

yearly edition,
will continue to
be in the state of the
Merschel, Clarke,
in the Canadian

September
..... 5629
..... 11
April 24th,
..... 1285

	D.	H.	M.
Length of the Winter 1867-8	89	00	57
Length of the Spring, 1868	92	20	36
Length of the Summer, 1868	93	14	23
Length of the Autumn, 1868	89	17	56
Sun North of the Equator	186	10	49
Sun South of the Equator	178	18	58
During the year 1867-8, the Sun longer in N. Signs	7	15	56
Average excess of Sun in N Signs	7	16	51
Length of the Tropical year, commencing at the Winter Solstice, 1867, and terminating at the Winter Solstice, 1868	365	5	42
Average length of the Tropical year	365	5	48

The *Solar year* is the time which the sun takes in passing over the twelve signs of the Zodiac, which is 365 days, 5h. 48m. 48s. The *Orbit year* is 365 days 6 hours, or rather 365 days for three years in succession, and every fourth year 366 days. The *Sidereal year* is 365 days, 5h., 48m., and every fourth year 366 days. The *Anomalistic year* is 365 days, 6h., 14m. The *lunar astronomical year* is 354 days, 8h., 48m., or 12 lunations. The *Anomalistic year* is an advance of the orbit as part of the solar system in space, and its excess over the *Sidereal* or *Tropical year*, is the stellar measure of the annual advance of the whole system.

Thurs-
..... May 21
..... " 24
..... " 31
..... June 7
..... " 17
..... " 20
..... " 21
..... " 22
..... " 24
..... " 29
..... " 30
..... Dec. 21
..... " 25

Eclipses During the Year 1868.

- I. In the year 1868, there will be two Eclipses of the Sun.
On February 22nd, there will be an *Annular eclipse of the sun*, invisible on this continent.
 - II. On August 17th, a total eclipse of the sun, invisible on this continent.
- A Transit of Mercury over the sun's disc occurs November 4th, invisible as the transit occurs when the sun is below the horizon.

ices
..... June 11
..... " 29
..... Nov. 24
..... Dec. 8

Appearances of the Planets 1868.

JUPITER will be a morning star until the 4th of July, then an evening star until the 26th of December. MARS will be a morning star until November 18th, then evening star. SATURN will be an evening star until the 24th of February, then a morning star until the 21st August, subsequently an evening star. VENUS an evening star until the 16th July, and a morning star during the remainder of the year. When the elongation of Venus is about 40° between its inferior conjunction and greatest elongation it appears brightest: for then, though its Phase be but the 1/3,200th of a circle, it is so much nearer the earth than at its superior conjunction, that the want of surface is more than compensated by intense light, this will occur on the 21st August.

3 p.m. } Green-
3 a.m. } wich
3 a.m. } Mean
2 p.m. } Time
3 p.m. }

The satellites of Jupiter are invisible from February 14th, to April 1st, the planet being too near the sun.