

# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Cottage, County of Bute, in Lat. 55° 49' 50", Long. 5° 4' 5", Distance from Sea 10 miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet. During the MONTH of January 1882.  
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulb/ Grass.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H. Cup Anemometer. No. —		No. of hours in which it fell.	Amount in inches.	9 A.M.		P.M.		9 h. A.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		Barometer. * No. —	Attach- ed Ther- mometer No. —	Barometer. No. —	Attach- ed Ther- mometer No. —	Max. No. —	Min. No. —	Max. in Sun's rays No. —	Min. on Grass. No. —	Dry bulb. No. —	Wet bulb. No. —	Dry bulb. No. —	Wet bulb. No. —	Direc- tion. No. —	Force No. —	Direc- tion. No. —	Force No. —	9 h. A.M. No. —	Velocity (0—6), and Direc- tion. No. —			Amount (0—10), and Species. No. —	Velocity (0—6), and Direc- tion. No. —	Amount (0—10), and Species. No. —	SUNSHINE.  Hours.	No. 1 inches.					No. 2 inches.	No. 3 inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† for Temp. (Col. 2), = 30.006  
Corrected Mean†† of Barometer at 9 P.M., minus the Correction†† for Temp. (Col. 4), = 30.037  
Mean at Station, corrected, and at 32°, = 30.021  
Correction for height, 116 feet above Mean Sea-level, = .127  
Mean, reduced to 32°, and Sea-level, = 30.148  
Highest Reading, corrected for Index error, on the th, = 30.800  
Lowest Do. Do., on the th, = 28.800  
Difference, or Monthly Range, = 2.000

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th, = 50.0  
Lowest in Month, corrected for Index errors, on the th, = 29.0  
Difference, or Monthly Range, = 21.0  
“Corrected Mean” of all the Highest, (Col. 5), = 46.7  
“Corrected Mean” of all the Lowest, (Col. 6), = 38.1  
Difference, or Mean Daily Range, = 8.6  
\*\* Calculated Mean Temperature of Month, = 42.4  
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, = —  
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun, = —  
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, = —  
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass, = —  
Difference of above Means or Range (“exposed”), = —

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 42.6  
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 41.4  
†† Computed Temperature of Dew-Point, = 40.0  
†† Do. Elastic Force of Vapour, = .247  
†† Do. Weight of Vapour in a Cubic Foot of Air, = —  
†† Relative Humidity, (Saturation = 100), = 90  
RAIN fell on 24 Days; Amount in Inches, = 4.57

WIND.		SUMMARY.	
Direction.	No.	Mean Force.	Mean Velocity in miles per day.
A.M.	0 3 0 2 8 6 7 2 3		
P.M.	0 0 3 0 1 4 6 5 3		
Mean.	0 2 1 1 9 5 6 4 3		

(Signed)

Observations made and  
Return verified by







# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barrow Cottage, County of Bute, in Lat. 55° 49' 50", Long. 5° 4' 5", Distance from Sea 10 miles.  
 Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet.  
 During the MONTH of February 1882.  
 The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				SUNSHINE. Hours.	THERMOMETERS under Ground.			SEA. Temperature at 1 fathom, and Density.	OZONE.  0-10.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.	Max. No.	Min. No.	Max. on Sun. days. No.	Min. on Grass. No.	9 h. A.M.		9 h. P.M.		9 h. A.M.	No. of hours in which it fell.	Amount in inches.	9 A.M.		P.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		Barometer. * No.	Attach- ed Ther- mometer	Barometer. No.	Attach- ed Ther- mometer						Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.				Direction.	Force	Direction.	Force	Velocity (0-6), and Direction.	Amount (0-10), and Species.		Velocity (0-6), and Direction.	Amount (0-10), and Species.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Dull heavy & blowy  
 wet am. Fair P.M.  
 1/2 clear fine  
 do Showers  
 foggy fine  
 Dull heavy & fine  
 do & small  
 cloudy & "raw"  
 Dull & wet  
 do do  
 do heavy showers  
 1/2 c slight rain  
 wet am. Fair P.M.  
 Dull & blowy  
 1/2 clear showers  
 wet am. Fair P.M.  
 Gale, showers  
 force gale, sleet showers  
 1/2 c blowy showers  
 Dull heavy & wet  
 do mild &  
 cloudy, cold showers  
 do fine  
 1/2 c fine  
 Dull & wet  
 do & damp  
 wet am. Fair P.M.  
 Dull blowy & cold

NOTATION USED IN GENERAL REMARKS.

a.	denotes aurora.	m.	denotes meteor.
ci.	cirrus.	ms.	meteors.
ci-cu.	cirro-cumulus.	n.	nimbus.
ci-s.	cirro-stratus.	r.	rain.
cu.	cumulus.	h. r.	heavy rain.
cu-s.	cumulo-stratus.	c. h. r.	continued heavy rain.
d.	dew.	s.	sleet.
f.	fog.	sc.	scud.
fr.	frost.	s.	snow.
h. fr.	hoar-frost.	sol. h.	solar halo.
h. d.	heavy dew.	sq.	squall.
hl.	hail.	sg.	squall.
l.	lightning.	t.	thunder.
h. cl.	light clouds.	t. s.	thunder storm.
h. sh.	light showers.	w.	wind.
lu. co.	lunar corona.	g.	gale of wind.
lu. ha.	lunar halo.		

TABLE FOR ESTIMATING FORCE OF WIND.

Estimated Force, 0-6.	Common Designation.	Estimated Force, 0-6.	Common Designation.	Estimated Force, 0-6.	Common Designation.
0	Calm	1.5	Light breeze	4	Blowing hard
0.5	Very light air	2	Fresh breeze	5	Blowing a gale
1	Light air	3	Very fresh	6	Violent gale

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction†† = 29.906  
 for Temp. (Col. 2), = 29.951 - .045 = 29.906  
 Corrected Mean" of Barometer at 9 P.M., minus the Correction†† = 29.904  
 for Temp. (Col. 4), = 29.952 - .048 = 29.904  
 Mean at Station, corrected, and at 32°, = 29.905  
 Correction for height, 116 feet above Mean Sea-level, = .127  
 Mean, reduced to 32°, and Sea-level, = 30.032  
 Highest Reading, corrected for Index error, on the th, = 30.620  
 Lowest Do. Do., on the th, = 28.790  
 Difference, or Monthly Range, = 1.830

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th, = 53.0  
 Lowest in Month, corrected for Index errors, on the th, = 31.0  
 Difference, or Monthly Range, = 22.0  
 "Corrected Mean" of all the Highest, (Col. 5), = 47.5  
 "Corrected Mean" of all the Lowest, (Col. 6), = 38.3  
 Difference, or Mean Daily Range, = 9.2  
 \*\* Calculated Mean Temperature of Month, = 42.9  
 S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =  
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, =  
 Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =  
 "Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =  
 Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 42.6  
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 41.8  
 # Computed Temperature of Dew-Point, = 40.8  
 # Do. Elastic Force of Vapour, = 256  
 # Do. Weight of Vapour in a Cubic Foot of Air, =  
 # Relative Humidity, (Saturation = 100), = 94  
 RAIN fell on 22 Days; Amount in Inches, = 3.42

WIND. SUMMARY.

Direction.	N	NE	E	SE	S	SW	W	NW	Mean or Variable.	Mean Force.	Mean Velocity in miles per day.
A.M.	0	0	2	2	7	3	8	3	3		
P.M.	0	0	2	1	6	3	4	5	7		
Mean.	0	0	2	2	6	3	6	4	5		







## SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Baron Cottage, County of Bute, in Lat. 55° 49' 50", Long. 5° 4' 5", Distance from Sea 10 miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet.

During the MONTH of March 1882.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		9 h. A.M.		9 h. P.M.		Protected in Shade, & at above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H. Cup Anemometer. No. —		No. of hours in which it fell.	Amount in inches.	9 A.M.		P.M.		9 h. A.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		Barometer. No. —	Attach- ed Ther- mometer.	Barometer. No. —	Attach- ed Ther- mometer.	Max. No. —	Min. No. —	Max. & Min. on Sun's days No. —	No. —	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direc- tion.	Force.	Direc- tion.	Force.	9 h. A.M.	No. —			Velocity (0-6), and Direc- tion.	Amount (0-10), and Species.	Velocity (0-6), and Direc- tion.	Amount (0-10), and Species.	No. — 3 inches.					No. — 12 inches.	No. — 22 inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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BAROMETER, "corrected Mean" at 9 A.M., minus the Correction†† for Temp. (Col. 2), = 29.724 - .055 = 29.679  
Corrected Mean" of Barometer at 9 P.M., minus the Correction†† for Temp. (Col. 4), = 29.743 - .054 = 29.689  
Mean at Station, corrected, and at 32°, = 29.689  
Correction for height, feet above Mean Sea-level, = .127  
Mean, reduced to 32°, and Sea-level, = 29.816  
Highest Reading, corrected for Index error, on the th, = 30.434  
Lowest Do. Do. on the th, = 28.840  
Difference, or Monthly Range, = 1.594

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th, = 57.5  
Lowest in Month, corrected for Index errors, on the th, = 28.5  
Difference, or Monthly Range, = 29.0  
"Corrected Mean" of all the Highest, (Col. 5), = 50.0  
"Corrected Mean" of all the Lowest, (Col. 6), = 37.6  
Difference, or Mean Daily Range, = 12.4  
\*\* Calculated Mean Temperature of Month, = 43.8

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =  
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, =  
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =  
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =  
Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 43.9  
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 42.2  
†† Computed Temperature of Dew-Point, = 40.1  
†† Do. Elastic Force of Vapour, = .250  
†† Do. Weight of Vapour in a Cubic Foot of Air, ... =  
†† Relative Humidity, (Saturation = 100), = 86  
RAIN fell on 23 Days; Amount in Inches, = 4.15

WIND.		SUMMARY.							
Direction.		N	NE	E	SE	S	SW	W	NW
A.M.	0	2	2	0	2	13	6	4	2
P.M.	0	2	3	1	1	10	10	3	1
Mean.	0	2	3	0	2	12	8	3	1

Observations made and  
Return verified by

James Kay

(Signed)

James Kay

M.  
H.P.



Noted  
Mar. 1882

99/

*Secretary of the Meteorological Society of Scotland.*

The weather during the month has been ~~rather~~ <sup>the</sup> variable & stormy and it has been somewhat unusual for this time of year. Some clouds appear about every day & during the night there are frequent showers of rain. The wind is mostly from the N.W. & S.W. but at times from the E. & N.E. The temperature is generally between 60° and 70° F.

above ground. Several specimens of *Epistemon* were  
 taken from the 11 feet 1/2 ft. stratum though fresh  
 and made above ground. Only some fine in shallow  
 excavations one in leaf & stems 1/2 ground.

A. B.  
 (By Order)

EDINBURGH, December 1880.

Noted  
Mar. 1882

**Wind.** The intensity or force, both as regards direction and amount, of the more important motions of the winds.  
**Vane.** A wind-vane ought to be elevated at least 12 feet above surrounding objects. When it oscillates incessantly, the mean direction should be taken. In all cases, especially when the vane is stationary, and when the reference may be made to the direction of smoke, clouds, etc., the observer should take care to note the exact bearing. Careful observation of the wind, and during the day, will serve to ascertain the direction of the prevailing breeze, the frequency of its occurrence, and the force on the scale; the latter may be estimated by the force on the scale—be it 1, 2, 3, 4, or blowing fresh.

The Council would self-registering instrument which shows the amount of Wind that passes it per day; from which also the mean Velocity of the Wind at the time of observation may be ascertained. For indicating the Force of the Wind at any particular hour of observation, the Pressure barometers recently brought under the notice of the Society by Mr. T. Stevenson, the Veterinary Secretary, and Mr. R. Ballingall, the Secretary of the Society, are to be used, as they secure the object of the Society, and are not liable to the same errors as the former ones. Many causes conspire to produce anomalies in Bar. Returns.

The Council Commanded Overseers, before purchasing new instruments, and in repairing old ones, to communicate with the Meteorological Service, so that every instrument may be examined and improved before being used; and they consider it necessary that he should have full power to reject any instrument which, on being presented for comparison, does not afford him satisfaction.

(By Order) A. B.  
Ennsurunt, December 1880.

register observations only ; and nothing that pertakes of the nature of deduction or inference.

Convenient abbreviations for the nomenclature of Clouds will be found on the other side. The amount of Cloud ought to be estimated from the greater or less observation of the sky overhead (*i.e.*, within  $20^{\circ}$  or  $30^{\circ}$  of the zenith). The strata of Clouds that appear near the horizon are viewed obliquely ; and if Clouds, being unable to judge of their amount, we ought not to take

2. W. — It is indicated that the highest wind at Ocean and warm extreme velocity from S.W., and those in the lower regions from N.W. and S.W. respectively. The wind at Ocean was from N.W. V., with one-third the speed of the former. Again, in the second 4, sk. — Cloud column, an entry of  $\frac{2}{2}$  cu.-st. indicates that the higher regions are covered to the amount of 4-tenths with *stratus* clouds; and that the sky is further obscured to the extent of 2-tenths by *stratus* clouds.

As the germination and growth of crops and plants generally, depend greatly on the temperature of the soil, it is important to ascertain the amount and constancy—the Council point out that observations in this interesting department will be made at 9 a.m. by Thermometers permanently fixed in the soil, three bulbs being sunk to depths of 3, 12, and 22 inches, and the stems above ground protected from the sun's rays, and fitted with sloping tin plates to prevent rain water being conveyed to the bulbs by the stems.

OBSERVATIONS IN CONNECTION WITH THE PERIODICAL RETURN OF THE SEASONS.

Noted  
Mar. 1882

The Meteorological Box is to be placed over a plot of ground, and in such a position as to be sheltered from the wind by the day as surrounding conditions enable the Observer to secure. The Thermometers are suspended on cross-laths in the centre of the Box, and face the door, which should open to the north.

The Council regard the question of UNIFORMITY OF HEIGHT ABOVE GROUND, AND METHOD IN PROTECTING THE THERMOMETERS, as vital in every system of observation, although it is somewhat difficult to attain uniformity in different Stations; and, therefore, it is impossible to compare the Climates of places with each other as

**Barometer.**—The aneroid barometer is subject to highly variable errors, and should not be used for Meteorological Observations that require the same means of adjustment or compensation which will secure that the height of the mercury in the tube is accurately measured from the fluctuating surface of the mercury in the cistern.

The Barometer in which the error arising from the fluctuating surface of the mercury in the cistern is entirely got rid of is Fortin's Barometer, the arrangement consisting in applying pressure by means of a screw to the bottom of the cistern, which is made of flexible metal, so that, when the pressure is applied, the surface of the mercury in the cistern rises or falls, until it unites with the surface of the mercury in the tube, thus raising or depressing the surface of the mercury in the tube to the same level as the surface of the mercury in the cistern.

mercury is indicated by a shade very near, when through the fit and ease of the column, this little piston-rod is brought by the adjusting-screw to the position of the zero, and the straightness of the scale is then tested by the eye, that is, the exact height from which the eye, taking an observation, this preliminary setting must be made, with scrupulous accuracy, as a slight error here will vitiate the readings from the zenith. It is absolutely necessary that the thermometer be used, and that the whole subject of the

to secure that the whole instrument, including the brass fittings, the Hygrometer Observations, Observers are specially required to attend to the following conditions.—The bulbs must hang down by at least an inch free from the scales and frame which they are attached; the frame must be such as will bring the tubes forward by an inch from any board on which it may be suspended; the venter of the bulb must be covered, and altogether placed to the side, and a little below the level of the wet bulb, but in no way under the bulb; the

Thermometer to tenths of a degree and noted in decimals. Then the thermometer will be read—39° 9, 40° 0, or 40° 1; again, 40° 4, 40° 6, according as it indicates a little under, an exact coincidence with, or a little over 40° or 40½, respectively. So also 40° 5 and 40° 8 more or less must be registered 40° 2, 40° 3, and 40° 7, or 40° 8 respectively. In reading Rutherford's Minimum Thermometer, the indication of that end of the index which is next the surface of the spirit is alone noted. On using the Thermometer

[illegible]



## SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Bridge, County of Bute, in Lat. \_\_\_\_\_, Long. \_\_\_\_\_, Distance from Sea 10 miles.Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet.During the MONTH of April 1882.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depressions or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H. Cup Anemometer. No. —		No. of hours in which it fell.	No.	9 A.M.		P.M.		9 h. A.M.					Temperature of Wet and Dry at feet. No.	Temperature of Air and Density.	9 A.M. 9 P.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
		Barometer. No. —	Attached Thermometer	Barometer. No. —	Attached Thermometer	Max. No. —	Min. No. —	Max. in Sun. No. —	Min. on Grass. No. —	Dry bulb. No. —	Wet bulb. No. —	Dry bulb. No. —	Wet bulb. No. —	Direction. No. —	Force. No. —	Direction. No. —	Force. No. —	Velocity (0—5), and Direction. No. —	Amount (0—10), and Species.			Velocity (0—5), and Direction. No. —	Amount (0—10), and Species.	Hours.	No. 3 inches.	No. 12 inches.								No. 22 inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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BAROMETER, "corrected Mean" at 9 A.M., minus the Correction<sup>††</sup> for Temp. (Col. 2), = 29.643  
Corrected Mean "of Barometer at 9 P.M., minus the Correction<sup>††</sup> for Temp. (Col. 4), = 29.661  
Mean at Station, corrected, and at 32°, = 29.652  
Correction for height, 116 feet above Mean Sea-level, = .127  
Mean, reduced to 32°, and Sea-level, = 29.779  
Highest Reading, corrected for Index error, on the th, = 30.464  
Lowest Do. Do., on the th, = 29.068  
Difference, or Monthly Range, = 1.396

\* Each instrument tested at the Office in Edinburgh bears the stamp "S.M.S." and a number to be entered in the Heading; or the Number and Initials of the Maker may be here given.  
† Embouching corrections for both capillarity and Index Errors.  
†† The Diurnal Range for Scotland is as yet unknown.  
‡ Practically, though not absolutely a minus correction.  
‡‡ These "Hygrometrical Deductions" are calculated from Glaisher's Hygrometrical Tables, Second Edition only.  
‡‡‡ While the Diurnal Range is unknown, the Arithmetical Mean of Cols. 5 and 6 will be entered as the "Calculated Mean Temperature." Any Observations not taken under the conditions specified in the Directions on the other side, or noted at the Top of each column, must be marked as such by the observer, in each Schedule. See over.

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th, = 61.0  
Lowest in Month, corrected for Index errors, on the th, = 27.8  
Difference, or Monthly Range, = 33.2  
"Corrected Mean" of all the Highest, (Col. 5), = 51.5  
"Corrected Mean" of all the Lowest, (Col. 6), = 37.8  
Difference, or Mean Daily Range, = 13.7  
\*\* Calculated Mean Temperature of Month, = 44.6

S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, = \_\_\_\_\_  
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = \_\_\_\_\_  
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, = \_\_\_\_\_  
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, = \_\_\_\_\_  
Difference of above Means or Range ("exposed"), = \_\_\_\_\_

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 44.0  
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 41.8  
† Computed Temperature of Dew-Point, = 39.2  
† Do. Elastic Force of Vapour, = .240  
† Do. Weight of Vapour in a Cubic Foot of Air, = \_\_\_\_\_  
† Relative Humidity, (Saturation = 100), = 83  
RAIN fell on 17 Days; Amount in Inches, = 2.50

WIND.	SUMMARY.									
	Direction.	N	NE	E	SE	S	SW	W	NW	Mean Velocity in miles per day.
A.M.		2	6	10	1	4	1	5	1	0
P.M.		2	1	12	1	3	2	2	6	1
Mean.		2	3	11	1	4	2	3	3	1

Observations made and  
Return verified by

James Kay

(Signed)

James Kay

H. P.







# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barrow Cottage, County of Bute, in Lat. 55° 49' 56", Long. 5° 4' 5", Distance from Sea 10 miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet. During the MONTH of May 1882.  
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depressure, or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.			
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H. Cup Anemometer.		No. of hours in which it fell.	No. of inches.	9 A.M.		P.M.		9 h. A.M.						Temperature of Wet Bulb, at least 4 feet No.	Temperature of Air and Density.	9 A.M. 9 P.M.
		Barometer. * No. —	Attached Ther- mometer	Barometer. No. —	Attach- ed Ther- mometer	Max. No. —	Min. No. —	Max. in Sun's rays No. —	Min. on Shade No. —	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direc- tion.	Force	Direc- tion.	Force	No. of 9 h. A.M.	Velocity (0—5), and Direc- tion.			Amount (0—10), and Species.	Velocity (0—5), and Direc- tion.	Amount (0—10), and Species.	No. 3 inches.	12 inches.	22 inches.							
inches.	°	inches.	°	°	°	°	°	°	°	°	°	°																						
1	29.316	46	29.368	48	52.536					44	43	45.5	44	SE	SSR			290													1			
2	29.500	50	29.470	50	52.542					47.2	45.3	43.2	42.5	S	SVN			040													2			
3	29.780	48	29.620	50	55.535.5					47	45.8	48.6	47.5	ENE	WNW			106													3			
4	29.634	48	29.700	51	54.541					46.5	43.5	45	43	NW	NW																4			
5	29.764	52	29.800	53	57	36.5				50	48	46.2	44	WNW	SVY			180													5			
6	29.780	49	29.840	52	55.840.5					44.2	43	45.2	44	NW	YY			045													6			
7	29.890	50	29.964	48	49	40				48.6	47	43	42.5	SE	NE			225													7			
8	30.100	46	30.190	48	52	38				43.3	41.6	44	42	NE	SE			783													8			
9	30.092	47	30.130	51	52	40.5				46	45.8	43	42.2	S	WNW			250													9			
10	30.264	52	30.220	52	56.335.5					53	49.3	48	46.5	WSW	SW			005													10			
11	30.086	51	29.946	51	55.242.5					50.3	49	44.6	43	SSW	NW			155													11			
12	30.140	50	30.280	51	54.541					50	45	44	42.6	NW	NW																12			
13	30.300	50	30.320	55	62	36				51	48	50	48	WNW	SE																13			
14	30.350	55	30.390	53	61	43				54.5	50	45	42	E	ENE																14			
15	30.370	55	30.380	53	57.538					50.2	45.2	46.5	43.5	NE	BSR																15			
16	30.432	51	30.428	55	61	38.2				49	45.5	49.2	47.2	SE	NW																16			
17	30.476	56	30.396	57	65.539.5					58	54	52	48	W	NW																	17		
18	30.380	58	30.256	61	71	42				62.3	55.2	55.2	52.3	E	calm																18			
19	30.190	60	30.132	60	71.348.5					59	52	53	50	NE	NE																	19		
20	30.076	56	30.004	61	64	42				54.5	51	51	47	NE	NE																	20		
21	29.948	56	29.940	56	63.544					58.6	54	53	49.8	E	E																	21		
22	29.918	54	29.750	58	67	46				52.2	49.8	54	50	NE	NE																	22		
23	29.620	55	29.500	58	68	42.5				50.2	47.8	57	54	NE	NE			030														23		
24	29.156	54	29.092	56	58.845.2					49	48.5	50.8	50.5	ENE	YY			110														24		
25	29.286	53	29.366	57	64	43				47	45.6	52.5	51.5	NE	NE			030														25		
26	29.504	58	29.590	58	63	48				60	54	52.6	51.5	SW	SSB			220														26		
27	29.520	59	29.740	57	58	47				56	53.5	51	50	S	S			280														27		
28	29.850	55	30.010	58	62.547					55.5	53.3	51.3	49.5	S	SW			005														28		
29	30.188	59	30.260	58	64	45				57	52	51	49.5	W	SW			003														29		
30	30.344	61	30.316	60	65	41				59.3	54.5	52	49	SSB	NW																	30		
31	30.324	62	30.210	61	66.243					59.8	54.6	51.3	49	NW	NW																	31		
Sums.	13.15.8	13	14.14.5	12	13.6	13.4				63.2	58.8	12.5	12.7					2.754																
Means.	29.954		29.968		60.0	41.5				51.0	48.8	49.1	47.0																					
+ Total Corrections for Instrumental Errors.																																		
+ Corrections for Diurnal Range.																																		
"Corrected Means."																																		
No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction  $\frac{1}{100}$  for Temp. (Col. 2), = 29.954 = 29.887  
Corrected Mean of Barometer at 9 P.M., minus the Correction  $\frac{1}{100}$  for Temp. (Col. 4), = 29.968 = 29.898  
Mean at Station, corrected, and at 32°, 29.892 = 29.892  
Correction for height, 116 feet above Mean Sea-level, = .127  
Mean, reduced to 32°, and Sea-level, 30.019 = 30.019  
Highest Reading, corrected for Index error, on the th, = 30.476  
Lowest Do. Do., on the th, = 29.092  
Difference, or Monthly Range, = 1.384

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th, = 71.3  
Lowest in Month, corrected for Index errors, on the th, = 35.5  
Difference, or Monthly Range, = 35.8  
"Corrected Mean" of all the Highest, (Col. 5), = 60.0  
"Corrected Mean" of all the Lowest, (Col. 6), = 41.5  
Difference, or Mean Daily Range, = 18.5  
\*\* Calculated Mean Temperature of Month, = 50.8  
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =   
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, =   
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =   
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =   
Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 50.6  
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 47.9  
# Computed Temperature of Dew-Point, = 45.1  
# Do. Elastic Force of Vapour, = 30.1  
# Do. Weight of Vapour in a Cubic Foot of Air, =   
# Relative Humidity, (Saturation = 100), = 82  
RAIN fell on 17 Days; Amount in Inches, = 2.76

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.		0	7	5	3	6	1	5	4	0	
P.M.		0	6	3	2	3	5	4	7	1	
Mean.		0	6	4	3	4	3	5	5	1	

Observations made and  
Return verified by

James Kay

(Signed)

James Kay H. R.







# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Baron Cottage, County of But, in Lat. 55° 49' 50" N, Long. 5° 4' 5" W, Distance from Sea  $\frac{8}{10}$  miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet. During the MONTH of June

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.		Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		9 h. A.M.		9 h. P.M.		Protected in Shade, & above Ground.		Exposed Back Bulbs on Sun's rays		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H.Cup Anemometer.		No. of hours in which it fell.	Amount in Inches.	9 A.M.		P.M.		9 h. A.M.							Temperature of WELL at depth of feet. No.	Temperature at 1 fathom, and Density,	9 A.M.	9 P.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Barometer. * No.	Attach- ed Ther- mometer	Barometer. No.	Attach- ed Ther- mometer	Max. No.	Min. No.	Max. in Sun's rays No.	Min. on Grass. No.	Dry bulb. No.	Wet bulb. No.	Dry bulb. No.	Wet bulb. No.	Direction. No.	Force No.	Direction. No.	Force No.	9 h. A.M. No.	Velocity (0-5), and Direction.			Amount, (0-10), and Species.	Velocity (0-5), and Direction.	Amount, (0-10), and Species.	SUNSHINE. Hours.	No. 3 inches.	12 inches.										No. 22 inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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<b>BAROMETER,</b> "corrected Mean" at 9 A.M., <i>minus</i> the Correction $\uparrow\uparrow$			
for Temp. (Col. 2),	=	<u>29.703</u>	
Corrected Mean " of Barometer at 9 P.M., <i>minus</i> the Correction $\uparrow\uparrow$			
for Temp. (Col. 4),	=	<u>29.701</u>	
<b>Mean at Station, corrected, and at 32°,</b>			
	=	<u>29.702</u>	
Correction for height,			
feet above Mean Sea-level,	=	<u>.127</u>	
<b>Mean, reduced to 32°, and Sea-level,</b>			
	=	<u>29.829</u>	
Highest Reading, corrected for Index error, on the	th,		
	=	<u>30.340</u>	
Lowest Do.	Do,		
	on the		
	th,		
	=	<u>29.244</u>	
Difference, or <b>Monthly Range,</b>			
	=	<u>1.096</u>	

<b>S.-R. THERMETER</b> , (in shade, etc.), <b>Highest in Month</b> , (corrected for Index Errors), on the	th.....	=	<u>74.0</u>
<b>Lowest in Month</b> , corrected for Index errors, on the	th, .....	=	<u>38.0</u>
Difference, or <b>Monthly Range</b> , .....		=	<u>36.0</u>
"Corrected <b>Mean</b> " of all the <b>Highest</b> , (Col. 5), .....		=	<u>62.2</u>
"Corrected <b>Mean</b> " of all the <b>Lowest</b> , (Col. 6), .....		=	<u>46.1</u>
Difference, or <b>Mean Daily Range</b> , .....		=	<u>16.1</u>
** Calculated <b>Mean Temperature</b> of Month, .....		=	<u>54.2</u>

  

<b>S.-R. THERMETER, Black Bulb in Sun, Highest</b> , (corrected for Index Errors), on the	th.....	=	
"Corrected <b>Mean</b> ," (Col. 7), of <b>Black Bulb, Max. in Sun</b> ,.....		=	
<b>Lowest at Night</b> , Black Bulb, (corrected for Index errors), on the	th, ...	=	
"Corrected <b>Mean</b> ," (Col. 8), of <b>Black Bulb, Min.</b> on grass, .....		=	
Difference of above Means or Range ("exposed"), .....		=	

<b>HYGROMETER, Mean</b> (corrected) A.M. and P.M. Reading of <b>Dry Bulb</b> , (Cols. 9 and 11), .....	=	57.5
<b>Mean</b> (corrected) A.M. and P.M. Reading of <b>Wet Bulb</b> , (Cols. 10 and 12), .....	=	52.4
‡ Computed <b>Temperature of Dew-Point</b> , .....	=	50.4
‡ Do. <b>Elastic Force of Vapour</b> , .....	=	.365
‡ Do. <b>Weight of Vapour in a Cubic Foot of Air</b> , ...	=	
‡ <b>Relative Humidity</b> , (Saturation = 100), .....	=	86
<b>RAIN</b> fell on 19 Days; Amount in Inches, .....	=	5.10

WIND.		SUMMARY.									
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day
A.M.	1	3	4	1	6	4	5	6	0		
P.M.	2	2	2	2	4	3	7	6	2		
Mean.	2	2	3	2	5	3	6	6	1		

Observations made and  
Return verified by

(Signed,

2M







## SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Cottage, County of Bute, in Lat. 55° 49' 50", Long. 5° 4' 5", Distance from Sea 10 miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet. During the MONTH of July 1882.  
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevailing Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		9 h. A.M.		9 h. P.M.		Protected in Shade, & above Ground.		Exposed Black Balls.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H. Cap Anemometer. No. —		No. of hours in which it fell.		9 A.M.		P.M.		9 h. A.M.						Temperature of WELL at depth of feet, No.	Temperature at 1 fathom and Density,	0—10.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		Barometer. No. —	Attach- ed Ther- mometer	Barometer. No. —	Attach- ed Ther- mometer	Max. No. —	Min. No. —	Max. in Sun, & on Grass.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	Hours.	No. —	3 inches.	12 inches.	22 inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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## SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Cottage, County of Bute, in Lat. 55° 49' 50", Long. 5° 4' 5", Distance from Sea 10 miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet.

During the MONTH of August 1882.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.	
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.									
		Barometer.	Attached Thermometer.	Barometer.	Attached Thermometer.	Max.	Min.	Max.	Min.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer.	No. of hours in which it fell.	Amount in inches.	Velocity (0-10), and Direction.	Amount (0-10), and Species.	Velocity (0-10), and Direction.	Amount (0-10), and Species.	No. 1.	No. 2.					No. 3.
		* No.	inches.	°	inches.	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°					°
	1	29.990	61	29.990	61	59.8	55			57.6	57.6	57.5	57.5	WSW		WSW		570										Dull blowy & wet	1		
	2	29.804	60	29.970	59	59	50.5			56	54.5	52	51.5	W		NW		030										Cloudy & blowy Thunder 6 P.M.	2		
	3	30.110	58	30.214	59	60	47			57	52	53	51	NW		NW												1/2 clear blowy So. ha. 3 P.M.	3		
	4	30.250	60	30.250	60	62	48.3			57.5	55	57.2	56.5	NW		NW		020										1/2 "	4		
	5	30.230	61	30.216	61	65	52			60.3	57.5	55.5	55	NW		NW												1/2 "	5		
	6	30.124	59	30.124	60	61	52.5			58	57	55.5	54.3	W		NW												blowdy & mild	6		
	7	30.158	58	30.190	63	63.2	49.5			55.6	53.5	51	50.2	NW		NW												1/2 fine warm So. ha. 3 P.M.	7		
	8	30.164	58	30.200	63	65	44			55	54	54.5	54	SE		NW												clear do	8		
	9	30.230	64	30.256	64	70	49			63.5	60	58	56	SW		calm												do do	9		
	10	30.240	64	30.184	66	75	47			68.5	64	59	57	SE		calm												do do	10		
	11	30.114	64	29.990	65	74	50.3			69.5	65.2	57	55.2	SSE		S												do do	11		
	12	29.890	63	29.820	64	66.5	53			61.2	59.6	54.5	53	S		calm												1/2 do	12		
	13	29.720	62	29.600	64	69.5	50			59.5	57.3	62	61.5	NE		calm		68.6										Dull & warm Th. storm 6 P.M.	13		
	14	29.612	63	29.600	64	68	55			58.6	58.3	58	58	SW		S		290										1/2 cloudy breezy	14		
	15	29.446	62	29.530	61	65	52			55.5	55.2	56	55	SW		W		090										1/2 fine	15		
	16	29.614	61	29.724	62	72.3	53.5			62.5	60.5	56.3	56	W		NW												cloudy, change	16		
	17	29.744	61	29.730	62	65	52			60	57.5	56.5	56.3	SSW		SSE		310										do dull	17		
	18	29.872	60	29.900	62	65.3	50.5			58.6	56.2	57.6	56.5	SW		SSW		070										1/2 do	18		
	19	29.854	62	29.874	62	65.2	52.3			58.5	57.5	54.2	53	SW		W												1/2 cloudy	19		
	20	29.732	59	29.572	59	65	47.3			57.2	54.8	54.8	53	SSE		SW		362										Dull & wet	20		
	21	29.428	59	29.480	58	59	51.5			57	55	55	53.5	W		NW		192										1/2 fine	21		
	22	29.600	58	29.332	56	59	49			56.8	53.5	51	50	WNW		W		010										1/2 fine	22		
	23	29.140	56	29.250	57	61	46.5			53.5	50.3	49	48	NW		SW		085										1/2 do showers	23		
	24	29.290	58	29.400	57	62	46.3			58.5	55.2	48	47.2	E		WNW		136										1/2 fine	24		
	25	29.360	57	29.430	58	64.6	46.3			57	55.5	49.6	48	SW		NW		005										1/2 do fine Rain 3 P.M.	25		
	26	29.510	59	29.620	61	63	47			55.5	54.5	53.5	52.5	NW		NW												1/2 do	26		
	27	29.660	58	29.684	59	64	50			55	53.5	54	53	NW		NW		040										1/2 do	27		
	28	29.572	57	29.334	57	57.5	47			53.5	52.6	49	48.5	SSE		calm		733										Dull, heavy Rain	28		
	29	29.332	57	29.650	59	63.6	44			53.6	51.8	54	51.3	NW		NW												1/2 do	29		
	30	29.894	58	30.000	57	61	46			55.8	53	47.3	46.3	WNW		NW													1/2 fine	30	
	31	29.936	56	29.706	57	64.8	40			54.5	52.3	54.5	52.3	SSE		SSE		490										1/2 do change So. ha.	31		
Sums.		15127	15	15115	14	145	13.5			1811	1410	177	146					4124													
Means.		29.560	30.3	29.760	1.6	13.5	38.4			252.8	183.9	132.0	101.3																		
+ Total Corrections for Instrumental Errors.																															
+ Corrections for Diurnal Range.																															
"Corrected Means."																															
No. of Column.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction<sup>††</sup> for Temp. (Col. 2), = 29.709  
Corrected Mean of Barometer at 9 P.M., minus the Correction<sup>††</sup> for Temp. (Col. 4), = 29.713  
Mean at Station, corrected, and at 32°, = 29.711  
Correction for height, 116 feet above Mean Sea-level, = .127  
Mean, reduced to 32°, and Sea-level, = 29.838  
Highest Reading, corrected for Index error, on the th, = 30.256  
Lowest Do. Do., on the th, = 29.140  
Difference, or Monthly Range, = 1.116

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th, = 75.0  
Lowest in Month, corrected for Index errors, on the th, = 40.0  
Difference, or Monthly Range, = 35.0  
"Corrected Mean" of all the Highest, (Col. 5), = 64.4  
"Corrected Mean" of all the Lowest, (Col. 6), = 49.2  
Difference, or Mean Daily Range, = 15.2  
\*\* Calculated Mean Temperature of Month, = 56.8  
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =  
"Corrected Mean," (Col. 7), of Black Bulb Max. in Sun, =  
Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =  
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =  
Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 56.2  
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 54.6  
†† Computed Temperature of Dew-Point, 53.1 = 53.1  
†† Do. Elastic Force of Vapour, = 4.05  
†† Do. Weight of Vapour in a Cubic Foot of Air, =  
†† Relative Humidity, (Saturation = 100), = 89  
RAIN fell on 17 Days; Amount in Inches, = 4.12

WIND.		SUMMARY.							
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.
A.M.	2	1	1	3	5	6	5	8	0
P.M.	0	0	1	0	4	2	5	4	5
Mean.	1	1	1	1	4	4	5	11	3

Observations made and  
Return verified by

James Kay

(Signed)

James Kay

H.P.  
J.H.







# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Cottage County of Perth, in Lat. 56° 49' 50", Long. 5° 4' 5", Distance from Sea 10 miles.  
 Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet. During the MONTH of September 1882.  
 The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS.  As in occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H.Cup Anemometer. No. _____ 9 h. A.M.	No. of hours in which it fell.	Amount in inches. No. _____	9 A.M.		P.M.		9 h. A.M.						Temperature of WELL at depth of feet. No. _____	Temperature at 1 fathom and Density.	0-10.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		Barometer. * No. _____	Attach- ed Ther- mometer No. _____	Barometer. No. _____	Attach- ed Ther- mometer No. _____	Max. No. _____	Min. No. _____	Max. in Sun's rays No. _____	Min. on Grass. No. _____	Dry bulb. No. _____	Wet bulb. No. _____	Dry bulb. No. _____	Wet bulb. No. _____	Direction. No. _____	Force No. _____	Direction. No. _____	Force No. _____				Velocity (0-6), and Direction. No. _____	Amount (0-10), and Species. No. _____	Velocity (0-6), and Direction. No. _____	Amount (0-10), and Species. No. _____	No. _____ 3 inches.	No. _____ 12 inches.								No. _____ 22 inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
																																			SUNSHINE. Hours.	No. _____ 3 inches.	No. _____ 12 inches.	No. _____ 22 inches.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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## NOTATION USED IN GENERAL REMARKS.

a.	denotes aurora.	m.	denotes meteor.
ci.	" cirrus.	ms.	" meteors.
ci-cu.	" cirro-cumulus.	u.	" nimbus.
ci-s.	" cirro-stratus.	r.	" rain.
cu.	" cumulus.	h. r.	" heavy rain.
cu-s.	" cumulo-stratus.	c. h. r.	" continued heavy rain.
d.	" dew.	s.	" stratus.
f.	" frost.	sc.	" squall.
fr.	" hoar-frost.	s.	" sleet.
h.	" haze.	so. h.	" solar halo.
h. d.	" heavy dew.	sq.	" squall.
li.	" lightning.	sqa.	" squall.
li. cl.	" light clouds.	t.	" thunder.
li. sh.	" light showers.	t. s.	" thunder storm.
lu. co.	" lunar corona.	w.	" wind.
lu. ha.	" lunar halo.	g.	" gale of wind.

## TABLE FOR ESTIMATING FORCE OF WIND.

Estimated Force, 0-6.	Common Designation.	Estimated Force, 0-6.	Common Designation.	Estimated Force, 0-6.	Common Designation.
0	Calm	1.5	Light breeze	4	Blowing hard
0.5	Very light air	2	Fresh breeze	5	Blowing a gale
1	Light air	3	Very fresh	6	Violent gale

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction†† = 29.702  
 for Temp. (Col. 2), = 29.716 - .014 }  
 Corrected Mean" of Barometer at 9 P.M., minus the Correction†† = 29.713  
 for Temp. (Col. 4), = 29.728 - .015 }  
 Mean at Station, corrected, and at 32° = 29.708  
 Correction for height, 116 feet above Mean Sea-level, = .127  
 Mean, reduced to 32°, and Sea-level, = 29.835  
 Highest Reading, corrected for Index error, on the th, = 30.396  
 Lowest Do. Do., on the th, = 29.028  
 Difference, or Monthly Range, = 1.368

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th, = 65.6  
 Lowest in Month, corrected for Index errors, on the th, = 35.3  
 Difference, or Monthly Range, = 30.3  
 "Corrected Mean" of all the Highest, (Col. 5), = 60.1  
 "Corrected Mean" of all the Lowest, (Col. 6), = 44.6  
 Difference, or Mean Daily Range, = 15.5  
 \* Calculated Mean Temperature of Month, = 52.4  
 S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, =  
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, =  
 Lowest at Night, Black Bulb, (corrected for Index errors), on the th, =  
 "Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, =  
 Difference of above Means or Range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 52.0  
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 50.6  
 ‡ Computed Temperature of Dew-Point, = 49.2  
 ‡ Do. Elastic Force of Vapour, = .351  
 ‡ Do. Weight of Vapour in a Cubic Foot of Air, =  
 ‡ Relative Humidity, (Saturation = 100), = 90  
 RAIN fell on 20 Days; Amount in Inches, = 5.52

WIND.	SUMMARY.									
	Direction.	N	NE	E	SE	S	SW	W	NW	Mean Force.
A.M.		2	3	5	5	4	2	3	5	1
P.M.		2	0	2	0	5	3	2	6	10
Mean.		2	2	3	3	4	2	3	6	5

Observations made and  
 Return verified by

*James Mackay*

(Signed)

*James Mackay*

7A







# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Cottage, County of Bute, in Lat. 55°49'00" Long. 5°4'5", Distance from Sea 10 miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet. During the MONTH of October 1882.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. _____				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.						
		9 h. A.M.		9 h. P.M.		Protected in Shade 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.														
		Barometer.	Attach- ed Ther- mometer	Barometer.	Attach- ed Ther- mometer	Max.	Min.	Max. in Sun's rays.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No. _____	No. of hours in which it fell.	Amount in inches.	Velocity (0-6), and Direction.	Amount (0-10), and Species.	Velocity (0-6), and Direction.	Amount (0-10), and Species.	No.	12 inches.					No.	22 inches.				
		* No. _____	_____	No. _____	_____	No.	No.	No.	No.	_____	_____	_____	_____	_____	_____	_____	_____	9 h. A.M.	No.	No.	No.	No.	No.	No.	No.	_____					_____	_____	_____	_____	_____	_____
		inches.	°	inches.	°	°	°	°	°	°	°	°																								
	1	29.370	56	29.380	55	62	52			53.5	53.5	53.6	49	S	S																			1		
	2	29.618	56	29.540	57	61	42			57	53.5	51.5	50	SW	SW			1.000																2		
	3	29.844	56	30.184	57	52	42			54	51.5	53.5	53	W	SW			070																3		
	4	30.424	57	30.580	57	56	51			54.5	53.5	54	53	NW	NW																			4		
	5	30.600	56	30.550	56	58.6	47			55	53.5	53.5	52.6	E	E																			5		
	6	30.1470	55	30.380	55	59.5	47.5			53	51	51.5	50.3	ENE	E																			6		
	7	30.234	54	30.120	55	54.5	48.5			52.6	51	52	50.5	E	E			485																7		
	8	30.094	55	30.090	56	57.6	49			53.4	52.6	52.5	52	ENE	calm			276																8		
	9	30.050	56	30.050	55	58	44			52	51.8	45.3	45.3	NE	calm																			9		
	10	30.020	55	29.760	56	55	44			49.2	48.8	51.5	50	SE	SE			213																10		
	11	29.500	57	29.368	56	56	47.3			52.6	53	49	48.5	SE	SW			373																11		
	12	29.540	55	29.720	58	59.3	42			51	50.6	57	56	NE	NE			075																12		
	13	29.850	59	29.970	58	59	52.5			56	55	54	53.5	NE	E																			13		
	14	29.950	57	29.882	57	56	50.3			55.5	54.8	52	51.3	SE	E			270																14		
	15	29.776	53	29.730	53	53	46			47	46.8	47	47	SE	SE			555																15		
	16	29.730	52	29.800	51	52	45.3			47.8	47	47	46	SE	SE			040																16		
	17	29.916	50	30.028	51	55	42.5			46.3	45	46	44	NE	SE																			17		
	18	30.040	49	29.860	52	53.6	41			48	45.6	49	46.6	SE	SE			223																18		
	19	29.612	52	29.530	54	52	46			49.2	49	48	47.5	SE	W			580																19		
	20	29.530	55	29.510	54	55	43			52	51	48.5	46	S	S			120																20		
	21	29.380	51	29.176	52	51.6	40.3			49.3	48.3	41.5	41.3	SE	W			270																21		
	22	29.044	50	29.100	50	50.5	39			47	46.5	43	42	SW	S			033																22		
	23	29.100	50	29.190	52	54.5	40.5			46.5	44.8	46.3	45.5	SW	W			225																23		
	24	29.230	50	29.268	48	55.5	37			43	42.8	38	38	E	calm			020																24		
	25	29.366	47	29.430	48	54.5	35			45.3	45	38.5	38	calm	calm																			25		
	26	29.480	44	29.430	46	47.5	31.5			39.5	39.5	42	41.5	E	E																			26		
	27	29.540	46	29.750	47	52	38.5			42.6	42	44	43	NE	E																				27	
	28	29.892	46	29.930	46	53.5	36			46.3	44.8	38	38	E	E																				28	
	29	29.870	44	29.720	48	53.3	29			38	37.8	39	39	NW	calm			153																	29	
	30	29.460	45	29.520	46	48	38			41.6	41.6	44	43.8	NE	NW			410																	30	
	31	29.734	47	29.680	48	52.5	39			46.8	45.8	46	45	SW	SE			106																	31	
	Sums.	15.145	14	15.153	16	14.7	14.4			178	14.13	155	13.6					8.4																		
	Means.	23.304	65	23.226	84	48.5	86.7			22.5	26.2	22.6	197.2					5.457																		
	+ Total Corrections for Instrumental Errors.																																			
	+ Corrections for Diurnal Range.																																			
	"Corrected Means."																																			
	No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					

BAROMETER, “corrected Mean” at 9 A.M., minus the Correction†† = 29.689  
for Temp. (Col. 2), = 29.752..... = 0.063..  
Corrected Mean” of Barometer at 9 P.M., minus the Correction†† = 29.684  
for Temp. (Col. 4), = 29.749..... = 0.065..  
Mean at Station, corrected, and at 32°..... = 29.686  
Correction for height, 116 feet above Mean Sea-level,..... = 0.127  
Mean, reduced to 32°, and Sea-level,..... = 29.813  
Highest Reading, corrected for Index error, on the th..... = 30.600  
Lowest Do. Do. on the th..... = 29.044  
Difference, or Monthly Range,..... = 1.556

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the th..... = 62.0  
Lowest in Month, corrected for Index errors, on the th..... = 29.0  
Difference, or Monthly Range,..... = 33.0  
“Corrected Mean” of all the Highest, (Col. 5),..... = 54.8  
“Corrected Mean” of all the Lowest, (Col. 6),..... = 42.8  
Difference, or Mean Daily Range,..... = 12.0  
\*\* Calculated Mean Temperature of Month,..... = 48.8  
S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th..... =  
“Corrected Mean,” (Col. 7), of Black Bulb, Max. in Sun,..... =  
Lowest at Night, Black Bulb, (corrected for Index errors), on the th..... =  
“Corrected Mean,” (Col. 8), of Black Bulb, Min. on grass,..... =  
Difference of above Means or Range (“exposed”),..... =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11),..... = 48.4  
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12),..... = 47.4  
† Computed Temperature of Dew-Point,..... = 46.3  
† Do. Elastic Force of Vapour,..... = 315  
† Do. Weight of Vapour in a Cubic Foot of Air, ... =  
† Relative Humidity, (Saturation = 100),..... = 93  
RAIN fell on 20 Days; Amount in Inches,..... = 5.46

WIND.		SUMMARY.							
Direction.		N	NE	E	SE	S	SW	W	NW
A.M.		0	5	8	7	2	4	1	2
P.M.		0	1	9	5	3	3	2	5
Mean.		0	3	8	6	3	3	2	4

\* Each instrument tested at the Office in Edinburgh bears the stamp “S.M.S.” and a number to be entered in the Heading; or the Number and Initials of the Maker may be here given.  
† Embracing corrections for both capillarity and Index Errors.  
‡ The Diurnal Range for Scotland is as yet unknown.  
§ Practically, though not absolutely a minus correction.  
|| These “Hygrometric Deductions” are calculated from Glaisher’s Hygrometric Tables, Second Edition only.  
¶ While the Diurnal Range is unknown, the Arithmetical Mean of Cols. 5 and 6 will be entered as the “Calculated Mean Temperature.”  
Any Observations not taken under the conditions specified in the Directions on the other side, or noted at the Top of each column, must be marked as such by the observer, in each Schedule. See over.

Observations made and Return verified by

(Signed)

H. R.  
H. R.







# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Cottage, County of Wick, in Lat. 55° 49' 50", Long. 5. 4. 5, Distance from Sea  $\frac{8}{10}$  miles.

Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet.

During the MONTH of November 1882

The Hours of Observation are of Greenwich Time.

[illegible]

**BAROMETER**, "corrected Mean" at 9 A.M., *minus* the Correction<sup>††</sup> } = 29.444  
for Temp. (Col. 2), = 29.485... - .041... }

Corrected Mean" of Barometer at 9 P.M., minus the Correction ++  
for Temp. (Col. 4), = 29.489 - .043 } 29.446

Mean at Station, corrected, and at 32°,..... = 29.445

Correction for height, 116 feet above Mean Sea-level,..... = .127

Mean, reduced to 32°, and Sea-level,..... = 29.572

Highest Reading, corrected for Index error, on the \_\_\_\_\_th,..... 39.200

Lowest Do. Do., on the th,..... = 28.760

Difference, or **Monthly Range**,..... = 1.440

\* Each instrument tested at the Office in Edinburgh bears the stamp "S.M.S.;" and a number to be entered in the Heading; or the Number and Initials of the Maker may be here given.

These "Hygrometrical Deductions" are calculated from Glaisher's Hygrometrical Tables, Second Edition only.  
While this Journal Range is unknown, the Arithmetical Mean of Cols. 5 and 6 will be entered as the "Calculated Mean Temperature."

Any Observations not taken under the conditions specified in the Directions on the other side, or noted at the Top of each column, must be marked as such by the observer, in each Schedule. See over.

**S.-R. THERMOMETER**, (in shade, etc.), **Highest in Month**, (corrected for Index Errors), on the      th,..... = 55.0

**Lowest in Month**, corrected for Index errors, on the      th, ..... = 29.0

Difference, or **Monthly Range**, ..... 26.0

"Corrected Mean" of all the Highest, (Col. 5), ..... 46.5

"Corrected Mean" of all the Lowest, (Col. 6), ..... = 35.1

Difference, or **Mean Daily Range**, ..... 11.4

\*\* Calculated **Mean Temperature of Month** ..... 12.8

B. THERMOMETER. Black Bulb in Sun Highest (corrected for

Index Errors), on the \_\_\_\_\_th, \_\_\_\_\_

"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun,.....

**Lowest at Night**, Black Bulb, (corrected for Index errors), on the      th, ... = \_\_\_\_\_

"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, .....

Difference of above Means or Range ("exposed"), ..... =

**HYGROMETER, Mean** (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), ..... = 40.5

Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12) 30.2

# Computed Temperature of Dew-Point ..... - 33.6

Do. <b>Elastic Force of Vapour,</b> .....	=	0.2
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## Do. Weight of Vapour in a Cubic Foot of Air, ... =

## Relative Humidity, (Saturation = 100), ..... = 90

MIN fell on 24 Days; Amount in Inches, ..... = 8.49

WIND.	SUMMARY.

Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day.
A.M.	1	4	2	5	3	3	6	4	3		
P.M.	1	1	5	2	0	5	7	6	3		
Mean.	1	3	3	4	1	4	6	5	3		

Observations made and  
Return verified by

(Signed)

H. A. D.







# SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Barone Cottage, County of Bute, in Lat. 55° 49' 50", Long. 5° 4' 5", Distance from Sea 10 miles.  
Height of Cistern of the Barometer above Mean Sea-level 116 feet, above Ground 3 feet. During the MONTH of December

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.								SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER. No. —				WIND.				RAIN.		CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS.  As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.  Mention the hour at which Storms, including Thunder and Lightning, began and ended.	Days of Month.		
		9 h. A.M.		9 h. P.M.		Protected in Shade, 1 foot above Ground.		Exposed to Sun & Wind, on Grass.		9 h. A.M.		9 h. P.M.		9 h. A.M.		9 h. P.M.		Readings of the H. Cup Anemometer. No. —		No. of hours in which it fell.		9 A.M.		P.M.		9 h. A.M.		Temperature of Well at depth of feet. No.		Temperature at 1 fathom, and Density.						0—10.	
		Barometer. * No. —	Attach- ed Ther- mometer	Barometer. No. —	Attach- ed Ther- mometer	Max. No.	Min. No.	Max. No.	Min. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Direction.	Force	Direction.	Force	No. 9 h. A.M.	No. 9 h. P.M.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	Velocity (0—6), and Direction.	Amount (0—10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.	No. 3 inches.	No. 12 inches.	No. 22 inches.								
		inches.	°	inches.	°	°	°	°	°	°	°	°	°	°																							
	1	29.820	40	29.884	40	38.5	33.5			37	35	37.5	35	E		E																Dull	1				
	2	29.720	40	29.250	42	44.6	35.5			40.3	39	43	41.3	S		S																do	2				
	3	29.158	45	28.942	45	46.2	37			44	43.2	38.8	38	SW		calm																do	3				
	4	28.910	43	29.100	40	41.3	34			36	35.5	35	33.6	calm		E																do	4				
	5	29.414	38	29.524	35	36.5	29			35	32	31	30	NE		NE																	do	5			
	6	29.520	35	29.480	33	34.3	26			28.2	28	29.2	29	NNE		E																do	6				
	7	29.432	32	29.550	35	39	26.6			32	32	34.5	34	NE		calm																	do	7			
	8	29.634	34	29.634	34	40	24.5			27	27	29.8	29.8	NW		calm																	do	8			
	9	29.630	32	29.650	35	41.6	23			24.5	24	27	27	NE		calm																	do	9			
	10	29.636	34	29.640	33	41	25.5			30	30.4	31	31	NE		calm																	do	10			
	11	29.590	37	29.572	35	35.6	27			31	33.6	31	30.5	SW		calm																	do	11			
	12	29.564	34	29.572	34	32.3	26.5			30.3	30	30	29	NE		NE																	Dull	12			
	13	29.550	32	29.586	31	31	20			25.5	25.5	25	24	NE		calm																	do	13			
	14	29.710	34	29.750	34	34	23			30.2	29.8	29	29	calm		SE																	do	14			
	15	29.750	35	29.720	35	37	21			27	26	36.5	36.5	NE		SE																	do	15			
	16	29.700	38	29.644	40	44	35.5			40.2	39.5	40.3	40.3	E		SE																	do	16			
	17	29.590	41	29.600	42	44.5	38.5			41	41.3	42	41.8	SE		SE																	do	17			
	18	29.500	44	29.700	44	45.2	39			44.5	43.3	43	42.2	SE		ENE																	do	18			
	19	29.920	45	30.032	45	44.5	40.2			42.5	42	44	43	E		calm																	do	19			
	20	29.990	46	29.670	46	47	42			46.5	45.5	46.8	45.5	S		SSW																	do	20			
	21	29.450	45	29.562	45	47.5	38			41	40	41.5	39.5	SW		WNN																	do	21			
	22	29.494	44	29.232	45	45	35			41.6	40.5	36	35.5	SW		NW																	do	22			
	23	29.420	40	29.594	41	41.6	32.3			38	36	36	34.8	NW		NW																	do	23			
	24	29.594	40	29.564	47	42.5	38			39.8	39	41.8	41	W		NNW																	do	24			
	25	29.432	41	29.340	42	42.5	31.5			35.3	34.5	45.2	42	NW		calm																	do	25			
	26	29.356	40	29.430	39	36.6	30.5			33.8	32	34.5	33	calm		E																	do	26			
	27	29.176	38	29.136	48	50.5	31.6			35.5	34.8	48.2	47.2	NE		W																	do	27			
	28	29.326	48	29.180	48	51	43.5			47	46.2	51	50.3	WNN		SW																	do	28			
	29	29.070	49	29.330	47	53	37			48.5	46.3	38.3	36.3	SSW		NW																	do	29			
	30	29.600	41	29.690	40	39.5	28.5			31.6	30.6	38.6	36.5	NE		SE																	do	30			
	31	29.600	42	29.590	44	45.5	34.5			42.5	42.2	43	43	S		SE																	do	31			
	Sums.	1713.5	11	1615.4	12	139	147			128	146.8	147	137																					NOTATION USED IN GENERAL REMARKS.			
	Means.	16.250	29.7	16.148	0.4	52.3	57.7			197.3	170.0	225.5	199.6																								
	+ Total Corrections for Instru- mental Errors.																																				
	+ Corre- ctions for Diurnal Range.																																				
	"Cor- rected Means."																																				
	No. of Column.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						

<b>BAROMETER</b> , "corrected Mean" at 9 A.M., <i>minus</i> the Correction $\uparrow$ +	$\} = 29.495$
for Temp. (Col. 2), = <del>29.524</del> ..... - .229.....	
Corrected Mean" of Barometer at 9 P.M., <i>minus</i> the Correction $\uparrow$ +	$\} = 29.491$
for Temp. (Col. 4), = <del>29.521</del> ..... - .030.....	
<b>Mean at Station, corrected, and at 32°,</b> .....	$= 29.493$
Correction for height, 116 feet above Mean Sea-level,.....	$= .127$
<b>Mean, reduced to 32°, and Sea-level,</b> .....	$= 29.620$
Highest Reading, corrected for Index error, on the	th,..... $= 30.032$
Lowest Do.	Do., on the
	th,..... $= 28.910$
Difference, or <b>Monthly Range,</b> .....	$= 1.122$

**S.-R. THERMOMETER**, (in shade, etc.), **Highest in Month**, (corrected for Index Errors), on the      th, ..... = 53.0

**Lowest in Month**, corrected for Index errors, on the      th, ..... = 20.0

Difference, or **Monthly Range**, ..... = 33.0

" Corrected **Mean** " of **all the Highest**, (Col. 5), ..... = 41.7

" Corrected **Mean** " of **all the Lowest**, (Col. 6), ..... = 31.9

Difference, or **Mean Daily Range**, ..... = 9.8

**\*\* Calculated Mean Temperature** of Month, ..... = 36.8

<b>S.-R. THERMOMETER, Black Bulb in Sun, Highest,</b>	(corrected for	
Index Errors), on the	th,.....	=
<b>"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun,</b>	.....	=
<b>Lowest at Night,</b> Black Bulb, (corrected for Index errors), on the	th, ...	=
<b>"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass,</b>	.....	=
Difference of above Means or Range ("exposed"),	.....	=

**HYGROMETER, Mean** (corrected) A.M. and P.M. Reading of Dry  
Bulb, (Cols. 9 and 11), ..... = 36.8

Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols.

10 and 12), ..... = 36.0

‡ Computed **Temperature of Dew-Point**, ..... = 34.9

## Do. Elastic Force of Vapour, ..... = 20

‡ Do. **Weight of Vapour in a Cubic Foot of Air.** ... =

## Relative Humidity. (Saturation = 100) - 93

RAIN fell on 19 Days; Amount in Inches, ..... = 5.59

WIND.		SUMMARY.									
Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day.
A.M.	1	8	3	1	5	3	2	3	5		
P.M.	0	2	5	6	2	1	3	3	9		
Mean.	1	5	4	3	3	2	3	3	7		

Observations made and  
Return verified by

(Signed)



