

# AN UNUSUAL SLATE SUNDIAL

MIKE COWHAM

I received a picture one day sent by Frank King of a slate dial with many rather strange attributes. It belonged to a colleague of his who wanted to know more about the dial. It clearly has some wrong features, perhaps the most prominent being the corner subsidiary dials, three of which did not have their gnomons following north-south alignment, but the remainder seemed worth studying.

The dial is mounted on a wrought iron framework, making the whole assembly look like a table. As far as it is possible to tell, this may have been its original mount; perhaps so made for putting the dial out on the veranda or for use inside a conservatory.

Closer inspection reveals that the dial is signed “G B FECIT” and is dated “1712”, so this dial predates the dials of Melville by about 100 years. Some of the spellings also looked odd. Note in particular the spelling of EVROPE but also EUROPE on the top left subsidiary dial and the Latin names for the compass directions of SEPTENTRIO, ORIENS, OCCIDENS and MIDY. It is the MIDY that replaces the more usual ‘MERIDES’. Looking closer at the north edge of the main dial, it is possible to see the months of the year and the spellings of some of these are odd. I suddenly realised that the dial is of French origin, and slate is a rather unusual material for French dials.



Fig. 1. The ornate engraving of the slate dial.

The general decoration of the dial is somewhat different to the better-known slate dials of Melville (Melvin) of the early 1800s. In many ways, this dial is much cruder, with the surface of the slate still fairly rough and not really polished. The patterning on the dial plate is certainly much more ornate, perhaps rococo(?) and it has an attractive flower pattern around each subsidiary dial. As the engraving is coloured, probably with its original colouring, it seems unlikely that the dial has been outside in the weather for much in its life.



Fig. 2. The dial mounted on a wrought iron stand.

The gnomon angles were measured and each was identical at about  $48^\circ$ . Next, the IX and III lines on the main dial were measured (each giving about  $40^\circ$  from XII) and were calculated as being for a dial for around  $57^\circ$  north. Obviously there is a large discrepancy here! Furthermore, the main central gnomon is the same size as those on the subsidiary dials and is only about one quarter of the size that I would have expected. In the summer the shadow is going to be particularly short.

It is so easy at this stage to ignore the dial and treat it as a rather poor example of dialmaking, but there are other features that are still worthy of our attention. I have already



Top to bottom:

Fig. 3. The engraved months with zodiac signs below.

Fig. 4. The years with Epacts beneath. Notice the Roman numeral XIII instead of XV.

Fig. 5. The crest with two lion supporters.

mentioned the names of each of the months along the north edge of the main dial. Under each of these is a zodiac sigil showing which sign is entered during the month. Below this, inside the inner gold border are some less pronounced characters, the first being the number of days in each month and the second possibly being the number of days in each lunar cycle. The lunar cycle, as we know, has a period of quite close to  $29\frac{1}{2}$  days, so, in terms of whole days, alternate months could have the figures of 29 and 30 attached. This would be fine, but in one place there are two consecutive 29s meaning that there also have to be two further consecutive 30s (which are just discernable for December and January). Is this a plain engraving mistake or am I missing something rather subtle?

Around the southern edge of the dial are further marks, some a little difficult to read now, but these are clearly the years from 1709 to 1736 and the Epacts (following the 19-



Top to bottom:

Fig. 6. Hand of Ceres holding a stalk of corn.

Fig. 7. The engraving of "L'année" with "52S" and "3 65".

Fig. 8. The engraving of "S'-----n", possibly the town of the maker, G B.

year Lunar cycle) to go with each year in Roman numerals. Note the odd engraving for 1714 where XIII is used for XV.

Below 'MIDY' is probably the crest of its first owner. This is now difficult to decipher but the shield is surmounted by a Viscount's crown and either side are lion supporters. The smaller crests on the other four sides are probably just decorative.

However, between 'EVROPE' and 'MIDY' is a further image with a motto around it. This appears to be an arm of a person wearing a cloak and holding an object like an oar.



Fig. 9. The subsidiary dial for Europe with a mixture of Roman and Arabic numerals.

This is probably the hand of the Roman goddess Ceres (Demeter in Greek mythology) holding one of three stalks of corn. The motto reads “I’AIME LE PLVS LONGT” probably meaning ‘I love the longest’, presumably referring to the stalk of corn rather than the dial’s shadow.

Further inspection of the dial reveals various other interesting features. Between the numerals VI and VII in the evening is a word “L’année” and beneath this are two numbers which appear to say “52S”, the S probably meaning ‘semaines’ (weeks), and just below that “3(gap)65”, telling us that the year consists of 52 weeks of 365 days.

On the opposite side of the signature, balancing the date, is a further inscription, now unreadable but this may be the town of the maker G B, possibly starting with S and ending in n.

The corner dials are puzzles, one each for EUROPE, AFRIQUE, [A]MERIQUE and ASIE. Obviously, with three of these dials twisted, these are unable to work at all. Furthermore, the hour lines engraved on each and the numerals are the same as for the main dial, but not so accurately or carefully done.

Other oddities that will be seen on close inspection are the use of numeral 8 in place of VIII on the main dial and the use on two of the subsidiary dials of a mixture of Arabic and Roman numerals such that the hours around noon go 10 11 12 I II 3. For the [A]MERIQUE dial the numerals are correct but the afternoon ones are inverted with respect to those for morning.

It is difficult to come to a firm conclusion about the dial but it seems that it was made by a fairly competent engraver – his images are excellent, his scrollwork fine and delicate, and his lettering is well formed – but with a rather shallow knowledge of gnomonics. He has perhaps seen various dials and has probably tried to copy them in his work here.

#### ACKNOWLEDGEMENT

I would like to thank the owner of this fine dial for allowing me to photograph it and to record its details.