REMARKS ON TORONTO METEOROLOGICAL REGISTER FOR JULY, 1863.

Highest Barometer.....29.912 at 8 a. m. on 18th } Monthly range =
Lowest Barometer.....29.390 at 6 a. m. on 28th } 0.522 inches.

Self-registering Thermom.
- Maximum Temperature ..... 83°5 on p.m. of 1st } Monthly range = 35°5
- Minimum Temperature ..... 48°0 on a.m. of 16th }
- Mean maximum Temperature ..... 74°88 } Mean daily range = 15°19
- Mean minimum Temperature ..... 59°69 }
- Greatest daily range ..... 21°5 from a.m. to p.m. of 28th.
- Least daily range ..... 3°0 from a.m. to p.m. of 25th.

Warmest day ..... 1st .. Mean temperature..... 75°12 } Difference = 18°60.
Coldest day .. .. 17th... Mean temperature..... 56°52 }

Maximum { Solar..... 103°3 on p.m. of 7th } Monthly range = 61°5
Radiation. { Terrestrial..... 41°8 on a.m. of 19th }

Aurora observed on 6 nights, viz.,—8th, 15th, 17th, 18th, 19th, and 24th.
Possible to see Aurora on 14 nights; impossible on 17 nights.
Snowing on . days, depth ... inches; duration of fall, ... hours.
Raining on 15 days, depth 3.413 inches; duration of fall 42.0 hours.
Mean of cloudiness = 0.64. Above average 0.19.
Most cloudy hour observed, 2 p.m: mean = 0.71; least cloudy hour observed, 8 a.m.; mean, = 0.60.

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

North.	South.	East.	West.
1176.74	894.79	731.78	823.10

Resultant direction N. 18° W.; Resultant velocity 0.49 miles per hour.
Mean velocity .....3.89 miles per hour.
Maximum velocity .....21.0 miles, from 8 to 9 a.m. on 21st.
Most windy day .....21st.....Mean velocity, 10.39 miles per hour. } Difference = 10.21 miles.
Least windy day .....10th ..... ditto. 0.18 ditto. }
Most windy hour .... noon to 1 p.m.....Mean velocity, 6.43 ditto. } Difference = 4.27 miles.
Least windy hour...9 p.m. to 10 p.m.....Mean velocity 2.22 ditto. }

1st. Inner fort lunar halo at midnight.—2nd Thunderstorm 5.30 to 6 a.m.; and again from 8 to 9.30 p.m.—3rd. Dense fog from 2 to 8 a.m; sheet lightning at night.—4th. Distant thunder 3.30 p.m.; Sheet lightning at 8 and 10 p.m.—5th. Distant thunder in N.W. a.m, and fire-flies in morning.—7th Sheet lightning in N.W., 10 p.m. and midnight.—8th. Thunderstorm 4.30 to 7.15 a.m.; and again from 8 to 10.40 p.m.—10th. Ground fog, and fire-flies in nervous at 10 p.m.—13th. Thunderstorm 4.30 to 10 p.m.—14th. Dense fog 6 to 8 a.m.—15th. Distant thunder 1.30, p.m.—23rd. Sheet lightning at 10 p.m. and midnight.—24th. Thunderstorm 2 to 3 a.m.—28th. Sheet lightning at midnight.—27th. Brilliant meteor at 8 p.m. in S.E.—30th. Lunar halo at 10 p.m.—31st. Thunderstorm 1 to 2 p.m.; ground fog at 8 p.m.—31st Thunderstorm between 10 and 11 p.m.

July, 1863, was comparatively mild, calm and cloudy.

COMPARATIVE TABLE FOR JULY.

YEAR.	TEMPERATURE. Mean.	Excess above average (66.8)	Max. observed.	Min. observed.	Range.	BAIN. No. of days.	Inches	SNOW. No. of days.	Inches	WIND. Resultant. Direction.	Vly	Mean Force or Velocity
	°	°	°	°	°							
1840	65.8	— 1.0	79.4	48.2	31 2	6	5.970	...	...	...	...	.....
1841	65.0	— 1.8	86.3	43 2	43.1	10	8.150	...	...	...	...	0.27 lbs.
1842	64.7	— 2.1	90.5	42.0	48.5	4	3.050	...	...	...	...	0.33
1843	64.5	— 2.3	85.1	40.2	45.9	8	4 605	...	...	...	...	0.44
1844	65.0	— 0.8	84.1	40.5	45.6	12	2.815	...	...	...	...	0.19
1845	63.2	— 0.6	94.6	45.6	49.0	7	2.195	...	...	...	...	0.30
1846	68.0	+ 1.2	94.0	44.9	49.1	0	2.835	...	...	...	...	0.29
1847	68.0	+ 1.2	87.5	43.8	43.7	8	3.355	...	...	...	...	0.19
1848	63.5	— 1.3	82.7	40.7	35.0	10	1.890	..	...	N 14° W	0.18	4.94mls.
1849	63.4	+ 1.6	89.1	51.0	38.1	4	3.415	...	...	S 5° W	0.75	3.52
1850	63.9	+ 2.1	84.9	52.8	32.1	12	5.270	...	...	N 81° E	0.59	4.56
1851	65.0	— 1.8	82.7	52 1	30.6	12	3.625	...	...	N 60° W	0.88	4.13
1852	63.8	0.0	90.1	49.5	40.6	8	4.025	...	...	N 43° W	0.93	3.33
1853	61.6	— 1.2	85.4	49.4	36.0	10	0.915	...	...	S 58° E	0.24	3.69
1854	72.5	+ 5.7	94 6	54.0	40.6	9	4.81	...	...	S 49° W	0.37	4.03
1855	67.9	+ 1.1	88.4	53.1	35.3	13	3.245	...	...	S 19° W	0.73	6.47
1856	63.9	+ 3.1	92.0	51.4	40.6	8	1.120	...	...	N 79° W	1.57	5.84
1857	67.8	+ 1.0	85.4	52.4	33 0	15	3.475	...	...	S 63° E	0 81	4.74
1858	67.9	+ 1.1	83.4	55.9	27.5	13	3.072	...	...	N 15° E	1.13	5.76
1859	66.9	+ 0.1	87.7	50.5	37.2	12	2.611	...	...	N 56° W	1.43	5.81
1860	61.3	— 2.9	85.8	47.5	38.3	13	4.335	...	...	N 00° W	2.15	7.29
1861	65.4	— 1.4	82.9	49.4	33.5	16	2.615	...	...	N 74° W	1.43	4.66
1862	61.7	— 0.1	83.6	52 6	30.0	15	5.344	...	...	S 83° W	1.42	5.80
1863	67.6	+ 0.8	82.3	49.3	33.0	15	3.493	...	...	N 18° W	0.49	3.89
Results up to 1863.	66.85	...	87.21	48.32	38.89	10.0	3.493	...	...	N 65° W	0.49	4.91
Excess for 1863.	+ 0.72	...	— 4.91	+ 0.98	— 5.89	+ 5.0	— 0.082	...	...	.....	.....	— 1.02