

| PHASE.                               | Hali-<br>fax. | Frede-<br>ricton. | Que-<br>bec. | Mont-<br>real. | Kings-<br>ton. | To-<br>ronto. | Lon-<br>don. | Fort<br>Garry. | Victo-<br>ria. |
|--------------------------------------|---------------|-------------------|--------------|----------------|----------------|---------------|--------------|----------------|----------------|
|                                      | H. M.         | H. M.             | H. M.        | H. M.          | H. M.          | H. M.         | H. M.        | H. M.          | H. M.          |
| First contact with<br>Penumbra ..... | 16 13         | 16 3              | 15 43        | 15 33          | 15 21          | 15 9          | 15 1         | 13 58          | 12 15          |
| First contact with<br>shadow .....   |               |                   |              |                | 16 24          | 16 12         | 16 4         | 15 1           | 13 18          |
| Beginning of total<br>Phase .....    |               |                   |              |                |                |               |              | 16 6           | 14 23          |
| Middle of Eclipse ..                 |               |                   |              |                |                |               |              |                | 15 8           |
| End of total Phase ..                |               |                   |              |                |                |               |              |                | 15 53          |

Magnitude of Eclipse (Moon's diameter=1) 1.423.

First contact with shadow occurs at 124° from the North point of Moon's limb towards the East; and the last contact 82° towards the West; in each case for direct image.

II. A partial Eclipse of the Sun, May 25, 1873, visible in the Eastern part of Canada on the morning of May 26 (civil time.)

The Eclipse begins on the earth generally May 25, at 19h. 3m Greenwich time, in longitude 26° 57' W of Greenwich, and latitude 25° 4' N.

The greatest Eclipse is at 21h. 8.8m. in long. 99° 46' W., and latitude 63° 54' N.

Magnitude 0.899; the Sun's diameter being unity.

The Eclipse ends generally May 25, 23h. 14.5m. in longitude 131° 13' E., and latitude 52° 57' N.

The line on which the Eclipse ends at sunrise crosses the St. Lawrence a little above Montreal.

At HALIFAX the Sun rises partially eclipsed.

Magnitude at sunrise 0.59.

Position 34° from North point of Sun's disc towards the East.

At FREDERICTON the Sun rises partially eclipsed.

Magnitude at sunrise 0.56.

Position 40° from North point of Sun's disc towards the East.

At QUEBEC the sun rises partially eclipsed.

Magnitude at sunrise 0.30.

Position 51° from North point of Sun's disc, towards the East.

At MONTREAL, a very small portion of the Sun is eclipsed at rising.

Magnitude at sunrise 0.06.

Position 53° from North point of Sun's disc, towards the East.

At TORONTO the Eclipse is not visible.

III. A total Eclipse of the Moon, Nov. 4, which occurs after the Moon has set at most parts of the Dominion.

At Victoria the first contact with the Penumbra and with the shadow occur just before the Moon sets in the morning of November 4.

IV. A partial Eclipse of the SUN Nov. 19, 1873 invisible in Canada.

## EUROPEAN SOVEREIGNS.

### DATES OF BIRTH AND ACCESSION.

|                            |                                    | Born.          | Accession.     |
|----------------------------|------------------------------------|----------------|----------------|
| Austria .....              | Francis Joseph, Emperor .....      | 18 Aug., 1830  | 2 Dec., 1848   |
| Baden .....                | Frederick W. L., Grand Duke .....  | 9 Sept., 1826  | 5 Sept., 1856  |
| Bavaria .....              | Louis II., King .....              | 25 Aug., 1815  | 10 Mar., 1864  |
| Belgium .....              | Leopold II., King .....            | 9 April, 1835  | 10 Dec., 1865  |
| Brazil (South America) ..  | Pedro II., Emperor of .....        | 2 Dec., 1825   | 7 April, 1831  |
| Denmark .....              | Christian IX., King .....          | 8 April, 1818  | 15 Nov., 1833  |
| England .....              | Victoria, Queen .....              | 24 May, 1819   | 20 June, 1837  |
| France .....               | L. A. Thiers, President .....      | 16 April, 1797 | 31 Aug., 1871  |
| Greece .....               | George I, King of the Greeks ..... | 24 Dec., 1845  | 6 June, 1833   |
| Hesse Darmstadt .....      | Louis III, Grand Duke .....        | 9 June, 1806   | 16 June, 1818  |
| Holland .....              | William III, King .....            | 19 Feb., 1817  | 17 Mar., 1840  |
| Italy .....                | Victor Emmanuel II, King .....     | 14 Mar., 1820  | 23 Mar., 1849  |
| Mecklenburg Schwerin ..    | Frederic Francis, Grand Duke ..... | 28 Feb., 1823  | 7 Mar., 1842   |
| Mecklenburg Strelitz ..    | Fred Wm. Charles, Grand Duke ..    | 17 Oct., 1819  | 6 Sept., 1860  |
| Oldenburg .....            | Nicolas, Grand Duke .....          | 8 July, 1827   | 27 Feb., 1853  |
| Portugal .....             | Don Louis I, King .....            | 31 Oct., 1818  | 11 Nov., 1821  |
| Prussia .....              | William I, Emperor of Germany ..   | 22 Mar., 1797  | 2 Jan., 1861   |
| Roman Church .....         | Pius IX, Pope .....                | 13 May, 1792   | 16 June, 1846  |
| Russia .....               | Alexander II, Emperor .....        | 29 April, 1818 | 2 Mar., 1855   |
| Saxe Coburg and Gotha ..   | Ernest II, Augustus Charles, Duke  | 21 June, 1818  | 29 Jan., 1844  |
| Saxe Meiningen .....       | George, Duke .....                 | 2 April, 1826  | 20 Sept., 1866 |
| Saxe Weimar .....          | Charles Alexander, Grand Duke ..   | 24 June, 1818  | 8 July, 1853   |
| Saxony .....               | John I, King .....                 | 12 Dec., 1801  | 9 Aug., 1854   |
| Spain .....                | Amadeus, King .....                | 30 May, 1845   | Nov., 1870     |
| Sweden and Norway .....    | Charles XV, Louis Eugene, King ..  | 3 May, 1826    | 7 July, 1859   |
| Turkey .....               | Abdul Aziz Khan, Sul'an .....      | 9 Feb., 1830   | 25 June, 1866  |
| United States (America) .. | Ulysses S. Grant, President .....  | 27 April, 1822 | 4 Mar., 1869   |
| Wurtemberg .....           | Charles Frederick Alexander, King  | 6 Mar., 1823   | 25 June, 1861  |