

May's Observatory, Ipswich

THE OBSERVATORY OF CHARLES MAY, ESQ., F.R.A.S.

Mr. May, of the firm of Messrs. Ransomes and May, engineers of Ipswich, who have so ably carried out Mr. Airy's plans in the erection of the altitude and azimuth instrument and the large transit circle at Greenwich, has favoured us with the following account of an observatory constructed by himself at his private residence, and which he intends to furnish with good instruments.

Its dimensions and general plan resemble the Bedford Observatory described by Captain Smyth in his *Cycle*. The transit room is 17 ft. long, 12 ft. wide, and 9 ft. high. Two very substantial stone piers are provided for an instrument which may be of 6 or 7 ft. focal length if required.

The equatorial room is 16 ft. in diameter, covered by a dome similar in construction to Dr. Lee's; the floor is 4 ft. higher than that of the transit room, surrounding objects rendering a little elevation desirable; this room is built with a very solid foundation for the instrument, the lower portion being brickwork in cement, the upper Portland stone; the north pier is about 8 ft. by 3 ft. at the floor line, diminishing upwards to about 6 ft. by 3 ft. at a height of 6 ft. from the floor. Upon the brickwork at this height is a Portland stone 6 ft. by 3 ft., and 10 in. in thickness, forming the support of two other blocks of the same kind of stone, which have a clear aperture of 15 in. between them, similar to the two piers for a transit instrument. The object proposed by this form is to support the upper end of the polar axis in such a manner as to allow of the lower transits of the circumpolar stars being seen by the equatorially-mounted

telescope. The shutter of the dome is in one piece, turning on the apex of the dome as a centre, and resting upon rollers at the base, and is moved by a rack and pinion. The full opening at the equator is about one hour of time.

So far as regards instruments, this observatory is not completed; a 20-in. transit, by Cary, is mounted on an iron casting cemented across the tops of the transit piers, and there is an indifferent clock with dead-beat escapement and wooden pendulum.

For the equatorial room a telescope, with a very fine object-glass of 6.34 in. clear aperture by Merz, of Munich, is mounted upon a cast-iron stand with polar axis and arcs divided so as readily to find an object; this stand is intended to be superseded by a polar axis upon the same general principle as that in the Corporation Observatory at Liverpool.