

# ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT MONTREAL IN OCTOBER, 1860.

By Archibald Hall, M.D.

| Day. | DAILY MEANS OF THE                        |                         |            |                    |        |         |                     | THERMOMETER.            |                         | WIND.                                                                     |                                 | RAIN AND SNOW.                  |                            |       | GENERAL OBSERVATIONS.                                                                           |
|------|-------------------------------------------|-------------------------|------------|--------------------|--------|---------|---------------------|-------------------------|-------------------------|---------------------------------------------------------------------------|---------------------------------|---------------------------------|----------------------------|-------|-------------------------------------------------------------------------------------------------|
|      | Barometer corrected and reduced to F. 32° | Temperature of the air. | Dew Point. | Relative Humidity. | Ozone. | CLOUDS. |                     | Maximum read at 9 P. M. | Minimum read at 7 A. M. | Its general Direction and Mean Force from 0 Calm to 10 Violent Hurricane. | Rain in 24 hrs read at 10 A. M. | Snow in 24 hrs read at 10 A. M. | Total rain and melted snow |       |                                                                                                 |
|      |                                           |                         |            |                    |        | Amount. | General description |                         |                         |                                                                           |                                 |                                 |                            |       |                                                                                                 |
| 1    | Inc's.                                    | °                       | °          | 0.100              | 0.10   | 0.10    |                     | °                       | °                       |                                                                           | 0.10                            | Inch.                           | Inch.                      | Inch. | Fine Lunar Halo.                                                                                |
| 2    | 30.153                                    | 39.8                    | 36.8       | .86                | 7.0    | 9.6     | Nimb.               | 46.9                    | 32.7                    | S. S. E.                                                                  | 4.0                             | 0.50                            |                            |       |                                                                                                 |
| 3    | 30.072                                    | 45.2                    | 39.9       | .81                | 9.0    | 9.6     | Cu. St.             | 50.0                    | 38.0                    | W. S. W.                                                                  | 1.2                             | Inap.                           |                            |       |                                                                                                 |
| 4    | 30.231                                    | 49.7                    | 44.2       | .82                | 8.5    | 10.0    | Cu. St.             | 55.0                    | 43.0                    | W. S. W.                                                                  | 0.6                             |                                 |                            |       | Fine Aur. towards midnig't.                                                                     |
| 5    | 30.084                                    | 48.1                    | 46.2       | .94                | 10.0   | 10.0    | Nimb.               | 50.8                    | 46.6                    | N. S. E.                                                                  | 2.3                             | 0.17                            |                            |       |                                                                                                 |
| 6    | 29.935                                    | 49.5                    | 41.3       | .73                | 9.0    | 7.3     | Cu. St.             | 56.8                    | 45.0                    | W. S. W.                                                                  | 3.0                             | 0.13                            |                            |       |                                                                                                 |
| 7    | 30.083                                    | 41.5                    | 29.0       | .55                | 4.5    | 4.3     | Cu.                 | 48.6                    | 37.0                    | W. N. W.                                                                  | 2.6                             | 0.03                            |                            |       | Rain Sleet Snow. [pools. Hoar frost with thin ice on Earthquake 5.55 a.m.                       |
| 8    | 29.847                                    | 42.3                    | 33.0       | .66                | 9.0    | 9.6     | Cu. St.             | 47.2                    | 36.0                    | S. S. E.                                                                  | 1.3                             |                                 |                            |       |                                                                                                 |
| 9    | 29.293                                    | 46.2                    | 42.2       | .87                | 5.5    | 8.0     | Nimb.               | 52.0                    | 40.5                    | W.                                                                        | 2.0                             | 0.51                            |                            |       |                                                                                                 |
| 10   | 29.311                                    | 43.0                    | 37.8       | .80                | 6.0    | 6.0     | Cu.                 | 55.4                    | 36.0                    | W. S. W.                                                                  | 1.0                             | Inap.                           |                            |       | Drizzly Rain. Slight Fog early a.m.                                                             |
| 11   | 29.561                                    | 49.0                    | 41.0       | .72                | 6.5    | 7.0     | Cu. St.             | 53.5                    | 37.5                    | S. S. W.                                                                  | 1.3                             |                                 |                            |       |                                                                                                 |
| 12   | 29.580                                    | 51.4                    | 41.2       | .65                | 5.5    | 7.0     | Cu. St.             | 62.0                    | 43.0                    | S. W.                                                                     | 4.3                             | Inap.                           |                            |       |                                                                                                 |
| 13   | 29.957                                    | 44.0                    | 34.7       | .66                | 3.5    | 3.0     | Cu. St.             | 52.4                    | 35.2                    | S. W.                                                                     | 2.0                             | Inap.                           |                            |       | Paint Lunar Corona. Frost. [Lunar Halo. Faint Aur. light, imperfect Gale during night of 28-29. |
| 14   | 30.115                                    | 43.6                    | 34.5       | .67                | 2.5    | 3.0     | Cir. Cu.            | 50.9                    | 30.0                    | W. S. W.                                                                  | 1.0                             |                                 |                            |       |                                                                                                 |
| 15   | 30.27                                     | 42.8                    | 32.7       | .62                | 2.2    | 2.0     | Cu. St.             | 49.5                    | 36.0                    | S. S. E.                                                                  | 1.0                             |                                 |                            |       |                                                                                                 |
| 16   | 29.971                                    | 37.8                    | 35.7       | .93                | 10.0   | 10.0    | Nimb.               | 45.5                    | 31.2                    | W. N. W.                                                                  | 1.0                             | 0.07                            |                            |       | Fog early a.m.                                                                                  |
| 17   | 29.882                                    | 43.0                    | 42.2       | .80                | 7.5    | 5.0     | Nimb.               | 56.3                    | 35.3                    | W. S. W.                                                                  | 2.0                             | 0.42                            |                            |       |                                                                                                 |
| 18   | 30.193                                    | 43.8                    | 35.3       | .70                | 8.0    | 10.0    | Cu. St.             | 53.0                    | 41.0                    | N. N. E.                                                                  | 2.3                             | 0.15                            |                            |       |                                                                                                 |
| 19   | 30.302                                    | 44.0                    | 38.5       | .81                | 7.0    | 2.0     | Cir. Cu.            | 50.4                    | 36.2                    | S. E.                                                                     | 1.0                             |                                 |                            |       | Faint Aur. light, imperfect Gale during night of 28-29.                                         |
| 20   | 30.219                                    | 43.8                    | 42.9       | .81                | 5.0    | 0.0     | Cu. St.             | 56.8                    | 38.0                    | W. S. W.                                                                  | 1.0                             |                                 |                            |       |                                                                                                 |
| 21   | 30.322                                    | 43.6                    | 35.8       | .74                | 3.5    | 3.0     | Cir. St.            | 50.0                    | 38.0                    | N. N. E.                                                                  | 3.3                             |                                 |                            |       |                                                                                                 |
| 22   | 30.106                                    | 40.1                    | 33.0       | .92                | 9.0    | 10.0    | Nimb.               | 43.7                    | 36.0                    | N. E.                                                                     | 2.3                             | 0.35                            |                            |       | Drizzly Rain. Slight Fog early a.m.                                                             |
| 23   | 30.000                                    | 46.2                    | 41.6       | .94                | 10.0   | 10.0    | Nimb.               | 49.5                    | 42.7                    | N. N. E.                                                                  | 1.0                             | 0.90                            |                            |       |                                                                                                 |
| 24   | 29.839                                    | 49.6                    | 46.0       | .90                | 9.5    | 10.0    | Cu. St.             | 54.5                    | 45.0                    | N. N. E.                                                                  | 1.3                             | 0.01                            |                            |       |                                                                                                 |
| 25   | 29.955                                    | 52.2                    | 48.3       | .88                | 5.3    | 8.0     | Cu. St.             | 58.7                    | 49.0                    | W. S. W.                                                                  | 1.0                             | 0.02                            |                            |       | Paint Lunar Corona. Frost. [Lunar Halo. Faint Aur. light, imperfect Gale during night of 28-29. |
| 26   | 30.022                                    | 53.8                    | 48.7       | .84                | 6.0    | 5.3     | Cu.                 | 60.0                    | 50.0                    | S. W.                                                                     | 1.5                             |                                 |                            |       |                                                                                                 |
| 27   | 29.968                                    | 48.0                    | 41.1       | .78                | 2.5    | 5.0     | Cu.                 | 55.4                    | 38.0                    | W.                                                                        | 2.3                             | 0.35                            |                            |       |                                                                                                 |
| 28   | 30.323                                    | 44.8                    | 37.8       | .78                | 1.0    | 0.0     |                     | 55.0                    | 37.0                    | N. N. W.                                                                  | 1.0                             | Inap.                           |                            |       | Fog early a.m.                                                                                  |
| 29   | 30.342                                    | 45.2                    | 37.4       | .74                | 1.5    | 6.3     | Cir. Cu.            | 51.0                    | 35.0                    | S. S. E.                                                                  | 3.3                             |                                 |                            |       |                                                                                                 |
| 30   | 30.187                                    | 50.7                    | 46.5       | .88                | 3.0    | 8.0     | Nimb.               | 55.4                    | 47.0                    | S. S. W.                                                                  | 2.3                             | 0.25                            |                            |       |                                                                                                 |
| 31   | 30.249                                    | 52.6                    | 49.9       | .93                | 4.5    | 10.0    | Cu. St.             | 57.0                    | 40.3                    | N. N. E.                                                                  | 1.0                             | 0.09                            |                            |       | Fog early a.m.                                                                                  |
| 32   | 30.143                                    | 62.1                    | 57.7       | .87                | 4.0    | 8.0     | Cu. St.             | 68.4                    | 52.8                    | S.                                                                        | 1.0                             |                                 |                            |       |                                                                                                 |
| S's  |                                           |                         |            |                    |        |         |                     |                         |                         |                                                                           |                                 |                                 |                            |       |                                                                                                 |
| M's  | 30.122                                    | 46.61                   | 40.73      | 7.96               |        |         |                     | 53.27                   | 40.36                   |                                                                           | 3.98                            |                                 |                            |       |                                                                                                 |

## ABSTRACT OF METEOROLOGICAL OBSERVATIONS AT TORONTO IN OCTOBER, 1860.

Compiled from the Records of the Magnetic Observatory.

| Day. | DAILY MEANS OF THE             |                         |                    |                       | THERMOMETER.                      |                                   | Dew Point at 3, P.M. | WIND.              |                                  | RAIN AND SNOW in 24 hours, ending at 6 A.M. next day. |       |                             |                                                                                             | GENERAL REMARKS. |
|------|--------------------------------|-------------------------|--------------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|--------------------|----------------------------------|-------------------------------------------------------|-------|-----------------------------|---------------------------------------------------------------------------------------------|------------------|
|      | Barometer reduced to 32° Fahr. | Temperature of the Air. | Relative Humidity. | Amount of Cloudiness. | Max'm read at 6 A.M. of next day. | Min'm read at 2 P.M. of same day. |                      | General Direction. | Mean Velocity in Miles per hour. | Rain.                                                 | Snow. | Total rain and melted Snow. | Ozone in 24 hours ending 6 A.M. of next day.                                                |                  |
|      | Inches.                        | °                       | 0-100              | 0-10                  | °                                 | °                                 | °                    |                    |                                  | Inch.                                                 | Inch. | Inch.                       |                                                                                             |                  |
| 1    | 29.6732                        | 47.20                   | 92                 | 10                    | 49.8                              | 37.2                              | 48.0                 | N. 44 E.           | 2.38                             | 0.325                                                 |       |                             | Solar halo at 5 p.m.                                                                        |                  |
| 2    | .7063                          | 50.25                   | 85                 | 10                    | 54.2                              | 46.4                              | 49.0                 | N. 27 W.           | 1.11                             |                                                       |       |                             |                                                                                             |                  |
| 3    | .8460                          | 53.93                   | 77                 | 8                     | 59.2                              | 49.4                              | 47.0                 | S. 84 E.           | 4.88                             | .040                                                  |       |                             |                                                                                             |                  |
| 4    | .6705                          | 54.60                   | 89                 | 10                    | 59.0                              | 50.2                              | 55.0                 | S. 63 E.           | 1.14                             | .005                                                  |       |                             | Particles of snow at 5 p.m.                                                                 |                  |
| 5    | .7222                          | 52.97                   | 76                 | 4                     | 64.0                              | 52.0                              | 50.5                 | N. 29 W.           | 9.08                             |                                                       |       |                             |                                                                                             |                  |
| 6    | .8697                          | 37.77                   | 78                 | 0                     | 53.0                              | 29.8                              | 34.0                 | N. 78 W.           | 4.20                             |                                                       |       |                             |                                                                                             |                  |
| 7    | Sun day                        |                         |                    |                       | 53.2                              | 33.8                              |                      | N. 81 E.           | 2.75                             | .115                                                  |       |                             | Rainbow at 4.30 p. m.<br>{ Dense fog dur. m'g. thun-<br>storm during evening<br>Lunar Halo. |                  |
| 8    | .2347                          | 46.68                   | 70                 | 8                     | 52.6                              | 45.0                              | 35.0                 | N. 46 W.           | 18.13                            |                                                       |       |                             |                                                                                             |                  |
| 9    | .3010                          | 42.97                   | 80                 | 10                    | 48.0                              | 38.0                              | 42.5                 | N. 79 W.           | 5.51                             | Inap.                                                 |       |                             |                                                                                             |                  |
| 10   | .1445                          | 51.80                   | 77                 | 7                     | 59.2                              | 40.2                              | 52.0                 | S. 39 W.           | 11.28                            |                                                       |       |                             | 29th, 30th, and 31st very warm, being 10°9, 14°6, & 17°3, above their resp. av              |                  |
| 11   | .4302                          | 42.27                   | 65                 | 5                     | 51.5                              | 45.7                              | 32.0                 | N. 59 W.           | 11.38                            |                                                       |       |                             |                                                                                             |                  |
| 12   | .7110                          | 37.45                   | 71                 | 4                     | 45.8                              | 28.4                              | 34.0                 | N. 86 W.           | 7.27                             | Inap.                                                 |       |                             |                                                                                             |                  |
| 13   | .8212                          | 39.33                   | 73                 | 4                     | 46.2                              | 30.5                              | 39.0                 | N. 39 W.           | 5.37                             |                                                       |       |                             | No Aurora observed during month.                                                            |                  |
| 14   | Sun day                        |                         |                    |                       | 48.5                              | 38.0                              |                      | N. 24 E.           | 6.27                             |                                                       |       |                             |                                                                                             |                  |
| 15   | .7375                          | 41.57                   | 75                 | 6                     | 49.2                              | 37.5                              | 41.0                 | S. 82 W.           | 6.38                             |                                                       |       |                             |                                                                                             |                  |
| 16   | .5802                          | 47.98                   | 79                 | 6                     | 55.2                              | 35.0                              | 46.0                 | S. 75 W.           | 10.29                            | .190                                                  |       |                             | 29th, 30th, and 31st very warm, being 10°9, 14°6, & 17°3, above their resp. av              |                  |
| 17   | .5875                          | 43.42                   | 71                 | 7                     | 49.0                              | 40.2                              | 35.5                 | N. 7 E.            | 10.83                            |                                                       |       |                             |                                                                                             |                  |
| 18   | .9010                          | 44.20                   | 79                 | 10                    | 49.0                              | 39.0                              | 36.0                 | N. 20 E.           | 3.91                             |                                                       |       |                             |                                                                                             |                  |
| 19   | .8908                          | 47.08                   | 81                 | 6                     | 53.0                              | 39.0                              | 45.0                 | N. 10 E.           | 6.23                             |                                                       |       |                             | No Aurora observed during month.                                                            |                  |
| 20   | .7978                          | 47.50                   | 75                 | 10                    | 52.5                              | 44.8                              | 43.0                 | N. 47 E.           | 11.37                            | .173                                                  |       |                             |                                                                                             |                  |
| 21   | Sun day                        |                         |                    |                       | 51.5                              | 44.5                              |                      | N. 70 E.           | 12.13                            | .220                                                  |       |                             |                                                                                             |                  |
| 22   | .6153                          | 49.20                   | 97                 | 10                    | 51.4                              | 48.0                              | 47.0                 | N. 85 E.           | 6.45                             | .115                                                  |       |                             | 29th, 30th, and 31st very warm, being 10°9, 14°6, & 17°3, above their resp. av              |                  |
| 23   | .4895                          | 49.18                   | 96                 | 10                    | 52.8                              | 48.0                              | 49.0                 | S. 77 E.           | 3.12                             | .095                                                  |       |                             |                                                                                             |                  |
| 24   | .6103                          | 48.45                   | 87                 | 6                     | 55.0                              | 43.4                              | 49.5                 | S. 75 W.           | 3.10                             | .105                                                  |       |                             |                                                                                             |                  |
| 25   | .5300                          | 48.65                   | 86                 | 7                     | 55.1                              | 38.8                              | 49.0                 | N. 70 W.           | 5.33                             |                                                       |       |                             | No Aurora observed during month.                                                            |                  |
| 26   | .7463                          | 43.02                   | 80                 | 1                     | 51.0                              | 41.0                              | 40.0                 | N. 41 W.           | 7.28                             |                                                       |       |                             |                                                                                             |                  |
| 27   | .9097                          | 42.70                   | 83                 | 8                     | 43.2                              | 35.8                              | 41.0                 | N. 74 E.           | 11.66                            |                                                       |       |                             |                                                                                             |                  |
| 28   | Sun day                        |                         |                    |                       | 55.5                              | 44.0                              |                      | S. 69 E.           | 9.21                             | .225                                                  |       |                             | No Aurora observed during month.                                                            |                  |
| 29   | .7995                          | 52.13                   | 87                 | 5                     | 60.0                              | 51.5                              | 52.5                 | S. 84 W.           | 6.12                             |                                                       |       |                             |                                                                                             |                  |
| 30   | .7430                          | 55.55                   | 89                 | 8                     | 62.4                              | 44.0                              | 54.0                 | N. 88 E.           | 5.81                             | .010                                                  |       |                             |                                                                                             |                  |
| 31   | .7060                          | 58.03                   | 87                 | 10                    | 68.0                              | 52.0                              | 57.0                 | N. 33 W.           | 4.84                             | Inap.                                                 |       |                             | No Aurora observed during month.                                                            |                  |
| S's  |                                |                         |                    |                       |                                   |                                   |                      |                    |                                  |                                                       |       |                             |                                                                                             |                  |
| M's  | 29.6711                        | 47.25                   | 81                 | 7                     | 53.65                             | 41.38                             | 44.57                | N. 9° W.           | 6.93                             |                                                       |       |                             |                                                                                             |                  |