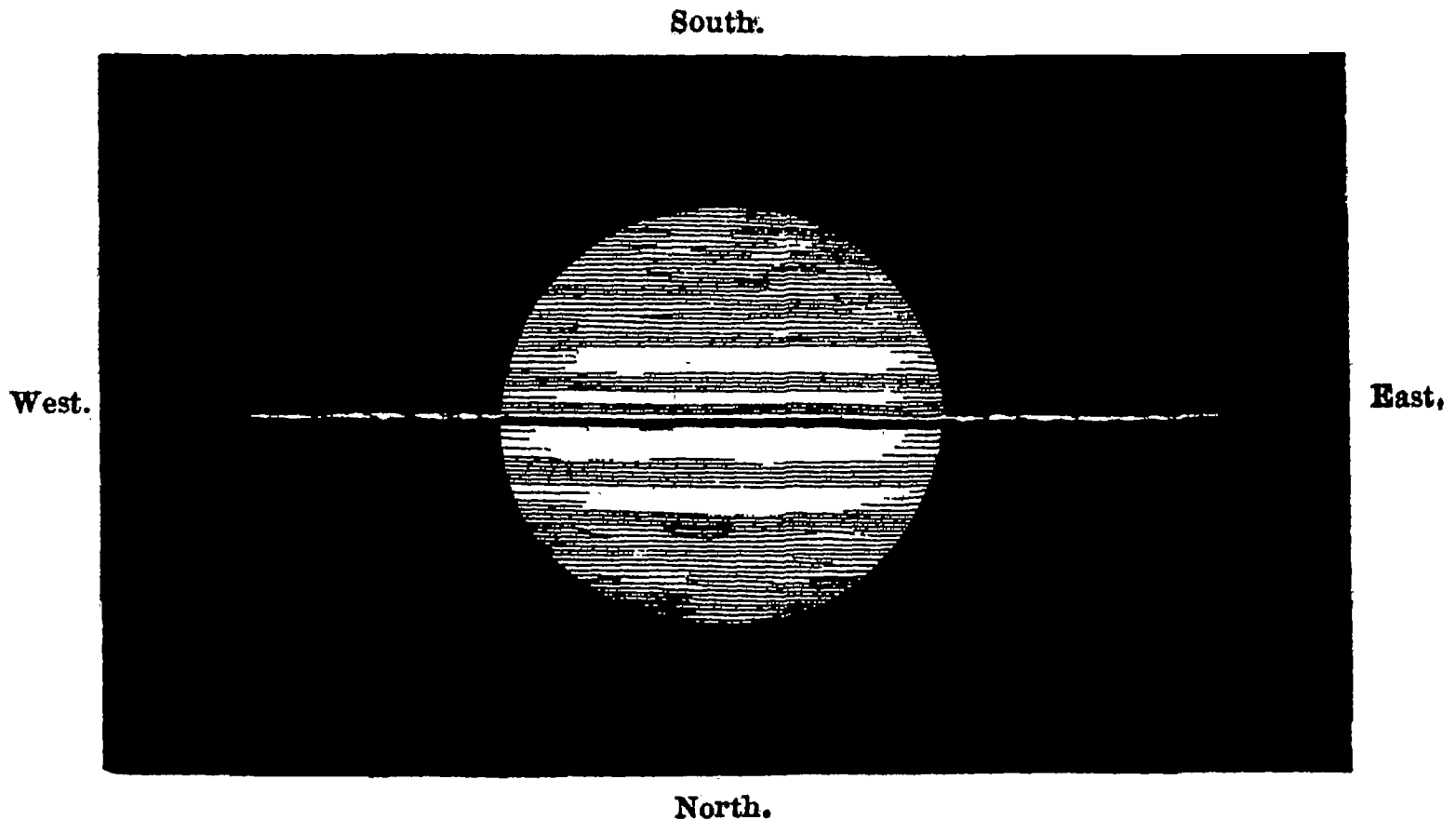


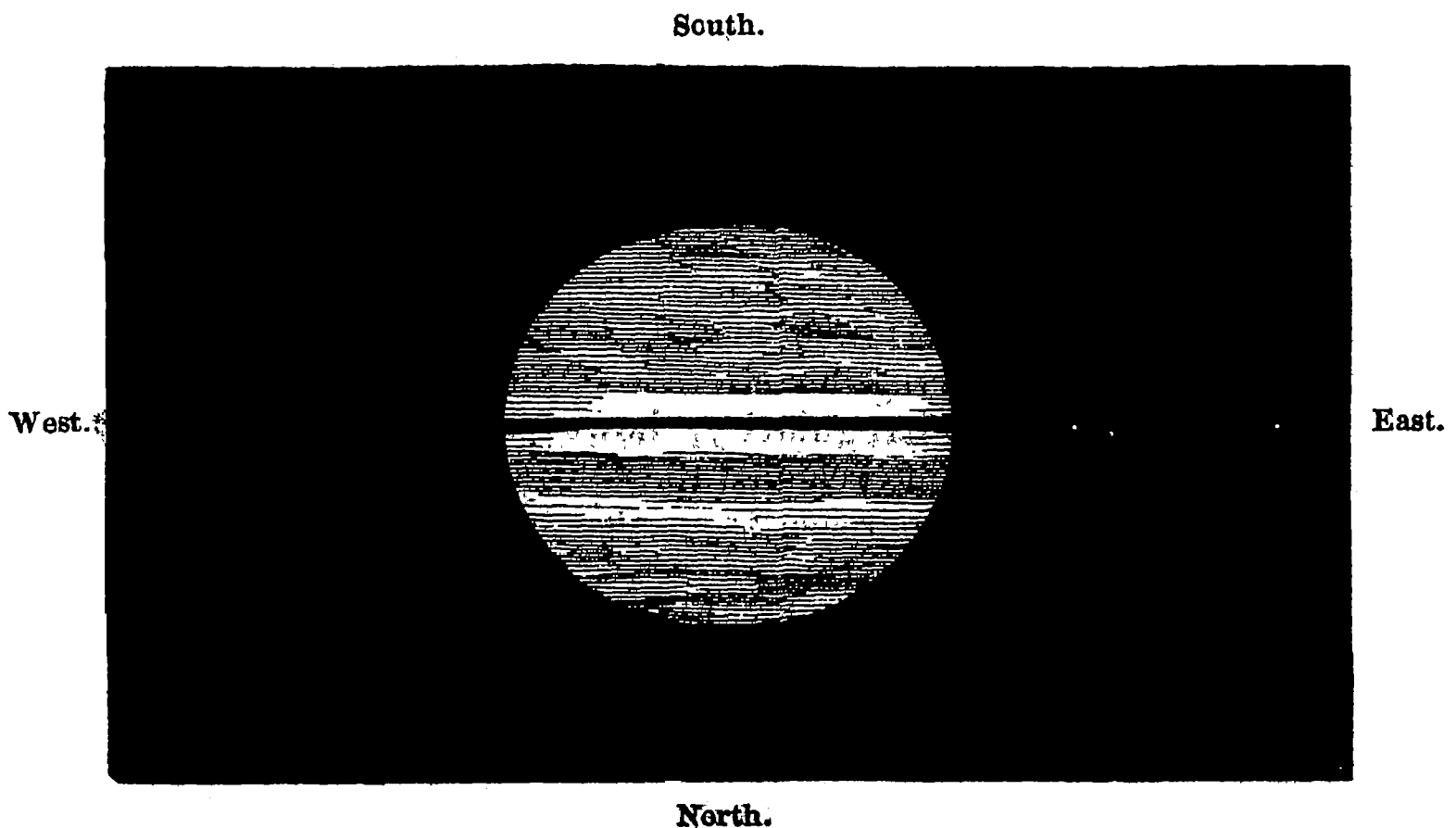
Note on Two Drawings of Saturn. By Capt. W. S. Jacob.

Two drawings of *Saturn*, by Captain Jacob, were exhibited at the meeting in December. Captain Jacob writes:—

“No. 1 was taken on the morning of November 12th, shortly before the disappearance of the ring, as seen in Dr. Lee’s tele-



scope at Hartwell. I cannot say how far the inequalities in the ring were due to want of definition. The atmosphere was not in prime condition, and scarcely bore the power of 240; yet, when the definition seemed at its best by occasional glimpses, the inequalities were the most conspicuous.



“No. 2 was taken at York on the morning of the 4th Dec.

with the 9 inch object glass which Messrs. Cooke and Sons have been preparing for my equatoreal. The excellence of its defining power may be judged of from the fact of its separating the dark streak across the planet into two parts with an almost inconceivably fine line of light between viz the ring itself and its shadow. The breadth of the former could not have been much more than 0.04.

Only four satellites could be seen viz *Titan* at some distance and the three shown in the drawing of which the outermost is *Tethys* and the other two probably *Dione* and *Enceladus*.

Hartwell at *Aylesbury*
December 86

*The Solar Eclipse of the 31st December 1861 observed at
Kilkenny House Sion Hill, Bath By R W H Hardy
Esq R N*

As the clouds cleared off about noon we were enabled to view the eclipse uninterruptedly. The moment of first contact was not accurately noticed. It appeared to take place at 1^h 45^m G. M. T. Soon after the eclipse began and for some time afterwards the overlapping surface of the Moon was covered over with a soft grey tint which terminated on the advancing edge in a narrow band of deep purple. Concurrently with this purple band there appeared in advance of the Moon's edge but concentric with it, at a short distance a bright gleam of light brighter than the solar disk. This light was separated from the Moon's edge by a narrow pale green shadow which softened into the former. This is also the character of all shadows from objects on our Earth. At 2^h the Moon's edge undulated rapidly while the Sun's edge remained comparatively tranquil. About this time also the outline of the Moon appeared to form an irregular curvature bulging out at the edge *a*, figure 1. This irregularity however diminished as the Moon advanced till she reached the central line when it ceased but began again to increase from this epoch till it reached a second maximum near the point *a* figure 3 at 3^h G. M. T. Before this at 2^h 15^m a bright yellow green light reflected from the Moon's edge and continuous surface attracted our notice which not only brought out our satellite in strong relief but also showed the lunar surface beautifully foreshortened especially so at 3^h 35^m. With respect to the apparent undulations of the edges of the Sun and Moon they were about equal when our satellite reached the line of centres and at their