the chancel arch was cut out; and in later times it has suffered severely, so that all its original architectural details have been destroyed. There is a sundial on the south-west corner, bearing the date 1622, which date is probably the date of the alterations referred to and of the erection of the belfry."



Fig. 4. Ross's sketch of Smailholm church. The sundial is not visible.



Fig. 5. The sundial at Smailholm today (circled). There have been changes at this corner of the church.

Ross provides only a sketch of the church which does not appear to show the sundial (Fig. 4), although there does appear to have been a change at the corner where the sundial sits today, as can be seen at Fig. 5. As Ross says above, the sundial sits on the south-west corner, and has dials on both the south and west faces. The west facing dial is in extremely poor condition with the hour lines barely



Fig. 6. The poorly positioned lamp above the Smailholm sundial. Both faces are in very poor condition.

visible, if at all, and likewise with the numerals. The south face is faring better but only because its gnomon is in place.

Both dial faces though are badly compromised by a very poorly positioned lamp (Fig. 6). The date of 1622 that Ross mentions can no longer be seen, which is a great pity as it would have been a contender for Scotland's oldest dated sundial.

Staying in the Scottish Borders, at the church in the tiny settlement of Abbey St Bathans, Ross merely states that:

"There is a sundial on the wall-head of the south wall at the east end."

He doesn't provide a sketch of the sundial, but to have a sundial at the east end of a Scottish church (Fig. 7) is extremely unusual as they are almost exclusively mounted at the south-west corner. The sundial itself, which is slightly canted to the south, is sitting on a corbel which



Fig. 7. The Abbey St Bathans sundial unusually at the east end of the church.



Fig. 8. Close-up of the Abbey St Bathans sundial. The poor condition is evident.

appears to incorporate a head. It is a stone cube with a sundial face only on the south side.

Like the previous two sundials, it is in a poor condition with hour lines visible, but no numerals or gnomon and with serious flaking (Fig. 8).

The village of Gladsmuir is in East Lothian and the old ruined church still has its sundial. Ross says that the old church of Gladsmuir is

"a ruin near the village of Longniddry. The parish of Gladsmuir was formed out of several other parishes in 1695, at which time this church [Fig. 9], now in ruins, was erected. A sundial [Fig. 10], bearing the date 1700, stands in the usual place at the south-west corner."

The sundial is in place at the south-west corner underneath the precarious-looking bell tower (Fig. 11). It is in a poor condition. The date of 1700 can just be seen on the south dial face (Fig. 12) as well as the hour lines, but the



Fig. 9. Ross's sketch of the ruined church at Gladsmuir.

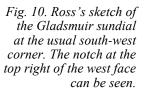






Fig. 11. The Gladsmuir sundial today (circled) with the precarious-looking bell tower behind.



Fig. 12. Close-up of the Gladsmuir sundial with the intriguing notch on the west face.

numerals have all but disappeared. Part of the rusty gnomon is still in place. On the west dial face all that remains is the stub of the gnomon and the intriguing slot at the top right of the face. This slot is visible on Ross's sketch (Fig. 10), so what could its purpose have been, if anything? Perhaps it was for a wrongly positioned gnomon.

Gifford is a fine village also in East Lothian and the church at the end of the main street is known as Yester Church. It is of the 18th century and replaced an earlier church. Ross says:

"The parish church of Yester stands at the north end of the village of Gifford, about four and a half miles south of Haddington. The ancient church of Yester has already been described. It was superseded last century by the present structure, which is a plain oblong chamber of the usual style of the period, but with a tower on the south side [Figs 13, 14], which is a good example of that class of erection at the period."

You may notice that he did not mention the sundial which can just be seen in his sketch. It is wrapped round the south-west corner of the tower with one dial facing southeast and the other south-west. Nothing remains of either

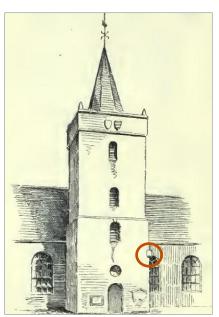


Fig. 13. Ross's sketch of Yester church at Gifford with its sundial (circled) although Ross does not mention it.



Fig. 14. Yester church today with its sundial (circled).



Fig. 15. Close-up of the very poor Yester sundial.

face other than the rusty gnomon on the south-east side (Fig. 15).

In the west of Scotland, Rutherglen is a town south-east of Glasgow and only three miles from its centre. Ross tells us that:

"The church stands near the west end of the cemetery, on the north side of the main street. The entrance from the street is through a picturesque lych-gate of Renaissance design, dated 1663 [Fig. 16]. It is surmounted by a sundial, dated 1679."

The lych-gate with the sundial remains in front of the church (Fig. 17) although the church itself has changed considerably. There is a blue plaque on the church wall saying that "the Kirk Port [the name of the lych-gate] was built in 1663 in a Renaissance style to replace the earlier entrance at the west end of the churchyard. Building costs

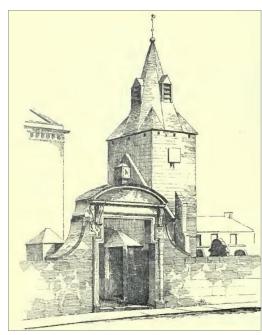


Fig. 16. The Rutherglen lych-gate with the sundial above as sketched by Ross.



Fig. 17. The Rutherglen lych-gate today with the sundial above (circled).



Fig. 18. The south and west faces of the Rutherglen sundial. The date of 1679 can be seen on the south face.



Fig. 19. The north and east faces of the Rutherglen sundial.

were part funded by fines levied for the profanation of the Sabbath. The sundial was added in 1679."

It is interesting to note how the building costs were part funded!

The sundial has four badly flaking dial faces with a pyramid cap on top (Figs 18 and 19). Many of the Arabic numerals and some of the hour lines exist. Metal gnomons are in place on the north, south and west faces, but only a stub remains on the east face. The date of 1679 can be clearly seen on the south face.

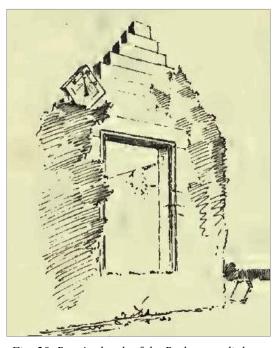


Fig. 20. Ross's sketch of the Rathen sundial.

According to Ross, the church at Rathen in the north-east of Scotland is:

"A ruinous building situated about three miles south from Fraserburgh, and standing in an old churchyard. In the south gable [Fig. 20], which is crow-stepped, there is a well-moulded window with a straight lintel, and a sundial over."

I have not been able to see this sundial, but the photograph (Fig. 21), which is shown with permission from Places of Worship in Scotland (POWiS), shows that it is quite unusual for a Scottish church sundial. It is square, but designed and mounted as a diamond with noon in the bottom corner and is held in place with four metal clips. The Arabic numerals and hour lines with half hour marks are clear, but it does not appear to be in the same place that it was in Ross's day. The gnomon is missing and there is a date of 16xx in the top corner above a cross, but unfortunately the last two digits are illegible.

Ross does not provide a sketch of the following sundial in Mains church near Dundee, but he mentions it in the following text:

"This fragment of a church is situated in the centre of its churchyard, on the margin of a romantic glen, on the opposite side of which stands the ruined Castle of Mains, in



Fig. 21. The Rathen sundial today unusually designed as a diamond. Photo courtesy of Places of Worship in Scotland (POWiS).

the region of Strath Dichty, about three miles north from Dundee. There is a sundial, of more recent date than the building, carved on the south-west corner, similar to the sundials on the porch of Linlithgow Church and on the south transept of Melrose."

It was a ruin when Ross saw it, but it no longer exists. He compares it to the sundials at Linlithgow church and Melrose Abbey. Whilst the sundial at Linlithgow⁶ is a mass dial (unusual in Scotland), the one at Melrose⁷ is an equal hours dial cut into the fabric of the church.

It is a great pity that Ross did not provide a sketch, as then it would have been clear which type of sundial it was.

This next sundial is at St Drostan's Church in Aberdour in Aberdeenshire. The church has been in disuse since 1818 when the present church was built, and is now a ruin. Ross briefly mentions a sundial as follows:

"The font is still in existence. It is quite plain and octagonal, being 2 feet in diameter by about 2 feet 2 inches high. After the abandonment of the church the font appears to have been built into the wall, and to have had a sundial carved on its lower end [Fig. 22]."

Does the fact that the sundial was carved on the lower end of the font mean that Ross sketched it when it was upside down? Also Ross states that "font appears to have been built into the wall", but the Scottish Churches website⁸ tells us that "a small stone octagonal font stands on a base in the nave area". Similarly, Historic Environment Scotland⁹ says that "at the intersection of the nave and the SSE aisle is an octagonal font." Neither mentions a sundial although they all say that the font is octagonal, so it is all a bit confusing.

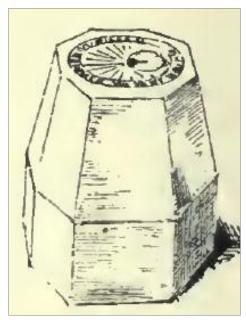


Fig. 22. Ross's sketch of the Aberdour sundial carved on the octagonal font.

Was it built into the wall upside down in Ross's day? It appears that now it may be standing on a base, so is the sundial accessible and can it been seen today, if indeed it is still there?

There were too many questions for me to commit to a round trip of some 350 miles with maybe nothing to see, so I decided to leave it for another day when I might be up in that area. Perhaps I may combine it with a trip to see the previously mentioned sundial at Rathen church.

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IN THE FOOTSTEPS OF THOMAS ROSS

Part 40: The End of the Journey

DENNIS COWAN

or around ten years now I have been walking with Thomas Ross (Fig. 1), travelling all over Scotland, with a short detour into England, looking for the sundials that he catalogued mostly in volume 5 of *The Castellated and Domestic Architecture of Scotland* ¹ way back in 1892. In all, he identified around three hundred sundials and I have followed in his footsteps looking at many of them.

It has been a tremendous journey and I have been to places that I would not otherwise have been, and on the way met Lords, Ladies, Knights of the Realm and Clan Chiefs as well as many other owners who were keen to show me their sundials. Many of these monumental sundials could only be afforded by the wealthy who owned estates worthy of displaying them, some of which are now in the care of the National Trust for Scotland. Of course, as we have seen, many other sundials are in public places such as on mercat crosses and churches.

So who was Thomas Ross? He was born, the son of a farmer, in 1839 near Errol in Perthshire. When he was around sixteen years old, after he was found to be very



Fig. 2. MacGibbon and Ross's premises at 92 George Street, Edinburgh, still occupied by a firm of architects.

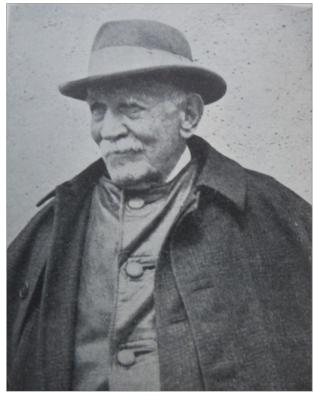


Fig. 1. Thomas Ross in 1925 at the age of 85. Photo courtesy of the Dictionary of Scottish Architects.

good at drawing, he moved to Glasgow to work as an assistant to architect Alexander Kirkland before moving across the city to the architectural office of Charles Wilson. In 1862 he secured an appointment in Edinburgh as an assistant to David MacGibbon, becoming a partner in the firm of MacGibbon and Ross ten years later. It was around this time that he married Mary MacLaren, eventually having a family of two sons and two daughters.

In his early years in Edinburgh, Ross's closest friend was Alexander Graham Bell of telephone fame, a distant relative, with whom he remained in touch until Bell's death in 1922.

Ross worked in Edinburgh's New Town² originally at MacGibbon's office at 89 George Street, then across the road to 92 George Street (Fig. 2), before moving to 65 Frederick Street in 1890. It is interesting to note that a firm of architects still occupies the first floor of 92 George Street.

His last home was at 14 Saxe-Coburg Place, also in the New Town, and where his two daughters Johanna and Elizabeth, who were unmarried, lived until their deaths in 1963 and 1967 respectively. His two sons, Thomas and James, both moved to London to further their careers; Thomas as a doctor and James as an architect like his father. James served in the Royal Engineers during the First World War, and was awarded the Military Cross in 1915 for conspicuous gallantry.

The first two volumes of Ross and MacGibbon's most famous work, *The Castellated and Domestic Architecture of Scotland*, were published in 1887. Volume 3 followed in 1889, after which the Society of Antiquaries of Scotland published *The Ancient Sundials of Scotland* ³ in 1890. This was after it was suggested to Ross by his publisher David Douglas that he should make use of the significant amount of detail on sundials that had been collected. Volumes 4 and 5 followed in 1892 when the original *Ancient Sundials of Scotland* article, with only a small number of additions and omissions, made up a large part of volume 5. One wonders if David Douglas made his suggestion because they were short of material for the final volume! In any case, we owe him a great debt of gratitude.

This major work was followed four years later by *The Ecclesiastical Architecture of Scotland* ⁴ with volumes 1 and 2 being published in 1896 and then the third and final volume the following year. Although both partners are credited with these two major works, the majority was carried out by Ross, as MacGibbon spent lengthy periods in France due to family circumstances, before he died in 1902.

As we have seen, only sketches were included in these works even though photography was in place at this time and MacGibbon was known to be a keen photographer. This was quite possibly because cameras were bulky and heavy in those days and most of their trips were carried out at the weekend by train or bicycle. In any case as was said earlier, the majority of the work was carried out by Ross.

Probably as a result of these two significant works, commissions flowed in, mainly for restoration work or extensions to existing buildings, many of which were related to schools, hotels, banks and churches. Ross's last commission was in 1916 after which he closed the practice and worked from home only on work which interested him.

In 1908 he was appointed as a founder Commissioner of the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS), an organisation that continued until 2015 when it merged with Historic Scotland to become Historic Environment Scotland. It was while working on Commission business in 1915 studying Rossend Castle in Fife that he was arrested for sketching in a prohibited area, probably because of its proximity to the approaches to Rosyth Dockyard. He was subsequently found guilty and fined five shillings.

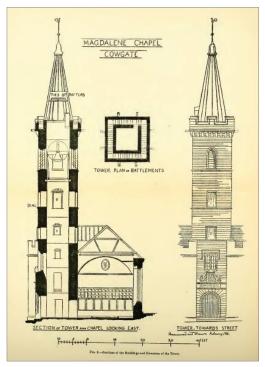


Fig. 3. Plan from 'The Magdalen Chapel' showing the location of the sundial.

Almost certainly, Ross's last involvement in sundials came in 1915 when he collaborated with Gerard Baldwin Brown, who was also a Commissioner with the RCAHMS, on a 78-page article on *The Magdalen Chapel* ⁵ in Edinburgh for the RCAHMS and which was published by the Old Edinburgh Club in 1916.

"There is a sundial on the western side of the Tower below the belfry stage [Fig. 3], the existence of which has only recently become known. It has its gnomon still in position and the well-cut figures and lines are quite distinct. The feature is shown in [Fig. 4]. This means of marking the time would be useful to the bell-ringer supposing it to have been constructed before the Tower was furnished with a clock."

The date of the sundial is unknown. As Ross said, it had been forgotten about and had only recently been rediscovered. The chapel itself dates from 1541 and the



Fig. 4. The Magdalen Chapel sundial as it was in 1915.



Fig. 5. The old wooden ladder giving access to the tower.





tower was added in around 1620, so the sundial must be after that. A clock was added to the tower in 1642, replacing a small one which was subsequently sold. Clocks were notoriously unreliable at this time, so it was likely that the sundial would have been used to calibrate the clock, as well as indicating the time to the bell ringer. It was said that during the 17th century, the many churches in Edinburgh all rang their bells at different times, owing to the inaccuracy of the clocks, causing much confusion to the citizens.

Access to the tower is not easy. A very long old wooden ladder (Fig. 5) has to be used to get to the trapdoor leading to the tower. On my first visit, I had only heard that there might a sundial there but did not know where in the tower it might be located, and was not even aware of Ross's involvement. I certainly wasn't properly equipped and had neglected to take a torch with me, not realising that the window openings were all boarded up with no lighting in the tower, and so consequently it was no surprise that I did not find the sundial.

I did, however, find the very large early 17th century bell (Fig. 6) inside the tower when I inadvertently stood on a lever which rang the bell very loudly indeed! Magdalen Chapel has not been used as a place of worship since the early 19th century and, according to the representative of the Scottish Reformation Society who own the building, this was the first time that the bell had been rung in a very, very long time.

After I left, I suddenly saw what turned out to be a protester living in a tree house opposite the chapel (Fig. 7) whom I

had not seen earlier when I entered the building. He was protesting about a plan to build a hotel on the waste ground there. For a brief moment I had the idea of asking him if I could join him in order to get a better view of the tower and possibly see the sundial. But only for a moment!

It was after this first visit, when I did further research, that I found the article by Ross and Brown, so was able to pinpoint the position of the sundial as it was in 1915. So a return visit was required, but the coronavirus pandemic in 2020 and 2021 put paid to this for a good while.

On my second visit, late in 2021, I realised that I was about the same age as Ross was when he was here in 1915, a fitting end to my trip to his final sundial. Unfortunately



Fig. 7. The protester in the tree house opposite Magdalen Chapel tower.



Fig. 8. The location of the sundial, which was nowhere to be seen.

although I knew precisely where it was located, I still could not find the sundial (Fig. 8). Although the gnomon was probably gone, the immovable shutters must have been covering the numerals and hour lines, or else the stones on which it was carved had been removed. That was a real disappointment for me in that I wasn't able to see it. I did search the other windows just in case, but no luck.

On a brighter note, one of the great highlights for me on this journey was when I found out that Ross's personal annotated copy of *The Castellated and Domestic Architecture of Scotland* was held in the archives of the National Trust for Scotland. Due to Covid, it took me eighteen months to arrange a visit to view his copy. Just picking out two examples, Fig. 9 shows his inserted comment regarding the obelisk sundial at Barnbougle

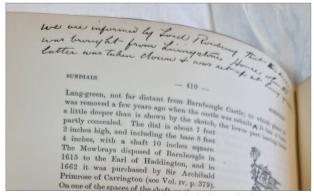


Fig. 9. Ross's note regarding the obelisk sundial now at Barnbougle Castle.

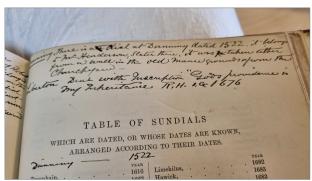


Fig. 10. Ross's comment on the 1522 sundial at Dunning.

Castle ⁶ "that we are informed by Lord Roseberry that this dial was brought from Livingstone House when the latter was taken down and was set up at Lang Green". Secondly, on his Table of Sundials, he tells us that "there is a dial at Dunning dated 1522, it belongs to Mr. Henderson, slater there, it was taken either from a wall in the old manse grounds or from the churchyard" (Fig. 10). This comment certainly requires further investigation, as the date of this sundial is far earlier than any other dated Scottish sundial, if in fact it is correct.

It was a great honour to have handled and examined Ross's own copy and I am indebted to Ian Riches of the National Trust for Scotland who facilitated my visit to their archives.

Thomas Ross died of a strangulated hernia on 4 December 1930 at the age of 91 and my last walk in his footsteps was to his final resting place at Comely Bank Cemetery in Edinburgh. He was buried alongside his wife Mary, who had died three years earlier, and his sister Catherine who, like Thomas, died in 1930.

As with some of his sundials, I didn't know exactly where to find his burial place and on entering the cemetery I had three choices. I could go left, right or straight on. For no particular reason, I chose to go left. My luck was in as I found his gravestone within ten minutes. Unfortunately it was broken and had toppled over (Fig. 11), but on the plus side, it had fallen the right way and the inscription was facing upwards (Fig. 12). If it had fallen the other way, I would never have found it. His stone reads:

IN MEMORY
OF
MARY MACLAREN
WIFE OF
THOMAS ROSS LLD.
DIED 20TH JULY 1927.
THOMAS ROSS
LLD., F.S.A. SCOT.
ARCHITECT
DIED 4TH DECEMBER 1930.
CATHERINE ROSS.
HIS SISTER
DIED 8TH MARCH 1930.



Fig. 11. Ross's toppled gravestone at Comely Bank cemetery.



Fig. 12. At least it has fallen the right way and we can still read the inscription today.

I sat down beside his gravestone for ten minutes or so, and reflected on my many journeys over the last ten years in which I had been spiritually in his company. So thank you Thomas Ross, I have enjoyed every minute of our journey.

ACKNOWLEDGEMENTS and NOTES

I owe an enormous debt of gratitude to Thomas Ross and to the many sundial owners who allowed me to see and photograph their sundials and welcomed me into their sometimes private gardens.

Very many thanks to my wife Evelyn who accompanied me to many of the sundials, even though she sometimes forgot who the expert was and tried to take over some of the conversations with the owners.

Some of the detail of Ross's life was obtained from the Dictionary of Scottish Architects website www.scottisharchitects.org.uk and the rest by my own genealogical research.

I am very grateful to the Scottish Reformation Society for twice giving me access to Magdalen Chapel's tower and for not being upset when I rang their bell, and to Ian Riches of the National Trust for Scotland for facilitating my visit to their archives.

And finally but certainly not least, I must thank the editors of the *Bulletin*, in particular John Davis for his enthusiasm for my initial idea and to both him and Christine Northeast for turning my words and photographs into professional articles.

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CASTELLATED AND DOMESTIC

ARCHITECTURE

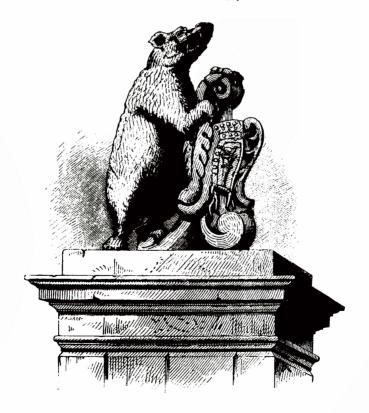
OF SCOTLAND

FROM THE TWELFTH TO THE EIGHTEENTH CENTURY

BY

DAVID MACGIBBON AND THOMAS ROSS ARCHITECTS

VOLUME FIYE



EDINBURGH: DAVID DOUGLAS MDCCCXCII.

SCOTTISH SUNDIALS.

THE number of sundials connected with the castles, mansions, churches, and even the cottages of Scotland is very great, and the variety of the designs is so remarkable, that, without some description of them, the foregoing account of our Scottish edifices would undoubtedly be incomplete.

Numerous books exist which treat of the scientific construction of sundials, and in which definite rules are laid down for the guidance of the dial-maker, so as to ensure his producing a work which will accurately note the passing hours. But it is not a little surprising that there should be no well-illustrated book dealing with sundials as objects of artistic design and skill, showing how they changed in appearance as different styles of art prevailed, and how the types of one country affected those of another.

In the following pages an attempt is made to treat of sundials, so far as Scotland is concerned, from the historical and architectural point of view, and to arrange them according to their date and design; but the full elucidation of the subject would require the co-operation of others in foreign countries, so as to trace the origin and development of the remarkable forms adopted.

When engaged in collecting materials for the Castellated and Domestic Architecture of Scotland, many ancient sundials were seen and sketched. In the course of correspondence still further accessions were made, and a number of illustrations have been finally collected, which are sufficient to give a clear idea of the art of dial-making as practised in Scotland from the sixteenth to the eighteenth century.

The Book of Sundials, by H. K. F. Gatty* and Eleanor Lloyd (London: Bell & Sons), is a work of great research and labour, which no one interested in the subject can ignore, and it is the only guide we have to the whereabouts of sundials throughout the world. As a treatise which reviews them "chiefly from their moral and poetical aspect" it is never likely to be superseded. In it are treasured up the wise saws relating to the flight of time, collected from many generations and many lands.

Sundials may be divided into two great classes—the attached and the detached. The attached dials are those displayed on the walls of a building; the detached those standing alone. The former are subsidiary works, the latter are often of a very monumental character. Of the attached dials almost every town and village contains examples, and they occur in all imaginable positions—in wall panels, on the apex and eaves of gables,

on the corners of houses, over archways and doorways, and every other "coign of vantage." Although detached dials exist in hundreds, there are only four independent types of them in this country. And as it is convenient and necessary to have some descriptive name by which the dials of each type may be known, they will be referred to as—(1) the obelisk-shaped dials; (2) the lectern-shaped dials; (3) the facet-headed dials; and (4) the horizontal dials. These names are suggested by the appearance of the dials themselves.

The following description commences with the simplest form of sundials, and then proceeds to those of a more complicated design. This arrangement is adopted as being more convenient than following their chronological order.

I. ATTACHED DIALS.

These may be divided into-

- 1. Single-faced dials,
- 2. Dials with two faces on angles of buildings.
- 3. Dials with two or more faces projected on corbels.
- 4. Terminal dials.
- 5. Dials on market and other crosses.
- 6. Horizontal attached dials.

1. SINGLE-FACED DIALS.

These consist of a plain flat slab or plate, either of stone or metal, fixed to the surface of a building, or forming part of the structure itself.

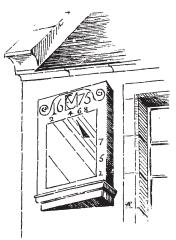


Fig. 1465.-Hatton House.

King's College, Aberdeen.—There is a dial here about 3 feet square, formed of a metal plate set on the face of one of the buttresses of the chapel at a height of about 25 feet from the ground. It appears to be an original part of the structure, which was founded in 1494, and in that case it is probably the earliest example of a sundial known in Scotland.

Hatton House, Midlothian.—There are five dials at this mansion. Three of these belong to the class now under consideration. Two are placed on the south-east tower. The lower one is perfectly plain, and faces south (see Vol. III. p. 275). The upper one faces the east; it is rounded

on the top, and contains the date 1664, with the monogram of Elizabeth

(Lauder), wife of Charles Maitland, Earl of Lauderdale, the proprietor and builder of the greater part of Hatton House. Another dial (Fig. 1465) occurs on the west wall of the building; its face does not coincide with the face of the wall, being slightly canted northwards. It rests on a



Fig. 1466.—Hatton House GateWay.

moulded bracket, and is finished square on the top, having an incised scroll-line enclosing the same monogram as the last dial, with the date 1675.

Hatton House Gateway (see Vol. III. p. 274).—The fourth of the dials at Hatton (Fig. 1466) is placed over an arched gateway leading from

the public road to the grounds. Over the keystone of the arch, on the face opposite the dial, is the inscription Anno dom 1692, and alongside in modern figures the date 1829. The latter date probably refers to a

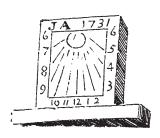


Fig. 1467.—St. Boswells.

re-erection of the gateway in its present position, and to the building of two inferior side archways for foot passengers. At least it may be inferred that the dial is not in its original position, as it now faces the north.

St. Boswells.—A dial (Fig. 1467) canted from the face of the wall of the house front. It is dated 1731, and bears the initials J.A.

Balcomie Castle, Fifeshire (see Vol. II. p. 358).

—This is a very modest dial, hardly seen beside the rich heraldic carving which fills the three

adjoining panels. Like the dial last considered, it is over the entrance gateway. The initials on it are those of John Learmonth of Balcomie, and his wife, Elizabeth Myreton of Randerston, whose arms occupy the panels.

On the frieze above the panels is the inscription (EXCEPT) THE LORD BYLD THE HOUSE THEY LABOVE IN VAINE THAT BUILD IT. The date of the gateway, which faces the south, is 1660.

Aberdour Castle, Fifeshire (see Vol. II. p. 468).—This quaint dial (Fig. 1468) is placed in a kind of niche formed on a projecting corner of the castle; it cuts diagonally across the corner, and faces in a southwest direction. Over one of the windows in this part of the castle are the initials of William, Earl of Morton, who built it between the years 1606 and 1648, the year of his death. Since the sketch of this dial was made, it has been pointed out that on the upper corners it contains the initials of William, Earl of Morton, and Anne, Countess of Morton, with the date beneath-These are all faintly cut, and easily escape observation.

Fountainhall, East Lothian (see Vol. II. p. 550).—This charming old mansion has a dial (Fig. 1469) on the south-west corner,

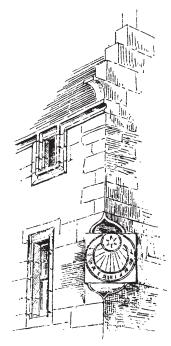


Fig. 1468.—Aberdour Castle.

treated in a manner similar to the dial on Hatton House. Fountainhall is a seventeenth century building, and the supporting stone seems to be part of the original structure, but the dial itself is evidently of later

26-10

19-11

17-25

workmanship, and is believed to have been put up by Sir Andrew Lauder about the end of last century. The dial faces due south, and is accurate as a timekeeper.

Dunnikier House, Fifeshire (see p. 35).—
17-22 The dial on this house is similar to the one just described. The house faces the road, on the top of the hill at the east end of Kirkcaldy, and is dated 1692.

Yarrow Kirk, Selkirkshire.—The sketch of this dial (Fig. 1470) is taken from the Reminiscences of Yarrow, p. 166.* It contains the motto watch and pray tyme is short, with the initials I.F.M. The maker's name is concealed in the monogram, R.M. FECIT.

Cortachy Church, Forfarshire.—The dial here (Fig. 1471) is surrounded with an orna-



Fig. 1469. - Fountainhall.

TYMEISSHORT

IF M

15-20

Fig. 1470.--Yarrow Kirk.

· mental frame in the convoluted style of the seventeenth century. On either side of the frame are the initials K.C., which probably mean either Kortachy Church or Kirk of Cortachy; on the lower side the motto UT HORA FYGIT VITA, and on

the top the date 1675. The gnomon is fixed in the centre of a figure of the sun. This sketch is made from a rubbing kindly made for us by Mr. George Miln, architect.

Peffermill House, Midlothian

(see Vol. II. p. 167).—There are three dials on this house, all of the same design (Fig. 1472). They have a considerable resemblance to those of Heriot's Hospital, to be hereafter described; and as the

* Messrs. William Blackwood & Sons, publishers, to whom we are indebted for permission to copy it here.

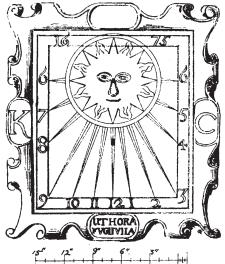
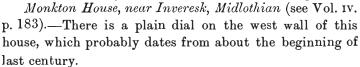


Fig. 1471. - Cortachy Church.

36-12

house is contemporaneous with Heriot's, being dated 1636, and only two miles distant from it, the dials may be the work of the same designer.



Northfield, Preston, East Lothian (see Vol. II. p. 183). —This dial (Fig. 1473) is lying on a rock-work in the garden at Northfield. It has a rounded top, with the date 1647, and the initials G.M.—M.R. These connect it with Northfield, which was built by proprietors called Marjoribanks.

Pinkie House, Midlothian (see Vol. II. p. 392).—There are three dials here. The one now referred to is a plain example; it is placed over the ground floor windows of the oriel on the south side of the house, and dates from early in the seventeenth century.



15-21

Inveresk House, Midlothian.—A plain weather-worn dial is built in the east front of this house, which was formerly the parsonage of Inveresk. Over the doorway, in a carved tympanum, is the monogram composed of the letters O.C.M.R., with the date 1643, and the motto NEMO NISI VERITATIS ET PACIS STUDIOSVS INTRABIT ("Let none enter who is not studious of peace and truth"). Inveresk House is supposed to have been built by Oliver Coult, to whom and to other members of the family

there is a monument in the neighbouring churchyard, from which we find that he was minister of the parish from 1651 to 1679. Oliver and his predecessor, Adam Coult, were buried within the grounds of this house.

Inveresk Churchyard, Midlothian.—There are two dials here, lying loosely against the walls of the church. One of them (Fig. 1474) is of very great interest, as it bears the inscription ARCHIBALDI HANDASYDE PISCATORII FECIT MDCCXXXV., with the motto SIC TRANSIT GLORIA MUNDI. Piscatorii is a

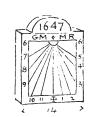


Fig. 1473. Northfield, Preston.

classical form of the name of the neighbouring village of Fisherrow, where Handasyde lived at that time. He was fond of classical names, and, as we shall see further on, he invented the name of "Conchi Polensis" for the town of Musselburgh when he lived there. Handasyde was evidently a regular dial-maker, and probably made the plain dial lying beside the above one (Fig. 1475), and also the dial at Cramond House, one of the finest and most elaborate we possess, as well as a horizontal dial at Portobello, and one at Nishet (all of which are afterwards described); and his influence, if not his handiwork, is visible on the fine dial at Cadder.

The chief dial at Inveresk has a rounded moulding on the edge, and is, scientifically speaking, of complicated construction; the gnomon is open,

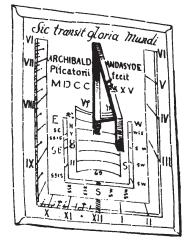


Fig. 1474.—Inveresk Churchyard.

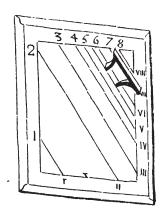


Fig. 1475.—Inveresk Churchyard.

and made of hammered iron, with a slight artistic touch in the centre. The companion dial has a similar moulding round its sides, and has also a wrought-iron open gnomon.

- 34-38 Preston Lodge, Cupar-Fife (see Vol. IV. p. 358).—There are three plain dials on this interesting mansion house, situated in the Bonnygate. A stone built into the wall contains the motto SAT CITO SI SAT BENE, along with a merchant's mark, and the date 1623.
- 26-8 Melrose Abbey.—On the face of the buttress of the south transept, at the west side of the doorway, the lines and figures of a dial have been cut, with the date 1661 (Fig. 1476). This dial has been merely carved on the face of an existing stone.
- 32-18 Linlithgow Church. A dial similar to the foregoing has been cut on the south porch of this church, on the

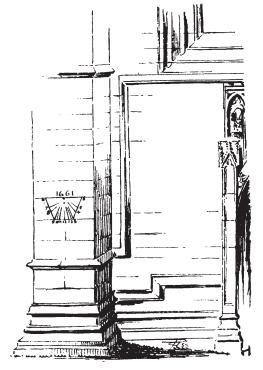


Fig. 1476.—Melrose Abbey.

west side of the doorway. It is seen in the View, Fig. 6, p. 38 of Vol. III., but it is so very small and inconspicuous as hardly to attract attention. It has no date, but being of the same construction as the one at Melrose,

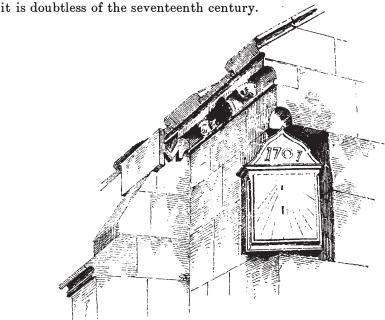


Fig. 1477.—Borthwick Church.

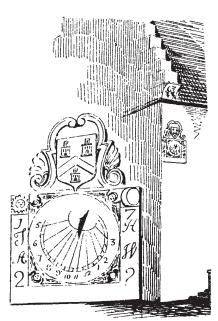


Fig. 1478.—Prestonpans.

Borthwick Church, Midlothian.— This neat dial (Fig. 1477), dated 1707, is inserted in the south-west corner of the south porch or transept of the church, which probably dates from the fifteenth century.

Prestonpans, East Lothian (see p. 51).—There are a number of dials in this village, and several which once existed have been lost or destroyed. Many of the houses on which they appear belonged to masons. The westmost dial in the village is on a house which belonged to one Petticrew, a mason; and the next dial, going eastwards, is likewise on a mason's house. Fig. 1478 shows the position of the latter on the corner of the house, as well as an enlarged sketch of the dial, which is a circular

one inscribed on a square stone. In the upper corners there is a representation of the sun and moon, with the initials of John Howison, and his wife, Agnes Wood, with the date 1729. Round the top is an ornamental scroll containing the masons' arms, a chevron between three castles. Immediately above the dial, on the skewstone of the gable, there is sculptured a right hand holding a mallet, and striking a chisel held in the left hand.

Torryburn, Fifeshire.—This is a plainer rendering (Fig. 1479) of the same design as that just shown



Fig. 1479. Torryburn.

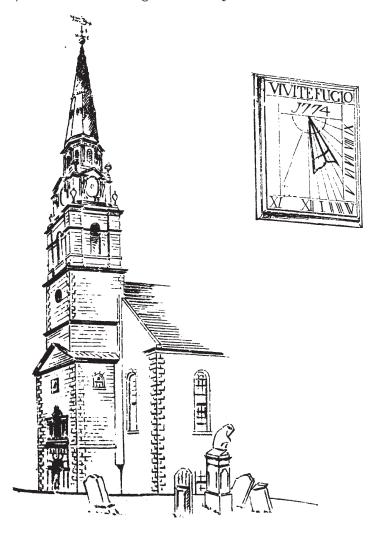


Fig. 1480 .- West Kirk.

from Prestonpans. On the adjoining window are the initials seen on the figure, and the date 1705.

West Kirk, Edinburgh.—This finely-cut dial (Fig. 1480) is placed on the west face of the steeple, and in design is not unlike those in Inveresk Churchyard. It has a bead and hollow moulding round its four sides, and has an open iron gnomon; above is the motto VIVITE FUGIO, with the date 1774. The dial and its frame appear to be made of stones from different quarries. The builder and supposed designer of the church was a Mr. Weir. The upper part of the tower and the spire shown in the sketch were added in 1787, and are the work of a Mr. Stein.

Aberdeen Town-House.—The town-house of Aberdeen was erected in 1730, and on the front of it there was a plain metal dial (Fig. 1481) which

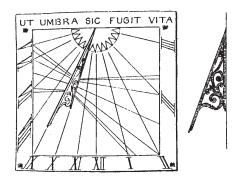
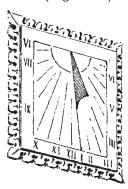


Fig. 1481.—Aberdeen Town-House.



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Fig. 1482.-Stirling.

was transferred to the new building when the old one was taken down about twenty years ago. The gilt gnomon issues from a radiant sun, and is of wrought-iron, ornamented as shown on sketch. Along the top of

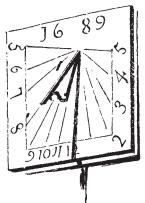


Fig. 1483. Barrochan **H**ouse

the dial is the motto UT UMBRA SIC FUGIT VITA. We are indebted for a sketch and photograph of this dial to Mr. John Morgan of Rubislaw House.

Stirling.—Fig. 1482 is a dial with a nicely carved border from a seventeenth century house on the north side of the main street. It is set off with some gilding, and is evidently regarded with pride by its owner.

Barrochan House, Renfrewshire (see Vol. IV. p. 380).—Fig. 1483 is a plain example, dated 1689.

Dargavel, Renfrewshire.—This house, situated about a mile from Barrochan, has a neat dial on one of its round towers. It is dated 1670, and is illustrated in Vol. IV. pp. 22, 23.

Ormiston, East Lothian.—This simple dial (Fig. 1484), supported on a moulded bracket, is placed below the eaves of a two-storied house in the village. It bears the date 1736.

19-12

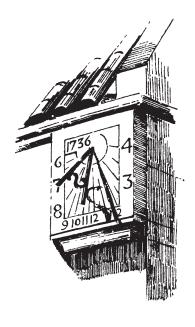


Fig. 1484. - Ormiston.

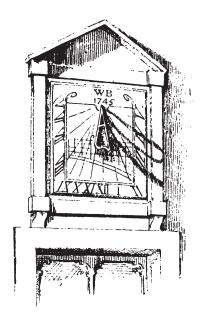


Fig. 1485.—Lugton.

Lugton, Dalkeith.—There is a dial here, placed over one of the second-floor windows of a house overlooking the Esk (Fig. 1485). It is a metal

plate, and contains the initials W.B., and the date 1745. The panel with the pediment enclosing the plate are of stone, and date from early in this century.

Loanhead, Midlothian.—A similar dial (Fig. 1486) is placed on the west front of a house in this village, near Dalkeith.

Canongate Tolbooth, Edinburgh (see p. 104).—There is a very weather-worn dial on the south front of the tower of this building. The date of the tolbooth is 1591, but the dial has the appearance of having been inserted at some later time.

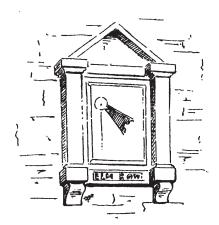
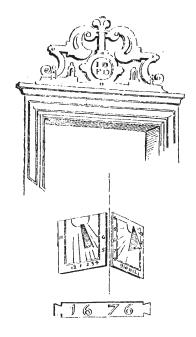


Fig. 1486, - Loanhead.

2. DIALS WITH TWO FACES ON ANGLES OF BUILDINGS.

John Knox's House, Edinburgh (see Vol. IV. p. 431).—On the southwest projecting corner of this house there is a remarkable piece of sculpture, containing a dial which does not appear to have been hitherto recognised. It contains a figure, very skilfully twisted round the corner of the house, representing Moses kneeling on the top of a mount pointing with his right hand to a figure overhead of the sun in glory, on which is carved, in Greek, Latin, and English, the name of God. The sun's rays are represented as flames of fire. The left arm of Moses is bent backwards, and the hand rests on one of the tables of the law. Beneath



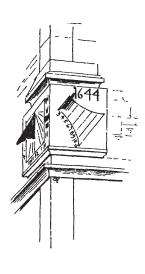


Fig. 1487. - Philipstoun House.

Fig. 1488.—Lethington Castle.

are two square empty panels supported on a bracket, representing flames of fire. These two empty panels were intended for dials facing south and west, as shown in the illustration.

Philipstoun House, Linlithgowshire.—There are six angle dials on this house. These, simple as they are (Fig. 1487), give a life and character to the building. The date 1676 is carved over one of the windows, and on another part are the initials I.D.—F.D. The Dundases of Philipstoun are a branch of the neighbouring house of Dundas.

Lethington Castle, Haddingtonshire (see Vol. III. p. 256).—On the south-east corner of the latest part of the castle may be seen the dial

shown in Fig. 1488. The date (1644) shows that this portion of the building was erected after Lethington passed from the Maitlands into the possession of the ancestors of the present proprietor, Lord Blantyre.

Prestonpans, East Lothian.—Eastwards from Howison's Cottage, already noticed, there is a house called Galla Bank, which has four

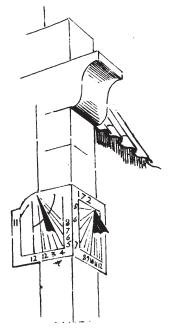


Fig. 1489.—Prestonpans.

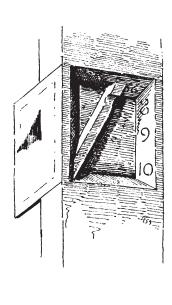


Fig. 1490 .- Prestonpans.

sundials, two on the south-west corner (Fig. 1489) and two on the south-east corner (Fig. 1490). One of the latter—viz., the one facing

the east—is peculiar; the surface is sunk,

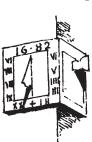


Fig. 1491. Limekilns.

v.

and the gnomon or stile is formed by a portion of the stone being left. Sinkings of various forms are of common occurrence on detached dials, but are rare on attached dials. Examples, however, will be noted at Makerstoun, Newstead, Elie, and East Calder. Neither the date of this house nor the builder's name has been ascertained. Still further

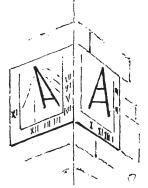


Fig. 1492.—Culcreuch Mill.

eastwards, at the head of Low's Wynd, another south-west corner contains two dials; and within living memory a dial stood on a battlemented wall at the foot of the wynd overlooking the sea.

Limekilns, Fifeshire.—On the south-east corner of a house here there is a similar dial bearing the date 1682 (Fig. 1491), and another 23-6 on Culcreuch Mill, Stirlingshire (Fig. 1492).

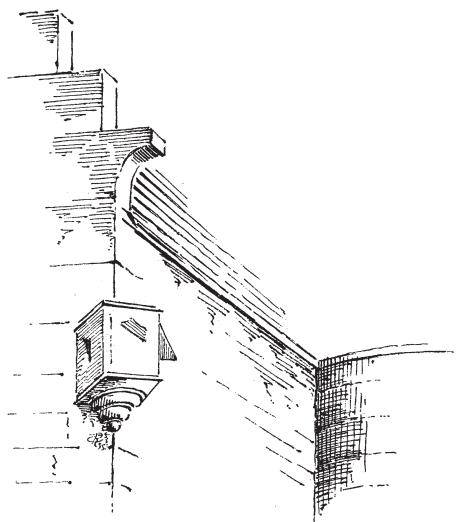


Fig. 1493.-Invernethy House.

Ormiston, East Lothian.—Two dials, almost the same in design as those at Galla Bank, Prestonpans, occur on the south-east corner of a house near the west end of the village.

Cockburn House, Midlothian.—On this house (illustrated on page 251) there are three dials—one single-faced dial to the south, and a double-faced dial on the north-east corner, rather an unusual position; the date of the house is 1672.

Invernethy House, Abernethy, Perthshire.—For this dial (Fig. 1493)

we are indebted to Dr. Laing. There is a similar dial on the diagonally

opposite corner of the house. They are somewhat similar to the Newstead dials.

10-36

Liberton House, Midlothian (see p. 315).

On the south-west corner of this house, the ancient mansion of the Littles of Liberton and Craigmillar, there is a fine angle dial (Fig. 1494), round the top of which is the motto as the sune runes so death comes. Above the dial the corner is rounded and enclosed with a carved scroll containing the arms of Little (a saltire with an inescutcheon) betwixt the initials of William Little and the date 1683.

Inverkip Castle, Renfrewshire (see Vol. I. p. 296).—This double-faced dial (Fig. 1495) is lying on the floor of the hall of the castle; it is dated 1699. There is another dial here, built into the south-east corner of the castle; if it is coeval with the castle, it must be one of the oldest of our sundials.

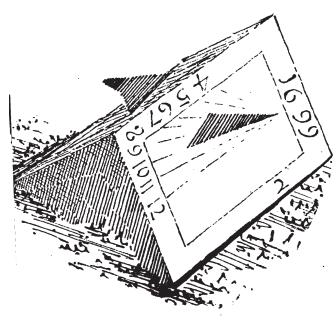


Fig. 1495.—Inverkip Castle.

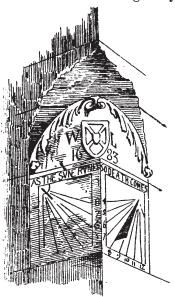


Fig. 1494.—Liberton House.

Nisbet Farm, Pencaitland, Haddingtonshire. - This dial (Fig. 1496) is believed to have been made by Archibald Handasyde (above mentioned, p. 362). It stands on a rockery in the garden. The farm of Nisbet is now, and has been for some generations, in the tenancy of a family of the name of Handasyde, probably descendants of the maker of the dials at Inveresk Church and Cramond Each face measures House. 10 inches square by 111 inches high. The total height of the dial is 20 inches. (For further remarks on this dial see the next following.)

Ormiston Manse, Haddingtonshire.—The dial here (Fig. 1497) stands on the top of the garden wall, but, as appears from an inscription on it, dedicat to this CHAPEL BE THE (PARISHIONERS?), it is obviously not in its original position, but probably stood on one of the corners of the old church of Ormiston, to which it was gifted. The reading of the end of the inscription is very obscure. We have suggested the "parishioners," but are not at all confident of this, especially as it also contains beneath the initials J.C.,

19-13

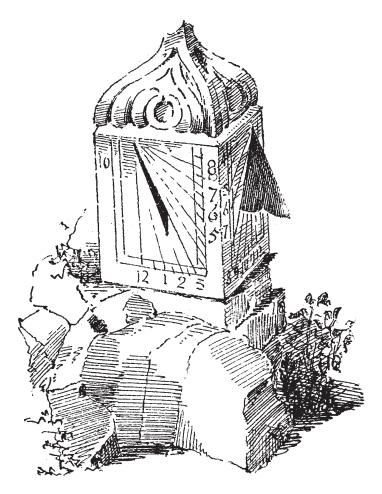


Fig. 1496 .- Nisbet Farm.

probably some member of the Cockburn family, who would not likely place his private initials on a public gift. It further bears the date 1719. We think it not improbable that this dial and the one just described at Nisbet (about three miles distant) were made by the same hand, and the date is just the period of Handasyde's activity. Both have occupied positions at the angle of a building; the lettering and surrounding double lines, with markings for the half-hours, correspond, and in the latter respect agree with the large signed dial at $\rm I_{nveresk~Church.}$

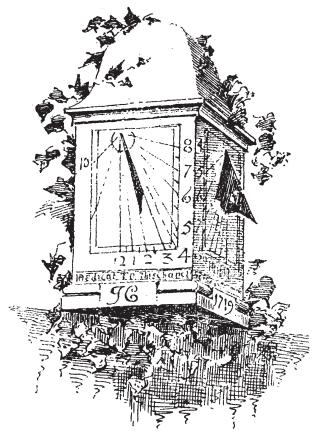


Fig. 1497.—Ormiston Manse.

Prestonpans Church, Midlothian (see p. 171).—On the south-west corner of one of the south aisles of this picturesque church there was

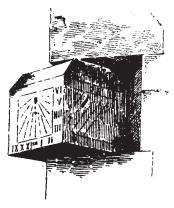


Fig. 1498.—Prestonpans Church.

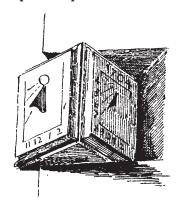


Fig. 1499.—House in Bathgate.

SUNDIALS

a projecting angle dial (Fig. 1498). The aisle has been taken down since The Old Statistical Account says that this church, the sketch was made.

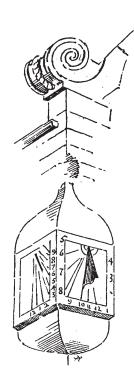


Fig. 1500. -Silvermills.

11-9

with the exception of the steeple, which is much older, was rebuilt in 1774. A dial in a similar position occupies the south-west corner of a house in Bathgate (Fig. 1499). dated 1704, but the house is probably older.

Silvermills, Edinburgh.—On the south-west corner of a quaint old house in the lane behind St. Stephen's Church an angle dial projects on a rounded corbel (Fig. 1500). The dial finishes above with an ogee moulding reaching up nearly to the ornamental skew-stone. A similar skewstone on the opposite side of the building bears the date 1714.

Glencorse Church, Midlothian (see p. 166). — On the south-west corner of this abandoned 15-25 church there is a very simple dial of this type. The date on the Woodhouselee aisle of the church is 1699.

Pencaitland Church (see p. 168).—There are five dials on this church. Three are placed 21-26 on the three faces of the south-west buttress, one on the east gable, and one at the top of the tower.

3. DIALS WITH TWO OR MORE FACES PROJECTED ON CORBELS.

Heriot's Hospital (see Vol. IV. p. 138).—Perhaps the finest specimens of attached dials in Scotland are to be seen on this building. There are eleven of them, eight being on the outside walls and three facing the courtyard. They are all of the same general form. Figs. 1501, 1502, 1503, and 1504 represent those of the courtyard. Those on the outer fronts are similar to the above, and they all differ from each other chiefly in their supporting brackets. One has this feature rounded, as shown by Fig. 1504. Others have brackets, consisting of cupids' heads with wings, similar to Figs. 1501 and 1503, and to the dials at Peffermill. Others have demons' heads, with wings similarly disposed; and one on the east side (Fig. 1505) rests on what appears to be intended for an elephant's head.

These dials seem to have been made by William Aytoun, who succeeded William Wallace as architect and superintendent of the hospital buildings in 1631-32. In the contract between Heriot's Trustees and Aytoun,* the

latter was bound "to mak and carve his Majesties portratt or any other portratt he beis requyrit to mak in that wark; and to mak all sort of dyallis as sal be fund fitting for samyn."

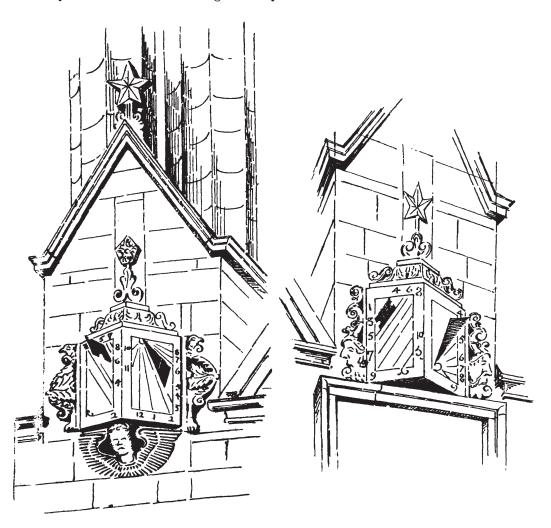


Fig. 1501 .-- Heriot's Hospital.

Fig. 1502.--Heriot's Hospital.

There ought to be another dial at Heriot's Hospital, but it seems to have disappeared In 1679 "Mr. Alexander Burton, laitly ane of the doctors of the High School, had gifted freely to the hospital a dial for the hospital garden, which he is to put up at his own expense." *

^{*} Life of George Heriot, p. 101.

Dials are very liable to get broken, and during repairs and alterations they are apt to disappear; while coveting and taking away a neighbour's

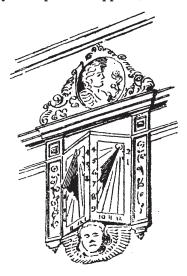


Fig. 1503. -Heriot's Hospital.

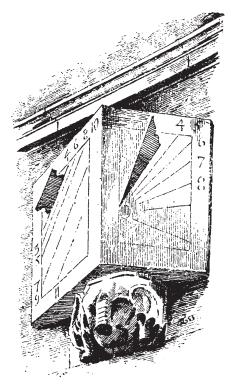


Fig. 1505.-Heriot's Hospital.

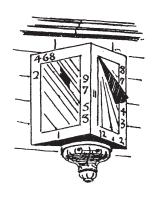


Fig. 1504.--Heriot's Hospital.

dial is not an unknown offence, as we find from Scott's *History of Berwick*, p. 306, that "Johne Orde the younger" was charged "for taking away the dyall that was at the Newgate, which is now standing in his garden. As also the same hath taken away the sone dyall that Thomas Smith sett up on the church wall which was a benefit to all persons that came that way."

While on this subject we may mention that the dial on Glasgow Cathedral, referred to by Miss Gatty, is not there now.

Innes House, Morayshire (see Vol. II. p. 202).—There are numerous dials on this house, which is one of great interest, as it is known, from an account of the building kept by the laird, to have been designed by "William Aytoun, maister massoun at Heriott his work." As might be expected, the dials here resemble those on Heriot's Hospital.

Alloa, Clackmannanshire.—This very fine dial* (Fig. 1506) occurs on the front wall of a house in the Kirkgate, Alloa. The supporting bracket is quite different from those at Heriot's, and so is the ornament along the

34-40

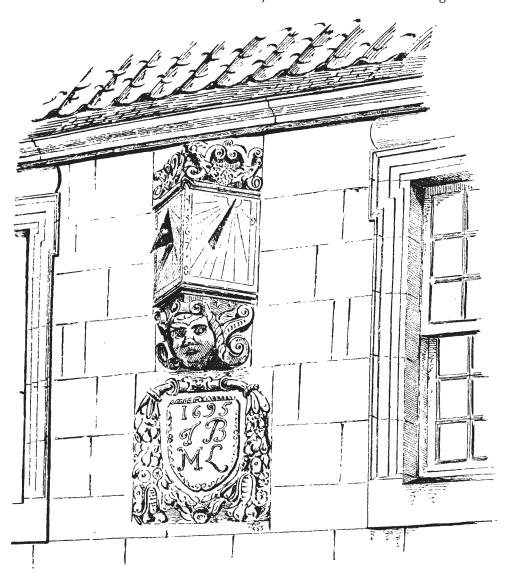


Fig. 1506,-Alloa.

top. A shield beneath, surrounded with a nicely-carved wreath, bears the date 1695, with the initials of Tobias Baak, or Bachup, and his wife,

^{*}We are indebted for a large photograph of this dial to Mr. Adam Frame, architect, Alloa.

Margaret Lindsay. He was a mason in Alloa, and built the handsome house, on which the dial occurs, for himself.*

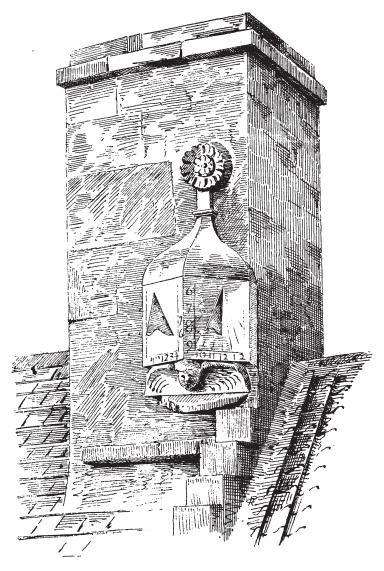


Fig. 1507.—South Queensferry.

In 1680 extensive repairs, almost amounting to rebuilding of the old kirk and steeple at Alloa, were carried out by order of the Archbishop of St. Andrews. "Sworn craftsmen" reported on the condition of the building, and undertook the work that was needed. A note of the

* Northern Notes and Queries, June 1889 and March 1891; also footnote in Macdowall's History of Dumfries.

materials required as to the stonework, "conform to the measson's report," is signed "T. Buchanan, Tobias Baak." *

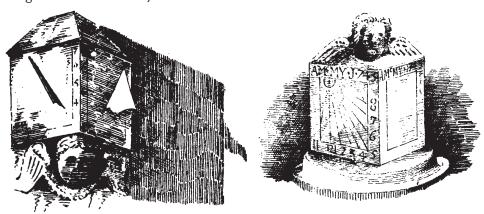


Fig. 1508.—FisherroW.

Fig. 1509.—Bonally Garden.

The Kirkgate was at one time the principal street in Alloa, being in the direct route between Stirling and Dunfermline, and doubtless this dial was of considerable importance to travellers two centuries ago.

The dial from South Queensferry, Linlithgowshire (Fig. 1507), is built into a chimney-stack on the south side of a house near the east end of the village. It has had rough usage, and the ledge projecting at the base has been broken as indicated. The dial is about level with the road behind the house, and is not visible from the street; it is doubtless of the same age as the Heriot's Hospital examples.

The dial from Fisherrow, Midlothian (Fig. 1508) is somewhat similar, but plainer; while the one from the garden of Bonally, Midlothian (Fig. 1509), instead of having the cherub's head as a supporter, has it as an ornament on the top of the dial stone. That from Bonally is a well-executed work, and contains the unknown initials, A.M...—M.Y., and the date 1743. It is now, with other carved stones, lying in the garden, but was probably meant to be set up on a house. An example of the same kind from Torryburn, Fifeshire (Fig. 1510), is recessed in a square niche.



Fig. 1510. -Torryburn.

Jedburgh, Roxburghshire.—This is a peculiar dial (Fig. 1511); it is wedge-shaped in the lower part so as to form a double dial like those of Heriot's Hospital, and above this there are two

* This master mason was engaged as architect and contractor at Dumfries Town Hall (see p. 127), and also executed some of the work at Kinross House, as pointed out further on.

4-16

11-14

cup-shaped dials on a surface parallel with the wall of the house on which it stands. The dial is in rather a dilapidated condition; it is undated,

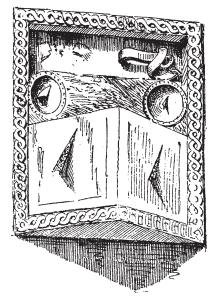


Fig. 1511.—Jedburgh.

but has the remains of a riband in high relief bearing the words FUMIT CUNCTUS NOVANTHUS.

Canonmills, Edinburgh.—A dial here is projected on a rough corbel from the south wall of one of the old mills.

Newstead, near Melrose.—There are numerous dials in this village, a fact which is accounted for from the circumstance of Newstead having been the home of many first-class working masons, who had the taste to set up dials on their own houses. Fig. 1512 is supported on a vigorously-carved bracket; it is dated 1683, and has the initials W.M. and L.M., standing for the surname of Mein. Figs. 1513 and 1514 are dated 1751 and 1754 respectively. The latter contains the initials J.B., signifying J. Bunyan, Mein and

Bunyan being both old mason-names in Newstead. Fig. 1515 is identical in design with the last mentioned, and is situated over an archway. Figs. 1516 and 1517 * have each three faces; the former is dated 1777,

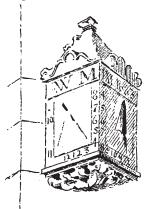


Fig. 1512,-Newstead.



Fig. 1513.-Newstead.

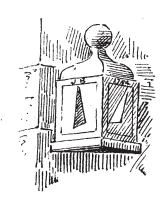


Fig. 1514.-Newstead.

and the latter, without a date, is remarkable from having on one side a sloping semi-cylindrical dial. This is the simplest form we have observed of this feature, which, as we shall afterwards see, is a conspicuous one on certain of the detached dials.

^{*} Fig. 1517 is from a sketch by Mr. Anderson.

Melrose.—This dial (Fig. 1518) is placed on the corner of a house near the Market Cross; it bears the date 162—.

26-8

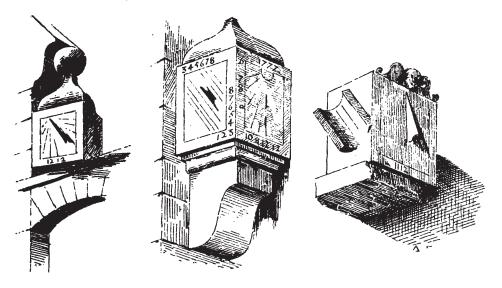


Fig. 1515.—Newstead.

Fig. 1516.--Newstead.

Fig. 1517.—Newstead.

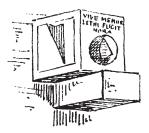
The dial at Limekilns in Fife (Fig. 1519) may be classed with those 23-7 from the Melrose district.



Fig. 1518.-Melrose.



Fig. 1519.-Limekilns.



VIVE · MEMOR LETHI · FUGIT HORA

Fig. 1520.-Makerston.

Makerston, near Kelso.—This is the dial (Fig. 1520) already referred to in the description of that at Prestonpans (Fig. 1490). It is peculiar in having a hollow cup on one face, the other two faces being of the ordinary kind. The following motto is on the cup-faced side: VIVE MEMOR LETHI FUGIT HORA. Makerston House was destroyed by Hert-

ford in 1545, and it is believed to have been rebuilt (says Jeffrey in his History of Roxburghshire) in 1590; but the dial is probably of a later age.

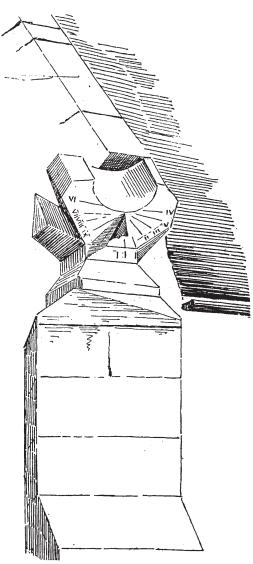


Fig. 1521.—Cockburnspath.

In connection with the two foregoing dials of Newstead and Makerston, this is perhaps the proper place to introduce the two very remarkable dials which are found on the churches of Cockburnspath and Oldhamstocks, situated about two miles apart, and a dial at Seton Palace.

Cockburnspath and Oldham- 1-31 stocks, Berwickshire.—These are sloping dials, and, so far as our observation goes, they are unique amongst attached dials, which are all upright; and as these two dials probably date from early in the sixteenth century, they may be regarded as the forerunners of the "lectern" dials, to be considered under a separate head.

The dial at Cockburnspath (Figs. 1521 and 1522) forms the terminal of the angle buttress at the south-west corner of the church; its face leans forward, and the sides are splayed away; the upper surface slopes backwards to the skew of the gable, and is hollowed like a half cylinder. A singular piece of stone sticks out like the stump of an amputated arm from the west side. Whether this was meant to tell the time by its shadow on the gable cannot be determined,

as the wall is "harled" over. The west end of this church, including the buttress and the singular round tower (Fig. 1522), as well as the east end, probably date from about the beginning of the sixteenth century, and without doubt the dial is a part of the original structure.

1 - 32

The Oldhamstocks dial (Fig. 1523) is placed on the south wall of the church at the west corner; it leans forward, and has the top hollowed like a cylinder. Its proclining face having been cut out of a square stone, sufficient material has been left to form a gnomon, which is moulded like a Gothic rib. The face of the gnomon has itself formed a dial. gnomons are of frequent occurrence on unattached dials, but are rare in those of this class. We have already noted one (but of a different form) at Prestonpans (Fig. 1490). The stone is notched out and splayed away on each side,

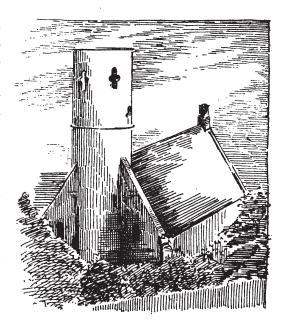


Fig. 1522.—Cockburnspath. View from South-West.

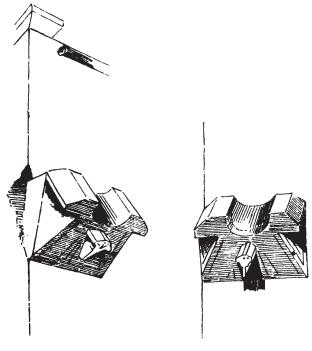
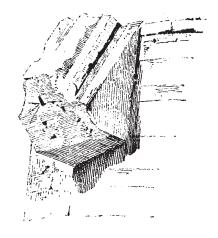


Fig. 1523.—Oldhanistocks.

and has dials on the splays. Above each splay a portion of the stone is left square like horns at each side of the dial face; these horns act as gnomons in the same manner as the similar horns on the unattached dial at Woodhouselee (Fig. 424). Cockburnspath and Oldhamstocks churches seem to be both of the same date.

Oldhamstocks has a square projecting tower-like belfry in the centre of the west end, the position occupied by the round tower at Cockburnspath. It has a chancel

with an east window filled with rude flowing tracery. Alongside this window there is an *inserted* stone with arms, and the date 1581, "probably," writes the Rev. Mr. Hutton, "the date of the death of Margaret



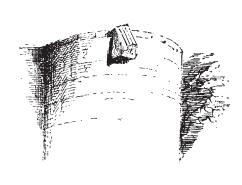


Fig. 1524.—Seton Palace.

Fig. 1525. -Seton Palace.

Sinclair, wife of Thomas Hepburn, incumbent of Oldhamstocks." Without doubt the chancel is earlier than this date, and it is almost equally certain that the west gable is also earlier.

The body of the church was partly rebuilt and repaired in 1701, that date being over the doorway in the south wall. Now, this is too late a

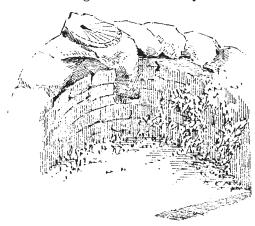


Fig. 1526.—Seton Palace.

date for the angle buttress at Cockburnspath, where buttress and dial are part of the original structure; and as there can be no doubt but that both dials are contemporaneous, the date 1701 is out of court altogether, and we have to fall back on some date previous to 1581 as the period of these dials. They measure horizontally about 20 inches in breadth.

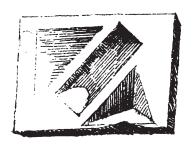
Seton Palace.—This dial, of the same type as the two last mentioned, has not been so well preserved. It stands on a bastion tower, built at

an angle formed by the walls of the old garden of Seton Palace (see Vol. IV. p. 187). Fig. 1525 shows the dial at the top of the tower as seen from the outside. The tower is probably about 10 feet high. Fig. 1524

shows it more in detail. There have been cylinders on the upper sloping

surface, but they have been smashed and broken so as hardly to be recognisable. On the flat top of the stone there is a horizontal dial seen from the inside of the bastion by ascending a stair. It is shown by Fig. 1526.

Auchterhouse Church, Forfarshire.—
This very interesting Gothic church has two dials—one, perfectly plain, on the south-east corner of the chancel; the other, on the gable (Fig. 1527), may appropriately be introduced here. It consists of a semi-cylinder sunk into the stone with a triangular hollow on each side. On the same gable occurs the stone shown with the date 1630.



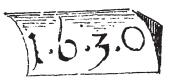


Fig. 1527.—Auchterhouse Church.

4. TERMINAL DIALS, OR DIALS FORMING THE TERMINATION OF A GABLE, BUTTRESS, Skew, OR OTHER PORTION OF A BUILDING.

Dials are frequently used as strictly architectural features, altogether irrespective of their use in noting the hours, and this is especially the case with those which come under this head. They frequently occur



Fig. 1528. - Water of Leith.

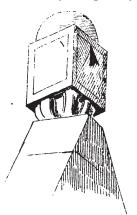


Fig. 1529.—Belmont.

on the apex of gables, as at the village of the Water of Leith (Fig. 1528), where the dial crowns a building belonging to the bakers' craft, whose arms and insignia shown on the sketch are carved on the wall (see Vol. IV. p. 485).

Fig. 1529 is a handsome specimen from the apex of a gable at Belmont, near Corstorphine, and Figs. 1530 and 1531 are from gables of old houses

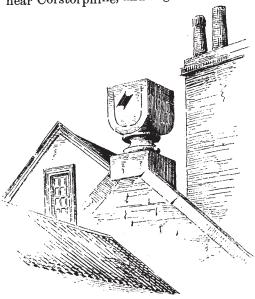


Fig. 1530.- Haddington.

They form the finials of the buttresses; but they are not coeval with the buttresses and church, the latter being founded in 1429, while the dials are undoubtedly later.

St. Giles', Edinburgh.—In a view of this church, painted in 1790, and now in the possession of the Town Council, there is a large dial, surmounted by a cross, shown on the apex of the gable of the Chepman aisle.

10-34

Ayton Church, Berwick-shire.—In Carr's History of Coldingham Priory, p. 128, there is a view of Ayton Church, on which a dial is shown, occupying the same position as the one at Chirnside, shown at p. 390.



Fig. 1531.—Haddington.

at Haddington. Similar examples of dials occur on the offices at Bredisholm, near Glasgow.

Corstorphine Church, Midlothian (see Vol. III. p. 29).
—There are seven dials on this church, all similar to the one shown in Fig. 1532.

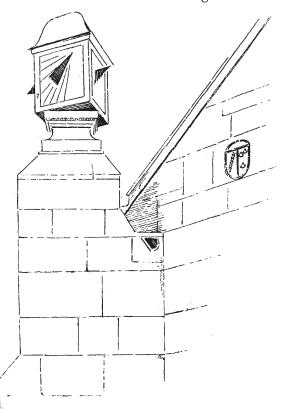


Fig. 1532.—Corstorphine Church.

Hawick, Roxburghshire.—On the 25th of December 1888 a sundial was found built into one of the grates in the house of Mr. Francis Scott, 26 High Street, Hawick, who kindly sent us a sketch of the dial. It is a square block of stone with two face dials; the third side contains indistinct lettering, and on the fourth side there is the date, in clear large letters, 1683. On the upper and lower surfaces there is a hole as if for a dowel. In the newspaper report of its discovery considerable importance is attached to the dial, as it was apparently used by the inhabitants, a clock not having been introduced till eleven years later, when the tolbooth was erected.

Peebles.—In Chambers's History of Peeblesshire there is a woodcut showing a dial on the top of a wall over an arched gateway.

West Linton, Peeblesshire.—Dials forming terminations at the eaves or lower ends of gables are of common occurrence, and a good example is shown from a one-storied cottage at West Linton (Fig. 1533).*



Fig. 1533.-West Linton.

^{*} This drawing is copied from a sketch by Mr. C. S. S. Johnstone, architect, Edinburgh.

Newburgh, Fifeshire.—We are indebted for this dial (Fig. 1534) to Dr. Laing of Newburgh. It originally stood on the old Parish Church,

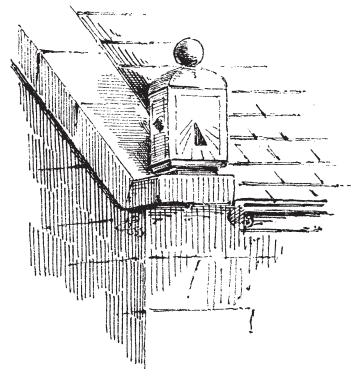


Fig. 1534.—Newburgh.

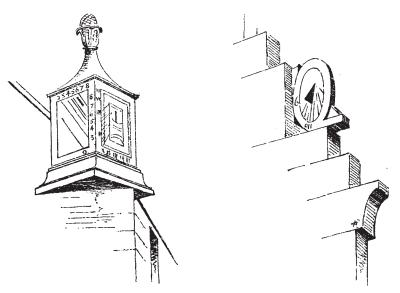


Fig. 1535.—Prestonpans.

Fig. 1536.—Clackmannan.

which was taken down in 1830. It bears the date 1725, and now stands on Lingurth House, Newburgh.

Prestonpans, East Lothian (Fig. 1535).—This dial is already referred to (see p. 51) as belonging to one Petticrew, a mason. The date of its erection has not been ascertained.

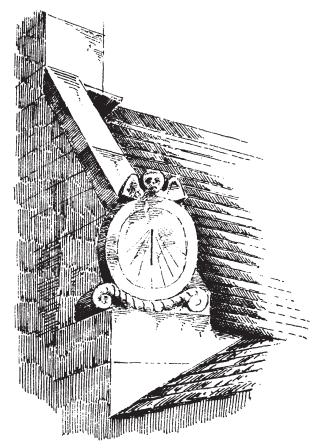


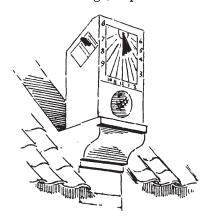
Fig. 1537.-Summerhall, Edinburgh.

Clackmannan.—A very quaint round dial (Fig. 1536) is placed on one of the crow-steps of an old house in Clackmannan. It is neatly fitted to its position with a square base and properly prepared side.

A dial (Fig. 1537) resembling the one at Clackmannan may be seen on one of the old houses at Summerhall, Edinburgh. It probably dates from about the end of the seventeenth century.

Grangepans, Bo'ness, Linlithgowshire (see Vol. IV. p. 82).—On this fine old mansion-house there are two dials occupying a similar position to the one last mentioned. The date on the house is 1564, but the dials are later. The place they occupy has not been specially prepared for them, and they do not properly fit their position.

East Calder, Midlothian.—This dial (Fig. 1538), on the gable of a house in the village, is peculiar in having a cup-hollow.



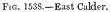




Fig. 1539.-Aberdeen.

Aberdeen.—This dial (Fig. 1539), for which we are indebted to Mr. Keith, jun., stands on a house in Upper Kirkgate, and occupies a similar position to the last mentioned.

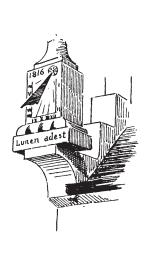


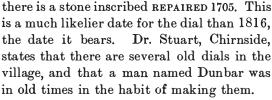
Fig. 1540.-Chirnside Church.



Fig. 1541.-Bladdo Farm, Kinross.

Chirnside Church, Berwickshire.—The dial here (Fig. 1540) is not unlike the one above referred to at Prestonpans (Fig. 1535), both in design and position; it bears the motto HOC AGE DUM LUMEN ADEST, and the date 1816; but the dial itself is older than the lettering. The church

dates from the Norman period, and some work of that time is still left; but it has undergone many transformations and repairs, and on the north gable



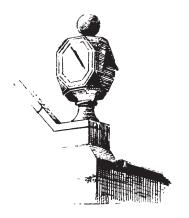


Fig. 1542.—Earlsferry.

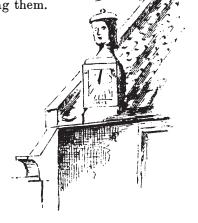


Fig. 1543 -Leuchars.

Bladdo Farm, Kinross.—This dial (Fig. 1541), dated 1775, occupies the same position as those in Figs. 1537, 1538, and 1540. Bladdo is about two miles west from Kinross, adjoining the highway leading to the Crook of Devon.

Earlsferry and Leuchars, Fifeshire.

—These dials occupy similar positions.

The first mentioned (Fig. 1542) is neat and graceful in design; the second

is commonplace, and terminates with a rudely-carved head (Fig. 1543). There is a somewhat similar dial on Roxburgh Church.

Kinross House, Kinrossshire.—We are indebted to Mr. David Marshall, F.S.A. Scot., for the following interesting facts regarding the sun-

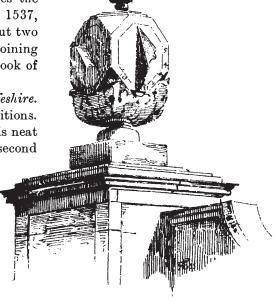


Fig. 1544.-Kinross House.

dials here. John Hamilton, mason, servitor to Mr. James Smith, overseer of His Majesty's Works, cut the two sundials still standing on

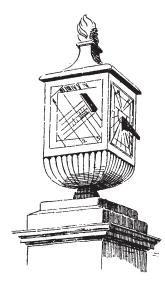


Fig. 1545.—Pitfirrane.

the walls of the office courts to the right and left of the house between 14th April and 24th June 1686. Mr. Smith was son-in-law to Robert Mylne, the king's master mason. James Anderson, a local mason, hewed the "basses" for the dials (Fig. 1544).

Pitsirrane, Fifeshire (Fig. 1545).—A well-shaped dial of this century. It forms the 37-26 termination of a gate pillar adjoining the public road at Pitsirrane.

Longside, Aberdeenshire.—Over the Lichgate leading to the old church and churchyard of Longside there is a dial (illustrated at p. 183) placed at one end of the cornice, and there was probably another at the other end. A finial over the centre of the gateway bears the date 1705, but the gateway appears to be earlier.

was built in 1620.

Kelly Castle,
Fifeshire.—A
sketch is given in
Vol. 11. p. 127 of
a square dial at
Kelly Castle, with
an ogee top, which
serves to mark one
of the corners of
the garden wall.

17-24

The church itself

House of Muir, Hadding tonshire.—On the quaint old House of Muir, near Ormiston, now used as a roadside inn, there is a square block dial (see p. 67). It is placed dia-

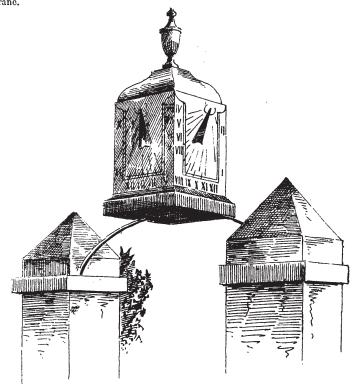


Fig. 1546 .- Liberton.

gonally on the gable skew, in a position similar to the dial at Clack-

Auchtermuchty, Fifeshire (see Vol. IV. p. 43).—Dial over gateway, dated 1629.

Liberton, Midlothian.—This sundial (Fig. 1546) now occupies a peculiar position over a gateway leading through a small garden to a house on the roadside. It is supported on an arched bar of iron thrown between the gate pillars in the manner shown. The dial is of neat workmanship, but the finial on top is not original.

10-37

Lessudden House, Roxburghshire.—
Two dials (Figs. 1547 and 1548) adorn
the garden walls here. One is dated

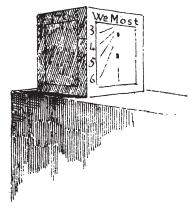


Fig. 1547.-Lessudden House.

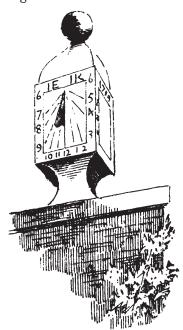


Fig. 1548.—Lessudden House.

1706, and has the familiar rebus WE MOST (DIE ALL). The other is dated 1739.

A dial almost similar to the last stands on the garden wall at Drylaw, near Edinburgh.

Pollok Castle, Renfrewshire (see Vol. IV. p. 220, Fig. 793).—This is a triangular sundial, fixed on the cope of a stair balustrade, which probably dates from about 1694. Another similarly-shaped dial (see Vol. IV. p. 223, Fig. 797) occupies a position on the top of the garden wall.

Cockburnspath, Berwickshire (Fig. 1549).—A dial placed over the lintel of a doorway leading to a garden.

Fountainhall, Midlothian.—This singular juxtaposition of a dial and "jougs" (Fig. 1550) is to be found on a pigeonhouse at Fountainhall. The old mansionhouse (see Vol. II. p. 550) was the residence of Lord

Fountainhall (Sir John Lauder), and the tradition that he held occasional public courts of justice here is not lessened by the presence of the "jougs" on one of his pigeon-houses. Only one gnomon of the dial remains entire; the stone faces have scaled off, and it is altogether in a neglected state; while the pigeon-house itself has



Fig. 1549. Cockburnspath.

been allowed to fall into total ruin. This and another pigeon-house stand about fifty yards south of the mansion-house, the ancient approach

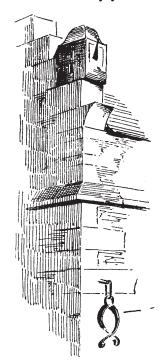


Fig. 1550.—Fountainhall.

to which passed through between them, so that the "jougs" and dials were in full view of all visitors.

Elie, Fifeshire.—The "Muckle Yett" (p.37) was a fine old Scottish house in Elie, which, as 17-24 it projected some 10 or 12 feet into the street, had to be taken down about thirty years ago. On the projecting part there was an elaborate doorway which contained a curious terminal dial, of which a drawing is shown at p. 38. The dial and doorway are still preserved. The former unites some of the peculiarities of the unattached dials with those of its own class, such as proclining and hollow cup-dials with upright ones. On the doorway is the date 1682, and the initials of Alexander Gillespie, and his wife, Christian Small.

Church, Berwick-on-Tweed.*—This fine dial (Fig. 1551) forms the termination of the south aisle wall of the nave, immediately over the compartment of the third window from the west end. The face of the dial is of a white stone, and measures about 4 feet 8 inches square; the width across, including the frame,

is about 5 feet 10 inches; and the height to the apex of the gablet is about 8 feet 2 inches. The gnomon is of iron, and projects 2 feet

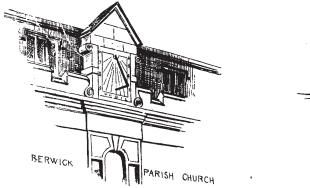


Fig. 1551.-Berwick Parish Church.



Fig. 1552. - Warriston House.

* We are indebted to Mr. W. D. Purves, Berwick, for procuring drawings of this dial and another on the bridge of Berwick.

4 inches. The church was erected in 1652, and Mr. James Stevenson, jun., architect, Berwick, to whom we are indebted for drawings of the dial, is of opinion that it is of the same date.

Warriston House, Edinburgh (Fig. 1552).—This dial is picturesquely perched on the cornice of a modern cottage adjoining. Warriston House, and is probably not older than last century. There is a very good modern dial of this century in front of the house of a Tudor Gothic design.

· 5. DIALS ON MARKET AND OTHER CROSSES.

It is not surprising to find that many of the market crosses erected during the seventeenth century have been adorned with dials; the sentiment peculiar to a dial is well fitted for such a symbolic structure. At Inverkeithing, Airth, Peebles, Doune, Nairn, Leven, Lochgoilhead, Elgin, and other places, sundials are conspicuous on these crosses.

Inverkeithing.—This beautiful market cross (Figs. 1553 and 1554) was illustrated by the late James Drummond, R.S.A., in a paper read before

the Society of Antiquaries of Scotland in February 1861; and from the heraldry of the shields on the capital—viz., those of the Royal and Drummond arms impaled, and of the Earl of Douglas—he connects the cross with Annabella Drummond, queen of Robert III., and says, "May not this cross have been a gift of the queen on the occasion of the marriage of her son, the Duke of Rothesay, with the daughter of the Earl of Douglas, in 1398, as the heraldry suggests?" There is no reason for doubting Mr. Drummond's conclusion, and his suggestion is extremely probable, so far as regards the cross proper; but the dial is without doubt

9-12

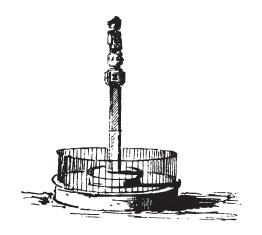


Fig. 1553. - Inverkeithing.



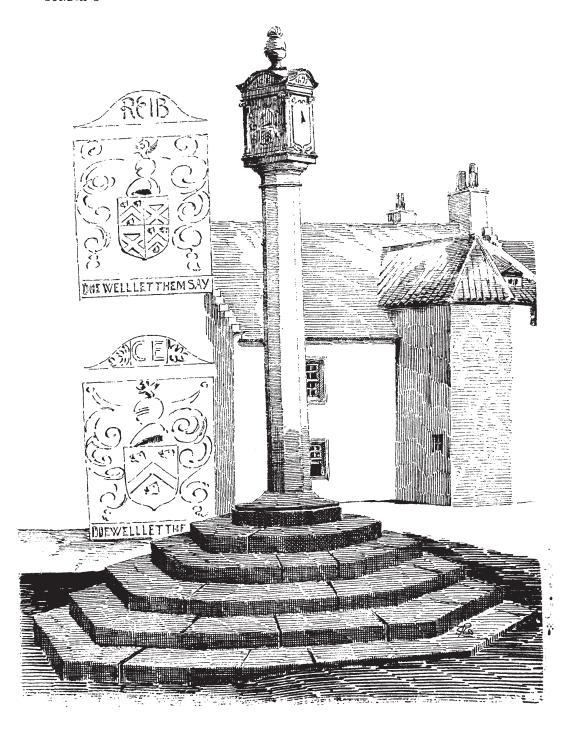


Fig. 1555. -- Airth.

an addition of the seventeenth century. The height from the base of the pillar to the top of the unicorn is 14 feet 6 inches.

Airth, Stirlingshire.—This fine market cross (Fig. 1555) stands in the centre of the village. On the top of the shaft a square architectural composition, which resembles an old-fashioned eight-day clock, contains two sundials. Over one of them is the date 1697. On the other two faces there are first the Elphinstone arms and motto doe well let them say, and above are the initials C.E. On the other face are quartered the Elphinstone and Bruce arms; * above are the initials, probably of Richard Elphinstone, eldest son of Sir Thomas Elphinstone of Calderhall; † along with his initials are those of his wife, I.B., Jane Bruce, heiress of the estate of Airth.

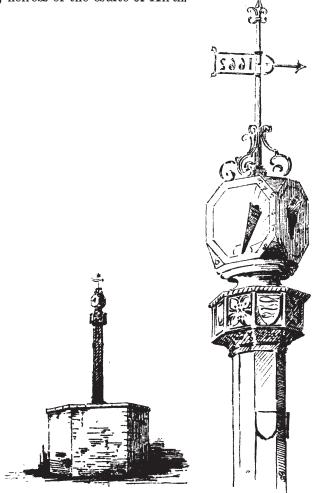


Fig. 1556.-Peebles.

- * We are obliged to Mr. Small, Stirling, for sketches of these arms.
- † Nisbet, Vol. 1. p. 158.

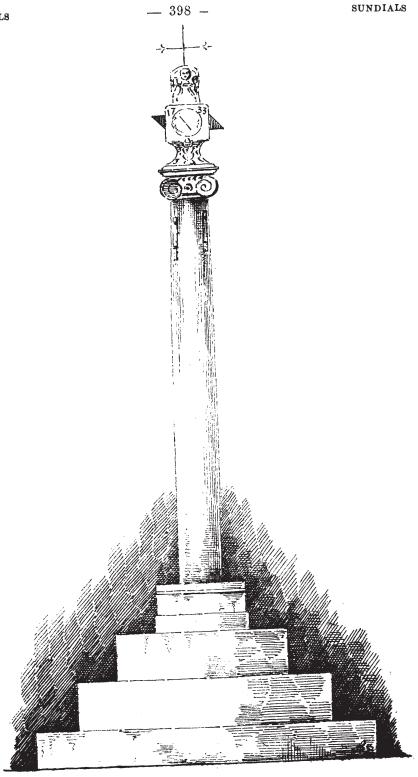


Fig. 1557.—Elgin.

9-14

9-13

9-18

9-12

Peebles.—The Peebles cross is an octagonal shaft about 12 feet high, and is dated 1699 (Fig. 1556). It has an iron vane on the top, with the open figures 1662. The shaft rose from the top of an octagonal building about 10 feet high and 12 feet across, in which Dr. Chambers, in his History of Peeblesshire, says there was an inside stair which led up to the platform. But in the paper above referred to Mr. Drummond asserts that there was no stair leading to the platform. This cross was taken down so as not to obstruct the traffic (?) on the street of Peebles, and is now in the Chambers Museum.

Elgin.—This sundial (Fig. 1557) surmounts what is known as the "Little Cross." There is a dial on each of the four faces, and the north face bears the date 1733. The shaft and steps are supposed to be much older, and to have been erected at the expense of Alexander, third son of the Lord of the Isles, about 1402; but this date appears to be extremely doubtful. The steps and shaft are circular on plan. The height of the former measures 3 feet 8 inches, and to the top of the capital from the ground 12 feet 4 inches, the total height being about 15 feet.*

Nairn.—The dial-cross at Nairn is in a very dilapidated condition, and is entirely given over to the use of the bill-sticker, behind whose

handiwork it can hardly be recognised. The top ball is broken away, and the dials and capital are very much defaced. The height of the whole structure is about 7 feet 6 inches (Fig. 1558).†

Fettercairn, Kincardineshire.‡—This market cross (Fig. 1559) is an octagonal shaft, surmounted with a capital having a sundial on its southern face. It bears the coroneted initials of John, first Earl of Middleton, and his arms (a lion rampant within a double tressure flowered and counter-flowered with fleur-de-luce, all countercharged), and on the north side is the date 1670. This cross stood originally in the now decayed village

- * We are indebted to Mr. L. Mackintosh, Elgin, for information regarding and for a sketch of this dial.
- + We are indebted to Mr. William Fowler, architect, Liberton, for bringing this dial under our notice.
- ‡ We are indebted to Mr. J. Crabb Watt, advocate, for procuring a drawing of this cross and dial.

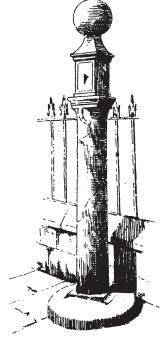


Fig. 1558.—Nairn.

of Kincardine, which lost its prestige by the courts being removed to Stonehaven in the year 1600. It is probable that the shaft only

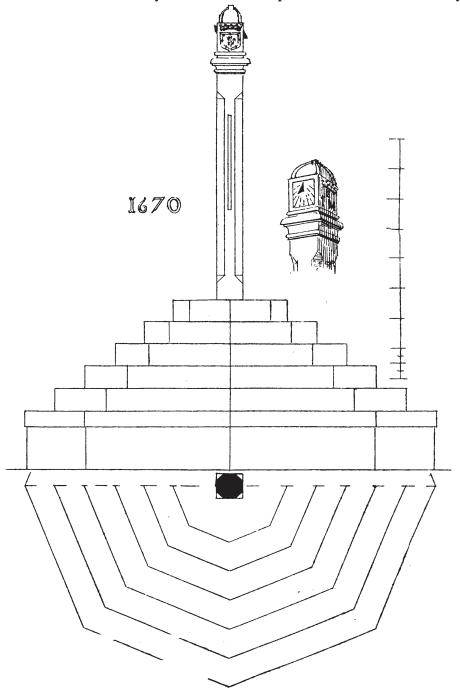


Fig. 1559.---Fettercairn.

was brought from Kincardine, and that the earl had the present capital made for it then. On the shaft, as will be seen by the sketch, there is a representation on one side only of the standard

Scotch ell, 3 feet $1\frac{1}{2}$ inches long. This cross was noticed by the Queen in the Leaves from the Journal of Our Life in the Highlands.

Galashiels, Selkirkshire.—Mr. Anderson, architect, Galashiels, to whom we are indebted for bringing the dial (Fig. 1560) under our notice, informs us that a few

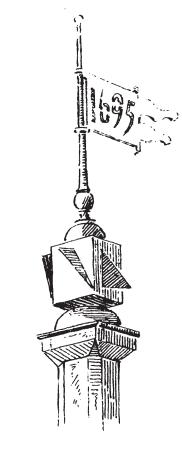


Fig. 1560. ~ Galashiels.

Fig. 1561.—Galashiels.

years ago the upper part of this market cross was brought to the ground by the foolish freak of a young man who climbed to the top and overbalanced the vane and sundial. They were, it appears, little damaged, and the youth escaped with a broken leg. When the cross was subsequently restored (Fig. 1561) it is supposed that the dial was renewed after the original pattern. The date on the vane is 1695.

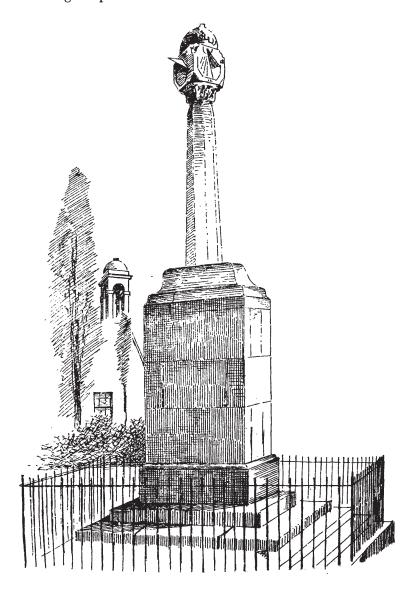


Fig. 1562.—Pencaitland Wester.

Pencaitland Wester, Haddingtonshire.—This market cross (Fig. 1562), surmounted by a dial, stands in the centre of the village. It is a good example of its kind, and is doubtless of late seventeenth century work.

9-17

9-16

26-10

Houston, Renfrewshire.—This is a simple village cross (Fig. 1563) with a square block on the top having dial faces.

Dryburgh, Roxburghshire. -This dial (Fig. 1564), situated in the abbey grounds, is not unlike some of the market crosses just described, and more especially the one at Houston, the dial being the termination of an octagonal shaft. There are four faces. The one to the south (see view) has at the top of the dial the round face of the sun, with a goat above, and the motto WATCH WEEL. On the north side, in a position corresponding to the sun, is carved a rude figure, bearing a cross in one hand and something like a bell in the other, with the motto above. FIDUCIA CONSTANTE. another face are the Scott

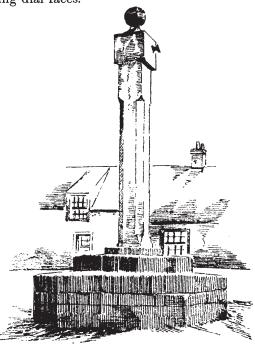


Fig. 1563.—Houston.

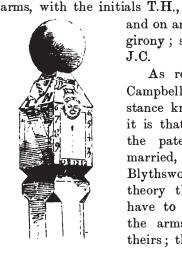


Fig. 1564.—Dryburgh.

and on another the Campbell arms—first and fourth, girony; second and third, a galley, with the initials J.C.

As regards the conjunction of the Scott and Campbell arms on this sundial, the only circumstance known to us as at all likely to account for it is that Walter Scott, well known as "Beardie," the paternal great-grandfather of Sir Walter, married, in 1690, Mary Campbell, a niece of the Blythswood family. But as telling against the theory that this dial was set up by them we have to point out that the initials accompanying the arms on the dial do not correspond with theirs; they are T.H. and J.C.

6. Horizontal Attached Dials.

There are few dials of this kind to be met with in Scotland, while, on the other hand, horizontal detached dials occur with great frequency.

Ayr.—On the parapet of the famous "Auld Brig" of Ayr there is a horizontal dial (Fig. 1565). The bridge is an ancient structure, and the

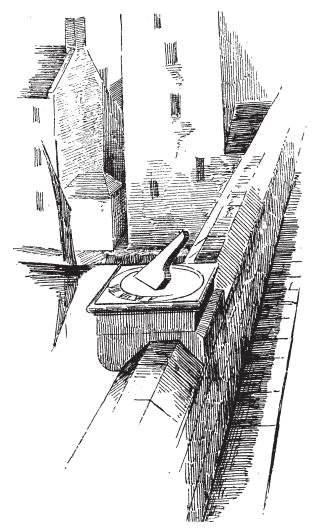


Fig. 1565.—Ayr, "Auld Brig."

lower bracket-stone of the dial is likewise of an early date; but the upper stone and the metal plate and gnomon belong to a later period, and they probably replace older pieces. The face of the dial is very much broken. SUNDIALS

12-19

Crichton, Midlothian.—At this seventeenth century mansion (see p. 254) there is a dial in a very peculiar position on the sill of one

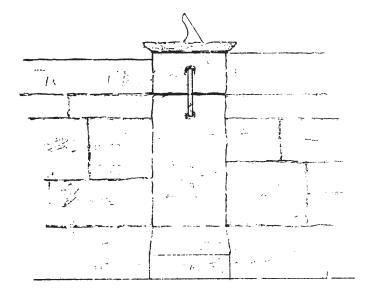
of the first floor windows (Fig. 1566). It is the only example known of a dial so placed at the time of the erection of the house, and forming an integral part of it.

Berwick Bridge.—The dial here, shown by a plan and elevation (Fig. 1567), is similar to the one just described at Ayr. It is placed on the down-stream parapet, in a recess over the first pier from the Berwick side. The bridge dates from 1624, and the dial, it is believed, was put



Fig. 1566,-Crichton.

up about the beginning of this century; but whether it replaced an older one or was then quite new does not appear to be known.



ELEVATION



FLAN

Melrose, Roxburghshire.—This is a dial (Fig. 1568) in a similar position to that of Crichton. It occurs on a house to the north of the abbey. The dial is supported on the window sill by a flat iron bracket.

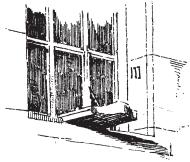




Fig. 1568.—Melrose.

Fig. 1569.—Melrose.

Fig. 1569 shows the face of the dial as seen from the room. It bears the date 1762, and is, we understand, of a date subsequent to the building of the house. These dials could only be read by those inside the house.

II. DETACHED DIALS.

The dials to be considered under this head are among the most important monumental objects bequeathed to the country by the seventeenth century; and it is only when we come to know how numerous they are, and how many of them are fine works of artistic and scientific skill, that we perceive how widespread must have been the appreciation of the sculptor's art, combined with that of the landscape gardener, at that time.

As already mentioned, the detached dials are reducible to four groups, viz.:—

- 1. Obelisk-shaped dials.
- 2. Lectern-shaped dials.
- 3. Facet-headed dials.
- 4. Horizontal dials.

A brief description of the characteristics of these will be given under their respective headings. As might be expected in a subject such as this, where the examples are so numerous, a hard and fast line cannot always be drawn so as to completely separate the specimens of one class from those of another class; but, generally speaking, the distinction we have drawn between the various classes is perfectly obvious.

1. OBELISK-SHAPED DIALS.

18-12

This name, while it fairly describes the appearance of the dials of this class, has a further fitness from the circumstance that the Egyptian obelisks are believed, amongst other purposes, to have acted as gnomons.

31-25 38-14 2-16

The constant parts of these dials are—a square shaft, a bulged capital, and a tapering finial. Where the dial is of the normal type and unaltered, the shaft is divided on each side into five horizontal spaces by incised lines, thus presenting twenty compartments. These compartments are hollowed out with cup-shaped, heart-shaped, triangular, and other sinkings, which are generally lineated so as to mark the hours, and were without doubt always meant to be so. The sharp edge of the figure casts the shadow, which is especially distinct in the angular shapes and at the top of the heart sinkings, where there is often a certain amount of undercutting. Stone gnomons of various forms are frequently left in the cuphollows, and metal stiles are to be found in all the dials. Occasionally some of the spaces are left blank, and on the north side initials, dates, and arms sometimes occur.

The capital is always bulged out so as to form an octagon in the centre, with an upright facet on each of the eight sides, having a dial on each. Above and below each facet over the four sides of the shaft are sloping facets, with a reclining dial or a proclining dial on eachthe former being those dials whose faces slope towards the sky, and the latter those whose faces slope towards the ground. The eight triangular pieces formed by the meeting of the square and octagon are cut out, and most effective shadows, from an artistic point of view, result from this arrangement, giving an air of dignity to the capital, which is wanting in the one instance (at Drummond Gardens) where this arrangement is departed from. The upright facets of the octagonal part have heartshaped and cup-shaped sinkings, as in the shaft; but the proclining and reclining parts seldom have sinkings. Nor has the tapering finial, although usually covered with dials, ever any sinkings; like the shaft, this part is divided by horizontal incised lines, the number of spaces, for which there • appears to have been no rule, varying according to the height of the finial.

The obelisk-shaped dials are generally set on some kind of base, consisting either of steps or a pedestal; the former frequently alternate, being set square and diagonally as they ascend. The pedestals have a general resemblance to each other, being frequently ornamented with representations of the sun and moon in almost identical form—as at Meggatland and Kelburn (Figs. 1572 and 1575).

With this general description of the obelisk-shaped dials, we will now proceed to the consideration of individual examples.

Barnton House, near Edinburgh.—This dial (Fig. 1570) stands on the east side of Barnton House, and, like another dial at this place, to be hereafter described, it is set on four steps placed alternately at an angle

of 45° with each other. The upper part, or tapering finial, nearly equals the shaft in height, their dimensions being 3 feet 9 inches and 4 feet respectively; the height of the dial is 9 feet 41 inches, and including

> the steps it measures 11 feet 10 inches; the shaft is 10 inches square. It is dated 1692. (As to the probability of this dial not being in its original position, see page 480.)

> Bonnington House, near Ratho, Midlothian.—This dial is situated in the garden of Bonnington House; it stands on three steps placed anglewise (Fig. 1571). dimensions of the dial are - shaft, 3 feet



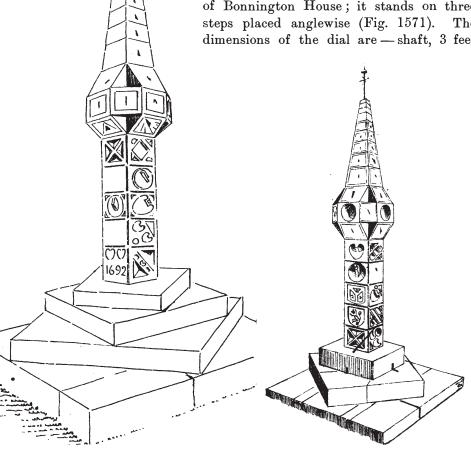


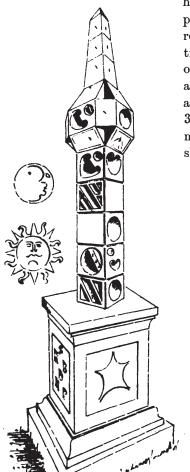
Fig. 1570.-Barnton House.

SUNDIALS

Fig. 1571.-Bonnington House.

 $10\frac{1}{2}$ inches high; the capital, 1 foot $6\frac{7}{8}$ inches high; and the finial about 3 feet 4 inches high; or 8 feet $9\frac{3}{8}$ inches in all, and including the three steps, 10 feet $2\frac{7}{8}$ inches. The width of the capital is 1 foot $7\frac{1}{8}$ inches, and of the shaft $10\frac{1}{2}$ inches. The remains of an iron finial are visible on the top of the finial. Other examples of obelisk dials having this feature are shown. Like the dial at Barnbougle (Fig. 1573), this one has on one of the compartments of the north side the Cunnyngham arms. A shake fork and the presence of three stars seem to indicate the Cunnynghams of Belton, and on the compartment beneath there is a lion rampant.

Meggatland, Midlothian.—This dial (Fig. 1572) stands in the grounds of Meggatland House, about one mile west from Merchiston Castle. It



has a square moulded pedestal with four panels; in the south, east, and west panels respectively there are sculptured representations of the sun, the moon, and a star; and on the north panel occur the initials R.B. and D.H.P. (the last initial is indistinct, and may be R. or B.) The pedestal is about 34 inches high, and the dial about 7 feet more, or nearly 10 feet high altogether; the shaft of the dial is $9\frac{1}{2}$ inches square.

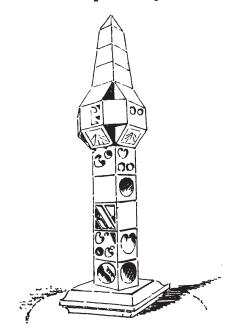


Fig. 1572.—Meggatland.

Fig. 1573. -- Barnbougle Castle.

Barnbougle Castle, Linlithgowshire.—When this dial (Fig. 1573) was sketched it was standing in a garden in front of the cottages at

Lang-green, not far distant from Barnbougle Castle, to which place it was removed a few years ago when the castle was rebuilt. It has a base a little deeper than is shown by the sketch, the lower part having been

partly concealed. The dial is about 7 feet 2 inches high, and including the base 8 feet 4 inches, with a shaft 10 inches square. The Mowbrays disposed of Barnbougle in 1615 to the Earl of Haddington, and in 1662 it was purchased by Sir Archibald Primrose of Carrington (see Vol. IV. p. 379). On one of the spaces of the shaft, on the north side, are the Cunnyngham arms, as noted above in connection with the Bonnington dial.

Kelburn, Ayrshire. — These companion dials (Figs. 1574 and 1575) adorn the gardens which surround the fine old castle of Kelburn (see Vol. IV. p. 24). They seem to be in their original positions, and, unlike the two dials at Newbattle (to be described further on), they are in no way designed to balance or harmonise with each other, not being visible from any point at the same time. The shafts are set diagonally on a moulded base. The obelisk (Fig. 1574) of one of these dials terminates with a wrought-iron vane of delicate design and workmanship, enclosing the entwined and coroneted monogram of the Earl of Glasgow and his wife, the whole being surmounted

beautiful piece of wrought-iron work; it was loose and otherwise worn by time, but the Earl of Glasgow has just had it carefully restored. The dimensions of the dial are—height of shaft, 3 feet 8 inches; height of capital, 1 foot 8 inches; height of finial, 2 feet $5\frac{1}{2}$ inches;

with a Scotch thistle.

18-13

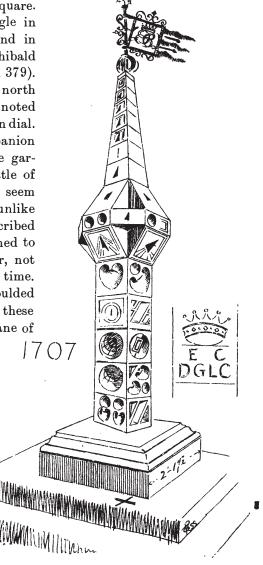


Fig. 1574,-Kelburn.

height of moulded base, 9 inches; total, 8 feet $6\frac{1}{2}$ inches. The moulded base is 2 feet $1\frac{1}{2}$ inches square, and the breadth of the shaft is $9\frac{1}{2}$ inches.

This is a

The other dial (Fig. 1575) is generally of the normal type, but certain

deviations therefrom seem to show that it has been altered. The shaft has only four spaces, and there has been mending done on it, and probably a space has been lost; and attention may be drawn to the unusual circum-

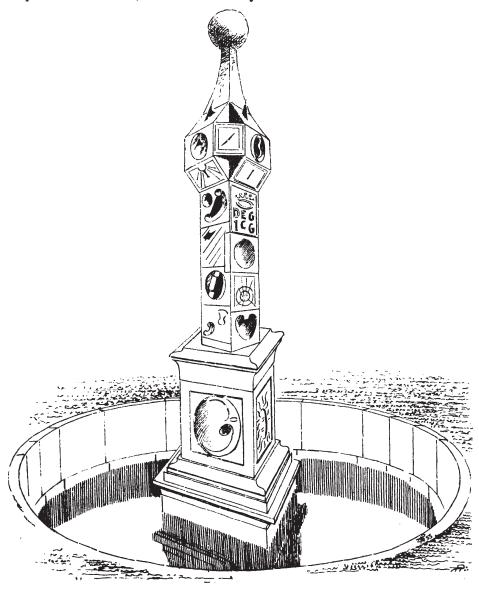


Fig. 1575.-Kelburn.

stance that the spaces on each face are not all of one size, in this respect resembling the dial at Tongue. The curved finial on the top and the ball termination are no doubt the result of a repair, like the altered finial at Craigiehall (Fig. 1577). The dial stands anglewise on a pedestal which resembles somewhat that of the Meggatland dial; on both there will be observed similar figures of the sun and moon.

Many of our dials stand on a stone pavement slightly raised above the grass, often of a circular or octagonal form, and this feature certainly adds to their dignity and consequence. This dial at Kelburn is superior to most others in this respect, as it stands in a built stone basin supplied with running water. The height of this dial and pedestal is about 10 feet.

On Fig. 1574 there is the date 1707, with the initials E.D. and C. L.C. These stand for David Boyle of Kelburn, who was created Lord Boyle in 1699, and Earl of Glasgow in 1703, and his first wife, Margaret Lindsay Crawford, daughter of the house of Kilbirnie. The other

dial is undated, but having the same initials, is probably of about the same age.

Lochgoilhead, Argyleshire.—This is a conspicuous object in the village, and was probably a market cross (Fig. 1576). On the north side, and on the upper space of the shaft, there are the initials $_{\rm H.M.}^{\rm D.}$; further down on a shield are the initials S.C.C., and on the under space is the date 1626. The dial was overthrown and broken across the middle of the shaft by some Glasgow excursionists about thirty years ago. It was repaired and set up again, and is now protected by an iron railing. The drawing is from a photograph made expressly for the purpose by Mr. John Parker, C.A., Glasgow.

Craigiehall, near Cramond, Linlithgowshire.

—This dial, which is one of the normal type (Fig. 1577), has undergone a considerable transformation. When the mansion-house was rebuilt about the middle of last century by the Hon. Charles Hope Vere, second son of the first Earl of Hopetoun, the dial, which was probably broken, was set up on a new and most original base, consisting of a globe about 2 feet 2 inches in diameter, into which the shaft is fitted, burying the whole of one of the five spaces. The globe is supported on a rounded base, and the whole rests on a square plinth. The upper portion was also renewed, but not strictly after the old form, a slightly

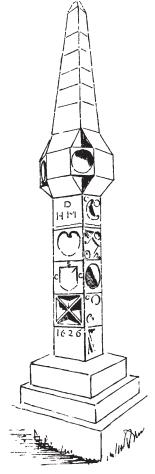


Fig. 1576.-- Lochgoilhead.

38-15

curved outline without division lines having been given to it. The whole of the renewed work is of white sandstone, while the original

dial is of red sandstone. The height from the ground to top of globe measures about 4 feet 8 inches, thence to top of capital about 4 feet 5 inches, and the renewed top 2 feet 11 inches; total height is about 12 feet. The width of the base at the ground is 2 feet 2 inches. The dial stands in the park, and is protected from the cattle by an iron railing.

Leven, Fifeshire.—This dial (Fig. 1578) is believed on sufficient evidence to have been the town cross of Leven. All knowledge of its existence was lost till, on the 15th January 1889, Mr. James Anderson of Norton, Leven, observed it broken and built into a garden wall. He had it taken out, and found the shaft in two pieces, with a portion of the centre lost, as well as the upper portion, but the capital was entire. The whole has now been restored, and set on three steps, on one of which is the following inscription: -LEVEN CROSS, FORMERLY ON CARPENTER'S BRAE, REMOVED 1767, RESTORED AND REBUILT BY JAMES ANDERSON OF NORTON, 1889. has been handed over by Mr. Anderson to the custody of the trustees of the Greig Institute. The dial stood on Carpenter's

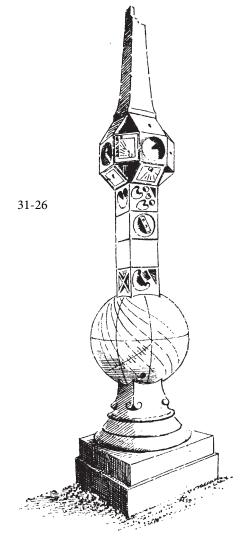
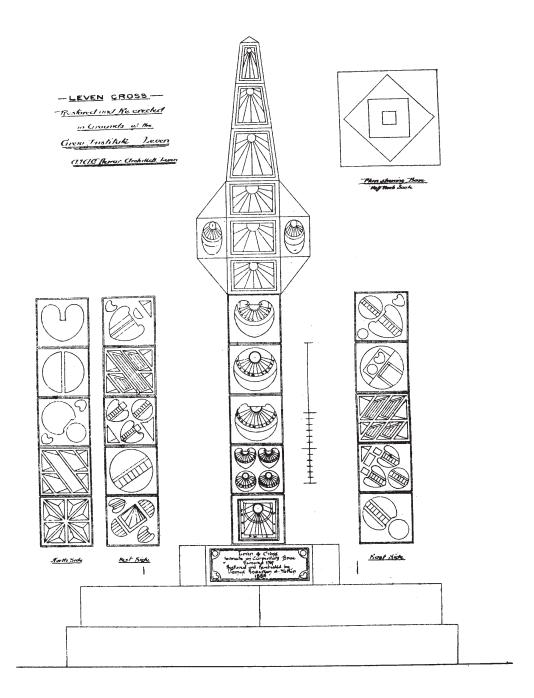


Fig. 1577.—Craigiehall.

Brae, and it was taken down to allow the passage of Mr. John Gibson of Durie's funeral in 1767. After the burning of Durie House in 1764, Gibson lived in the High Street of Leven. The height of the upper part as restored is purely conjectural, and the whole height as it now stands, exclusive of the steps, is 7 feet 3 inches.



F1G. 1578.—Leven.*

^{*} We have to thank Mr. Andrew Dewar, architect, Leven, for this drawing.

Tongue, Sutherland.—This obelisk, known as "Lord Reay's" dial (Fig. 1579), stands in the gardens of Tongue House. Bishop Pocock thought it worthy of notice when he visited Sutherland * in July 1760. He says, "In the middle of the kitchen garden is a pillar entirely covered with dials." Mr. Kemp's note on the pillar is that it is made of "red sandstone, too soft to resist the action of time and storm, so very few of

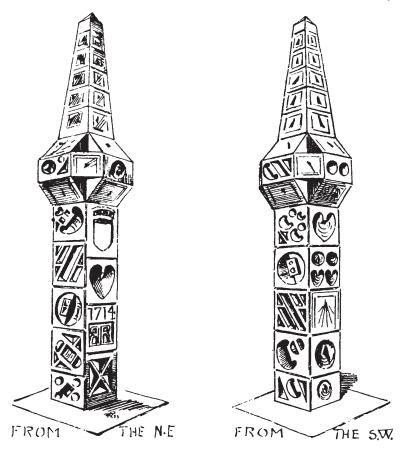


Fig. 1579.-Tongue.

the old dials are now decipherable." Its total height is $7\frac{1}{2}$ feet, the pillar and main dial-stone being 5 feet, with an obelisk of the same stone, "but of much newer appearance" (it is newer, having been restored early in this century), "standing on the top of it. It is covered with dials from top to bottom, except on the north side of the pillar, which bears the remains of an earl's coronet, with escutcheon underneath, now blank; below that a heart cut in stone, then the date 1714, with a double letter

^{*} See Sutherland Papers, Pocock's Tour, p. 21, Notes by Mr. Daniel William Kemp.

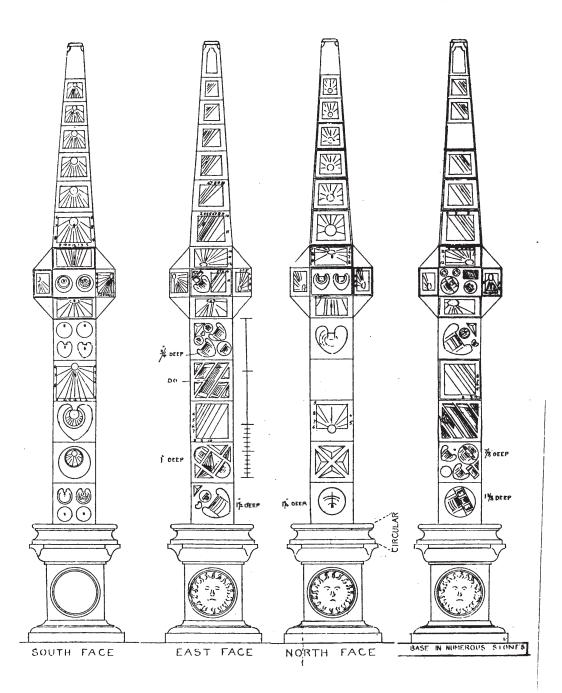


Fig. 1580.—Mount Stuart.

R below, and further down a cross or star." The view of this dial is made from a pen sketch kindly lent by Mr. W. Fowler, architect.

Mount Stuart, Bute.—The drawings of this dial (Fig. 1580), which were kindly lent us by Mr. G. Washington Browne, architect, are so minute as to render description scarcely necessary. The dial rests on a pavement of stones taken from the shore. The shaft and the tapering part of the dial each measure 3 feet 10 inches, the capital is 1 foot 10 inches, and including the pedestal the whole height is 11 feet 4 inches. The capital of this dial differs from those of the normal type in this respect, that the four triangular pieces connecting the octagon with the square are left in on the upper reclining surfaces, and are only cut out in the usual manner on the under or proclining surfaces.

SPECIAL VARIETIES OF OBELISK DIALS.

The obelisk-shaped dials still to be described have each certain variations from the normal type. These are shown on the sketches, and will now be described.

Drummond Castle, Perthshire.—This dial stands (Fig. 1581) in the centre of the splendid gardens at Drummond Castle (see Vol. 1. p. 285). Its upper part is considerably higher than the shaft, and the whole dial is cut into placques which correspond to the spaces of the normal type. On the shaft only they are enriched with hollow figures, some of which are new and different from those hitherto met with. The shaft contains four spaces instead of the usual five in the height, and for the first time we have a neck-moulding beneath the capital, while the triangular spaces at the angles of the obelisk are not cut out, thus losing the effective shadows so conspicuous in the dials of the ordinary type. The dial finishes with a stone ball having a metal point, while its base consists of a thin spreading moulding. A Latin inscription informs us that it was erected by the second Earl of Perth in 1630; and from the Dictionary of Architecture we find that it was made by John Mylne (the third of the name), who was the architect of extensive additions at Drummond Castle. The dial contains five stanzas of rhyme in which the hours as sisters descant on the flight of time.*

* Inscription on the dial erected in 1630 in Drummond Castle gardens, translated by Dr. W. Barrack, Rector of Dollar Academy:—

 2 D

We are the hours on the pillar you see, Marked by the shadows that ever flee, And move with the sun in its Course on high, Noting the time passing swiftly by.

Sisters are we, then why are we clad In joyful robes, and robes that are sad?

٧.

We who have rays from the sun at morn
Are servants to those in the East who are born,
Who live in those regions far remote,
Where the Medes and the Persians round Babylon
fought.

We whose robes are red and bright Have our names from the sun's retreating light, Italians, Bohemans, all are we, And the bright red tints of the West you see.

We who are dark and dusky in hue
Mark out the hours on the zodiac blue,
To the people of France and the people of Spain,
Who live by the side of the weltering main.

(There are two or three lines at bottom of pillar illegible.)

38-18

Invermay, Perthshire.—This dial (Fig. 1582) shows a greater divergence from the normal type than any other known example. In certain of its details it resembles the dial at Drummond Castle, from which it is distant about ten miles, and that the design of the one influenced

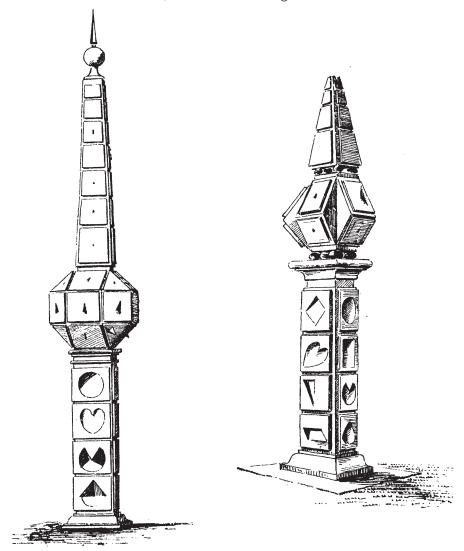


Fig. 1581. - Drummond Castle.

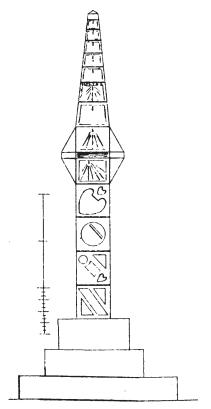
Fig. 1582.-Invermay.

that of the other there can be little doubt. The placque arrangement is alike in both; so are the base and the neck-moulding. The capital has reclining and proclining dials only, the octagonal centre with its upright dials being entirely omitted, which gives it a cleft appearance. The central portion rests on four little rounded balls placed above the neck-mouldings of the shaft. The finial rests in a similar manner on four

balls set on the top of the capital. Such small rounded balls, forming rests for architectural objects, like feet peeping out beneath a skirt, are of frequent occurrence in the architecture of the time. They will be found in connection with the Newbattle and Pinkie dials, and at Pitreavie and Aberdour they support the whole structure.*

Ballendalloch, Balfron, Stirlingshire.—This dial (Figs. 1583 and 1584) is of the normal type, except that the octagonal part of the capital is extremely thin, being reduced to $1\frac{1}{2}$ inches, while it is continued round the cardinal sides as a narrow sinking. The dial rests on three steps,

38-15



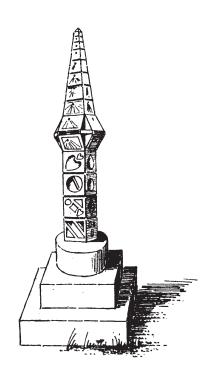


Fig. 1583.—Ballendalloch. Elevation.

Fig. 1584.—Ballendalloch. View.

the upper one being round. The dimensions of the dial are—height of shaft, 2 feet $10\frac{1}{2}$ inches; height of capital, 1 foot $2\frac{1}{2}$ inches; height of top, 2 feet 5 inches; height of steps, 1 foot 9 inches; total height, 8 feet 3 inches. The breadth of the shaft is $8\frac{1}{2}$ inches. For a perspective sketch of this dial we are indebted to Mr. R. Thornton Shiels, architect, and for its dimensions to Mr. A. H. Cooper, W.S.

* We are indebted to Mr. Andrew Grant of Invermay for fine sketches of the dials at Drummond Castle and Invermay, made by James M'Laren, a young man on the latter estate.

Lennox Castle, Stirlingshire.—This drawing is made from measurements and sketches by Mr. John B. Ross, land steward at Lennox Castle. The peculiarities of the dial (Fig. 1585) consist in the shortness of its shaft, which contains only three sections, being the fewest of

any known example, and in having a bead moulding beneath and above the capital. The dial stands on two octagonal steps, each $5\frac{1}{4}$ inches high, with a third step beneath, 3 feet 2 inches square by 8 inches high, and it has a tapering iron rod for a termination 35 inches long. The height of the shaft, including the bead, is 27 inches, and of the capital 17 inches. The tapering top, including the under bead, is $26\frac{7}{8}$ inches;

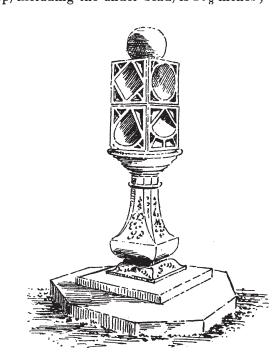


Fig. 1585.-Lennox Castle.

Fig. 1586 .- Panmure.

height of dial, 5 feet $10\frac{7}{8}$ inches, and the total height of the stonework, including the steps, is 7 feet $5\frac{3}{8}$ inches.

Panmure, Forfarshire.—This dial (Fig. 1586) appears to us to be a part of the shaft of an obelisk.

Carberry, Midlothian (see Vol. III. p. 430).—There are two companion dials in the grounds of Carberry Tower. Of one dial (Fig. 1587) only the

octagonal capital is old, the pedestal with the curved neck being quite modern, and clearly not according to the original design, as this is evidently the capital of an obelisk dial, and a very remarkable one it is, being pierced quite through in the manner shown. The raised

placques on the faces are of uncommon shapes. A wooden pin or dowel, the rounded end of which is seen on the top, goes down through the capital into the necking, and the rounded bead seen between the two is of wood. The total height of the dial as it now stands is about Fig. 1588 shows an attempt to restore it to something after its original design, the idea of the open obelisk to suit the open capital being taken from Polton

Fig. 1587.—Carberry.

24-16

Fig. 1588 .- Carberry

(Fig. 1649). The capital is $17\frac{1}{2}$ inches high, and the faces of the octagon measure about $6\frac{3}{4}$ inches wide by $6\frac{5}{8}$ inches high.

Pollok Castle, Renfrewshire.—Fig. 797, p. 223, Vol. IV., shows the capital of an obelisk dial.

2. LECTERN-SHAPED DIALS.

The dials of this type are as unlike those of the obelisk class in appearance as any two things can be which are designed to serve the same purpose. The characteristic elements of the lectern-shaped dials are a shaft (on which there are no dials), and a stone supported upon it, cut in a peculiar manner, so as to contain several sundials, the whole bearing a very decided resemblance to a music-stand or lectern.

The dial-stone is cut, angled, bevelled, and hollowed into a multiplicity of parts not easily described. In a general way the front and back present sloping surfaces, and the ends or sides are perpendicular. On the front slope there is left a square block 3 or 4 inches thick, not unlike a closed book resting on a lectern. Suppose a square cut out of each corner of the book so as to leave the form of a Greek cross, and four semicircles cut out of the ends of the four arms of the cross, thus leaving eight horns, and you have the principal and universal feature of this kind of dial. Further, suppose this cross to be placed well up on the slope so as to project beyond it, and the projecting part containing the semi-cylinder cut out of its upper side continued down the sloping back of the dial, and you have another constant feature of this design. forerunners of this pattern we saw in the dials at Cockburnspath and Oldhamstocks, where a semi-circular hollow is employed. The lower part of the stone generally contains proclining dials, which are almost concealed from view.

We have felt while drawing these sundials that there must have been some reason, not apparent on the surface, for the selection of the peculiar shape given to them. They are not objects of a kind which an architect would devise whose aim was simply to design beautiful features for the adornment of a garden-such as statues, vases, or obelisks. We were convinced that the forms were traditional, and had a definite purpose in their origin. They are sometimes called masonic dials; but we have not met with any explanation of what is meant by that expression. We believe, however, that an illustration in an article in the Magazine of Art (Cassell & Company, November 1891), by W. Fred. Dickes, entitled "The Mystery of Holbein's 'Ambassadors,'" may suggest the source from which the lectern-shaped dials derived their peculiar form. The picture contains representations of several sundials (not of this type), while astronomical and musical instruments are distributed on the table, at either end of which the ambassadors stand. These instruments are used by Mr. Dickes to prove who the ambassadors were, being, as he makes out, the Counts Palatine—Otto Henry, born 1502, and his brother Philip. One of the instruments represented is the torquetum of Apian, by means of which "the position of sun, moon, or stars can be indicated at any

hour," &c. Apian was professor of mathematics at Ingolstadt, and published numerous books. One of his works, called the Book of Instru-

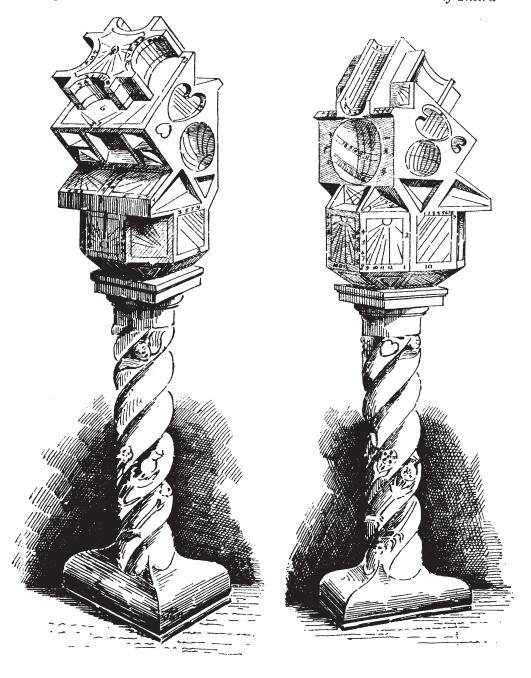


Fig. 1589.—Woodhouselee. Front View.

Fig. 1590.—Woodhouselee. Back View.

ments (1533), contains various figures, one of which, reproduced by Mr. Dickes, seems undoubtedly to indicate the source from which the lectern-shaped dial derives its origin; it is simply an astronomical instrument of this kind converted into stone. The study of astronomy and the invention of all kinds of instruments connected with it were very common in the sixteenth century; and the above figure, or some similar one invented for astronomical purposes, has in all probability suggested the shape of the dials we are now considering. Possibly, if search were made, earlier examples of a similar form might be discovered abroad.

Woodhouselee, Midlothian.—This is the most elaborate dial of the type. It consists (Figs. 1589 and 1590) of a broad spreading base, from which rises a twisted shaft 8 inches in diameter, with a cap on top; and, including base and cap, it is 3 feet 9 inches high. The total height of shaft and dial is 6 feet 3 inches. In the lower part of the hollows of the shaft the thistle and the rose are carved alternately, with winged cupid heads and hearts at the top. In addition to the usual features of the type there are eight upright dial faces; two of these, on the front, are overshadowed by square projecting horns similar to those at Oldhamstocks, and, like them, serving the purpose of gnomons. This dial, like many others, is, we are informed by Mr. Tytler of Woodhouselee, a wanderer. It belonged to the Napiers of Wrychtis Housis (see Vol. IV. p. 432), and fortunately, before that mansion was destroyed in 1800, it was purchased by Lord Woodhouselee and set up in his grounds in its present position.

Ruchlaw, Stenton, Haddingtonshire.—This most graceful dial (Figs. 1591 and 1592) stands in the garden of the old house at Ruchlaw. It has a plain octagonal shaft, with a base and capital supporting the dial-stone, which contains about thirty-five gnomons. The shaft is $7\frac{1}{2}$ inches in diameter, and is 3 feet $5\frac{1}{2}$ inches high, and the total height is 5 feet 8 inches. There are two carved window pediments on the old house (see sketch), one of which has the arms and initials of Archibald Sydserf and the date 1663; the other has the same date and initials, with the addition of those of his wife, also a Sydserf, and in all likelihood this is the date of the construction of the dial. It was broken and cast aside, till, about the beginning of this century, it was restored and put up where it now stands, and for security the dial-stone was clasped to the capital with iron bands.

Neidpath Castle, Peeblesshire (see Vol. I. p. 183).—This dial (Figs. 1593 and 1594) has all the permanent features of the type, but the book part, instead of being square as in the normal conditions, is oblong, while the sloping cylinder is closed about half-way down, and on the flat surface thus made there is a cup-hollow. Its other features are all normal. The measured drawing (Fig. 1595) of this dial, prepared by Mr. Robert Murray, architect, gives a definite representation not only of it, but of those of the type. This dial belonged to Neidpath Castle, and about the time (1795)

36-11

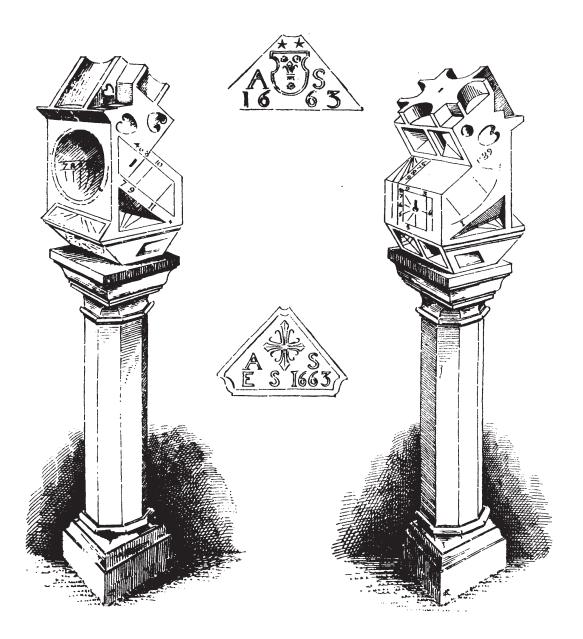


Fig. 1591,—Ruchlaw. Back View.

Fig. 1592,—Ruchlaw. Front View.

when "Old Q." began his work of desolation there, his gardener, Mr. Spalding, fortunately got possession of the dial, and his son, a nurseryman in Peebles, erected it in his grounds, where it remained for many years,

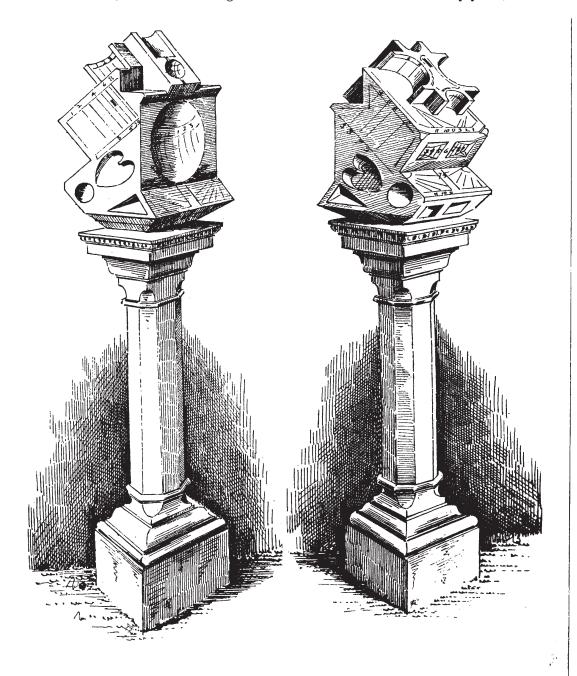


Fig. 1593.—Neidpath Castle. Back View.

Fig. 1594.—Neidpath Castle. Front View.

till it was presented to the Chambers Institute a few years ago, where it now remains, but without the shaft.

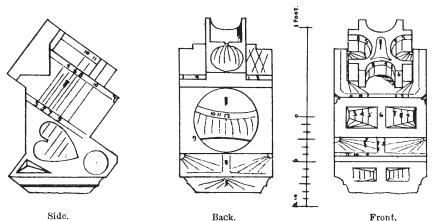


Fig. 1595.—Neidpath Castle. Elevations.

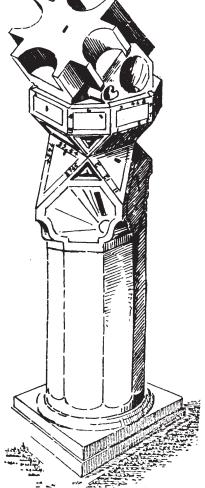
29-29

Mid-Calder House, Midlothian —This dial (Fig. 1596) is placed in the garden of Mid-Calder House. At some unknown period it got broken and was in danger of being lost, when Lord Torphichen had it repaired and placed on a new shaft and base. It has the constant features, and, in addition, a central portion, consisting of a narrow octagonal band, which is cut away beneath, and is then splayed out from the octagon to the square with sloping and perpendicular dials. The dialstone is 27 inches high, and the width across the horns of the book part is



Fig. 1597.-Mid-Calder House. Back View.

13½ inches. The whole height as it now stands is 35½ inches, but it was doubtless higher in its original state. Fig. 1597 shows a side and back view of the dial.



Pitreavie, Fifeshire (see Vol. II. p. 537).—This dial (Fig. 1598) stood on a terrace which ran along the south front of the old house of Pitreavie. A flight of stone steps led up to the dial, which had a wide octagonal paved space around it. This, with the stair and terrace, gave a finished and dignified air to the dial. It stands on a square

36-13

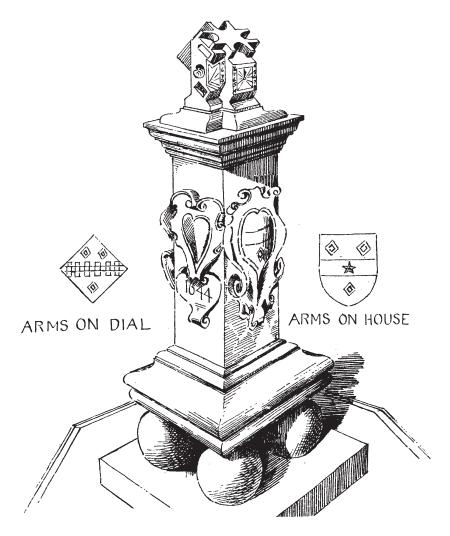


Fig. 1598.-Pitreavie.

pedestal, instead of the usual shaft, with carved escutcheons on each face containing the initials of Sir Henry Wardlaw, the family arms, a heart-shaped figure, and the date 1644. This dial is not quite so elaborate as others of the type, but it contains all the permanent features, and is fitted gracefully to the pedestal with a bold, flowing moulding. The pedestal is 10¾ inches square, and measures from floor to top of cornice

4 feet $5\frac{1}{4}$ inches, and the whole height is 6 feet $1\frac{1}{4}$ inches.* A copy of this dial was put up in the gardens of Fordel about thirty years ago.

Dundas Custle, Linlithgowshire (see Vol. 1. p. 328).—This combined fountain and dial (Fig. 1599) well illustrates the magnificent ideas which

prevailed during the seventeenth century with regard to the monumental accessories considered desirable for the adornment of pleasure grounds and gardens, and we learn from the inscriptions on the fountain that many more objects of the kind once existed here which have been swept away. The fountain and dial do not appear to be in their original position, as is evident from an unpublished drawing in the possession of the Royal Scottish Academy. They were probably shifted when an old house which stood here was taken down. A flight of ten steps leads up to the dial, which is supported on an octagonal shaft adorned with winged figures; above this is the swelling basin of a second fountain, out of which rises the dial proper. It contains the usual features, with certain peculiarities which can easily be seen on examination of the sketch. principal fountain, which is square, measures about 7 feet each way by about 7 feet high to platform, above which the dial and pedestal

7-25

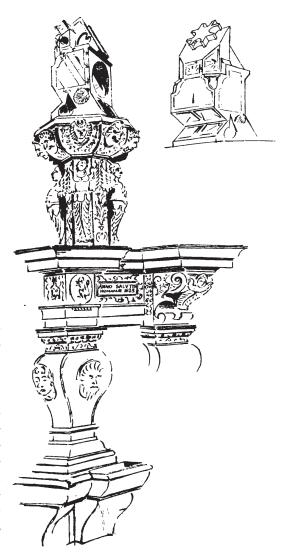


Fig. 1599 —Dundas Castle.

rise to a height of 5 feet 8 inches. From an inscription seen on the drawing we learn that the structure was built ANNO SALVTIS There are numerous initials and other inscriptions on the fountain; the former are

^{*} For these measurements we have to thank Mr. Henry Beveridge of Pitreavie.

those of Sir Walter Dundas, and his lady, Dame Ann Menteith; and the latter, amongst other things, advise visitors to behave themselves seemly, to forbear to do harm to the fountain, "nor yet should'st those inclined to injure the signs of the dial."*

Lamancha House, Peeblesshire.—This very beautiful dial exhibits the greatest variation from the type of any known example. It has the usual

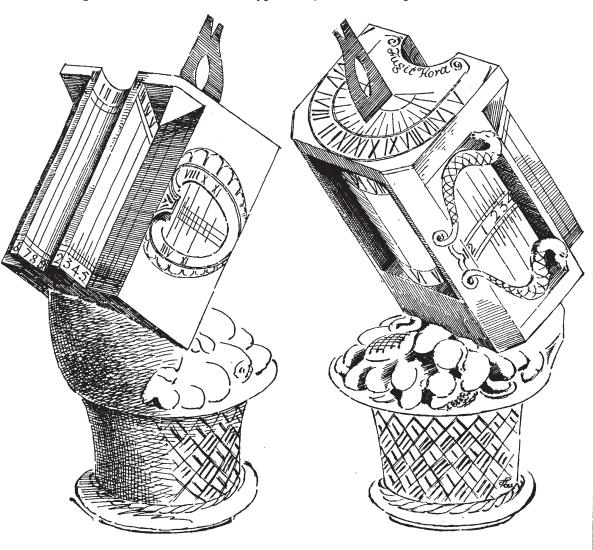


Fig. 1600.—Lamancha House. Back View.

Fig. 1601.—Lamancha House. Front View.

cylinder, hollowed out in a very pronounced form (Fig. 1600), but all the other details are changed. The dial on the top is square (Fig. 1601),

* For further particulars see Miss Gatty's Book of Sundials.

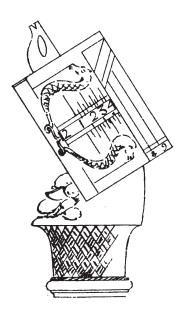
the eight horns being wanting; the lower corners are canted off, the figures are arranged in a circle, and are finely cut, and the gnomon, made of thin iron, is of a pleasing design. Following the circle of the cylinder is the motto fugit hora (Fig. 1602). The under side of the stone is cut into so as to leave a drum-shaped dial (a new form), the shadows on which

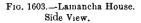
are cast by the sides of the cutting. The sides of the dial-stone contain each a single distinct and different figure, unlike those usually found in this position. The oblong hollow on one side has two carved serpents starting with their intertwisted tails and wriggling round the sides of the hollow, the upper edge of which forms the stile; the lower edge is not sunk. Serpents in a similar



Fig. 1602. -- Lamancha House.

position will be seen on the dial at Pinkie (Fig. 1670). The other "haffet" has a heart or shell shaped figure, sunk, with a flat field, and the sharp overlapping top for a gnomon. The sides of the shell





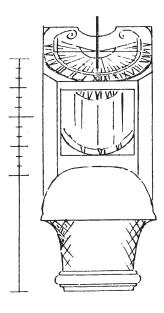


Fig. 1604.—Lamancha House. Front View.

are splayed, and contain the figures. The whole of the faces are carefully lineated and figured. The dial is placed on the top of a basket of fruit. The wicker-work and fruit disappear as you get round to the back,

and with most successful effect the rounded stone is here left uncarved. The basket and dial are cut out of one stone. Mr. M'Glashan, sculptor (to whom we are indebted for bringing this dial under our notice), informs us that it rested on a pedestal $25\frac{1}{4}$ inches high by $16\frac{3}{4}$ inches wide, the total height being about 4 feet 4 inches. Figs. 1603 and 1604 show the dial portion drawn to scale. There is no date on the dial, but judging from the lettering of the motto, which resembles the lettering of the dial at Cadder dated 1698, and from the whole circumstances, it probably dates from late in the same century.

Ardgowan, Renfrewshire.—This mutilated dial (Fig. 1605), which adjoins the old castle, has a considerable resemblance to the Ruchlaw and Neidpath dials.

38-19

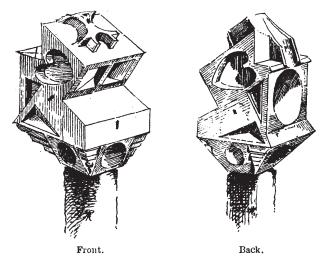


Fig 1605 .- Ardgowan.

Cromarty.*—The dial seen nearest in the view (Fig. 1606) was dismantled and lost, when, early in this century, Hugh Miller, then a boy, dug it out of the earth, and set it up in his uncle's garden as shown. He states† that it "had originally belonged to the ancient castle garden of Cromarty," and remarks about it "that as it exhibited in its structure no little mathematical skill, it had probably been cut under the eye of the eccentric but accomplished Sir Thomas Urquhart." This is not an unlikely supposition, but, as we see from this treatise, there is nothing remarkable about the dial, there being many others of more complicated design; so that it does not necessarily follow that its construction required any very special skill. He mentions an interesting episode of his life in connection with the dial. When standing beside it, and discoursing on it to some

* We have to thank the Rev. Walter Scott, Cromarty, for kindly procuring for us a photograph of these dials, from which the sketch is made.

† My Schools and Schoolmasters, chap. xxiii.

friends, he first saw for a brief moment the young lady who ultimately became his wife.

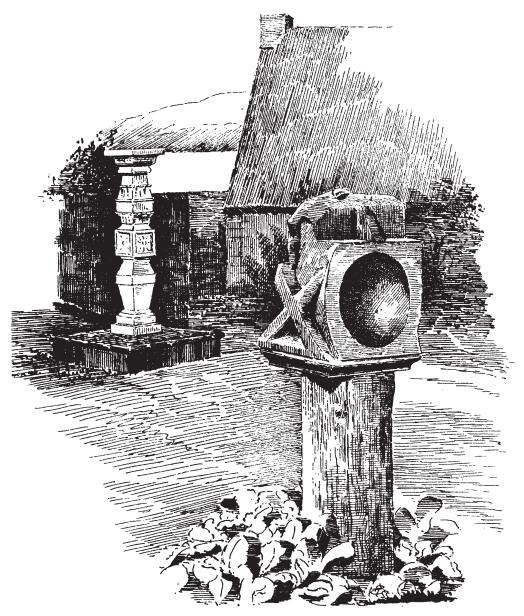


Fig. 1606.—Cromarty.

The other dial seen in the background is interesting as having been made by Hugh Miller himself.* He refers to it with some pardonable

* My Schools and Schoolmasters, chap. xxiii.

pride. During a period of convalescence, while still a young man, he tells us that he amused himself in hewing for his uncles, "from an original design, an ornate dial-stone; and the dial-stone still exists to show that my skill as a stone-cutter rose somewhat above the average of the profession."

Ladylands House, Ayrshire. — This fine specimen of a lectern dial (Fig. 1607) is mounted on a pedestal unlike those of the general type, and resembling those often found among the horizontal dials. It is dated 1673, and contains the initials M.P.C., but we are not in a position to say whose they are.

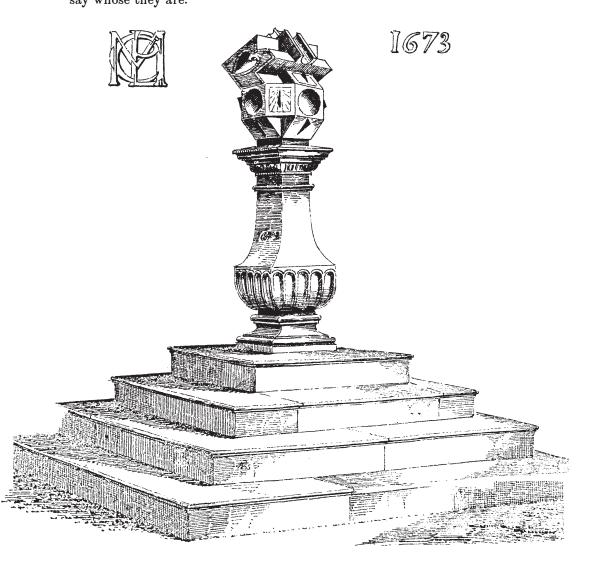


Fig. 1607.—Ladylands House.

Skibo Castle, Sutherland.—The careful drawings of this dial (Fig. 1608) were made by the Rev. Donald Grant, Dornoch. Although differing greatly in its details from the other dials of the type, it retains in a

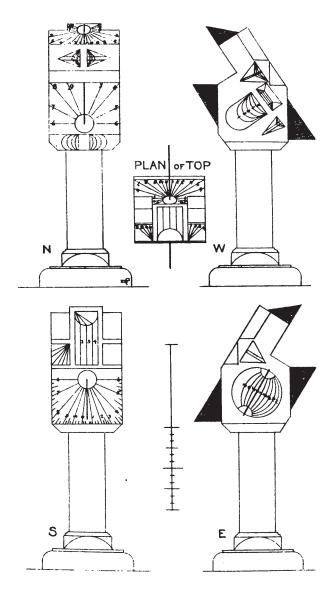


Fig. 1608.—Skibo Castle.

very marked degree the general lectern appearance. As at Lamancha, the eight-horned figure on the top is absent, and a plain-faced dial is substituted. The cylinder hollow (which is $1\frac{1}{2}$ inches deep) is retained, with the

peculiarity of having its ends closed. The north and south sides have each a large plain-faced dial. All the other figures (triangular, oblong, and circular) are sunk. The large circle on the east side (marked E on drawing) is sunk $2\frac{1}{2}$ inches, and it has a gnomon stretched across the cup as at Cadder. The triangular hollows are all 1 inch deep on the west side; the oblong semicircle is $1\frac{7}{8}$ inches deep. The shaft is circular, and rests on a square base, measuring together about 1 foot 8 inches high, the total height being about 3 feet $2\frac{1}{2}$ inches. Mr. Grant says that, so far as is known, this dial stands in its original position.

Zoological Gardens, Edinburgh.—A very fine dial of this type, of which an illustration is given in Chambers's Encyclopædia (article "Dial"), stood in the old Zoological Gardens. We have made various inquiries regarding its present location, but have not learned anything on this point.

Scotscraig, Fifeshire.—The drawings of this dial (Figs. 1609 and 1610) have been kindly furnished by Mr. T. S. Robertson, architect, Dundee.

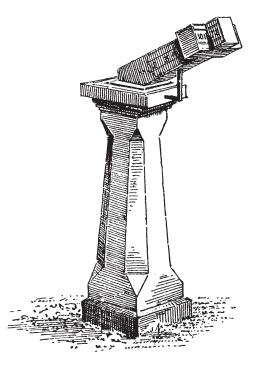


Fig. 1609.—Scotscraig.

This is a very exceptional dial, having only a sloping cross of the Latin form, instead of the usual Greek cross peculiar to the type. The dial stood in the courtyard of the old mansion-house of Scotscraig, which Mr. A. H. Millar says (see Dundee Advertiser, 16th August 1888) "was habitable until a comparatively recent time." The house was removed, and the courtyard was transformed into a garden. The dial, which is of closegrained sandstone, was mounted on its present pedestal by Admiral Maitland Dougall. Scotscraig was acquired by Archbishop Sharp, Mr. Millar believes about 1661, and the gateway leading to the mansion, which was erected by the archbishop, still stands, bearing his initials, A.I.S., with his arms and the date 1667. There seems every reason to believe that this dial belonged to the archbishop.

A sketch of a modern dial in Shenstone Churchyard, near Lichfield, bearing a considerable resemblance to the one at Scotscraig, is given by Miss Gatty, No. 221.

sundials — 437 — sundials

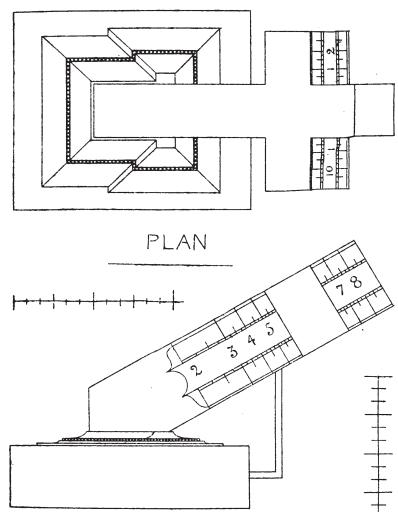


Fig. 1610.—Scotscraig. Side Elevation.

Carberry, Haddingtonshire (see Vol. III. p. 430).—This is one of the most quaint and interesting dials (Figs. 1611 and 1612) we possess. The support—a short rounded column—has for its capital a graceful female bust presenting one face to the north, and another (the one shown) to the south, with the Ionic volutes and abacus so frequent in Renaissance work. On the top rests the dial-stone, fashioned to contain upright, reclining, and horizontal dials. There is also an upright round dial at the shoulders of the bust pendant from the volutes. Altogether there are thirteen dials on the structure. The base and steps, as is so frequently the case, are set diagonally. The measurements of the dial are—height of steps, $18\frac{1}{2}$ inches; shaft and base, $20\frac{1}{2}$ inches; bust and abacus, $13\frac{1}{2}$ inches; total to the top of abacus,

4 feet $4\frac{1}{2}$ inches. Above this the dial-stone is $10\frac{1}{2}$ inches high by $10\frac{7}{8}$ inches on the face, and 11 inches in width on the sides. The

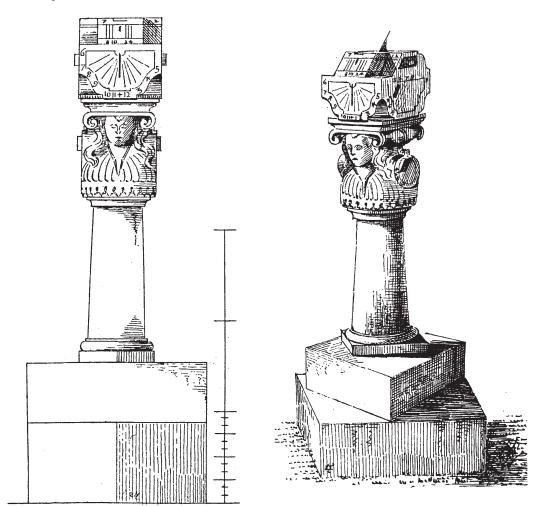


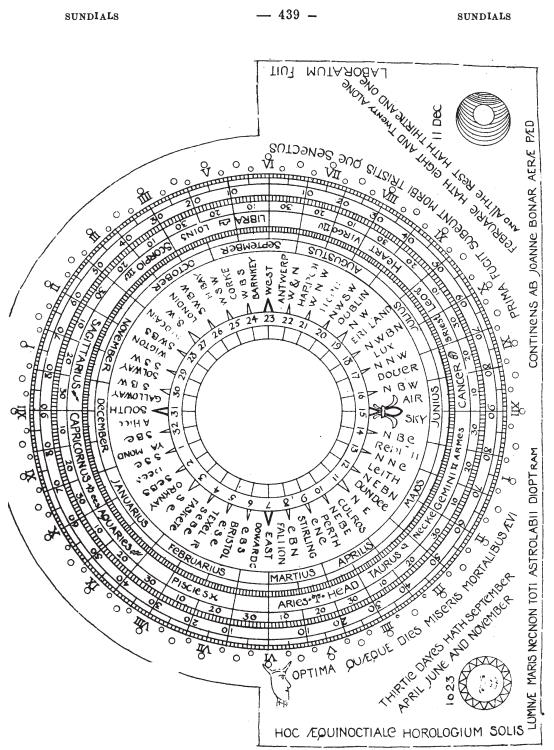
Fig. 1611.—Carberry. South Elevation.

Fig. 1612.—Carberry. View from South-East.

pendant dials are 5 inches in diameter, and the lower step is 2 feet square.

Kenmure Castle, Kirkcudbright (see Vol. IV. p. 256).—We are indebted to the late Mr. George Hamilton of Ardendee for bringing this dial (Fig. 1613) under our notice, and for the great trouble he has taken in searching out the various readings which have been made at different times of its closely-printed faces, which are somewhat difficult to decipher. We are otherwise much indebted to Mr. Hamilton for assistance. The inscriptions were made out by the late Rev. George Murray, Balmaclellan, and Provost M'Kay, New Galloway, in 1867,





and again in 1871 by the present minister of Kirkpatrick-Durham. They were composed by a local schoolmaster, whose name is forgotten. The dial consists of two flat slate slabs, three-quarters of an inch thick, set up against each other at an angle, like the sides of a lectern or music-stand, and they are supported on a modern shaft. Although differing in many points from the other lectern dials, it may, for convenience sake, be classed along with them. The faces are both of the same size, and measure about 2 feet by 1 foot $8\frac{1}{2}$ inches. On the front dial (see figure) the following inscriptions occur. It is difficult to say in what order they should be read.

Round the circle of the upper half is the following:—

ANTE SOLIS OCCASUM DEBET DIES CLARA FECIT
ITAQUE DEUS DVO MAGNA ILLA LUMINARIA LUMINARE
MAJUS AD DOMINIUM DIEI ET LUMINARE MINUS
AD DOMINIUM NOCTIS ATQUE STELLAS
INNOCUI VIVITE NUMEN ADEST.

VIGILATE QUIA NESCITIS HORAM NEQUE DICTAM HORAM QUA FILIUS HOMINIS VENIET.

Round the under side of circle:

OPTIMA QUÆQUE DIES MISERIS MORTALIBUS ÆVI PRIMA FUGIT SUBEUNT MORBI TRISTIS QUE SENECTUS.

THIRTIE DAYES HATH SEPTEMBER
APRIL JUNE AND NOVEMBER
FEBRUARIE HATH EIGHT AND TWENTY ALONE
AND ALL THE REST HATH THIRTIE AND ONE.

Along the base and sides:-

HOC ÆQUINOCTIALE HOROLOGIUM SOLIS (LU)NÆ
MARIS NECNON TOTI ASTROLABII DIOPTRAM
CONTINENS AB JOANNE BONAR AERÆ
PÆD OS LABORATUM FUIT.

1623
II DEC.

The names of the zodiac, the months, and numerous towns, mostly English and Scotch, are all cut on the dial face.

This inscription occurs in eight lines round the top part of the back dial:—

QUHAIR MENNOK * MONTANE MOUNTES FRA THE WOLD
A LAPICIDE DID RAISE ME FRA THE RUITE
TWYSE NYNE THOWSAND OF MILES PHŒBUS IS ROLD
THE NATURALL DAY TO RINE ON ME BUT BUITE
QUHEN HE WALD FEED ON VENISON AS FRUITE

* NN should be RR.

THEN CAPRICORN WITH HORNS DOES HIM EFFRAYE
HE HAISTES SYNE TO LEIFF ON LAMPETTS RUIDE
OUT THROUGH THE SIGNS WITH CANCER FOR TO STAYE
QUHEN ARIES AND LIBRA MAK'S DERAYE
IN SABLE WEED FOR PHAETON HIM CLEEDS
ENDYMIONS SPOUS THAT LIQUID FEELDS ARAYS
PORTUMNUS SOJORS* TEACHES HEER THAIR MEEDS.
LET ALL ESTAITS MY MUISSINGS HEERON SKANCE;
EARN BY MY SHADE OF WARDLIE GLEE THE GLANCE
LAUS HONOR IMPERIUM DOMINO. AMEN.

And along the bottom of the dial is the inscription:—
1623
II DEC.

DUM LICET ET VEROS ETIAM NUNC EDITIS ANNOS DISCITE EUNT ANNI MORE FLUENTIS AQUÆ.

3. FACET-HEADED DIALS.

These dials consist of a large head, generally approaching a sphere in shape, but cut so as to present a number of facets, on which sundials are formed. Facet-headed dials are generally supported on some kind of baluster, rather than a shaft. In three instances lions take the place of the baluster; but whatever shape the supports may assume, dials do not occur on them (as is also the case with the lectern dials), with the one known exception of the very remarkable dial at Mount Melville. Each face of the facet-head contains a dial, either on a flat surface or in cuphollows. Only in a few examples, as at Holyrood, are the heart-shaped sinkings, so common on the obelisks and lecterns, to be found. The facet-head is generally supported on a small pivot, which gives to these dials one of their most striking peculiarities.

Holyrood (see Vol. IV. p. 130).—This dial (Fig. 1614) is situated in the grounds of Holyrood Palace; it stands on a high, wide-spreading base, consisting of three moulded steps. The support of the dial is hexagonal, and it is delicately carved and moulded. The facet-head, with its dials, is the most elaborate of the type, and the same arrangement of facets is found only at Invermay (Fig. 1617). At top and bottom the head has five sides, and cut horizontally in the centre it presents ten sides. This results from the alternating triangular arrangement, in which we have a triangle resting on its base, then one resting on its apex, and so on.

The dials are hollowed out with figures of various shapes. In one the gnomon is formed by the nose of a grotesque face; in another by the points of a thistle-leaved ornament. The under surfaces have no dials, except on one small heart-shaped lozenge, but are decorated instead with

heraldic and other devices. These comprise the royal arms as borne in Scotland, with the collar and badge of the Thistle. There are also the initials of Charles I. and his queen, Henrietta Maria, for whom Charles is said to have had the dial made. From the "Excerpts from the Masters of Works' Accounts," supplied to us by Dr. Dickson, and quoted further on,

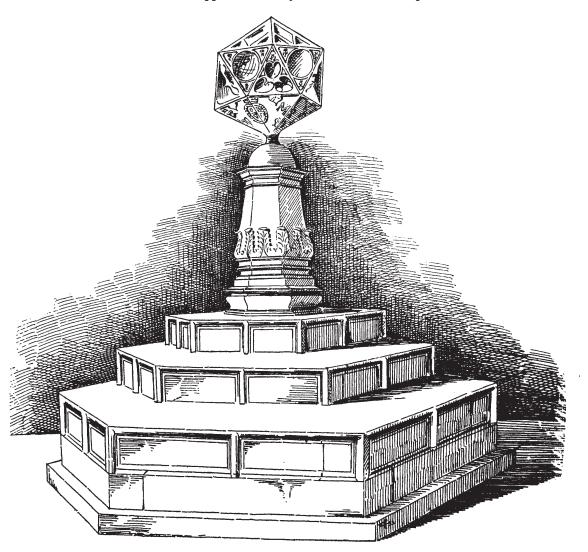


Fig. 1614.—Holyrood.

we learn that this sundial was made by John Mylne, the king's master mason, in 1633, with the assistance of his two sons, John and Alexanders "for which he was paid the sum of £408, 15s. 6d. Scots." The dial and pedestal measure 6 feet 7 inches high, and the total height, including the base, is 10 feet, and the width at the ground is 10 feet 3 inches. It is

stated that this dial was lying broken and uncared for, and that it was put in order by command of the queen.

Warriston House, Edinburgh.—The dial here (Fig. 1615) is probably all that remains of the old mansion-house of Warriston. It has had a stepped base, like that at Holyrood, but only a portion of it now remains;

5-33



Fig. 1615.-Warriston House.

otherwise the dial is perfect. On the top of the remaining step there is a square pedestal ornamented with Oriental-looking heads, above which rises the moulded baluster for supporting the dial-stone, which rests on a point. Round the centre the dial-head is six-sided, with flat dials on its numerous faces, except on one side, where there is a cup-hollow. The height of the dial and baluster is 5 feet 3 inches, and the pedestal measures about 1 foot 10 inches above the steps.

Melville House, Fifeshire.—We are indebted to the late Mr. Russell Walker, architect, for a pencil sketch of the Melville House dial (Fig. 1616).

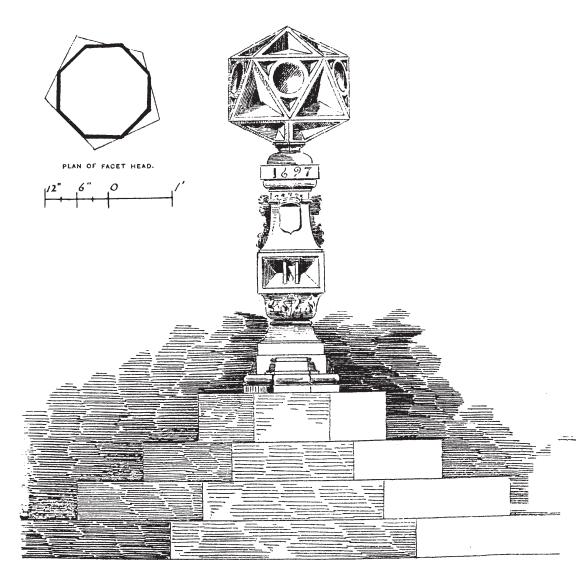


Fig. 1616.-Melville House.

Its head resembles that of the last mentioned, and is full of hollowed figures. It was erected about half a century later, and is dated 1697.

The height of the dial and pedestal is about 5 feet 8 inches, and the total height from the ground is about 8 feet 4 inches. We were informed by the late Lady I. L. Melville Cartwright that this dial originally stood at Balgonie Castle (see Vol. I. p. 377), and when that property was sold the dial was taken by the family to Melville House, where it was erected

in 1861 or 1862. (See Monimail Castle, Vol. III. p. 448.)

Invermay, Perthshire.—This dial (Fig. 1617) is shaped on the same principle as the one at Holyrood, but is simpler in its construction. It is fixed on a point, and rests on a low quaintly-designed baluster.

Ellon Castle,* Aberdeenshire.—This extremely beautiful example (Fig. 1618) is one of two sundials which stand in the castle garden. It differs, as will be seen, very considerably from the normal type, but as a graceful object of architectural design it will hold its own with the best examples of its class. The general contour of the dial corresponds with that of the obelisks, but is modified in all its details. Thus, the shaft, instead of rising abruptly from the platform, or resting on a pedestal, has a fine and boldly moulded base. The faces of the shaft are richly carved with well-executed orna-



Fig. 1617.-Invermay.

ments of fruit and flowers hung from open-mouthed masks. A few simple mouldings with a double necking connect the shaft and capital, which contains hollows on all its twenty-four faces—an unusual arrangement, and found only on the Pitmedden dial, figured in the next illustration. The finial, with its neck-moulding and stone-ball termination, also resembles the same example, and it is not improbable that the design of the one influenced that of the other, although the Ellon dial is considerably richer and more delicate in its details. The finial of the dial in Duthie Park, Aberdeen, appears to have been modelled somewhat after the style of these two dials at Ellon and Pitmedden, indicative of a decided local peculiarity, also visible in the Rubislaw Den dial. The Aberdeen dial is dated 1707, but we incline to the opinion that the Ellon and Pitmedden dials belong to the previous century. The appearance of the Ellon dial is greatly enhanced by the fine and wide moulded steps on which it stands. The steps, each 7 inches high, measure respectively 8 feet square, 7 feet square, and 4 feet square. The dial itself to top of ball is 8 feet 6 inches high. The other dial in Ellon garden resembles the dial

* We are indebted to Mr. Arthur Gordon, Ellon Castle, for calling our attention to this dial, and for having it photographed for our use; as also to Mr. Robert Keith, jun., Aberdeen, for assistance regarding it and the dial at Pitmedden.

at Forgue (Fig. 1664) so closely as to suggest that they are the work of

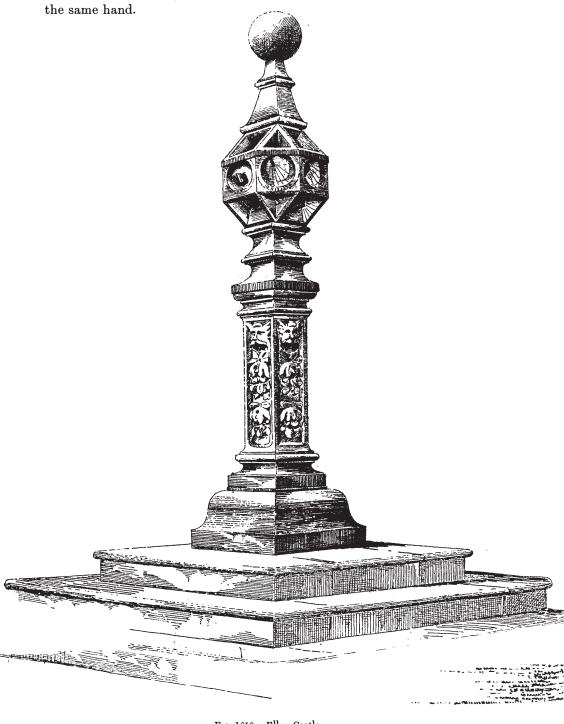


Fig. 1618.—Ellon Castle.

Pitmedden House,* Udny, Aberdeenshire (Sir William Seton).—In

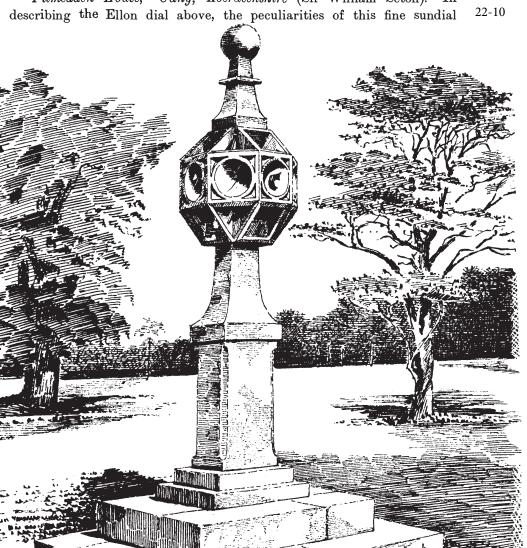


Fig. 1619. -Pitmedden House.

(Fig. 1619) are commented on. Its capital being placed on a slender stock or neck, unlike those of the type in general, has a more than usually striking appearance. Mr. Duthie believes the dial to have

^{*} We are indebted to Mr. Robert Duthie, Pitmedden House, for a photograph and for particulars of this dial.

been made about 1675, about which time the garden walls at Duthie House were erected. We agree in thinking that it is certainly as old as this date. The dimensions are—width and height of the capital on the square, 1 foot 11 inches; total height from ground, 8 feet 9 inches; width of lower step, 4 feet 11 inches; width of pedestal, 12 inches. There are two other dials here on the corner of a garden house, but they have nothing of special interest about them.

Cammo, Cramond, Midlothian.—This dial (Fig. 1620) stands in the gardens adjoining the mansion-house. It has cup-hollows in the upright facets, and flat dials on all the others. It is considerably older than its pedestal, and was taken to Cammo by the present family, in recent years, from the gardens of Minto House, in the Canongate, Edinburgh. On the square abacus of the pedestal there occur the initials of Charles Watson, a former proprietor of Cammo, with the date 1795, so that this pedestal must have supported some dial constructed for itself, if, indeed, it was not a horizontal dial, which its broad abacus seems to suggest. The pedestal is very graceful, and has a Greek character in its refined details. This dial indicates the hour on five faces at one time.

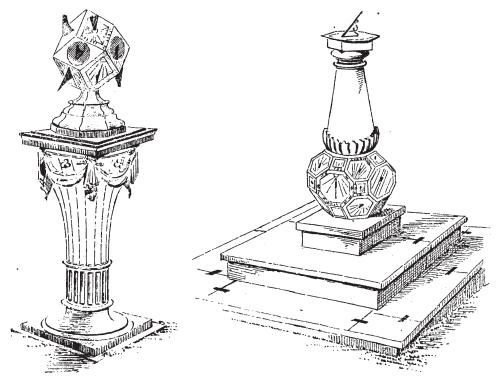


Fig. 1620.-Cammo.

Fig. 1621.—Woodhall.

Woodhall, Juniper Green, Midlothian.—This dial (Fig. 1621) has evidently had a chequered career. It now stands with its head down-

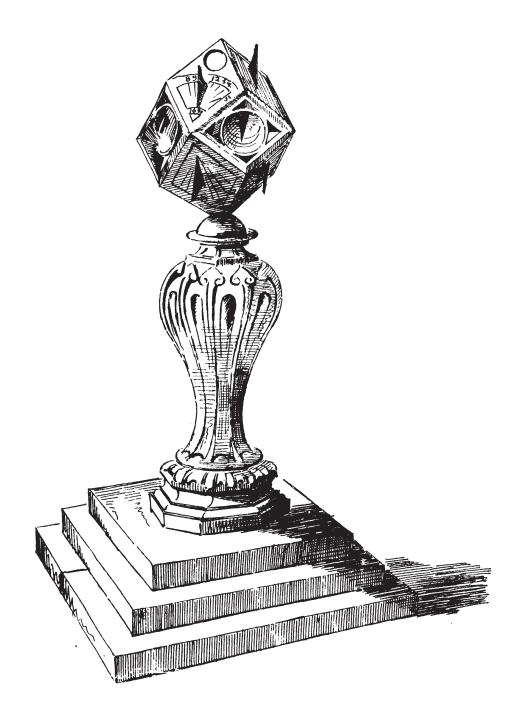


Fig. 1622.--InVeresk Lodge.

most, and its support up in the air, the latter bearing a metal dial roughly fixed down, and showing the inscription MADE BY JOHN JUSTICE AND GIFTED TO WOODHALL 1717. The facet-head is peculiar; it consists of a series of large octagonal faces separated by small squares. The height of the pedestal is 26 inches, and the dial and pedestal measure 3 feet $5\frac{1}{2}$ inches. The width across the bottom step is 5 feet $2\frac{1}{2}$ inches, and along the top step $16\frac{3}{4}$ inches.

Inveresk Lodge, Midlothian (see Vol. IV. p. 356).—This dial (Fig. 1622) has had rough usage in some bygone period, but General Hope, to whom it belongs, has carefully preserved its parts, and has recently

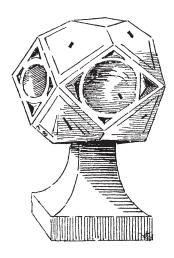


Fig. 1623.-Inveresk House.

23 - 8

had it repaired by Mr. Bryson, optician, and set up again. It is a neat and carefully cut dial, with a very graceful baluster. It is dated 1691.

Inveresk House, Midlothian.—This is probably the dial (Fig. 1623) referred to by "Delta" in the Roman Antiquities of Inveresk, p. 13. It bears a considerable resemblance to the last-mentioned dial, but it is not so careful in its workmanship. It has a curved support fitted into its under side, which probably rested on some sort of pedestal. The dial is now cast aside on a garden rockery. It doubtless belonged to the ancient mansion of the Earls of Sutherland which stood here, and the dovecot of which still remains.

Craigton, Linlithgowshire.—Only the head and breast of this lion-shaped dial-support exist (Fig. 1624). There is a neatly carved abacus on the head of the lion for the dial to rest on.

Pitsirrane, Fifeshire (see Vol. III. p. 572).—The dialstone which rested on this fine lion-shaped pedestal (Fig. 1625) is lost. The figure holds between his fore-paws a shield, containing a lion passant regardant, over three piles, the cognisance of the Halketts of Pitsirrane. The date on the castle is 1580, but there is nothing to connect



Fig. 1624. Craigton.

this date with the dial, and the earliest dated dials (at Dundas Castle and Kenmure Castle) are forty-three years after this time. This dial disappeared, and all knowledge of its ever having been at Pitfirrane was lost, till the late Mr. Paton of Dunfermline found it lying in a garden in the neighbourhood, and on Sir Arthur Halkett recognising the arms as his own it was restored to Pitfirrane. The height of the lion is 2 feet

6 inches, and including the base 3 feet $3\frac{1}{2}$ inches; breadth of base, $12\frac{1}{2}$ inches; breadth across shield, $9\frac{1}{2}$ inches.

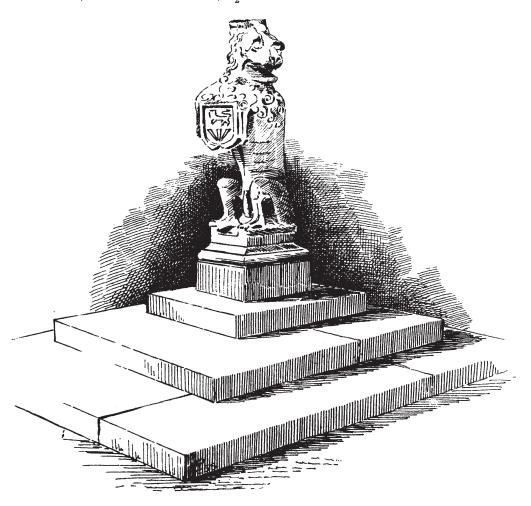


Fig. 1625,-Pitfirrane.

Cramond, Midlothian (see Vol. III. p. 432).—This is a most remarkable dial (Fig. 1626), and possesses certain peculiarities giving it a distinct character of its own within the type. It stands on a graceful square baluster, nicely moulded and carved, on which rests its peculiarly facetted double head. On the lower part of the head there are four circular upright dials with grotesque faces between and sloping dials above. The upper part of the head is of the form peculiar to the type. On one of the round dials is carved the name SIR ROB DICKSON, and the date 1732 (Fig. 1627). Sir Robert was a descendant of the well-known David Dickson, Professor

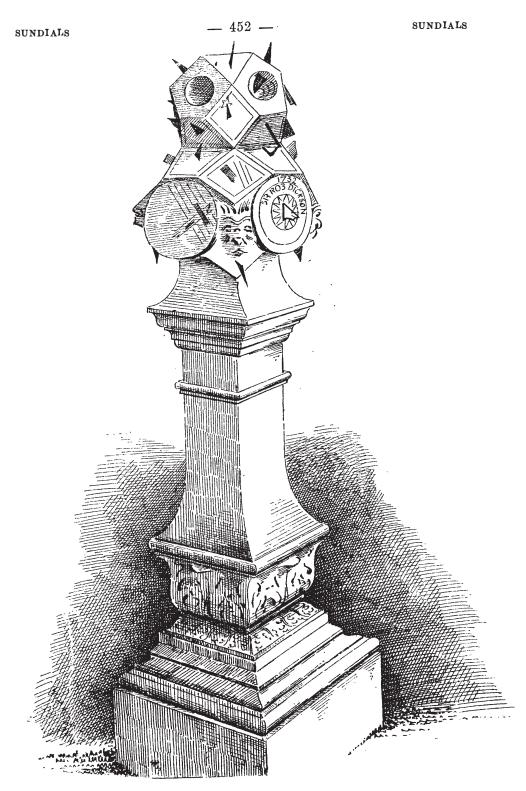


Fig. 1626.—Cramond.

of Divinity in Edinburgh University. His father acquired the estate of Carberry and Sornbegg, now designed Inveresk, and sold the latter to the Duchess of Monmouth at the beginning of last century. Sir Robert was the chief bailie of Musselburgh during the rebellion of '45. He died in 1760. On the other side of the dial occurs the inscription ACH HANDASYDE FECIT. The same name occurs, as we have seen, on one of the two dials already described as lying in the churchyard of Inveresk

(p. 363), and others are mentioned as being known to be by the same maker. We are thus able to identify Handasyde as a dial-maker. Although the dials at Inveresk and Cramond are widely different in design, they have a point of resemblance in their open gnomons. On finding, from the name of Sir Robert, that this dial was connected with Inveresk, an examination was made of the churchyard, and on a tall dial-like tombstone, to the south-west of the church, a family epitaph was found describing Handasyde as a mason in Musselburgh, or, as it is rendered in the epitaph, CEMENTARII CONCHI POLENSIS. His own death is not recorded on the tombstone, but there are



Ach Handasyde Fecit

Fig. 1627.—Cramond.

various dates from 1729 to 1733. A few years ago this dial was found lying in an outhouse, broken in several pieces, and we were then informed by the gardener that it once stood in the neighbouring grounds of Lauriestoun. In 1886 it was repaired and placed in the grounds of the Edinburgh Exhibition, and on being returned to Cramond it was set up in front of the house. It now bears a modern finial, which is the "poppy-head" of a cast-iron railing. While in the Exhibition it was copied, at least once, and a copy, with a different support, was shown in the Exhibition of Decorative Handiwork held in Edinburgh in 1888. The height of the square base is 9 inches, above which to the top of the cornice is 3 feet 2 inches, and from thence to the top of the dial (not including the finial) 2 feet 2 inches. The total height is 6 feet 1 inch.

Lee Castle,* Lanarkshire.—This capital lion-supported sundial (Fig. 1628) stands within a short distance of the castle. The lion carries an enriched cartouch, on which is the Lock Heart, the origin of the cognomen of the family of Lockhart of Lee, and on its head the facetted dial-stone is skilfully poised (Fig. 1629). It is interesting to notice that the next dial, from Waygateshaw, in the vicinity, has also a lion support, that property during the sixteenth and seventeenth centuries having belonged to the Lockharts.

* We are indebted to Mr. Hugh Davidson, Lanark, for good photographs of this dial, and for bringing it under our notice.

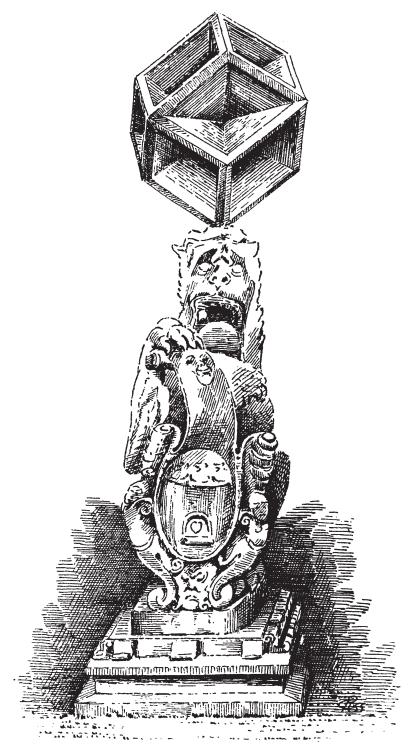


Fig. 1628. – Lee Castle. Front View of Dial.

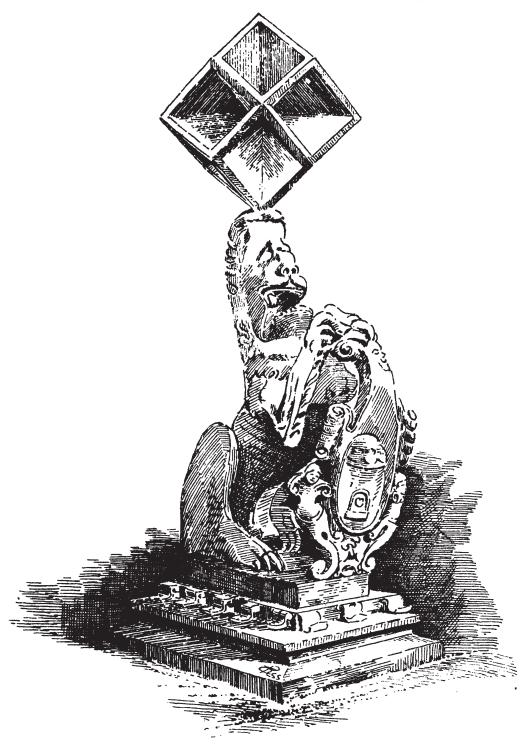


Fig. 1629.—Lee Castle. Side View of Dial.

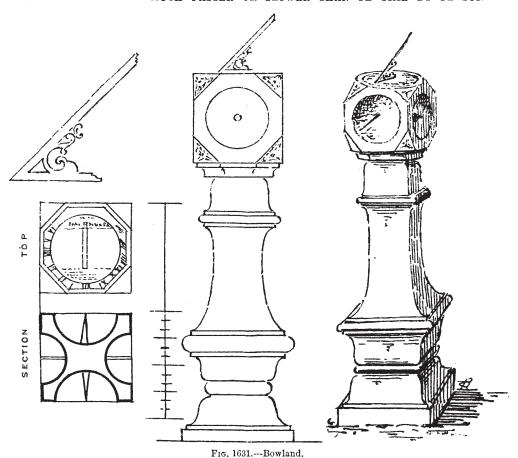


Fig. 1630. Waygateshaw.

Waygateshaw, Carluke, Lanarkshire (see Vol. IV. p. 406).—This dial (Fig. 1630), having a lion support, stands at present, along with other sculptured animal figures, over the old archway leading to the mansion-house of Waygateshaw, on the Clyde. The height of the whole is about 3 feet.

Bowland, Galashiels, Selkirkshire.—This dial* (Fig. 1631) is designed on the same principle as the one at Cadder; the square block of the dial-stone having its angles canted off on each face. There are four cuphollows measuring about 7 inches, each having a metal gnomon. On the upper surface of the dial-stone there is a horizontal dial of bronze or copper, and on each side of the gnomon is an engraved table for every day of the year, arranged in monthly columns, with the following inscription behind, which shows that dial-

makers were not antagonistic to watchmakers, but rather the reverse:—
SET YE WATCH SO MUCH FASTER OR SLOWER THAN YE TIME BY YE SUN



* This drawing is made from sketches by Mr. Anderson, architect, Edinburgh.

ACCORDING TO THE TABLE FOR YE DAY OF YE MONTH WHEN YOU SET IT. AND IF YE WATCH GO TRUE YE DIFFERENCE OF IT FROM YE SUN ANY DAY AFTERWARDS WILL BE THE SAME IN YE TABLE. JOHN BROWN, EDINBURGH. On the east side is the date June 1708, 11 day. The shaft measures 2 feet $7\frac{1}{2}$ inches high, and the total height is 3 feet $5\frac{1}{2}$ inches. The dial was brought to Bowland from St. Fort, in Fife, which at one time was in the possession of the family of Sir William S. Walker of Bowland.

Edmonston, Midlothian.— This dial (Fig. 1632) stands in front of the mansion-The dial and finial house. only are ancient; the shaft and pedestal date from early in this century. The dial has a resemblance to that at Cramond, but is of simpler design; it is in perfect order, with figures and lines clear and distinct, The centre squares measure $10\frac{3}{4}$ inches by 10 inches high, the height of the old dial-stone is 18 inches, and including finial 2 feet 4 inches. The shaft and pedestal are six-sided; the former is 2 feet 11 inches high, and the latter is 191 inches high. The total height of the dial is 6 feet 10 inches.

Cadder, Lanarkshire.— This dial (Figs. 1633 and 1634) stands in front of the old mansion of Cadder, about five miles north-east from Glasgow. Its shaft bears a

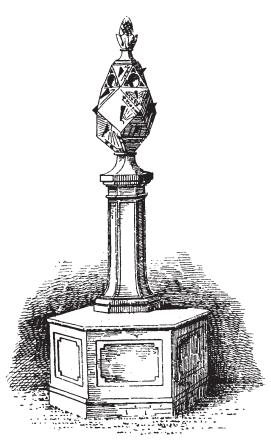


Fig. 1632.—Edmonston.

considerable resemblance to that at Cramond (Fig. 1626), but nothing could be more unlike than the two dials themselves—the latter being the most complicated of the type, and the other designed with a Doric simplicity which marks it as distinct from all its companions. Comparing the two shafts, it will be observed that they consist of the same general features. Two corresponding members at the base are decorated with carved foliage. From the cap moulding of both a curved slope leads up to support the dial. In the one this member is carved, and in the other it is plain. While this does not prove that the Cadder dial was

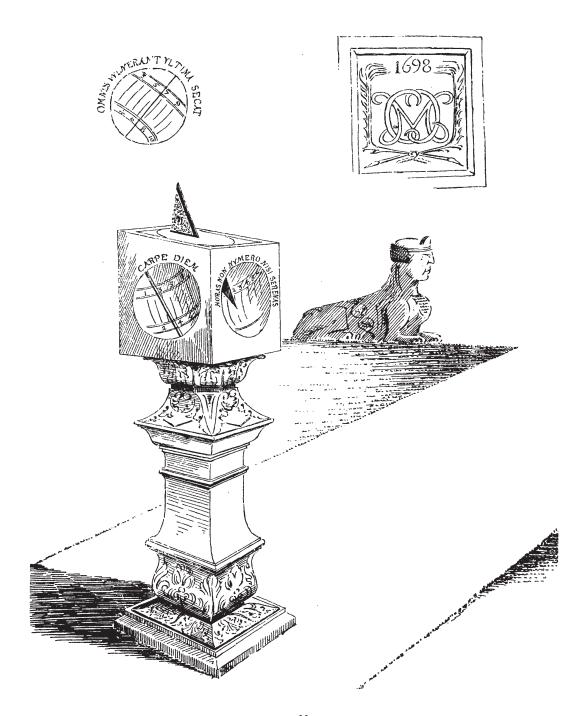


Fig. 1633.—Cadder.

designed by Handasyde, it is worth noting, as there are only thirty-two years between the dates of both works. The Cadder dial-stone consists of

a block $14\frac{3}{4}$ inches square, with a sloping upper surface; the height of the block is $13\frac{1}{8}$ inches and $14\frac{1}{4}$ inches; the height of the shaft is 3 feet. On the east, west, and south faces there are large cup-hollows, $9\frac{3}{4}$ inches in diameter, all carefully lineated. Over each hollow there is a motto; these, in the order above given, are:—

CARPE DIEM.
OMNES VVLNERANT VLTIMA SECAT.
HORAS NON NUMERO NISI SERENAS.

The gnomons consist of thin strips of metal stretched across the cups. On the sloping upper surface there is a metal dial-plate (which may be called a horizontal dial, not a usual feature in this type), the gnomon of which is the finest piece of design and workmanship of the corresponding feature of any known dial. It is a thin piece of brass most delicately perforated and chased, and containing the arms of the Maitland or Lauderdale family-a lion rampant within a double tressure. On the north side, in a panel, the initials of Charles Maitland and his wife, Lilias Colquhoun, are entwined (see Fig. 1633), with the date 1698. Lilias Colquhoun first married Sir John Stirling of Keir, and in their marriage contract Sir John settled on her in liferent his manor-place of Cadder. Sir John died in 1684, and shortly afterwards his widow married the Hon. Charles Maitland, third son of the third Earl of Lauderdale. She died in 1726, and

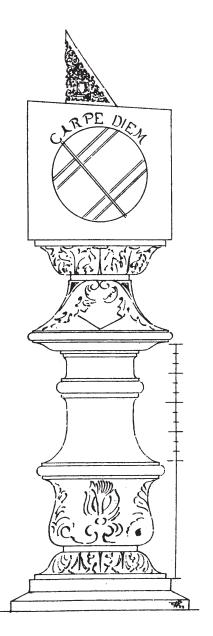


Fig. 1634.- Cadder.

was buried at Cadder. At the distance of a few yards from the dial two sphinx-like figures guard the approach.

Lock Inch, Wigtonshire.—Only the shaft and steps here are old. They indicate a dial of considerable elegance and importance. In 1889 Lord Stair added the capital and upper part in a suitable style, as shown by Fig. 1635. The lower step measures about 10 feet in diameter, and the shaft about 10 inches, and the whole height from the ground is about 10 feet. This dial may be regarded as forming part of the appurtenances of Castle Kennedy (see Vol. IV. p. 368).

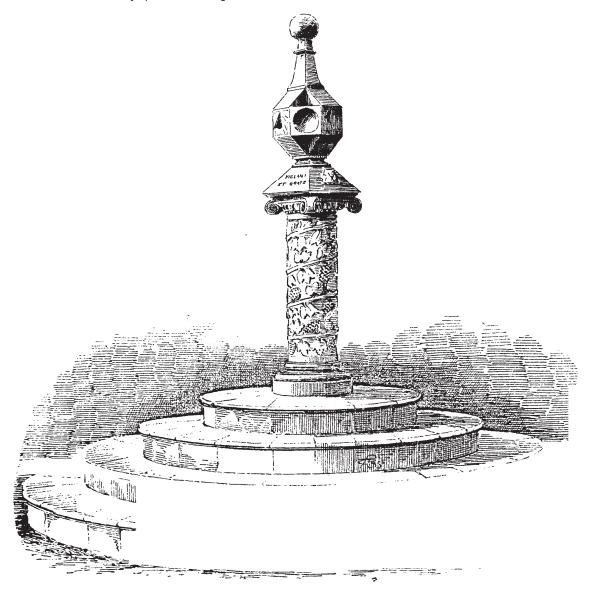


Fig. 1635.-Loch Inch.

Mount Melville, Fifeshire.—This very remarkable dial of the facetheaded type (Fig. 1636) contains certain features peculiar to the obelisks

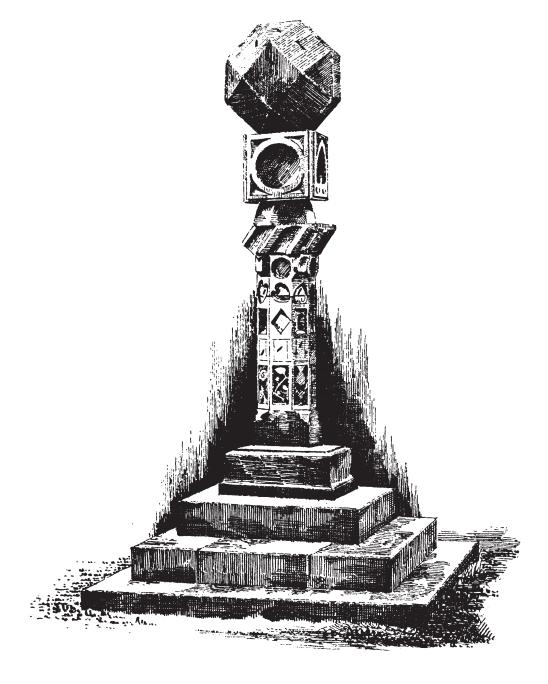


Fig. 1636.-Mount Melville.

and lecterns, and to those of Cockburnspath and Oldhamstocks. Thus, its shaft contains dials as in the obelisks, but differently arranged, being on an octagonal shaft instead of the universal square shaft of the latter, and the dials of a certain shape are arranged on a sequence all round, while on the obelisks there is no such sequence. There are (1) a series of plain dials; (2) oblong-shaped sunk dials, all upright except one, which is placed obliquely; (3) heart-shapes, variously turned; and (4), on the cardinal faces only, cup-hollows. At the base of the shaft there are upright panels with rose and thistle carvings alternately, except on one face, where two twisted serpents with indefinite carving beneath occupy the space. Above the shaft a collar contains a series of five cylindershaped hollows, and behind these four slanting, oblong sunk dials. Above the collar, and resting on a base, there is a square block not unlike the Cadder dial, having, like it, three large cup-hollows, which probably had also similar gnomons. At the back there is a large heart-shaped hollow. Above this square block is placed the facet-head, but not fixed, as will be observed, on the usual pivot principle. This singular structure contains seventy dials, twenty five of which are on the facetted sphere top, which measures about 18 inches in height. The block beneath is about 10 inches square.*

Rubislaw Den, Aberdeenshire. - We are obliged for a large photograph of this dial, and for information regarding it, to the proprietor, Mr. William Keith of Rubislaw Den. This fine monumental dial (Fig. 1637) was erected by the Earls Marischal in the garden behind their town house in Aberdeen. The house was demolished about the year 1789, and the name of "Marschal Street" and this dial are now probably the only memorials left of the Earls' residence there. The late Mr. Skene rescued the dial, and had it set up at the old house of Rubislaw, where it remained till the property fell into decay, and was let out in tenements. It then passed into the possession of the proprietor of Rubislaw Den, where it now stands in good preservation, except that its eight gnomons were cut off and stolen during a time when the house was unoccupied. The dimensions of the dials are—width of stone platform, 6 feet; width of base on which balusters stand and of table supported by them, 3 feet 11½ inches; the dial-block above is a cube of 17 inches; the cupsinking, 12 inches diameter; width of dial-block above, 131 inches; from thence to top of ball, 14 inches; height from top of platform to top of table, 3 feet 41 inches; total height from ground to top of ball, 9 feet 5 inches.

^{*} For photographs of this dial, and for information regarding it, we are greatly indebted to Mr. J. M. Balfour Melville of Strathkinnes.

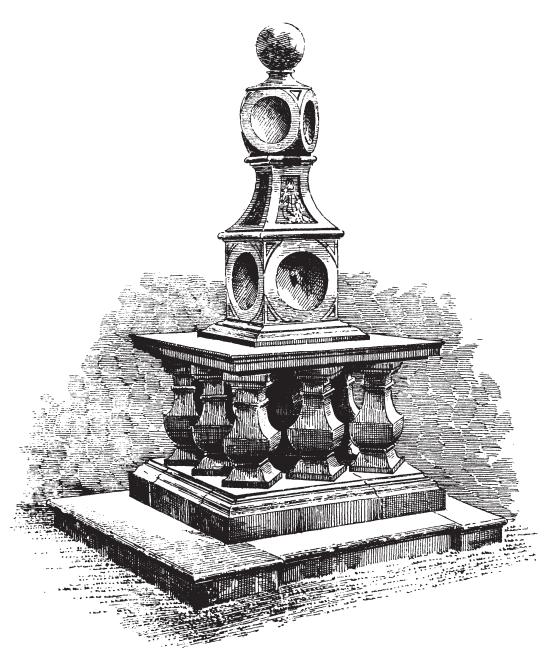


Fig. 1637.—Rubislaw Den.

Aberdeen.—We have to thank Mr. John Morgan of Rubislaw House for bringing this dial under our notice, and for a large photograph of it, as well as for information regarding it. The dial (Fig. 1638) belongs to the city, and stands in a property formerly called Arthur's Seat, now

SUNDIALS

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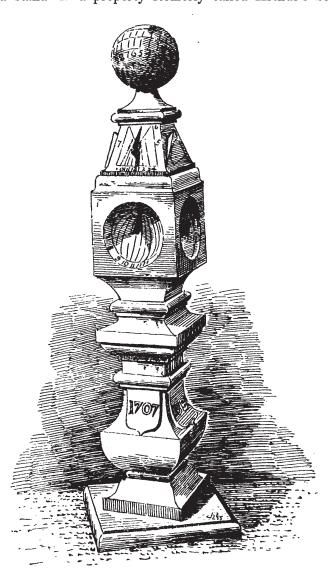


Fig. 1638.-Aberdeen.

absorbed in the Duthie Park, a public pleasure ground presented to Aberdeen by the late Miss Duthie of Ruthrieston. The dial-faces and the ball on the top are painted a light blue colour, and the lines and figures are gilt; there are shields on each of the four sides of the support-

ing baluster bearing respectively the initials C.G., G.B., the date 1707, and a representation of a mortar and pestle. This dial bears a considerable resemblance to the one at Midmar (Fig. 1639); and, omitting all above the square block with the cup-sinkings, it is not unlike the Cadder dial.

Midmar, Aberdeenshire (see Vol. II. p. 372).—This dial stands (Fig. 1639) in front of the grand old castle of Midmar. It is of quaint design, and contains nine dials. Its age is uncertain, but it is believed to have

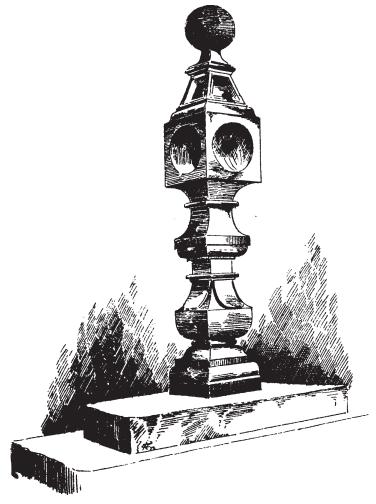


Fig. 1639.—Midmar.

been made a little over a hundred years ago. The drawing was made from a photograph kindly sent us by Miss Gordon, Midmar. The height of the dial above the steps is not quite 6 feet.

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Meadowbank, New Galloway, Kirkcudbrightshire.—We are indebted to the late Mr. Hamilton, Ardendee, for the sketches of this dial (Fig. 1640) which stands in front of Meadowbank House. It is an old dial-stone in the shape of a cube, with a circular hollow on top and square sinkings on the sides. A portion of the stone is left standing in the hollow on the top to act as a gnomon, and there is a gnomon of steel on one side, and a stone gnomon on another side.

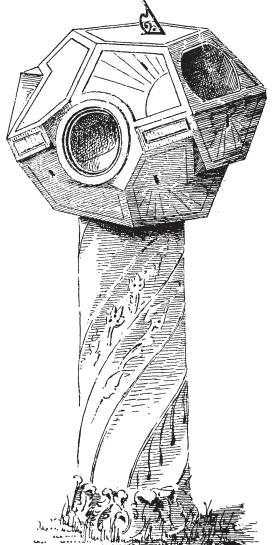


Fig. 1641.—Haddington.



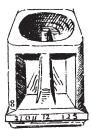


Fig. 1640.-Meadowbank.

side. The dial measures $11\frac{1}{2}$ inches square by 11 inches high; the opposite faces are similar to those shown.

Haddington. — This is a facet-headed dial (Fig. 1641), of a kind so complicated and irregular that no two sections through it would be alike. Its horizontal face on the top is five-sided, from which diverge five reclining faces, which grow into eight faces, and these again change and turn in a manner not easy to describe. These irregularities necessarily give the dial an unbalanced appearance from whatever side it may be viewed. There are four hollowed dials. Two of these are round, and on opposite faces; the other two are elongated into the appearance of the gunholes seen in mediæval castles. The one seen in the view is a recliner, and the opposite one is a procliner. Dr. Howden, to whom the dial belongs, informs us that when he got it it had no pedestal, and was merely placed for convenience on the shaft shown in the view, which is doubtless a piece of seventeenth century work, not unlike the shafts at Woodhouselee and Drummore. The block of the dial measures about 19 inches on the square by $16\frac{1}{4}$ inches high. The shaft is about 2 feet 5 inches high by $7\frac{1}{2}$ inches in diameter.

Haddington.—This dial (Fig. 1642) in its general conception is unique, although its parts are to be found in many others; but from its general idea it may be classed as a facet-headed dial. The cup-hollows on each of its octagonal faces are not unlike those found on the horizontal dial at Pinkie; and in the same way as at Pinkie, Newbattle, and other places, certain of the hollows have faces acting as gnomons. Between each of



Fig. 1642.-Haddington.

the hollows there is a mask. The peculiarity of this dial consists in its vase form, being hollowed out in the inside, and lineated so as to form a horizontal hollow dial. There is a hole at the bottom of the vase to allow the rain to escape. Its pedestal or support is gone; and Dr. Martine, to whom it belongs, says that the history of the dial is not known further than that it and the preceding dial from Haddington (Fig. 1641) were at one time companions at Bellevue, at the west end of the town, and that being a modern place, they were evidently wanderers there. The dial is 11½

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inches high bỳ $15\frac{1}{2}$ inches wide, and the basin is 6 inches deep. The cup-hollows surrounding the dial are $4\frac{1}{2}$ inches wide.



Fig. 1643.-North Barr. Front View.

North Barr, Renfrewshire.—This singular and graceful sundial (Figs. 3-8 1643 and 1644) stands in the centre of the old-fashioned, semi-decayed

gardens of North Barr, at a distance of a few minutes' walk up the Clyde from Erskine Ferry. There is something extremely droll and quaint in the conception of the lady who supports the dial-stone, with her remarkable headpiece and picturesque seventeenth century costume, as she stands

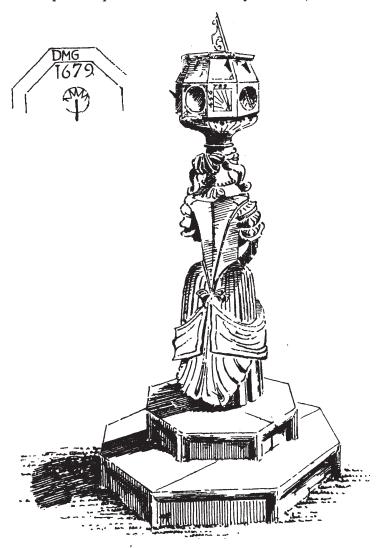


Fig. 1644.-North Barr. Back View.

gracefully holding a rose at her breast and smiling on the spectator. The two hair curls standing out in relief very considerably heighten her odd effect, and at the same time give apparent strength to her slender neck to carry the overhanging and weighty dial. The dial itself is an octagonal block with seventeen faces. On the perpendicular faces

there are cup-hollows alternating with plain face dials. The gnomon of the west hollow is a piece of metal stretched from side to side, with its under edge serrated like a saw. The hollows on one of the last faces are four heart-shapes, disposed somewhat as they are at Holyrood. On the horizontal dial, which is 14½ inches wide, there occur the initials of Donald Macgilchrist, with the date 1679. North Barr was for generations in the possession of a branch of the Stewarts of Darnley. North Barr Stewarts became extinct in the seventeenth century, and the last of them alienated most of his estate about 1670 to Donald Macgilchrist, a wealthy Glasgow merchant. He built the house of North Barr in 1676, and died in 1684. The dimensions of the dial are—height of lady, 3 feet $11\frac{1}{9}$ inches; height of lady and dial, 5 feet $3\frac{1}{2}$ inches; height of steps, 8 inches each; width of upper step, 3 feet \(\frac{1}{4} \) inch; of under step, 5 feet. The whole structure, which is in fine preservation, is cut out of The dial stands in its original position, and tells the grey freestone. hours with exactness.

Glamis Castle, Forfarshire (see Vol. 11. p. 113).—This dial * (Fig. 1645) has been classed with those of the facet-headed type, as it has their 7-22 distinguishing feature in a very pronounced form. It may be regarded as certainly one of the finest monumental dials in Scotland, befitting the majestic castle beside which it is erected. It consists of an octagonal base, on which stand four rampant lions, each holding a dial in his forepaws. The dial held by the lion facing the south is elliptic in shape, and measures 19 inches by 14 inches; the north one is round, and measures 16 inches in diameter; the west one is rectangular, and measures $15\frac{1}{2}$ inches high by $13\frac{1}{2}$ inches wide; the east one is $13\frac{1}{2}$ inches square. Between the lions there are twisted pillars, with curving in the spiral hollows, which support a canopy, from which a curved neck rises up, bearing the facetted globe, the dials on which are arranged in three tiers. The dimensions of the structure are—height from ground to platform on which lions stand, 3 feet 7 inches; height of lions, 5 feet 2 inches; the cornice above them is 12 inches thick; from top of cornice to under side of facetted head, 3 feet $3\frac{1}{2}$ inches high; the height of the facet-head is about 3 feet $5\frac{1}{2}$ inches, and it comprises twenty-four compartments, each compartment containing three or four facets with dials. The earl's coronet, supported by the four curved scrolls, is about 4 feet 9 inches high. The total height of the dial from ground to top of coronet is thus 21 feet 3 inches. Behind the lions, in the centre of the structure, there is an octagonal pillar 12 inches thick. The width of the lower step at the ground level is 10 feet 10 inches, and the width of the base of the structure at the level of the top of the second step is 5 feet 4 inches.

* For particulars regarding this dial we are indebted to Mr. Andrew Ralston, Glamis.

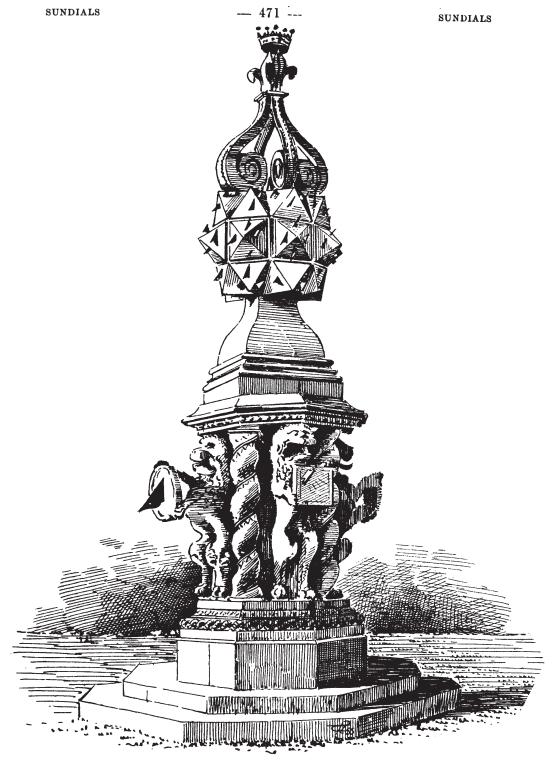


Fig. 1645.—Glamis Castle.

Portobello Tower, Midlothian.—There is a large collection of carved stones from various old buildings gathered together at this place, and amongst them is this sundial (Fig. 1646). It stands in front of the tower, and the steps are concealed with a garden rockery. The faces of the dial are very large, and consist of separate slabs cramped together; it is finished with a moulded tapering top, surmounted with a Scotch thistle.

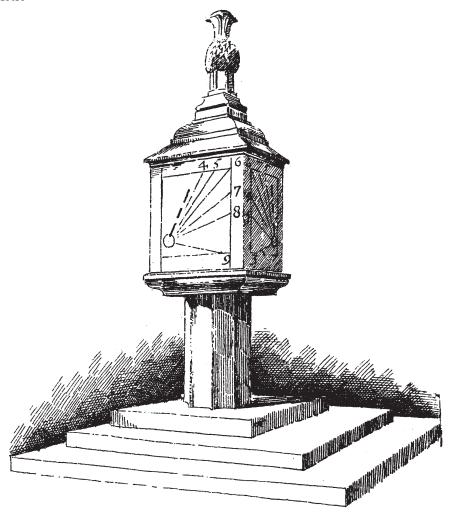


Fig. 1646,-Portobello Tower.

Newbattle Abbey, Midlothian (see Vol. III. p. 354).—There are two dials here (Fig. 1647) of a very monumental description. They are exactly alike in all respects, and stand in the gardens on the east side of the abbey. They are not, however, in their original position, having been moved from another part of the grounds. In appearance they bear a

25-33

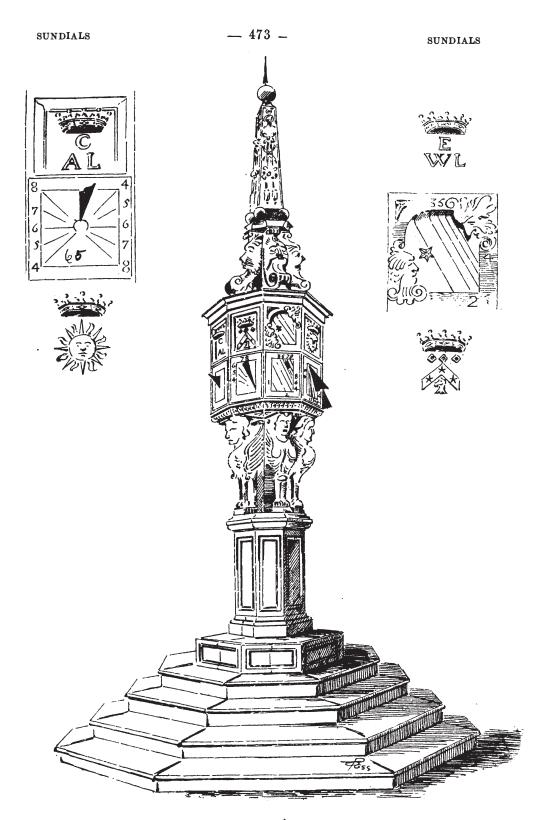


Fig. 1647.—Newbattle Abbey.

certain resemblance to articles of goldsmiths' design, and the pedestal seems thin for such a massive superstructure; this is, however, compensated for in a great measure by the wide-spreading steps on which the structure stands. The dial part is octagonal, and contains two tiers of oblong spaces. Four of the spaces, however, do not contain dials, but are filled (1) with coroneted initials of William, Earl of Lothian; (2) those of Annie, Countess of Lothian; (3) the arms of the earl; (4) a figure of the sun, the crest of the family. These are all drawn in detail (see sketch), as is also one of the slightly hollowed dials, where the profiles of diagonally opposite faces act as gnomons. Sir William Ker, of the Ancrum family, married, in 1631, Lady Ann Ker, who succeeded to Newbattle in her own right. He was created earl in the same year, and the dial was doubtless erected between then and 1667, the year in which the countess died.* The

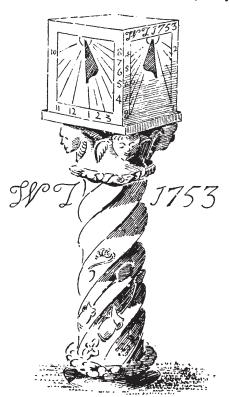


Fig. 1648.—Drummore House.

gnomons, figures, and lines of the dials have all been gilt. The total height, measuring from the surface of the upper step, is about 16 feet. Copies of these dials have been erected by Lord Haddington and Lord Home at their mansions.

Drummore House, near Musselburgh, Midlothian.—The shaft of this dial (Fig. 1648) belongs to the lectern type. The commonplace square block dial now crowning the shaft is not a part of the original dial; it is of red sandstone, while the shaft is of white sandstone, similar in material and design to the shaft at Woodhouselee. Both are twisted in the same manner, and similarly ornamented with foliage in the The winged heads, inhollows. stead of being placed in the hollows at the top of the shaft, as at Woodhouselee, are formed so as to make a capital; thus all the elements of design to be found in the one are found in the other.

The present insignificant dial bears the date of 1753, with the initials of W. Finlay, a former proprietor of Drummore.

Polton, Midlothian.—This drawing (Figs. 1649 and 1650) shows the

^{*} Since the above was written, Lord Lothian has found, from papers at Newbattle, that the date of the dials is 1635.

ruins of what has been either one or two dials, apparently of exceptional design. They are now built up against the garden wall so as to form a rockery, and are here sketched as they appear. The three lower dial-stones have been part of one structure. They are unusually fine in workmanship and design, all the figures and ornaments being raised in relief. The lowest stone is a cube of about $22\frac{1}{2}$ inches, and has large cup-

13-32

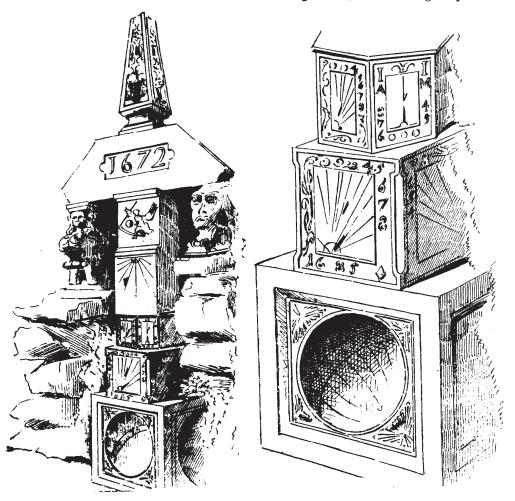


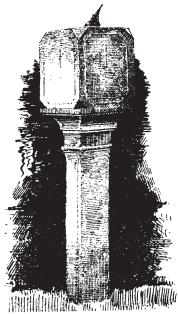
Fig. 1649 .-- Polton.

Fig. 1650.-Polton.

hollows of about 13 inches diameter. The next two tiers of dials are each cut out of one stone, the lower being a square of 13 inches by 22 inches in height, containing the date 1685; the next, of a polygonal section, is 9½ inches high, with faces of about 6 inches in breadth. On one of the exposed sides are the initials $_{\Lambda,M}^{I,I}$. These have all formed part of one dial, and when the exceptionally large size of the lowest stone is considered,

along with the careful finish and beauty of the whole, we are warranted in concluding that this must have been one of the finest of Scottish dials. The dial-stone immediately above, with the figure of Death and his scythe encircling the globe, appears to have belonged to a different structure. The two carved stones on either side are suggestive of having belonged to a dial similar in design to those of Newbattle; the left-hand figure would fit such a position as those standing on the pedestal of the latter (see Fig. 1647), while the carved head on the right hand, reclining on the scroll, recalls the similar features on the upper part of the Newbattle dials, and so likewise does the carved tapering finial. The lintel-like stone on which this latter rests may or may not be a part of the dial. It contains the date 1672.

Castle Park, Prestonpans, East Lothian.—This dial (Fig. 1651) was found by Mr. Hislop, Castle Park, lying in one of the bastions of the garden wall enclosing the old castle of Preston; the shaft was also discovered amongst the rubbish; so that in all probability this dial belonged either to the family at the castle or to that at Magdalens House. It is undoubtedly of the seventeenth century, the date of the latter house, and the period when extensive additions were made to the castle. It has been re-erected by Mr. Hislop.



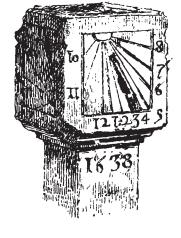
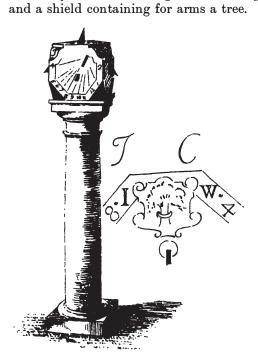


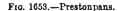
Fig. 1651.—Castle Park.

Fig. 1652.—Temple.

A sundial similar to that at Castle Park stands at the gate of Temple Churchyard, Midlothian, and is shown by Fig. 1652, a reproduction of a sketch kindly supplied by Miss Dundas of Arniston. It measures $8\frac{1}{4}$ inches square, and is dated 1638.

Prestonpans, Haddingtonshire. -- This dial (Fig. 1653) is lying in a mason's yard in the village. On the top are the initials T.C. and J.W.,





19-13

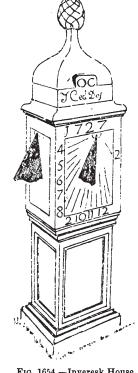


Fig. 1654.-Inveresk House.

Inveresk House, Midlothian.—This small, unpretending dial (Fig. 1654) stands in the garden of Inveresk House, where a dial (p. 362) has been already described. It is square on plan, and is about 5 feet high. It bears the initials of Oliver Coult, with some unintelligible contractions beneath, and the date 1727.

Nunraw, Haddingtonshire (see Vol. III. p. 353).—This dial (Fig. 1655) stands in the grounds of Nunraw House, and Mr. Walter Wingate Grey of Nunraw, in sending a photograph, writes: "The small dials include dials for Cairo, Ispahan, Jerusalem, Mount Sinai, Jamaica, &c., and also Savannah, Philadelphia, &c., which shows that it cannot be more than a hundred years old; also on one of the sides of the pillar there is a system of figures for making an equation of time and so called." The upper, or facetted, part has the usual dials, hollowed and plain.



Fig. 1655.-Nunraw.

Dunglass, Haddingtonshire.—This dial (Fig. 1656) stands on the summit of a circular artificial mound about fifty yards south-west from the ruined Collegiate Church of Dunglass (see Vol. III. p. 27). It is square on plan, and has very much the appearance of being a fountain, with what seems to be a broad projecting square basin; but it is a dial only. The pedestal (cut out of one stone) is fashioned with four pilasters at the angles; these are fully relieved, showing daylight between. The

19-10

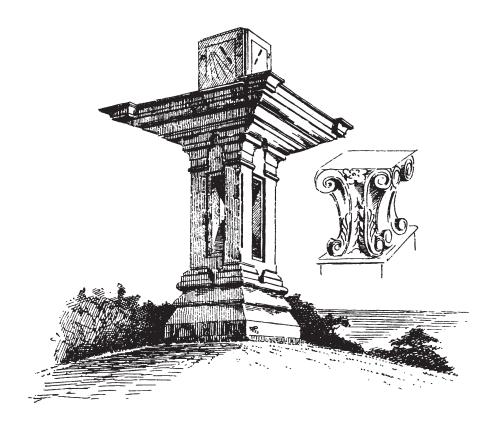


Fig. 1656.-Dunglass.

dials are on the top of the seeming basin, the upper surface of which is flat; they measure about 15 inches square by about 2 feet high; but it is doubtful if this part of the structure is in its original condition. There are various loose stones, moulded and carved, lying about, one of which is here shown, and it seems probable that these are connected with the dial. The height from the ground to top of basin is about 6 feet 2 inches, and across the basin the measurement is 5 feet 1 inch; the width across the pedestal is about $20\frac{1}{2}$ inches.

Troquhain, New Galloway, Kirkcudbrightshire.—We are indebted to Mr. William Barbour, the tenant of Troquhain farm, for information regarding this dial, and for having procured the sketch (Fig. 1657). The lower part or shaft is modern, of date 1855, and contains the initials of the Rev. George Murray, minister of Balmaclellan, and of his wife, Elizabeth Hyslop Murray, with the inscription HORAS NON NUMERO NISI SERENUS. The

dial itself is dated 1616, and it is thus the oldest dated dial we have met with in Scotland. There is an almost similar dial lying in front of Callendar House, Stirlingshire.

Oxenford, Millothian.—There are three dials at Oxenford Castle. The first stands in the centre of the garden; it is a plain circular horizontal dial, with a marble dial-plate. The second stands



29-26

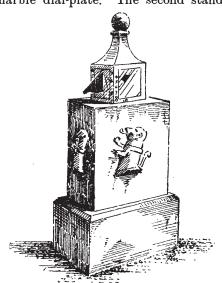


Fig. 1657.-Troquhain.

HORAS

Fig. 1658.—Oxenford.

in the old churchyard adjoining the castle; it is a square horizontal dial, and has also a marble dial-plate, which, in addition to the figures, has the name James anderson cut on it. The third dial, of an extremely simple design, is the one shown by Fig. 1658. On each face of the square pedestal there is cut a bear—evidently the crest of the Macgills of Cousland, from which place this dial was brought. There are three dials on the block above. The dimensions of the dial are—height of base (which is modern), 13½ inches; the pedestal, 17½ inches high by 15¼ inches wide; dial, 9 inches high by 8¾ inches wide; total height, 3 feet 10 inches.

29-27

Barnton, Midlothian.—This dial (Fig. 1659) stands on the west side of Barnton House, anciently known as Cramond Regis. It contains

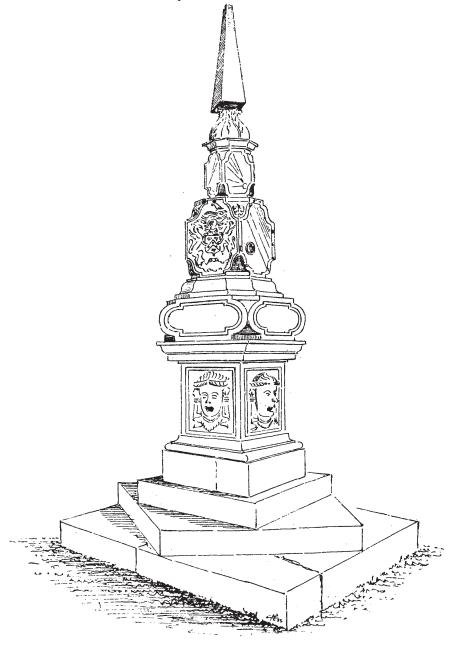


Fig. 1659.- Barnton.

the arms of Lord Balmerinoch (Fig. 1660), from which we may infer that it is not in its original position, as the Barnton possessed by the Balmerinoch family was only the eastern part of the property now known by that name; and the old house of Barnton, built by the Lords Balmerinoch in 1623, was situated not far from the village of Davidson's Mains, where without doubt this dial also stood. John, fourth lord, sold

Barnton in 1688, the year in which his son Arthur, sixth lord-who was fated to end his days on Tower Hill-was born. We may be almost certain that this dial was erected by the fourth Lord Balmerinoch; its details forbid an earlier date being assigned to it than towards the end of the seventeenth century. It contains eight dials, two of which have cup-sinkings. The open pierced mouths of the masks in the lower part of the structure are suggestive of a fountain. The dial rests on steps placed anglewise, as in the case of its companion (described at p. 408).

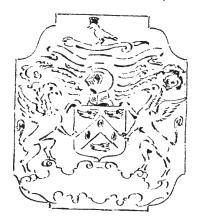


Fig. 1660.-Barnton.

The history of this latter dial cannot, however, be made out. The whole height of the Balmerinoch dial, including steps, is 10 feet $2\frac{1}{2}$ inches.

Nisbet Farm, Pencaitland, Haddingtonshire.—This fragment (Fig. 1661) lies in the garden rockery beside the one already described (Fig. 1496). Nothing remains to indicate how it was originally finished. There is a dowel mark on the top, suggesting that the

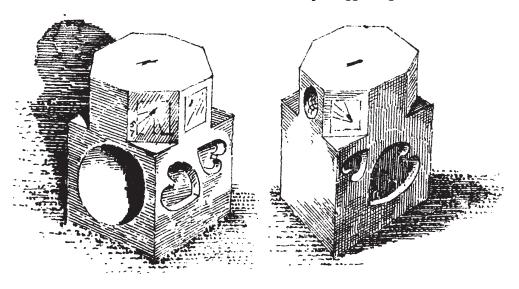


Fig. 1661.-Nisbet Farm.

octagonal part was continued, probably as a shaft with dials. The whole structure would stand on some kind of pedestal. It is not unlikely, from its being in the possession of the Handasydes of Nisbet, that it may

Fig. 1662. -Pinkie.

also, like its companion, be the work of Archibald Handasyde.

Pinkie, Midlothian (see Vol. 11. p. 392).—This dial (Fig. 1662) stands on the top of the old garden wall on the east side of Pinkie It is canted a House. little to one side, so that its face does not coincide with the line of the wall. The structure is square throughout. On the spaces immediately above the wall-cope there appear to have been painted dials, none of the lines being incised. The crowning obelisk resembles that of the dial at Newbattle. This is, however, a very characteristic feature of the architecture of the period, and is to be found crowning the pillars of the entrance gate at Pinkie. and at numerous other places throughout The 'measurecountry. ments are—the height of the wall on which the dial stands is about 10 feet, and from the cope to the top of the balls supporting the obelisk is about 6 feet; the obelisk with the stone ball on top about 3 feet 6 inches; the face of the dial is 23¹/₄ inches in breadth.

West Pilton Farm, Granton, near Edinburgh.—This dial (Fig. 1663) stands in the farm-house garden. It surmounts a short modern Doric column. The dial has only one face, and, judging from the rounded appearance of the back of the stone, it appears to have been cut from a split boulder.

Forgue, Elgin.—This dial (Fig. 1664) was at one time built into a wall, and appears to have been a corner dial. It has been mounted on a pedestal as shown, and has been fixed on the buttress of St. Margaret's Church, Forgue. The Rev. William Temple, to whom it belongs, traces its possession back through five generations of paternal ancestors and to his brother (whose obituaries have all



Fig. 1663.-West Pilton Farm.

been carved on the pedestal). The dial stone is 19 inches high

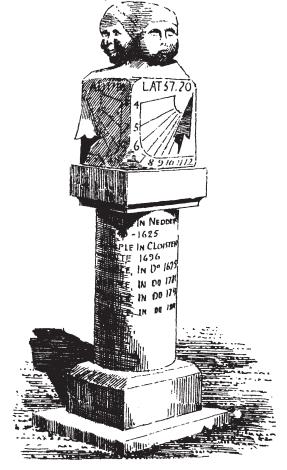


Fig. 1664, -- Forgue.

by 10 inches square, and is dated 1710. We have already referred to a similar dial at Pitmedden, made, according to tradition, by the same sculptor.*

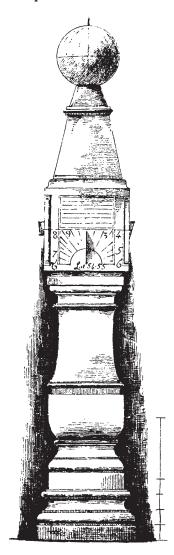


Fig. 1665.—Castle Wigg.

this dial, and Mr. M'Currach, stonecutter, Huntly, for a photograph.

Castle Wigg, Kirkcudbrightshire (see p. 248).—We are indebted to Mr. Galloway for a sketch of this fine sundial (Fig. 1665). It is of square, massive construction, 8 feet 5 inches high, and has four dial faces, each about 16 inches square (on one of which there is a table from which the difference between Greenwich and local time may be calculated). On the top ball there is a central line divided to indicate time by the shadow travelling round the ball itself, a divided circle with a gnomon at top, and another on one side at bottom.

Ladylands House, Ayrshire.—This dial (Fig. 1666), in the garden of Ladylands, has a very graceful pedestal finished with a voluted capital. On the pedestal occur the initials of William Cochrane of Ladylands, and his wife, Catherine Hamilton, and on the opposite side the year 1821; but it is believed to be of an older date. The dialstone on the top does not appear to us to be an appropriately formed termination. It will be observed that it is like the capital of an obelisk dial, and has the appearance of being merely placed there, and not of being specially designed for its position.

* We have to thank the Rev. Mr. Temple, Forgue, for information regarding

14-27

27-11

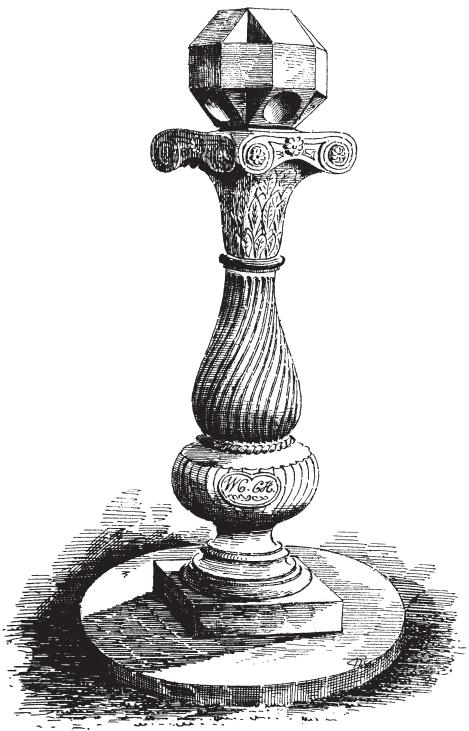


Fig. 1666.—Ladylands House.

4. Horizontal Dials.

The dials of this type are so numerous that a list of them would probably include the name of every parish in Scotland, and the making

of them has continued down to our own time. Horizontal dials may be divided into two classes—(1) those which in appearance are not unlike a card-table, consisting of a pedestal supporting the flat dial-stone, which is either square, octagonal, or round; (2) the class in which the top of the pedestal itself becomes the dial.

Ruchlaw, Stenton, Haddingtonshire.

—This is a typical example of the class (Fig. 1667). It has a marble face inserted in the stone table, which bears the name ARCHIBALD SYDSERF, ROUGHLAW. His initials (see p. 425) occur on a stone at Ruchlaw, dated 1663.

36-12

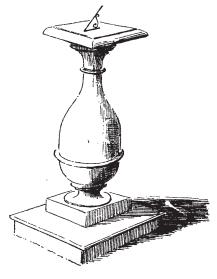


Fig. 1667. - Ruchlaw.

Drummond Castle, Perthshire.—

Fig. 1668 is from a rubbing, kindly obtained for us by Mr. Henry Curr, from one of two brass dials which stand on the garden terrace at

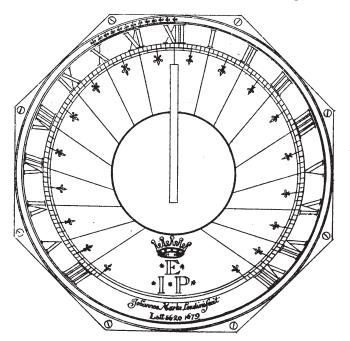


Fig. 1668.—Drummond Castle.

Drummond Gardens. It contains the initials of John, Earl of Perth, surmounted by an earl's coronet, with the inscription on the margin Johannes marke londing fect latt 56 20 1679. The plate measures $11\frac{5}{8}$ inches across.

Cairnie, near Balcarres, Fifeshire.—This sundial (Fig. 1669), which is dated 1650, and contains the initials S.I.L. and D.C.R., was, it is conjectured by the Rev. J. Wood Brown of Gordon, brought from Pitcorthy, in the neighbourhood. In the East Neuk of Fife it is stated that Wester Pitcorthy

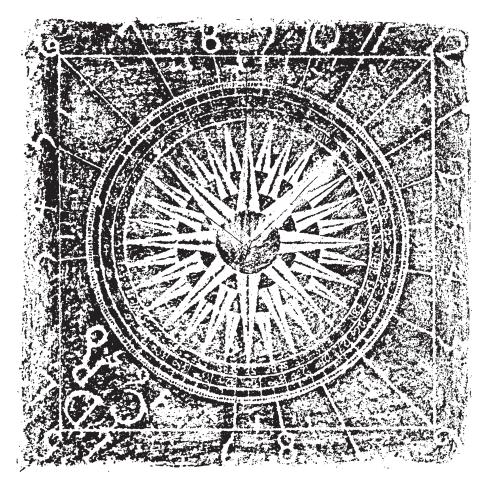
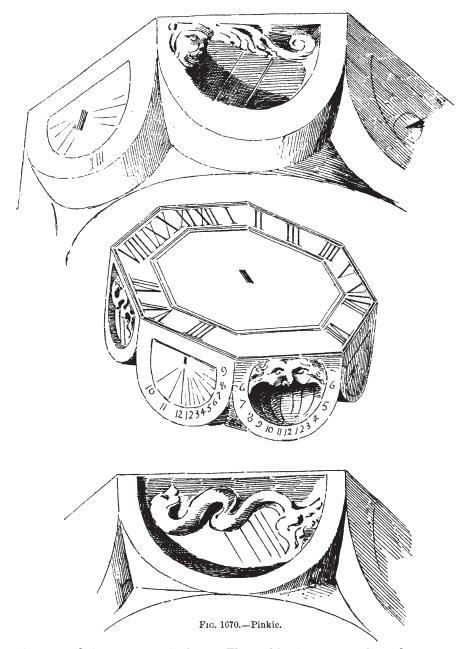


Fig. 1669. - Cairnie.

was the dower-house of the estate of Innergellie, and that a Dame Christian Rutherford in 1635 was infeft in an annuity from Innergellie. This would suggest that the other initials are those of Sir James Lumsden of Innergellie, the only difficulty being that these parties were not husband and wife, so far as is known. The dial is well cut in stone, and

has the frequent mariner's compass face enclosed in circles, with the degrees and other signs minutely carved. It measures 4 feet 2 inches in height.

Pinkie, Midlothian (see Vol. II. p. 392).—This is one of the finest examples of the class (Fig. 1670), but it is unfortunately broken into two



pieces, and its support is lost. The table is octagonal, and measures 16 inches across. The face of the dial is beautifully cut, and has fine

figures. In appearance the dial resembles the upper part of the typical

Norman capital. The scalloped sides are 5 inches deep, and each contains a dial, three of which are hollowed. In the upper part of the hollows occur carved twisted serpents, which recall those on the Lamancha dial (p. 430).

Craigton, Linlithgowshire.*—This dial (Fig. 1671) is situated in the garden of the seventeenth century mansion-house of Craigton; it has a circular baluster support with boldly cut egg and dart enrichment supporting a square abacus, on which is placed the bronze dial-plate.

Elie House, Fifeshire.—There is a marble dial here, which was made in Italy and brought to this country by one of the Anstruthers of Elie. The metal plate, by

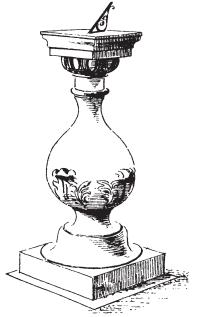


Fig. 1671. -Craigton.

Heath of London, contains the Anstruther arms and motto Periissem.

Hatton House, Midlothian.—This is the fifth dial (Fig. 1672) described as existing at Hatton (see ante, p. 358). The pedestal is carved in imitation of the trunk of a tree—a poor design, which finds great favour in modern terracotta garden-work. The table is round, and measures 26 inches in diameter, and in it was fixed the metal dial-plate, now lost. The height of the dial is 3 feet 7 inches.

Polmaddie, near Rutherglen, Lanarkshire.—The following interesting account, accompanied by a photograph, of this dial, from which Fig. 1673 was made, was kindly communicated by Mr. John



Fig. 1672.—Hatton House.

* We are indebted to the Rev. Mr. Primrose, Broxburn, for bringing this and various other dials under our notice.

32-16

35-16

Parker, accountant, Glasgow. The pillar and table are of freestone, and in the table a square cavity is cut, in which is inserted a square

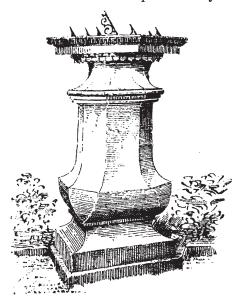


Fig. 1673.--Polmaddie.

cube of hard slate on which nine dials are cut. The centre one is for Glasgow alone. Smaller dials at the four corners show the hours at different places, corresponding to the hour at Glasgow. Thus, when the shadow indicates noon at Glasgow, the stile on the upper left-hand circle gives an hour in the morning at Boston or Charlestown, not the same in each, but both morning, while that on the upper right-hand corner gives an evening hour at Alexandria or the Cape of Good Between these corner dials Hope. at each side there are three smaller dials recording the time at only one place each.

Mountquhanny, Fifeshire (see Vol. IV. p. 268).—This dwarf dial (Fig. 1674), 2 feet 2 inches high by 1 foot $7\frac{3}{4}$ inches broad, was brought to its present position from Murdoch Cairnie. The inscription, NON HORAS NUMERO NISI SERENAS, is modern, while the dial is supposed to be about a century old.



Fig. 1674.--Mountquhanny.

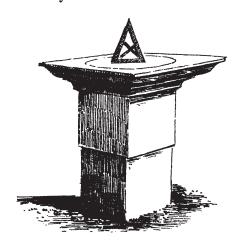


Fig. 1675 .- Culcreuch.

Culcreuch, Stirlingshire (see p. 255).—This is another dwarf dial (Fig. 1675), of about the same dimensions as the last described; it stands in the gardens of the old mansion-house.

Auchterhouse, Forfarshire (see p. 229).—This (Fig. 1676) is an. other good example of the cardtable type of dial; it is under 3 feet high, and is massive in its design, with figures boldly cut on the stone face, and is probably of about the same date as the Ruchlaw dial.

Croft-an-Righ, Edinburgh. This massive, weather-worn dial (Fig. 1677) stands in a market garden to the east of the old house of Croft-an-Righ.

North Leith.—This dial (Fig. 1678), entirely of stone, is in the manse garden at North Leith.

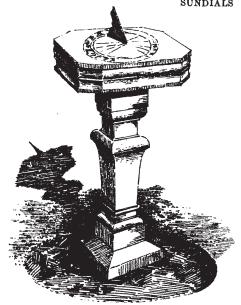


Fig. 1676.-Auchterhouse.

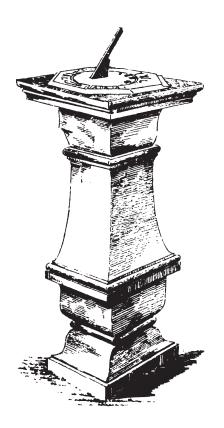


Fig. 1677. - Croft-an-Righ.

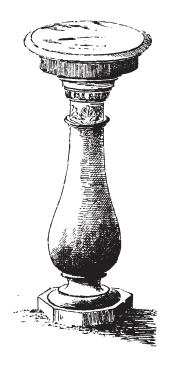


Fig. 1678. - North Leith.

Aberdour, Fifeshire.—This quaint dial (Fig. 1679), drawn from a sketch by Mr. John D. Michie, artist, stands in the gardens of "The Place" of Aberdour. It belongs to the second class of horizontal dials. Its square ornamented pedestal, resting on four large balls, is similar in

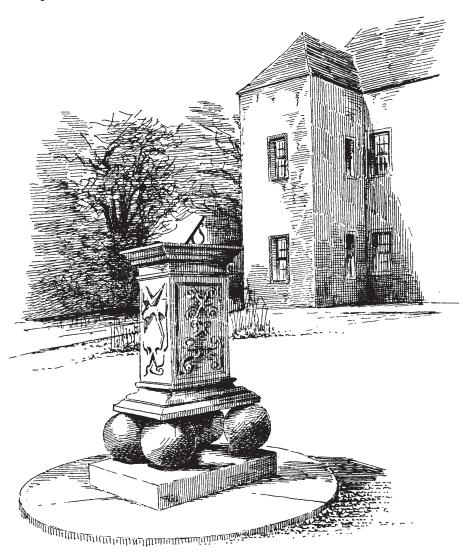


Fig. 1679.-Aberdour.

idea to the pedestal of the dial at Pitreavie, about four miles distant (see p. 428), and both rest on a raised pavement, which is of a circular form here, and octagonal at Pitreavie. From information supplied by Mr. Patrick Borrowman, it appears that on the north-west face of the

pedestal there is a coronet with the insignia of the Order of the Garter, and the motto hom sold qui mal y pense, and on the south-west face the Douglas heart. The south-east face contains what appears to be a clam-shell, and the north-east face a grotesque and undecipherable sculpture. The dial is set north-east and south-west, so that twelve o'clock falls exactly at the north-east corner of the stone. The letters are on the edge of the stone, and a circle contains the degrees numbered on it within.

Glasserton House, Wigtonshire.*—The architectural features of this dial (Fig. 1680) recall to mind the "Gothic" work sometimes produced by the brothers Adam. Glasserton House down to 1740 was a principal



Fig. 1680.—Glasserton House.

seat of the Earls of Galloway. About that date it was burned, and afterwards became the residence of Admiral Stewart, a younger son of the earl. The dial probably dates from about the middle of last century; it has a modern dial-plate.

* We have to thank Mr. Galloway for a pencil sketch of this dial.

Whitehouse, Cramond, Midlothian.—This sundial (Fig. 1681), which stands in the garden of Whitehouse, contains four vertical dials on the frieze of its shaft, along with its horizontal table-dial. The latter is a circular strip of metal cut out like the letter O, and is 3 or 4 inches in breadth, with the figures and lines cut on it. The gnomon, of which

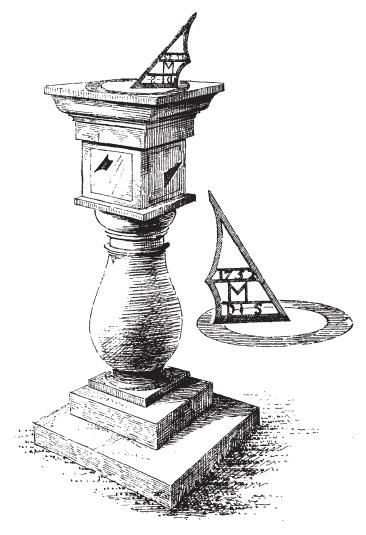


Fig. 1681.-Whitehouse.

an enlarged sketch is given, is very large, being about 11 inches high by $7\frac{1}{4}$ inches. It contains the initials $\frac{M}{D.S.}$, with the date 1752, and on the dial-plate there is the inscription MR DAVID STRACHAN, with the date 1732. Mr. Mackay of Whitehouse informs us, from his manuscript notes, that Strachan's conveyance to the property is dated 21st May 1750,

that he was a bailie of Leith, and a prominent man in the affairs of the

locality till his death in 1771. It thus appears that if the stonework of the dial was made by Strachan after he purchased Whitehouse, he must have brought the plate with him from some other place. The horizontal dial measures $9\frac{1}{4}$ inches high by $9\frac{1}{2}$ inches in breadth, and the table is $20\frac{1}{4}$ inches square, and is 4 feet from the ground.

20-19 Lethington Castle, Haddingtonshire (see Vol. III. p. 256).—A round horizontal dial with a baluster shaft stands in front of this ancient castle; it is undated, but on its metal face is engraved DAVID LYON SCULPSIT.

Niddrie Marischal, Midlothian (see Vol. II. p. 62). — This is a fine example of the second class of horizontal dials (Figs. 1682 and 1683); it stands in front of the mansion-house, on the edge of a swift-flowing burn. The arms of the Wauchopes of Niddrie, with all the accessories, are very skilfully wrought on the pedestal and

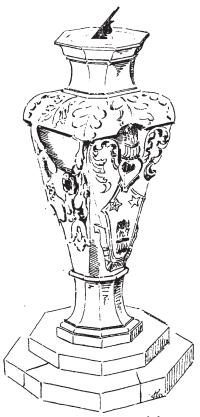


Fig. 1682.—Niddrie Marischal.

fully wrought on the pedestal, and on the metal face is the inscription JACOBUS CLARK DUNDEE FECIT.

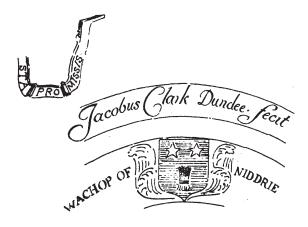
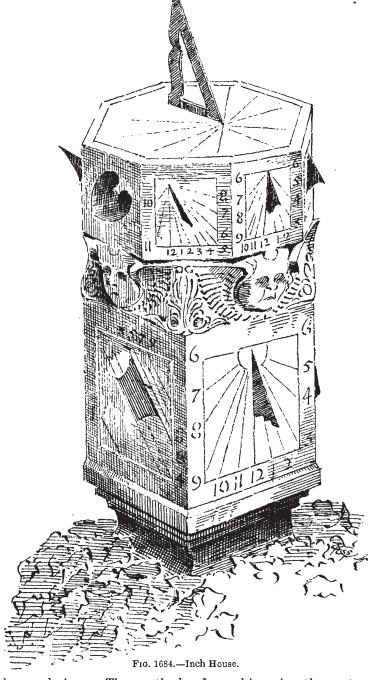


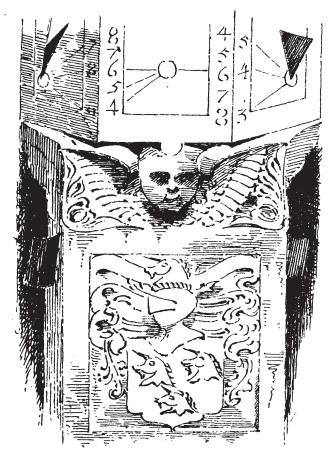
Fig. 1683.—Niddrie Marischal.

Inch House, Midlothian (see Vol. III. p. 528).—This dial (Fig. 1684), from the garden of the old mansion-house of Inch, is a simple and



very clever design. The method of working in the octagon top above the square below is effective, and quite in the style of the early

seventeenth century. The lower part of the dial, which appears to be quite plain, is concealed with ivy. The under dials measure 81 inches



F10, 1685.-Inch House.

square; the octagonal portion measures $11\frac{1}{2}$ inches across, and each of the eight dials is $4\frac{3}{4}$ inches square. There are twelve dials in all; two

of them contain heart shapes on the east and west sides respectively; the north side (Fig. 1685) contains the Preston arms, very delicately carved.

Haddington.—A dial (Fig. 1686) of this type stands in the garden of Haddington House, a fine old mansion near the church (see p. 64). On the bronze plate are the initials A.M. K.C., and the date 1688.

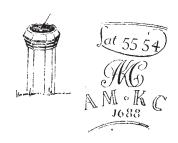


Fig. 1686.—Haddington.

Craigiehall and Hopetoun, Linlithgowshire.—The horizontal dials at Craigiehall (Fig. 1687) and Hopetoun are almost identical. The carved

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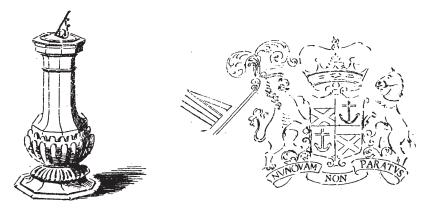


Fig. 1687.—Craigiehall.

Fig. 1688.—Craigiehall.

work on the pedestals was probably wrought by the same hand. On the first-named is the inscription MADE BY ENGLAND, INSTRUMENT MAKER TO

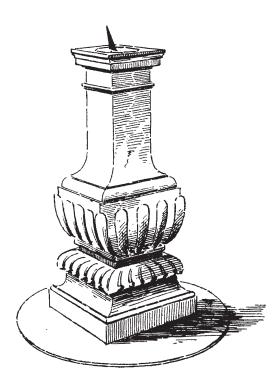


Fig. 1689.-Houston.

HER MAJESTY AT CHARING X, LONDON, with the arms of the Marquis of Annandale (Fig. 1688) quartered with those of his wife, a Fairholm of Craigiehall.

Houston, Linlithgowshire (see Vol. II. p. 512).—This is a massive square dial (Fig. 1689), which probably dates from the latter part of the seventeenth century; it stands on a circular stone base, which is flush with the ground, beside the old mansion of Houston.

Elsick, Kincardineshire.—
This dial (Figs. 1690 and 1691), as may be judged from the plate, belonged to an agriculturist. Mr. J. Crabb Watt, advocate, to whom we are indebted for bringing it to our knowledge, and for

sketches of it, informs us that James Rae, whose name is engraved

32-16

on the plate, was a farmer at Crowhillock, Kinneff, father of the celebrated Rachel Rae, an excellent fiddler, in whose house Neil Gow

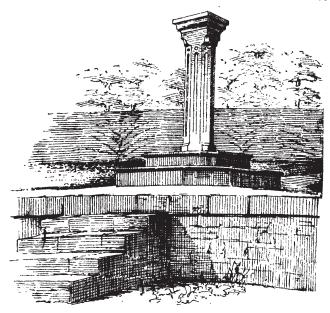


Fig. 1690.—Elsick.

composed "Ratchell Rae's Rant," and his strathspey "Crowhillock." The dial was shifted about from one farm to another until its present owner,



F10. 1691.—Elsick.

Mr. Forbes, got possession of it, and set it up in the garden of Elsick House. The dial bears the inscription wm. NICOL FECIT, LATITUDE 56.

Portobello, Midlothian.—This is a dial (Fig. 1692) of great interest, as it is known to have been the work of Archibald Handasyde, and it is pleasing to learn that it still remains in the possession of his descendants of the third generation. His grandson, the late Mr. Handasyde, had it erected in his garden at Windsor Place, Portobello, where it now stands. The whole is of stone, and is about 4 feet high; the face is rudely cut, and is lettered from 1 to 8 and from 4 to 12, and has the date 1775.



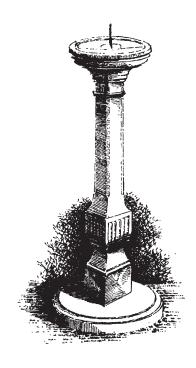


Fig. 1692.—Portobello.

Fig. 1693.-Auchterhouse.

Auchterhouse Manse, Forfarshire.—For the sketch from which the view of this very graceful dial (Fig. 1693) is made we are indebted to Mr. Robertson, Dundee. The dial is in the manse garden; it stands on a circular base 4 inches high by 21 inches in diameter; above this the dial rises 3 feet 6 inches high; the base is $5\frac{1}{2}$ inches square, and the shaft tapers from 4 inches to $3\frac{1}{2}$ inches; the disc is 13 inches in diameter.

Colonsay House, Isle of Colonsay.—This dial (Fig. 1694) is from a sketch by Mr. Galloway. It stands in an extensive and beautiful

garden; the date on the house, the residence of Major-General Sir John M'Neill, is 1722, and probably the date of the dial is the same.

Bargaly, near Minnigaff, Kirkcudbrightshire. — This view and plan (Figs. 1695 and 1696) are made from a sketch by Miss Johnstone, Minnigaff Manse, and the following information communicated by her is interesting. The dial is the handiwork of Andrew Heron of Bargaly, who died in 1729; it bears his initials and those of his wife, Mary Graham, cut on the corners of the dialstone (Fig. 1696). Advocates' Library Macfarlane Mss., Vol. 1. p. 517, occurs the following entry: "There are some stones on the two gates of the churchyard with

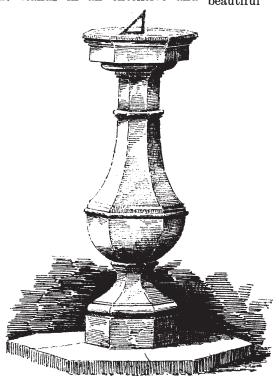


Fig. 1694.--Colonsay House.

some proper inscriptions from the Psalms, and a dyal in the middle of the churchyard, all done by Bargaly's own hand." The dial is not in any



Fig 1695, -- Bargaly



Fig. 1696.-Bargaly.

way to be regarded as a churchyard monument, as Bargaly and his wife are buried in a mausoleum, erected in his lifetime, beside the mansion-house of that name. Miss Johnstone notes that Heron was married about 1678, and thinks the dial was erected about that time.

Minnigaff, Kirkcudbrightshire.—The description we received of this dial* (Fig. 1697), from the late Mr. George Hamilton of Ardendee, is that it is an old dialed market cross with a "louping-on" stone along-

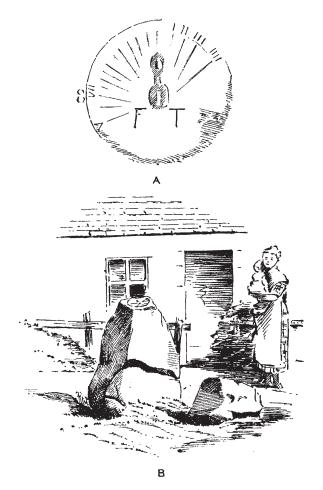


Fig. 1697 .- Minnigaff.

side. The dial is very primitive, and is a rough unhewn whinstone (Fig. B); the top is squared, and bears a horizontal dial about 9 inches in diameter (Fig. A).

^{*} The drawing is copied from a sketch by Miss Johnstone.

Neworth, Kelso, Roxburghshire.—The drawing of the dial at Neworth (Fig. 1698) is made from a watercolour sketch by the designer of the dial, kindly lent to us by his great-grandson, Mr. Patrick Robertson, Fountainhall. Mr. Robertson informs us that his ancestor made the dial in 1760, when he was a very young man, and had the pedestal hewn by a local mason at Ednam, where it was first put up, and after being once or twice removed, as the family changed their abode, it was finally brought to Neworth by the son of the designer when he purchased that property in 1854. The dial-plate is of metal.





Fig. 1698.-Neworth.

Fig. 1699 .- Ardgowan.

Dials at North Leith (see p. 491) and Ardgowan (Fig. 1699) are very similar in design to the last described.

Cults, Fifeshire.—There is a simple dial here (Fig. 1700), which stands

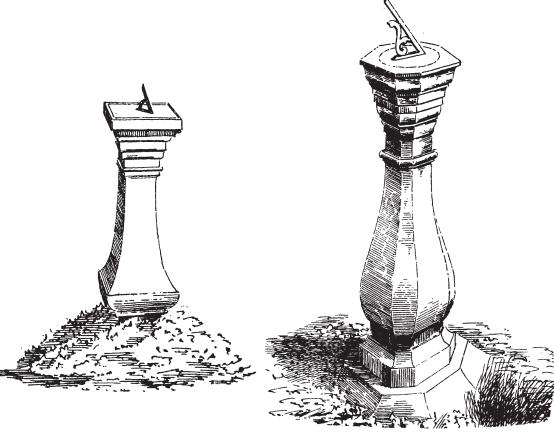


Fig. 1700.—Cults.

Fig. 1701.--Gagie.

in the manse garden. A pencil sketch sent us by Mr. T. S. Robertson, architect, Dundee, shows its base to be quite overgrown with ivy.

Gagie, Forfarshire.—Gagie House is illustrated in this volume, p. 275, where the position of the dial (Fig. 1701) is shown in the old-fashioned garden. As will there be seen from the sketches, the whole place is in admirable keeping, the old trees, the summer-house, and turreted mansion realising on a small scale a gentleman's establishment of the seventeenth century.

Tongue, Sutherlandshire.—There is a companion dial (Fig. 1702) at Tongue to the one already described on p. 415; it has an octagonal shaft about 9 or 10 inches square, with a rounded top on which there is a horizontal dial.

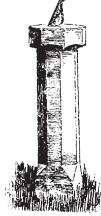


Fig. 1702.-Tongue.

Newhall, Penicuik, Midlothian.—This dial (Fig. 1703) may be classed 3-7 with those of the horizontal type, although the globe supported by the hollow cylinder-shaped figure which forms the gnomon is a feature

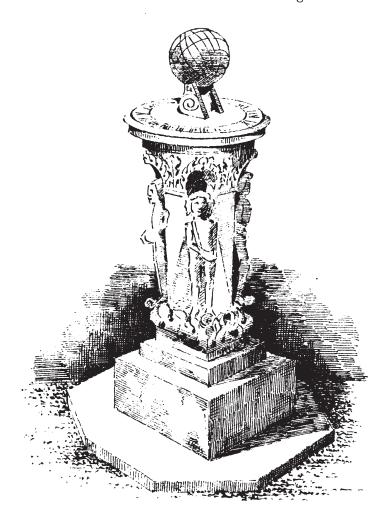


Fig. 1703.-Newhall.

unusual in such dials. The dial is probably the production of a local sculptor, specimens of whose work may be seen scattered about the village of West Linton. A dial there (p. 387) bears a considerable resemblance to this one, and they are probably by the same hand.

III. MODERN DIALS.

The practice of dial-making has never entirely died out in Scotland, but the character of the art exhibited in the dials of the seventeenth century seems to have gradually deteriorated during the eighteenth century, and to have almost entirely perished in the nineteenth. Some modern sundials, although of considerable size, and exhibiting a worthy ambition to rival the more ancient ones, are wanting both in the scientific and artistic elements which distinguished their forerunners.

The Haining, Selkirk.—This is a singular modern example (Fig. 1704), and may be well called a masonic dial, since it contains various symbols

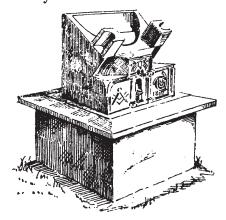


Fig. 1704.—The Haining.

of the craft—an arch springing from Ionic columns enclosing the all-seeing eye within a wreath, the compass, square, and triangle, and various other figures. The dial is the work of a hewer who was employed at The Haining in 1817, the date on the dial.*

Amisfield, Dumfriesshire.—Mr. Roberton, Glasgow, has drawn our attention to a neat modern horizontal dial at Amisfield Castle. The plate contains the inscription THIS DIAL BELONGS TO AND. COWAN, J. W. FECIT 1825, together with the

motto DAY GIVES PLACE TO NIGHT, LIFE SOON ENDS IN DEATH, AND TIME WILL BE SWALLOWED UP IN VAST ETERNITY. The dial tells the hours at various towns throughout the world.

Newhall, Penicuik, Midlothian.—This dial (Fig. 1705), which may be regarded as a monument to Allan Ramsay, stands in front of the mansion-house of Newhall. Its appearance will be easily understood from the sketch. The following information regarding the dial was supplied by Mr. John J. Wilson, banker, Penicuik. There are eight panels on the square tapering shaft, on one of which there is the following inscription—HERE ALEXANDER PENICUIK OF NEWHALL, M.D., IS SAID TO HAVE GIVEN ALLAN RAMSAY THE PLOT OF HIS CELEBRATED PASTORAL COMEDY OF THE "GENTLE SHEPHERD." This explains the contents of the six remaining panels, which refer to the well-known play—viz., (1) a design consisting of a shepherd's crook and other pastoral implements; (2) Habbie's Howe and Mause's cottage; (3) the washing-green and Symon's house; (4) the Craigy bield and Glaud's onstead; (5) a

* We are indebted for this example to Mr. Anderson, architect.

35-13

35-13

3-7

35-14

ship enclosed in an oval margin; (6) HERE ALLAN RAMSAY RECITED TO HIS DISTINGUISHED AND LITERARY PATRONS, AS HE PROCEEDED WITH THEM, THE SCENES OF HIS UNEQUALLED PASTORAL COMEDY, AMID THE OBJECTS AND CHARACTERS INTRODUCED INTO IT. The last panel contains the motto—

OBSERVE HOW FAST, TIME HURRIES PAST, THEN USE EACH HOUR, WHILE IN YOUR POWER, FOR COMES THE SUN, BUT TIME FLIES ON, PROCEEDING EVER, RETURNING NEVER.

R. B. 1810.

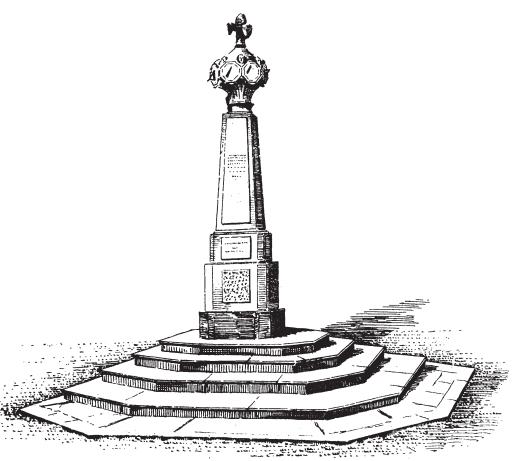


Fig. 1705.—Newhall.

Bredisholm, near Glasgow.—In the gardens here there is a dial (Fig. 1706) erected in 1840, not unworthy to be classed with the ancient examples. It is entirely the work, both in design and execution, of

35-15

3-7

Alexander Fraser,* a north country working mason. The Rev. Mr. M'Millan, Baillieston, having made diligent inquiry, has communicated the following notes, containing all that can now be gathered regarding Fraser. He rented an orchard adjoining Bredisholm House, and built a cottage for himself, where he lived quite alone. Having no knowledge of

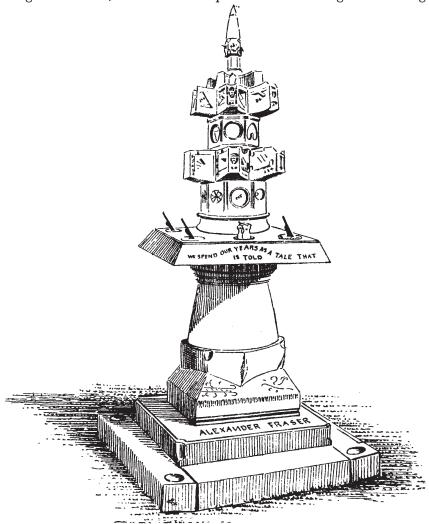
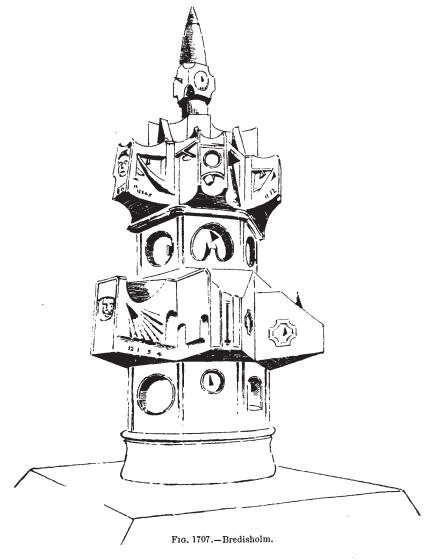


Fig. 1706.—Bredisholm.

horticulture, the management of an orchard proved an unsuccessful undertaking. He devoted a considerable portion of his time to dial-making, and in one instance, for a very simple dial, he is known to have received $\pounds 2$. During his residence here, which lasted for a few years, he erected

^{*} This is probably the skilful mason referred to by Hugh Miller in My Schools and Schoolmasters.

the above dial in his orchard. Removing to Shettlestone, he again built a house for himself, and embarked in the speculation of building a tenement adjoining Camlachie Parish Church, but evidently with little profit to himself. For many years he wrought most of the tombstones and sculpture work required in the locality, and was often seen, Mr. M'Millan



says, by the people of Old Monkland passing their doors on his way to the churchyard—a modern "Old Mortality." Whatever his occupation for the time may have been, he appears always to have had a dial on hand. He died about 1870.

When Fraser executed this dial, the art as it was understood in olden

times may be said to have been extinct, only the commonest horizontal dials being occasionally set up. All the traditions which guided the men who erected the "obelisks," the "lecterns," or "facet-headed" dials were lost, so that we are not surprised to find that this dial is based on altogether different lines. It may be described as a massive horizontal dial supporting an octagonal column from which there jut out two tiers of radiating wings. These wings are carved and sliced into innumerable figures and shapes, which will be partly understood by referring to the drawing (Fig. 1707), in which is also seen a space for a thermometer. There are dials on each corner of the flat table, three of them carved on the stone, and the fourth consisting of a metal plate. There are other



Fig. 1708 .-- Grange.

contrivances on the table, some of which it is believed served the purpose of a rain-gauge, and are supposed to be connected with an opening in the base of the dial. Winding round these dials is the inscription IT IS A LIGHT THING FOR THE SHADOW TO GO DOWN TEN DEGREES; NAY, BUT LET THE SHADOW RETURN BACKWARDS TEN DEGREES. is not unlikely that the arrangement of the table dials may have been suggested to Fraser by the dial at Polmaddie, only a few miles distant.

Grange, Bo'ness, Linlithgowshire. — The baluster supporting this dial (Fig. 1708) is ancient, but the 35-16 old dial having become dilapidated, the late Mr. Henry Cadell of Grange designed the peculiar horizontal dial shown in the sketch.

No attempt having hitherto been made, so far as we can ascertain, to illustrate in a systematic manner the sundials of any country, nor to analyse and classify their designs, we are unable to make any comparison between those of Scotland and other countries. We believe, however, that those above described form a representative collection of Scottish sundials, sufficiently numerous to illustrate the principles which guided the old dial-makers; and we are confident that no further examination of the subject will reveal any new type or system of design in this country.

An examination of the Table of Dials, arranged according to their dates on p. 513, shows that the chief dial-making period extended from 1616 (the date of the dial at Troquhain) onwards for a period of about one hundred and fifty years. As has been already shown, there were dials before and after the above dates, but the period just mentioned may be regarded as that in which the art was at its best. The authors have not seen any dial in Scotland which can in their opinion be placed earlier than about the year 1500, and there is no dated dial belonging to

the sixteenth century known. In the old Palace of Holyrood, erected after 1547 (see Fig. 717, Vol. IV. p. 134), there are sundials shown towards the upper part of the tower on the right hand. An examination of the table of dated dials shows that the earliest of these dials are amongst the most complicated of their kind. This seems to indicate that the art was imported into this country in a highly advanced state, and had probably been developed abroad; but till foreign dials have been examined and classified, we cannot say positively where the ideas were derived from, nor how far the foreign models were followed. As above pointed out, the pattern of the lectern-shaped dial seems to have been derived from the mathematical and astronomical instruments in common use in the sixteenth and seventeenth centuries. observable that the different types do not follow each other in succession, but that dials of all the types were erected simultaneously. When we consider how few the types are, notwithstanding the number of specimens, and the widespread area they occupy, it seems probable that the art of dial-making was practised according to certain well-known traditions, for it is impossible to believe that such a multitude of designs would have been limited to such a small number of leading patterns had they been the emanations of individual fancy. It is not improbable that the scientific principles of dialling were taught in many of the parish schools along with land-surveying, both practical and theoretical, and other mathematical studies. But as the publication of the Ordnance Maps put an end to the study of land-surveying in schools, so has the comparative cheapness of clocks and watches, combined with their greater convenience, put an end to the study of dialling. Two dials of very scientific construction—one at Currie and another at Riccarton 6-13 -were made in 1836 and 1829 respectively by the village schoolmaster, Robert Palmer, who taught the elementary principles of astronomy, and had the walls of his schoolroom painted with astronomical Such a man could not fail to give lessons in dialling. We learn also that the local schoolmaster had to do with the dial at Kenmure Castle.

Burns, the poet, in an autobiographical letter to Dr. Moore, says that he was sent to a "noted school" (Kirkoswald) "to learn mensuration, surveying, dialling," &c. In a controversy on this episode, in the Scotsman of January 1889, it was held by certain writers that the "dialling" here mentioned referred to underground surveying in coalpits, the proof brought forward being that the writers knew of places where underground surveying is so called. Without entering on this question, it seems probable that the poet's schoolmaster was prepared to teach mathematics and astronomy; and when we remember that this was at a time when dial-making was still, to a certain extent, a living art, it would not be surprising to know that he also touched on the subject of

dial-making, and that the term "dialling" was understood in the sense of sundial-making.

In the same county, at Fenwick, about the time that Burns was sent to learn dialling, we find that Hugh Wilson, the author of the tune "Martyrdom," having finished his education at the village school, and while learning the shoemaking trade with his father, "applied himself assiduously to the study of mathematics and kindred subjects." One of the kindred subjects was the making of sundials, and a specimen constructed by him may still be seen at Fenwick.*

The art of dial-making appears to have been more popular in certain localities than in others, being in part due to the influence of the local school, and in part to the taste and spirit of the working masons, who frequently erected a specimen on their own dwellings, and thereby spread the desire for and appreciation of dials as adornments of houses. The making of dials appears to have been a favourite amusement of many of our masons during their leisure hours; and when it was the practice to stop building in winter, they would have ample time to devote to it. The dial made by Hugh Miller, already mentioned (p. 433), is a case in point. Probably at no time nor place was there a sufficient demand for dials to keep a maker in constant occupation. There can be no doubt, however, that our forefathers regarded the sundial in very much the same manner as we regard the public clock. Thus, in 1719 a sundial was put up on the church at Inverarity for the public benefit, and for which the sum of half-a-crown was paid (note Epitaphs and Inscriptions, by Jarvise, Vol. II. p. 304). In Weir's History of Greenock, mention is made of a corner dial on a house in that town built in 1716, which was the only "tell-tale time could boast of" till the magistrates built a timber steeple with a clock in 1753. And we have seen that the magistrates of Berwick (p. 376) regarded a dial set up on the church wall "as a benefit to all persons that came that way." In all probability many dial-makers, like Fraser in our own time, found a large share of their employment in the making of tombstones. Mylne and Wallace practised their business very much in the manner of modern architects; and Handasyde, the dial-maker above referred to, was possibly also an architect and builder, with a practical knowledge of sculpture and carving.

^{*} Article by James Love, Falkirk, in Parish Magazine, September 1889, p. 134.

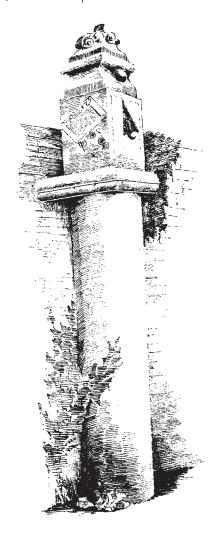
TABLE OF SUNDIALS

WHICH ARE DATED, OR WHOSE DATES ARE KNOWN, ARRANGED ACCORDING TO THEIR DATES.

	YEAR	
Troguhain,	1616	Limekilns, 1682
Troquhain,	1623	Hawick,
Kenmure Castle,	1623	Liberton House. 1692
Kenmure Castle,	1623	Newstead,
Lochgoilhead,	1626	Polton, 1685
Melrose,	162-	Kinross House, 1686
Anchtermuchty	1629	Haddington House, 1688
Auchterhouse Church,	1630	Haddington House, 1688 Barrochan House, 1689
Drummond Gardens,	1	Inveresk Lodge, 1691
Heriot's Hospital,	1	Dunnikier House, 1692
Holyrood,		Dunnikier House, 1692 Barnton House, 1692
Newbattle,	300-	Hatton House, 1692
Aberdour Castle	I	Alloa, 1695
Peffermill House,	1636	Alloa, 1695 Galashiels Cross, 1695
Temple	1638	Airth Cross, 1697
Temple,	1640	Airth Cross, 1697 Melville House, 1697
House, Water of Leith,		Cadder House, 1698
	1643	Glencorse Church, 1699
Inveresk House, Lethington Castle,	1644	Peebles Cross 1699
Pitreavie House,		Inverkip Castle, 1699
Northfield House	1045	Bathgate, House in, 1704
Cairnie		Bathgate, House in, 1704 Torryburn, 1705
Berwick Church,	1652	Longside, 1705
Balcomie Castle,	1660	(1706
Balcomie Castle,	1661	Lessudden, $\{ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Peebles Cross,	1662	Aberdeen, Duthie Park, 1707
•	11000	Borthwick Church 1707
Ruchlaw,	1663	Kelburn, 1707
Hatton House,	1664	Kelburn,
St. Mary's College, St. Andrews,	1664	Forgue, 1710
Dargavel,		Tongue, 1714
Dargavel,	1670	Silvermills, Edinburgh, House in, 1714
Cockburn House,	1672	Greenock, 1716
Polton House,	1672	Woodhall, 1717
Cockburn House,	1672	Inversity, 1719
Cockburn House, Ladylands House,	1673	Ormiston Manse, 1719
Cortachy Church,	1675	Ormiston Manse, 1719 Newburgh, 1725 Inveresk House, 1727
Hatton House,	1675	Inveresk House, 1727
Hatton House, Philipstoun House,	1676	Prestonpans, 1729
North Barr,	1679	Aberdeen Municipal Buildings, . 1730
North Barr,	1679	St. Boswells,
Heriot's Hospital,	1679	Cramond House, 1732
Elie, "The Muckle Yett,".	1682	\sim 1732
Inveresk House,	1682	Whitehouse, Cramond, 1752

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									YEAR
			YEAR 1733	Portobello,					1775
Elgin Cross, · · ·	•	•	1735	Newstead, .					1777
Inveresk Churchyard, .	•	•	1736	Cammo, .			•		1795
Ormiston, · · ·	•	•	1743	Newhall, .				•	1810
Bonally, · · ·	•	•	1745	Chirnside Chur	ch,				1816
Lugton, Dalkeith,	•	•	1751	The Haining,			•	•	1817
Newstead,	•	•	1753	Ladylands, .			•	•	1821
Drummore, Musselburgh,	•	•	1754	Amisfield, .		•	•		1825
Newstead,	•	•	1760	Riccarton, Cur	rie Pa	rish,		•	1829
Neworth, Kelso,	•	•	1762	Currie Churchy	ya r d,			•	1836
Melrose, · · ·	•	•	1774	Bredisholm, .			•	•	1840
West Kirk, Edinburgh,	•	•	1775						
Bladdo Farm, · ·	•	•	1,10	i					



ST. MARY'S COLLEGE, ST. ANDREWS.