488. Ark 19

(Form H.) ☞ To be filled up, and sent on the first of each month, in an envelope addressed to "The Chief Signal Officer, U. S. Army, Washington, D. C."

WAR DEPARTMENT, SIGNAL SERVICE U. S. ARMY,

DIVISION OF TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

1.97

265 256

Place of Observation: Snowville, County of Pulaski Co, State of Va.

Latitude 37; Longitude 80; Height of ground above the Sea, 1800 feet. } METEOROLOGICAL RECORD for the month of Jan, 1879

Name and Post-Office address of Observer: Elmina Drake Slusher Snowville

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 and melted snow in gauge, in inches.	Depth of snow, in inches.	Clouds. 7 A.M. Upper Clouds. Kind and amount.	Direction moving from.	Lower Clouds. Kind and amount.	Direction moving from.	2 P.M. Upper Clouds. Kind and amount.	Direction moving from.	Lower Clouds. Kind and amount.	Direction moving from.	9 P.M. Upper Clouds. Kind and amount.	Direction moving from.	Lower Clouds. Kind and amount.	Direction moving from.	Winds. 7 A.M. Direction.	Force.	2 P.M. Direction.	Force.	9 P.M. Direction.	Force.	Day of Month.
1	31	38	36		rain				10	10	10																1
2	38	22	12																								2
3	2	8	2																								3
4	0	16	10																								4
5	2	10	11																								5
6	10	20	16						10	10	10																6
7	4	42	30																								7
8	30	48	39		rain				10	10	10																8
9	45	47	38						10	10	10																9
10	10	29	22				10/13	2in	10	10	10																10
11	18	40	35						10	10	10																11
12	34	39	34				26/10		10	10	10																12
13	32	45	30								8																13
14	36	49	40						2	10	10																14
15	33	33	32						9	10	10																15
16	32	52	36		rain & sprinkle				4	or 2	10																16
17	29	44	42						8	10	10																17
18	42	44	38		rain & sprinkle				10																		18
19	23	25	15																								19
20	15	28	27		snow		.02	2/10 in		10	10																20
21	24	49	48																								21
22	42	54	42																								22
23	52	57	32						10		5																23
24	27	52	41																								24
25	41	61	45						8																		25
26	24	58	40																								26
27	29	55	52							8	10																27
28	50	61	50						8	8																	28
29	49	60	50						10	10	10																29
30	37	50	33		rain		1/10		5	5	5																30
31	32	41	37						10	10	8																31
Sums.	868	1305	1014				3.72																				Sums.
Means.	28.0	42.1	32.7	33.0																							Means

THE OBJECT of these observations is to enable the Chief Signal Officer, U. S. Army, 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 will be supplied with full directions for using all the instruments, on application to the Chief Signal Officer, Washington, D. C.

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. Fractions of degrees should be recorded in tenths, thus: 46°.5, 37°.3, 72°.1, &c.

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. Amount of rain or melted snow in gauge should be recorded in inches, tenths, and hundredths, thus: 1.25, 6.03, 0.01, &c.

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 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: *S.*—Stratus; *Cu.*—Cumulus; *C.*—Cirrus; *N.*—Nimbus; *C. s.*—Cirro-stratus; *Cu. s.*—Cumulo-stratus; *C. 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 figures from 1 to 10, as in the first column of the following table. The figures in the last column, expressing the number of miles per hour, are *not to be used* in the register. A little practice will enable Observers to make use of the figures in the first column, corresponding to light, gentle, fresh, strong, &c., with accuracy, and it is very important that such should be the case to make the record reliable.

0. Calm.									
1. Very light breeze,	varies	between	1	and	2	miles	per	hour.
2. Gentle breeze	"	"	3	"	5	"	"	"
3. Fresh breeze,	"	"	6	"	14	"	"	"
4. Strong wind,	"	"	15	"	29	"	"	"
5. High wind,	"	"	30	"	39	"	"	"
6. Gale,	"	"	40	"	59	"	"	"
7. Strong gale,	"	"	60	"	69	"	"	"
8. Violent gale,	"	"	70	"	79	"	"	"
9. Hurricane,	"	"	80	"	99	"	"	"
10. Most violent hurricane,	"	from 100 upward.							

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