<table>
<thead>
<tr>
<th>Day of Month</th>
<th>Highest</th>
<th>Lowest.</th>
<th>Highest in shade</th>
<th>Lowest in shade</th>
<th>Highest in sun.</th>
<th>Lowest on grass</th>
<th>Directional Daily registers</th>
<th>Force in lbs. per square foot</th>
<th>Rain in Inches</th>
<th>Mean of the daily average temperature of the Lower Air.</th>
<th>Total monthly precipitation.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0 155 in. above the average)</td>
<td>(80.53 in.)</td>
</tr>
</tbody>
</table>

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

10th.—Carpinus betulus commencing to break into leaf.
19th.—Ailanthus glandulosa ditto ditto.
24th.—Tilia Europea ditto ditto.
25th.—Morus nigra ditto ditto.
31st.—Melia azedarach commencing to break.

Barometer mean, 29 939 in., being 0.155 in. above the average.
Temperature mean, 57 96°, being 4.02° above the ditto.
Solar Intensity mean, 101 71°, being 6.11° above the ditto.
Dew point mean, 46.0°, being 2.3° above the ditto.
Humidity of air mean, 68°, being 9.5 per cent. below the ditto.
Elastic force of vapour mean, 328, being 0.52° per cent. above the ditto.
Total amount of rain, 2.34 in., being 0.37 in. above the ditto.
Increase of spontaneous evaporation on rainfall, 2.20 in.
Mean amount of ozone, 7 10°, being 0.32° of chromatic scale below ditto.
Electricity active on the 2nd, 3rd, 15th, 19th, 23rd, 26th, 30th, and 31st.
Aurora on the 12th and 25th.
More or less snow on Mount Wellington all through the month.

FRANCIS ABBOTT.
NOTES ON THE METEOROLOGY AND MORTALITY OF THE MONTH OF OCTOBER, 1870.

By Dr. E. Swarbreck Hall.

On the whole the weather this month was favourable to health, the deaths being considerably below the average, and nearly half of them persons above 60 years old.

Atmospheric pressure was very high with wide ranges, and as is usual was very fatal to feeble, diseased, and aged persons. The mean 29·399, was +1·55 above the average. The extreme range was from 30·412 on the 12th to 29·256 on the 20th. On fourteen days the mutations exceeded one-fifth of an inch. On the 20th it was nearly three-fourths of an inch (-520), both days of heavy floods in Victoria, though with only a moderate rainfall here.

Wind-force, 80·53 lbs., was, 19·42 lbs below the October average. North-west winds had 44 out of the 93 records, with more than half of the total forces. The strongest wind, 10·42 lbs. pressure to the square foot, was from the west on the 22nd. There were 18 calms, being +2·72 above the average.

Temperature, 57·96 degrees, was +4·02 above the mean. The maximum 81 occurred on the 28th, the minimum 39 on the night of the 11th.

Daily range of temperature mean, 29·39 degrees, was +1·72 above the average. On the 5th the extreme range occurred being 33 degrees.

Solar-Intensity mean, 101·71 degrees, was +6·11 above the average. The hottest day was the 30th when the thermometer in the sun rose to 114 degrees.

Terrestrial Radiation mean, 42·68 degrees, was +0·69 above the average. The lowest temperature by this thermometer was 33·5 degrees in the night of the eleventh.

Elastic force of vapour mean, 328, was +28 above the average. The range was from 104 on the 22nd to 581 on the 29th.

Humidity mean, 68, was —5 below the average, notwithstanding the copious fall of rain.

Rainfall, 2·34 inches, was +3·7 above the average. It fell on 14 days which is only—90 below the average. The greatest amount on any day was 52 of an inch on the 9th, and the next was 42 on the 19th. Other days also had sufficient to flush the drains and sewers, but none were heavy enough to cause floods. Health and vegetation were promoted by this genial rainfall. Snow was never absent from Mount Wellington during the month, and received frequent additions.

Spontaneous evaporation occurred to the amount of 4·54 inches, being nearly double the amount of rainfall, as might be expected with so much sunshine and wind.

Cloud mean, 5·68 was —0·2 below the average.

Ozone had a mean of 7·10 which is —0·2 below the average. The predominance of the north-west winds no doubt was the cause of this.

The Electrometer records were positive 19, with tension from 2·3 to 8; negative 36, with tension from 1 to 6; nils 7.

The deaths in the month amounted to 31, being—19 3·13ths less than the average of the previous 13 years, and 15 less than October 1869 had. Under one year of age there were five deaths, the oldest being only seven weeks, the other four from twelve hours to nine days. From one to five years old there were four deaths; from five to ten, one only; from ten to twenty the deaths were two; from twenty to sixty only six, while in October, 1869, there were twenty-one. At sixty and all ages above the deaths were sixteen, the oldest being a woman eighty-four years old. At all ages it is very remarkable how large a proportion were males—twenty-eight to six females. There were only three inquests, two of them cases brought to hospital from other districts; including these there were only six deaths in the public hospital. Both invalid establishments at the Cascades and the Brickfields had four deaths each, the mean age of each being respectively 50·3 and 72·4. In the Zymotic class of diseases there was only one death, a child aged between three and four years from Diphtheria. Consumption caused three deaths, two of them, aged ten and fifteen years, were natives of Tasmania.