ASTRONOMICAL AND NAUTICAL INFORMATION.

EXPLANATION OF ASTRONOMICAL SYMBOLS AND ABBREVIATIONS.

☉ The Sun.	Astræa.	☊ Ascending Node.		♈ Aries.	0
● New Moon.	⚵ Juno.	☋ Descending Node.		♉ Taurus.	30
☽ First Quarter.	⚳ Ceres.	° Degrees		♊ Gemini.	60
○ Full Moon.	⚴ Pallas.	′ Minutes	of Arc.	♋ Cancer.	90
☾ Last Quarter.	Metis.	″ Seconds		♌ Leo.	120
☿ Mercury.	Diana.	H. or h. Hours		♍ Virgo.	150
♀ Venus.	♃ Jupiter.	M. or m. Minutes	of Time.	♎ Libra.	180
⊕ The Earth.	♄ Saturn.	S. or s. Seconds		♏ Scorpio.	210
♂ Mars.	♅ Uranus.	N. North. E. East.		♐ Sagittarius.	240
Flora.	♆ Neptune.	S. South. W. West.		♑ Capricornus.	270
⚶ Vesta.	☌ Conjunction.	M. or m. Morning.		♒ Aquarius.	300
Iris.	□ Quadrature.	A. or a. Afternoon.		♓ Pisces.	330
Hebe.	☍ Opposition.				

BEGINNING AND LENGTH OF THE SEASONS.

			H.	M.	
Sun enters ♑,	Winter commences	Dec. 21, 1849, at	5	18 Afternoon	Mean Time at St. John.
" ♈,	Spring "	Mar. 20, 1850, "	6	37 Afternoon	
" ♋,	Summer "	June 21, " "	3	36 Afternoon	
" ♎,	Autumn "	Sept. 23, " "	5	36 Morning	
" ♑,	Winter "	Dec. 21, " "	11	14 Afternoon	

	D.	H.	M.
Length of the Winter of 1849–50,	89	1	21
" " Spring of 1850,	92	20	57
" " Summer "	93	14	0
" " Autumn "	89	17	38
Length of the Tropical Year 1850,	365	5	56
Mean Length of the Tropical Year,	365	5	$48\frac{4}{5}$

ECLIPSES OF THE SUN.

In the year 1850, there will be only **two Eclipses**, both of the Sun.

I. An Annular Eclipse of the Sun, **February 11, 1850**, invisible in New-Brunswick. The central line of this Eclipse passes over the Earth, from West to East, beginning in Southern Africa, in Lat. 10° 21′ S., and Long. 22° 53′ E., traversing the Indian Ocean, and East Indian Islands, and ending in the North Pacific, in Lat. 15° 49′ N., and Long. 143° 6′ E. The Northern limit, or the line traversed by the Northern edge of the Moon's Penumbra, begins in Lat. 24° 30′ N., and Long. 25° 29′ E., passes over the Southern part of Arabia and the Chinese Empire, and ends in Lat. 50° 3′ N., and Long. 136° 28′ E. The Southern line of simple contact begins in Lat. 46° 36′ S., and Long. 7° 43′ E., passes over the Southern Ocean and Australia, and ends in Lat. 17° 49′ S., and Long. 155° 50′ E.

II. A total Eclipse of the Sun, **August 7, 1850**, invisible in New-Brunswick. The centre of the shadow in this Eclipse passes over the Earth, from West to East, beginning in Lat. 12° 17′ N., and Long. 150° 5′ E., traversing the Pacific Ocean, and ending off the Western coast of South America, in Lat. 9° 42′ S., and Long. 80° 28′ West. The Northern line of simple contact begins in Lat 43° 8′ N., and Long. 133° 30′ E., passes over the North Pacific and South-Western parts of the United States, and ends in the Atlantic, in Lat. 41° 20′ N., and Long. 66° 36′ W. The Southern line begins in Lat. 18° 38′ S., and Long. 156° 46′ E., passes over the South Pacific, and ends in Lat. 40° 13′ S., and Long. 88° 17′ W.