☞ 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.

323 369

Place of Observation Powhatan Nile County of King George State of Virginia

Latitude 38° 13' Longitude 77° 12' Height above the sea 100 feet

Name and address of Observer Edward Thornton Taylor, Osmus, King Geo. C. H. Va. For the month of May, 1870.

Day of Month.	THERMOMETER IN THE OPEN AIR. 7 A. M.	2 P. M.	9 P. M.	Mean.	RAIN AND SNOW. 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. Amount of cloudiness.	Kind of clouds.	MOTION OF HIGHER CLOUDS. Velocity.	Direction.	2 P. M. Amount of cloudiness.	Kind of clouds.	MOTION OF HIGHER CLOUDS. Velocity.	Direction.	9 P. M. Amount of cloudiness.	Kind of clouds.	MOTION OF HIGHER CLOUDS. Velocity.	Direction.	WINDS. 7 A. M. Direction.	Force.	2 P. M. Direction.	Force.	9 P. M. Direction.	Force.	Day of Month.
1	56	76	67																		NW		N		E		1
2	58	66	59																		E		NE		E		2
3	53	58	56		9½ A.M. 2½ P.M.	7½ P.M.	0.120														NE		E		N		3
4	59	79	74																		W		W		.		4
5	67	65	58																		E		SE		SE		5
6	58	74	68		10½ A.M.	12½ P.M.	.365														SE		S		E		6
7	65	75	62		3 P.M.		.01														SW		SE		SE		7
8	69	74	62		11 A.M.	2 P.M.	.16														.		SW		W		8
9	58	73	64																		.		W		.		9
10	59	70	58		7 P.M.																SW		SW		.		10
11	55	55	52			12 M.	.635														SW		W		.		11
12	54	70	62		9 P.M.		.01														SW		SW		N		12
13	59	56	57		8½ A.M. 10½	3 P.M.	.29														.		N		W		13
14	58	73	67																		W				.		14
15	63	21	73																		NW		S		SE		15
16	67	82	74																		SW		N		E		16
17	60	76	64		10 P.M.	10½ P.M.	.02														NW		N		.		17
18	59	67	63																		.		S		SE		18
19	60	77	72																		S		S		SE		19
20	71	80	70		7½ P.M.	6½ P.M.	.36														S		SW		W		20
21	68	80	74		midnight 21/22		.075														S		W		SW		21
22	72	75	68																		NE		N		SE		22
23	65	74	70		midnight 23/24		.495														SW		SE		SE		23
24	68	77	72		9 P.M.	10 P.M.	.10														SW				SW		24
25	63	80	75																						SE		25
26	63	62	62		10 A.M.		.10														SE		E		E		26
27	58	57	56				.89														NE		E		E		27
28	54	57	56				.15	1.515													N		N		.		28
29	58	65	61		5 P.M.		.075														.		W		.		29
30	61	69	67																		.		S		E		30
31	64	72	66		6 P.M. & 10½ P.M.		.215														SE		SE		SE		31
28 days	Sums. 1910	2195	2014				In: 4.15																				Sums.
	Means. 616	708	650				√	In 3.63 the average of twenty-one years.																			Means.

Now deduct

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.

(65,60)

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.

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.