Orrery, with bone earth featuring longitude, latitude and ecliptical lines, brass twilight pointer, held above an angled ring to alter the height of the moon ball, also in bone, a secondary ring graduated with zodiac signs, disc showing the phases of the moon, on a functional multi-wheeled geared mechanism, central brass sun mounted on central axis, two planets on brass arms, brass index pointer; detachable bone handled crank handle, mahogany horizon plate with hand- coloured engraved paper, graduated around the red-painted edge with days of the month and signs of the zodiac, compass directions and degrees of amplitude and azimuth, raised on wooden table stand. Brass planetarium attachment, hand- coloured engraved paper dial, brass arms supporting 7 ivory planets, one with bone ring, mahogany horizon plate with hand-coloured engraved paper, red-painted edge; both contained in original locking mahogany case.
With a small oil lamp.
A few marginal tears in the paper dial. The mahogany box with a crack in the spanning the top along with a smaller crack.

AN ORRERY FIT FOR A PRESIDENT

A New Portable Orrery [and planetarium attachment]. Invented and Made by W. Jones, and Sold by him in Holborn, London.

Author
JONES, W[illiam]

Publication date
[after 1798].

Publisher
W. Jones,

Publication place

London,

Physical description
Orrery, with bone earth featuring longitude, latitude and ecliptical lines, brass twilight pointer, held above an angled ring to alter the height of the moon ball, also in bone, a secondary ring graduated with zodiac signs, disc showing the phases of the moon, on a functional multi-wheeled geared mechanism, central brass sun mounted on central axis, two planets on brass arms, brass index pointer; detachable bone handled crank handle, mahogany horizon plate with hand- coloured engraved paper, graduated around the red-painted edge with days of the month and signs of the zodiac, compass directions and degrees of amplitude and azimuth, raised on wooden table stand.
Brass planetarium attachment, hand- coloured engraved paper dial, brass arms supporting 7 ivory planets, one with bone ring, mahogany horizon plate with hand-coloured engraved paper, red-painted edge; both contained in original locking mahogany case.
With a small oil lamp.
A few marginal tears in the paper dial. The mahogany box with a crack in the spanning the top along with a smaller crack.

Dimensions

Notes
Biography
W.& S. Jones were among the greatest scientific instrument makers in London in the early nineteenth century. The firm, owned by brothers William Jones (1763-1831) and Samuel (1769-1859), was also known for marketing globes by W. & T.M. Bardin. According to some sources, Samuel became active about 1810. The firm published a small book in 1812 authored by William entitled ‘The Description and Use of a New Portable Orrery’ to promote and describe how to use three portable orreries. According to the Preface of the book, this device was designed to be transportable and inexpensive, making it particularly appropriate for school and private tutorial use. Thomas Jefferson, the third president of the United States, was devoted to science as a vocation; according to records at Monticello, Jefferson bought a ‘New Portable Orrery’ from William Jones in 1792.

Astronomy
The present orrery demonstrates the relationship between the sun, moon and earth, and the planetarium shows the solar system. The tellurian part can be used to show the progression of day and night, the change of the seasons and eclipses. The engraved base is crammed with information. A pair of cherubim hold banners acting as trade cartouches on either side of the mechanism. The pink and green table supported by two figures in classical drapery, one leaning on a globe, gives information on the six planets nearest the sun for the year 1794. It outlines their distance from the sun, the length of their solar year, their diurnal rotation, diameter, greatest elongation and parallax. Two other tables provide the orbits and distances of the satellites of Jupiter and Saturn.

The present planetarium is an attachment to Jones’ orrery, designed to show the motion of the planets around the sun, and to give an idea of their relative size. The engraved base features calendrical and zodiacal scales, giving the seasons, solstices and equinoxes, as well as the relative sizes of the planets.

Bibliography
Dekker ZBA4664; William Jones, The Description and Use of a New Portable Orrery (London: W.& S. Jones, 1812).

Provenance

Price:

Inventory reference: 15688