Sundials

An ‘instrument showing time by shadow of pointer, cast by sun on graduated plate’. The earliest reference to a Sundial was in Egypt around 1300 B.C., the Greeks then significantly developed the art of dialing by introducing a slanting indicator, known as a gnomon, pointing it towards the North Star.

The earliest example of a Sundial in the British Isles dates from the late 7th Century and can be seen on the Anglo Saxon Bewcastle Cross in Cumbria. This vertical sundial had a peg made from either metal or wood, casting a shadow on the radiating lines below. Derivatives of this, the Scratch or Mass Sundial, can be seen on the walls of our very own Tythe Barn here at Taddington, known locally as ‘Church Barn’, dating from 1632. These Scratch dials could have related to canonical hours or the three hour praying intervals.

Sundials can be split into 5 main categories; Vertical, Pillar, Horizontal, Multiple and Equinoctial. Sundials for the garden are mainly the horizontal type and placed on a decorative pedestal, usually carved from stone. We also come across the Armillary Sphere, which falls into the Equinoctial category and the rare, but interesting, Multi-faceted sundials. These are strange, multi-dialled arrangements with many gnomons protruding like fins that cast shadows on well worn lines. 17th Century examples are still in existence, and are found mainly in Scotland. A little-known but interesting area is the Stained Glass Sundial, dating predominantly from the 17th Century. These Dials were fitted into the windows of Churches or Manors to read the time during the cold winter months from the warmth of the inside – the gnomon being fixed outside to cast the shadow. An extant painted dial can be seen at Berkeley Castle.
A horizontal sundial in the garden can be seen to be coming to the fore in the 17th Century with makers honing their talent with ever more complex engraving, showing not only the time but also the position of the planets and star systems. Thomas Tompinon, 1639-1713, is considered one of the best makers of his time. A fine example of his work can be seen on display at Hampton Court.

The Armillary Sphere falls into the Equinoctial dial category. A central rod (sometimes in the form of an arrow) casts a shadow onto one of the rings engraved with the hours, with all the other rings acting as both support and a representation of the Celestial sphere. Other designs such as a Hemispherical Equinoctial act in a similar way by casting a shadow from a rod into a half-sphere, either onto a band of numbers or into a bowl delineated with the hours.

One last area is the Heliochronometer (or Sun Clock) much loved by the early train timekeepers in France, although they were extant in a cruder form in the 18th Century. Greater accuracy is obtained as the plate can be elevated and rotated to allow for the Latitude and Longitude variations, and this accuracy was again increased by the sunlight coming through a slit rather than using a shadow. In fact one maker, Pilkington and Gibbs, probably took the manufactured sundial to its Zenith after 2500 years of development, but sadly even these technically advanced sundials are still only accurate on just four days of the year!
William the IV Sundial [ITEM 62]
An elegant age patinated artificial stone sundial having baluster pedestal base surmounted by a verdigris bronze armillary sphere calibrated with the hours.

*Overall height 5’ 5” [165 cm]  Overall width 2’ 3” [68 cm]*
The Inverted Pedestal
with Armillary Sphere [item 63]
A verdigris bronze armillary sphere pierced with an arrow, calibrated with the hours. Mounted on an elegant natural limestone inverted pedestal.

*Overall height 5’ 9½” (176 cm) Square at base 1’ 1½” (34 cm)*
The Swagged Georgian Pedestal with Dial Plate [ITEM 64]

An ornately carved natural limestone sundial having grotesque mask and swagged garland decoration to the pedestal, raised upon an octagonal step. The square top inset with bronze Thomas Wright dial plate.

*Overall height 4' 5" [135 cm]  Square at top 2' [61 cm]*
*Overall diameter of base step 2' [61 cm]*
The Swagged Georgian Pedestal with Armillary Sphere [item 65]
An ornately carved natural limestone armillary sundial having grotesque mask and swagged garland decoration to the pedestal, raised upon an octagonal step, surmounted by a verdigris bronze armillary sphere calibrated with the hours.
Overall height 6’ 6” [198 cm] Square at top 2’ [61 cm]
Overall diameter of base step 2’ [61 cm]
The Jekyll Pedestal with Dial Plate [ITEM 66]

An elegant hand carved natural limestone sundial, of quartered baluster form, having dentil carving to the dial support, raised upon a square base. The replica engraved circular bronze dial plate, signed ‘Tho’s Wright, Instrument Maker to His Majesty’ with engraved armorial coat of arms and Prince of Wales Feathers, calibrated with the hours, minutes and compass points.

Height [excluding gnomon] 3’ 4” [102 cm]  Square at base 1’ 8” [51 cm]
The Jekyll Pedestal
with Armillary Sphere [item 67]
An elegant hand carved natural limestone pedestal of quartered baluster form, having dentil carving to the top plate, raised upon a square base surmounted by a verdigris bronze armillary sphere, pierced by an arrow and calibrated with the hours.

*Overall height 5’ 8” (173 cm) Square at base 1’ 8” (51 cm)*
The Baluster Pedestal
with Dial Plate [ITEM 68]
A hand carved natural limestone sundial of fluted baluster form raised
upon an octagonal plinth. The circular top inset with the bronze
Thomas Wright dial plate.

*Overall height 3’ 9” [114 cm]*  
*Overall diameter of top 1’ 8” [51 cm]*  
*Overall diameter of plinth 2’ 1” [64 cm]*
The Baluster Pedestal with Armillary Sphere [Item 69]

A hand carved natural limestone fluted baluster raised upon an octagonal plinth surmounted by a verdigris bronze armillary sphere calibrated with the hours.

Overall height 5’ 11½” [181 cm] Overall diameter 1’ 8” [51 cm]
Overall diameter of plinth 2’ 1” [64 cm]
The Thomas Wright Dial Plate [ITEM 70]
A faithful copy from the antique original. The engraved circular bronze dial plate, signed ‘Tho’s Wright, Instrument Maker to His Majesty’ with engraved armorial coat of arms and Prince of Wales Feathers, calibrated with the hours, minutes and compass points.

Height [including gnomon] 8" [20 cm] Diameter 1' [31 cm]
The Zenith Armillary Sphere [item 71]
A verdigris bronze armillary sphere, pierced with an arrow and calibrated with the hours. Mounted upon a bell shaped support.

*Overall height 2' 4½" [72 cm]  Overall width 1' 6" [46 cm]*

*Diameter at base 6 ½" [17 cm]*