

Factsheet

The Astronomical Clock at Hampton Court Palace

- The astronomical clock was constructed between 1540 and 1542 when Henry VIII was rebuilding Cardinal Wolsey's original Hampton Court. The tower that houses the clock overlooks Clock Court, in the centre of the palace.
- There are three bells in the belfry, the oldest of which was cast in 1478. It had been given to Cardinal Wolsey by the Knights of St John in Jerusalem who leased the Manor of Hampton Court to Wolsey on the 11th January 1514.
- The clock was made by French clockmaker Nicholas Oursian and is a marvel of the sixteenth century clockmaker's skill. He was appointed clock-keeper to Hampton Court in 1541 and was clockmaker to successive monarchs until his death in 1590. The design of the clock is credited to the Bavarian astronomer Nicholas Cratzer, who came to England at the invitation of Cardinal Wolsey.
- The dial is extremely complicated. It is fifteen feet in diameter and consists of three separate copper dials, of different sizes, with a common centre but revolving at different speeds. The hours, in two sets of twelve, were originally painted on the stone but are now painted on metal segments affixed to the stonework.
- The clock tells the hour, month, day of the month, the position of the sun in the ecliptic, the twelve signs of the zodiac, the number of days that have elapsed since the beginning of the year, the phases of the moon, its age in days, the hour in which it crosses the meridian, and, therefore, the time of high water at London Bridge. As Henry VIII often travelled by river in the Royal barge the king insisted Cratzer install an astronomical clock at the palace to indicate the time of high tide in

London, and therefore the best time to travel by boat.

- This clock was designed before the discoveries of Copernicus and Galileo, when it was believed the sun revolved around the earth rather than the earth around the sun. Consequently the clock depicts the earth represented as a small globe in the centre, while the sun goes around it on a pointer.