

THE CANADIAN ALMANAC, FOR THE YEAR 1858.

CHRONOLOGICAL CYCLES.

Golden Number	18	Dominical Letter	C
Epoct	15	Roman Indiction	1
Solar Cycle	19	Julian Period	6571

EPOCHS.

The year 5619 of the Jewish Era com. Sept. 19th	1858	The 22nd of Queen Victoria's Reign beg. June 20th..	1859
The year 1276 of the Mahom. Era com. Aug. 22nd.....	1858	The 83rd of the Indep. of the U. S. begins July 4th...	1858

FIXED AND MOVEABLE FESTIVALS AND ANNIVERSARIES.

Ash Wednesday	Feb'y 17	Whitsunday	May 23
St. Patrick	March 1	Birth of Queen Victoria	May 24
Lady Day	Mar. 17	Midsummer Day	June 24
EASTER SUNDAY	Mar. 25	Birth of Prince Albert	Aug. 26
St. George	April 4	Michaelmas Day	Sept. 29
Holy Thursday	April 23	Birth of Prince of Wales	Nov. 9
	May 13	St. Andrews	Nov. 30

Explanation of the Articles in the Calendar.

These pages are calculated for Toronto and Quebec, and for ordinary purposes will serve with sufficient accuracy for every city in Canada.

MOON'S PHASES.—This Table gives the times for the two meridians when the moon passes the geocentric longitudes of 0°, 90°, 180° and 270° east of the sun. It gives also the times of her greatest and least distance from the earth.

TWILIGHT.—In this table are given the times at which twilight begins in the morning and ends in the evening, i. e., the times when the sun's centre is 18° below the horizon.

GREATEST ELONGATION OF THE POLE STAR.—This column gives the greatest azimuth of the Pole Star east or west from the meridian as observed at a place in latitude 45°. When the greatest elongation corresponding to any other latitude is required, the number given in the column should be corrected by means of the following table.

Degrees of Latitude	42	43	44	45	46	47	48	49	50
1st Correction for degrees	-5 58	-4 5	-2 5	0 0	+2 12	+4 32	+6 59	+9 34	+12 18
2nd Correction for each minute of latitude.....	+ 1.9	+ 2.0	+ 2.1	+ 2.2	+ 2.3	+ 2.5	+ 2.6	+ 2.7	

The 1st correction for the degrees of latitude is to be subtracted from the greatest elongation given in the calendar, or added to it, according as the degrees of latitude are less or greater than 45°.

The 2nd correction, which is always additive, is found by multiplying the number given in the third line of the table by the number of minutes in the latitude.

Thus for latitude 48°20'...1st correction=	-4' 5"	2nd cor.	+ 2.0×20=	+40"
" " 47°40'... " "	+ 4'32"	" "	+ 2.5×40=	1'40"
" " 45°10'... " "	+ 0' 0"	" "	+ 2.2×10=	0'22"

THE PLANETS.—The times of rising and setting of the five chief planets are calculated for Toronto, and are corrected for refraction. The times of culmination, although computed for the meridian of Toronto, will serve approximately for the whole of Canada. The meridian zenith distances, being designed merely to aid in finding the planets, have been given only to the nearest tenth of a degree, as seen from the latitude of Toronto.

When the planetary day is shorter than the mean solar day, and commences soon after the midnight of the preceding day, the planet will sometimes arrive a second time on the meridian before the expiration of the actual civil day. From analogous causes a planet will sometimes rise twice or set twice in the same civil day. When two culminations occur in the same day, or two risings or settings, the times of both are registered.

The times of the SUN'S RISING AND SETTING are given for the upper limb, and are corrected for refraction both for Toronto and Quebec.

The MOON'S RISING is given from full to change, and her setting from change to full.

The MOON'S MERIDIAN ZENITH DISTANCES are given to the nearest tenth of a degree for Toronto. They are not corrected for parallax or refraction.

The column SUN ON MERIDIAN gives the time that a watch should shew when the shadow of a sun dial is on the noon mark.

DECLINATION OF THE SUN AT APPARENT NOON.—This column gives the sun's declination at the instant he passes the meridian of Toronto.

MOON'S AGE.—This column shews to the nearest tenth of a day the Moon's age at Toronto Noon.

The column, MOON ON THE MERIDIAN, gives the mean time at which the moon's centre passes the meridian of Toronto.

The column, UPPER TRANSIT OF POLE STAR shews for every day the mean time at which the Pole Star makes its upper transit across the meridian of Toronto. It passes in the morning from April 8th to October 8th, and in the evening for the rest of the year.

The five last columns, although computed for Toronto, will serve with sufficient accuracy for the whole of Canada.

The time at which the lower transit of the Pole Star occurs may be found by adding 11 h. 58 m. 2 s. to the time of its preceding upper transit.

From the time of the upper transit of the pole star may be found the time of its greatest western or eastern elongation, by adding or subtracting the constants given in the annexed Table.

Latitude	42	43	44	45	46	47	48	49	50
Constant.....	h m s	h m s	h m s	h m s	h m s	h m s	h m s	h m s	h m s
	5 53 49	5 53 38	5 53 26	5 53 14	5 53 2	5 52 49	5 52 36	5 52 22	5 52 8