

IN THE FOOTSTEPS OF THOMAS ROSS

Part 7: Scotland's Grandest Sundials

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In his travels, whilst gathering information for the *'Castellated and Domestic Architecture of Scotland'*,¹ 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 facet-headed 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

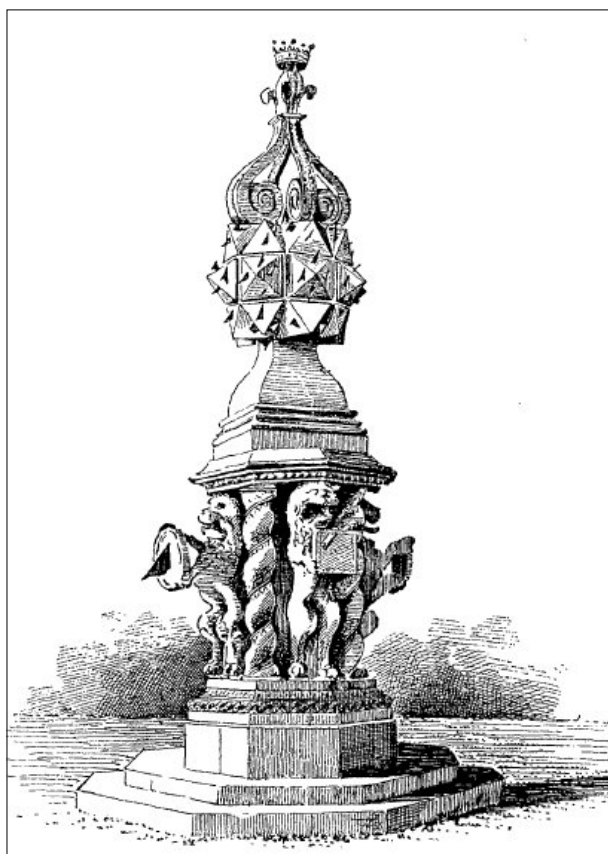


Fig. 1. Sketch of the Glamis Castle dial, drawn by Thomas Ross.¹



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*³ in 2009.



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:

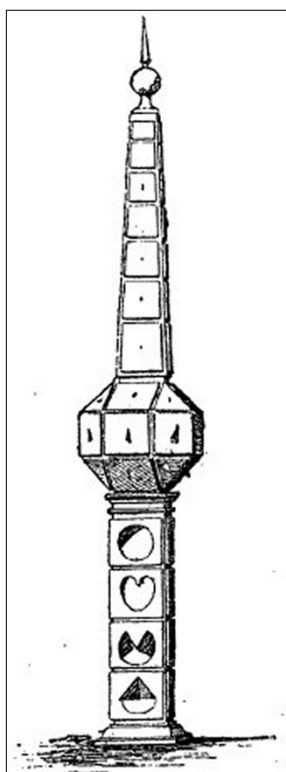


Fig. 5. Ross's sketch of the Drummond Castle dial.

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.



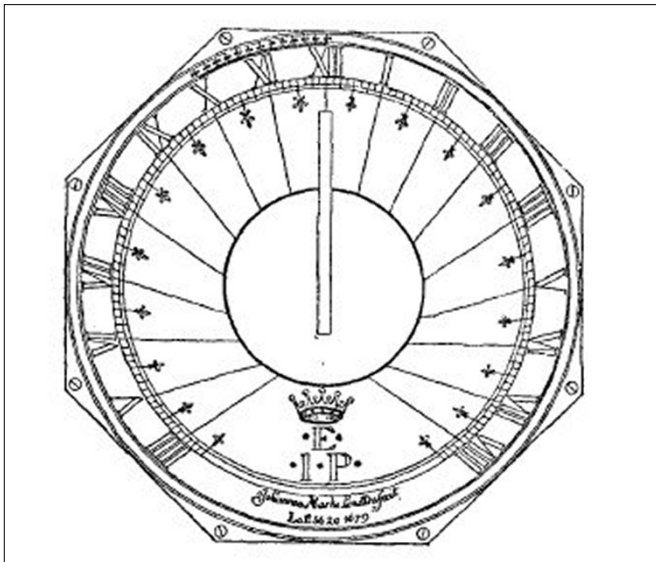


Fig. 7. Copy of the rubbing made by Ross of the John Marke dial at Drummond Castle and

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 $56^{\circ} 20'$ 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).

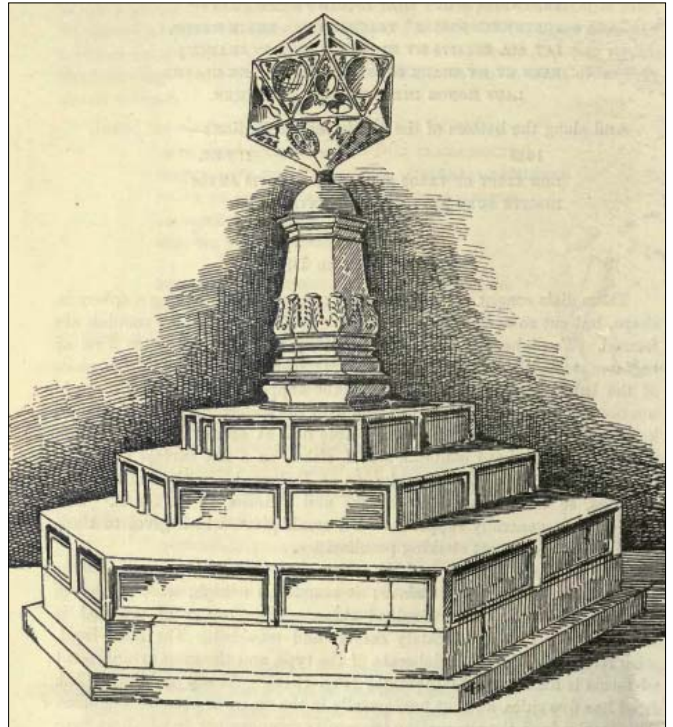
The third of these grand sundials is at the Palace of Holyroodhouse in Edinburgh, the official home of the Queen in Scotland. Ross tells us:

"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 facet-head, 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 Holyroodhouse 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 half-fiendish 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

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