

# ASTRONOMICAL QALCULATIONS

Made Expressly for this Publication at the Magnetic Observatory in Toronto for the Year 1889.

### Chronological Cycles.

Golden Number Epact Solar Cycle			
	22	Julian Period	602

#### Epochs.

The year 5650 of the Jewish Era begins Sep-	The 53rd of Queen Victoria's Reign begins
tember 26 1889 The year 1307 of the Mahometan Era begins	June 20 1889 The 23rd of the Dominion of Canada begins
on August 28	Inly I

## Fixed and Movable Festivals and Anniversaries.

New Year's Day St. David Ash Wednesday St. Patrick Lady Day	March 6 March 17	Whitsunday Midsummer Day Dominion Day	June June July	9 24
Easter Sunday St, George	April 21 April 22	Michaelmas Day Birth of Prince of Wales St. Andrew. Christmas Day I	Vov.	9

# Explanation of the Articles in the Calendar.

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

Moon's Phases.—This Table gives the times (standard 75th meridian)\* 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.

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

The standard times\* both for the rising and setting of the Moon's centre are given for every day for Toronto.

<sup>\*</sup> In the present Almanac, the hours are numbered from o (midnight) to 23.

<sup>†</sup> Although these times are calculated for Toronto only, the standard times at other places differing not rauch in latitude from this place may be obtained with sufficient accuracy for ordinary purposes, by adding four minutes for every degree west of Toronto, and subtracting four minutes for every degree east of Toronto.