

METEOROLOGY FOR MAY, 1870.

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	30.339	30.300	55.27	85.5	34.5	NW NE SW	.52		
2	30.310	30.286	62.37	96.0	33.0	NW SW	.73		
3	30.386	30.356	63.37	96.0	34.0	NW E	.52		
4	30.286	30.029	60.43	81.0	36.5	NW	.73		
5	29.855	29.729	58.46	62.5	45.5	NW SW	.52		
6	29.792	29.779	58.46	88.5	43.0	SW NW	.73	0.05	
7	29.810	29.715	67.48	95.5	44.0	NW	1.04	0.03	
8	30.015	29.948	62.45	93.0	41.0	SW	1.30	0.03	
9	30.107	30.089	64.40	92.5	33.0	WNW	1.04		
10	30.161	30.150	71.45	99.0	43.5	NW W	1.04		
11	30.266	30.230	63.37	94.0	36.0	NW SE	.26		
12	30.255	30.180	67.40	94.5	37.5	NW E SE	.26		
13	30.053	29.890	53.41	53.5	37.0	NW	0	0.02	
14	29.651	29.538	59.42	87.0	40.5	NW SE	.52		
15	29.559	29.540	64.46	91.0	36.5	NW	.73		
16	29.655	29.638	60.46	76.5	41.5	NW SW	.52		
17	30.070	29.953	54.43	54.0	33.0	SE	1.30	0.39	
18	30.391	30.310	57.43	86.0	37.0	SW E SE	.73	0.03	
19	30.360	30.311	51.40	62.5	39.0	NW SW	.26		
20	30.309	30.291	51.45	54.0	40.0	NW SW	0		
21	30.319	30.269	57.45	86.0	34.0	NW SW	.52		
22	30.260	30.232	64.41	95.0	39.0	NW SE	.52		
23	30.211	30.102	64.42	95.5	33.5	W NW E	.52		
24	29.956	29.874	70.43	89.0	39.0	S NW SW	.52		
25	29.653	29.477	63.44	89.0	43.0	NW	1.30		
26	29.595	29.521	63.49	83.0	46.0	NW	5.47	0.02	
27	29.926	29.773	63.47	87.0	42.0	NW	1.30		
28	30.443	30.360	67.42	91.0	36.5	SW NW	1.04		
29	30.529	30.460	65.36	89.0	35.0	NW SW	.73		
30	30.321	30.162	56.38	84.5	36.5	NW	.73		
31	30.109	29.946	62.42	79.0	40.5	NW	1.04	0.2	
Monthly mean			51.63	83.95	38.74	Total Force ..	27.05	0.59	
	30.054								

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 an 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.

- 10th—First Medlar ripe.
- 21st—Coronilla Glauca commencing to flower.
- 25th—Photinia serrulata ditto ditto.
- 28th—Diosma alba ditto ditto
- 30th—Spirea prunifolia ditto ditto ; Alianthus sericeus ditto ditto.

Barometer mean, 30.054 in., being 0.207 in. above the average.
 Temperature mean, 51.63°, being 1.35° above the ditto.
 Solar intensity mean, 83.95°, being 2.08° above the ditto.
 Dew point mean, 42.08°, being 1.76° below the ditto.
 Humidity of air mean, .74, being .02 per cent. below the ditto.
 Elastic force of vapour mean, .291, being .011 per cent. below the ditto.
 Total amount of rain, 0.59 in., being 1.22 in. below the ditto.
 Increase of spontaneous evaporation on rain fall, 1.22 in.
 Mean amount of ozone, 6.08, being 0.72 of chromatic scale below the ditto.
 Electricity active on the 8th, 9th, 10th, 17th, 27th, 28th, and 29th.
 A light fall of snow on Mount Wellington on the 8th, the apex covered with ditto on 17th, which was not totally absent till the end of the month.

ANALYSIS OF OBSERVATORY RECORDS, AND HEALTH REPORT
FOR MAY, WITH NOTE ON CENSUS OF 1870. BY DR. E.
SWARBRECK HALL.

Most of the meteorological phenomena of this month deviate from the 25 years adopted standard, and though diseases of the respiratory organs prevailed extensively, the effect on the mortality returns was but slight, the total mortality of the month being somewhat below the average of the previous 13 years, and no May of the previous six years having so small a number of deaths as the present month.

Atmospheric pressure mean, 30·054, was considerably (+ ·207) above the average, and had a wide range, with some very sudden and extensive rises and falls, within 24 hours, which told heavily on aged and enfeebled persons.

Wind-force 27·05 lbs., was — 10·80 lbs. below the May average, and north-west winds constituted nearly two-thirds of the numerical records, and more than two-thirds of the total strength.

Temperature mean, 51·63 degrees, was + 1·35 above the average, the extremes being 71 and 36.

Daily range of Temperature 18·45 degrees, was + 3·29 above the average.

Solar-intensity mean, 83·95 degrees, was + 2·08 above the average, the maximum being 99 degrees.

Terrestrial-radiation mean, 38·74 degrees, was 0·57 below the average, the minimum being 33 degrees.

Elastic force of Vapour mean, ·291, was — ·11 below the average.

Humidity mean, 74, was only — 2 below the average, though the rainfall was so small.

Rainfall, ·59 of an inch, was — 1·22 below the average, or about two-thirds less than the May mean, and the number of days on which it fell, was little more than one-half the usual rate.

Spontaneous-evaporation, 1·81 inches, was only equal to the usual rainfall for May, which of course resulted from the slight wind-force.

Cloud mean, 5·99, was + ·49 above the average.

Ozone mean, 6·08, was ·72 below the average, the natural result of the small rainfall and small force of the winds, and their predominance from the north-west quarter.

Electricity was noted "nil" only at three records. Negative greatly preponderated in frequency and strength.

Snow appeared on Mount Wellington several times during the month, but soon disappeared.

The *Deaths* amounted to 37, being — 3 7-13ths below the average of the previous 13 Mays. At and under one year old the deaths were six. From one to five there were three deaths. One of these, a child aged 4½ years, died from *traumatic tetanus*, resulting from a wound in the hand. From five to twenty there were only two deaths. From twenty to sixty the deaths were ten. At sixty and above, to ninety, there were sixteen deaths, a very large proportion indeed of the total mortality. No one disease influenced the mortality unduly, the cases being principally of a long standing chronic character.

The *Population* of the Hobarton Registration District, which includes, with the city, the Electoral Districts of Queenborough and Glenorchy, has undergone little numerical alteration on the totals between the census of 1861 and 1870. In the former the total was 24,773, in the latter 25,004. But in the constituent elements of age there has been a striking change. In 1861 all under 20 years of age amounted to 10,960; in 1870 the amount is 13,025. From 20 to 60 in 1861 there were 12,592, in the present year only 10,154. At 60 and all ages above there were in 1861 only 1221; in 1870 there were 1825. From 15 to 30, too, there has been a large increase of females, and a large decrease of males.