

ANNULAR ECLIPSE OF THE SUN, 1858, MARCH 14-15.

THE following suggestions for observation of the eclipse are not offered as by any means complete, but as presenting grounds for consideration, which may tend to direct observers in deciding on the employment of the means which they may possess.

I. *Observations not requiring Instruments.*

1. As the eclipse advances, it is desirable to obtain some notion or measure of the degree of darkness.
2. At what distance from the eye can a book or paper, exhibiting type of different sizes, be read?
3. Hold up a lighted candle nearly between the sun and your eye. At how many sun-breadths' distance from the sun can the flame be seen?
4. If you are in an elevated position, remark the changes of colour and appearance of the surrounding objects in the landscape.
5. If you see the spots of light formed by the intersecting shadows of the boughs of trees, remark whether they exhibit the lune-form of the sun.
6. When the annulus is formed, you will probably observe it with a darkened glass; but you are particularly requested to devote one instant (as early as possible) to the verification of this point, viz.: When the annular sun is viewed with the naked eye, does it appear an annulus or a fully illuminated disk?

II. *Optical, Astronomical, and Solar-physical Observations, requiring the use of Instruments.*

7. As the eclipse advances, estimate (on the image seen in the telescope) the comparative intensity of the sun's light near the centre of his disk and near his limb.
8. For the more critical observations, it is desirable that the power of your telescope should be so low as to give you an easy view of the whole breadth of the sun.
9. Remark irregularities on the moon's limb.
10. As the cusps become very sharp, remark whether they are irregular. For this, and for all the observations near the annular phase, it is necessary that you be provided either with a graduated prismatic shade, or with a succession of shades of different intensity, and that you instantly select the shade which is most agreeable to your eye.
11. Remark whether the sun's light extends beyond the inter-