

THE FAVERSHAM GUILDHALL

“NOON-MARK” SUNDIAL



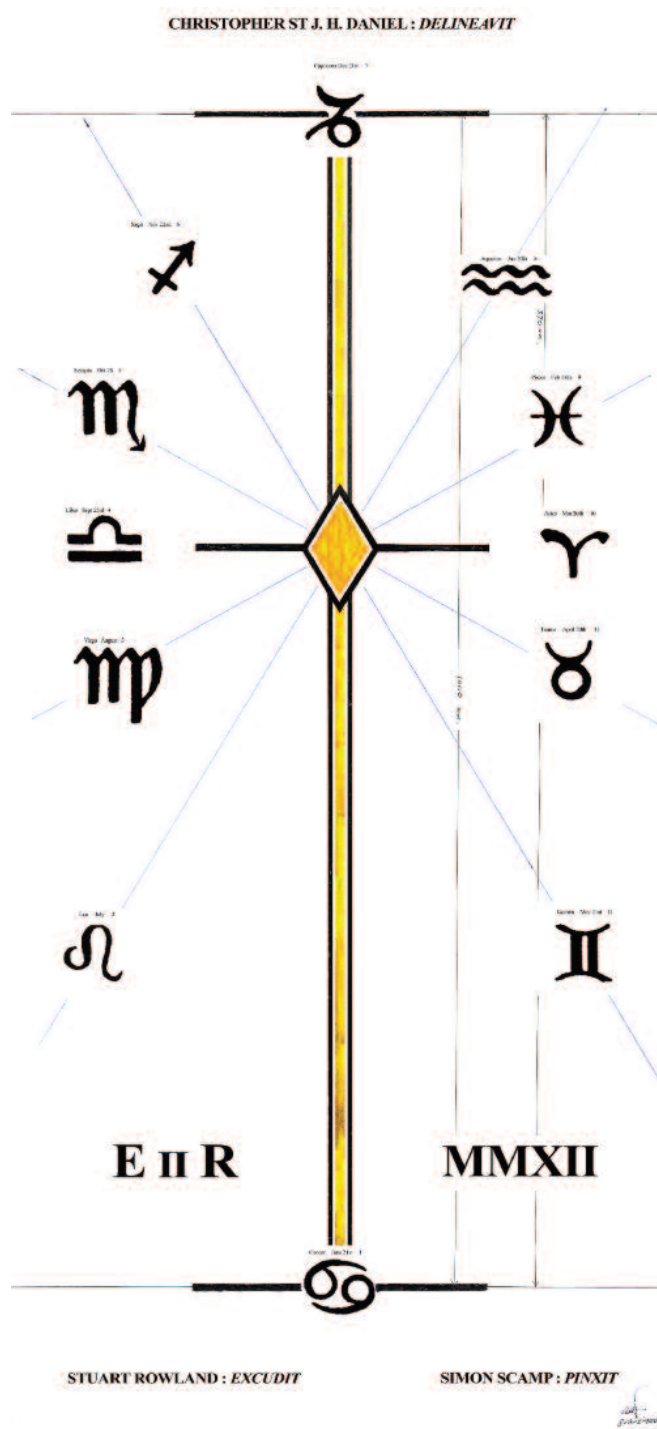
The Faversham Guildhall ‘sundial’ is of a kind that is known as a Noon-Mark, since it indicates the moment of Local Apparent Noon, when the sun is due south, on the meridian of Faversham, at its maximum diurnal altitude. Technically, in this case, it would be better to describe the dial as a vertical mural noon-mark, since it has been painted on the wall of the building in the continental style.

The dial-plate of the noon-mark is delineated with a thick vertical gilded meridian line, highlighted in black, on a white background. It features a black transverse ‘T’- bar at the top and the bottom, which mark the winter and summer solstices respectively. The uppermost of these is furnished with the zodiacal symbol for the sign of Capricorn, denoting the winter solstice, whilst the lowest transversal features the symbol for the sign of Cancer, the summer solstice. The symbols representing the remaining signs of the zodiac are merely ornamental and serve no particular purpose.

About a third of the way down the meridian line, there is a gilded diamond shape, which also supports a ‘broken’ transversal, marking the equinoxes. The diamond is symbolic of Her Majesty the Queen’s Diamond Jubilee Year.

Above the dial, there is a gilded metal sun image, supported by a metal frame (the gnomon). This ornamental sun image features a small circular aperture at its centre (the nodus), through which, in fine weather, near the time of mid-day, the sun’s rays may be projected as a spot of light onto the dial-plate.

To read the dial, observe the spot of light as it moves across the face of the noon-mark dial-plate. When the spot of light is on the central gilded meridian line, this will mark the instant of Noon (Local Apparent Time), which would once have marked the mid-day hour of 12 o’clock, “Faversham Time”. Accordingly, the Guildhall clock would have been adjusted to read the same time and, likewise, other clocks and watches in the town would have been regulated in the same manner.



Since Faversham is to the east of Greenwich (the Standard Meridian), at longitude $00^{\circ} 53' 32''$ E., the Guildhall noon-mark will be 3m 34s fast on a sundial at Greenwich, i.e. at 12 o'clock Noon, a sundial in Faversham would read 12 03 34. Furthermore, the time of Noon varies over the course of the year, due to the effects of the earth's variable orbital velocity around the sun and the tilt of its axis. This variation is called the equation of time, usually given in minutes and seconds, which can be applied to a sundial as a plus or minus correction. In this case, the time shown by the Guildhall clock gives the time of Noon at Faversham.



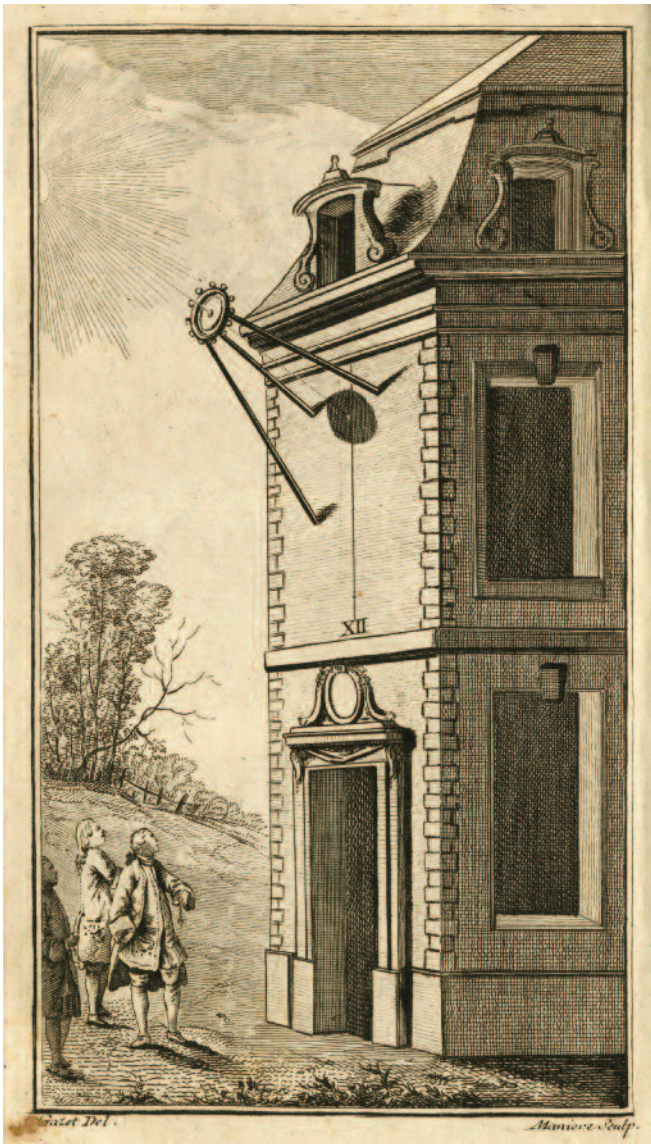
Sun image nodus

The following table provides the observer with these Guildhall clock times, given to the nearest minute, for twelve days in the year, one value for each month / sign of the zodiac,

adjusted to take into account the difference between Faversham and Greenwich. The Guildhall clock times are given in **black** for **GMT** (Greenwich Mean Time) and **red** when **BST** (British Summer Time) is in force.

ARIES	March 20	:	1204
TAURUS	April 20	:	1255
GEMINI	May 21	:	1253
CANCER	June 21	:	1258
LEO	July 23	:	1304
VIRGO	August 23	:	1259
LIBRA	September 23	:	1248
SCORPIUS	October 23	:	1240
SAGITTARIUS	November 22	:	1142
CAPRICORNUS	December 21	:	1154
AQUARIUS	January 20	:	1207
PISCES	February 18	:	1214

By way of an example, consider the date of 20th March – the vernal equinox. At the moment when the spot of light is on the Faversham meridian, the Guildhall clock should show the time as 1204 (GMT).



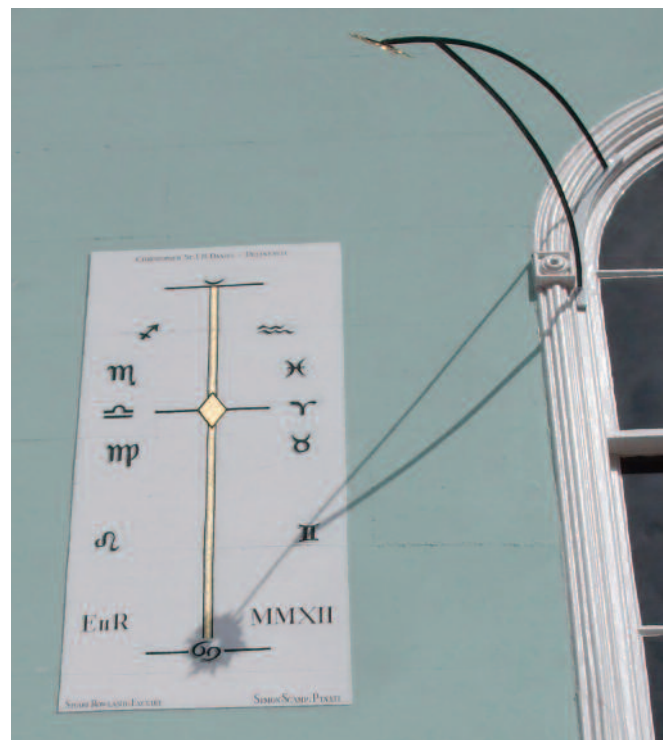
French 18th Century noon-mark

Alternatively, on 3rd April, at the moment when the spot of light is on the Faversham meridian, the clock should show the time as 1303 BST, i.e. three minutes past 1 pm. This is because British Summer Time will have come into force, when the clocks would have been advanced by an hour.

It should be noted that “Summer Time” (BST) is a mechanical device, sometimes called “Daylight Saving Time”, which moves the clocks forward by one hour in summer, thus obliging people to get up one hour earlier. This presumes that they will enjoy longer daylight hours in the summer; but also saves considerable government expenditure on lighting.

Whilst it is not uncommon for sundials to indicate Mean Time, i.e. GMT or BST, a noon-mark is normally intended as a simple means of marking the time of mid-day. This noon-mark serves the same purpose, as in bygone days, as a means of regulating the Guildhall clock.

The Faversham Guildhall noon-mark was designed and delineated by the author in the year 2012, the gnomon was constructed by Stuart Rowland, the noted blacksmith of Canterbury, and the dial-plate was painted by Simon Scamp, the Faversham sign-writer. Generous local sponsorship was given by Jonathan Carey, John Finnis and Shepheard Neame. The inaugural ceremony was carried out on 3rd April 2013 by Councillor David Simmons, Mayor of Faversham.



The Noon-Mark:

The spot of light, at the centre of the sun image, indicates the time to be just after noon, near the date of the summer solstice.

Christopher St J. H. Daniel. 28th June 2013