

MAY, 1871.

PRIVATE OBSERVATORY, HOBART TOWN.

Day of Month.	Bar. 37 feet abv. sea level corrected & reduced.		Self-Registering Thermometers.				Wind.		
	Highest.	Lowest.	Highest in shade.		Lowest in shade.		Direction from three daily re- gisters.	Force in lbs. per square foot.	Rain in Inches.
			°	°	°	°			
1	30'182	30'013	63	51	66°0	50°0	SW NW	0°	0'0
2	29'826	29'715	62	53	75°0	52°0	NENWN	0°	0'01
3	29'789	29'779	61	50	70°0	39°0	SES	0°	0'02
4	29'922	29'800	62	43	95°0	41°5	SESSE	·52	
5	29'960	29'937	55	44	86°0	42°0	NWN E	0°	0'04
6	30'018	29'979	57	45	68°5	42°5	NWSE	0°	
7	30'070	30'037	56	43	58°0	40°0	NWSE	·26	0'03
8	30'110	30'090	53	48	57°0	44°0	SE	1'04	0'05
9	30'227	30'147	53	45	59°5	43°5	SWSE	·52	0'04
10	30'197	30'186	54	45	63°0	41°5	SE	0°	
11	30'191	30'147	53	50	59°0	47°0	SE	·78	
12	30'160	30'134	59	48	86°0	42°0	NWSENW	0°	
13	30'136	30'062	62	42	87°0	35°0	NW SW	·52	
14	30'070	30'042	63	34	85°5	33°0	NWSE	1'04	
15	30'061	30'020	65	38	90°0	35°5	NW	1'30	
16	30'034	30'010	64	50	89°0	48°0	NWNE	·78	
17	30'132	30'140	64	40	83°0	37°5	SENE NW	·78	
18	30'266	30'146	62	36	80°5	34°5	NW W	·78	
19	30'247	30'215	67	40	91°5	38°0	NW W	·52	
20	30'262	30'233	73	40	98°5	38°0	NW SW NW	·78	
21	30'309	30'272	75	43	100°0	41°0	NWSE	·26	
22	30'369	30'347	71	47	97°0	40°5	NWSE	·52	
23	30'334	30'333	57	49	59°5	45°0	NW	0°	
24	30'386	30'328	56	50	58°0	44°0	NW	0°	
25	30'363	30'330	56	38	66°5	36°5	NW	·26	
26	30'203	30'099	61	43	86°0	43°0	NW	1'04	
27	29'990	29'845	63	49	76°0	43°0	NW E	0°	0'05
28	29'748	29'635	60	43	88°0	41°5	NE SW W	·52	0'08
29	29'495	29'413	53	41	75°0	39°0	NW	·52	0'25
30	29'903	29'824	50	40	73°0	33°0	W SW NW	2'36	0'02
31	30'095	30'065	70	45	95°5	42°5	NW	1'30	
Monthly mean			52'98		78'31	41'15	Total force	16'44	0'66
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The mean in all cases is taken from the sums of the three daily registers, and not from the maximum and minimum.
 The direction of the wind is registered from currents moving at a height of 192 feet and the force according to Lind's Wind Gauge. The supposition, however, of a uniform velocity during the month is a very arbitrary one, and the results can be considered only approximately correct.
 The relations of the quantities of rain which fell under the different winds are registered each evening at sundown.
 The 25 years' standard tables are used for obtaining the difference from the average.

Leafing, Flowering, and Fruiting of a few Standard Plants in the Royal Society's Gardens during the month.

- 12th.—Medlar commencing to ripen.
 18th.—Coronilla glauca commencing to flower.
 20th.—Photinia serrulata ditto ditto.
 24th.—Diosma alba ditto ditto.
 25th.—Spirea prunifolia ditto ditto.
 26th.—Ailanthus glandulosus leaves all fallen.

Barometer mean, 30·071in., being 0·224in. above the average.

Temperature mean, 52·98°, being 2·70° above the ditto.

Solar intensity mean, 78·31°, being 3·56° below the ditto.

Dew point mean, 45·0°, being 1·52° above the ditto.

Humidity of air mean, 78, being ·02 per cent. above the ditto

Elastic force of vapour mean, ·311, being ·009 per cent. above the ditto.

Total amount of rain, 0·66in., being 1·15in. below the ditto.

Increase of spontaneous evaporation on rainfall, 0·60in.

Mean amount of ozone, 5·36in., being 1·44 of chromatic scale below the ditto.

A small amount of electricity all through the month.

The early part of the month was notable for a large amount of cloud, and a frequent register of calms, with dewy mornings, and low vapour.

Snow on the apex of Mount Wellington on the 29th.

On the 30th the mountain and low hills were capped with snow. FRANCIS ABBOTT.

NOTES ON THE METEOROLOGY AND MORTALITY OF THE MONTH OF MAY, 1871.

BY DR. E. SWARBRECK HALL.

The character of the weather during the month was in almost every aspect abnormal. Very high atmospheric pressure, very calm, very mild, very cloudy, little rain, little ozone, little sunshine, little electricity. The deaths were considerably below the average of the previous 14 years, falling principally upon aged and infirm people, nearly one-half of the deaths being at and above 60 years old, the oldest 84. Under 20 the deaths were remarkably few.

Atmospheric pressure mean, 30·071, was +·224 above the 25 years' adopted standard mean. Only three Mays in the previous 30 years have had higher means. The maximum was 30·386 on the 24th; the minimum, 29·413, on the 29th, the month's range consequently ·973 of an inch. The greatest movement in any 24 hours was a rise of +·389 of an inch on the 30th. On only 7 other days did it exceed one-fifth of an inch. Steady high barometrical pressure with moderate fluctuations, and small extreme range, characterised this month.

Wind force, 16·64 lbs, was -21·21 lbs. below the May average. *North-west* winds were recorded 48 times out of the 93 observations, and had 10·66 lbs, of the total force. The strongest wind had only 2·60 lbs. pressure to the square foot; it occurred on the 30th, and was from the north-west. *Calms* were 52 in number being +9·20 above the average.

Temperature mean, 52·98 degrees, was +2·70 above the average. Only four Mays, out of the previous 30, had a warmer mean. The maximum was 75 degrees on the 21st. The minimum 34 on the 14th. *Wet-bulb* mean was 49·30, being +2·22 above the average.

Daily Range of Temperature had the mean of 16·32 degrees, being +1·16 above the average. The greatest on any day was 33 degrees on the 20th.

Solar Intensity mean, 78·31 degrees, was -3·56 below the average, owing no doubt to the cloudy character of the month. The maximum was 100 on the 21st, the minimum 57 on the 8th.

Terrestrial Radiation mean, 41·15, was +1·84 above the average. The lowest was recorded for the night of the 30th, being 33 degrees. Often before has it fallen below freezing point (32.)

Elastic force of Vapour mean, 311, was +9 above the average. It ranged from 503 on the 2nd, to 197 on the 15th.

Humidity mean, 78, was +2 above the average.

Rainfall ·66 of an inch, was -1·15 below the average. May 1870 was almost

the same. It fell on 11 days, being -3.09 below the average. On only one day, the 29th, did sufficient ($.25$) fall to cleanse the surface channels. *Snow* covered Mount Wellington and all the low hills about the city on the morning of the 30th.

Spontaneous evaporation was 1.26 inches.

Cloud Mean, 6.68 , was $+1.18$ above the average. At 35 out of the 93 records the sky was entirely over-clouded.

Ozone Mean, 5.36 , was -1.44 below the average. No previous May record had so small an amount.

Electricity was almost confined to negative of a low tension, ranging from 1 to 5. There was only one positive with tension of 4. There were 7 nils. No thunder heard or lightning seen during the month.

The *deaths* during the month were 33 being $-7.6-14$ less than the average of the previous 14 years, and -6 less than May 1870 had. Again the female deaths, 17 out of 33, preponderated. Under one year old there were 3 deaths; from 1 to 5, also 3; from 5 to 10, none; from 10 to 15, one; from 15 to 20, none. In May 1870 there were 12 deaths under 20 years old. From 20 to 60 the deaths were 10; and at 60 and all ages above the large proportion of 16, the oldest being 84 years old. May 1870 had 17, the oldest being 90. In the *zymotic class* of diseases there were only 2 deaths from erysipelas; one an old man from a country district, the other a child only 2 years old. From *consumption* there were 2 deaths, one a woman aged 50, a native of Switzerland, the other a girl of 14, daughter of a coal miner from the coal mines, Tasman's Peninsula, born in Tasmania. Her mother and a sister both died from the same disease in Hospital some time before, so that probably the hereditary tendency in the family is strong. In the public *Hospital* there were 6 deaths, inclusive of the girl from consumption. At the *Cascades* there were 5 deaths, three females aged 60, 74, 75, and two males aged 71 and 81. At the *Brickfields* there was only one death, a man aged 72. There was only one *Inquest*, a man aged 75 who died from natural causes.