

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Gaddo House, County of Abertree, in Lat. 57° 24', Long. 2° 14', Distance from Sea 12 miles.
Height of Cistern of the Barometer above Mean Sea-Level 150 feet, above Ground 0 feet.

During the MONTH of January 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.		WIND.				CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.		GENERAL REMARKS.		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.		No. of Days in which it fell.	Amount in inches.	9 h. A.M.		9 h. P.M.		Readings of the U. S. Cup Anemometer.		9 A.M.		P.M.		No. 8 inches.		No. 12 inches.	No. 22 inches.	Temperature of Wind at each of these heights.	Temperature and Direction.		0-10.	As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Barometer. No.	Attached Thermometer.	Barometer. No.	Attached Thermometer.	Max. No.	Min. No.	Max. in Sun's rays No.	Min. on Grass. No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.			9 h. A.M.	9 h. P.M.	Direction.	Force.	Direction.	Force.	9 h. A.M.	9 h. P.M.	Velocity (0-10). and Species.	Amount (0-10). and Species.										Velocity (0-10). and Species.	Amount (0-10). and Species.	SUNSHINE. Hours.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Haddo House, County of Aberdeen, in Lat. 57° 24', Long. 2° 14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of February 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				CLOUDS.				THERMOMETERS under Ground.			SUNSHINE. Hours.	SEA. Temperature of Wells at depth of Feet, No.	OZONE. 0-10.	GENERAL REMARKS. As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc. <i>Mention the hour at which Storms, including Thunder and Lightning, began and ended.</i>	Days of Month.		
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		Dry No.		Wet No.			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.	Velocity (0-10), and Species.	Amount (0-10), and Species.	Velocity (0-10), and Species.	Amount (0-10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.							
		* No.	inches.	°	inches.	°	No.	No.	No.	No.	No.	No.	No.		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.						No.	No.
	1	30.116	32	30.038	32.5	35.5	28	38		32.5	32	32	31	+	E	E							32	34	35							1
	2	29.912	33	29.976	35	36.5	31	40		33	32	35	34	+	E	S.E.							32	34	35							2
	3	30.018	34	30.106	34	35	32	35		34	33.5	32	31	+	E	S.E.							32	34	35							3
	4	30.060	36	30.132	33	38	28	46		34	35	33	32	+	N.E.	N.							32	34	35							4
	5	29.988	34	29.760	30	38	27	47		33	31.5			+	N.E.	N.W.							32	34	35							5
	6	29.518	27	29.580	25	28	18.5	27						+	S.E.	S.E.							32	34	35							6
	7	29.628	25	29.668	18	30	15	55						+	N.E.	S.							32	34	35							7
	8	29.670	2	29.752	8	17.5	15	48							N.	N.							31	33	35							8
	9	29.742	2	29.718	2	21	14	40							N.	N.							30	33	35							9
	10	29.588	2	29.552	11	23	16	29							N.	N.E.							29	33	35							10
	11	29.476	16.5	29.528	24	33	8	48						+	S.W.	N.							27	33	35							11
	12	29.586	27.5	29.716	22	33	17	45						+	N.	N.							27	33	35							12
	13	29.722	45	29.888	22	33	0	44.5		29	28.5				N.	S.W.							31	33	35							13
	14	30.028	29	30.178	30	33	17	40						+	S.E.	S.E.							30	33	34							14
	15	30.288	32	30.368	23.5	36	19	46.5		30	29.5	29	28.5		S.E.	N.W.							30	33	34							15
	16	30.388	11	30.410	18	35	18	52		32	31.5				N.	N.							27	32	34							16
	17	30.318	22	30.282	18.5	38	11	54							N.E.	N.							27	32	34							17
	18	30.102	13	30.032	14	28	4	55							N.	N.W.							25	32	34							18
	19	30.022	11.5	30.106	20.5	38	1	71							N.	N.W.							24	32	34							19
	20	30.048	32	30.056	35.5	40	18	52		33	32	38	37	+	N.W.	N.							27	32	34							20
	21	30.064	35.5	30.072	35	40	33	53.5		38	35	36	35		N.W.	N.W.							32	32	34							21
	22	30.060	36	30.070	35	39.5	33	44		37	36	36.5	35.5	+	N.W.	N.W.							33	32	34							22
	23	29.896	37	29.778	35	38	33	40		38	36.5	34	33	+	N.W.	N.W.							33	32	34							23
	24	29.588	34	29.730	34	42	32	62		33.5	33	33	32	+	N.E.	N.E.							33	32	34							24
	25	29.788	34	29.760	33	39	28.5	48		37.5	32.5	31.5	28.5		N.	N.W.							32	32	34							25
	26	29.342	38	29.440	33	41	29	57.5		39	38	32.5	31.5	+	N.W.	N.W.							32	32	34							26
	27	29.508	34	29.568	33	37	31	46		34	33	31	28.5	+	N.W.	N.W.							32	32	34							27
	28	29.468	37	29.200	38	43	24	54		38	36	38.5	37	+	S.W.	N.							32	32	34							28
	29																															29
	30																															30
	31																															31
Sums.		11445	122	12131	112	11535	2	12		5875	5655	472	4345										823	917	964							
Means.		29.934	29.952	29.943	29.943	29.943	29.943	29.943		34.8	33.1	33.7	32										301	328	344							
+ Total Corrections for Instrumental Errors.		1070	1070	1070	1070	1070	1070	1070																								
+ 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	

NOTATION USED IN GENERAL REMARKS.					
a.	denotes aurora.	m.	enotes 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.	stratus.		
f.	fog.	sc.	scud.		
fr.	frost.	s.	sleet.		
h-fr.	hoar-frost.	e.	snow.		
h.	haze.	so. ha.	solar halo.		
h. d.	heavy dew.	sq.	squall.		
hl.	hail.	sqh.	squalls.		
l.	lightning.	t.	thunder.		
li. ci.	light clouds.	t. s.	thunder-storm.		
li. 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

NOTATION USED IN GENERAL REMARKS.

a.	denotes aurora.	m.	enotes meteor.
ci.	cirrus.	ms.	meteors.
ci. cu.	cirro-cumulus.	n.	nimbus.
cu.	cumulus.	r.	rain.
cu. s.	cumulo-stratus.	h. r.	heavy rain.
d.	dew.	c. h. r.	continued heavy rain.
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h. l.	haze.	s. ha.	solar halo.
h. d.	heavy dew.	sq.	squall.
hl.	hail.	sqs.	squalls.
l.	light.	t.	thunder.
li. cl.	light clouds.	t. s.	thunder-storm.
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BAROMETER, "corrected Mean" at 9 A.M., minus the Correction for Temp. (Col. 2), = 29.934
 "Corrected Mean" of Barometer at 9 P.M., minus the Correction for Temp. (Col. 4), = 29.952
 Mean at Station, corrected, and at 32, = 29.943
 Correction for height, feet above Mean Sea-level, = 2.07
 Mean, reduced to 32°, and Sea-level, = 30.150
 Highest Reading, corrected for Index error, on the 16th, = 30.410
 Lowest Do. Do., on the 28th, = 29.200
 Difference, or Monthly Range, = 1.210

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 28th, = 43.0
 Lowest in Month, corrected for Index errors, on the 16th, = 16.0
 Difference, or Monthly Range, = 49.0
 "Corrected Mean" of all the Highest, (Col. 5), = 34.6
 "Corrected Mean" of all the Lowest, (Col. 6), = 18.8
 Difference, or Mean Daily Range, = 15.8
 ** Calculated Mean Temperature of Month, = 26.2
 S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 11th, = 58.5
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = 58.5
 Lowest at Night, Black Bulb (corrected for Index errors), on the 11th, = 58.5
 "Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, = 58.5
 Difference of above means or range ("exposed"), = 58.5

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 58.5
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 58.5
 Computed Temperature of Dew-Point, = 58.5
 Do. Elastic Force of Vapour, = 58.5
 Do. Weight of Vapour in a Cubic Foot of Air, = 58.5
 Relative Humidity (Saturation = 100), = 58.5
 RAIN fell on 17 Days; Amount in Inches, = 5.25

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	5	3	3			1	9	6		
P.M.	1	2	1	4	1	1	8	10			
Mean.	1	3	2	4	1	1	8	8			

Observations made and Return verified by John Forrest

(Signed)

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Halls House, County of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of March 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				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. <i>Mention the hour at which Storms, including Thunder and Lightning, began and ended.</i>	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. in Sunrays.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		No. of Days in which it fell.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No.	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.		No.		No.	No.	No.	No.						No.																		
		inches.	°	inches.	°	°	°	°	°	°	°	°	°		°																		
	1	29.202	37	29.366	31.5	41	30	51		37.5	35.5	31	30.5	+	NW	N	8356				32	32	34			7	6	1					
	2	29.472	30	29.336	26	34	22	49		28	27.5	24.4	24	+	NW	N	9136				32	32	34			6	6	2					
	3	29.310	28	29.380	32	36	21	52		23.4	23	20	29	+	NW	N	9784				32	32	34			6	6	3					
	4	29.636	34	29.682	33.5	40	30	65		35	34	32.5	32	+	NW	NW	0443				32	32	34			6	6	4					
	5	29.542	37	29.448	36	43	32	66		37	34.5	35	34.5		W	W	0768				32	32	34			6	6	5					
	6	29.326	35.5	29.306	37.5	47.5	32.5	71		36	35	38	37	+	S.W	S	0959				32	32	34			6	6	6					
	7	29.404	38	29.416	39	49.5	32.5	84		38	37	38.5	38		W	S.E	1297				32	32	34			6	6	7					
	8	29.376	38.5	29.360	37	48	33	45		36	35	37	36		S.E	S.E	1565				32	32	34			6	6	8					
	9	29.326	37	29.334	38	42	36	49		37	36.5	37.5	36.5	+	S	S.E	2708				32	32	34			6	6	9					
	10	29.266	37.5	29.256	36	38.5	35	40		37	35.5	36	35.5	+	E	E	3008				32	32	34			6	6	10					
	11	29.258	35.5	29.364	32	39	35	39		35	34	30	29	+	N.E	N.E	3548				32	32	34			7	6	11					
	12	29.462	36.5	29.636	32	44	23	59		34.5	32	30	29		NW	E	3586				32	32	34			6	6	12					
	13	29.692	33.5	29.764	33.5	46	28	60		33.5	32.5	29	28.5		S.W	W	3641				32	32	34			6	7	13					
	14	29.762	38	29.778	42	48.5	27	65		38.5	37.5	42	41	+	S.W	S.W	3942				32	32	34			6	6	14					
	15	29.834	40	29.860	44	52	35	59		42	40.5	45	43.5		S.W	S.W	4342				33	32	34			7	6	15					
	16	29.872	46	29.916	43.5	54.5	41	78		50.5	47	43.5	41		W	W	4551				34	33	34			8	6	16					
	17	29.870	48	29.924	38.5	54	33.5	72		50.5	46	34	33.5	+	W	NW	5327				35	33	34			8	7	17					
	18	29.816	41	29.574	40.5	52.5	28	78		45	40	40	38	+	W	NW	5875				33	33	34			8	10	18					
	19	29.496	44	29.309	43	48	37	48		43.5	40.5	43	40	+	W	NW	6809				35	33	34			6	8	19					
	20	29.548	40	29.640	40.5	44	35	53		41	38	37.5	36	+	N.E	S.E	7391				35	33	34			8	9	20					
	21	29.402	42	29.350	45	58	37	73		44	43	43	41	+	S	NW	7906				36	35	34			7	6	21					
	22	29.384	47	29.376	48	55	39	72		48.5	43	48	46.5	+	S.W	S.E	0028				40	36	35			6	6	22					
	23	29.352	49	28.924	47	51	47	59		48	46.5	48	46.5	+	S.W	S.E	0500				42	38	36			6	5	23					
	24	28.552	51	28.622	41	53	37	85		51	45	37	35	+	W	W	1560				43	39	37			6	7	24					
	25	28.642	47	28.668	40	52	32	70		43.5	38	35	33.5	+	S	NW	3027				39	39	38			6	7	25					
	26	28.770	39	28.986	38	49	26.5	66		37.5	36.5	36	34	+	NW	W	3472				37	39	38			8	6	26					
	27	28.954	41	28.872	39.5	47	24	68		44.5	39	39	38.5	+	S.W	S.E	4384				37	39	38			7	6	27					
	28	28.662	37	28.616	38	40	32	39		36.5	36	37.5	37	+	N.E	N.E	5558				39	39	38			7	6	28					
	29	28.790	39.5	29.008	39.5	42	26	44		39.5	39	38	37	+	N.E	N.E	6189				39	39	39			6	6	29					
	30	29.222	41.5	29.270	39.5	46	36	60		43	40	38	37	+	N.E	N.E	6645				40	39	39			6	7	30					
	31	29.234	41	29.380	40.5	44	34	55		41.5	40	39	38.5	+	N	S.E	6797				41	40	39			6	8	31					
Sums.		16150	164	16143	156	143	132	15		157	145	163	166								10	12	15			16	201						
Means.		29.436	30	29.076	30	30	30	30		30	23	22	18								15	13	15			65	65						
+ Total Corrections for Instrumental Errors.		x 070		x 070																													
+ 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		

NOTATION USED IN GENERAL REMARKS.					
a.	denotes aurora.	m.	enotes 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.	" stratus.		
f.	" fog.	sc.	" scud.		
fr.	" frost.	s.	" sleet.		
h.-fr.	" hoar-frost.	s.	" snow.		
h.	" haze.	so. ha.	" solar halo.		
h. d.	" heavy dew.	sq.	" squall.		
hi.	" hail.	sqs.	" squalls.		
l.	" lightning.	t.	" thunder.		
li. cl.	" light clouds.	t. s.	" thunder-storm.		
li. 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 $\frac{1}{1000}$ for Temp. (Col. 2), = 29.377
 "Corrected Mean" of Barometer at 9 P.M., minus the Correction $\frac{1}{1000}$ for Temp. (Col. 4), = 29.386
 Mean at Station, corrected, and at 32', = 29.382
 Correction for height, feet above Mean Sea-Level, = 201
 Mean, reduced to 32', and Sea-level, = 29.583
 Highest Reading, corrected for Index error, on the 17 th, = 29.924
 Lowest Do. Do., on the 25 th, = 28.608
 Difference, or Monthly Range, = 1.316

S.R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 16 th, = 59.5
 Lowest in Month, corrected for Index errors, on the 3 th, = 21.0
 Difference, or Monthly Range, = 38.5
 "Corrected Mean" of all the Highest, (Col. 5), = 46.4
 "Corrected Mean" of all the Lowest, (Col. 6), = 32.5
 Difference, or Mean Daily Range, = 13.9
 ** Calculated Mean Temperature of Month, = 39.4
 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), = 38.6
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 36.8
 ** Computed Temperature of Dew-Point, = 34.3
 ** Do. Elastic Force of Vapour, = 199
 ** Do. Weight of Vapour in a Cubic Foot of Air, =
 ** Relative Humidity (Saturation = 100), = 85
 RAIN fell on 22 Days; Amount in Inches, = 4.24

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

Observations made and Return verified by John Forrest

(Signed)

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Kaddo House, County of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of April 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				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. <i>Mention the hour at which Storms, including Thunder and Lightning, began and ended.</i>		Days of Month.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs. Grass.		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.		0-10.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
		Barometer.	Attached Thermometer.	Barometer.	Attached Thermometer.	Max.	Min.	Max. in Sun.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		No. of drops which it fell.	No.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No.	9 h. A.M.	Velocity (0-6), and Species.	Amount (0-10), and Species.	9 h. A.M.	Velocity (0-6), and Species.						Amount (0-10), and Species.	SUNSHINE. Hours.	No. 3 inches.	No. 12 inches.	No. 22 inches.	Temperature of Well at depth of feet No.	Temperature and Barometer.	9 A.M.	9 P.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		* No.	inches.	°	inches.	°	°	°	°	°	°	°	°		°	°	°	°	°	°	°	°	°	°	°	°						°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction $\frac{1}{100}$ for Temp. (Col. 2), = 29.590
 "Corrected Mean" of Barometer at 9 P.M., minus the Correction $\frac{1}{100}$ for Temp. (Col. 4), = 29.629
 Mean at Station, corrected, and at 32', = 29.610
 Correction for height, feet above Mean Sea-Level, = 200
 Mean, reduced to 32', and Sea-level, = 29.810
 Highest Reading, corrected for Index error, on the 13 th, = 30.164
 Lowest Do. Do., on the 6 th, = 28.734
 Difference, or Monthly Range, = 1.430

S-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 23 th, = 65.0
 Lowest in Month, corrected for Index errors, on the 14 th, = 24.0
 Difference, or Monthly Range, = 41.0
 "Corrected Mean" of all the Highest, (Col. 5), = 53.4
 "Corrected Mean" of all the Lowest, (Col. 6), = 35.5
 Difference, or Mean Daily Range, = 17.9
 ** Calculated Mean Temperature of Month, = 44.5
 S-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 10 th, = 89.0
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = 69.4
 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), = 41.6
 ** Computed Temperature of Dew-Point, = 38.9
 ** Do. Elastic Force of Vapour, = 238
 ** Do. Weight of Vapour in a Cubic Foot of Air, =
 ** Relative Humidity (Saturation = 100), = 83
 RAIN fell on 15 Days; Amount in Inches, = 1.64

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

Observations made and Return verified by

John Forrest

(Signed)

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Staddo House, County of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of May 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				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. <i>Mention the hour at which Storms, including Thunder and Lightning, began and ended.</i>		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 h. A.M.		9 h. P.M.															
		Barometer.	Attached Thermometer.	Barometer.	Attached Thermometer.	Max.	Min.	Max. in Sunrays.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		No. of flashes in which it fell.	Amount in inches.	Direction.	Force.	Direction.	Force.	Velocity (0-6) and Direction.	Amount (0-10), and Species.	Velocity (0-6) and Direction.	Amount (0-10), and Species.	No. 8 inches.	No. 12 inches.						No. 22 inches.	Temperature of Well of feet.	Temperature and Density.	9 A.M.	2 P.M.
		* No.	inches.	°	inches.	°	°	°	°	°	°	°	°		°	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.						No.	No.	No.	No.	No.
	1	29.616	55	29.950	45.5	61	40	75	33	57	46	41	38	+	S.W.	N.W.	9362															1				
	2	30.194	56	30.312	49	59	38	77	26	55	47	43.5	42	+	S.W.	N.W.	0957															2				
	3	30.346	56	30.380	47	54.5	34	81.5	29	56	49	40.5	40		S.E.	S.E.	1378															3				
	4	30.348	50	30.236	47	53.5	37.5	68	30	45.5	43.5	44	43		S.E.	S.E.	2061															4				
	5	30.224	54	30.264	47	56	35	69	30	52	49	43	41	0.5	S.E.	S.E.	2707															5				
	6	30.326	58	30.348	49	63	34	74	38	58.5	52	45.5	44.5		S.E.	S.E.	3351															6				
	7	30.326	59	30.250	50	64	37	80	33	52.5	53	45	44		S.E.	S.E.	4058															7				
	8	30.142	58	29.962	50	53.5	36	70	29	55	48.5	45	44		S.E.	S.E.	4767															8				
	9	29.872	54	29.848	50	63	40	77	34	53	50	47	45.5		S.E.	S.E.	5851															9				
	10	29.816	53	29.832	53	65	44	83	41	57	53	53	50	+	S.W.	S.W.	6779															10				
	11	29.946	62	29.974	52	65.5	42	92	36	63	53	47.5	46		S	S.E.	6941															11				
	12	29.998	56.5	29.980	52	58	41	72	32.5	54	53	49	48	+	0.7	S.E.	S.E.	8314															12			
	13	29.960	60	30.028	53.5	67	40.5	91	35	60	55	49	47		N.W.	N.E.	8204																13			
	14	29.961	53.5	29.860	54	65.5	43.5	78.5	36	53	54	50.5	48	+	S.W.	N.W.	7363																14			
	15	29.718	54	29.732	46	57	41	73	35	51	46.5	41.5	37	+	N.W.	N	9460																15			
	16	29.702	43	29.628	38.5	44	34	60	33	41.5	36	36	34	+	N	N	0072																16			
	17	29.534	40	29.614	42	42	34	48	31	40	36	41	40	+	N	N	0457																17			
	18	29.612	44	29.604	45	55	40	72	36	44.5	43.5	44	42	+	N	N	0537																18			
	19	29.614	46	29.676	43	51	40	67	38	46.5	42.5	44	41.5	+	26	N	N.E.	0619															19			
	20	29.634	46	29.654	46	49	40	59	38	47	46.5	43	42	+	N	S.E.	0815																20			
	21	29.638	54	29.644	48.5	62.5	41	81	35	57	53.5	45	44.5	+	N	S.E.	1226																21			
	22	29.698	56	29.702	51	64.5	40	87	38.5	53.5	52	46.5	45		S.E.	S.E.	1909																22			
	23	29.706	56	29.708	52	65	38	84	33	56	57.5	48	46.5		S.E.	S.E.	2246																23			
	24	29.728	58	29.748	49	62	35	82	31.5	57.5	53.5	43.5	43		S.E.	S.E.	2444																24			
	25	29.752	50	29.766	50	56	40	75	39	44.5	43	47.5	46.5		S.E.	S	2755																25			
	26	29.886	60	30.012	53	67	43	94	38	59	51.5	48.5	47		N	S.E.	2879																26			
	27	30.080	63.5	30.042	54	69.5	37	93.5	34	65	53	49	47.5		S.W.	S.E.	3215																27			
	28	30.226	64.5	29.916	58	77	45	99	41	67	58	54	51		S	E	3910																28			
	29	29.876	66	29.836	55	68	47.5	90	41	66	57	50	48		S.W.	S.E.	4592																29			
	30	29.760	57	29.622	53	54	37	72	34	56.5	53.5	48	47		S.E.	S.E.	5071																30			
	31	29.538	57	29.532	53	69	42	92	39	55	53	50	49	+	18	S.E.	S.E.	5984																31		
Sums.		18 13 14 14 2		8 12 14 13 2		4		16		14 1	15 5	14 5	14 3									13 8	15	11	10											
Means.		29.712	1704	29.682	1338	1869	1214	2419	1061	1684	1540	1423	1373								28.8	1628	1613	1333												
+ Total Corrections for Instrumental Errors.		29.778	55	29.893	49.6	60.3	39.2	78.4	34.4	54.3	49.7	45.9	44.3	13	56							52.5	51.7	49.4												
+ Corrections for Diurnal Range.		29.889		29.889																																
"Corrected Means."		29.889		29.889																																
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 \ddagger = 29.818
 for Temp. (Col. 2), = 29.839.....29.821
 "Corrected Mean" of Barometer at 9 P.M., minus the Correction \ddagger = 29.833
 for Temp. (Col. 4), = 29.853.....29.866
 Mean at Station, corrected, and at 32',.....29.897
 Correction for height, feet above Mean Sea-Level,.....196
 Mean, reduced to 32', and Sea-Level,.....30.095
 Highest Reading, corrected for Index error, on the 3rd th,.....30.380
 Lowest Do. Do., on the 17th th,.....29.534
 Difference, or Monthly Range,.....0.846

S.R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 28th th,.....77.0
 Lowest in Month, corrected for Index errors, on the 2nd th,.....33.0
 Difference, or Monthly Range,.....44.0
 "Corrected Mean" of all the Highest, (Col. 5),.....60.3
 "Corrected Mean" of all the Lowest, (Col. 6),.....39.2
 Difference, or Mean Daily Range,.....21.1
 ** Calculated Mean Temperature of Month,.....49.8
 S.R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 26th th,.....94.0
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun,.....78.4
 Lowest at Night, Black Bulb (corrected for Index errors), on the 2nd th,.....26.0
 "Corrected Mean," (Col. 8), of Black Bulb, Min. on grass,.....34.4
 Difference of above means or range ("exposed"),.....44.0

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11),.....50.1
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12),.....44.0
 ** Computed Temperature of Dew-Point,.....43.7
 ** Do. Elastic Force of Vapour,.....28.5
 ** Do. Weight of Vapour in a Cubic Foot of Air,.....79
 ** Relative Humidity (Saturation = 100),.....79
 RAIN fell on 4 Days; Amount in Inches,......58

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.		6	0	0	14	26	1	2	0		
P.M.		4	2	1	19	1	1	0	3	0	
Mean.		5	1	1	16	2	3	1	2	0	

Observations made and Return verified by John Torment

(Signed)

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Haarls House, County of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of June 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS.				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 h. A.M.		P.M.		9 h. A.M.		9 h. P.M.				As to occurrence of Thunder, Lightning, Storms, Hail, Meteors, Remarkable Depression or Elevation of Barometer, Prevalent Diseases, etc.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		Barometer. No.	Attached Thermometer.	Barometer. No.	Attached Thermometer.	Max. No.	Min. No.	Max. in Sun-rays.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		No. of hours in which it fell.	No.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No.	9 h. A.M.	Velocity (0-6) and Direction.	Amount (0-10), and Species.	Velocity (0-6) and Direction.	Amount (0-10), and Species.			SUNSHINE. Hours.	No. 3 inches.	No. 12 inches.	No. 22 inches.		Temperature of Well at depth of feet, No.	Temperature at surface as indicated by Barometer and Density.	0-10.		Mention the hour at which Storms, including Thunder and Lightning, began and ended.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
																																				9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.	9 P.M.	9 A.M.

NOTATION USED IN GENERAL REMARKS.

a.	denotes aurora.	m.	denotes meteor.
ci.	cirrus.	ms.	micro-meteor.
ci-cu.	cirro-cumulus.	n.	nimbus.
ci-s.	cirro-stratus.	r.	rain.
cu.	cumulus.	c. h. r.	confined heavy rain.
cu-s.	cumulo-stratus.	s.	stratus.
d.	dew.	sc.	scud.
f.	fog.	sl.	sleet.
fr.	frost.	so. ha.	solar halo.
h. fr.	hoar-frost.	sq.	squall.
h.	haze.	sjs.	squalls.
h. d.	heavy dew.	t. s.	thunder.
li.	lightning.	w.	wind.
li. cl.	light clouds.	g.	gale of wind.
li. sh.	light showers.		
lu. co.	lunar corona.		
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 \ddagger = 29.806
 for Temp. (Col. 2), = 29.806
 "Corrected Mean" of Barometer at 9 P.M., minus the Correction \ddagger = 29.827
 for Temp. (Col. 4), = 29.827
 Mean at Station, corrected, and at 32°, = 29.816
 Correction for height, feet above Mean Sea-level, = 1.97
 Mean, reduced to 32°, and Sea-level, = 30.013
 Highest Reading, corrected for Index error, on the 5th, = 30.266
 Lowest Do. Do., on the 30th, = 29.274
 Difference, or Monthly Range, = 0.992

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 7th, = 78.0
 Lowest in Month, corrected for Index errors, on the 14th, = 55.0
 Difference, or Monthly Range, = 23.0
 "Corrected Mean" of all the Highest, (Col. 5), = 63.8
 "Corrected Mean" of all the Lowest, (Col. 6), = 43.3
 Difference, or Mean Daily Range, = 20.5
 ** Calculated Mean Temperature of Month, = 53.6
 S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 8th, = 106.0
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = 83.7
 Lowest at Night, Black Bulb (corrected for Index errors), on the 13th, = 29.5
 "Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, = 38.2
 Difference of above means or range ("exposed"), = 45.5

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 53.7
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 50.7
 \ddagger Computed Temperature of Dew-Point, = 47.8
 \ddagger Do. Elastic Force of Vapour, = 331
 \ddagger Do. Weight of Vapour in a Cubic Foot of Air, = 80
 \ddagger Relative Humidity (Saturation = 100), = 80
 RAIN fell on 16 Days; Amount in Inches, = 2.84

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.		3	1	2	9	2	3	3	4	0	
P.M.		5	2	1	11	2	0	3	6	0	
Mean.		4	2	1	10	2	2	3	6	0	

Observations made and Return verified by John Forrest

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SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Haddo House, County of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of July 1895

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				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. Max. in Min. on Sun's rays Grass.		Dry No.		Wet No.			9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.		9 h. P.M.											
		Barometer.	Attached Thermometer.	Barometer.	Attached Thermometer.	Max.	Min.	Max.	Min.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	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.			
		* No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.						No.	No.	No.	No.	No.
		inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.		inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.						inches.	inches.	inches.	inches.	inches.
	1	29.418	63.5	29.388	59	66	41	78.5	37	64	63	56.5	56		S.E.	S.E.	4693					5	63	59	56		6	5	1							
	2	29.316	59	29.408	57	66	54	87	52	59	58	54.5	54	X	E.	N.	5423					1.5	61	59	56		6	5	2							
	3	29.634	56	29.860	54.5	59.5	47	75	48	54	53	51	49	X	N.	N.W.	5670					2.4	58	59	56		7	4	3							
	4	29.964	54.5	30.028	51	59	46	80	38	52	49	45	44	X	N.W.	N.	6053					5	59	59	56		7	5	4							
	5	30.004	60	29.974	59	62	36	88	32	60	54	57	55		N.	S.	6173					7.5	60	59	56		6	6	5							
	6	29.932	67	29.896	64	75	44	100	42	67	69	63	61.5	X	S.W.	S.W.	6341					7	66	59	56		6	4	6							
	7	29.842	70	29.820	66	77	43	98	47	71	64	64	60		S.	S.	6463					7.7	66	61	57		5	3	7							
	8	29.792	73.5	29.624	63	73	54	89	47	71	64	63	59		S.E.	S.W.	7000					8.2	69	62	57		6	3	8							
	9	29.656	67	29.312	61	64	50	74	43	62	50	54	52.5	X	S.	S.	8476					1.4	63	62	57		3	5	9							
	10	29.446	61	29.586	57.5	65	48	88	48	59	52	53	49.5		N.W.	W.	8988					6.3	59	60	57		6	3	10							
	11	29.522	60	29.248	49	60	40	76	34	67	52	47	46	X	S.W.	N.W.	9808					11.6	59	59	57		6	5	11							
	12	29.340	55	29.530	52	61	44	81	40	53	57	49	47	X	N.	N.W.	0345					6.7	56	58	57		5	5	12							
	13	29.516	57	29.344	54	63	44	93	38	54	51	52	51	X	N.W.	N.	0725					4.5	56	58	57		5	4	13							
	14	29.246	56	29.334	56	65	45	92	39	55	52.5	53	50	X	59 W	W	1147					4	57	58	57		5	4	14							
	15	29.404	55.5	29.536	54	57.5	51	67	46	55	57	52	49		N.W.	N.W.	1289						66	58	57		5	4	15							
	16	29.588	60	29.506	55	60	45	77	38	58	52	51	51	X	N.W.	S.E.	3554					4.8	61	57	57		5	5	16							
	17	29.524	61	29.546	60	68	45	86	39	60	58	58	56	X	S.W.	S.E.	5945					10.4	61	58	57		5	4	17							
	18	29.486	59.5	29.502	59	70.5	53.5	89	48	57	56.5	55	53	X	S.E.	S.W.	4465					6.4	60	58	57		5	4	18							
	19	29.336	58	29.164	56	59	49	60	44	55	55	53	50	X	E.	S.W.	4603						58	58	57		7	6	19							
	20	29.262	61	29.284	56	64	45.5	81	38	56	54	53.5	52		S.W.	S.E.	5270					11.5	58	58	57		6	6	20							
	21	29.224	56	29.216	56	61	51.5	75	45	54	53.5	53	52.5	X	98 N.E.	N.	5433					1.5	58	58	57		6	6	21							
	22	29.280	58	29.288	56	62	51	83	50	57	54	52	51	X	N.W.	N.W.	5654					2.5	59	58	57		6	8	22							
	23	29.448	57	29.576	55	63	41	89	35	67	54	52	51	X	N.W.	S.E.	5737					2	58	58	57		6	6	23							
	24	29.482	55	29.458	54.5	58	49	70	46	53	52	50	48	X	S.E.	W.	5834					1.2	58	58	57		6	7	24							
	25	29.586	56	29.644	56	62.5	48	79	44	56	53	51	47		N.W.	N.E.	5888					1.4	58	58	57		6	0	25							
	26	29.746	56	29.702	53	57	45	62	40	55	50.5	50	49.5	X	E.	E.	5950						58	58	57		6	6	26							
	27	29.524	53	29.448	53	56	47	61	42	50.5	50	52	50.5	X	S.E.	N.	6641						55	58	57		6	6	27							
	28	29.402	56	29.570	54	63	50	88	47	55.5	53	50	48		1.02 N.	N.W.	6703					6.3	57	58	56		7	5	28							
	29	29.574	61	29.688	55	65	41	90	35	57	52.5	53	51	X	N.W.	N.W.	6762					7	58	58	56		7	5	29							
	30	29.724	58	29.796	55	63	42	87	35	55	50	52.5	51	X	N.W.	S.E.	6983					6	57	58	56		6	5	30							
	31	29.834	63	29.786	58	62	49	94	43	61	55	56	54		1.03 W	S.W.	7059					8	61	58	56		5	5	31							
Shuns.		16.13	16.2	16.55	16.1	20.3	13	14	16	17.0	16.5	16.6	15.9	21	2.98							13.7	18													
Means.		916.102	843.5	916.002	1751.5	462	429	525	365	1300	1790	1676.5	1656	1599	21	2.98						136.1	1843	1817	1757		179	157								
+ Total Corrections for Instru- mental Errors.		29.552	59.5	29.548	56.2	63.46	81.8	41.9	57.7	54.9	53.4	51.6										59.4	58.6	56.8		55.5	1									
+ Corrections for Diurnal Range.		+0.070		+0.070																																
"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					

BAROMETER, "corrected Mean" at 9 A.M., minus the Correction $\ddagger\ddagger$ } = 29.540
for Temp. (Col. 2), = 29.622 82..

"Corrected Mean" of Barometer at 9 P.M., *minus* the Correction.†† } = 29.544
for Temp. (Col. 4), = 29.618.....74

Mean at Station, corrected, and at 32°, = 29.552
Correction for height + 0.06
feet above Mean Sea level 19.1

Correction for height, feet above Mean Sea-level, 196

Mean, reduced to 32°, and Sea-level, 29.748

Highest Reading, corrected for Index error, on the $k^{\text{th}}, \dots = 30.028$

Lowest Do. Do., on the 21st, = 4.216
Difference, or **Monthly Range**, = 0.812

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 oscillarity 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.-P. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 7th,..... = 77.0

Lowest in Month, corrected for Index errors, on the 5th, = 36.0

Difference, or Monthly Range, = 1.1

"Corrected Mean" of all the Highest, (Col. 5), = 63.8

"Corrected Mean" of all the Lowest, (Col. 6), = 46.8
 Difference, or Mean Daily Range, = 13.2

** Calculated Mean Temperature of Month, = 55.3

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), = 55.6

Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols.
10 and 12), = 51.8

†† Computed Temperature of Dew-Point, = 50.2

†† Do. Elastic Force of Vapour, = 8.66

¶ Do. Elastic Force of Vapour, = 365-
 ¶ Do. Weight of Vapour in a Cubic Foot of Air, =

†† Relative Humidity (Saturation = 100), = 82
IN fell on 21 Days: Amount in Inches 2.90

[illegible]

Direction.	N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.	Mean Velocity in miles per day.
A.M.	4	1	3	5	2	4	2	10			
P.M.	5	1	1	6	3	5	3	7			
Mean.	5	1	2	5	3	4	3	8	0		

Observations made and
Return verified by } Wm Forrest

(Signed)

FOR TAKING METEOROLOGICAL

The Council of the Society recommend that the Self-Registering Thermometers, and the Dry and Wet Bulb Hygrometers, be kept in Stevenson's Louver-boarded Box for Thermometers, painted white inside and outside, and screened by four stout posts, also painted white, firmly secured to four stout posts, also painted white, which are driven in position the Bulbs of the Minimum Thermometer, and of the Dry and Wet Bulb Thermometers, at the same height of four feet above the ground as the Maximum Thermometer. The upper four feet of a plot of thermometer, and the lower four feet have free access to the air, so arranged to windward, that the sun's rays have free access to the face of the box, and surrounding conditions enable the Observer to generate. The Thermometers are suspended on cross-sticks 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, and the vital in every system of Meteorological Observation, since without it Observations made at different Stations are incompatible, thus rendering it impossible to compare the Climates of places with each other as regards air most important features.

column of spirit breaking, and part of the spirit distilling by high temperature and lodging at the top of the tube. This derangement of occasional occurrence with protected Thermometers, but of frequent occurrence with exposed Thermometers. Hence a systematic examination of Minimum Thermometers ought to be a regular part of the work carried on by each Observer. Fortunately, Spiritthermometers may be easily set right by

amount to a simple position, to allow the rest of the spirit still to be drawn out of the tube. The tube is then placed, during the pouring, at the mouth of the tube to draw down to the bottom. But the method must be adapted, if the portion of spirit in the top of the tube be small. Heat should be applied slowly and cautiously to the top end of the tube where the detached portion of spirit is, till the top end of the tube where the detached portion of spirit is, which being turned into vapour by the heat, will condense on the surface of the unbroken column of spirit. Care must be taken that the heat is not applied too quickly; for if this be done, the tube will break, and the instrument be destroyed. The best way to apply the requisite amount of heat is by bringing the end of the tube slowly down towards a minute flame from a gas-burner; or, if gas be not at hand, a piece of heated metal will serve instead.

Black-Bath Thermometers.—During night, have a black coating, which may easily be made, or mented, by the application of a mixture of lampblack and printer's ink. They are placed in shallow enamelled boxes, whose sides protect the bulbs from the wind, and the Maximum should be freely exposed to the sun, and the Minimum should rest on wooden supports a few inches from the surface of the grass in an open situation. Snow must not be allowed to cover either of these Thermometers. Nor must the hat to affect the Minimum Thermometer by distillation. Black-baths enclosed in glass jackets may also be used, being indeed preferable to the latter. It must, however, be added, that the whole subject of the observation of Solar and Terrestrial Radiation is not yet in a sufficiently advanced state to warrant the exclusive recommendation of any one of these methods.

In reading the Thermometer, great care must be taken to bring the eye exactly opposite the tip of the index or column of mercury. The reading ought to be taken to tenths of a degree, and noted in decimals. Thus, if the Thermometer were read $-39^{\circ}.3$, $40^{\circ}.0$, or $40^{\circ}.1$; or again, $0^{\circ}.4$, $40^{\circ}.5$, $40^{\circ}.6$, according as it indicates a little under, an exact coincidence with, or a little over 40° , or $40^{\circ}.5$, respectively. So also, if it indicates $40^{\circ}.1$, $40^{\circ}.2$, $40^{\circ}.3$, $40^{\circ}.4$, $40^{\circ}.5$, $40^{\circ}.6$, $40^{\circ}.7$, or $40^{\circ}.8$ 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 operating the Thermometer Box, the Dry and Wet Bulb Thermometers are to be first, and rapidly, read, inasmuch as they are readily affected by heat from the person of the Observer.

No instrument ought to be used for Meteorological purposes till it has been carefully tested by comparison with a standard Thermometer. When such Thermometers, as are not graduated on the stem, but merely on an attached scale, undergo repairs they are very liable to be moved from their position on the scale, and ought receiving especially the attention of the observer. Secondly to be compared with minimum Thermometers, eight fourthly to be compared with the dry bulb of the Hygrometer. The freezing-point of each thermometer, marked by a scratch on the tube, ought to be tested once a year, in snow or melting ice.

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, but

1. As regards Direction.

2. As regards Velocity and pressure. The Council would recommend the Hemispherical Cup Anemometer, — a 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

Rain gauges. arising partly from the difficulty of obtaining perfectly unobjectionable situation for observation, and partly from the defective nature of the instruments used. The Rain Gauge should not be placed on a slope or terrace, but in a level piece of ground, in as open a situation as the Observer can find. It is often difficult to obtain position for it.

remains level in an undisturbed, homogeneous soil. In such cases as Fleming's, which are furnished with a measuring-rod attached to a float, the rod ought to be fixed down, and the float rise to its height only at the time the instrument is read, it being found that a stem projecting above the rim of the gauge seriously interferes with the proper measurement of the Rain-gauge.

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 obscuration of the sky overhead (i.e. within 20° or 30° of the zenith). The stratus of Clouds that appear near the horizon are viewed obliquely; and thus, being unable to judge of their amount, we ought not to take account of them. Changes may be noted among the Remarks. The amount of Cloud is entered from a scale of 0 to 10; thus, when the sky overhead is free from Clouds it is entered 0, when half-covered by clouds, 5, wholly covered, 10, and so on.

Cloud column, an entry of $\frac{4}{2}$ — will indicate that the higher

Sunshine. The approximate number of Hours in which objects in the sun's rays cast shadows, should be entered in the proper column.

A knowledge of the Temperature of the Sea is not only in itself important, but in its relations to that of our island, a most important branch of Meteorology. The Council herefore recommend that the Temperature of the Sea be carefully taken by a properly constructed apparatus, from boats, or from the ends of piers and rocks round the coast, where it is not influenced by that of river water, and as little as possible by currents sweeping along the coast, and thus to ascertain the Temperature of the land, either greatly heated by the sun, or cooled by nocturnal radiation. And as near the head of high

10

the Ozona Test-Papers are used, Schönbren's or Motiufs, etc. The Paper is affixed by a pin to a board in the thermometer box, and the indications registered at 9 A.M. and 9 P.M. It is desired that these indications be registered in connection with the force and direction of the wind at the time of observation, in the following manner:—thus $32\frac{3}{4}$, as an Ozona entry in the schedule will indicate that the Ozona paper is fitted as 3 on the scale, that the wind is from the N.W., and that its force on the scale 0—5 is 4, or blowing fresh.

The Remarks column is unavoidably too narrow. Some of the most valuable Observations that can be taken are those for which no rules can be given nor hours assigned. The use of contractions ought, therefore, to be taken every advantage of, and a list of such as are in general use is given

maximum, and ending, as well as such Notes on Storms as have been limited at above. When lofty hills are in the vicinity of a Station, the weight of Clouds and of the Snow-line in winter should be recorded. By the use of abbreviations, the state of the weather at 9 A.M. and P.M. should be registered, either in two columns, otherwise unoc-

Observations ought to be confined to individual trees and shrubs on particular species of birds, and, in the case of crops, to specified portions reared from year to year on a selected piece of ground or farm. The Annual Table, published yearly in the Society's Journal, will indicate the species of plants and animals to which special attention more particularly directed.

Ериван, *December 1891.*

[illegible]

WITH THE PE	Dyed of leaves.	Barley	Oats,	Wheat,	Beans,	Peas,	Potatoes,	Turnips,	Rye
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[illegible]

pizootic disease prevails among cattle; and the Agricultural condition of the district generally.

[illegible]

(By Order) A. B.

(By Order) A. B.

(By Order) A. B.

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Haddo House, County of Aberdeen, in Lat. 57° 24', Long. 2° 11', Distance from Sea 12 miles.
Height of Cistern of the Barometer above Mean Sea-Level 186 feet, above Ground 3 feet. During the MONTH of August 1895.
The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.		WIND.				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.		Dry No.		Wet No.		9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.				0-10.							
		Barometer.	Attached Thermometer.	Barometer.	Attached Thermometer.	Max. No.	Min. No.	Max. in Sun's rays.	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	No. of Drops in which it fell.	Amount in inches.	Direction.	Force.	Direction.	Force.	Velocity (0-10), and Direction.	Amount (0-10), and Species.	Velocity (0-10), and Direction.	Amount (0-10), and Species.	No. 3 inches.	No. 12 inches.	No. 22 inches.	Temperature of Well at depth of feet.		Temperature at 1 fathom, and Density.	9 A.M.			9 P.M.
		* No.	inches.	°	inches.	°	°	°	°	°	°	°	°	°	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.		No.	No.			No.
	1	29.684	61	29.580	56	62	67	79	43	59	55	54	52			S.W	S							2	60	58	57			5	4		
	2	29.432	58	29.240	57	59	57	65	48	58.5	55	55	54			S	W								57	58	57			6	6		
	3	29.146	58	29.044	56	65	44	85	37	56	53.5	52	51			S	S.E							3.5	57	58	57			6	5		
	4	29.100	57.5	29.220	58	65.5	49	84	44	56	54.5	56	54.5			S.E	N.E								4.5	58	58	57			5	5	
	5	29.106	60	29.218	58	65	55	82	50	61	58	56	55			N.E	E								2	61	59	57			6	6	
	6	29.184	59	29.316	57	67	51	90	47	60.5	57.5	52.5	51.5	+		N.E	N.E								3.6	60	59	57			6	5	
	7	29.377	60	29.502	58	65	45	89	49	60	58	53	52	+	14	N.W	N.W								1.7	59	59	57			6	5	Thunder
	8	29.566	57.5	29.578	54	67	46	93	39	56	54	50	49			W	W								6.7	58	59	57			6	4	
	9	29.448	60.5	29.322	57	62	42	84	36	60	55	55	54	+		S	E								3.4	60	59	57			6	6	
	10	29.396	64	29.418	57	74	60	99	45	65	64	55	54			S.W	N.E								7.5	61	59	57			5	6	
	11	29.292	57	29.226	58	61	48	67	42.5	55	54.5	57	56	+		E	S.E								3	58	59	57			6	6	
	12	29.186	60	29.368	59	63	53	82	49	58	56	56	53	+		S.W	S.W								2.8	59	59	57			6	5	
	13	29.384	60	29.458	58.5	67	49	89	42	60	57	57	50			S.W	S.E								6.2	60	59	57			6	6	
	14	29.620	61.5	29.884	56	68	46	89	41	63	59	51	50		29	S.W	S.E								2.2	60	59	57			5	4	Thunder
	15	29.448	63	29.974	56	68	39	88	34	64	58	53	52.5			S.E	S.E								9.5	59	59	57			4	5	
	16	29.538	61	29.908	62	65	50	71	43	59	58	63	61	+		S.E	S									60	59	57			6	6	
	17	29.880	67	29.912	65	78	57	103.5	59	72	65	64	61			S	S								9.3	63	60	57			5	4	
	18	29.860	63.5	29.760	62	73	58	91	53	63.5	62	61	57			S.E	S								6.8	63	61	58			6	5	Thunder
	19	29.702	69	29.764	60.5	73	55	104	47	69	63	55	53			S	S.W								7	64	61	58			5	4	
	20	29.760	64	29.788	60	73	48	103	41	61.5	56	56	55			S.W	S.W								4.5	60	61	58			6	3	
	21	29.694	63	29.672	60	72	52	87	48	63	59	60	57	+	73	S	S.W								5.4	61	61	58			5	4	
	22	29.588	62	29.528	60.5	72	56	96	50	61	60	58	57	+		S	S.E								5	61	61	58			6	6	
	23	29.574	64	29.492	55	66	49	100	46	62	57	54	53	+		N.W	N.E								4.8	62	61	58			6	7	
	24	29.608	57	29.718	57	59	48	87	44	54	57	49	45	+	44	N.W	N.W								7	59	60	58			7	5	
	25	29.816	57	29.798	52	52	43	89	40	53	48	49	48	+		N.W	N.W								8	55	59	58			6	5	
	26	29.646	53	29.502	54	60	43	63	39	57.5	57	52	51.5	+		S.E	S.E									56	58	58			6	6	
	27	29.202	58	29.236	57	66	47	96	43	61	59.5	56.5	57	+		S.W	N.W								3.4	57	58	58			6	5	
	28	29.660	54	29.632	57	57	58	80	43	52	48.5	53	54.5	+		N	S								5	57	58	57			6	6	
	29	29.654	56.5	29.348	68	63	48	81	43	55	54.5	59	56	+		S	W									57	58	57			6	8	
	30	29.602	62	29.574	57	66	53	86	47	62	56	53	52			W	W								4.4	58	58	57			6	8	
	31	29.680	56	29.640	57	62	47	76	40	55	53	58	52	+	78	N.W	W								3	57	58	57			7	7	
Sums.		1615.12		1612.14		14	16	15	15	11	53	13	11																				
Means.		29.512		29.424		20.355	15.27	26.8	13.6	18.35	57.2	17.09	16.525																				
+ Total Corrections for Instrumental Errors.		29.548	60.1	29.532	57.2	65.7	44.3	86.4	44.3	59.5	56.5	55.1	53.3	15	3.38																		
+ Corrections for Diurnal Range.		+0.70		+0.70																													
+ "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		

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.	stratus.		
f.	fog.	sc.	scud.		
fr.	frost.	s.	sleet.		
h.-fr.	hoar-frost.	s.	snow.		
h.	haze.	so. ha.	solar halo.		
h. d.	heavy dew.	sq.	squall.		
hl.	hail.	sq.	squalls.		
l.	lightning.	t.	thunder.		
h. cl.	light clouds.	t. s.	thunder-storm.		
li. 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 for Temp. (Col. 2), = 29.535
for Temp. (Col. 2), = 29.618 83
"Corrected Mean" of Barometer at 9 P.M., minus the Correction for Temp. (Col. 4), = 29.527
for Temp. (Col. 4), = 29.602 75
Mean at Station, corrected, and at 32°, = 29.531
Correction for height, feet above Mean Sea-level, = 1.95
Mean, reduced to 32°, and Sea-level, = 29.726
Highest Reading, corrected for Index error, on the 15th, = 29.974
Lowest Do. Do., on the 3th, = 29.044
Difference, or Monthly Range, = 0.930

S.R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 17th, = 78.0
Lowest in Month, corrected for Index errors, on the 15th, 16, = 43.0
Difference, or Monthly Range, = 35.0
"Corrected Mean" of all the Highest, (Col. 5), = 65.7
"Corrected Mean" of all the Lowest, (Col. 6), = 49.3
Difference, or Mean Daily Range, = 16.4
** Calculated Mean Temperature of Month, = 57.5
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), = 57.3
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 54.9
Computed Temperature of Dew-Point, = 52.8
Do. Elastic Force of Vapour, = 399
Do. Weight of Vapour in a Cubic Foot of Air, =
Relative Humidity (Saturation = 100), = 84
RAIN fell on 15 Days; Amount in Inches, = 3.38
WIND. SUMMARY.
Direction. N NE E SE S SW W NW
A.M. 1 2 1 5 8 7 2 5
P.M. 4 2 7 5 4 3 4
Mean, 1 3 2 6 6 5 3 5 0

* 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.
† Enclosing 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 Arithmetic 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 John Forrester

(Signed)

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Handa House, County of Aberdeen, in Lat. 57° 24', Long. 2° 14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of September 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS.				HYGROMETER.				Rain.	WIND.				CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS.		Days of Month.						
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		Dry No.		Wet No.			9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.													
		Barometer.	Attached Ther- mometer	Barometer.	Attached Ther- mometer	Max.	Min.	Max. in Sunshade	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		No. of Waves in which it fell.	Amount in inches.	Direction.	Force	Direction.	Force	Readings of the H. Cup Anemometer No.	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.		No.		No.	No.	No.	No.	No.	No.	No.	No.		No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.						No.	No.	No.	No.	No.	No.
		inches.	°	inches.	°	°	°	°	°	°	°	°	°		°	°	°	°	°	°	°	°	°	°	°						°	°	°	°	°	°
	1	29.594	58	29.652	60	73	55	106	49	57	53	58	55			N.W.	5H			7678				5.2	56	58	57		6	5	1					
	2	29.638	59.3	29.576	58	72	49	90	41	61.5	57	59	56			S	S			8205				8	57	58	57		7	4	2					
	3	29.525	60	29.628	57	70	51.5	100	43.5	60	59	55	50			S	SH			8560				3.8	58	58	57		6	5	3					
	4	29.626	58.4	29.596	54	59	39	59	35	56	51.5	54	50	X		SH.	SH			9056				1.4	56	58	57		6	6	4					
	5	29.636	56	29.658	56	60.5	47	84	42	57	54	57.5	51	X		H	SE			8388				1.3	56	57	57		6	5	5					
	6	29.826	55.5	29.880	51	64	41.5	95	36	56	51.5	48	47			H	S			9597				8	54	57	57		6	6	6					
	7	29.548	56	29.712	54	68	47	81.5	42	55	54.5	50.5	48	X	55	S.S.	H			0220				3.8	55	57	57		6	6	7					
	8	29.810	55	29.852	54	60	47	66	41	56	52	52	51	X		S	S			0746					54	57	57		6	6	8					
	9	29.800	56	29.628	57	64	43	78	36	61	56	58	57	X		S	S			0806				3.4	54	57	56		5	6	9					
	10	29.404	61	29.244	56	69	48	81	42	62.5	60	54.5	51.5	X		S	H			0895				6.2	58	57	56		6	5	10					
	11	28.928	59	29.262	55	61.5	51	75	46	59	52.5	54	57	X		S	N.W.			1337				2.5	56	57	56		6	8	11					
	12	29.466	56	29.730	52	58	48	75	42	56	51.5	49.5	47.5	X		N.W.	N.W.			2460				2.5	55	57	56		6	8	12					
	13	29.910	52	29.976	48	60	43	75	37	50	47	43	42			N.W.	H			3283				4.7	52	56	56		7	4	13					
	14	29.934	55	29.988	53	65	43	81	36	56	52	50.5	50			S.H	H			3317				4	55	56	56		5	5	14					
	15	30.046	55	29.980	54	64	50	74	42	54	53	51	50		26	S.S.	S			3320				1.2	56	57	56		6	5	15					
	16	29.854	54	29.824	55	67	38	86	33	62	57.5	53	57	X		S	S.H			3338				2.5	53	57	56		5	5	16					
	17	29.712	53.5	29.618	54	63	40	78	36	52.5	52	54	52	X		S.S.	N.E.			3474					54	56	56		6	7	17					
	18	29.610	55	29.672	52	69	47	67	43	55	54	50	47	X		H	S.S.			3596				1.2	54	56	55		7	7	18					
	19	29.886	55	30.022	57	57	48	75	41	54	51	53	57	X		N.	N.			5895				3	53	55	55		6	6	19					
	20	30.830	57	30.126	47	60	43	75	39	50	52	45	44			H.	S			5412				6.9	52	55	55		6	5	20					
	21	30.032	50	30.020	52	65	39	83	34	55	57	50	48			S	S			5622				8.2	51	55	55		6	4	21					
	22	30.004	52	29.936	57	70	41	83	37	59	55	48	47		56	S.H	S.H			6063				8.4	52	55	55		5	4	22					
	23	29.882	47.5	29.904	50	67.5	34.5	80	30.5	56	53	49	48.5			H	S.S.			6315				8.4	49	53	55		5	4	23					
	24	29.918	57	29.800	52	73	38	79	34	57	55	54.5	52.5			S.S.	S.S.			6448				4.6	52	55	55		5	5	24					
	25	29.918	57	29.912	53	77	50	83	45	59	58	56	55	X		S.S.	S.S.			6655				4.3	56	56	55		4	5	25					
	26	29.712	62	29.954	58.5	70	53.5	79	47	67	63	57	56	X		S.H.	S.H			7010				1.8	58	57	55		6	5	26					
	27	29.982	56	29.988	56	73	46	84	42	57	56	53.5	53			N.W.	S.S.			7233				2.3	55	57	55		4	4	27					
	28	30.058	58.5	30.080	57	64	50	69	46.5	60	59	56	55			N.W.	E			7399					57	57	56		5	5	28					
	29	30.008	55	29.978	56	68	48	80	43	56	55.5	54	53.5			E	S.S.			7564				2.6	56	57	56		5	5	29					
	30	29.874	57	29.734	56.5	74	43	82	42	55.5	55	57	56		03	S.S.	S.			7541				6.6	54	57	56		4	6	30					
	31																															31				
Sums.		18103	142	19111	131	121	142	213	121	142	133	122	142	120																						
Means.		895.57	1622	893.908	1632.0	782.513	62	2403.5	1203.2	17120	1613	15113	1450	14	1.20																					
+ Total Corrections for Instrumental Errors.		786																																		
+ Corrections for Diurnal Range.		+080		+080																																
"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					

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.	stratus.		
f.	fog.	sc.	scud.		
fr.	frost.	s.	sleet.		
h.-fr.	hoar-frost.	s.	snow.		
h.	haze.	so. ha.	solar halo.		
h. d.	heavy dew.	sq.	squall.		
hl.	hail.	sq.	squalls.		
l.	lightning.	t.	thunder.		
li. cl.	light clouds.	t. s.	thunder-storm.		
li. 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 \ddagger = 29.774
 for Temp. (Col. 2), = 29.656 }
 "Corrected Mean" of Barometer at 9 P.M., minus the Correction \ddagger = 29.799
 for Temp. (Col. 4), = 29.867 }
 Mean at Station, corrected, and at 32°, = 29.786
 Correction for height, feet above Mean Sea-level, = 19.6
 Mean, reduced to 32°, and Sea-level, = 29.922
 Highest Reading, corrected for Index error, on the 20 th, = 30.130
 Lowest Do. Do., on the 11 th, = 28.928
 Difference, or Monthly Range, = 1.202

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 25 th, = 77.0
 Lowest in Month, corrected for Index errors, on the 23 th, = 34.5
 Difference, or Monthly Range, = 42.5
 "Corrected Mean" of all the Highest, (Col. 5), = 66.2
 "Corrected Mean" of all the Lowest, (Col. 6), = 45.4
 Difference, or Mean Daily Range, = 20.8
 ** Calculated Mean Temperature of Month, = 55.8
 S.-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the th, = 77.0
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = 77.0
 Lowest at Night, Black Bulb (corrected for Index errors), on the th, = 34.5
 "Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, = 34.5
 Difference of above means or range ("exposed"), = 42.5

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 54.9
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 52.7
 Computed Temperature of Dew-Point, = 50.6
 Do. Elastic Force of Vapour, = 370
 Do. Weight of Vapour in a Cubic Foot of Air, = 86
 Relative Humidity (Saturation = 100), = 86
 RAIN fell on 14 Days; Amount in Inches, = 1.20

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

Observations made and Return verified by John Forrest

(Signed)

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Hands House, County of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.

Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet.

During the MONTH of October 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				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. <i>ention the hour at which Storms, including Thunder and Lightning, began and ended.</i>	Days of Month.							
		9 h. A.M.		9 h. P.M.		Protected in Shade, 4 feet above Ground.		Exposed Black Bulbs. Sun's rays Grass.		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. in Sun's rays	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		No. of flashes in which it fell.	Amount in inches.	Direction.	Force.	Direction.	Force.	Readings of the H. Cup Anemometer. No.	Velocity (0-10), and Species.	Amount (0-10), and Species.	Velocity (0-10), and Species.	Amount (0-10), and Species.	SUNSHINE. Hours.					No. 3 inches.	No. 12 inches.	No. 22 inches.	Temperature of WELL at depth of feet. 16.	Temperature 11 fathoms, and Density.	9 A.M.	9 P.M.
		* No.	inches.	* No.	inches.	No.	No.	No.	No.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.		No.	No.	Direction.	Force.	Direction.	Force.	No.	No.	No.	No.	No.	No.					No.	No.	No.	No.	No.	No.	No.
	1	29.538	55	29.220	56	58	48	65	45	53.5	53	57	50.5	X	S.W.	S.W.	7880					1.2	56	57	56		6	6						1			
	2	28.778	50	29.018	42	46	35	46	30	46	45.5	36	34.5	X	1.07	N	N	8421					5.2	56	56		5	7						2			
	3	28.930	44	28.732	41	45	29	54	24.5	42	39	38	37.5	X	S	N.W.	9317					5.5	45	54	54		6	6						3			
	4	28.914	43	29.226	40	48	35	60	29	43	40	36	34	X	N.W.	N.W.	0204					6.4	45	52	53		6	6						4			
	5	29.124	46	29.188	41.5	56	28	68	24	50.5	47	37.5	36		S.W.	N	1019					5.3	45	51	53		6	4						5			
	6	29.172	40	29.216	43.5	54	27.5	60	26	42	40	42	40.5		S	S	1556					1.4	42	50	53		5	5						6			
	7	29.130	44	29.186	40	53	36.5	63	30	47	43	39	37		N	S	1797					5.4	44	50	52		4	4						7			
	8	29.176	45.5	29.254	45.5	55	35	64	29	48	47	42	41	X	S.H.	S.H.	2181					7	47	50	52		5	5						8			
	9	29.166	46	29.106	46	48.5	42	48	41	46	45	44	43	X	N	N.E.	2294					48	50	51		6	6							9			
	10	29.342	45.5	29.482	44	48	41	56	37	45	42	43	41	X	N	N	2795					2	46	50	51		6	7						10			
	11	29.628	45.5	29.342	46	53	40	62	36	45	42.5	45	44.5	X	N.W.	N.W.	3799					45	50	51		6	6							11			
	12	29.352	52	29.616	54	56	48	60	40	54	53	53	52	X	N.W.	N.W.	4758					1.5	50	50	51		5	6						12			
	13	29.616	54	29.598	51	60	51	78	44	55.5	50	52	47		S.W.	N	5847					3.5	50	51	51		6	6						13			
	14	29.652	48	29.836	46	56	38	67	35	44.5	42.5	42	41	X	H	N	7296					4	49	51	51		5	5						14			
	15	29.898	45	29.874	37	45	39	47	32	43	41.5	36	35		N.E.	N.W.	7291					47	50	51		6	6							15			
	16	29.956	43	30.152	41	50	27	62	22	41.5	40	38	37.5	X	N	N.W.	7640					3.6	43	49	50		6	6						16			
	17	30.228	43	30.236	37	53.5	31	64	26.5	44	42	32	31		H	H	8293					8.5	43	48	50		6	5						17			
	18	30.180	39	30.136	37.5	55.5	24	61	21	34.5	32	33.5	33		H	N.W.	8507					6.4	40	47	49		3	4						18			
	19	30.024	38	29.954	47	58	28	74	24	43	41	42	47	X	H	N.W.	8587					4.4	40	46	49		6	4						19			
	20	30.008	41.5	29.996	39.5	52	35	66	30	46	44	35	34.5	X	N.W.	N.W.	8913					5	43	47	48		6	6						20			
	21	29.876	39.5	29.848	39	45	33	57	28	36	35.5	35	34	X	N	N	9053					4.7	42	47	49		6	6						21			
	22	29.792	37	29.586	37	45	31	60	26	37.5	35	36	35	X	N	N.W.	9185					3	41	46	48		6	6						22			
	23	29.454	35.5	29.264	35	45	31	51	26	34	33	34	33	X	N.W.	N	9473					3.2	40	45	48		6	6						23			
	24	29.072	35.5	29.050	36	39	31	47.5	29	34	33.5	35	34.5	X	N	N	0232					2.4	39	44	47		6	6						24			
	25	29.042	37	29.162	38	40	33	47	30	35	34	36.5	36	X	N	N	1020					2.6	37	43	46		6	7						25			
	26	29.356	37	29.318	35	45	31	52	25	36	34	33	32	X	N	N	1375					3.7	37	42	46		6	6						26			
	27	29.352	36	29.378	36	38	32	45	28	35	34	34	33	X	N.W.	N.W.	2067					1.3	36	42	45		6	6						27			
	28	29.358	33	29.452	35	42.5	26	57	21	33	32	34	33.5	X	N.W.	N	2559					4.3	35	42	45		6	6						28			
	29	29.610	34.5	29.708	36	40	31	45	26	35	34	35	34	X	N.W.	N.W.	2695					8	36	41	44		6	6						29			
	30	29.538	37	29.400	36	43	33	47	28	37	35	36	35.5	X	S.H.	N	2820					37	41	44		6	6							30			
	31	29.708	41	30.016	36	47	32	56	25	43	40	33	32	X	N.E.	N	3892					4.3	38	41	43		6	6						31			
Sums.		13144	154	12155	152	15	12	17785	956	1313	103	131	115									13	9	12													
Means.		913.974	1328	924.820	1316	1520	1049	1778.5	956	1317.5	1250	1206.5	1168.0									1338	1483	1539													
+ Total Corrections for Instru- mental Errors.		29.483	423	29.504	411	49.0	362	57.3	30.8	42.2	40.3	38.6	37.7	24	670							91.5	43.2	47.8	49.6		57	57									
+ 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						

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.	stratus.
f.	fog.	sc.	scud.
h. fr.	hoar-frost.	s.	sleet.
h.	haze.	so. ha.	solar halo.
h. d.	heavy dew.	sq.	squall.
h.	hail.	sq.	squalls.
l.	lightning.	t.	thunder.
li. cl.	light clouds.	t. s.	thunder-storm.
li. 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 $\frac{1}{1000}$ for Temp. (Col. 2), = 29.547
 "Corrected Mean" of Barometer at 9 P.M., minus the Correction $\frac{1}{1000}$ for Temp. (Col. 4), = 29.551
 Mean at Station, corrected, and at 32', = 29.549
 Correction for height, feet above Mean Sea-level, = 200
 Mean, reduced to 32', and Sea-level, = 29.749
 Highest Reading, corrected for Index error, on the 17th, = 30.236
 Lowest Do. Do., on the 3th, = 28.732
 Difference, or Monthly Range, = 1.504

S.R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 13th, = 60.0
 Lowest in Month, corrected for Index errors, on the 18th, = 24.0
 Difference, or Monthly Range, = 36.0
 "Corrected Mean" of all the Highest, (Col. 5), = 49.0
 "Corrected Mean" of all the Lowest, (Col. 6), = 34.2
 Difference, or Mean Daily Range, = 14.8
 ** Calculated Mean Temperature of Month, = 41.6
 S.R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 19th, = 74.0
 "Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = 57.3
 Lowest at Night, Black Bulb (corrected for Index errors), on the 28th, = 21.0
 "Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, = 30.8
 Difference of above means or range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 40.4
 Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 39.0
 ** Computed Temperature of Dew-Point, = 37.2
 ** Do. Elastic Force of Vapour, = 222
 ** Do. Weight of Vapour in a Cubic Foot of Air, = 89
 ** Relative Humidity (Saturation = 100), = 89
 RAIN fell on 24 Days; Amount in Inches, = 6.70

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.		8	2	1	1	1	4	6	8		
P.M.		9	1	1	2	1	5	12			
Mean.		8	2	1	1	2	2	5	19	0	

Observations made and
Return verified by

John Forrest

(Signed)

OBSERVATIONS,

correct numbering of the scale or of every instrument; the rejection of Thermometers the frameworks of which are not likely to stand exposure to the weather, as shown in the past by repeated and annoying breakages of Thermometers of similar construction; and as regards Maximum Thermometers, other Negretti and Zambra's, or Philip's, whether they will act at the highest temperatures they may be recommended to register. By the laws of the Society, Members and Observers have a right to have their instruments compared by the Secretaries, and to advise with him regarding the purchase of instruments. Very great care should be bestowed on the Observations of the Wind, the accuracy of which, both as regards Direction and Force, is so essential towards the right discussion of many of the more important problems of the science of the Winds.

A Wind-Vane ought to be placed at least 12 feet above the surface of the ground, and in a position where it is not liable to be disturbed by any object.

1. As regards direction, the direction in which the wind is blowing, especially when the Vane is stationary, and when the Vane is flexible, reference may be made to the direction of smoke, etc., in well-exposed situations. Careful observations are recommended to be made on the changes in the direction of the wind; and during storms, extra observations at every hour of Greenwich time. Such

but its observations made at different stations are incomparable, thus rendering it impossible to compare the climates of places with each other as regards their most important features. Professor Phillips, and Negretti and Zambra's Maximum Thermometers, and Kieffer's Minimum Thermometer, are recommended. It is recommended that these Thermometers be graduated on the glass stem. The

column of spirit breaking, and of the spirit distilling by high temperature and lodging at the top of the tube. This derangement is of occasional occurrence with protected Thermometers, but a systematic examination of Minimum Thermometers. Hence a systematic examination of Minimum Thermometers ought to be a regular part of the work carried on by each Observer. Fortunately, Spirit Thermometers may be easily set right by any one, when the column of spirit changes to asphalt. Let the thermometer be taken out of the liquid, and the spirit column gradually raised to the head and then flexibly swung down towards the bulb, the oil being on the principle of centrififugal force, to the bottom of the tube. The decanted portion of spirit still unites with the remaining portion. A few throws, or swifter strokes, will generally be

For a summary, spirit phenomena may be easily so regarded. Let the many one, when the column of spirit changes to separate. The thermometer be taken in the hand by the end farthest from the bulb, raised above the head, and then forcibly swung down towards the feet; the object being, on the principle of centrifugal force, to drive down the detached portion of spirit till it unites with the column. A few throws, or swinging strokes, will generally be sufficient to effect this. The thermometer will then be found to be

sufficient for the purpose; after which the thermometer should be placed in a slanting position, to allow the rest of the spirit still adhering to the sides of the tube to drain down to the column. But another method must be adopted, if the portion of spirit in the bulb of the tube be small. Heat should be applied slowly and cautiously to the top end of the tube, until the vapour by the heat will condense on the interior of the bulb, and the spirit will acquire by the weight of the condensed vapour the requisite amount of spirit. Care must be taken that the heat is not applied too quickly; for, if this be done, the tube will break and the instrument be destroyed. The best way of the requisite amount of heat is by bringing the end of the tube slowly down towards a minute flame from a gas-burner; or, if gas be not at hand, a piece of heated metal will serve instead.

The bulbs of the Thermometers for registering the greatest heat from sun's rays, and the least from radiation

Black bulb Thermometers during night, have a black coating, which may easily be made, or mended, by the application of a mixture of lampblack and printer's ink. They are placed in shallow lacquered boxes, whose sides protect the bulbs from the wind. The Maximum should be freely exposed to the sun, and the Minimum should rest on wooden supports a few inches from the surface of the grass, in an open situation. Snow must not be allowed to cover either of these Thermometers; nor the sun's heat to affect the Minimum Thermometer by distillation. Black-bulbs enclosed in "glass jackets" may also be used, being indeed preferable to the bare bulb. It must, however, be added, that the whole subject of the observation of Solar and Terrestrial Radiation is not yet in a sufficiently advanced state to warrant the exclusive recommendation of any one of these methods.

above. It must, however, be added, that the whole subject of a direct observation of Solar and Terrestrial Radiation is not, yet in a sufficiently advanced state to warrant the exclusive recommendation of any one of these methods.

The Hygrometer in use at the Society's Stations consists of two Thermometers usually, but not necessarily, mounted on one frame. As apparently slight deviations from the approved form of this apparatus seriously vibrate the Hygrometer.

attached, the frame must be such as will bring the tubes forward an inch from any board on which it may be suspended; the water in the tubes may be covered, and altogether placed to slide, and a little weight may bring the level of the wet bulb, but in no case under the bulbs: the thermometer must be of medium fineness, and fastened at the neck of the thermometer by the cotton, which also supplies it with water. It must be seen by the Observer that the mixture is always clean and moist, and the water pure. In frosty weather, oleum tartari must be added to the water, and the mixture must be stirred. The bulb must be secured by immersion from 15 to 30 minutes before the hour of observation. From the film of ice thus formed evaporation will proceed as from the moist cloth in ordinary circumstances.

In reading the Timmermans great care must be taken to bring

In reading the thermometer, the eye must be exactly opposite the tip of the index column of mercury. The reading ought to be taken to tenths of a degree, and noted in decimals. Thus, if the thermometer will read— 39° , or 40° ; or again, $40^{\circ}.4$, and $40^{\circ}.6$, according as it indicates a little over 40° , or 40° respectively. So also, if it reads $40^{\circ}.7$, and $40^{\circ}.8$, respectively, it must be less than 41° . In reading Rutherford's Minimum Thermometer, the indication of that end of the index surface of the spirit is alone useful. On opening the Thermo-Indicator Box the Dry and Wet Bulb Thermometers are at first, and rapidly, read, inasmuch as they are readily affected by heat and cold. The observer should note the temperature readings of t_1 and a_1 m.

in the 24-hours preceding. It is not a matter of indifference when the Self-Registering Thermometers are read, since, in winter at least, the extremes may occur at any hour; and it is necessary to refer their occurrence to their proper meteorological day. In the Society's schedules, the indications registered on the 24th and extending till 9 a.m. on the 31st are taken as the day's, and extending till 9 a.m. on the 31st.

No instrument ought to be used for Meteorological purposes till it has been carefully tested by comparison with a standard Thermometer. When such Thermometers are ascertained to be correct, they are then used for the verification of a standard Thermometer. When such Thermometers are not graduated in the stem, but merely on an attached scale, undergo repairs, they are very liable to be moved from their position on the Scale, and ought never afterwards to be used without being re-tested. The Self-Registering, especially the Minimum Thermometers, ought frequently to be compared with the dry bulb of the Hygrometer. The freezing-point of each Thermometer, marked by a scratch on the tube, ought to be tested once a year, in snow or melting ice.

In selecting instruments, the following points require attention. :- The divisions of the venter of Barometers in reference to their scales, and the perfect freedom of the Barometer from air; the

[illegible]

SHRUBS, &C.		FRUITS.		MIGRATORY BIRDS.		First Arrival.	Departure.
Barberry,	Apple,		Cuckoo,				
Broom,	Cherry,		House-Swallow,				
Bouthee or Elder,	Black Currant,		Cartlew,				
Hazel,	Gean,		Lapwing,				
Holly,	Peach,		Sand-Martin,				
Laburnum,	Pear,		Starling,				
Mezerion,	Strawberry,		Rail or Corn Crake,				
Mountain Ash or Rowan,							
Red Flowering Currant,							
Rhododendron Ponticum,							
Whin,							

Have the goodness also to state any information you may be able to collect relative to the Crops of Grain, Hay, Potatoes, Turnips, &c., which plentifully, or in perfection, whether any have suffered from blight, disease, etc. Whether zoote diseases prevails among cattle; and the Agricultural condition of the district generally.

1 100

122 George Street,

EDINBURGH.

Scottish Meteorological Society,

BOOK POST.

SCOTTISH METEOROLOGICAL SOCIETY.

Observations taken at Gualds House, County of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.
Height of Cistern of the Barometer above Mean Sea-Level 180 feet, above Ground 3 feet. During the MONTH of November 1895.

The Hours of Observation are of Greenwich Time.

ELECTRICITY.	Days of Month.	BAROMETER.				SELF-REGISTERING THERMOMETERS. Read Daily, at 9 P.M.				HYGROMETER.				Rain.	WIND.				CLOUDS.				THERMOMETERS under Ground.				SEA.	OZONE.	GENERAL REMARKS.		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.			No. of Days in which it fell.	Amount in inches.	9 h. A.M.		9 h. P.M.		9 A.M.		P.M.		9 h. A.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Barometer. * No.	Attached Ther- mometer	No.	Attached Ther- mometer	Max. No.	Min. No.	Max. in Sunrays	Min. on Grass.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.				Direction.	Force	Direction.	Force	Readings of the H. Cup Anemometer. No.	9 h. A.M.	Velocity (0-10), and Direction.	Amount (0-10), and Species.	Velocity (0-10), and Direction.	Amount (0-10), and Species.						SUNSHINE. Hours.	No. 3 inches.	No. 12 inches.	No. 22 inches.	Temperature of Well at depth of feet. No.	Temperature at 1 fathom, and Dew-Point.	9 A.M.	9 P.M.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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NOTATION USED IN GENERAL REMARKS.

a.	denotes aurora.	m.	denotes meteor.
ci.	" cirrus.	ms.	" meteor.
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.	" stratus.
f.	" fog.	sc.	" scud.
fr.	" frost.	s.	" sleet.
h. fr.	" hoar-frost.	s.	" snow.
h.	" haze.	so. ha.	" solar halo.
h. d.	" heavy dew.	sq.	" squall.
hl.	" hail.	sg.	" squalls.
l.	" lightning.	t.	" thunder.
li. cl.	" light clouds.	t. s.	" thunder-storm.
li. 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 \ddagger = 29.566
for Temp. (Col. 2), = 29.605 - 39 = 29.566
"Corrected Mean" of Barometer at 9 P.M., minus the Correction \ddagger = 29.546
for Temp. (Col. 4), = 29.577 - 31 = 29.546
Mean at Station, corrected, and at 32' = 29.556
Correction for height, feet above Mean Sea-level, = 20.0
Mean, reduced to 32', and Sea-level, = 29.556
Highest Reading, corrected for Index error, on the 24th, = 30.336
Lowest Do. Do., on the 11th, = 28.468
Difference, or Monthly Range, = 1.868

S-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 7th, = 55.0
Lowest in Month, corrected for Index errors, on the 2th, = 21.5
Difference, or Monthly Range, = 33.5
"Corrected Mean" of all the Highest, (Col. 5), = 46.2
"Corrected Mean" of all the Lowest, (Col. 6), = 33.2
Difference, or Mean Daily Range, = 13.0
** Calculated Mean Temperature of Month, = 39.7
S-R. THERMOMETER, Black Bulb in Sun, Highest, (corrected for Index Errors), on the 8th, = 65.0
"Corrected Mean," (Col. 7), of Black Bulb, Max. in Sun, = 50.0
Lowest at Night, Black Bulb (corrected for Index errors), on the 2nd, = 18.0
"Corrected Mean," (Col. 8), of Black Bulb, Min. on grass, = 29.2
Difference of above means or range ("exposed"), =

HYGROMETER, Mean (corrected) A.M. and P.M. Reading of Dry Bulb, (Cols. 9 and 11), = 39.2
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 37.6
Computed Temperature of Dew-Point, = 35.5
Do. Elastic Force of Vapour, = 2.08
Do. Weight of Vapour in a Cubic Foot of Air, = 87
Relative Humidity (Saturation = 100), = 87
RAIN fell on 18 Days; Amount in Inches, = 2.47

WIND.		SUMMARY.									
Direction.		N	NE	E	SE	S	SW	W	NW	Calm or Variable.	Mean Force.
A.M.				4	7	6	4	4	5		
P.M.			1	2	10		4	11	1		
Mean.		0	1	3	8	3	4	8	3	0	

Observations made and
Return verified by

John Forrest

No return for Ther in sun and on grass during Snow Storm on Dec: 6th, 7th, 8th & 9th, owing to high wind from N.W., covering them with snow to the depth of 18 inches and 2 feet each night.

Haddo House

METEOROLOGICAL SOCIETY.

City of Aberdeen, in Lat. 57°24', Long. 2°14', Distance from Sea 12 miles.

Feet, above Ground 3 feet.

During the MONTH of December 1895.

The Hours of Observation are of Greenwich Time.

ELECTR.	Days of	WIND.																		CLOUDS.				THERMOMETERS under Ground.			SEA.	OZONE.	GENERAL REMARKS.	Days of Month.							
		9 h. A.M.		9 h. P.M.		Projected in Shade, 4 feet above Ground.		Exposed Black Bulbs.		9 h. A.M.		9 h. P.M.		No. of Days in which it fell.	Amount in inches.	Readings of the H. Cup Anemometer.		9 A.M.		P. M.		SUNSHINE.	9 h. A.M.			Temperature of Wind at height of feet, No.					Temperature and Density.	0-10.					
		Barometer.	Attached Thermometer.	Barometer.	Attached Thermometer.	Max.	Min.	Max.	Min.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.			Direction.	Force.	Direction.	Force.	No.	Velocity (0-6) and Direction.		Amount (0-10), and Species.	Velocity (0-6) and Direction.	Amount (0-10), and Species.							No.	9 inches.	12 inches.	22 inches.	9 A.M.	P. M.
1	29.388	43	29.486	36.5	44	31.5	45	27	40	38.5	34	32			S	W	3294						3	40	42	42		6	6		1						
2	29.540	40	29.128	45	48	28	46	21.5	37.5	35.5	47	45	+		S.W	S.E	3581						3	36	42	42		6	6	Gale	2						
3	29.256	38	29.216	36.5	47	31	47	24	36.5	34	33.5	32			W	W	4778						4.7	37	41	42		6	6		3						
4	29.224	37	28.822	45	50	32	48	26	36.5	34	45	44	+		S.W	S.W	6101							36	40	42		6	6		4						
5	28.566	40	28.650	34	40	28	40	25	38	36	33	31	+		W	N.W	7746						1.8	40	40	41		6	7	Gale & Snow Storm	5						
6	28.612	32	28.644	31.5	35	28			28.5	28	30	29.5	+		W	N.W	10345						1.3	36	40	41		6	6		6						
7	29.002	34.5	29.376	31	35	28.5			33	32.5	30	29.5	+		N.W	W	2467							36	39	40		6	6	" "	7						
8	29.564	32.5	29.636	32.5	37	29			32.5	32	31	30.5	+		N.W	W	3651							35	39	40		6	6	Gale & Hail Showers.	8						
9	29.160	37.5	29.130	38	43	28			37	35	36	35	+	2.85	S.W	W	4223						3.4	35	38	40		6	6		9						
10	29.316	37	29.444	34	39	31	40	26	37.5	36	31	30			W	W	5886						3	35	38	40		6	6		10						
11	29.488	34	29.560	33	41	28	43	23	30	29	31	30			S.W.	W	6290						3	34	38	40		6	7		11						
12	29.208	37	28.534	34	39	19.5	38	18	35	33.5	33	32	+		S	S.E	6290							33	37	40		6	7		12						
13	28.788	38	29.266	37	38	29	38	24	37.5	37	36	35	+		N.W	N.W	6893							34	36	39		7	6		13						
14	29.230	38	29.004	39	41	28	40	25	36	34	40.5	40	+		S	S	7151							33	36	38		6	7		14						
15	28.992	32	28.588	39	43	24	42	22	30	29.5	40.5	38.5	+	1.32	N.E.	S	7422							33	36	38		6	7		15						
16	28.816	40	29.040	40	43	38	43	33	40	38	40	39.5	+		S.	E	8180						1	36	36	38		6	6		16						
17	29.468	42	29.642	40	43	37	43	34	42	40	39	38	+		S.E.	S.E	9741							38	37	38		6	6		17						
18	29.676	39.5	29.688	39	41	35	41	30	39	38.5	39	38.5	+		E	S.E	9871							37	37	38		6	6		18						
19	29.704	38	29.698	36	38	31	38	29	36	35.5	33.5	33	+		S.W.	N.W	0103							37	37	38		6	7		19						
20	29.734	38.5	29.756	30	34.5	30	34	27	31.5	30	28	27.5	+		W.	W	0120							35	37	38		6	6		20						
21	29.728	30.5	29.700	28	32	22	32	19	28.5	28	23	23			W.	W	0120							33	37	38		6	5		21						
22	29.588	28.5	29.582	34.5	36.5	20	35	18	26	26	35.5	34.5	+	1.10	S.E.	S.E.	0120							33	36	38		5	7		22						
23	29.632	38	29.660	38	40	35	39	30	38.5	37.5	37.5	36	+		S.E.	S.E.	0487							33	36	38		7	6		23						
24	29.648	37	29.648	37	38	35	38	33	36	34	36	34.5	+		S.E.	S.E.	2504							35	36	38		6	6		24						
25	29.742	37	29.812	37	37	33	37	32	36	33	34	33	+		E	S.E.	5205							35	36	37		6	6		25						
26	29.860	37	29.796	36	36	34	37	32	35.5	34	35	32	+		E	E.	6902							35	36	37		6	7		26						
27	30.058	34	30.128	36	36	31.5	35	30	32.5	31.5	35	33.5			N.W	S.E	7076							34	36	37		6	6		27						
28	30.008	35.5	29.664	38	38	32	38	30	35.5	34	37	36	+		S.	S.E	7080							34	36	37		6	6		28						
29	29.424	40	29.382	40	42	38	43	35	40	39.5	40	39.5	+	78	S.	N.W	7972							37	36	37		6	6		29						
30	29.356	41	29.356	41.5	43.5	38	43.5	36	41	40.5	41	40.5	+		N.W.	N.E.	7976							38	37	37		6	5		30						
31	29.588	42	29.678	42.5	43	39	42	39	41	40.5	42.5	42	+	19	S.E.	S.E.	8002							39	38	37		6	6		31						
Sums.	1514.5	44.4	1516.3	34.3	141	162			146	152	113	136												1102	1166	1206											
Means.	29.364	106.4	29.385	106.4	113.5	123.5	95.2	108.5	74.5	110.4	106.5	107.5	106.5	25.6	24									20.2	35.5	37.6	38.9		6	6.2							
+ Total Corrections for Instrumental Errors.	+0.80		+0.60		40.0																																
+ 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							

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.	" stratus.
f.	" fog.	sc.	" scud.
fr.	" frost.	s.	" sleet.
h.-fr.	" hoar-frost.	s.	" snow.
h.	" haze.	so. lu.	" solar halo.
h. d.	" heavy dew.	sq.	" squall.
hl.	" hail.	sq.	" squalls.
l.	" lightning.	t.	" thunder.
li. ci.	" light clouds.	t. s.	" thunder-storm.
li. 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

NOTATION USED IN GENERAL REMARKS.

a.	denotes aurora.	m.	denotes meteor.
ci.	" cirrus.	ms.	" meteora.
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.	" stratus.
fr.	" fog.	sc.	" squall.
fr.	" frost.	s.	" sleet.
h. fr.	" hoar-frost.	so. ha.	" solar halo.
h.	" haze.	sq.	" squall.
h. d.	" heavy dew.	sq.s.	" squalls.
hl.	" hail.	t.	" thunder.
l. cl.	" light clouds.	t. s.	" thunder-storm.
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lu. co.	" lunar corona.	g.	" gale of wind.
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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 ++ for Temp. (Col. 2), = 29.479 22 = 29.457
"Corrected Mean" of Barometer at 9 P.M., minus the Correction ++ for Temp. (Col. 4), = 29.465 24 = 29.440
Mean at Station, corrected, and at 32', = 29.450
Correction for height, feet above Mean Sea-level, = 2.02
Mean, reduced to 32', and Sea-level, = 29.652
Highest Reading, corrected for Index error, on the 27th, = 30.128
Lowest Do. Do., on the 12th, = 28.534
Difference, or Monthly Range, = 1.594

S.-R. THERMOMETER, (in shade, etc.), Highest in Month, (corrected for Index Errors), on the 24th, = 50.0
Lowest in Month, corrected for Index errors, on the 12th, = 19.5
Difference, or Monthly Range, = 30.5
"Corrected Mean" of all the Highest, (Col. 5), = 40.0
"Corrected Mean" of all the Lowest, (Col. 6), = 30.7
Difference, or Mean Daily Range, = 9.3
** Calculated Mean Temperature of Month, = 35.4
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), = 35.7
Mean (corrected) A.M. and P.M. Reading of Wet Bulb, (Cols. 10 and 12), = 34.6
Computed Temperature of Dew-Point, = 33.0
Do. Elastic Force of Vapour, = 19.0
Do. Weight of Vapour in a Cubic Foot of Air, = 8.7
Relative Humidity (Saturation = 100), = 87
RAIN fell on 25-Days; Amount in Inches, = 6.24

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

Observations made and Return verified by

John Forrest

(Signed)

