

and during that period I have several times beheld an eclipse of the moon, but never before did my eyes behold the moon positively giving *good* light from its disk during a total eclipse. The phases of the moon perfectly corresponded with the authorised diagram up to the period of 8^h 40^m and after 9^h 40^m to the end of the eclipse."

Occultations of Fixed Stars observed by Mr. Rümker, Hamburg.

| | B.A.C. | | Hamburg M.T. |
|----------|-----------------------|--------------------|--|
| 1847. | | | |
| Feb. 25 | 2486 | 68 Gemin. k | 10 ^h 27 ^m 55 ^s .3 Immersion |
| March 22 | 1692 | 115 Tauri | 7 22 12.0 — |
| May 28 | 5112 | 35 Libræ ζ^4 | 10 2 38.8 — |
| June 22 | 4521 | 76 Virginis | 8 57 54.6 — |
| Oct. 26 | 1526 | Tauri | 9 25 51.0 Emersion |
| 1848. | | | |
| Jan. 26 | 1420 | 87 Tauri α | 5 16 20.8 } — |
| | By M. G. Rümker | | 21.5 } — |

(The nomenclature of the stars has been altered to make it agree with that of the British Association Catalogue.)

Occultations observed at Poona, by W. S. Jacob, Esq.

Lat. 18° 31' 36", N.; Approx. Long. 4^h 55^m 42^s E.

1847.

Dec. 13. Occultation of θ *Aquarii*, Poona Sidereal Time.

Immer. 1^h 38^m 11^s.5 instantaneous; Emer. 2^h 45^m 37^s.0 instantaneous.

Dec. 16. Occultation of *Saturn*, Poona Sidereal Time.

Immer. 3^h 40^m 7^s.2 *i.e.* total disappearance; Emer. 4^h 51^m 35^s.5

The planet was not visible at emersion until it was about 2' separated from the moon's limb, or about 4^s after true emersion: 4^s must, therefore, be subtracted from the emersion stated. Planet very dim.

Extract of a Letter from Mr. Maclear. (Cape of Good Hope.)*

"I have observed all the stars which Professor Mädler wished me to observe except one which is now coming into visibility. The reductions are proceeding.

"I have got the 46-inch achromatic on the polar axis, and am proceeding with the adjustments. . . . The dome may be turned with the little finger. There is a little too much side-play, for our violent winds keep it in constant oscillation; but this can easily be checked, and on the whole I am very well satisfied. The practical knowledge I have acquired will, I trust, be useful when the large equatoreal (which is daily expected) arrives. . . .

"Observations have been commenced, or rather resumed, of the

* See the last *Annual Report*, p. 87.