## Astronomical Calculations.

## Eclupses.

During the year 1877 there will be three eclipses of the sun and two of the moon.

1. February 27 , total eelipse of the moon, invisible in America, except in extreme east of Nova Scotia.
2. March 14, partial eclipse of the sun, invisible in America, except in the north and north-west.
3. August 8, partial eclipse of the sun, invisible in America.
4. August 23 , total eclipse of the moon, partly visible in America, Eclipse begins $7: 52$ evening in Toronto ; 7:19 in Quebee ; 7:39 in Frederickton ; 6:57 in Halifax. Ends 9:02 in Toronto ; 9:34 in Quebec ; 9:55 in Frederickton ; 10:05 in Halifax.
5. September 6, partial celipse of the sun, invisibie in North America.

Morning stars.
Venus until May 6.
Mars until Juns 6; visible also after sun-
rise till September 5.
Jupiter till April 13; also visible before
sunrise till June 21.
Saturn from March 1 to June 16; also
visiblebeforesunrisetill September 15.
Venus after May 6.
Mars after June 6.
Jupiter after April 13.
Saturn after March 1; also after June 16.

## CHRONOLOGICAL CYCLES.

Dominical Letter
Roman Indiction
Golden Number.
Jewish Lunar Cycle.
Epact
Solar Cycle

G
5
16
13
15
15
10

Julian Period
6590
Mid Lent. $\qquad$ Good Friday
Ascension Day
Easter Sunday
Ash Wednesday. $\qquad$
$\qquad$
$\qquad$ March 11 March 30 May 10 April 1 Feb. 14

THE FOUR SEASONS.
Spring begins, Sun's entrance in Aries, March 20, 7h. 10 m . morning.

| Summer |  |  |
| :---: | :---: | :--- |
| Antumn | $"$ | $"$ |
| Winter | $"$ | $"$ |$\quad$ Cancer, June 21, 3 h .8 m. morning.

fixed and moveable festivals and anniversaries.


## First Month.]

| 1 | Mon. | The year op |
| :--- | :--- | :--- |
| $\mathbf{2}$ | Tu. | struction of |
| 3 | Wed. | the prospect |
| 4 | Th. | health and lif |
| 5 | Fri. | national blet |
| 6 | Sat. | land, at least ? |

Wine is a Mocker, st

| 7 | Sun. | Am I My B |
| ---: | :--- | :--- |
| 8 | Men. | First Youths' |
| 9 | Tu. |  |
| 10 | Wed. | None but sobe |
| 11 | Th. | Men who use |
| 12 | Fri. | cold than thos |
| 13 | Sat. | Order of TemI |

thereby is not wise.

| 14 | Sun. | Now therefore |
| :--- | :--- | :--- |
| 15 | Mon. | nor rstrong dri |
| 16 | Tu. | First Temp. M |
| 17 | Wed. | Rev. Dr. Beecl |
| 18 | Th. | Temperance u |
| 19 | Fri. |  |
| 20 | Sat. | Pledge against |

drink wine, and men

| 21 | Sun. | Praise pra |
| :--- | :--- | :--- |
| 22 | Mon. | The American |
| 23 | Tu. | First meeting |
| 24 | Wed. | Van Pelt, "th |
| 25 | Th. | his Saloon busi |
| 26 | Fri. | Dunkin Bill vo |
| 27 | Sat. |  |

Woe to him th

[^0]St. George
Birth of Queen Victoria
May 24 St. Andrew..

Sun.
Mon.
Tu.
Wed.

I have drunk n poured out my Rev.Dr.Nott (A J. Dunlop com.


[^0]:    28
    29
    30

