

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<sup>h</sup> 40<sup>m</sup> and after 9<sup>h</sup> 40<sup>m</sup> to the end of the eclipse."

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

	B.A.C.		Hamburg M.T.
1847.			<sup>h</sup> <sup>m</sup> <sup>s</sup>
Feb. 25	2486	68 Gemin. <i>k</i>	10 27 55.3 Immersion
March 22	1692	115 Tauri	7 22 12.0 —
May 28	5112	35 Libræ $\zeta^4$	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 $\alpha$	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<sup>h</sup> 55<sup>m</sup> 42<sup>s</sup> E.

1847.

Dec. 13. Occultation of  $\theta$  *Aquarii*, Poona Sidereal Time.

Immer. 1<sup>h</sup> 38<sup>m</sup> 11<sup>s</sup>.5 instantaneous; Emer. 2<sup>h</sup> 45<sup>m</sup> 37<sup>s</sup>.0 instantaneous.

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

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

The planet was not visible at emersion until it was about 2' separated from the moon's limb, or about 4<sup>s</sup> after true emersion: 4<sup>s</sup> 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.