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U. S. DEPARTMENT OF AGRICULTURE.

REPORT FOR FEBRUARY, 1897.

VIRGINIA SECTION

OF THE

CLIMATE AND CROP SERVICE

OF THE

WEATHER BUREAU,

IN COOPERATION WITH THE

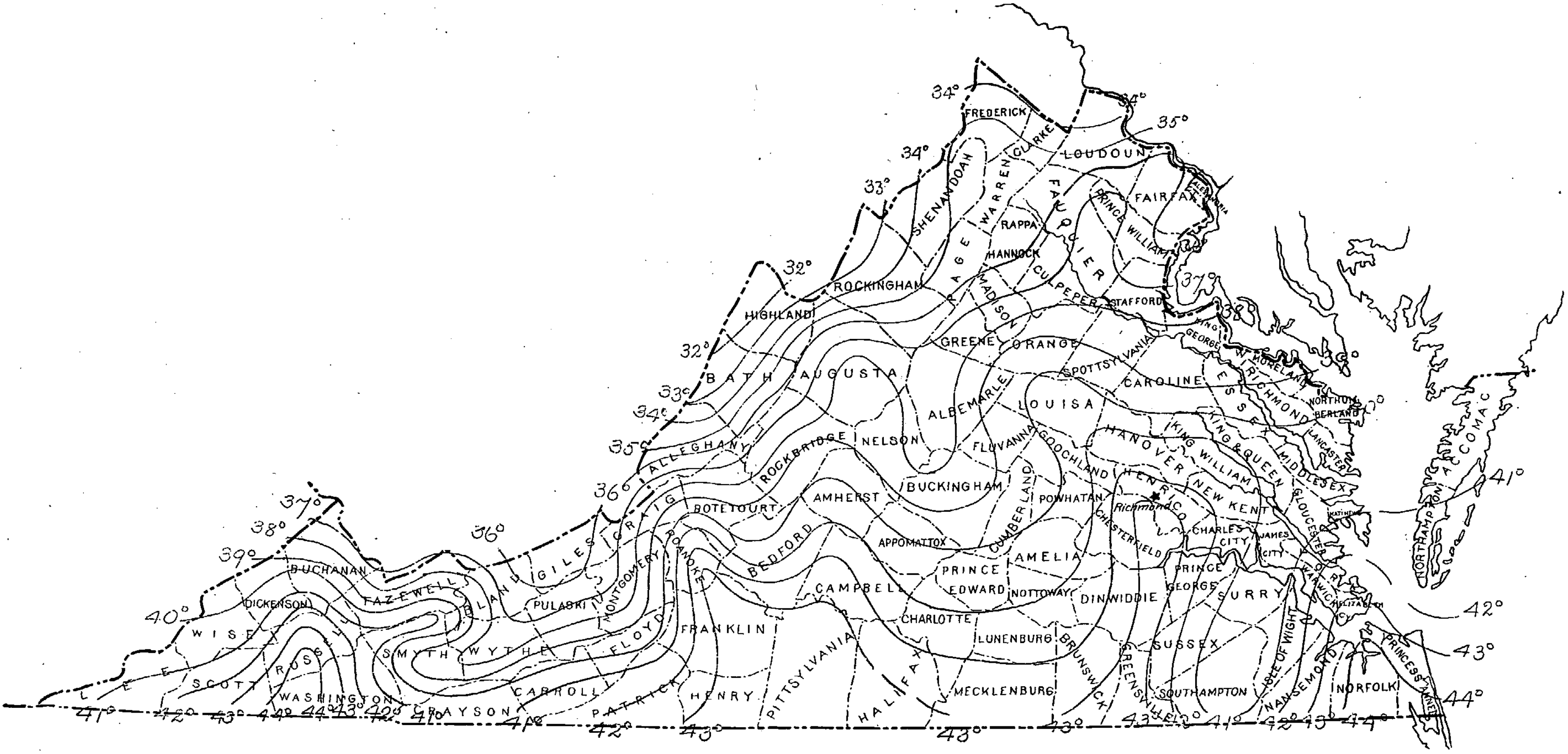
VIRGINIA STATE BOARD OF AGRICULTURE.

PREPARED UNDER THE DIRECTION OF
WILLIS L. MOORE,
CHIEF OF BUREAU.

BY

EDWARD A. EVANS
SECTION DIRECTOR,
RICHMOND, VA.

MONTHLY MEAN TEMPERATURE FOR FEBRUARY, 1897.



U. S. DEPARTMENT OF AGRICULTURE,

CLIMATE AND CROP SERVICE
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Central Office, WASHINGTON, D. C. — **WILLIS L. MOORE, Chief.**

VIRGINIA SECTION,
E. A. EVANS, Section Director,
RICHMOND, VA.

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THE ORIGIN OF TYPHOONS AND HURRICANES.

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The study of the formation and development of cyclones has been followed with the greatest minuteness under exceptionally favorable conditions by the meteorologists of India. In a recent essay (An Account of a Storm Developed in Equatorial Regions, Calcutta, 1896), Mr. W. L. Dallas has endeavered to decide whether the inrush of a saturated stormy wind from the southwest into a region of heated moist air, is essential to, or the determining cause of, the formation of a cyclonic whirl. He finds that it is not necessary and gives in detail the facts of a special case over the Bay of Bengal between the 1st and 15th of December, 1894. His conclusions are favorable to the general correctness of the ideas developed by Professor Ferrel who, as is well known, gave a more precise expression to the principles taught by Espy. According to these meteorologists, when a general uniformity of pressure and quietness prevails in the atmosphere, especially over the ocean, and when the quiet air becomes so warm and moist that ascending currents and clouds are forming here and there over the warm region, then any one of these ascending currents may be so fed with moist air as to steadily increase in its volume and instability; it rises and the surrounding air that is drawn in begins a gyratory motion, usually in the cloud regions, but which is soon propagated downward to the earth's surface. The quiet region in which the instability first occurs is often that which is called the doldroms; if this is not located at the equator, but five or ten degrees north or south, depending on the season, then the gyration of the winds around the center is fully determined by the deflecting action resulting from the diurnal rotation of the earth on its axis.

In summing up the results of his study of this storm Mr. Dallas says:

On the first three days of December, 1894, the Indian daily weather charts exhibited a typical illustration of the ordinary meteorological conditions which theory assigns to the Belt of Calms. An area of continuous low barometer lay over the equator, on either side of which the two trade wind currents blew freshly, while within the area itself, the surface winds were very light and variable. The weather was fine generally, but daily, at 4 pm., just after the diurnal period of greatest evaporation, heavy precipitation of rain took place. The charts for these days show, then, a more or less inclosed area within which the weather was fine, and constant evaporation was proceeding with apparently no horizontal outlet for the accumulating aqueous vapor. On the 3d of December the the southeast trades seemingly began to take off, but the observations on this day show that nearly all the ships in southern latitudes had entered or were close to the enclosed area of light and unsteady winds and low barometer. The sky was densely clouded, and though heavy rain fell for a time during the later hours of the day, this outlet was probably insufficient to stay the steady accumulation of aqueous vapor over the enclosed area. In the afternoon of this day (3d) the vessel *Falls of Garry*, in latitude 5° south, reported the cessation of southeast trades, their replacement by light, variable "puffy" breezes and heavy rain. By the 4th the process of accumulation of aqueous vapor had apparently reached its maximum and the subsequent condensation had set in. A continuous downpour of rain was reported, and this was accompanied with light, variable airs and calms on all the ships within the inclosed area. At the same time as the constant rapid condensation proceeded so did atmospheric pressure diminish, so that by the morning of the 6th a well-defined central area of depression had been developed within the inclosed area almost directly over the equator. It is interesting to note that so far as can be judged from the observations, at the period when the process of constant evaporation had resulted in a saturated condition of the atmosphere over the inclosed area, and the subsequent process of sudden, rapid, and extensive condensation had succeeded, there apparently occurred a slight but appreciable rise of pressure over the whole equatorial region under observation. This rise was shown by the chart of 8 am. of the 4th (not reprinted), and it will be remembered that it was after 4 pm, on the 3d that the process of rapid condensation set in and became the most important of the changes in progress over the area.

If the above be the explanation of the initiation of the storm, then further inquiry would be unnecessary, as the principle of evaporation and condensation is a general and not a local one and is as applicable to equatorial regions as to other parts of the earth's surface. Further, it is unnecessary from this point of view to introduce a force to account for the gyratory motions, as the theory presupposes an irregular inflow of the surrounding air as pressure diminishes, an inflow which can only result in a vorticose or spiral motion of the atmosphere converging towards a center, while for the gradual increase in the intensity of the barometric depression and in the force of the winds an adequate cause is assigned in the rapid condensation and precipitation of rain accompanying the inflowing currents of air when once the center is developed. * * * Two minor points of interest connected with the disturbance deserve perhaps passing notice. The first is the torrential rain which accompanied the disturbance throughout its course. This rainfall was apparently associated with a stream of air from trans-equatorial regions, and as soon as this supply was cut off and the wind shifted to northeast again, to the south of the disturbance the rainfall decreased and the intensity of the disturbance diminished. The second is the sharply defined limits of the disturbance. Hardly any indication of the presence of a storm was afforded by the coast observations. So much so indeed was this the case that the rainfall which occurred around the head of the bay on the 14th and 15th when the center of disturbance was in latitude 18 degrees and 20 minutes N was ascribed to disturbed weather in Upper India instead of its actual source, viz, the depression over the Bay. *Extract, November, 1896, Weather Review.*

ATMOSPHERIC PRESSURE.

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The mean monthly air pressure as deduced from the U. S. Weather Bureau Stations at Lynchburg, Norfolk and Washington D. C., was 30.10 inches; highest 30.69 inches, at Washington D. C., on the 28th; lowest 29.34 inches, at Norfolk, Va., on the 2d; range 1.35 inches.

TEMPERATURE. (DEG. F)

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TIDEWATER VIRGINIA.—Highest monthly mean, 44.4, at Norfolk; lowest monthly mean, 38.6, at Warsaw; maximum temperature, 73, at Petersburg, on the 18th; minimum temperature, 15, at Ashland, and Warsaw, on the 1st; greatest daily range, 39, at Ashland.

MIDDLE VIRGINIA.—Highest monthly mean, 42.9, at Rocky Mount; lowest monthly mean, 35.9, at and Quantico; maximum temperature, 73, at Bedford City, on the 18th; minimum temperature, —2, at Buckingham, on the 1st, greatest daily range, 43, at Bedford City and Bon Air.

THE GREAT VALLEY. — Highest monthly mean, 43.6, at Sword's Creek; lowest monthly mean, 32.4, at Monterey; maximum temperature, 74, at Salem and Sword's Creek on the 18th and 22d; minimum temperature, 3, at Dale Enterprise, on the 27th; greatest daily range, 41, at Graham's Forge, Salem and Saltville.

FOR THE STATE.—Average of the monthly mean temperatures, 39.5; average of the maximum temperatures, 66; average of the minimum temperatures, 15; average of the greatest daily range, 33.

The temperature conditions obtaining over the State during the month of February, were, on the whole, considerably below the normal. Of the different days on which the weather showed a tendency to approach toward the normal, only two, the 17th and 18th, ranged up well. On these days the conditions were balmy and spring-like. The month was largely characterized by damp, raw and disagreeable weather with frequent precipitation, some of which, in the early part of the month, fell as snow.

The mean temperature, 39.5, was 1.9 below the normal.

Spring work was retarded to some extent, and very little done in preparing tobacco plant beds. Wheat and oats passed through the month fairly well.

PRECIPITATION.

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TIDEWATER VIRGINIA.—Greatest monthly precipitation, 6.82 inches, at Spottsville; least monthly, 3.98 inches, at Cape Henry; greatest amount in any twenty-four consecutive hours 2.27 inches, at Spottsville, on the 1st and 2d.

MIDDLE VIRGINIA.—Greatest monthly precipitation, 9.25 inches, at Rocky Mount; least monthly, 2.68 inch, at Guinea, greatest amount in any twenty-four consecutive hours, 3.50 inches, at Manassas, on the 2d.

THE GREAT VALLEY.—Greatest monthly precipitation, 9.71 inches, at Marion; least monthly, 3.99 inches, at Staunton; greatest amount in any twenty-four consecutive hours, 3.20 inches, at Hot Springs, on the 5th and 6th.

FOR THE STATE.—Average total precipitation, 6.49 inches.

The average total precipitation for the State, 6.49 inches, was 2.50 inches in excess of the normal. By sections, the excess was greatest over the Great Valley and least over the Tidewater district. The month was rather remarkable for the frequency and quantity of its precipitation. In the Great Valley some points reported amounts from 5.20 inches to 5.72 inches above the normal. The rate of decrease from the mountains to the coast was very regular, and the distribution quite even.

Snow occurred generally over the State early in the month, and at points in the Blue Ridge and Alleghenies during the second decade.

High water prevailed in all the streams of the State during the latter part of the month, and much damage was done in cities the country districts.

The average number of days on which 0.01 of an inch or more of rain or snow fell, was 11 in Tidewater Virginia; 10 in Middle Virginia, and 11 in the Great Valley. Average for the State, 11.

WIND.—The prevailing direction of the wind in the different sections was as follows: Tidewater Virginia N.; Middle Virginia, NW. and SW.; the Great Valley, W. Prevailing direction for the State, NW.

WEATHER.—Tidewater Virginia, average number of clear days 8; partly cloudy, 7; cloudy, 13. Middle Virginia, average number of clear days, 11; partly cloudy, 7; cloudy, 10. The Great Valley, average number of clear days, 10; partly cloudy, 7; cloudy, 11. For the State, average number of clear days, 10; partly cloudy, 7; cloudy, 11.

NOTES AND COMMENTS.

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Voluntary observer's stations have been established at Farmville, Prince Edward County, and Leesburg, Loudoun County. The former is in the hands of Mr. Jno. R. Martin agent of the N. & W. R. R., and the latter Mr. C. A. English, of the Southern Railway. Good results are expected from the records at these points, and we extend a hearty welcome to the new observers.

It it desirable that in entering precipitation, the time of beginning and ending should be carefully noted.

This makes the record more complete and is valuable for reference should it be necessary at any time to establish the exact hour of the day that precipitation occurred at any station.

Reports from Charlottesville, missing.

Climatological Data for February 1897.

Stations.	Counties.	Elevation, feet.	Length of record, years.	TEMPERATURE, IN DEGREES FAHRENHEIT.							PRECIPITATION, IN INCHES.					SKY.			Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall (unmelted.)	Number of rainy days.	Number clear days.	Number partly cloudy days.	Number cloudy days.		
TIDEWATER VIRGINIA.																				
Ashland	Hanover	220	5	40.9	+2.2	68	18	15	1	39	6.26	+3.05	2.26	3.0	12	5	12	11	n. se.	E. L. C. Scott.
Birdsnest (1).	Northampton	40	28	40.7	-0.1	70	18	24	1	....	5.00	+0.62	1.15	0.5	9	7	5	16	nw.	C. R. Moore.
Cape Henry	Princess Anne	17	22	41.9	+2.0	70	18	22	28	28	3.98	+0.42	0.68	tr	11	8	6	14	se.	U. S. Weather Bureau.
Doswell	Hanover	134	0	39.5	......	60	18	20	21	37	†5.70	....	2.00	†1.0	5	5	4	19	n.	C. W. Butterworth.
Hampton	Elizabeth City	3	9	43.1	+2.1	66	14 18	26	28	30	4.94	+0.92	1.15	tr	13	7	7	14	ne	C. L. Goodrich.
Norfolk	Norfolk.	3	25	44.4	+0.6	72	18	26	28	30	4.03	+0.21	0.81	....	14	9	6	13	ne.	U. S. Weather Bureau.
Petersburg	Dinwiddie	11	9	43.0	+3.4	73	18	21	28	38	5.85	+2.45	1.81	1.0	14	6	9	13	n.	Prof. Jas. M. Colson.
Richmond (near)	Henrico.	96	21	41.2	-1.1	68	18	17	1	29	......	....	......	....	†7	12	5	11	nw.	Capt. J. C. Shafer.
Spottsville	Surry		7	40.9	+1.3	71	18	18	1	34	6.82	+1.90	2.27	1.2	14	10	6	12	ne.	B. W. Jones.
Sunbeam	Southampton		2	40.6	+5.0	64	18	23	28	26	5.60	+1.10	1.88	....	8	11	5	12	n.	Dr. W. H. Daughtry.
Warsaw	Richmond	200	3	38.6	+0.6	63	15	15	1	35	6.26	+2.42	2.04	3.0	9	1	18	9	n.	C. H. Constable.
Williamsburg	James City	160	9	......	......	....	....	23	28	....	......	......	......	....	....	16	0	11	ne.	L. S. Williams.
MIDDLE VIRGINIA.																				
Alexandria	Alexandria	35	37	36.5	+2.3	63	17	16	27	30	5.23	+2.89	1.32	2.2	12	6	16	6	nw.	H. C. Slaymaker
Barboursville	Orange		0	36.3	......	61	17	8	1	34	5.56	....	1.81	5.0	15	11	9	8	sw.	Dr. Thos. H. Ellis.
Bedford City (e)	Bedford	900	6	40.4	+1.6	73	18	16	27	43	‡3.98	....	‡2.60	....	3	....	....	....	......	J. T. Davidson.
Bon Air	Chesterfield	130	2	42.6	+4.0	72	18	16	28	43	6.27	+2.52	1.56	1.9	14	12	2	14	ne.	Wm. H. Pleasants.
Buckingham	Buckingham		3	37 9	+6.7	69	18	-2	1	38	6.70	+3.96	2.25	tr	10	10	7	11	sw.	Dr. W. E. Pratt.
Callaville	Brunswick		2	42.4	+7.0	71	18	18	28	39	6.38	+2.39	1.46	....	12	10	11	7	nw.	F. M. Gage.
Charlottesville	Albemarle		9	......	......	....	....	....	....	....	......	....	......	....	....	....	....	....	......	Prof. A. H. Tuttle.
Farmville ‡ (d)	Prince Edward			47.8	......	70	18 22 24	20	28	40	†3.08	....	1.00	1.5	7	12	1	11	w.	Jno. R. Martin.
Fredericksburg	Spottsylvania	47	1	38.0	-0.1	64	14	10	1	38	6.40	+2.85	2.92	3.0	11	13	1	14	e.	E. C. Rowe.
Gordonsville	Orange		0	38.9	......	53	15	23	1 27	21	‡0.80	....	0.60	1.0	†3	13	0	15	n.	H. S. Smithers.
Guinea	Caroline	100	0	38.8	......	63	17	23	25	36	2.68	....	2.57	1.1	6	11	11	6	sw.	M. A. Nunn.
Leesburg † (r)	Loudoun			34.4	......	51	21	14	27	18	1.18	....	0.52	1.7	4	4	3	3	n.	C. A. English
Lynchburg	Campbell	525	17	40.6	+1.6	71	18	14	1	36	7.84	+4.31	2.53	....	14	12	4	12	nw.	U. S. Weather Bureau.
Maidens	Goochland	185	1	40.4	-3.8	61	14	23	28	33	†5.91	....	†3.02	tr	6	10	9	9	ne.	J. R. Hopkins.
Manassas	Prince William	317	2	37.0	+0.2	63	17	10	1	30	6.49	+1.38	3.50	7.5	7	11	9	8	se.	Thos. H. Lion.
Nottoway C. H.	Nottoway		7	......	......	....	....	....	....	....	......	....	......	....	....	....	....	....	......	Geo. Dunn.
Quantico	Prince William	33	0	35.9	......	61	17	18	27	31	†0.20	....	0.20	2.0	1	14	4	10	nenw	E. V. King.
Rocky Mount	Franklin	1150	2	42.9	+7.5	71	18	20	28	36	9.25	+6.41	2.80	tr	8	9	14	5	......	J. H. Binford.
Smithville	Charlotte	560	2	41.2	+7.6	68	18	20	1 28	26	4.72	+1.90	1.22	....	9	11	4	13	......	W. G. Williams.
Stanardsville	Greene		6	36.8	+2.6	61	17 18	12	1	37	5.08	+2.51	1.70	3.0	8	....	....	....	......	W. N. Parrott.
THE GREAT VALLEY.																				
Big Stone Gap	Wise	1966	6	39.8	+7.1	71	22	10	27 28	39	8.25	+3.50	1.75	1.0	15	8	4	16	w.	John W. Fox. Sr.
Blacksburg	Montgomery	2170	7	36.8	+5.0	65	18	9	1	39	6.93	+3.78	1.98	5.8	13	10	4	14	sw.	Prof. W. B. Alwood.
Bristol	Sullivan, Tenn.	1676	2	41.0	+7.7	71	22	15	26	34	9.20	+7.14	3.10	0.2	9	14	4	10	......	J. Bunting. Jr.
Burke's Garden	Tazewell		0	34.0	......	61	22	9	1	25	7.74	....	2.50	3.5	10	9	6	13	w.	Rev. E. H. Kohn.
Christiansburg	Montgomery	2160	9	......	......	....	....	....	....	....	6.80	+4.15	1.71	0 3	12	11	15	2	w.	H. D. Walters.
Clifton Forge	Allegheny	1047	2	34.2	......	61	17	10	1	37	5.19	....	†2.30	4.5	8	13	1	14	nw.	T. P. Halloran.
Dale Enterprise	Rockingham	1350	10	33.9	-0.9	60	14 17	3	27	35	5.64	+2.24	1.50	13.9	12	14	4	10	s.	L. J. Heatwole.
Goshen (1)	Rockbridge	1590	1	39.4	......	60	18	14	4	32	†3.55	....	†1.20	5.0	6	14	1	13	w.	J. B. Wood.
Graham's Forge	Wythe		3	38.4	+10.7	69	18	14	4	41	9.19	+6.19	2.70	4.0	11	7	12	9	sw.	David Graham.
Hot Springs	Bath	2195	4	33.0	+1.9	58	17	12	27	24	6.96	+3.76	3.20	10.6	12	7	14	7	......	W. B . Davis.
Lexington (a)	Rockbridge	946	23	38.2	+0.4	66	18	9	1	38	5.79	+2.55	1.81	7.5	14	8	11	9	s. w	Prof. H. C. Campbell.
Marion (c)	Smyth	2124	8	38.6	+2.4	65	21	14	28	32	9.71	+7.46	2.50	4.0	12	5	8	15	......	A. T. Lincoln.
Monterey	Highland	3008	2	32.4	+5.3	52	14 15	6	27	26	5.21	+3.43	1.28	19.0	9	11	3	14	w.	Jos. Jones.
Salem	Roanoke	1200	6	43.1	+7.5	74	18	20	1	41	7.56	+3.99	2.08	1.5	12	....	....	....	......	Prof. S. C. Wells.
Saltville	Smyth	1739	2	40.6	+10.7	69	22	16	28	41	6.47	+3.08	2.08	tr	11	....	....	....	......	C. M. Perry.
Stanleyton	Page	1064	0	35.2	......	64	21	10	1	33	7.73	....	2.38	13.5	7	13	4	11	ne.	A. K. Grim.
Staunton	Augusta	1380	6	37.7	+2.3	64	14	11	1	36	3.99	+0.88	1.96	11.0	11	8	13	7	e.	W. C. Hedrick.
Stephens City	Frederick		4	35.0	+0.4	62	17	10	1	34	6.89	+3.67	2.39	11.7	11	14	7	7	w.	W. B. Steele.
Sword's Creek	Russell		0	43.6	......	74	22	11	27	40	7.23	....	1.80	....	11	....	....	....	......	J. H. Steele.
Woodstock	Shenandoah	927	0	35.3	......	67	21	10	1	35	7.65	+4.86	1.94	11.5	12	10	11	7	w.	H. F. Miley.
Wytheville	Wythe	2370	25	37.5	+4.7	65	18 22	12	4	31	9.37	+6.57	2.55	7.5	13	10	8	10	w.	Dr. P. B . Green.

† Estimated. ‡ Incomplete. tr. trace, or less than 0.01 of an inch. (1) Means from 7 am, 2 and 9 + 9 pm. observations.

Note— Estimated and incomplete data not considered in means.

MISCELLANEOUS PHENOMENA.

Fogs: Birdsnest, 2, 6, 12, 15, 22, 25; Hot Springs, 12; Stanleyton, 11; Staunton, 22; Woodstock, 6; Wytheville, 20.

Gales: Petersburg, 22; Big Stone Gap, 18; Lexington, 5.

Hail: Ashland, 2, 20; Buckingham, 22; Bristol, 22; Burke's Garden, 18; Clifton Forge, 1, 5, 20; Monterey, 4; Woodstock, 12, 22; Wytheville, 18.

Halos, Lunar: Spottsville, 9; Staunton, 15, 20; Woodstock, 15.

Halos, Solar: Spottsville, 5, 10, 15, 18, 23.

Lightning: Hampton, 26; Farmville, 20, 22, 23; Fredericksburg, 22.

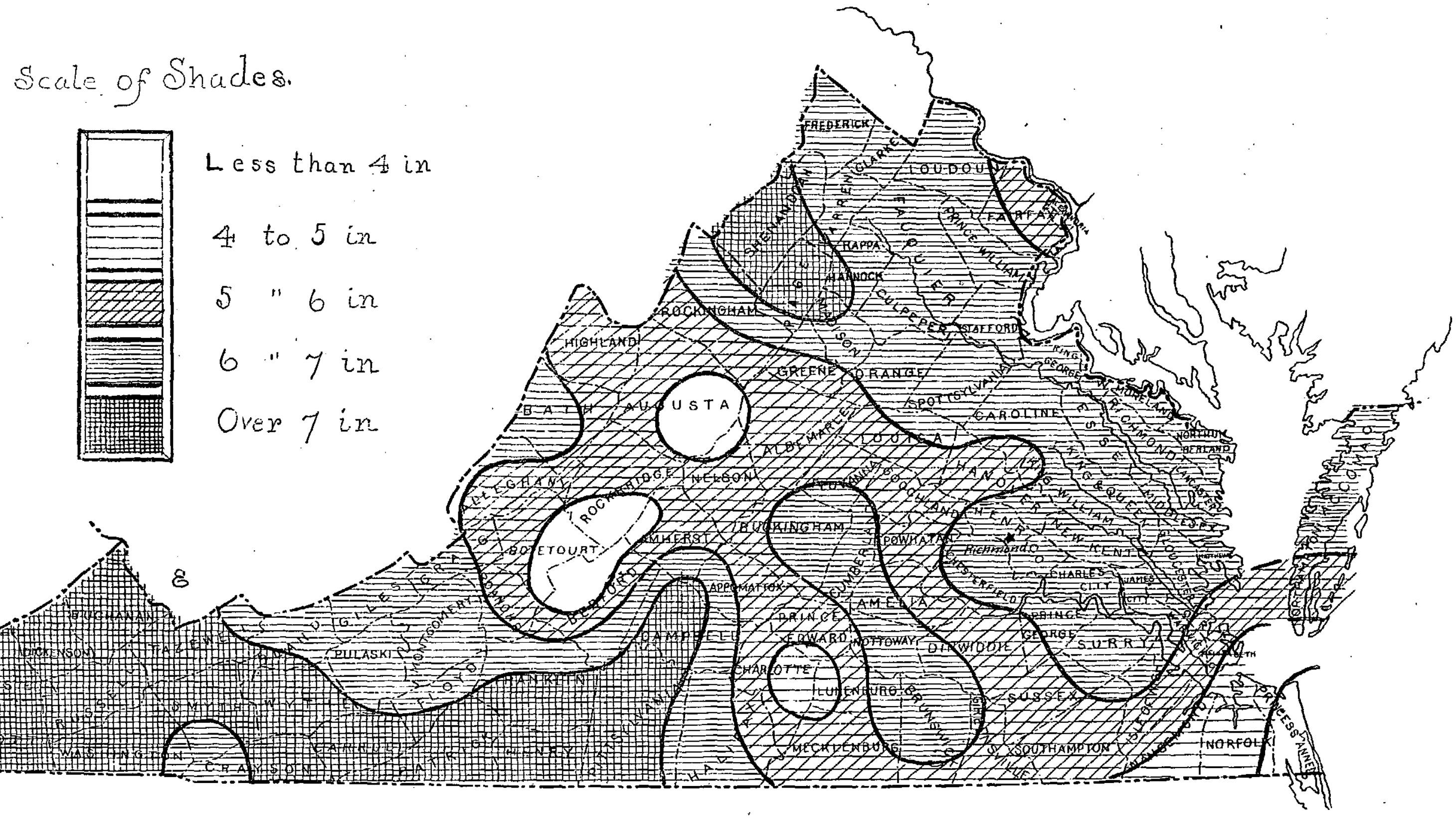
Meteors: Spottsville, Fredericksburg, 27; Blacksburg, 18.

Thunder storms: Ashland, 21, 22; Hampton, Petersburg, Spottsville, Barboursville, Callaville, Blacksburg, Christiansburg, 22; Buckingham, Burke's Garden, Hot Springs, 18, 21; Farmville, 20, 22 -3; Gordonsville, 18; Lynchburg, 18, 21-2; Big Stone Gap, 18, 19, 20-1,-2; Bristol, 1; Dale Enterprise, Monterey, 15, 21-2; Lexington, Woodstock, Wytheville, 21-2; Salem, 18, 20, 23; Saltville, 12, 18, 19, 21-2,-3; Stanleyton, 17, 21,-2; Stephen's City, 15, 22; Sword's Creek, 18, 20,-1,-2.

Daily Maximum and Mininum temperatures for February, 1897.

Stations.	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		31		Monthly Mean.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
TIDEWATER VA.																																																																
Ashland	45	15	40	33	41	32	46	40	40	23	60	24	59	38	45	30	55	28	41	26	38	32	40	32	52	25	66	27	67	34	54	39	67	38	68	47	51	34	39	27	55	33	51	42	60	42	54	31	44	35	53	29	33	24	45	18	..	..	..	..	..	..	50.6	31.2
Cape Henry	42	31	51	38	39	27	37	33	40	33	49	38	53	41	49	32	45	31	46	38	40	37	42	38	42	35	54	35	54	36	58	36	64	36	70	46	47	38	41	35	50	38	50	41	69	42	48	38	42	38	45	37	44	30	32	22	..	..	..	..	..	..	48.0	35.8
Doswell	41	25	40	38	40	35	41	29	41	29	58	41	55	22	44	30	40	25	50	22	35	30	40	30	50	27	44	32	62	34	41	41	53	38	60	47	50	35	40	28	57	20	45	45	58	40	47	38	43	35	43	32	49	32	40	22	..	..	..	..	..	..	46.7	32.3
Hampton	46	30	51	40	42	33	41	34	44	32	56	40	59	40	50	36	46	37	44	31	42	37	41	37	48	32	66	36	55	38	57	40	61	39	66	49	47	39	42	35	50	38	50	45	62	44	46	38	44	40	50	34	37	32	38	26	..	..	..	..	..	..	49.3	36.9
Norfolk	48	30	51	36	44	32	41	32	46	31	62	46	56	42	55	38	44	33	54	31	42	37	43	38	48	32	63	34	67	38	60	39	65	36	72	42	46	38	46	35	52	40	67	45	70	46	48	39	45	40	52	35	37	30	38	26	..	..	..	..	..	..	52.2	36.5
Petersburg	40	22	43	35	45	33	45	27	45	25	61	30	59	40	58	30	50	30	50	28	42	34	44	33	50	29	65	27	69	34	62	35	60	40	73	50	60	33	45	30	52	35	59	50	60	44	52	31	52	35	56	28	50	26	42	21	..	..	..	..	..	..	53.2	32.7
Richmond	41	17	41	32	43	33	42	28	39	25	60	34	55	40	55	31	49	30	43	28	41	33	43	33	50	27	63	34	65	40	55	34	60	37	68	41	50	34	45	28	58	44	55	40	58	41	42	31	45	32	45	39	45	31	45	19	..	..	..	..	..	..	50.0	32.3
Spottsville	43	18	46	36	46	29	42	27	40	24	61	38	57	41	52	29	45	31	53	26	41	34	38	34	49	28	60	26	63	31	49	35	64	33	71	50	53	33	40	27	50	34	57	46	57	45	50	30	44	36	50	28	36	24	42	19	..	..	..	..	..	..	50.0	31.8
Sunbeam	42	25	38	38	41	33	38	25	39	37	56	38	49	40	52	33	48	32	48	29	38	38	46	36	43	29	55	30	59	36	42	42	60	35	64	37	48	36	38	32	54	37	56	52	56	52	44	36	42	39	46	32	32	28	35	23	..	..	..	..	..	..	46.6	34.7
Warsaw	44	15	41	35	39	32	38	25	39	20	59	30	54	35	47	31	48	31	41	23	38	28	38	32	46	25	60	25	63	35	56	35	62	29	62	46	50	31	40	24	52	32	55	33	58	37	47	33	41	32	49	28	33	21	37	17	..	..	..	..	..	..	47.8	29.5
Williamsburg	..	24	..	43	..	33	..	33	..	34	..	48	..	42	..	32	..	33	..	26	..	32	..	35	..	26	..	28	..	32	..	40	..	38	..	53	..	35	..	32	..	40	..	50	..	45	..	..	..	39	..	29	..	26	..	23	..	..	..	..	..	..	....	35.1
MIDDLE VA.																																																																
Alexandria	41	22	38	33	41	27	39	23	40	24	52	36	51	30	41	29	41	24	43	25	38	31	36	32	43	26	56	26	57	35	47	29	63	37	56	32	45	26	40	28	50	33	43	39	50	32	42	31	46	33	46	17	30	16	37	18	..	..	..	..	..	..	44.7	28.3
Barboursville	34	8	37	19	42	31	37	24	32	23	51	24	50	39	43	30	45	29	39	24	35	24	44	29	49	30	60	28	58	30	52	40	61	27	57	31	47	32	36	27	53	32	47	30	51	36	44	28	43	33	39	31	33	21	38	16	..	..	..	..	..	..	44.9	27.7
Bedford City	..	..	..	..	..	..	..	..	..	..	49	25	49	35	53	27	51	28	50	25	48	40	52	26	56	28	65	25	58	30	57	26	66	30	73	30	60	29	48	28	54	35	53	38	54	26	49	27	45	29	43	17	38	16	46	20	..	..	..	..	..	..	52.9	27.8
Bon Air	43	19	59	37	47	34	48	29	51	23	62	24	62	40	54	32	55	29	49	23	39	23	47	32	56	28	69	25	71	30	56	42	67	35	72	50	56	33	41	28	54	35	48	43	62	40	54	32	42	34	55	27	42	25	48	16	..	..	..	..	..	..	53.9	31.3
Buckingham	36	-2	38	34	47	19	42	22	48	24	53	40	53	27	49	26	49	25	44	25	34	32	47	27	52	25	63	32	60	33	56	26	64	35	69	32	51	29	37	32	53	32	40	38	52	30	49	29	45	27	54	25	38	16	43	18	..	..	..	..	..	..	48.8	27.1
Callaville	41	22	45	39	46	34	42	27	42	24	61	37	57	39	56	32	48	29	53	28	40	35	43	35	50	30	67	28	66	34	48	43	63	45	71	51	52	37	37	32	59	37	57	38	61	48	50	32	43	39	52	27	34	26	42	18	..	..	..	..	..	..	50.9	33.8
Charlottesville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....
Farmville	..	..	..	..	..	..	..	..	50	30	57	30	58	50	55	54	57	53	55	54	53	49	55	45	55	53	54	42	57	35	55	35	65	40	70	45	60	35	44	33	55	33	70	35	65	43	70	30	45	35	65	25	55	25	50	20	..	..	..	..	..	..	57.3	38.3
Fredericksburg	40	10	38	32	41	28	42	24	37	23	56	33	56	31	43	28	46	31	42	23	35	28	39	32	50	28	64	26	55	33	51	34	64	28	58	43	48	32	38	25	54	33	44	40	57	37	48	31	44	31	50	28	35	20	40	17	..	..	..	..	..	..	47.0	28.9
Gordonsville	33	23	40	32	50	35	36	24	45	40	40	37	50	42	40	35	42	32	40	28	38	33	40	33	48	34	45	33	53	42	48	47	40	28	50	43	44	33	45	34	45	35	47	45	45	42	50	34	45	36	40	35	32	23	37	30	..	..	..	..	..	..	43.1	34.6
Guinea	40	34	35	27	39	30	37	26	40	29	50	30	53	31	54	27	50	30	44	24	35	28	39	30	49	25	60	27	57	32	50	30	63	27	56	42	47	30	48	30	45	32	50	30	52	27	49	25	48	23	52	30	54	33	59	32	..	..	..	..	..	..	48.4	29.3
Leesburg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	42	35	38	33	51	34	39	36	48	34	43	27	42	24	44	27	28	14	34	16	..	..	..	..	..	..	40.9	28.0
Lynchburg	35	14	43	33	48	33	44	26	34	27	52	33	49	37	52	32	52	32	47	31	37	32	52	31	54	34	64	28	58	35	55	35	64	29	71	42	51	36	40	32	55	34	53	41	53	40	47	32	46	32	48	32	35	24	43	21	..	..	..	..	..	..	49.4	31.7
Maidens	30	24	36	36	40	36	41	24	38	24	56	50	55	47	49	31	46	25	45	27	33	30	37	31	60	29	61	28	59	31	52	41	55	42	56	48	51	31	32	30	51	40	51	46	56	43	48	36	42	34	53	36	36	24	41	23	..	..	..	..	..	..	47.1	33.8
Manassas	38	10	41	31	39	32	39	23	40	17	54	32	53	35	41	29	41	32	33	23	40	29	42	30	51	32	60	30	54	32	47	38	63	32	55	42	45	31	41	24	53	32	57	38	52	35	44	29	44	29	39	30	41	16	37	16	..	..	..	..	..	..	45.0	28.9
Nottoway, C. H.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	....
Quantico	39	21	39	21	39	22	39	24	38	21	54	23	53	30	39	27	43	30	38	19	39	22	42	29	45	26	56	23	58	23	49	38	61	23	57	35	46	29	37	29	49	26	46	36	54	36	44	30	43	30	45	29	32	18	37	21	..	..	..	..	..	..	45.0	26.8
Rocky Mount	30	21	41	31	45	36	42	25	43	30	48	32	49	39	53	30	53	33	51	30	49	34	52	30	56	35	65	29	63	35	60	45	63	33	71	46	67	40	50	40	59	32	57	50	54	46	50	31	45	34	50	34	40	24	40	20	..	..	..	..	..	..	52.0	33.8
Smithville	38	20	38	33	45	25	45	25	38	26	53	35	49	39	50	33	48	31	48	30	46	32	43	32	48	32	56	32	62	40	60	46	60	36	68	46	64	38	46	33	56	33	57	44	52	43	46	32	44	36	50	26	35	27	39	20	..	..	..	..	..	..	49.4	33.0
Stanardsville	32	12	43	31	43	33	41	22	34	20	50	27	50	38	42	27	47	31	41	23	38	27	41	29	51	29	62	25	56	34	52	40	61	25	61	40	50	33	35	25	56	28	47	38	52	35	45	25	44	26	37	28	32	14	38	13	..	..	..	..	..	..	45.8	27.8
GREAT VALLEY.																																																																
Big Stone Gap	44	25	30	29	45	24	50	23	50	32	47	32	46	30	49	32	46	27	56	23	55	30	54	36	58	24	63	24	60	32	55	33	64	20	68	31	50	33	48	36	60	45	71	52	49	32	48	20	49	25	38	21	34	10	46	10	..	..	..	..	..	..	51.5	28.2
Blacksburg	32	9	38	30	42	21	42	13	35	22	47	26	42	28	45	26	45	28	50	25	41	31	47	28	54	27	63	25	56	31	51	30	62	23	65	40	50	30	39	30	55	33	52	40	51	35	45	25	43	29	41	21	37	15	41	17	..	..	..	..	..	..	46.8	26.7
Bristol	41	31	36	29	48	29	49	35	44	36	46	33	45	32	45	27	52	32	49	39	52	26	57	28	59	32	59	25	60	34	66	34	58	37	57	36	58	37	50	40	62	49	71	40	46	24	44	39	37	17	29	15	43	21	47	31	..	..	..	..	..	..	50.4	31.7
Burke's Garden	33	9	37	27	32	26	40	11	30	26	41	25	40	19	41	24	40	24	46	22	40	28	41	33	49	24	54	29	50	32	42	33	56	32	60	41	42	30	39	31	54	33	61	48	37	35	40	20	37	27	34	23	19	11	36	13	..	..	..	..	..	..	41.8	26.3
Clifton Forge	34	10	39	21	33	33	33	21	32	22	42	28	38	37	41	31	33	32	41	20	34	25	44	33	41	31	36	27	44	28	36	35	61	24	57	27	56	30	34	31	47	31	51	36	47	36	44	29	45	28	34	27	31	21	35	18	..	..	..	..	..	..	40.8	27.6
Dale Enterprise	35	6	35	22	40	29	36	14	33	16	42	22	46	35	45	25	44	24	36	18	32	20	46	25	48	26	60	27	56	30	55	33	60	25	56	38	48	26	35	24	58	28	49	36	49	31	42	23	46	26	35	22	30	3	38	9	..	..	..	..	..	..	44.1	23.7
Goshen	36	15	38	32	44	24	46	14	41	16	46	41	40	40	47	34	47	33	46	22	38	30	49	33	52	36	60	40	50	42	51	41	50	32	61	40	51	40	44	30	53	40	53	48	48	46	47	30	43	34	43	33	34	22	41	20	..	..	..	..	..	..	46.4	32.5
Graham's Forge	33	15	42	32	46	26	41	14	36	25	41	31	42	30	42	28	42	30	58	26	43	32	50	32	54	25	60	25	55	31	55	34	63	22	69	36	57	33	40	33	58	35	66	47	62	36	52	26	43	31	42	22	28	18	40	17	..	..	..	..	..	..	48.6	28.3
Hot Springs	30	22	35	27	38	21	40	22	37	24	39	32	35	26	36	25	39	20	44	20	33	29	40	30	46	27	42	31	49	33	43	27	58	38	54	46	44	28	32	26	44	40	51	34	37	20	39	26	38	27	35	13	25	12	35	28	..	..	..	..	..	..	39.9	26.2
Lexington	33	9	40	28	46	32	43	16	37	22	..	..	48	32	45	29	48	31	48	25	38	32	49	31	55	33	64	26	57	32	54	34	64	26	66	35	52	31	36	31	47	33	50	44	55	37	47	27	48	25	47	32	34	20	43	14	..	..	..	..	..	..	47.9	28.4
Marion	..	..	39	21	40	28	41	15	40	30	43	33	44	34	44	30	46	30	50	26	47	31	49	35	56	26	59	27	53	39	63	33	63	33	60	34	47	35	..	..	..	..	65	35	64	34	45	25	44	24	42	24	32	16	42	14	..	..	..	..	..	..	48.7	28.5
Monterey	35	9	32	22	34	22	34	22	32	24	38	32	40	32	36	24	36	22	40	16	36	26	40	30	42	30	52	30	52	32	38	32	50	30	50	40	40	24	34	28	48	40	50	40	40	30	38	18	36	28	32	24	22	6	36	10	..	..	..	..	..	..	39.0	25.8
Salem	34	20	43	29	54	35	45	23	40	28	45	30	56	40	51	33	57	34	50	30	45	33	55	30	59	34	72	31	62	38	62	43	70	34	74	47	63	38	50	32	49	33	55	49	58	45	54	31	45	33	52	31	42	22	45	22	..	..	..	..	..	..	53.1	33.1
Saltville	58	28	38	32	39	29	46	21	42	33	44	35	45	34	44	30	48	32	53	25	46	29	52	39	63	25	63	26	54	32	54	34	65	24	66	40	50	32	44	39	56	40	69	53	63	37	46	26	47	29	43	28	30	18	43	16	..	..	..	..	..	..	50.4	30.9
Stanleyton	32	10	34	11	39	31	35	12	34	15	48	16	47	37	45	27	41	30	37	20	34	22	44	25	47	29	58	28	57	33	58	33	59	30	56	45	46	28	38	27	64	31	54	39	50	36	43	27	45	31	39	19	30	14	35	16	..	..	..	..	..	..	44.6	25.8
Staunton	33	11	36	26	45	33	40	14	30	22	46	26	50	38	48	26	50	30	42	22	39	27	47	27	56	30	64	28	58	32	56	40	62	30	63	43	53	29	36	30	59	33	50	40	48	36	45	27	44	28	42	30	35	17	43	16	..	..	..	..	..	..	47.1	28.3
Stephens City	33	10	33	23	40	29	38	28	34	16	47	29	43	33	42	30	30	28	39	21	35	22	41	28	45	29	59	26	54	32	45	29	62	28	60	31	45	29	37	27	61	32	46	35	45	34	46	26	49	27	36	18	35	17	38	13	..	..	..	..	..	..	43.8	26.1
Sword's Creek	42	40	42	33	43	31	46	43	45	40	44	43	44	35	45	35	46	31	52	30	51	33	50	45	58	29	60	22	58	32	49	36	61	29	65	44	65	29	48	44	60	56	74	66	60	40	66	26	57	31	43	30	39	11	45	15	..	..	..	..	..	..	52.1	35.2
Woodstock	32	10	36	31	46	13	42	13	34	13	43	34	44	26	43	29	53	20	43	20	34	25	41	31	59	24	63	30	53	30	54	26	63	29	51	28	54	27	37	28	67	35	41	35	57	28	50	27	46	28	30	15	37	12	42	15	..	..	..	..	..	..	46.2	24.4
Wytheville	31	17	38	31	35	28	42	12	32	27	40	31	39	30	40	28	43	28	48	26	37	31	48	32	54	26	58	27	53	32	48	34	62	25	65	45	48	32	37	34	55	44	65	47	44	36	45	25	42	31	42	24	27	17	41	16	..	..	..	..	..	..	45.0	29.1

TOTAL PRECIPITATION FOR FEBRUARY, 1897.



Daily Precipitation for February, 1897.

Stations.	Day of Month.																															Total.
	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	31	
TIDEWATER VIRGINIA.																																
Ashland	....	1.10	.09	....	tr	.67	....	tr	....	....	.10	.41	....	....	....	.20	....	....	.25	.15	.39	1.87	.98	....	....	....	.05	....	....	....	....	6.26
Birdsnest	....	1.15	.80	....	....	.40	....	....	....	....	....	.30	tr	....	....	.70	....	....	....	....	.30	.55	.35	....	.45	....	....	....	....	....	....	5.00
Cape Henry	....	.57	.10	....	....	.55	....	....	....	....	.05	.21	....	....	....	.68	....	....	....	.31	.46	.09	.34	....	.62	tr	tr	....	....	....	....	3.98
Doswell †	....	2.00	....	....	....	.40	....	....	....	....	....	....	....	....	....	.40	....	....	....	....	.90	2.00	....	....	....	tr	....	....	....	....	....	5.70
Hampton	....	.78	.26	....	....	.54	....	tr	....	....	.01	.29	....	....	.02	.81	....	....	.05	.58	.08	.27	.88	....	.37	tr	....	....	....	....	....	4.94
Norfolk	.05	.81	.07	....	tr	.35	....	.01	....	....	.03	.24	....	....	....	.48	....	....	.06	.33	.56	.05	.48	....	.51	....	tr	....	....	....	....	4.03
Petersburg	....	1.81	.35	....	....	.47	....	....	....	....	.10	.36	....	....	.39	.30	....	.10	....	.35	.30	.60	.64	....	.08	....	....	....	....	....	....	5.85
Spottsville	1.10	1.17	.10	....	tr	.45	....	....	....	....	.20	.22	....	....	....	1.05	....	.07	....	.40	.41	.51	.75	....	.37	.02	....	....	....	....	....	6.82
Sunbeam	....	1.88	....	....	....	.52	....	....	....	....	tr	.51	....	....	....	.37	....	....	....	.70	.51	.54	....	....	.57	....	....	....	....	....	....	5.60
Warsaw	....	....	2.02	.20	....	.28	tr	....	....	....	....	.40	....	....	....	.30	....	....	.45	....	.40	....	2.04	....	....	....	....	.17	....	....	....	6.26
MIDDLE VIRGINIA.																																
Alexandria	.46	1.32	....	....	.05	.42	....	.11	....	....	.41	.13	....	....	....	....	....	....	.15	....	.57	.92	.61	....	....	.08	....	....	....	....	....	5.23
Barboursville	.05	1.38	.12	....	.06	1.75	....	.06	....	....	.01	.49	....	....	....	....	....	.03	.11	.34	.14	.50	.42	....	....	.10	....	....	....	....	....	5.56
Bedford City ‡	....	....	....	....	....	2.60	....	....	....	....	....	....	....	....	....	....	....	....	....	1.30	....	.08	....	....	....	....	....	....	....	....	....	3.98
Bon Air	....	.85	1.56	....	....	.38	.20	....	.02	....	....	.28	.21	....	....	.44	.38	....	.18	....	.52	.16	1.04	....	....	....	.05	....	....	....	....	6.27
Buckingham	.37	.27	....	....	.70	1.19	tr	.15	....	....	.48	tr	....	....	tr	....	....	.34	....	.53	.42	2.25	....	....	....	tr	....	....	....	....	....	6.70
Callaville	....	1.46	.14	....	....	.54	....	tr	....	....	.03	.44	....	....	....	1.00	....	....	.09	.51	.56	.10	1.16	....	.35	....	tr	....	....	....	....	..32
Charlottesville	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Farmville ‡	....	....	....	....	....	1.00	....	....	....	....	....	.50	....	....	....	....	....	....	.33	....	.05	.20	1.00	....	....	....	tr	....	....	....	....	3.08
Fredericksburg	....	2.92	....	....	....	.66	....	.08	....	....	tr	.53	....	....	....	.05	....	.04	....	.28	.30	.71	.71	....	....	.12	....	....	....	....	....	6.40
Gordonsville†	tr	tr	....	....	.10	....	....	....	....	....	tr	tr	....	....	....	....	....	tr	.10	....	.60	....	....	....	tr	....	....	....	....	....	....	0.80
Guinea	....	.04	....	....	....	.01	....	.01	....	....	....	.04	....	....	....	.01	....	....	....	....	....	2.57	....	....	....	....	....	....	....	....	....	2.68
Leesburg ‡	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.26	.35	.52	....	....	....	.05	....	....	....	....	....	1.18
Lynchburg	.54	1.01	....	....	.02	2.53	....	.06	....	....	.09	.44	....	....	tr	.02	....	.07	.12	.43	.43	.52	1.56	....	....	tr	....	....	....	....	....	7.84
Maidens †	....	1.00	....	....	....	.58	....	....	....	....	....	.58	....	....	....	.28	....	....	....	.45	....	3.02	....	....	....	....	....	....	....	....	....	5.91
Manassas	....	3.50	....	....	tr	....	tr	....	....	....	....	....	.66	....	....	....	....	tr	....	.45	.33	.65	.60	....	....	....	.30	....	....	....	....	0.20
Nottoway C. H.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9.25
Quantico†	tr	tr	....	....	....	....	....	tr	....	....	....	....	....	....	....	....	....	tr	....	tr	tr	tr	....	....	....	.20	....	....	....	....	....	4.72
Rocky Mount	tr	1.45	....	....	tr	2.80	....	tr	....	....	.30	.57	....	....	tr	tr	....	....	.35	tr	1.60	.38	1.80	....	....	....	....	....	....	....	....	5.08
Smithville	....	.75	....	....	....	1.22	....	....	....	....	tr	.45	....	....	....	.18	....	....	.16	.30	.61	.25	.80	....	....	....	....	....	....	....	....	....
Stanardsville	....	1.20	....	....	.10	1.60	....	tr	....	....	....	.67	....	....	....	....	....	....	....	58	....	.36	.45	....	....	.12	....	....	....	....	....	....
THE GREAT VALLEY.																																
Big Stone Gap	.55	.22	tr	....	.20	1.25	tr	.42	....	....	.11	.75	....	....	.05	....	....	.25	.10	1.05	1.75	1.15	.37	....	....	tr	.03	....	....	....	....	8.25
Blacksburg	.30	.28	....	....	....	1.62	....	.12	....	....	.29	.50	....	....	....	....	.04	.09	.03	.48	1.50	1.08	.60	....	....	....	....	....	....	....	....	6.93
Bristol	.30	tr	....	.53	.20	.23	tr	....	tr	.64	....	....	....	....	....	.38	....	....	....	3.10	1.00	2.82	....	....	tr	....	....	....	....	....	....	9.20
Burke's Garden	.30	....	....	....	....	....	....	.12	....	....	....	1.09	....	....	....	....	....	.26	.25	1.05	2.50	.70	1.42	....	....	....	.05	....	....	....	....	7.74
Christiansburg	....	.88	....	....	....	1.31	.15	.02	.02	....	....	.78	....	....	....	.03	....	....	.31	.26	1.71	.28	1.05	....	....	....	....	....	....	....	....	6.80
Clifton Forge †	....	.55	....	....	1.10	.59	....	....	....	.20	.35	....	....	....	....	....	.10	tr	tr	1.10	1.20	....	....	....	....	....	....	....	....	....	....	5.19
Dale Enterprise	.10	.53	....	....	.12	1.50	....	.09	....	....	....	.86	....	....	....	....	....	.01	....	.40	.10	.66	1.00	....	....	.27	....	....	....	....	....	5.64
Goshen †	....	....	....	....	....	.30	1.00	....	....	....	....	.05	....	....	....	....	....	tr	....	.20	1.00	1.00	....	....	....	....	....	....	....	....	....	3.55
Graham's Forge	.52	tr	....	....	tr	2.70	....	.08	....	....	.64	.90	....	....	....	.11	....	.34	....	.85	1.61	.62	.82	....	....	tr	....	....	....	....	....	9.19
Hot Springs	.80	.20	....	....	.10	3.10	....	.05	....	....	.04	.71	....	....	....	....	....	.16	....	.29	.20	.03	1.28	....	....	tr	....	....	....	....	....	6.96
Lexington	....	....	.93	....	.10	....	1.81	....	.05	....	....	.16	.38	....	....	tr	....	....	.23	.16	.83	.17	.44	.49	....	....	.04	....	....	....	....	5.79
Marion	.59	.20	....	....	tr	2.00	....	.25	....	....	.25	.62	....	.06	....	....	.63	....	.80	....	2.50	.50	1.40	....	....	tr	....	....	....	....	....	9.71
Monterey	....	.80	....	....	.20	1.00	....	.20	....	....	....	.28	....	....	....	....	....	....	....	.75	.60	1.28	....	....	....	.10	....	....	....	....	....	5.21
Salem	.60	.85	....	....	2.08	....	.20	.10	....	....	.30	.56	....	....	tr	....	....	tr	.16	.53	.93	.48	.77	....	....	tr	....	....	....	....	....	7.56
Saltville	....	.06	....	....	....	.30	....	.26	....	....	.30	.51	....	....	....	....	....	.16	.11	.96	2.08	.43	1.30	....	....	tr	....	....	....	....	....	6.47
Stanleyton	....	2.40	....	....	tr	2.38	....	tr	....	....	tr	.73	....	....	....	....	....	tr	....	.47	.60	1.00	....	....	....	.15	....	....	....	....	....	7.73
Staunton	....	.48	....	....	....	1.16	....	.12	....	....	.91	.37	....	....	tr	....	....	.14	....	.36	.20	.76	.07	....	....	.12	....	....	....	....	....	3.99
Stephens City	tr	1.41	.14	....	.19	1.26	....	.21	....	....	....	.43	....	....	tr	....	....	tr	....	.31	.42	1.51	.88	....	....	.13	....	....	....	....	....	6.89
Sword's Creek	.25	....	....	....	1.30	.30	tr	.10	....	....	.08	.45	....	....	....	....	....	.56	....	.73	1.80	.66	1.10	....	....	tr	....	....	....	....	....	7.23
Woodstock	.51	1.76	....	....	.53	.68	....	.08	....	....	.48	18	....	....	....	....	....	.10	....	.54	1.40	1.05	tr	....	tr	.34	....	....	....	....	....	7.65
Wytheville	.35	.10	....	....	.15	2.55	....	.11	....	....	.92	.08	....	....	tr	....	....	.35	.17	1.11	1.96	.92	.60	....	....	....	....	....	....	....	....	9.37

† Rainfall estimated. ‡ Incomplete. tr. Trace, or less than .01 of an inch.

OBSERVERS' NOTES.

ASHLAND.——On the 1st at 8 45 pm. storm from the NE. with heavy wind lasting all night and until early morning of the 3d, accompanied by snow, sleet, hail and rain. High wind on the 18th, and the thermometer fell 15 degrees. Several flashes of lightning.

BIRDSNEST.——Average temperature for February, 23 years 42.1, highest 49.8, in 1890; lowest 34.2 in 1889. Average rainfall for February, 23 years 3.71 inches. Greatest 7.55 inches in 1881; least 1.10 inches in 1878.

DOSWELL.——The elms are beginning to show signs of budding. During some of the warmer days the cheerful carol of the bluebird and the croaking of the frogs seemed to announce the approach of Spring in tuneful melody.

PETERSBURG.——Terrific wind storm on the night of the 22d.

SPOTTSVILLE.——First thunder of Spring on the 18th. Large meteor in the southwest at 8 pm. of the 27th. Month rainy, chilly, and unfavorable. Fruit buds remained dormant. Too wet for plowing and planting.

STANARDSVILLE,——Snow of the 26th melted as fast as it fell.

FREDERICKSBURG,——Rain high wind and snow begining on the 2d and lasting more than 24 hours. Freshet on the 3d and 7th.

CLIFTON FORGE,——No damage done in this locality by high waters.

BARBOURSVILLE.——First spring birds singing on the 12th. Frogs croaking on the 14th. Brisk south wind from 11 am. to 11 pm. of the 17th. Thunder storms from 5.10 to 6.15 pm. Very loud peal at 5.15 pm. Brisk west wind from 4 to 7 pm. of the 23d. Snow from 7.50 am. to 12.30 pm.; sunshine from 1.00 pm. to 2.15 pm. Rain from 3.10 pm. to 4.15 pm. Snow from 4.15 pm. to 5.50 pm.

BIG STONE GAP,——A very heavy wind on the 18th.

BLACKSBURG,——Thunder showers and lightning on the 22d.

CHRISTIANSBURG.——Apparently the earth is wet deeper than for 7 years past.

DALE ENTERPRISE,——Wild geese flying northward on the 14th. Floods on the 6th and 22d of the month.

GRAHAM'S FORGE.——The ground hog saw his shadow. Rainy and freezing weather has delayed the plowing for spring crops and farm work.

LEXINGTON.——High wind blew down covered wooden bridge across North river near Buena Vista, and unroofed two houses on the night of the 5th.

MARION.——Water highest known for years on the 21st.

STANLEYTON.——Snow 26 inches deep on top of Blue Ridge 12 miles se. of station on 2d. Snow nearly all disappeared by the 15th.

WYTHEVILLE.——Rain, snow, and sleet all night of the 5th, Violent storm for an hour on the 18th at 5 pm. Waters very high on the 21st.

STAUNTON.——Taking the month as a whole it was very rough. Very little outdoor work done by the farmers. Wheat seems to look very well, considering the open winter.