MONTHLY METEOROLOGICAL REGISTER, AT H. M. MAGNETICAL OBSERVATORY, TORONTO, C. W.—MAY, 1851.

Latitude 43°. 39'.4 N. Longitude, 79°. 21'.5 W. Elevation above Lake Ontario, 103 feet.—For the British American Medical and Physical Journal.

Day.	Barometer at Temp. of 32°				Temperature of the Air.				Tension of Vapour.				Humidity of the Air.				Wind.			Ins. of Rain.	Weather.
	6 A. M.	2 P. M.	10 P. M.	MEAN.	6 A. M.	2 P. M.	10 P. M.	MEAN.	6 A. M.	2 P. M.	10 P. M.	MEAN.	6 A. M.	2 P. M.	10 P. M.	MEAN.	6 A. M.	2 P. M.	10 P. M.		
1	29.401	29.284	29.357	29.347	40.2	40.7	35.8	39.82	0.210	0.204	0.148	0.186	.85	81	70	76	NW bN	S W bW	SW b W	—	Overcast; sonw and sleet.
2	29.628	29.6[illegible]	29.701	29.632	32.8	44.7	36.7	57.53	.165	.225	.172	.172	.89	77	79	77	W N W	W	W N W	—	Clouded; dull; high wind, a. m.
3	29.722	29.579	29.551	29.617	32.5	40.0	42.0	33.17	.105	.197	.245	.182	.57	80	93	97	W b N	E by S	N W	0.050	Mostly clouded; rain 6 to 7 p. m.
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N b W	N N W	N by W	—	Light clouds; clear; fine.
5	29.685	29.613	29.627	29.640	34.8	50.2	29.7	42.32	.169	.237	.136	.169	.84	66	56	63	N N W	N	N W	—	Clear; light clouds dispersed.
6	29.666	29.647	29.683	29.669	37.1	50.2	38.6	42.85	.144	.156	.179	.174	.66	43	77	65	N N W	N W	N	—	Partially clouded; ngt. cl. and fine
7	29.743	29.675	29.680	29.695	46.2	56.4	40.0	47.82	.280	.317	.188	.229	.90	71	77	70	NW b N	S S W	W S W	—	Fine; faint aurora at 10 p. m.
8	29.696	29.613	29.558	29.614	38.6	63.1	52.6	52.90	.168	.341	.355	.285	.72	61	91	71	NW b N	S E by E	E by N	inappl	Morning clear; night, drops of rn.
9	29.592	29.470	29.608	29.567	51.9	73.2	53.1	60.24	.342	.262	.226	.278	.90	33	57	58	SW b S	SW b W	N by W	—	Clear; few passing clouds.
10	29.720	29.698	29.603	29.674	45.9	61.3	49.6	52.17	.238	.346	.340	.290	.78	65	97	76	calm	S by W	N E	0.790	Clouded; thunder-storm at night.
11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	E b S	E	W b N	0.070	Overcast all day.
12	29.546	29.481	29.421	29.471	53.8	69.6	58.4	60.73	.370	.547	.408	.445	.91	78	86	85	N	S E by S	SW b S	—	Overcast; sheet lightning 10 p. m
13	29.[illegible]39	29.468	29.535	29.504	59.6	71.9	55.2	61.35	.424	.374	.249	.350	.85	49	58	67	SW bW	S W	N N W	—	Clouds and haze.
14	29.703	29.816	29.877	29.810	48.3	59.1	48.3	52.00	.236	.243	280	.248	.71	49	84	66	N N W	N W	N by E	—	Few clouds a. m.; clear p. m
15	29.922	29.924	29.829	29.894	48.0	54.6	47.2	50.90	.273	.308	.229	.267	.83	73	72	73	N by E	E S E	E by N	—	Clear a. m.; haze from 4 p.m
16	29.758	29.548	29.370	29.543	47.1	62.2	62.6	57.87	.239	.331	.435	.348	.75	60	78	73	Calm	E S E	S W	0.160	Overcast; rain during night.
17	29.349	29.526	29.654	29.514	56.9	65.2	49.3	57.82	.436	.393	.214	.358	.96	65	70	75	S by E	N N W	N N W	--	Ceased rain 8 a. m.; partially clear
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	N by E	S E by E	N E b E	—	Morning clouded; afternoon fine.
19	29.712	29.561	29.396	29.531	50.5	53.7	51.9	52.43	.221	.343	.362	.310	.61	85	96	80	E by N	E S E	S W	0.369	Thunder-st'rm from 10 till midg'n t
20	29.313	29.236	29.490	29.359	56.0	67.2	55.2	60.97	.424	.534	.334	.427	.96	82	78	81	N N W	S W b S	N W bW	—	Light clouds occasionally.
21	29.677	29.669	29.618	29.649	53.4	59.3	51.4	55.25	.308	.333	.340	.326	.77	67	91	76	NW b N	S	Calm	0.215	Morn. clear; rain during night.
22	29.442	29.181	29.138	29.233	48.2	59.6	55.7	54.67	.306	.447	.408	.393	.92	89	94	93	E	E S E	E by S	0.400	Cloudy; thunder-storm at night.
23	29.270	29.661	29.910	29.654	45.4	50.5	42.2	45.75	.254	.220	.189	.215	.85	60	72	72	S by W	N W	N W bN	—	Cloudy; high wind till 4 p. m.
24	30.050	30.038	29.934	30.010	40.9	58.4	40.0	47.77	.195	.424	.228	.261	.79	88	89	78	N W bN	S	E	—	Clear; hoar frost 6 a. m.
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NE by E	E S E	Calm	—	Unclouded, fine.
26	29.841	29.772	29.700	29.767	47.8	65.6	58.7	58.10	.297	.430	.377	.377	.90	70	78	80	N E	E S E	N E	0.350	Morn clear; thunder and rain p.m
27	29.626	29.592	29.511	29.538	51.5	67.2	61.0	61.23	.379	.596	.437	.477	.91	92	83	89	S E by E	S S E	W by N	0.035	Dist thun. and rain 6 a. m.
28	29.633	29.665	29.689	29.671	55.8	64.2	56.4	58.40	.372	.508	.385	.411	.85	87	86	86	N W b N	S S W	E by N	0.205	Overcast; slight rain 10 p. m.
29	28.658	29.693	29.770	29.709	51.4	51.7	47.6	49.87	.337	.359	.314	.332	.90	96	96	94	E N N	E S E	E S E	0.040	Densly overcast; slight rain.
30	29.809	29.811	29.836	29.817	50.8	58.2	48.8	52.77	.345	.491	.318	.351	.95	84	94	89	N by E	S by W	N by W	—	Few light clouds; fine.
31	29.913	29.863	29.720	29.829	55.0	62.8	54.8	58.18	.342	4.22	.241	.386	.81	76	57	80	N	E S E	E N E	0.275	Cloudy p. m.; rain most of night.
Sn	29.651	29.617	29.621	296302	47.59	58.56	49.36	52.48	0.281	0.352	0.287	0.308	.83	71	79	76	4.63	8.66	7.52	2.950	Brilliant meteor n E. 23rd p.m.

Highest Barometer,.....30 074 at 8 a.m. on 24th } Monthly
Lowest do. .....29.108 at noon on 22nd } Range, 0.966
Highest obs. Temperature.... 73.3 at 4 p.m on the 13th } Monthly
Lowest do. do .... 28.0 at 4 a. m. on 3rd } Range 45.3
Mean Max. Therm, 59.12 } Mean Daily
Mean Min. do. 43.07 } Range..16.05
Greatest Daily range.....26.3 from 4 p.m. of 13th to a.m. of 14th
Warmest Day, 13th.—Mean Temperature, 61.35 } Difference 1
Coldest Day, 2nd.—Do do 37.53 }
Warmest hour, 4 p.m.—Mean temperature, 58.65 }
Coldest hour, 6 a.m.— do do 47.50 }
Mean Diurnal Variation..... 11.16

Sum of the Atmospheric Currents in miles resolved into the fo r Cardinal directions.

North,	West	South	East
11001.3	4500.2	1690.7	1181.9

Mean velocity of the wind, 6.34 miles per hour.
Maximum velocity, 23.7 miles from 1 P.M. to midnight on 1st
Most Windy day, 1st mean velocity per hour, 14.46 miles
Least do. 16th, do. do. 2.45 miles
Most Windy hour, 4 p.m. mean velocity, 8.74 miles per do.
Least do. 4 a.m, do. 4.10 do.
Mean diurnal variation, 4.61 miles per hour.

Year	Temperature. Mean	Max..	Min.	Rnge.	Rain. No of days	Inches	Snow. Days	Inches
1841..	51.10	78.0	26.5	51.5	11	2.350	1	--
1842..	49.80	74.2	27.3	46.9	7	1.275	0	--
1843..	49.73	79.8	29 2	50.6	5	167.0	0	--
1844..	54.22	78.4	28.7	49.7	14	5.670	0	--
1845..	50.23	77.8	27.8	50.0	8	2.300	0	--
1846..	55.77	79.7	38.1	46.6	9	4 375	0	--
1847..	51.55	72.1	26.7	45.4	12	2.040	0	--
1848..	53.74	78.0	31.2	46.8	13	2.590	0	--
1849..	48.30	72.2	27.9	44.3	16	5.115	0	--
1850..	48.61	77.8	27.5	50.3	7	0.545	1	inapp
1851..	52.48	73.3	28.0	45.3	12	2.950	1	inapp