☞ To be filled up, and sent on the first of each month, in an envelope, addressed to the "Commissioner of Agriculture, Washington, D. C."

REGISTER OF METEOROLOGICAL OBSERVATIONS, UNDER THE DIRECTION OF THE SMITHSONIAN INSTITUTION, ADOPTED BY THE COMMISSIONER OF AGRICULTURE FOR HIS ANNUAL REPORT.

310 352

Place of Observation Powhatan Hill *County of* King George *State of* Virginia

Latitude 38° 13' *Longitude* 77° 12' *Height above the sea* 150 feet

Name and address of Observer Edward T. Tayloe, Comorn P.O., King George County *For the month of* April, 1869.

Day of Month	Thermometer 7 A.M.	Thermometer 2 P.M.	Thermometer 9 P.M.	Mean	Time of beginning of rain or snow	Time of ending of rain or snow	Amount of rain or melted snow in gauge, in inches	Depth of snow, in inches	Clouds (7 A.M., 2 P.M., 9 P.M.: amount of cloudiness, kind of clouds, motion of higher clouds — velocity, direction)	Winds 7 A.M. Direction	Force	Winds 2 P.M. Direction	Force	Winds 9 P.M. Direction	Force	Day of Month
1	42	50	46						Peach in bloom.	E		E		E		1
2	44	52	49		½ p 2 P.M.	about midnight	0.045			NW		SE		N		2
3	40	49	39							NW		NW		NW		3
4	37	48	39						skim of ice	SW		W		.		4
5	40	57	48						do. frost	SW		SW		W		5
6	~~49~~	~~65~~	~~49~~ 49		midnight		.045			SW		W				6
7	49	62	49						Spirea, Pyrus japonica, wild plum, plum, cherry, elm, in bloom.	.		NW		NW		7
8	46	64	55						frost	SW		W		W		8
9	47	46	44		10 p. P.M.	2 P.M.	.02			E		N		W		9
10	43	41	41		9 P.M.	midnight				.		NE		.		10
11	35	35	35			3 P.M.	.79		snowing at daybreak to 3 P.M. 3 in. deep	NE		NE		NW		11
12	(33)	50	42		in the night	}	.025			NW		S		N		12
13	37	47	42							NW		NW		NW		13
14	40	46	41							NW		NW		NW		14
15	42	56	50						heavy frost. skim of ice. Aurora Borealis very bright.	NW		SW		SE		15
16	49	68	59						the Aurora continued thro' nearly the whole night.	S		S		SE		16
17	58	67	65							S		SW		E		17
18	53	79	73							NE		SW		SE		18
19	69	77	72						Sassafras in bloom.	S		SW		S		19
20	70	78	68		½ p 3 P.M. again, during night	6 P.M.	1.10		Red bud " " — also purple magnolia again whippoorwill.	SE		S		S		20
21	67	73	65						Rain of 20th began with heavy blow from the West — martins.	W		W		W		21
22	63	75	66							N		E		E		22
23	66	(82)	74							SE		S		SE		23
24	70	72	66		½ p 3 P.M.	3 P.M.	.04		apple, lilac, in bloom.	S		N		SW		24
25	57	63	56							N		N		NW		25
26	~~56~~	~~72~~	65						dogwood in bloom.	W		SW				26
27	66	81	74						Yellow jasmine in bloom.	W		S		W		27
28	66	78	71							.		W		S		28
29	62	63	55		after midnight — [illegible]	[illegible]	.135			S		N		E		29
30	55	60	55						azalea (wild honeysuckle) in bloom.	SE		E		E		30
31	1551	1861	1653													31
Sums.	1446	1724	1539				In. 2.20 ✓									Sums.
Means.			5													Means.
	51.7	62.0	55.1													

THE OBJECT of these observations is to enable the Smithsonian Institution, in connexion with the Department of Agriculture, to prepare a series of Maps to illustrate the face of the sky, &c., over the United States, for each day in the year, and thus to study the rise, progress, and course of American storms. Observers who have a Barometer, Psychrometer, etc., will be supplied with other blanks, and also full directions for using all the instruments, by the Smithsonian Institution.

(55-98)

EXPLANATION OF THE ABOVE COLUMNS.

THERMOMETER IN THE OPEN AIR.

This is intended for the register of the thermometer, and for the daily mean or average of the three observations.

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RAIN AND SNOW.

Under this head are entered the time of beginning and ending of the fall of rain or snow, and the amount, in inches and hundredths, of rain or melted snow collected in a gauge at the surface of the ground; also the depth of the snow. Rain to be indicated by R, and snow by S. When there is no rain or snow, mark 0.

CLOUDS.

Under this general head are entered three daily observations on the aspect of the sky, &c. 1st. The "Amount of cloudiness," designated by figures, 10 being entire cloudiness; 5 half cloudiness; 0 entire clearness; and intermediate numbers in proportion. 2d. "Motion of the higher clouds," which pass directly over the head of the observer, as given to eight points of the compass. The direction *from* which they move is to be given. This observation is important, as the course of the *higher clouds* is sometimes different from that of the *surface wind*, which is given in another column. 3d. The "Velocity," or rate of motion, 10 being the highest, and 0 apparent rest. 4th. The description or "Kind of clouds," to be entered by means of the following abbreviations: *St.* Stratus: *Cu.* Cumulus: *Cir.* Cirrus; *Nim.* Nimbus; *Cir. st.* Cirro-stratus; *Cu. st.* Cumulo-stratus; *Cir cu.* Cirro-cumulus.

WINDS.

This is for the record of the direction *from* which the wind is blowing as indicated by a vane, and its force by estimation. The direction is entered in eight points of the compass: N., N.E., E., S.E., S., S.W., W., N.W. The force is to be estimated and registered by the following table, in figures, from 1 to 10:

1.	Very light breeze	2 miles per hour.
2.	Gentle breeze	4 " "
3.	Fresh breeze	12 " "
4.	Strong wind	25 " "
5.	High wind	35 " "
6.	Gale	45 "
7.	Strong gale	60 "
8.	Violent gale	75 " "
9.	Hurricane	90 " "
10.	Most violent hurricane	100 " "

☞ SEE OTHER SIDE.