

at the gold diggings. Mr. Calvert has himself been engaged for eight years in tracing the auriferous veins and in procuring gold. A short time ago he sent home a block of quartz weighing a ton and a half, and he has brought home with him in the Falcon 730 nuggets of the precious metal. One of the pieces weighs 23lbs. of pure gold, and we had the opportunity of seeing a piece weighing 1 1/2 lb., which is considered one of the best specimens, being, in the state in which it was discovered, above the standard. The amount of gold brought home by Mr. Calvert is about 339 lbs. gross, between 7 1/2 lb. and 80 lb. being dross or quartz more or less mixed with the gold. The largest quantity he ever obtained in one day was 76 lb. weight. He had been led to the spot by auriferous indications, increasing as he came nearer, for a distance of nearly 40 miles. The quartz vein ran north and south, and was from about 9 to 15 feet in breadth, half a mile from where he

robbed it of its precious treasure. It stands out in large blocks off from 15 to 20 feet in height, looking in the distance like white houses. This place is distant from Sydney about 215 miles, and a long way from any at present worked gold-field. During the latter part of his residence in Australia Mr. Calvert had a camp and three men as assistants, and, properly equipped, he pursued his scientific survey. Among his discoveries, he found diamonds, rubies, and many valuable minerals, in which the Australian colonies abound. We understand that Mr. Calvert will proceed direct to London, where he intends to get his drawings and maps transferred to canvass, for the purpose of exhibiting them as a panorama of the goldfields, illustrative of lectures which he intends to deliver on the origin of gold, and on the colonies towards which so many thousands of his fellow-countrymen are now turning their attention.—*Liverpool Mercury.*

Monthly Meteorological Register, at Her Majesty's Magnetical Observatory, Toronto, Canada West.—April, 1853.

Latitude 43 deg. 39.4 min. North. Longitude, 79 deg. 21 min. West. Elevation above Lake Ontario: 108 feet

Magne- t. Day.	Barom. at tem. of 32 deg.				Temperature of the air.				Tension of Vapour.				Humidity of Air.				Wind.			Rain in Inch.	S'w in Inch.
	6 A.M.	2 P.M.	10 P.M.	MEAN	6 A.M.	2 P.M.	10 P.M.	M'N.	6 A.M.	2 P.M.	10 P.M.	M'N.	6 A.M.	2 P.M.	10 P.M.	M'N.	6 A.M.	2 P.M.	10 P.M.	Inch.	Inch.
1	29.481	29.578	29.688	29.595	34.8	46.7	34.8	38.83	0.187	0.170	0.116	0.162	93	55	56	60	N b E	N	N N W	--	--
2	.795	.795	.749	.781	31.4	33.1	31.9	36.82	.131	.203	.159	.165	79	71	89	83	N b E	E	Calm	--	--
3	.702	.492			37.3	44.2			.185	.147			81	51			Calm.	E N E		--	--
4	.308	.146	.100	.162	36.6	38.8	37.9	37.35	.190	.202	.200	.207	88	86	95	91	N E b N	Calm.	N N W	0.175	Inap.
5	.041	.102	.151	.104	31.1	41.4	33.8	37.83	.173	.136	.166	.16	92	46	86	75	N N W	N W b W	Calm	0.053	Inap.
6	.133	.315	.523	.339	31.5	41.9	33.4	37.02	.186	.191	.123	.158	94	67	65	73	N E	N W b N	N W b N	--	Inap.
7	.547	.510	.553	.547	30.5	43.6	32.1	36.12	.137	.221	.171	.184	80	78	95	86	Calm.	S	Calm	--	Inap.
8	.533	.191	28.918	.202	32.3	51.0	48.1	15.07	.162	.256	.310	.251	85	78	94	84	Calm.	S b W	W	Inap.	
9	.294	.370	29.534	.376	49.2	52.4	49.2	14.05	.188	.295	.295	.204	71	53	84	71	S W	W b S	S	--	--
10	.635	.833			33.0	39.8			.162	.186			87	77			N W	N W b W		--	--
11	.901	.839	.339	.761	27.0	41.9	37.3	36.07	.131	.256	.169	.185	87	57	79	81	W N W	S E b S	Calm	0.100	--
12	.573	.479	.539	.526	37.3	41.1	42.2	11.18	.239	.269	.251	.248	95	94	91	91	Calm.	Calm	Calm	0.270	--
13	.685	.631	.385	.513	41.5	36.0	35.1	37.75	.232	.230	.181	.212	95	95	89	91	N E b N	N E	N E b N	0.715	--
14	.455	.625	.789	.633	32.7	36.6	30.9	33.37	.172	.188	.154	.168	93	87	89	88	N E b N	N b W	N W b N	0.020	Inap.
15	.946	.847	.931	.923	30.4	40.9	31.5	36.08	.157	.122	.171	.155	93	49	86	75	N N W	S b E	Calm	--	--
16	.891	.810	.758	.813	37.0	45.9	37.0	40.32	.182	.220	.184	.200	83	71	84	81	N E b E	E b S	N E	--	--
17	.773	.785			37.1	43.4			.177	.155			79	55			N b E	S b E		--	--
18	.810	.782	.712	.747	32.0	48.1	34.2	39.33	.141	.218	.161	.187	78	75	81	77	N	S S E	N E b E	--	--
19	.667	.568	.531	.579	28.0	51.6	39.1	41.70	.143	.212	.212	.212	96	52	90	82	Calm.	E S E	N b E	--	--
20	.593	.593	.667	.617	38.4	51.7	48.1	49.32	.174	.298	.251	.217	75	48	85	65	N b E	S b W	N b E	--	--
21	.795	.658	.594	.603	31.9	60.7	48.3	19.52	.171	.245	.248	.251	85	55	87	75	Calm.	S S E	E N E	0.390	--
22	.211	28.95	3.3	.210	16.7	57.8	47.4	50.98	.297	.434	.270	.330	94	94	81	90	N E b E	S E b S	N W b N	0.139	--
23	.653	27.72	7.25	.715	31.9	41.5	33.1	37.67	.153	.187	.133	.159	89	61	74	72	N N W	N b W	N b E	--	--
24	.746	.678			35.0	41.8			.148	.151			90	54			N E b E	E b S		0.290	1.0
25	.537	.578	.666	.579	34.3	41.1	32.3	36.57	.183	.198	.156	.181	91	77	85	86	N E b N	N	Calm	Inap.	--
26	.709	.674	.653	.678	33.4	51.2	41.1	14.02	.148	.119	.212	.194	78	31	82	69	Calm.	S E b E	Calm	--	--
27	.688	.622	.623	.612	38.1	61.4	51.7	51.58	.188	.302	.275	.277	82	57	73	73	Calm.	S S W	Calm	--	--
28	.669	.621	.582	.620	44.5	65.7	53.0	57.05	.238	.398	.420	.347	81	59	96	79	Calm.	S E	Calm	0.570	--
29	.553	.688	.812	.649	48.3	49.9	43.1	47.62	.231	.271	.211	.261	83	76	73	79	N b E	N W b N	N	--	--
30	.562	.923	.958	.910	33.4	50.9	40.6	43.47	.206	.277	.166	.214	89	76	66	75	N W b N	S W	N N W	--	--
M	23.579	21.551	20.575	22.365	35.76	48.38	31.40	41.92	6	211	205	212	87	79	83	89	M'N: 4.05	M'N: 7.16	M'N: 3.97	2.625	1.0

Sum of the Atmospheric Current, in miles, resolved into the four Cardinal directions.

North.	West.	South.	East.
1964.83	1172.57	621.52	895.06

Mean velocity of the wind - - - 5.20 miles per hour.
 Maximum velocity - - - 21.2 mps per hr, from 1 to 2 p.m. on 8th.
 Most windy day - - - 5th: Mean velocity, 10.71 miles per hour.
 Least windy day - - - 12th: Mean velocity, 0.29 ditto.

The column headed "Magnet" is an attempt to distinguish the character of each day, as regards the frequency or extent of the fluctuations of the Magnetic declination, indicated by the self-registering instruments at Toronto. The classification is, to some extent, arbitrary, and may require future modification, but has been found tolerably definite as far as applied. It is as follows:—

- (a) A marked absence of Magnetical disturbance.
- (b) Unimportant movements, not to be called disturbance.
- (c) Marked disturbance—whether shown by frequency or amount of deviation from the normal curve—but of no great importance.
- (d) A greater degree of disturbance—but not of long continuance.
- (e) Considerable disturbance—lasting more or less the whole day.
- (f) A Magnetical disturbance of the first class.

The day is reckoned from noon to noon. If two letters are placed, the first applies to the earlier, the latter to the later part of the trace. Although the Declination is particularly referred to, it rarely happens that the same terms are not applicable to the changes of the Horizontal Force also.

Highest Barometer - - 29.974, at 8 A.M., on 15th } Monthly range:
 Lowest Barometer - - 28.935, at 2 P.M., on 22 d } 0.933 inches.
 Highest observed Temp. - 65.7, at 2 P.M., on 25th } Monthly range:
 Lowest regist'd Temp. - 25.0, at A.M., on 11th } 40.7
 Mean Highest observed Temperature - - - 47.68 } Mean daily range:
 Mean Thermometer Minimum - - - 33.61 } 14.07
 Greatest daily range - - - 28.58 from 4 P.M on 22nd, to A.M. of 23rd.

Warmest day - - 25th - - - Mean Temperature - 57.05 (Difference:
 Coldest day - - 14th - - - Mean Temperature - 33.37 } 23.68

The "Means" are derived from six observations daily, viz., at 6 and 8 A. M., and 2, 4, 10 and 12, P. M.

April 5th—Froze first heard.
 Fine displays of Aurora on the 6th and 23th. Lunar Halo on 15th.
 An Earthquake is stated, on good authority, to have been felt at Toronto, about 5 A. M., on the 28th. Seven distinct shocks were perceived. Any person who noticed this will please communicate it to the Observatory.
 Possible to see Aurora on 12 nights. Aurora actually seen on 7 nights.

Comparative Table for April.

Year	Temperature.				Rain.		Snow.		Wind.	
	Mean.	Max.	Min.	Range.	D'vs	Inches.	D'vs	Inch	Mean	Velocity
1840	42.70	65.9	25.3	40.6	14	3.420	2	--	--	Miles.
1841	39.40	62.9	22.1	40.8	3	1.370	3	--	--	--
1842	43.40	80.5	21.6	67.9	8	3.740	2	--	--	--
1843	41.23	70.0	15.1	54.9	7	3.155	3	0.1	--	--
1844	48.11	74.5	17.2	57.3	10	1.515	1	Inap	--	--
1845	42.13	66.0	14.5	51.2	11	3.230	4	1.5	--	--
1846	44.11	79.4	21.4	55.0	10	1.300	2	1.3	--	--
1847	39.06	65.6	8.4	57.2	8	2.870	2	4.0	--	--
1848	40.67	65.4	21.5	35.9	5	1.455	1	0.5	4.89	--
1849	38.74	70.9	23.2	47.7	10	2.655	2	1.7	7.50	--
1850	38.30	63.2	18.2	45.0	7	4.721	2	1.1	7.61	--
1851	41.67	59.2	25.8	33.4	11	2.235	3	1.2	8.07	--
1852	38.29	53.8	19.8	34.0	6	1.971	4	9.4	6.69	--
1853	41.92	65.7	27.0	38.7	10	2.625	1	1.0	5.20	--
M'n	41.41	68.00	20.67	47.32	8.61	2.602	2.31	1.93	6.56	--