

# ECLIPSES DURING THE YEAR 1864.

There will not be any Eclipse of the Moon for 1864.

Of the Sun there will be but two Eclipses, and these will not be specially interesting to Canadian observers of astronomical changes.

On the 5th of May, in the afternoon, there will be a central Eclipse of the Sun. In Canada it will not be visible, but will be observed in the Western part of Illinois and Wisconsin about sunset. Those who dwell in California may have a fine view of it.

II.—On the 30th of October there will be an Annular Eclipse of the Sun, not visible in Canada.

## DURATION OF THE SEASONS, &c.

|                           | D. | H. | M. |                          | D.  | H. | M. |
|---------------------------|----|----|----|--------------------------|-----|----|----|
| Sun in Winter Signs,...   | 89 | 1  | 4  | Tropical Year,.....      | 365 | 5  | 57 |
| Sun in Spring Signs,...   | 92 | 20 | 42 | Sun North of Equator,... | 159 | 11 | 6  |
| Sun in Summer Signs,...   | 93 | 14 | 24 | Sun South of Equator,... | 176 | 18 | 51 |
| Sun in Autumnal Signs,... | 89 | 17 | 17 | Difference.....          | 7   | 16 | 15 |

## EQUINOXES AND SOLSTICES.

|                            | D.    | H. | M. |             | D. | H. | M. |
|----------------------------|-------|----|----|-------------|----|----|----|
| Verbal Equinox begins..... | March | 20 | 3  | 2 Morning.  |    |    |    |
| Summer Solstice.....       | June  | 20 | 11 | 24 Evening. |    |    |    |
| Autumnal Equinox.....      | Sept. | 22 | 2  | 8 Evening.  |    |    |    |
| Winter Solstice.....       | Dec.  | 21 | 7  | 55 Morning. |    |    |    |

## APPEARANCES OF THE PLANETS, 1864.

Until July 18th Venus will be Morning Star, and the rest of the year Evening Star. Until August 18th Mars will be Morning Star, and Evening Star the rest of the year. Until February 15th Jupiter will be Morning Star, then until Nov. 30th, Evening Star, then the rest of the year Morning Star. Until January 8th Saturn will be Morning Star, then until October 15th Evening Star, then the rest of the year Morning Star.