

REMARKS ON TORONTO METEOROLOGICAL REGISTER FOR OCTOBER, 1857.

Highest Barometer 29.994 at 8 a.m. on 22nd } Monthly range =
 Lowest Barometer 29.280 at 6 a.m. on 16th } 0.705 inches.
 Mean temperature 64.76 on p. m. of 6th } Monthly range =
 Minimum temperature 26.5 on a. m. of 21st } 37.5
 Mean maximum temperature 51.93 } Mean daily range = 14.45
 Mean minimum temperature 37.47 }
 Greatest daily range 26.52 from a. m. to p. m. of 8th.
 Least daily range 7.0 from p. m. of 4th to a. m. of 5th.
 Warmest day . . . 12th Mean Temperature . . . 57.03 } Difference = 24.21.
 Coldest day . . . 20th Mean Temperature . . . 32.82 }
 Maximum. { Solar 80.90 on p. m. of 13th } Monthly range =
 Radiation. { Terrestrial 17.4 on a. m. of 21st } 63.6
 Aurora observed on 2 nights, viz.: on 17th and 23rd; possible to see Aurora on 13th
 night; impossible on 18th night.
 Snowing on 2 days; depth, 0.2 inches; duration of fall 11.0 hours.
 Raining on 10 days; depth, 1.040 inches; duration of fall, 42.0 hours.
 Mean of cloudiness = 0.62; most cloudy hour observed, 6 a. m., mean = 0.65; least
 cloudy hour observed, midnight; mean = 0.54.

Sums of the components of the Atmospheric Current, expressed in Miles.

North.	South.	East.	West.
2570.76	512.76	1000.69	1718.43

Resultant direction of the wind, N 10° W; Resultant Velocity, 2.93 miles per hour.
 Mean velocity of the wind 6.24 miles per hour.
 Maximum velocity . . . 4.42 miles per hour, from 10 to 11 a. m. on 20th.
 Most windy day 26th—Mean velocity, 27.08 miles per hour.
 Least windy day 5th—Mean velocity, 0.99 do
 Most windy hour 1 to 2 p. m.—Mean velocity, 8.94 do } Difference
 Least windy hour 9 to 10 p. m.—Mean velocity, 4.43 do } 4.51 miles.

2nd. Halo round the moon at 10 p. m. 5th. Halo round the moon at 9 p. m. 5th.
 Corona round the moon at midgt. 12th. Sheet-lightning in S W. 8 to 9 p. m. 14th.
 Halo round the sun at 4 p. m. Very perfect. 15th. Large meteor course from
 zenith towards E. at 7 h. 55 m., p. m. 17th. Thin ice at 6 a. m.—the first observed
 this season. 17th. Sheet-lightning during the evening. 20th, 21st and 22nd. Thin
 ice on the pools at 6 a. m. 21st. Shooting stars numerous during the night. 23th.
 Slight snow from 2 to 9 p. m. First of the season.

The barometer and the temperature through the month exhibit no remarkable fluctuations.

Rain.—There was a considerable deficiency in the rain, its amount being less than half that which usually falls in October.

Wind.—The resultant direction and velocity for October, from 1848 to 1857, inclusive, were N 55° W, 1.44 miles.

The 5th was the most windy day but one ever recorded, its mean velocity being exceeded only on the 14th Dec. 1856, when it amounted to 23.03 miles per hour. From the 25th at midnight to the following midnight the average was 29.63 miles, thus surpassing any velocity yet recorded for 24 consecutive hours.

COMPARATIVE TABLE FOR OCTOBER.

YEAR.	TEMPERATURE.					RAIN.		SNOW.		WIND.	
	Mean.	Difference from Average.	Maximum observed.	Minimum observed.	Range.	No. of days.	Inches.	No. of days.	Inches.	Resultant Direc- tion.	Mean Velocity
1840	44.4	0.8	63.5	23.9	41.6	13	1.860	3	1.860	—	—
1841	41.6	3.6	58.3	20.3	38.0	6	1.300	2	1.300	—	0.41 lbs
1842	45.1	0.1	68.5	30.0	38.5	8	5.175	4	5.175	—	0.55 "
1843	41.8	3.4	65.7	24.5	41.2	12	3.750	4	2.5	—	0.43 "
1844	43.3	1.9	69.6	17.8	51.8	7	imp.	4	12.0	—	0.43 "
1845	46.4	—	62.7	20.0	42.7	11	1.760	1	inap.	—	0.35 "
1846	44.6	0.6	69.7	20.3	49.0	14	4.180	2	inap.	—	0.44 "
1847	44.0	1.2	65.0	20.7	44.7	15	4.390	2	inap.	—	0.19 "
1848	46.3	1.1	62.2	26.4	35.8	11	1.550	...	...	N 54 W	1.24 4.60 mls
1849	45.3	+ 0.1	59.2	23.5	33.7	13	5.955	1	...	N 12 W	1.27 4.76 "
1850	45.4	+ 0.2	66.6	21.8	41.8	10	2.085	...	...	S 72 W	1.06 1.33 "
1851	47.4	+ 2.2	66.1	25.0	41.1	10	1.680	2	0.3	S 72 W	1.19 4.47 "
1852	48.0	+ 2.8	70.7	29.3	40.9	12	5.280	...	...	S 5 E	1.19 4.47 "
1853	44.4	0.8	64.7	25.5	39.2	10	0.875	2	...	S 83 W	1.78 4.72 "
1854	49.5	+ 4.3	74.2	29.8	44.4	15	1.495	3	inap.	N 25 E	1.20 1.60 "
1855	45.4	+ 0.2	64.3	28.0	36.3	14	2.435	5	0.1	N 82 W	4.91 9.83 "
1856	45.3	+ 0.1	70.1	23.3	46.8	10	0.875	2	0.1	N 76 W	2.15 6.07 "
1857	45.4	+ 0.2	63.5	27.7	35.8	10	1.040	2	0.2	N 19 W	2.93 6.24 "
Mean	45.20	...	68.09	24.63	41.46	11.1	2.697	1.9	1.06	—	5.50