

METEOROLOGY FOR FEBRUARY, 1870.

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	30.121	29.936	82	55	121.0	54.5	NW SW SE	.78	
2	29.849	29.807	77	59	118.0	58.0	NW SE	6.25	
3	29.830	29.752	73	60	112.0	59.0	E SE E	1.04	
4	30.239	30.213	63	46	106.0	43.5	SW SE	1.04	
5	30.197	29.909	82	49	116.0	47.0	NW NE SE	1.04	
6	29.941	29.865	74	50	61.1	55.0	SE	2.82	0.03
7	30.178	30.158	65	43	105.0	40.5	NW SE	1.04	
8	30.142	30.057	70	47	110.0	45.0	NW SE	1.30	
9	30.076	30.063	65	54	89.0	50.5	NW SE	.78	
10	30.063	29.955	63	55	72.0	54.0	NW NE NW	.78	
11	29.706	29.421	82	54	120.0	52.5	NW W	10.68	
12	29.726	29.697	72	54	103.5	53.0	NW	5.72	
13	29.821	29.805	75	58	110.0	55.5	NW	1.30	
14	30.032	29.924	77	47	110.0	45.5	NW SE	1.04	
15	29.763	29.570	89	52	129.0	51.5	NW SE	1.30	
16	29.902	29.763	81	54	111.0	53.5	SE SW SE	.52	
17	29.975	29.833	68	43	108.5	39.0	NW SE	1.30	
18	29.684	29.548	81	49	114.0	47.5	NW E	1.56	
19	29.772	29.617	74	56	115.0	54.0	NW W	6.25	
20	29.917	29.821	76	52	113.0	49.0	NW SE	1.30	
21	29.879	29.520	92	54	130.5	48.0	NW	.52	
22	29.735	29.606	87	57	91.0	57.5	NW	1.30	
23	29.735	29.606	69	49	113.0	47.5	N SW NW	1.04	0.01
24	30.092	29.874	76	45	110.0	42.0	NW SE	1.30	
25	29.824	29.771	71	52	103.5	43.0	SW NW	.78	0.03
26	30.233	30.045	59	43	95.0	41.0	W SW	5.66	0.24
27	30.500	30.433	60	45	103.0	42.0	SE	1.30	0.04
28	30.455	30.361	69	42	106.0	39.0	NW SE	1.36	
Monthly mean			63	45	107.36	45.46	Total Force ..	60.88	0.35
									29.923

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.

- 1st—Kerry pippin apple commencing to ripen.
- 2nd—Windsor pear ditto ditto.
- 4th—Bon chretien pear ditto ditto.
- 6th—Greengage plum ditto ditto.
- 15th—Common ash commencing to shed seed.
- 18th—Common Sycamore ditto ditto.

Barometer mean, 29.923 in., being 0.097 in. above the average.
 Temperature mean, 63.45°, being 1.57° above the ditto.
 Solar intensity mean, 107.36°, being 0.51° below the ditto.
 Dew point mean, 48.2°, being 2.35° below the ditto.
 Humidity of air mean, .62, being .08 per cent. below the ditto.
 Elastic force of vapour mean, .355, being .019 per cent. below the ditto.
 Total amount of rain, 0.35in., being 1.34in. above the ditto.
 Increase of spontaneous evaporation on rain fall, 4.97in.
 Mean amount of ozone, 6.37, being 0.64 of chromatic scale below ditto.
 Electricity active on the 4th, 8th, 11th, 12th, 13th, 14th, 16th, 17th, 18th, 20th, 21st, 23rd, 25th, and 28th.
 Strong Aurora Australis with frequent erratic meteors on the 1st. Wind strong from N.W. and S.E. during the month.

FRANCIS ABBOTT.

REMARKS ON OBSERVATORY RECORDS, WITH HEALTH REPORT
FOR JANUARY AND FEBRUARY, 1870, AND A COMPARISON OF
THE VITAL STATISTICS OF 1869, WITH THOSE OF PREVIOUS
YEARS. BY DR. E. SWARBRECK HALL.

The only striking variations from the usual January weather to be seen in the table are—First, the deficiency of ozone, the amount being much below the January average, and less than for any of the previous twelve years recorded; second: Windforce was much above the average with a great predominance from that point of the compass, N.W., most adverse to health; third: though the temperature mean was not in excess, the extreme range in the month was greatly so; fourth: Rainfall was most advantageously above the average, only one January in the twenty-nine years recorded having a greater fall, *i.e.*, 1849, with the small superiority of four-hundredths of an inch. On the other hand humidity mean was considerably below the average. The electrical condition of the atmosphere recorded shows nothing inimical to health, the positive indications as well as the tension, being an usually fair proportion of the whole. The Hobarton district deaths this month, so far recorded, 64, are 15 above the average of the previous 13 years, 23 more than 1869 had, and considerably higher than any year since 1860, when 72 deaths occurred. 1858, the highest of the 13, having had the maximum 74, and 1864 the minimum 24. This excessive mortality was not owing to the prevalence of any epidemic disease, and it fell heaviest on adults and very aged persons. Of the 64 deaths, 19 only were under one year old, while 1860 had 28, and 1858 had 32. From 1 to 5 years old the present January had only 3 deaths, while 1860 had 7, but 1858 had 10. From 5 to 20 years old the deaths were 3, while 1860 had 7, but 1858 3 only also. From 20 and all ages above the deaths were 33, while 1860 had only 30, and 1858 only 29. Above 60 years old January, 1870, had 17 deaths, 1860 only 9, 1858 only 8. December, 1869, however, had 6 deaths less than the December average, while December, 1859, had 17 more than the average, and December, 1857, 3 more.

The Hobarton Registration District had the smallest number of deaths, for the whole year of 1869, than any of the previous twelve, the number being only 472, while the average of the previous 12 is 568, and the least in the number, 492 in 1865. This is without reference to the increase annually of the population by excess of births over deaths. For the whole of Tasmania, too, the registered deaths, 1335, were the fewest in proportion to population, being 129 less than 1868 had, and 107 less than the average of the previous twelve years. 1869 was entirely free from epidemic diseases. Estimating the population of all Tasmania at 100,000, the death rate would be about $13\frac{1}{2}$ per 1000 per annum. The death rate of England and Wales is about 22 per 1000, and the Registrar-General of England considers 17 per 1000 a nominal death rate. So favourable a condition of health cannot be expected to continue long in Tasmania, seeing how wide-spread is the neglect of vaccination and other hygienic measures, which most civilised communities elsewhere are so energetically enforcing. The homely adage, "a stitch in time may save nine," is particularly applicable to Tasmania.

The deaths in February, registered up to the 6th March inclusive, were 48, being 6-13ths below the February average of the previous thirteen years.