

BEGINNING AND LENGTH OF THE SEASONS.

	H. M.
Sun enters ♋ (Winter begins) Dec. 21, 1861, at....	10 27 M.
Sun enters ♈ (Spring begins) March 20, 1862, at....	11 35 M.
Sun enters ♊ (Summer begins) June 21, 1862, at....	8 14 M.
Sun enters ♏ (Autumn begins) Sept. 22, 1862, at....	10 21 A.
Sun enters ♋ (Winter begins) Dec. 21, 1862, at....	4 7 A.

	D. H. M.
Length of the { Winter of 1861 '62.....	89 1 9
{ Spring of 1862.....	92 20 39
{ Summer of 1862.....	98 14 7
{ Autumn of 1862.....	89 17 46

Length of the Tropical year.... 365 5 41

ECLIPSES.

In 1862 there will be Five Eclipses—three of the Sun and two of the Moon.

I. Wednesday and Thursday, June 11 and 12. A Total Eclipse of the Moon, *visible* in all parts of North America, as follows:—

	D. H. M.	
Moon enters Penumbra	11 11 33 A.	} Mean time at Halifax.
Moon enters shadow	12 0 27 M.	
Total Eclipse begins	12 1 35 M.	
Middle of Total Eclipse	12 2 6 M.	
Total Eclipse ends	12 2 38 M.	
Moon leaves shadow	12 3 45 M.	
Moon leaves Penumbra	12 4 39 M.	

Magnitude of Eclipse 1.200 (Moon's diameter = 1.)

II. Thursday and Friday, June 26 and 27. A Partial Eclipse of the Sun, *invisible* at Halifax, and in all parts of North America; but may be seen in the south Pacific Ocean, in Lat. 30° 15' South, and Long. 171° 57' West.

	H. M.	
This Eclipse begins June 26	11 58 A.	} Mean time at Halifax.
Ends June 27	4 46 M.	

Magnitude of greatest Eclipse 0.922 (Sun's diameter = 1.)

III. Friday, November 21. A Partial Eclipse of the Sun, *invisible* in all parts of North America; but may be seen in a small portion of the Great Southern Ocean, in Lat. 69° 39' South, Long. 75° 38' East.

Magnitude of greatest Eclipse 0.058 (Sun's diameter = 1.)

	H. M.	
This Eclipse commences June 21	1 42 A.	} Mean time at Halifax.
Ends June 21	2 47 A.	

IV. Saturday, Dec. 6. A Total Eclipse of the Moon, *visible* at Halifax, and in all parts of North America, as follows:—

	H. M.	
Moon enters Penumbra	0 9 M.	} Mean time at Halifax.
Moon enters shadow	1 31 M.	
Total darkness begins	2 39 M.	
Middle total darkness	3 25 M.	
Total darkness ends	4 11 M.	
Moon leaves shadow	5 20 M.	
Moon leaves Penumbra	6 32 M.	

Magnitude of Eclipse 1.415 (Moon's diameter = 1.)