

METEOROLOGY.

MARCH, 1871.

PRIVATE OBSERVATORY, HOBART TOWN.

Day of Month.	Bar. 37 feet abv. sea level corrected & reduced.		Self-Registering Thermometers.				Wind.		Rain in inches.
	Highest.	Lowest.	Highest in shade.	Lowest in shade.	Highest in sun.	Lowest on grass.	Direction from three daily re- gisters.	Force in lbs. per square foot.	
	In.	In.	°	°	°	°			
1	29.774	29.554	69	52	99.0	44.5	NW	1.30	
2	29.665	29.586	68	53	97.0	50.5	NW SENW	1.04	
3	30.001	29.848	64	42	102.5	40.5	NW SW	3.12	
4	30.252	30.186	63	50	101.0	49.0	SW SE	.78	
5	30.264	30.241	66	53	98.0	50.0	NW SE	.52	0.03
6	30.225	30.052	74	54	110.0	51.0	NW ESE	.78	
7	29.897	29.752	72	48	109.0	45.5	NW S	.52	0.09
8	30.010	29.962	72	48	109.0	46.0	NW SE	1.04	
9	30.042	29.752	74	45	111.5	43.0	NW SE	1.04	
10	29.815	29.587	69	50	105.5	48.0	SW	10.41	
11	30.094	29.890	59	48	90.0	45.0	NW SE	1.04	0.28
12	30.275	30.229	73	43	108.0	41.0	NW SE	1.60	
13	30.134	29.897	76	52	97.0	46.0	N NW	.78	0.40
14	29.684	29.606	75	56	108.5	54.5	NW	.78	
15	30.167	29.984	68	50	110.5	42.0	SE	1.30	
16	30.339	30.319	73	52	107.0	50.0	NW ENE	.78	
17	30.338	30.238	62	51	69.5	49.5	NE ENE	.26	
18	30.150	30.013	64	52	85.0	50.0	SW NW SE	.78	
19	29.937	29.815	64	47	96.0	46.0	NW S SW	0.	0.22
20	29.732	29.734	63	50	95.0	50.0	SW SE	1.04	0.16
21	30.034	29.995	62	46	96.0	42.0	SW NW	1.04	
22	30.176	30.102	58	46	89.0	43.5	SE	1.60	
23	30.186	30.126	61	40	91.0	37.5	NW SE	.52	
24	29.987	29.905	72	49	102.0	46.5	SE NW	.52	
25	30.042	29.899	73	49	109.0	48.5	SW SE	1.04	
26	30.248	30.219	74	41	108.5	38.5	NW SE	1.30	
27	30.291	30.123	85	45	118.0	45.5	NW SE	3.12	
28	30.083	28.887	88	48	120.0	50.0	NW	1.04	
29	29.679	29.593	81	56	110.0	56.0	NW W NW	5.47	0.13
30	29.876	29.685	61	49	93.0	44.0	NW SW	.78	0.02
31	30.083	30.012	74	46	113.5	42.5	SW SE	1.04	
Monthly mean 29.978			60.00		101.90	46.53	Total Force ..	46.30	1.33

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.

14th.—Tips of hornbeam commencing to turn yellow.	24th.—Leaves of horse chestnut turning brown.
16th.—Coe's golden drop plum ripe.	25th.—Ash leaves commencing to fall.
18th.—Tips of elm turning yellow.	26th.—Oak ditto.
20th.—Seckle pear commencing to ripen.	

Barometer mean, 29.978 in., being 0.123 in. above the average.

Temperature mean, 60.00°, being 0.24° above the ditto.

Solar intensity mean, 101.90°, being 1.39 below the ditto.

Dew point mean, 46.8, being 2.42 below the ditto.

Humidity of air mean, .66, being .05 per cent. below the ditto.

Elastic force of vapour mean, .337, being .019 per cent. below the ditto.

Total amount of rain, 1'33in., being 0'34in. below the ditto.

Increase of spontaneous evaporation on rain-fall, 2'00in.

Mean amount of ozone, 6'11, being 0'90 of chromatic scale below the ditto.

Electricity active on the 1st, 3rd, 4th, 10th, 22nd, 27th, and 28th.

Strong southern lights on the 23rd. *Aurora Australis* on the 24th.

FRANCIS ABBOTT.

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

BY E. SWARBRECK HALL.

High atmospheric pressure, great daily variations of temperature, cloudy weather with deficiency of sunshine, small rain-fall, and paucity of ozone, have characterised the present month, and told heavily on old and feeble people, more than two-fifths of the mortality having fallen on persons at and above sixty years old.

Atmospheric pressure mean, 29'978, was +123 above the 25 years' average. The maximum, 30'339, was on the 16th; the minimum, 29'554, on the 1st. The extreme range of the month, therefore, was small, only '785. But the daily fluctuations were very great, 18 days having more than one-fifth of an inch, and one of them, the 15th, a rise of +521 in the 24 hours.

Wind-force total, 46'30 lbs., was -6'79 lbs. below the average. *North West* winds were more numerous than from any other points of the compass, but were below the average in strength. *North*, *North East*, and *East* were both few in number and trifling in force. *South East*, our most propitious wind, was largely over the average both in number and force. *South* was below the average in both aspects. *South West* winds were about three times more than the average in number, and double in force. *West* was only recorded once, but with the strength of 5'21 lbs. pressure to the square foot. Only one other wind of the same force was recorded, and that a *South West* one. *Calms* were 25, being -3'22 less than the average.

Temperature mean, 60'00 degrees, only varied from the 25 years' average by +00'24. The highest record was 88 degrees on the 28th, nine years out of the 25 having a higher maximum. The lowest temperature, 40, was on the 23rd, only five years in the 25 having lower minima. The *wet bulb* mean was 53'56, being 00'39 below the average.

Daily-range of temperature exceeded the average by +1'44, being 20'84 degrees. The greatest range in 24 hours, 40 degrees, occurred on both the 27th and 28th. These fluctuations of temperature, combined with high atmospheric pressure, are very trying to diseased, feeble, and aged persons, though young and healthy people are little affected by them.

Solar-intensity mean, 101'90, was -1'39 less than the average. The maximum was 120 degrees on the 28th, which has often been exceeded.

Terrestrial-radiation mean, 46'53 degrees, was -1'62 below the average. The minimum record was, for the night of the 23rd, the temperature being, 37'5 degrees. Only thrice before in 15 years have there been lower minima in March.

Elastic-force of vapour 337 was -19 below the average; ranging from 126 at noon on the 28th, to 522 at noon on the 14th.

Humidity mean, 66, was -5 below the average.

Rain-fall, 1'33 inches, was -34 below the average. It fell on eight days, being -1'09 less than the average. It was sufficient to flush water courses and drains on the 11th, 13th, 19th, 20th. During the four months past, December, January, February, March, the rain-fall has only amounted to 4'48 inches, being -1'97 inches less than the 25 years' standard mean. *Snow* never was visible from the city, on Mount Wellington, during the month.

Spontaneous-evaporation was 3'33 inches.

Cloud mean, 6'06, was +64 above the average.

Ozone mean, 6'11, was -90 below the average, and the smallest on record for the month of March.

Electricity. 14 positive with tension from 3'5 to 6 were recorded; negative 46 with tension from 2 to 6, and 2 "nils." The *Aurora Australis* was

seen on the nights of the 23rd and 24th. There was *thunder* with rain on the 29th.

The *deaths* during the month were 51, being—3 4-14ths less than the average of the preceding 14 years, though +4 more than March 1870 and +9 more than 1869 had. In 1861 the deaths were the same in number, but in every other year of the fourteen more; the range being from 42 in 1869 to 73 in 1864. Thirty (30) were males, 21 females. Under one year old there were 11 deaths; from 1 to 5 the deaths were 4; none between 5 and 10; one (1) from 10 to 15; one (1) from 15 to 20; from 20 to 60 there were 13; and from 60 to all ages above 21, the oldest being 92, an old Waterloo soldier who died at the Brickfields Invalid Asylum. The deaths in the General Hospital were 13, seven (7) of which were from other Registration Districts, and one a foreign sailor. At the *Cascades Invalid Asylum* there were 5 deaths, at the *Brickfields* 2. There were 3 *inquests*. One died one hour after admission into hospital from a *tumour of the liver*; another died there from *compound fracture of both bones of the leg*, which occurred at Brighton. The leg was amputated; the third died before he reached the hospital from *inflammation of the bowels*, having been brought down the long and torturing journey from the Lakes. It is high time that cottage hospitals should be established by the settlers in their respective districts to avert such sufferings as this poor man must have endured. *Zymotic diseases* caused 13 deaths mostly from bowel complaints, but no epidemic disease prevailed. *Consumption* caused 4 deaths, none of the deceased having been natives of Tasmania.