

Drew's Observatory, Southampton

THE OBSERVATORY OF JOHN DREW, ESQ., F.R.A.S.

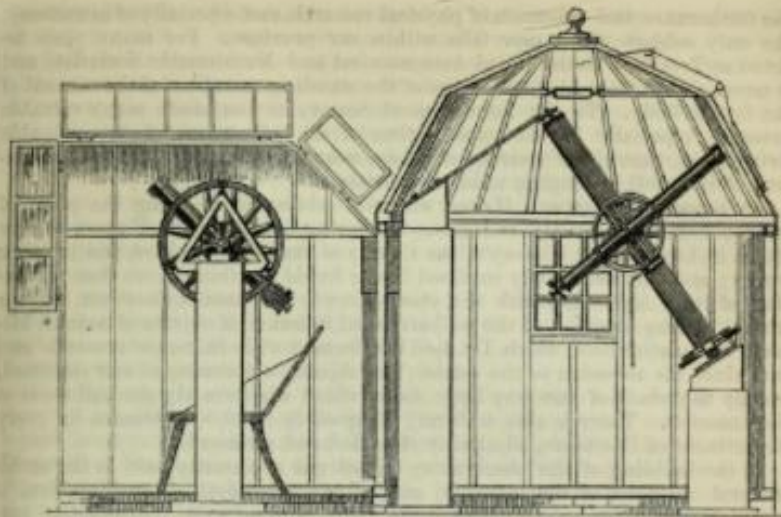
This observatory is situated at Southampton, at Mr. Drew's residence, Winsor Terrace, Cumberland Place. The distance from London might seem to place it without our limits; but by the magic agency of the railroad, Southampton is brought within reasonable visiting distance; and we have an object in view in showing that the public are benefited by the liberality and spirit of Mr. Drew, in giving correct time to this important port, when no public means have been resorted to for supplying it. Mr. Drew is well known to men of science as a zealous cultivator of astronomy. He is the author of a *Manual of Astronomy*, of which he is, we hear, preparing a new edition, and of various papers on meteorology, in the *Civil Engineer and Architect's Journal*.

The observatory consists of an equatorial-room and a transit-room; the former is 9 ft. in diameter, and is adapted to a 5 ft. achromatic by Dollond, mounted with a polar axis in the usual manner. The right-ascension and declination circles are 15 in. in diameter; and the telescope is furnished with a position wire micrometer and a rock crystal micrometer. The astronomical powers, of which there are eight, vary from 26 to 410, and admit of being increased by the insertion of a concave lens a few inches in advance of the focus of the object-glass.

In the transit-room is a transit-circle by Jones, 30 in. in diameter. The

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SECTIONAL VIEW OF MR. DREW'S OBSERVATORY.

telescope is 42 in. focal length, with an object-glass $3\frac{1}{2}$ in. in diameter. The axis moves on agate bearings. In the focus of the object-glass are five vertical wires, one fixed horizontal wire, and another moveable in altitude, by means of a micrometer-screw. The whole is mounted on stone piers. To the eastern pier are attached three microscopes, for reading off zenith distances on the circle. The nadir-point is found by observing the image of the wires reflected from mercury; for which purpose an eye-piece with a single lens is furnished with a perforated mirror, by which the light, admitted laterally, is reflected down the tube.

Outside the observatory a solid piece of brickwork is erected for the purpose of carrying a 20 in. collimating telescope, which is never removed; by means of this instrument the horizontal-point may be determined; and as there is no distant object visible in the horizon from the observatory, the wires of the collimator serve, when once adjusted, as a permanent meridian mark.

The object which the observatory is now answering is the determination of Greenwich time from the local time at the port. The chronometers of the various steamers which leave Southampton are under the care of Mr. Stebbing, optician, and his clock is regulated, from time to time, by comparison with Mr. Drew's. The observatory was originally built for the purpose of cultivating practical astronomy, and is ready for any work within the range of the instruments.

An account more extended than the present may be found in the Royal Astronomical Society's *Memoirs*, vol. x., No. 3, p. 63; and a plan and section of it may be seen at the Society's rooms, Somerset House.

The latitude and longitude of the observatory, as determined by triangulation from the Ordnance Map Office, Southampton, are as follows—

Latitude, $50^{\circ} 54' 34''$ north; longitude, $1^{\circ} 24' 25''$ west.