freshly fallen, and before it has to any great extent become packed either by its own weight, or by the wind, or by melting and re-gelation. Under these circumstances, it is not very erroneous to assume that 10 inches of snow would reduce by melting to 1 inch of water. The ratio 10 is known to be occasionally too small; instances of very light snow have occurred where the ratio is as large as 20, whereas in very wet snow ratios of 8, 7, and even 4 have been known; but 10 is considered as a very fair average for the United States and Canada. If, therefore, the depths as given in Tables X and XI be divided by 10 we obtain the equivalent water, and if this be divided by the total precipitation for the year we obtain the snowfall expressed as a percentage of the total snow and rain. A comparison of the total accumulated snowfall with the actual depth of snow lying on the ground, as published either in the MONTHLY WEATHER REVIEW or in the weekly chart of Depth of Snow on the Ground, published by the Weather Bureau, must impress one with the conviction that the accumulation of snow on the ground during the winter is prevented, not by rainfall, nor yet by its melting and penetration into the soil, but, especially and almost entirely, by the evaporation produced by the strong dry winds in the presence of sunshine. The accumulation of snow that in recent geologic times formed a general glaciation over the Lake Region, St. Lawrence Valley, and the neighboring regions, may have been due to the preservation of the snow by cloudy, foggy weather and moist winds, rather than to any excessive snowfall, and such a change in the climate and winds would be produced if the Rocky Mountain Plateau were submerged and the interior plains of the United States and Canada were covered by a shallow sea.

The enormous snowfalls recorded at high stations, such as Pikes Peak, show the influence of elevation above the surrounding country. The contrast of snowfall at Denver and Pikes Peak is like that between Mount Washington and its surrounding low land stations. In these and similar cases there is a tendency to snowfall with every passing cloud; in fact, the cloud that envelopes the summit is generally a local one, due to the upward deflection of winds striking the mountain side. It is safe to say that a broad plateau at the level of Pikes Peak would not show any snowfall such as recorded at that station, except, perhaps, at its immediate windward edge. The accumulation of hoar frost or frostwork on mountain summits is not to be confounded with the actual snowfall, no more than the cloud particles caught in the rain-gauge should be confounded with rainfall. Both the frostwork and the catch of fog in the gauge are like the drip from the trees in foggy weather, to be considered as moisture forcibly extracted from the air by contact with obstacles, and not as rain or snow naturally precipitated by force of gravity. Still, in the growth of a glacier and in the irrigation of dry soil, such formations of frostwork and drip have an appreciable importance.

From an agricultural point of view the quantity of snowfall has a twofold importance. A small fraction is melted by virtue of the warmth of the soil and percolates through it, but the principal work of the snow covering is to retain in the soil what little moisture may be there and to keep the surface at a uniform temperature near the freezing point, while the upper surface of the snow experiences the evaporation by day and the low temperature at night that would otherwise occur at the bare surface of the ground.

From a meteorological point of view the covering of the land by the snow has an important bearing on the temperature and moisture of the air and resulting winds. The air in contact with a widespread covering of snow is cooled down to especially low temperatures during the nighttime and the winter season by radiation that is uncompensated by heat from other sources; whereas during the daytime the solar radiation is largely consumed in melting a small thickness of snow; so that both during the day and the night the air over a field of snow is colder than over the bare ground.

REDUCTION OF BAROMETRIC PRESSURE TO SEA LEVEL.

By PARK MORRILL, Forecast Official. (Dated May 5, 1896.)

Under instructions of the Chief of the Weather Bureau, a special board has had under consideration, during the past year, the question of adopting some satisfactory plan of reduction to sea level. It is agreed that the formula of reduction to be used should be that of the International Meteorological Committee. This formula in English measures is—

$$\log \frac{P_0}{P} = \frac{H\left(1-0.378\frac{E}{B}\right)}{60368.6\,[1.00157-0.002039\ (t-32)]} \times$$

$$\times \frac{1}{(1-0.00259\cos.2l)\left(1-\frac{H}{20902950}\right)}$$

Wherein, H=altitude, in feet, of the point of observation.
P=pressure, in inches, at altitude H.
P_0=pressure, in inches, reduced to sea level.
t=mean temperature, in Fahrenheit degrees, of air column.
E=mean vapor pressure, in inches, of air column.
B=mean pressure, in inches, of air column.
l=latitude of point of observation.

In case of observations made in free air above a sea level plane, this formula defines the relations which must exist between the pressures at the point of observation and at sea level vertically below, provided there be no vertical acceleration within the air column and that the effects of viscosity and friction be neglected. That these effects are small has been shown by Professor Ferrel, and we are forced to disregard them because of our observational limitations.

When, however, we seek to apply the sea-level reduction to observations of pressure made at the earth's surface, in which case we have no air column below us, the problem becomes a purely hypothetical one, and the reduction is resorted to only for its assistance in the study of horizontal gradients of pressure. In such use of the above formula we are at once confronted with the question; What temperature and vapor pressure are to be assigned to the imaginary air column? Owing to the small effect of the latter of these factors, no serious error will result from using in the reduction some function of the vapor pressure at the point of observation. The difficulty lies in assigning a proper reduction temperature; this gives no trouble for observations at altitudes below 1,000 feet, as any reasonable modification of the observed temperature will produce inconsiderable change in the reduced pressure for elevations of this magnitude.

The problem of real difficulty is therefore found in the determination of the proper reduction temperature in case of observations at altitudes exceeding 1,000 feet. Among the present stations of the Weather Bureau, with a single excep-

tion, this difficulty obtains only in the elevated region between the Mississippi Valley and the Pacific Coast. For several months past the writer has devoted considerable labor to a study of this problem, as presented in our elevated western stations.

The results obtained may be briefly summarized in the following theses:

1. Normal reduction temperatures may be determined from the normal observed temperature reduced to sea level by assuming a decrement of temperature with altitude, ranging from 1.5° F. per 1,000 feet in winter to 2.5° in summer, and being 2° per 1,000 feet for the average of the whole year.

2. Observed temperatures may be reduced to sea-level temperatures (whereby is meant such temperatures as would exist if the present terrestrial surface were replaced by a sea-level plain, *while the general features of the atmospheric circulation remained unchanged*) by applying to them increments for altitude of the magnitude noted above and further modifying them by *local corrections* determined as follows. The normal temperatures increased proportionately to the various altitudes of stations are to be charted for a considerable extent of country and isotherms drawn. These, while forming a remarkably uniform system of lines as compared with those based on the original observed temperatures, are more or less wavy and irregular as a result of local peculiarities of temperature. Through these wavy lines smooth lines are drawn with a free hand and the isothermal chart thus formed is believed to closely approximate the desired chart of sea-level temperatures as above defined. Temperatures taken from the latter chart furnish the data required by the first thesis.

The propositions of the preceding paragraphs lead directly to the reduction of normal temperatures to sea level. In practice, the result is a set of corrections to be applied to the observed temperatures in order to form proper temperatures for use in reductions of pressure. These corrections depend mainly on the elevation of the station, but also on local temperature anomalies, such as the winter fœhn at the eastern base of the Rocky Mountains. The "reduction temperature" thus obtained depends *entirely on a discussion of temperature data*, and hence does not beg the question as to what the reduced barometric pressure should be.

The "reduction temperature corrections," established as above, are strictly applicable to normal temperatures. For the reduction of an individual observation of pressure, made under abnormal conditions, a further modification of temperature may, at least theoretically, be necessary. In the reduction of annual means, however, the abnormality will be so slight that those normal corrections may be used without modification, and this has been done in computing the sea-level temperatures and pressures of the accompanying table (A) for 1895 for elevations of 1,000 feet or more. At lower stations (except a few on the Pacific Coast, where the local correction is considerable) the sea-level temperature is formed from that observed simply by adding the proper increment for altitude, as the local correction would make no appreciable change in the reduced pressure.

The formula of barometric reduction to sea level as above given is rigidly that of the International Meteorological Committee. All necessary data are given in detail in the following table (A). The resultant isothermal and isobaric lines are shown on Chart IV. There are also included in the table and chart data from a number of Canadian stations, from which observations are received by the courtesy of the Canadian Meteorological Office. The reduction of these has been made by the same method, normal data from these stations having been included in my previous investigation. Data for Mexican stations has been taken from recent publications of a few observatories in that country.

(A.)—*Table of data for* 1895.

Station.	Elevation.	Latitude.		Mean observed pressure.*	Mean observed temperature.	Mean dew-point.	Mean reduction temperature.	Mean pressure reduced to sea level.*	Mean temperature reduced to sea level.
New England.	*Feet.*	°	′	*Inches.*	°*F.*	°*F.*	°*F.*	*Inches.*	°*F.*
Eastport, Me	76	44	54	29.89	42.5	34	42.6	29.97	42.7
Portland, Me	103	43	39	29.87	45.2	38	45.3	29.98	45.4
Northfield, Vt	872	44	10	29.07	41.6	33	42.5	30.03	43.4
Boston, Mass	125	42	21	29.88	49.8	39	49.9	30.02	50.0
Nantucket, Mass	14	41	17	30.01	49.1	43	49.1	30.03	49.1
Block Island, R. I	27	41	10	30.00	48.7	43	48.7	30.03	48.7
New Haven, Conn	107	41	18	29.91	49.3	40	49.4	30.03	49.5
Middle Atlantic States.									
Albany, N. Y	85	42	39	29.94	48.5	40	48.6	30.04	48.7
New York, N. Y	314	40	43	29.71	51.4	42	51.7	30.05	52.0
Harrisburg, Pa	377	40	16	29.65	51.2	42	51.6	30.06	52.0
Philadelphia, Pa	117	39	57	29.93	53.6	42	53.7	30.05	53.8
Baltimore, Md	148	39	18	29.90	54.2	42	54.3	30.06	54.4
Washington, D. C	112	38	54	29.94	54.2	43	54.3	30.07	54.4
Lynchburg, Va	685	37	25	29.33	56.1	44	56.8	30.06	57.5
Norfolk, Va	57	36	51	29.99	58.8	49	58.9	30.05	59.0
South Atlantic States.									
Charlotte, N. C	773	35	13	29.23	58.6	46	59.4	30.06	60.2
Hatteras, N. C	11	35	15	30.04	60.8	55	60.8	30.06	60.8
Kittyhawk, N. C	9	36	00	30.02	58.8	52	58.8	30.03	58.8
Raleigh, N. C	388	35	45	29.66	58.4	47	58.8	30.07	59.2
Wilmington, N. C	78	34	14	29.98	61.9	53	62.0	30.07	62.1
Charleston, S. C	52	32	47	30.04	64.7	55	64.8	30.09	64.9
Augusta, Ga	180	33	28	29.87	62.5	50	62.7	30.06	62.9
Savannah, Ga	98	32	05	29.97	65.4	55	65.5	30.07	65.6
Jacksonville, Fla	43	30	20	30.01	68.0	58	68.0	30.06	68.0
Florida Peninsula.									
Jupiter Fla	28	26	57	30.00	72.8	65	72.8	30.03	72.8
Key West, Fla	22	24	34	30.01	75.9	67	75.9	30.03	75.9
Tampa, Fla	36	27	57	30.02	70.9	62	70.9	30.05	70.9
Eastern Gulf States.									
Atlanta, Ga	1,131	33	45	28.88	59.7	49	60.8	30.07	61.9
Pensacola, Fla	56	30	25	29.99	66.0	57	66.1	30.05	66.2
Mobile, Ala	57	30	41	30.00	65.3	57	65.4	30.06	65.5
Montgomery, Ala	221	32	23	29.83	64.0	52	64.2	30.06	64.4
Meridian, Miss	358	32	21	29.67	62.3	53	62.7	30.05	63.1
Vicksburg, Miss	254	32	22	29.77	64.1	53	64.4	30.04	64.7
New Orleans, La	54	29	58	29.99	67.5	57	67.6	30.05	67.7
Western Gulf States.									
Shreveport, La	249	32	30	29.77	63.8	53	64.0	30.03	64.2
Fort Smith, Ark	481	35	22	29.52	58.5	49	59.0	30.04	59.5
Little Rock, Ark	302	34	45	29.72	60.3	49	60.6	30.04	60.9
Corpus Christi, Tex	20	27	49	29.99	68.8	63	68.8	30.01	68.8
Galveston, Tex	42	29	18	30.00	67.6	60	67.6	30.04	67.6
Palestine, Tex	510	31	45	29.50	64.3	53	64.8	30.03	65.3
San Antonio, Tex	704	29	17	29.28	68.0	52	68.7	30.02	69.4
Ohio Valley and Tennessee.									
Chattanooga, Tenn	762	35	04	29.27	58.6	47	59.4	30.08	60.2
Knoxville, Tenn	980	35	56	29.04	57.0	46	58.0	30.08	59.0
Memphis, Tenn	399	35	09	29.63	60.6	48	61.0	30.06	61.4
Nashville, Tenn	545	36	10	29.48	57.8	46	58.3	30.06	58.8
Lexington, Ky	989	38	02	28.99	53.7	41	54.7	30.05	55.7
Louisville, Ky	525	38	15	29.48	55.5	42	56.0	30.05	56.5
Indianapolis, Ind	766	39	46	29.22	52.1	40	52.9	30.05	53.7
Cincinnati, Ohio	628	39	06	29.38	53.6	40	54.2	30.06	54.8
Columbus, Ohio	824	39	58	29.18	57.6	39	52.4	30.06	53.2
Pittsburg, Pa	842	40	32	29.15	52.3	42	53.1	30.05	53.9
Parkersburg, W. Va	638	39	16	29.38	53.1	43	53.7	30.07	54.3
Lower Lake Region.									
Buffalo, N. Y	690	42	53	29.27	46.4	37	47.1	30.03	47.8
Oswego, N. Y	335	43	29	29.64	45.4	37	45.7	30.01	46.0
Rochester, N. Y	523	43	08	29.45	47.4	37	47.9	30.03	48.4
Erie, Pa	714	42	07	29.26	47.4	38	48.1	30.04	48.8
Cleveland, Ohio	740	41	30	29.23	48.3	39	49.0	30.04	49.7
Sandusky, Ohio	629	41	25	29.35	49.0	38	49.6	30.03	50.2
Toledo, Ohio	674	41	40	29.31	48.2	38	48.9	30.04	49.6
Detroit, Mich	724	42	20	29.24	47.2	36	47.9	30.03	48.6
Upper Lake Region.									
Alpena, Mich	609	45	05	29.32	41.6	34	42.2	29.99	42.8
Grand Haven, Mich	628	43	05	29.31	45.7	37	46.3	30.00	46.9
Marquette, Mich	734	46	34	29.17	40.6	32	41.3	29.98	42.0
Port Huron, Mich	639	43	00	29.33	45.1	36	45.7	30.03	46.3
Sault Ste. Marie, Mich	642	46	28	29.27	38.6	32	39.2	29.98	39.8
Chicago, Ill	824	41	52	29.13	47.1	36	47.9	30.03	48.7
Milwaukee, Wis	673	43	02	29.28	45.1	35	45.8	30.02	46.5
Green Bay, Wis	617	44	31	29.34	43.8	33	44.4	30.02	45.0
Duluth, Minn	702	46	48	29.20	39.1	31	39.8	29.98	40.5
North Dakota.									
Moorhead, Minn	935	46	52	28.95	38.5	29	39.4	29.99	40.3
St. Vincent, Minn	794	48	56	29.11	35.3	28	36.1	29.99	36.9
Bismarck, N. Dak	1,674	46	47	28.20	39.8	26	41.2	30.02	42.9
Williston, N. Dak	1,875	48	09	27.96	38.9	24	39.9	30.00	41.8
Upper Mississippi Valley									
St. Paul, Minn	850	44	58	29.09	43.6	32	44.4	30.02	45.3
La Crosse, Wis	720	43	49	29.24	45.7	35	46.4	30.02	47.1
Davenport, Iowa	613	41	30	29.35	48.7	36	49.3	30.02	49.9
Des Moines, Iowa	869	41	35	29.10	49.0	36	49.9	30.04	50.8
Keokuk, Iowa	613	40	22	29.37	50.7	38	51.3	30.03	51.9
Cairo, Ill	359	37	00	29.65	56.7	46	57.1	30.04	57.5
Springfield, Ill	644	39	48	29.34	51.3	39	51.9	30.04	52.5
Hannibal, Mo	534	39	41	29.46	51.4	40	51.9	30.03	52.4
St. Louis, Mo	571	38	38	29.45	55.1	43	55.7	30.07	56.3
Missouri Valley.									
Kansas City, Mo	963	39	05	29.02	53.2	42	54.2	30.05	55.2
Springfield, Mo	1,324	37	12	28.63	53.6	43	54.9	30.03	56.2
Omaha, Nebr	1,108	41	16	28.83	50.6	36	51.7	30.02	52.8
Sioux City, Iowa	1,165	42	29	28.75	47.8	34	48.8	30.01	50.0
Pierre, S. Dak	1,470	44	24	28.42	46.5	32	46.6	30.00	48.1
Huron, S. Dak	1,310	44	21	28.58	43.8	30	46.4	30.00	47.7

(A.)—*Table of data for* 1895—Continued.

Station.	Elevation.	Latitude.		Mean observed pressure.*	Mean observed temperature.	Mean dew-point.	Mean reduction temperature.	Mean pressure reduced to sea level.*	Mean temperature reduced to sea level.
Northern Slope.	*Feet.*	°	′	*Inches.*	° *F.*	° *F.*	° *F.*	*Inches.*	° *F.*
Havre, Mont	2,477	48	34	27.34	39.8	25	41.7	29.98	44.2
Miles City, Mont	2,374	46	25	27.46	43.0	30	44.9	29.98	47.3
Helena, Mont	4,110	46	34	25.84	42.8	25	46.8	30.07	50.9
Rapid City, S. Dak	3,260	44	04	26.58	45.3	28	46.3	29.98	49.6
Cheyenne, Wyo	6,098	41	08	23.98	43.7	26	49.0	30.00	55.1
Lander, Wyo	5,377	42	50	24.62	41.0	22	46.0	30.03	51.4
North Platte, Nebr	2,826	41	08	27.06	48.1	34	50.8	30.01	53.6
Middle Slope.									
Denver, Colo	5,290	39	45	24.71	48.8	26	52.0	29.97	57.3
Pueblo, Colo	4,713	38	18	25.25	49.8	25	53.1	29.98	57.8
Concordia, Kans	1,396	39	35	25.52	53.3	37	55.2	30.00	56.6
Dodge City, Kans	2,504	37	45	27.38	53.1	36	55.9	29.97	58.4
Wichita, Kans	1,351	37	41	28.57	55.5	42	57.2	29.99	58.6
Oklahoma, Okla	1,239	35	26	28.72	57.9	46	58.8	30.03	60.0
Southern Slope.									
Abilene, Tex	1,749	32	23	28.21	61.4	45	62.2	30.02	63.9
Amarillo, Tex	3,691	35	13	26.24	53.4	35	56.8	29.99	60.5
Southern Plateau.									
El Paso, Tex	3,767	31	47	26.16	62.2	31	64.4	29.98	68.2
Santa Fe, N. Mex	6,998	35	41	23.26	47.3	22	54.6	29.97	61.6
Yuma, Ariz	139	32	45	29.72	72.4	42	72.5	29.87	72.6
Independence, Cal	3,884	36	48	26.00	58.0	23	58.8	29.90	62.7
Middle Plateau.									
Carson City, Nev	4,720†	39	08	25.29	48.3	34	53.0	30.03	57.7
Winnemucca, Nev	4,340	40	58	25.66	47.1	19	54.0	30.05	58.3
Salt Lake City, Utah	4,344	40	46	25.65	50.2	31	54.2	30.03	58.5
Northern Plateau.									
Baker City, Oreg	3,470	44	50	26.46	45.2	29	51.8	30.04	55.3
Idaho Falls, Idaho	4,742	43	29	25.25	41.7	26	46.2	30.08	50.9
Spokane, Wash	1,930	47	40	28.00	48.0	30	49.5	30.06	51.4
Walla Walla, Wash	1,003	46	02	28.97	53.1	38	51.5	30.05	52.5
North Pacific Coast.									
Fort Canby, Wash	179	46	16	29.86	50.5	45	50.7	30.06	50.9
Port Angeles, Wash	29	48	07	30.01	47.3	41	47.0	30.04	47.3
Seattle, Wash	119	47	38	29.92	51.2	41	51.3	30.05	51.4
Tatoosh Island, Wash	86	48	23	29.95	48.4	44	48.5	30.03	48.6
Portland, Oreg	157	45	32	29.89	52.0	41	52.2	30.04	52.4
Roseburg, Oreg	523	43	13	29.46	52.3	42	52.8	30.03	53.3
Middle Pacific Coast.									
Eureka, Cal	64	40	48	30.00	50.9	46	53.1	30.07	53.2
Red Bluff, Cal	334	40	10	29.64	62.2	41	56.0	30.00	56.3
Sacramento, Cal	71	38	35	29.91	60.2	46	58.1	29.99	58.2
San Francisco, Cal	153	37	48	29.86	55.6	48	55.8	30.03	56.0
South Pacific Coast.									
Fresno, Cal	332	36	43	29.61	62.5	41	60.3	29.96	60.6
Los Angeles, Cal	330	34	03	29.61	61.7	48	61.7	29.96	62.0
San Diego, Cal	69	32	43	29.89	60.5	57	63.0	29.96	63.1
San Luis Obispo, Cal	201	35	18	29.78	58.5	45	58.7	30.00	58.9
Canadian Stations.									
St. Johns, N. F	125	47	34	29.80	42.0	....	42.1	29.94	42.2
Sydney, C. B. I	55	46	10	29.90	42.9	....	43.0	29.96	43.1
Halifax, N. H	118	44	39	29.85	44.2	....	44.3	29.98	44.4
Grand Manan, N. B	49	44	47	29.91	43.5	....	43.5	29.96	43.5
Yarmouth, N. S	65	43	50	29.91	43.9	....	44.0	29.98	44.1
Charlottetown, P. E. I	38	46	14	29.90	42.5	....	42.5	29.95	42.5
Chatham, N. B	21	47	03	29.92	39.6	....	39.6	29.95	39.6
Father Point, Que	20	48	31	29.91	36.4	....	36.4	29.93	36.4
Quebec, Que	296	46	48	29.62	39.1	....	39.4	29.95	39.7
Montreal, Que	187	45	30	29.76	41.9	....	42.1	29.97	42.3
Rockliffe, Ont	472	46	12	29.43	36.8	....	37.3	29.96	37.8
Kingston, Ont	285	44	13	29.68	42.6	....	42.9	29.99	43.2
Toronto, Ont	350	43	39	29.63	43.2	....	43.6	30.01	43.9
White River, Ont	1,252	48	20	28.61	30.9	....	33.3	30.00	34.6
Port Stanley, Ont	592	42	40	29.37	43.6	....	44.2	30.02	44.8
Saugeen, Ont	656	44	30	29.28	41.7	....	42.4	30.00	43.1
Parry Sound, Ont	635	49	15	29.20	39.8	....	40.4	29.99	41.0
Port Arthur, Ont	644	48	27	29.25	34.6	....	35.2	29.97	35.8
Winnipeg, Man	760	49	53	29.13	32.7	....	33.5	29.98	34.3
Minnedosa, Man	1,690	50	10	28.10	31.8	....	34.3	29.96	36.0
Qu'Appelle, Assin	2,115	50	44	27.67	31.8	....	34.1	29.98	36.2
Medicine Hat, Assin	2,161	50	01	27.64	38.7	....	40.3	29.97	42.5
Swift Current, Assin	2,439	50	20	27.36	35.2	....	36.9	29.99	39.3
Calgary, Alberta	3,389	51	02	26.35	35.6	....	39.0	29.92	42.4
Prince Albert, Sask	1,402	52	55	28.42	30.9	....	33.2	29.97	34.6
Edmonton, Alberta	2,158	53	14	27.61	35.3	....	38.4	29.94	40.6
Battleford, Sask	1,620	52	41	28.19	32.4	....	34.2	29.97	35.8
Spences Bridge, B. C	760	50	25	29.16	48.3	....	49.1	29.99	49.9
Hamilton, Ber	151	32	23	29.93	70.3	....	70.5	30.08	70.7
Esquimalt, B. C	28	48	26	30.01	47.2	....	47.2	30.04	47.2
Mexican Stations.									
Leon	5,894	21	07	24.25	65.7	45	71.5	29.81	77.4
Oaxaca	5,164	17	04	25.01	69.4	56	74.5	29.88	79.7
Mexico	7,487	19	26	23.02	60.3	46	70.5	29.83	78.0

* Height of the barometric column of mercury at temperature of 32° F. under the standard force of gravity at sea level in latitude 45°.
† Barometric elevation, all others are by leveling operations.

PRESSURES REDUCED TO A PLANE AT AN ALTITUDE OF 10,000 FEET.

At the request of Professor Abbe, the mean annual sea-level pressures and temperatures established above have also been reduced upward to an elevation of 10,000 feet. In making this reduction, it has been assumed that there is a uniform decrement of temperature with altitude at the rate of 2° per 1,000 feet. It has been further assumed that the dew-point may be treated as a function of temperature; it has been taken as 10° less than the temperature, since this value of the depression of the dew-point is that found by Professor Marvin to be the average of our observations. With these assumptions, and using the value of gravity for a mean latitude of 40°, the pressures at 10,000 feet may be expressed as a function only of the sea-level pressure and temperature, as shown in the table (B) below. The effect of the assumption as to gravity is to increase the north and south gradient on the isobaric chart by about 0.002 inch per degree of latitude. The isobars thus obtained at 10,000 feet elevation are shown on Chart V.

Certain minor irregularities in these high-level isobars are to be attributed to the fact that at most stations of less than 1,000 feet elevation the local temperature corrections, which were not important in the sea-level reduction, were still omitted. But in passing from the sea-level values to those at an altitude of 10,000 feet, such corrections are of equal value, whatever may have been the original elevation of the station of observation.

(B).—*Table for the reduction of sea-level pressures to a plane at an altitude of* 10,000 *feet.*

(Assuming gravity as at latitude 40° and a temperature decrement of 2° F. per 1,000 feet.)

Sea-level temperature (Fahrenheit).	Sea-level pressures.						
	29.86.	29.88.	29.90.	29.92.	29.94.	29.96.	29.98.
°	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
32	20.26	20.28	20.29	20.30	20.31	20.33	20.34
36	.32	.34	.35	.37	.38	.39	.41
40	.39	.40	.42	.43	.45	.46	.47
44	.46	.47	.48	.50	.51	.53	.54
48	.52	.54	.55	.56	.58	.59	.60
52	.59	.60	.61	.63	.64	.66	.67
56	.65	.66	.68	.69	.71	.72	.73
60	.72	.73	.74	.76	.77	.78	.80
64	.78	.79	.81	.82	.83	.85	.86
68	.84	.86	.87	.88	.90	.91	.93
72	20.91	20.92	20.94	20.95	20.96	20.98	20.99

Sea-level temperature (Fahrenheit).	Sea-level pressures.					
	30.00.	30.02.	30.04.	30.06.	30.08.	30.10.
°	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*	*Inches.*
32	20.35	20.37	20.38	20.39	20.41	20.42
36	.42	.43	.45	.46	.48	.49
40	.49	.50	.51	.53	.54	.56
44	.55	.57	.58	.59	.61	.62
48	.62	.63	.65	.66	.67	.69
52	.68	.70	.71	.72	.74	.75
56	.75	.76	.78	.79	.80	.82
60	.81	.83	.84	.85	.87	.88
64	.88	.89	.90	.92	20.93	20.95
68	20.94	20.95	20.97	20.98	21.00	21.01
72	21.00	21.02	21.03	21.05	21.06	21.08

TABLE I.—*Annual meteorological summary, Weather Bureau stations*, 1895.

Districts and stations.	Pressure, in inches.†			Temperature of the air, in degrees Fahrenheit.							Humidity.		Precipitation.			Wind.							
	Mean pressure, 8 a. m. and 8 p. m. ÷ 2.	Mean reduced.	Departure from normal.	Mean max. and min. ÷ 2.	Departure from normal.	Maximum.	Mean maximum.	Minimum.	Mean minimum.	Greatest monthly range.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Departure from normal.	Days with .01, or more.	Total movement, miles.	Prevailing direction.	Max. velocity. Miles per hour.	Max. velocity. Direction.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.
New England.																							
Eastport, Me	29.89	29.98	+ .02	42.5	+ 1.1	85	49.1	−10	35.9	53	34	75	32.88	−16.37	132	93,932	s.	72	e.	58	192	115	6.2
Portland, Me	29.87	29.97	− .01	45.2	+ 0.6	93	52.9	−11	37.4	60	38	80	38.78	− 3.90	126	65,624	nw.	49	se.	104	125	136	5.8
Northfield, Vt	29.07	30.03	+ .02	41.6	+ 0.6	90	52.3	−17	30.9	74	33	74	35.20	− 3.73	129	75,078	s.	49	sw.	114	125	126	5.6
Boston, Mass	29.89	30.03	+ .03	49.8	+ 0.9	96	57.5	− 6	42.1	56	39	70	40.17	− 6.19	118	96,340	w.	50	s.	122	104	139	5.5
Nantucket, Mass	30.02	30.03	.00	49.1	+ 0.5	89	54.5	1	43.7	48	43	81	38.32	− 5.62	134	97,847	nw.	51	e.	129	101	135	5.6
Woods Hole, Mass	.....	.....	.....	48.6	− 0.9	85	53.8	− 1	43.4	45	.....	.....	37.41	− 6.69	111	127,262	s.	70	sw.	166	87	112	4.6
Vineyard Haven, Mass	.....	.....	.....	51.6	+ 0.3	91	59.0	0	44.0	51	.....	.....	43.52	+ 2.00	127	.....	sw.	.....	.....	138	76	151	....
Block Island, R. I	30.01	30.04	+ .01	48.7	− 0.6	85	53.9	− 4	43.6	49	43	81	49.21	+ 4.26	123	130,738	sw.	68	ne.	99	179	87	5.4
Narragansett Pier, R. I	.....	.....	.....	48.5	0.0	91	56.7	− 7	40.3	57	.....	.....	46.37	− 1.13	117	.....	sw.	.....	.....	187	40	135	....
New Haven, Conn	29.92	30.04	.00	49.3	− 0.1	96	57.3	− 7	41.2	57	40	72	35.96	−14.26	123	78,454	n.	55	s.	162	103	100	4.5
Middle Atlantic States.																							
Albany, N. Y	29.95	30.04	+ .02	48.5	+ 0.3	97	57.4	−12	39.6	62	40	76	29.80	− 8.83	129	67,839	s.	42	se.	125	117	123	5.4
New York, N. Y	29.72	30.06	+ .01	51.4	− 0.6	97	58.6	− 3	44.2	57	42	74	35.73	− 9.52	120	110,861	nw.	73	w.	135	127	103	5.1
Harrisburg, Pa	29.66	30.08	+ .01	51.2	− 0.3	97	59.4	− 4	43.0	58	42	75	26.02	−20.71	118	62,892	w.	46	nw.	151	108	106	4.8
Philadelphia, Pa	29.94	30.06	.00	53.6	− 0.3	98	61.8	− 3	45.5	56	42	69	31.01	− 9.55	110	90,913	nw.	50	sw.	139	116	110	5.1
New Brunswick, N. J	.....	.....	.....	51.5	+ 0.1	99	62.0	−10	41.0	63	.....	.....	39.94	− 4.28	114	.....	w.	.....	.....	56	199	110	....
Baltimore, Md	29.91	30.06	− .01	54.2	− 1.1	97	62.1	1	46.2	61	42	67	40.47	− 3.87	114	67,713	n.	42	w.*	154	141	70	4.4
Washington, D. C	29.96	30.08	.00	54.2	− 0.8	98	63.2	0	45.2	67	43	71	34.25	−10.19	128	59,602	nw.	42	nw.*	169	104	92	4.3
Cape Henry, Va	.....	.....	.....	57.7	− 0.9	99	65.0	8	50.3	59	.....	.....	46.95	− 5.88	113	.....	sw.	.....	.....	108	145	112	....
Lynchburg, Va	29.35	30.09	+ .01	56.1	− 1.2	99	66.3	− 3	45.9	70	44	70	36.16	− 7.65	121	36,784	nw.	33	nw.	142	149	74	4.6
Norfork, Va	30.01	30.07	.00	58.8	− 0.6	100	66.8	2	50.8	66	49	77	45.41	− 6.76	131	75,239	ne.	42	nw.	198	97	70	3.9
South Atlantic States.																							
Charlotte, N. C	29.26	30.08	.00	58.6	− 1.7	100	68.0	1	49.3	68	46	70	39.16	−14.94	122	58,749	sw.	48	s.	154	122	89	4.6
Hatteras, N. C	30.07	30.08	+ .01	60.8	− 0.8	91	65.8	11	55.9	47	55	82	69.28	+ 0.80	137	123,838	sw.	60	n.	121	136	108	5.2
Kittyhawk, N. C	30.04	30.05	− .01	58.8	− 1.4	94	64.7	6	52.9	58	52	80	46.38	−10.96	130	132,515	ne.	66	n.	182	80	103	4.4
Raleigh, N. C	29.68	30.10	.00	58.4	− 0.9	100	69.9	4	49.0	67	47	72	51.12	− 4.39	140	53,638	sw.	37	sw.	129	108	128	5.1
Wilmington, N. C	30.01	30.10	+ .02	61.9	− 1.5	100	70.1	10	53.8	64	53	80	46.27	−10.54	127	72,833	ne.	48	w.	177	76	112	4.4
Charleston, S. C	30.07	30.12	+ .03	64.7	− 1.6	98	71.5	12	57.8	64	55	78	55.18	− 1.80	125	70,586	sw.	36	w.*	183	159	73	4.6
Columbia, S. C	.....	.....	.....	62.1	− 1.6	102	73.0	8	51.2	67	.....	.....	53.20	+ 6.44	116	.....	ne.	.....	.....	134	125	106	....
Augusta, Ga	29.90	30.09	+ .02	62.5	− 2.3	100	72.5	8	52.4	67	50	72	52.10	+ 3.67	120	45,822	w.	43	nw.	170	100	95	4.4
Savannah, Ga	30.00	30.11	+ .01	65.4	− 1.5	98	74.2	12	56.5	66	55	78	54.84	+ 2.75	124	68,390	s.	42	nw.	150	129	86	4.5
Jacksonville, Fla	30.05	30.10	+ .02	68.0	− 1.7	97	77.2	14	58.8	62	58	78	46.80	− 8.80	130	63,872	ne.	50	se.	132	139	94	5.1
Florida Peninsula.																							
Jupiter, Fla	30.05	30.08	.00	72.8	− 1.8	95	79.2	27	66.3	57	65	79	72.47	+15.77	136	85,137	s.	55	n.	117	168	80	5.0
Key West, Fla	30.06	30.08	+ .03	75.9	− 1.6	91	80.2	49	71.6	31	67	77	29.19	−11.04	113	85,770	e.	49	n.	148	155	62	4.6
Tampa, Fla	30.06	30.10	.....	70.9	− 0.8	95	79.4	22	62.3	55	62	80	50.64	− 1.59	122	55,663	ne.	42	sw.	103	186	76	5.2
East Gulf States.																							
Atlanta, Ga	28.91	30.10	− .01	59.7	− 1.6	98	68.2	0	51.2	71	49	74	45.92	− 7.38	125	82,275	nw.	48	nw.	173	88	104	4.6
Pensacola, Fla	30.03	30.09	+ .01	66.0	− 2.0	93	73.3	11	58.7	61	57	78	55.30	− 6.63	116	80,898	sw.	49	ne.	151	112	102	4.8
Mobile, Ala	30.04	30.10	+ .02	65.3	− 2.0	96	73.4	12	57.2	61	57	81	58.41	− 4.69	130	67,508	n.	42	nw.	100	138	127	5.6
Montgomery, Ala	29.86	30.10	.00	64.0	− 1.7	97	73.7	8	54.2	65	52	73	43.45	− 9.93	127	53,860	ne.	36	nw.*	125	118	122	5.2
Meridian, Miss	29.70	30.09	− .01	62.3	− 1.4	96	72.7	6	52.0	70	53	78	50.59	− 5.34	109	47,332	ne.	36	w.	107	139	119	5.5
Vicksburg, Miss	29.80	30.07	− .02	64.1	− 1.8	97	73.2	4	55.1	70	53	72	40.09	−17.20	120	61,049	se.	46	nw.	193	93	79	4.0
New Orleans, La	30.03	30.09	+ .03	67.5	− 1.7	94	75.0	16	60.0	58	57	76	56.44	− 6.58	141	73,761	se.	40	nw.	177	119	69	4.1
West Gulf States.																							
Shreveport, La	29.80	30.07	.00	63.8	− 2.4	98	73.1	4	54.4	70	53	73	36.55	−14.87	99	61,000	se.	43	n.	127	83	155	5.6
Fort Smith, Ark	29.55	30.06	+ .02	58.5	− 2.3	97	69.2	− 7	47.8	81	49	74	49.87	+ 5.87	118	56,458	e.	42	w.*	149	77	139	5.1
Little Rock, Ark	29.75	30.07	.00	60.3	− 1.9	96	69.1	− 2	51.4	74	49	72	49.58	− 4.62	108	60,374	sw.	60	nw.	134	114	117	5.3
Corpus Christi, Tex	30.03	30.05	.00	68.8	− 1.2	93	74.5	16	63.1	59	63	83	25.72	−11.58	76	107,993	se.	47	se.	88	156	121	5.6
Galveston, Tex	30.04	30.08	+ .03	67.6	− 2.4	94	72.4	15	63.0	50	60	79	38.91	−13.28	108	98,142	se.	49	nw.*	212	78	75	3.7
Palestine, Tex	29.53	30.08	.00	64.3	− 1.3	100	74.2	− 1	54.4	77	53	75	43.72	− 3.73	96	59,121	s.	32	s.*	102	151	112	5.6
San Antonio, Tex	29.32	30.05	+ .01	68.0	− 0.6	103	78.4	11	57.6	68	52	65	26.07	− 5.81	87	69,116	se.	46	n.	92	172	101	5.5
Ohio Valley and Tennessee.																							
Chattanooga, Tenn	29.30	30.11	+ .01	58.6	− 2.0	97	68.1	− 2	49.1	75	47	72	46.36	−10.60	122	56,646	w.	60	w.	121	128	116	5.4
Knoxville, Tenn	29.06	30.11	+ .01	57.0	− 1.2	96	66.8	− 7	47.1	78	46	72	38.75	−14.40	114	41,781	sw.	42	sw.	166	84	115	4.7
Memphis, Tenn	29.66	30.09	+ .02	60.6	− 1.0	98	69.4	− 3	51.9	77	48	72	38.59	−15.52	120	70,405	nw.	54	w.	166	96	103	4.6
Nashville, Tenn	29.50	30.09	+ .03	57.8	− 1.6	96	67.3	− 6	48.4	81	46	70	42.83	− 8.11	112	57,451	nw.	48	se.	158	106	106	4.7
Lexington, Ky	29.01	30.07	+ .01	53.7	− 1.3	95	62.7	−13	44.6	81	41	66	35.32	− 8.80	124	99,384	sw.	62	s.	95	108	162	6.2
Louisville, Ky	29.50	30.07	.00	55.5	− 1.6	100	65.0	−10	45.9	80	42	66	38.86	− 8.30	126	68,324	s.	57	sw.	143	100	122	5.2
Indianapolis, Ind	29.24	30.07	+ .01	52.1	− 0.6	100	61.6	−14	42.6	82	40	68	33.54	−11.34	126	56,324	nw.	34	w.	125	124	116	5.2
Cincinnati, Ohio	29.40	30.08	+ .01	53.6	− 1.8	97	62.3	−12	45.0	79	40	64	29.33	−11.56	110	65,329	se.	48	sw.	166	103	96	4.6
Columbus, Ohio	29.19	30.08	+ .02	51.6	− 0.7	99	61.2	− 8	42.0	72	39	68	30.74	− 9.82	130	60,440	sw.	38	sw.	95	154	116	5.7
Pittsburg, Pa	29.16	30.07	+ .02	52.3	− 0.7	98	61.2	− 6	43.4	66	42	72	27.50	− 9.98	142	58,048	nw.	35	nw.	107	141	117	5.5
Parkersburg, W. Va	29.40	30.10	+ .01	53.1	− 0.8	99	63.3	− 8	42.9	74	43	72	30.37	−11.60	132	47,774	se.	41	w.	112	124	129	5.6
Lower Lake Region.																							
Buffalo, N. Y	29.28	30.03	+ .01	46.4	0.0	93	53.3	−13	39.5	58	37	71	32.02	− 6.28	138	99,602	w.	78	w.	74	161	130	6.4
Oswego, N. Y	29.64	30.01	− .01	45.4	− 1.1	90	52.3	−12	38.6	62	37	74	32.48	− 2.87	151	95,677	s.	50	w.	113	94	158	5.8
Rochester, N. Y	29.46	30.03	+ .01	47.4	+ 0.1	94	55.5	− 8	39.3	62	37	70	30.42	− 4.62	157	71,754	sw.	52	sw.	136	122	107	5.1
Erie, Pa	29.27	30.04	+ .02	47.4	− 1.5	91	54.9	− 9	39.9	60	38	73	35.55	− 7.16	138	94,574	s.	54	sw.	105	119	141	5.9
Cleveland, Ohio	29.24	30.04	+ .02	48.3	− 0.6	94	56.0	− 6	40.6	68	39	73	26.84	−10.61	136	113,129	se.	73	s.	131	102	132	5.4
Sandusky, Ohio	29.36	30.04	− .01	49.0	− 1.4	98	56.5	− 6	41.5	70	38	71	26.82	− 9.58	118	78,695	sw.	50	nw.	84	133	148	6.1
Toledo, Ohio	29.32	30.05	+ .02	48.2	− 1.4	94	56.5	− 7	39.9	69	38	73	25.31	− 6.65	118	88,768	sw.	60	sw.	135	98	132	5.3
Detroit, Mich	29.25	30.03	.00	47.2	− 1.1	96	55.3	− 8	39.2	62	36	71	25.04	− 7.91	116	94,764	sw.	76	sw.	155	97	113	4.8
Upper Lake Region.																							
Alpena, Mich	29.32	30.00	− .01	41.6	+ 0.3	95	49.4	−23	33.8	76	34	76	21.59	−14.94	136	83,589	nw.	50	nw.	103	147	115	5.6
Grand Haven, Mich	29.32	30.01	.00	45.7	− 0.6	90	53.6	− 8	37.9	58	37	75	25.62	−10.09	138	92,341	sw.	50	sw.	112	112	141	5.8
Marquette, Mich	29.17	29.98	− .02	40.6	0.0	98	48.1	−16	33.1	70	32	76	33.04	+ 0.91	197	94,623	nw.	52	se.	67	135	161	6.6
Port Huron, Mich	29.34	30.04	+ .02	45.1	0.0	95	53.5	−16	36.6	65	36	73	26.11	− 5.71	128	99,029	s.	58	sw.	137	112	116	5.0
Sault Ste. Marie, Mich	29.27	29.98	− .02	38.6	− 0.4	89	47.2	−28	30.0	74	32	81	30.55	+ 1.02	167	72,840	nw.	42	nw.	82	118	165	6.4
Chicago, Ill	29.14	30.03	.00	47.1	− 1.6	95	54.2	−15	40.0	76	36	68	32.38	− 3.63	106	151,233	ne.	64	sw.	162	130	73	4.4
Milwaukee, Wis	29.29	30.02	− .01	45.1	− 0.1	96	52.8	−17	37.4	71	35	71	24.88	− 7.75	124	92,634	w.	50	sw.	123	122	120	5.4
Green Bay, Wis	29.34	30.02	+ .02	43.8	+ 0.2	95	53.0	−24	34.7	78	33	68	21.04	−12.39	112	77,990	s.	42	n.	68	168	129	6.3
Duluth, Minn	29.20	29.98	− .02	39.1	− 0.1	89	46.5	−27	31.7	85	31	75	22.30	− 9.75	132	85,167	ne.	54	nw.	108	151	106	5.4
North Dakota.																							
Moorhead, Minn	28.95	29.99	− .03	38.5	+ 0.9	92	49.4	−34	27.6	91	29	74	17.38	− 7.05	103	95,396	n.	61	se.	124	124	117	5.2
St. Vincent, Minn	29.10	29.98	− .03	35.3	+ 1.1	90	47.1	−41	23.4	93	28	82	20.60	+ 2.40	111	79,097	n.	40	n.	130	134	101	4.9
Bismarck, N. Dak	28.20	30.02	+ .01	39.8	− 0.1	98	52.2	−39	27.3	103	26	64	16.92	− 2.04	94	86,575	nw.	52	nw.*	151	128	86	5.0
Williston, N. Dak	27.96	29.99	− .01	38.9	− 0.4	96	50.0	−40	27.9	96	24	62	17.07	+ 3.11	116	86,611	nw.	60	nw.	108	164	93	5.5
Upper Mississippi Valley.																							
Minneapolis, Minn	.....	.....	.....	44.6	+ 0.4	96	54.5	−26	34.7	79	.....	.....	21.44	− 5.77	92	88,346	nw.	.....	.....	125	127	113	....
St. Paul, Minn	29.09	30.02	+ .01	43.6	0.0	96	53.2	−26	34.0	79	32	67	24.26	− 3.52	105	69,145	se.	55	se.	128	129	108	5.1
La Crosse, Wis	29.24	30.02	+ .01	45.7	− 0.2	97	55.6	−24	35.8	81	35	73	22.97	− 9.03	105	65,421	s.	38	w.	125	164	76	5.0
Davenport, Iowa	29.36	30.02	− .02	48.7	− 0.6	96	57.8	−20	39.6	84	36	68	27.14	− 7.64	99	83,207	sw.	60	w.	116	146	103	5.3
Des Moines, Iowa	29.11	30.05	+ .02	49.0	0.0	98	59.1	−18	38.9	85	36	66	26.80	− 8.33	106	75,190	nw.	50	sw.	138	108	119	5.0
Keokuk, Iowa	29.38	30.04	+ .01	50.7	− 1.4	96	60.1	−22	41.3	90	38	68	29.82	− 6.02	103	69,465	sw.	42	w.	172	100	93	4.2
Cairo, Ill	29.67	30.06	.00	56.7	− 1.2	95	65.1	− 9	48.3	83	46	72	33.57	−10.46	111	72,323	s.	52	sw.	112	147	106	5.4
Springfield, Ill	29.36	30.06	.00	51.3	− 1.5	95	60.6	−20	42.0	85	39	68	35.01	− 4.66	111	85,070	s.	38	w.	129	131	105	5.0

TABLE I.—*Annual meteorological summary, Weather Bureau stations*, 1895.—Continued.

Districts and stations.	Pressure, in inches.†			Temperature of the air, in degrees Fahrenheit.							Humidity.		Precipitation.			Wind.							
	Mean pressure, 8 a. m. and 8 p. m. ÷ 2.	Mean reduced.	Departure from normal.	Mean max. and min. ÷ 2.	Departure from normal.	Maximum.	Mean maximum.	Minimum.	Mean minimum.	Greatest monthly range.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Departure from normal.	Days with .01, or more.	Total movement, miles.	Prevailing direction.	Max. velocity. Miles per hour.	Max. velocity. Direction.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.
Up. Miss. Valley—Cont'd.																							
Hannibal, Mo	29.47	30.05	.....	51.4	.....	95	60.6	−18	42.1	83	40	71	42.13	.....	113	81,658	sw.	50	w.	158	119	88	4.7
St. Louis, Mo	29.47	30.08	+ .02	55.1	− 1.0	96	63.4	−12	46.7	82	43	68	31.20	− 7.11	110	95,650	s.	56	sw.	160	107	98	4.6
Missouri Valley.																							
Columbia, Mo	.....	.....	.....	53.5	− 1.0	98	65.3	−16	41.7	87	.....	.....	38.83	− 1.39	120	66,768	se.	41	nw.	116	105	144	5.8
Kansas City, Mo	29.04	30.07	+ .03	53.2	− 0.7	96	62.1	−12	44.4	80	42	71	41.22	+ 3.36	101	79,474	s.	40	n.*	141	126	98	4.8
Springfield, Mo	28.65	30.06	+ .01	53.6	− 2.4	92	63.3	−17	45.0	83	43	73	45.46	− 1.74	121	87,078	se.	48	sw.*	128	138	99	4.8
Topeka, Kans	.....	.....	.....	54.2	+ 1.3	99	65.0	−14	43.3	85	.....	.....	31.23	− 3.52	96	.....	s.	.....	.....	154	137	74	....
Omaha, Nebr	28.84	30.05	− .01	50.6	+ 0.8	102	60.4	−20	40.8	88	36	65	21.69	−11.44	86	74,104	se.	38	n.	140	89	136	5.3
Sioux City, Iowa	28.76	30.01	− .01	47.8	+ 0.7	103	58.7	−23	36.9	89	34	65	20.29	− 4.21	79	98,016	nw.	60	nw.	127	138	100	5.1
Pierre, S. Dak	28.42	30.00	− .03	46.5	+ 1.6	106	58.6	−27	34.5	97	32	65	16.85	+ 0.58	83	85,108	nw.	52	w.	133	150	82	5.1
Huron, S. Dak	28.59	30.01	− .03	43.8	+ 1.2	103	57.0	−33	30.5	101	30	66	17.08	− 5.23	98	120,629	nw.	65	nw.	113	160	92	5.1
Northern Slope.																							
Havre, Mont	27.33	29.98	− .03	39.8	− 1.3	96	52.2	−34	27.3	89	25	63	10.94	− 3.40	89	83,542	sw.	50	nw.	134	146	85	4.9
Miles City, Mont	27.46	29.99	.....	43.0	− 1.2	101	55.4	−32	30.5	94	30	65	12.74	+ 0.03	86	59,780	w.	47	w.	153	148	64	4.8
Helena, Mont	25.84	30.08	+ .05	42.8	− 0.5	94	53.1	−17	32.6	82	25	55	10.69	− 1.97	84	67,892	sw.	46	sw.	158	102	105	4.7
Rapid City, S. Dak	26.59	29.99	− .03	45.3	− 0.8	100	56.8	−24	33.7	96	28	57	15.48	− 2.43	92	85,476	w.	52	nw.	101	166	98	5.6
Cheyenne, Wyo	24.00	30.03	.00	43.7	− 1.2	92	55.5	−20	31.8	78	26	56	14.76	+ 3.03	83	102,267	nw.	60	nw.	111	196	58	4.7
Lander, Wyo	24.63	30.07	+ .03	41.0	− 1.6	91	55.6	−28	26.5	92	22	58	17.26	+ 5.48	62	35,755	sw.	48	sw.*	132	178	55	4.4
North Platte, Nebr	27.08	30.04	.00	48.1	− 0.4	101	61.0	−23	35.3	92	34	66	14.58	− 4.27	58	86,406	w.	53	nw.	141	166	58	4.6
Middle Slope.																							
Denver, Colo	24.73	30.03	+ .02	48.8	− 0.9	96	61.3	−15	36.2	78	26	50	16.12	+ 1.79	81	68,037	s.	60	nw.	150	163	52	4.4
Pueblo, Colo	25.27	30.03	+ .02	49.8	− 2.2	96	64.6	−21	35.2	92	25	48	17.47	+ 5.17	83	65,330	nw.	54	n.	176	118	71	4.2
Concordia, Kans	28.54	30.04	− .02	53.3	+ 1.3	104	64.9	−17	41.7	95	37	63	17.15	−11.71	78	70,501	s.	42	s.	194	103	68	4.0
Dodge City, Kans	27.40	30.01	+ .01	53.1	− 0.5	100	65.2	−14	41.0	88	36	63	20.31	+ 0.17	74	103,182	se.	64	nw.	191	122	52	3.9
Wichita, Kans	28.59	30.02	.00	55.5	− 0.1	101	66.3	−13	44.7	84	42	68	26.46	− 4.68	78	80,833	s.	49	n.	191	84	90	4.1
Oklahoma, Okla	28.75	30.06	.....	57.9	− 1.5	100	68.3	− 8	47.5	77	46	73	32.49	− 0.80	86	83,789	s.	52	n.	221	81	63	3.6
Southern Slope.																							
Abilene, Tex	28.24	30.06	− .02	61.4	− 2.3	100	71.7	− 4	51.0	76	45	65	35.30	+ 7.22	85	83,516	s.	56	nw.	133	125	107	4.8
Amarillo, Tex	26.27	30.03	.....	53.4	.....	95	65.0	− 7	41.9	78	35	61	24.79	.....	102	145,598	s.	84	nw.	141	119	105	4.8
Southern Plateau.																							
El Paso, Tex	26.20	29.99	.00	62.2	− 1.8	100	75.2	8	49.3	68	31	42	10.20	− 0.21	57	97,279	nw.	78	w.	182	135	48	3.5
Santa Fe, N. Mex	23.29	30.02	.00	47.3	− 2.0	87	57.5	−11	37.1	65	22	45	20.24	+ 6.32	101	61,055	se.	45	sw.	197	118	50	3.9
Yuma, Ariz	29.75	29.89	− .03	72.4	0.0	114	86.7	30	58.0	59	42	41	1.33	− 1.73	8	60,231	n.	46	nw.	298	57	10	1.6
Independence, Cal	26.02	29.93	.....	58.0	.....	102	71.1	16	44.8	58	23	33	4.17	.....	22	74,532	nw.	53	n.	212	84	69	3.2
Middle Plateau.																							
Carson City, Nev	25.31	30.08	.....	48.3	− 1.3	95	62.8	− 4	33.7	67	24	42	11.56	− 1.19	53	.....	w.	.....	.....	285	25	55	2.7
Winnemucca, Nev	25.68	30.06	+ .04	47.1	− 1.5	98	61.1	−14	33.2	70	19	42	6.84	− 1.60	68	85,774	sw.	68	sw.	181	110	74	3.9
Salt Lake City, Utah	25.66	30.07	+ .02	50.2	− 1.4	97	60.7	0	39.8	61	31	54	11.95	− 4.70	86	54,134	se.	48	s.	138	89	138	5.6
Northern Plateau.																							
Baker City, Oreg	26.47	30.01	.00	45.2	+ 0.4	94	57.0	− 3	33.5	60	29	59	12.00	− 3.15	84	50,578	se.	38	se.	153	104	108	4.5
Idaho Falls, Idaho	25.26	30.10	.....	41.7	0.0	94	55.5	−32	28.0	72	26	62	9.20	− 5.68	79	67,420	s.	52	s.	141	104	120	5.1
Spokane, Wash	26.00	30.05	+ .03	48.0	+ 0.2	95	58.1	8	38.0	59	30	60	13.46	− 5.43	98	53,851	sw.	42	sw.	81	126	158	6.2
Walla Walla, Wash	28.97	30.06	+ .02	53.1	− 0.8	104	63.4	11	42.9	56	38	58	14.89	− 2.89	87	53,234	s.	50	sw.	139	160	66	4.8
North Pacific Coast.																							
East Clallam, Wash	.....	.....	.....	47.2	.....	93	53.8	24	40.6	53	.....	.....	90.35	.....	174	.....	w.	.....	.....	119	36	210	....
Fort Canby, Wash	29.86	30.06	+ .04	50.5	− 0.3	90	55.4	31	45.5	43	45	86	60.39	+ 0.05	165	115,366	n.	78	se.	78	87	200	6.7
Neah Bay, Wash	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
Port Angeles, Wash	30.00	30.03	+ .03	47.3	+ 0.8	88	53.7	22	40.9	50	41	80	24.07	− 6.62	125	49,813	s.	38	w.	116	118	131	5.6
Port Crescent, Wash	.....	.....	.....	46.5	.....	90	55.5	18	37.6	57	.....	.....	40.50	.....	109	.....	e.	.....	.....	130	126	109	....
Pysht, Wash	.....	.....	.....	47.7	.....	86	55.9	22	39.4	48	.....	.....	67.58	.....	181	.....	w.	.....	.....	101	39	212	....
Seattle, Wash	29.91	30.04	.....	51.2	.....	90	58.1	27	44.3	48	41	74	29.69	.....	136	47,836	s.	42	sw.	101	90	174	6.3
Tatoosh Island, Wash	29.94	30.04	+ .03	48.4	− 0.5	78	52.4	30	44.4	37	44	85	92.95	+ 6.69	205	114,133	e.	72	e.	76	56	233	7.3
Astoria, Oreg	.....	.....	.....	51.4	+ 0.5	91	57.7	27	45.1	45	.....	.....	70.75	+ 6.09	184	.....	w.	.....	.....	116	83	166	....
Portland, Oreg	29.89	30.07	+ .01	52.0	− 1.1	97	60.2	25	43.9	53	41	71	30.76	−18.58	135	74,592	nw.	53	se.	104	155	106	5.4
Roseburg, Oreg	29.47	30.04	− .04	52.3	− 0.9	98	62.6	20	42.1	57	42	74	29.92	− 4.67	120	32,506	nw.	36	sw.	165	86	114	4.6
Middle Pacific Coast.																							
Eureka, Cal	30.01	30.07	+ .01	50.9	− 0.5	76	57.0	30	44.8	44	46	87	41.52	− 3.84	109	55,368	nw.	44	nw.	105	167	93	5.3
Red Bluff, Cal	29.65	30.00	.00	62.2	− 0.2	108	73.5	28	51.0	57	41	56	22.57	− 3.70	60	56,868	nw.	40	n.	231	61	73	3.2
Sacramento, Cal	29.93	30.01	.00	60.2	− 0.1	102	70.9	28	49.4	52	46	67	17.38	− 4.19	56	77,242	sw.	48	se.*	210	91	64	3.4
San Francisco, Cal	29.88	30.04	+ .01	55.6	− 1.0	89	61.3	38	49.8	41	48	81	17.13	− 7.51	65	94,058	w.	44	s.	180	124	61	4.2
Point Reyes Light, Cal	.....	.....	.....	52.1	− 0.3	82	59.0	34	45.1	43	.....	.....	23.06	− 7.50	73	141,963	nw.	120	nw.	99	64	199	....
South Pacific Coast.																							
Fresno, Cal	29.63	29.98	− .01	62.5	− 1.0	110	75.5	26	49.4	62	41	57	10.39	+ 1.39	43	48,419	nw.	28	w.*	225	73	67	3.2
Los Angeles, Cal	29.64	29.99	.00	61.7	− 0.8	100	72.9	34	50.6	58	48	73	12.55	− 5.85	42	30,053	w.	26	nw.*	142	172	51	3.8
San Diego, Cal	29.92	30.00	− .01	60.5	− 0.7	90	67.8	34	53.3	47	51	75	11.33	+ 0.35	42	46,369	w.	36	ne.	235	83	47	3.6
San Luis Obispo, Cal	29.81	30.03	.....	58.5	.....	99	70.1	28	47.0	65	45	71	17.49	.....	46	45,628	nw.	33	nw.	307	97	61	3.7

* More than one direction. † These are "apparent pressures," as defined on page 489.

TABLE II.—*Annual meteorological summary, Canadian stations*, 1895.

Stations.	Pressure.			Temperature.		Precipitation.		Prevailing direction of wind.
	Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Total.	Departure from normal.	
	Inches.	*Inches.*	*Inches.*	°	°	*Inches.*	*Inches.*	
St Johns, N. F	29.79	29.94	+ .02	42.0	+ 0.6	56.96	.....	n.
Sydney, C. B. I	29.90	29.96	+ .03	42.9	+ 2.1	46.73	−5.61	sw.
Halifax, N. S	29.85	29.98	+ .02	44.2	+ 2.0	62.07	+6.63	nw.
Grand Manan, N. B	29.91	29.96	.....	43.5	.....	46.63	+2.01	w.
Yarmouth, N. S	29.91	29.99	− .01	43.9	+ 0.8	48.81	+2.68	s.
St. Andrews, N. B	.....	.....	.....	42.0	.....	40.27	+0.25	nw.
Charlottetown, P. E. I	29.90	29.94	.....	42.5	.....	41.64	−0.14	w.
Chatham, N. B	29.92	29.94	− .01	39.6	+ 3.1	37.61	−6.35	w.
Father Point, Que	29.90	29.93	− .01	36.4	+ 2.1	31.49	+1.69	w.
Quebec, Que	29.62	29.96	− .01	39.1	+ 1.6	35.70	−7.08	sw.
Montreal, Que	29.76	29.97	− .01	41.9	+ 1.1	39.87	+1.06	sw.
Rockliffe, Ont	29.43	29.95	− .03	36.8	+ 1.3	27.80	−3.25	nw.
Kingston, Ont	29.68	30.00	+ .02	42.6	+ 0.1	26.03	−7.91	sw.
Toronto, Ont	29.63	30.02	.00	43.2	− 0.2	28.05	−2.70	w.
White River, Ont	28.60	29.99	.....	30.9	− 0.1	26.08	+2.75	s.
Port Stanley, Ont	29.38	30.03	.00	43.6	.....	30.94	−3.23	w.
Saugeen, Ont	29.28	30.01	+ .01	41.7	+ 0.5	32.95	−1.43	w.
Parry Sound, Ont	29.28	29.99	− .01	39.8	+ 1.1	38.14	+0.82	w.
Port Arthur, Ont	29.34	39.96	− .03	34.6	+ 1.2	22.47	−1.57	w.
Winnipeg, Man	29.12	29.98	− .03	32.7	+ 1.7	18.42	−5.03	nw.
Minnedosa, Man	28.09	29.94	− .05	31.8	+ 2.3	15.34	−2.39	nw.
Qu'Appelle, Assin	27.66	29.97	− .02	31.8	− 0.1	15.29	+0.35	nw.
Medicine Hat, Assin	27.63	29.97	.00	38.7	− 0.8	14.13	+3.86	w.
Swift Current, Assin	27.35	29.98	− .02	35.2	− 0.3	12.33	−3.52	w.
Calgary, Alberta	26.35	29.94	− .04	35.6	− 0.3	15.12	+1.84	w.
Prince Albert, Sask	28.40	29.96	.....	30.9	.....	14.14	.....	nw.
Edmonton, Alberta	27.59	29.97	+ .01	35.3	− 0.3	14.68	+0.87	nw.
Battleford, Sask	28.17	29.95	.....	32.4	.....	12.01	.....	nw.
Spences Bridge, B. C	29.15	29.97	.....	48.3	.....	7.18	.....	w.
Hamilton, Bermuda	29.96	30.12	+ .03	70.3	.....	63.11	.....	s.
Esquimalt, B. C	30.00	30.03	.....	47.2	.....	32.73	.....	sw.

TABLE III.—*Accumulated departures of average monthly temperature during* 1895.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual average.
New England	+ 1.0	− 4.2	− 4.6	− 4.6	− 3.2	− 1.7	− 3.6	− 2.3	+ 0.1	− 2.4	− 0.3	+ 2.1	+ 0.18
Middle Atlantic States	− 1.8	−11.5	−12.0	−11.6	−12.1	− 9.7	−12.8	−10.1	− 5.5	− 9.7	− 8.8	− 7.3	− 0.61
South Atlantic States	− 1.1	−13.8	−14.1	−14.7	−17.2	−16.7	−18.3	−16.9	−13.4	−16.2	−16.5	−17.7	− 1.48
Florida Peninsula	− 0.4	− 8.7	− 8.8	−11.4	−11.2	−11.7	−12.8	−13.0	−12.8	−13.8	−13.5	−16.6	− 1.38
East Gulf States	− 1.3	−14.6	−15.0	−16.7	−18.3	−18.4	−19.0	−18.7	−14.9	−17.4	−18.1	−20.6	− 1.72
West Gulf States	+ 0.4	−11.8	−12.7	−13.3	−15.6	−16.4	−17.9	−17.7	−14.2	−17.5	−19.9	−20.6	− 1.72
Ohio Valley and Tennessee	− 3.2	−15.6	−17.0	−15.4	−16.2	−13.5	−15.9	−13.3	− 8.0	−13.1	−13.4	−13.1	− 1.09
Lower Lake Region	− 2.7	−10.6	−14.1	−11.7	− 8.9	− 4.8	− 7.5	− 5.5	− 1.5	− 7.2	− 7.8	− 6.9	− 0.58
Upper Lake Region	− 1.9	− 6.4	− 8.5	− 5.3	− 1.6	+ 1.5	− 1.1	+ 0.7	+ 4.9	+ 0.5	− 1.0	+ 0.2	+ 0.02
North Dakota	+ 2.4	− 1.7	+ 1.5	+10.6	+11.7	+ 7.8	+ 5.4	+ 4.7	+ 6.2	+ 5.0	+ 0.2	+ 3.7	+ 0.31
Upper Mississippi Valley	− 2.9	−10.5	−10.3	− 6.0	− 4.2	− 2.2	− 4.5	− 2.1	+ 3.4	− 0.9	− 3.0	− 1.9	− 0.16
Missouri Valley	− 1.4	− 5.6	− 3.6	+ 1.9	+ 3.8	+ 2.6	0.0	+ 1.1	+ 5.9	+ 3.1	+ 0.9	+ 2.4	+ 0.20
Northern Slope	0.0	− 3.8	− 4.8	− 1.0	− 1.5	− 5.9	− 9.0	− 9.9	−10.0	− 9.8	−12.0	−11.9	− 0.99
Middle Slope	+ 1.5	− 5.8	− 6.4	− 3.0	− 2.1	− 4.3	− 8.0	− 7.8	− 2.7	− 4.6	− 6.0	− 6.3	− 0.52
Abilene (Southern Slope)	+ 1.1	−13.8	−14.1	−12.6	−14.4	−15.5	−19.4	−18.9	−13.7	−18.3	−21.6	−23.1	− 1.92
Southern Plateau	+ 0.8	− 1.8	− 2.1	− 1.9	− 2.8	− 5.0	− 8.1	− 9.0	− 7.1	− 6.3	− 8.2	−12.4	− 1.03
Middle Plateau	− 0.5	− 3.2	− 4.5	− 4.9	− 5.0	− 6.6	− 8.6	− 9.3	−12.1	−10.1	−12.4	−17.1	− 1.42
Northern Plateau	+ 3.3	+ 8.7	+ 9.5	+11.3	+ 2.3	+ 8.5	+ 6.0	+ 5.0	+ 1.0	+ 3.5	+ 2.4	+ 0.8	+ 0.07
North Pacific	+ 0.1	+ 3.4	+ 2.4	+ 1.5	+ 0.4	+ 0.4	+ 0.2	− 0.5	− 3.0	− 2.3	− 3.7	− 4.0	− 0.33
Middle Pacific	− 0.5	+ 2.2	+ 0.3	− 0.5	− 2.2	− 1.3	− 1.8	− 2.7	− 4.9	− 6.0	− 6.5	− 9.5	− 0.79
Southern Pacific	− 0.2	+ 1.7	+ 0.1	− 1.5	− 1.5	− 1.9	− 4.4	− 6.7	− 8.9	− 7.9	− 8.7	−10.0	− 0.88

TABLE IV.—*Accumulated departures of total monthly precipitation during* 1895.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual average.
New England	− 0.30	− 3.10	− 3.90	− 3.00	− 3.10	− 4.10	− 3.20	− 3.60	− 5.30	− 6.60	− 4.80	− 5.30	− 5.30
Middle Atlantic States	+ 1.00	− 1.00	− 1.90	− 0.30	− 0.40	− 1.50	− 2.70	− 4.90	− 7.50	− 8.40	− 8.80	− 9.10	− 9.10
South Atlantic States	+ 1.90	+ 1.50	+ 2.50	+ 4.40	+ 4.20	+ 2.90	+ 3.20	− 2.40	− 0.10	− 2.80	− 2.40	− 3.70	− 3.70
Florida Peninsula	− 0.20	+ 0.20	− 0.50	+ 1.40	+ 0.50	− 0.70	− 2.10	− 2.70	− 3.30	+ 0.50	+ 0.10	+ 0.70	+ 0.70
East Gulf States	− 0.40	− 2.20	− 1.30	− 2.20	− 1.00	− 0.20	− 2.00	− 0.80	− 4.30	− 5.10	− 7.90	− 8.60	− 8.60
West Gulf States	− 1.30	− 2.60	− 2.50	− 5.30	− 3.90	− 2.80	− 1.10	− 2.00	− 5.40	− 6.60	− 6.10	− 6.70	− 6.70
Ohio Valley and Tennessee	+ 0.80	− 2.40	− 3.60	− 4.80	− 6.20	− 7.30	− 7.10	− 8.70	− 9.70	−11.40	−11.40	−11.00	−11.00
Lower Lake Region	+ 0.20	− 1.40	− 2.60	− 3.10	− 3.80	− 6.10	− 6.50	− 6.20	− 7.10	− 8.60	− 7.40	− 5.80	− 5.80
Upper Lake Region	+ 0.60	− 0.40	− 1.70	− 2.50	− 2.60	− 4.10	− 5.70	− 5.90	− 6.20	− 8.40	− 8.00	− 7.00	− 7.10
North Dakota	0.00	− 0.20	− 0.80	− 0.40	+ 0.20	+ 1.00	+ 0.90	+ 0.10	− 0.70	− 1.90	− 0.80	− 1.10	− 1.10
Upper Mississippi Valley	− 0.30	− 1.80	− 2.70	− 3.80	− 5.10	− 6.60	− 5.40	− 6.10	− 6.50	− 9.00	− 8.80	− 7.80	− 7.80
Missouri Valley	− 0.30	− 1.20	− 1.20	− 2.40	− 4.00	− 3.90	− 3.20	− 2.60	− 3.30	− 5.20	− 5.00	− 2.90	− 2.90
Northern Slope	+ 0.10	+ 0.30	+ 0.40	+ 0.70	0.00	+ 0.90	+ 0.30	− 0.20	− 0.40	− 0.70	− 0.20	− 0.40	− 0.40
Middle Slope	− 0.30	+ 0.30	0.00	− 1.50	− 2.90	− 2.20	− 0.90	− 0.30	− 1.30	− 1.60	− 1.60	− 1.60	− 1.60
Abilene (Southern Slope)	+ 0.20	+ 1.40	0.00	− 2.10	− 4.50	+ 1.20	+ 4.20	+ 3.90	+ 5.00	+ 6.10	+ 5.80	+ 7.20	+ 7.20
Southern Plateau	+ 0.30	0.00	− 0.40	− 0.70	+ 0.40	+ 0.20	+ 0.90	+ 1.10	+ 0.40	+ 0.50	+ 0.80	+ 0.40	+ 0.40
Middle Plateau	+ 1.10	+ 1.00	+ 0.20	− 0.50	− 0.30	− 0.60	0.60	− 0.90	− 1.10	− 1.60	− 1.80	− 2.60	− 2.60
Northern Plateau	0.00	− 1.40	− 1.80	− 2.40	− 2.10	− 3.10	− 3.30	− 3.40	− 2.60	− 4.10	− 4.20	− 4.50	− 4.50
North Pacific	− 0.90	− 4.00	− 3.60	− 2.00	+ 1.20	− 0.30	− 0.50	− 1.30	− 1.80	− 7.60	− 8.70	− 4.10	− 4.10
Middle Pacific	+ 2.80	+ 0.80	− 0.60	− 1.90	− 1.60	− 2.20	− 2.20	− 2.20	− 0.90	− 2.60	− 3.00	− 5.60	− 5.60
Southern Pacific	+ 3.70	+ 2.30	+ 2.80	− 2.00	− 2.10	− 2.20	− 2.20	− 2.30	− 2.40	− 2.80	− 3.20	− 5.40	− 4.40

TABLE V.—*Resultant winds from observations at 8 a. m. and 8 p. m., daily, during the year 1895.*

Stations.	Component direction from— N.	S.	E.	W.	Resultant. Direction from—	Duration.
	Hours.	Hours.	Hours.	Hours.	°	Hours.
New England.						
Eastport, Me	208	249	124	296	s. 77 w.	177
Portland, Me	199	248	102	331	s. 78 w.	234
Northfield, Vt	237	372	41	196	s. 49 w.	205
Boston, Mass	212	191	111	363	n. 85 w.	254
Nantucket, Mass	277	148	192	280	n. 34 w.	156
Woods Hole, Mass.*	76	169	51	128	s. 40 w.	120
Block Island, R. I	231	198	171	355	n. 78 w.	188
New Haven, Conn	285	226	106	245	n. 67 w.	151
Middle Atlantic States.						
Albany, N. Y	215	306	84	223	s. 36 w.	236
New York, N. Y	253	204	156	286	n. 69 w.	139
Harrisburg, Pa	185	147	214	278	n. 59 w.	74
Philadelphia, Pa	268	199	153	268	n. 59 w.	134
Baltimore, Md	255	193	160	264	n. 59 w.	121
Washington, D. C	275	226	143	229	n. 60 w.	99
Lynchburg, Va	213	217	220	259	s. 85 w.	49
Norfolk, Va	333	228	287	183	n. 45 e.	148
South Atlantic States.						
Charlotte, N. C	152	297	278	196	s. 29 e.	166
Hatteras, N. C	284	212	168	226	n. 39 w.	92
Kittyhawk, N. C	261	221	228	238	n. 21 w.	43
Raleigh, N. C	277	259	115	224	n. 80 w.	110
Wilmington, N. C	245	229	187	152	n. 65 e.	38
Charleston, S. C	222	248	195	237	s. 59 w.	49
Augusta, Ga	227	202	207	232	n. 45 w.	35
Savannah, Ga	217	278	169	224	s. 42 w.	83
Jacksonville, Fla	289	226	234	212	n. 60 e.	26
Florida Peninsula.						
Jupiter, Fla	208	242	246	196	s. 52 e.	63
Key West, Fla	245	151	415	61	n. 76 e.	366
Tampa, Fla	312	135	241	193	n. 15 e.	183
Eastern Gulf States.						
Atlanta, Ga	241	158	232	289	s. 34 w.	101
Pensacola, Fla	259	220	199	238	n. 45 w.	55
Mobile, Ala	312	216	118	209	n. 44 w.	132
Montgomery, Ala	245	208	253	192	n. 60 e.	71
Meridian, Miss	262	247	231	163	n. 78 e.	70
Vicksburg, Miss	209	258	276	154	s. 69 e.	134
New Orleans, La	214	270	252	157	s. 60 e.	110
Western Gulf States.						
Shreveport, La	195	318	245	154	s. 39 e.	150
Fort Smith, Ark	159	153	383	127	n. 89 e.	256
Little Rock, Ark	225	257	184	218	s. 42 w.	43
Corpus Christi, Tex	192	308	368	76	s. 68 e.	311
Galveston, Tex	167	350	237	145	s. 27 e.	205
Palestine, Tex	186	345	196	149	s. 16 e.	163
San Antonio, Tex	254	252	291	62	n. 89 e.	228
Ohio Valley and Tennessee.						
Chattanooga, Tenn	215	199	180	257	n. 78 w.	79
Knoxville, Tenn	263	139	226	247	n. 10 w.	126
Memphis, Tenn	228	236	235	177	s. 82 e.	58
Nashville, Tenn	251	234	149	273	n. 83 w.	125
Lexington, Ky	154	302	175	255	s. 28 w.	168
Louisville, Ky	221	305	156	183	s. 18 w.	87
Indianapolis, Ind	219	271	173	255	s. 58 w.	96
Cincinnati, Ohio	202	268	226	221	s. 4 e.	66
Columbus, Ohio	190	265	198	234	s. 26 w.	84
Pittsburg, Pa	210	225	162	281	s. 83 w.	118
Parkersburg, W. Va	155	263	236	185	s. 26 e.	120
Lower Lake Region.						
Buffalo, N. Y	165	224	147	372	s. 75 w.	232
Oswego, N. Y	147	323	135	269	s. 38 w.	221
Rochester, N. Y	127	297	120	376	s. 56 w.	307
Erie, Pa	160	295	126	300	s. 52 w.	220
Cleveland, Ohio	170	204	245	119	s. 75 e.	130
Sandusky, Ohio	153	258	190	281	s. 42 w.	135
Toledo, Ohio	173	198	169	339	s. 82 w.	170
Detroit, Mich	206	243	165	336	s. 78 w.	175
Upper Lake Region.						
Alpena, Mich	198	243	144	320	s. 76 w.	182
Grand Haven, Mich	225	223	202	259	n. 88 w.	57
Marquette, Mich	272	209	107	302	n. 36 w.	328
Port Huron, Mich	186	336	141	227	s. 51 w.	240
Sault Ste. Marie, Mich	204	229	243	262	s. 39 w.	32
Chicago, Ill	231	146	238	269	s. 82 w.	124
Upper Lake Region—Cont'd.						
Milwaukee, Wis	202	234	169	289	s. 75 w.	124
Green Bay, Wis	197	325	124	206	s. 33 w.	152
Duluth, Minn	300	159	168	318	n. 47 w.	206
North Dakota.						
Moorhead, Minn	290	238	102	225	n. 67 w.	133
St. Vincent, Minn	283	216	126	236	n. 60 w.	129
Bismarck, N. Dak	336	143	148	260	n. 30 w.	223
Williston, N. Dak	243	200	123	296	n. 76 w.	178
Upper Mississippi Valley.						
St. Paul, Minn	164	261	209	301	s. 44 w.	134
La Crosse, Wis	204	336	87	185	s. 36 w.	164
Davenport, Iowa	144	255	186	287	s. 42 w.	150
Des Moines, Iowa	252	246	150	241	n. 86 w.	91
Keokuk, Iowa	214	279	136	279	s. 65 w.	157
Cairo, Ill	261	293	151	171	s. 32 w.	38
Springfield, Ill	217	292	118	251	s. 60 w.	153
Hannibal, Mo	186	281	151	265	s. 50 w.	148
St. Louis, Mo	227	285	170	198	s. 26 w.	64
Missouri Valley.						
Columbia, Mo.*	98	130	128	109	s. 31 e.	37
Kansas City, Mo	230	317	216	152	s. 36 e.	110
Springfield, Mo	205	320	227	150	s. 31 e.	147
Omaha, Nebr	260	264	195	187	s. 63 e.	9
Sioux City, Iowa	271	282	164	181	s. 57 w.	20
Pierre, S. Dak	254	166	239	211	n. 18 e.	92
Huron, S. Dak	255	242	200	233	n. 69 w.	36
Northern Slope.						
Havre, Mont	243	144	133	375	n. 68 w.	262
Miles City, Mont	205	231	155	251	s. 75 w.	100
Helena, Mont	138	236	55	470	s. 77 w.	438
Rapid City, S. Dak	234	180	126	315	n. 74 w.	198
Cheyenne, Wyo	288	166	58	382	n. 69 w.	346
Lander, Wyo	184	264	104	335	s. 71 w.	244
North Platte, Nebr	182	245	155	300	s. 66 w.	158
Middle Slope.						
Denver, Colo	232	285	162	218	s. 46 w.	77
Pueblo, Colo	293	156	202	259	n. 22 w.	148
Concordia, Kans	229	316	130	162	s. 20 w.	93
Dodge City, Kans	270	286	216	115	s. 81 e.	112
Wichita, Kans	245	332	173	98	s. 41 e.	114
Oklahoma, Okla	240	352	152	123	s. 14 e.	116
Southern Slope.						
Abilene, Tex	206	349	190	137	s. 21 e.	152
Amarillo, Tex	197	374	103	147	s. 14 w.	182
Southern Plateau.						
El Paso, Tex	246	91	280	291	n. 4 w.	154
Santa Fe, N. Mex	217	264	265	192	s. 57 e.	87
Yuma, Ariz	293	179	160	241	n. 36 w.	141
Independence, Cal	291	177	111	346	n. 64 w.	261
Middle Plateau.						
Carson City, Nev	173	218	143	303	s. 74 w.	166
Winnemucca, Nev	221	187	227	254	n. 39 w.	43
Salt Lake City, Utah	197	256	234	236	s. 2 w.	59
Northern Plateau.						
Baker City, Oreg	184	337	154	175	s. 8 w.	154
Idaho Falls, Idaho	244	325	71	217	s. 61 w.	167
Spokane, Wash	162	305	210	211	s.	143
Walla Walla, Wash	106	303	123	194	s. 20 w.	209
North Pacific Coast Region.						
Fort Canby, Wash	264	207	196	184	n. 12 e.	58
Port Angeles, Wash	59	358	137	277	s. 25 w.	330
Seattle, Wash	233	307	172	134	s. 27 e.	84
Tatoosh Island, Wash	27	260	307	241	s. 16 e.	242
Portland, Oreg	239	265	166	262	s. 75 w.	100
Roseburg, Oreg	286	165	183	243	n. 27 w.	135
Middle Pacific Coast Region.						
Eureka, Cal	216	219	201	266	s. 87 w.	65
Red Bluff, Cal	307	251	350	196	n. 70 e.	164
Sacramento, Cal	184	385	153	198	s. 13 w.	205
San Francisco, Cal	124	162	64	484	s. 85 w.	422
South Pacific Coast Region.						
Fresno, Cal	280	78	164	383	n. 48 w.	298
Los Angeles, Cal	193	100	188	354	n. 61 w.	192
San Diego, Cal	263	121	116	370	n. 61 w.	291
San Luis Obispo, Cal	330	143	70	299	n. 49 w.	301

* From observations at 8 p. m. only.

TABLE VI.—*Total number of thunderstorms reported during* 1895.

State.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Alabama	8	3	47	40	50	77	60	64	28	5	0	0	382
Arizona	1	3	1	6	19	5	41	64	21	22	7	0	190
Arkansas	19	0	37	40	64	66	62	53	26	7	8	11	393
California	14	8	11	15	19	4	6	13	14	44	2	7	157
Colorado	0	8	8	36	62	168	220	192	43	23	5	0	765
Connecticut	0	0	2	33	16	61	62	65	32	1	13	1	286
Delaware	1	0	5	7	5	23	14	17	9	0	4	0	85
Dist. of Columbia	0	0	1	1	3	11	7	6	3	0	0	0	32
Florida	25	15	39	73	156	143	266	194	156	8	17	2	1,094
Georgia	11	1	47	64	68	60	44	54	9	5	5	3	371
Idaho	0	1	2	6	28	19	51	41	18	1	1	0	168
Illinois	29	1	33	67	143	130	251	121	143	13	2	23	955
Indiana	12	0	10	32	33	46	78	69	51	8	0	0	339
Indian Territory	1	0	4	3	7	8	3	7	2	3	1	3	42
Iowa	22	0	19	82	142	161	160	148	99	4	2	22	861
Kansas	2	2	30	47	71	83	96	137	26	3	1	21	519
Kentucky	7	0	20	29	41	22	39	35	10	4	5	0	212
Louisiana	52	7	46	37	151	153	189	178	88	11	6	16	933
Maine	0	0	0	9	24	29	9	44	16	2	1	0	134
Maryland	6	0	18	44	42	130	68	76	35	0	10	5	434
Massachusetts	0	2	16	72	55	117	137	95	126	4	15	1	640
Michigan	7	0	15	2	75	55	49	79	98	2	0	4	405
Minnesota	1	0	10	112	154	181	116	159	136	2	12	3	1,086
Mississippi	27	1	56	48	61	116	99	94	49	11	4	2	578
Missouri	32	1	94	89	243	260	301	199	105	22	6	39	1,391
Montana	0	1	2	8	10	40	45	11	11	1	2	1	132
Nebraska	0	0	20	83	53	112	84	144	46	0	6	9	557
Nevada	0	5	3	17	24	29	31	45	7	27	0	0	188
New Hampshire	0	0	1	8	20	47	25	40	33	0	0	0	174
New Jersey	2	0	14	30	43	149	153	133	46	0	24	1	595
New Mexico	0	2	1	4	6	30	39	56	4	5	1	0	148
New York	0	0	11	17	75	116	85	166	81	2	7	4	564
North Carolina	20	0	20	65	77	123	147	202	54	0	6	1	715
North Dakota	0	0	0	11	11	34	28	41	12	0	1	0	138
Ohio	32	1	96	116	236	191	176	298	173	36	2	2	1,360
Oklahoma	0	0	10	7	5	32	14	25	2	2	3	6	106
Oregon	0	0	4	9	11	8	13	34	16	0	7	9	111
Pennsylvania	9	0	40	18	83	196	115	180	98	3	2	8	752
Rhode Island	0	0	1	11	4	13	15	9	10	0	1	0	64
South Carolina	12	1	54	70	65	101	104	140	26	5	9	1	588
South Dakota	0	0	6	35	43	70	60	45	18	3	9	0	289
Tennessee	14	0	31	67	79	96	122	118	58	4	2	2	593
Texas	8	8	37	65	102	135	82	74	37	21	9	26	604
Utah	1	2	3	8	17	21	36	38	11	10	1	0	148
Vermont	0	0	2	9	12	35	30	31	31	1	0	0	151
Virginia	4	0	10	33	49	76	33	55	18	0	7	7	292
Washington	3	0	10	18	8	7	20	16	5	0	5	5	97
West Virginia	0	0	23	39	35	58	45	44	21	0	2	3	270
Wisconsin	7	0	5	32	166	140	109	147	103	4	0	7	720
Wyoming	1	0	1	3	3	4	9	10	1	2	0	0	34

TABLE VII.—*Number of days on which thunderstorms were reported.*

Alabama	4	3	12	12	19	26	25	27	12	2	0	0	142
Arizona	1	2	1	3	9	2	21	25	12	6	6	0	88
Arkansas	7	0	13	14	14	21	24	19	12	4	5	4	137
California	3	1	5	7	10	2	5	8	8	10	2	3	64
Colorado	0	5	4	11	19	27	28	28	14	9	3	0	148
Connecticut	0	0	1	6	5	13	10	12	9	1	1	1	59
Delaware	1	0	1	4	5	10	11	8	6	0	1	0	47
Dist. of Columbia	0	0	1	1	3	11	7	6	3	0	0	0	32
Florida	14	8	9	19	24	23	31	31	25	6	8	2	200
Georgia	5	1	10	16	18	20	24	23	8	1	5	1	132
Idaho	0	1	1	4	12	10	17	15	10	1	1	0	72
Illinois	3	1	6	12	19	19	24	20	20	5	2	6	137
Indiana	5	0	4	12	12	10	15	15	12	3	0	0	88
Indian Territory	1	0	3	3	5	6	2	7	2	3	1	2	35
Iowa	2	0	4	18	23	21	17	23	15	2	2	2	129
Kansas	1	1	8	16	20	21	19	23	11	3	1	5	129
Kentucky	4	0	6	12	12	12	14	19	4	2	1	0	86
Louisiana	15	2	10	12	23	30	31	31	22	5	2	7	190
Maine	0	0	0	4	10	12	5	13	5	1	1	0	51
Maryland	2	0	6	10	10	20	15	15	7	0	3	2	90
Massachusetts	0	2	2	8	11	17	16	16	9	1	2	1	73
Michigan	3	0	5	13	15	17	17	19	22	2	0	2	116
Minnesota	1	0	3	14	20	28	20	26	22	1	4	3	142
Mississippi	8	1	12	13	18	25	28	28	19	4	4	2	162
Missouri	6	1	12	18	25	26	28	25	17	5	3	5	171
Montana	0	1	1	4	6	2	23	9	6	1	1	1	74
Nebraska	0	0	3	17	13	22	18	22	12	0	2	5	114
Nevada	0	4	3	5	9	8	16	16	5	7	0	0	73
New Hampshire	0	0	1	4	5	15	10	15	4	0	0	0	54
New Jersey	2	0	2	6	11	22	20	17	10	0	4	1	95
New Mexico	0	2	1	3	6	16	20	28	3	3	1	0	83
New York	0	0	2	7	12	2	17	16	15	2	2	1	95
North Carolina	7	0	11	16	19	22	25	26	14	0	4	1	145
North Dakota	0	0	0	9	8	17	13	15	9	0	1	0	72
Ohio	9	1	16	12	18	18	19	22	17	5	2	1	140
Oklahoma	0	0	5	3	5	14	8	12	2	1	3	2	55
Oregon	0	0	4	3	6	6	7	8	9	0	5	6	54
Pennsylvania	3	0	5	8	13	23	20	24	12	2	1	1	112
Rhode Island	0	0	1	4	4	7	6	6	6	0	1	0	35
South Carolina	5	1	12	15	15	19	24	27	12	2	6	1	139
South Dakota	0	0	2	12	13	24	19	16	10	2	1	0	99
Tennessee	4	0	4	16	21	22	23	26	17	2	2	1	138
Texas	3	5	12	13	24	25	24	26	18	8	6	11	165
Utah	1	2	2	5	10	13	18	19	5	4	1	0	80
Vermont	0	0	2	3	5	15	13	11	8	1	0	0	58
Virginia	2	0	6	11	15	17	16	22	9	0	4	3	105
Washington	2	0	5	2	5	4	8	4	3	0	3	4	40
West Virginia	0	0	8	7	12	15	13	17	8	0	1	2	83
Wisconsin	3	0	3	12	23	22	18	23	19	3	0	3	129
Wyoming	1	0	1	3	2	4	8	8	1	2	0	0	30

TABLE VIII.—*Total number of auroras reported during* 1895.

States.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Alabama	0	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	0	0	0	0	0	0
California	0	1	0	0	0	0	0	0	0	0	1	1	3
Colorado	8	2	1	0	1	7	3	1	1	7	4	2	37
Connecticut	1	11	4	4	0	0	1	0	2	4	2	0	29
Delaware	3	3	0	0	3	4	4	1	3	3	1	1	26
Dist. of Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0	0	0	0	0	0	0
Idaho	0	3	1	6	2	0	0	3	4	17	1	0	37
Illinois	1	10	0	1	2	1	1	4	11	36	19	4	90
Indiana	4	2	3	0	1	0	0	0	0	7	3	0	20
Indian Territory	0	0	0	0	0	0	0	0	0	0	0	0	0
Iowa	1	17	6	1	2	2	1	4	12	55	25	2	128
Kansas	0	4	1	3	3	4	1	0	1	8	7	0	32
Kentucky	0	2	0	0	0	0	0	1	0	0	0	1	4
Louisiana	0	0	0	0	0	0	0	0	0	0	0	0	0
Maine	5	29	13	25	4	1	1	3	13	6	6	5	111
Maryland	0	2	3	3	0	0	0	0	0	2	4	4	18
Massachusetts	9	38	6	10	7	0	8	5	10	14	15	5	127
Michigan	2	30	18	4	1	1	1	4	4	28	20	1	106
Minnesota	15	63	40	25	2	12	3	19	50	88	52	8	372
Mississippi	0	0	0	0	0	0	0	0	0	0	0	0	0
Missouri	1	0	1	0	1	0	0	0	1	6	7	0	17
Montana	2	18	6	11	1	0	4	2	18	25	17	7	111
Nebraska	1	9	3	2	1	3	1	0	7	29	19	4	79
Nevada	6	7	3	2	1	2	1	0	0	0	2	0	24
New Hampshire	6	30	22	21	2	11	4	6	7	9	12	7	137
New Jersey	4	8	1	2	3	2	0	0	0	12	11	3	46
New Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	3	29	21	14	2	3	4	1	10	32	10	0	129
North Carolina	1	0	0	0	0	0	0	0	0	0	1	1	3
North Dakota	14	34	32	30	12	6	8	14	47	45	28	18	288
Ohio	6	18	3	2	7	7	10	6	7	53	7	0	126
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	0	0	0	1	0	0	0	0	1	0	0	0	2
Pennsylvania	4	11	0	3	1	0	0	0	0	7	0	1	27
Rhode Island	0	7	0	1	0	0	0	0	0	3	0	0	11
South Carolina	0	0	0	0	0	0	0	1	0	0	0	0	1
South Dakota	2	13	10	8	0	0	2	6	13	23	20	2	99
Tennessee	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	0	0	0	0	0	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermont	5	16	7	6	1	0	3	1	2	9	6	4	60
Virginia	2	0	1	0	1	0	0	0	0	0	0	1	5
Washington	1	5	5	11	6	7	3	1	3	10	3	0	55
West Virginia	0	0	0	0	0	0	0	0	1	0	0	0	1
Wisconsin	13	58	29	22	5	4	0	14	24	61	41	6	277
Wyoming	2	0	0	0	0	0	0	0	0	3	3	0	8

TABLE IX.—*Total number of days on which auroras occurred.*

Alabama	0	0	0	0	0	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0	0	0	0	0	0	0	0
California	0	1	0	0	0	0	0	0	0	0	1	1	3
Colorado	8	2	1	0	1	2	3	1	1	4	3	2	28
Connecticut	1	4	2	2	0	0	1	0	2	1	2	0	15
Delaware	3	3	0	0	3	4	4	1	3	3	1	1	26
Dist. of Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0	0	0	0	0	0	0
Idaho	0	3	1	3	2	0	0	3	4	7	1	0	24
Illinois	1	7	0	1	2	1	1	2	5	4	7	3	34
Indiana	3	2	3	0	1	0	0	0	0	3	1	0	13
Indian Territory	0	0	0	0	0	0	0	0	0	0	0	0	0
Iowa	1	8	3	1	2	2	1	4	3	6	3	2	36
Kansas	0	4	1	3	3	4	1	0	1	3	2	0	22
Kentucky	0	2	0	0	0	0	0	1	0	0	0	1	4
Louisiana	0	0	0	0	0	0	0	0	0	0	0	0	0
Maine	4	8	8	10	4	1	1	3	6	2	3	4	54
Maryland	0	2	2	3	0	0	0	0	0	2	2	2	13
Massachusetts	2	9	5	4	7	0	7	5	6	3	8	4	60
Michigan	2	10	9	3	1	1	1	4	2	5	5	1	44
Minnesota	10	10	14	12	2	7	3	6	14	15	9	5	107
Mississippi	0	0	0	0	0	0	0	0	0	0	0	0	0
Missouri	1	0	1	0	1	0	0	0	1	2	3	0	9
Montana	2	10	5	8	1	0	3	2	8	13	9	5	66
Nebraska	1	6	3	2	1	3	1	0	1	5	4	4	31
Nevada	5	7	3	2	1	2	1	0	0	0	2	0	23
New Hampshire	3	13	8	9	2	9	3	6	6	3	5	3	70
New Jersey	2	3	1	1	2	2	0	0	0	5	5	2	23
New Mexico	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	3	7	9	5	2	3	4	1	7	6	8	0	55
North Carolina	1	0	0	0	0	0	0	0	0	0	1	1	3
North Dakota	5	9	10	11	8	6	6	7	11	16	7	11	107
Ohio	5	10	3	2	4	5	9	2	5	9	5	0	59
Oklahoma	0	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	0	0	0	1	0	0	0	0	1	0	0	0	2
Pennsylvania	3	4	0	3	1	0	0	0	0	4	0	1	16
Rhode Island	0	5	0	1	0	0	0	0	0	1	0	0	7
South Carolina	0	0	0	0	0	0	0	1	0	0	0	0	1
South Dakota	2	8	4	3	0	0	1	4	7	5	7	2	43
Tennessee	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	0	0	0	0	0	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermont	4	6	6	4	1	0	3	1	1	3	4	4	37
Virginia	2	0	1	0	1	0	0	0	0	0	0	1	5
Washington	1	5	4	6	6	7	3	1	3	4	3	0	43
West Virginia	0	0	0	0	0	0	0	0	1	0	0	0	1
Wisconsin	11	12	18	14	3	3	0	6	11	10	9	4	101
Wyoming	2	0	0	0	0	0	0	0	0	2	1	0	5

TABLE X.—*Total snowfall at Weather Bureau stations.*

Compiled by the Editor from data furnished by A. J. HENRY, Chief of Division of Records and Meteorological Data. The snowfall is given in inches for the respective snow years, July 1, 1884–June 30, 1885, etc.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Alabama.											
Mobile	.....	.....	.....	.....	.....	.....	.....	.....	1.0	T.	6.0
Montgomery	3.0	T	12.7	T.	0	0	0	0	2.3	T.	3.2
Arizona.											
Fort Apache	18.9	5.6	7.1	27.5	0.8	.....	1.4	.....	.....	.....	.....
Fort Bowie	T.	2.9	0	10.0	0.8	0	0	.....	.....	.....	.....
Fort Grant	16.5	10.2	0.2	T.	18.5	0.2	0	.....	.....	.....	.....
Fort Thomas	0	2.1	0	T.	0	0	0	.....	.....	.....	.....
Prescott	0	21.0	14.7	34.5	31.8	14.3	.....	.....	.....	.....	.....
Tucson	.....	.....	.....	.....	.....	.....	.....	.....	0	4.7	0
Willcox	0	0	2.0	0	0	0	0	.....	.....	.....	.....
Arkansas.											
Fort Smith	0.3	11.8	3.2	0.4	2.0	0	5.1	9.2	10.8	9.3	12.5
Little Rock	2.0	0.7	2.1	11.1	1.5	T.	5.2	13.5	16.6	7.5	11.0
California.											
Fort Bidwell	3.5	71.9	86.0	71.4	.....	.....	.....	.....	.....	.....	.....
Keeler	.....	11.1	2.3	0.1	T.	0	1.3	0.9	6.8	8.0	.....
Red Bluff	0	0	0	0	0	0	0	2.5	0	2.0	T.
Sacramento	0	0	0	4.0	0	0	0	0	0	0	0
San Francisco	0	0	3.7	0.1	0	0	0	0	0	T.	0
Colorado.											
Colorado Springs	.....	.....	.....	5.7	9.4	43.6	.....	.....	.....	17.2	.....
Denver	49.7	34.6	32.1	25.5	21.3	38.5	76.6	52.3	57.4	51.9	37.0
Montrose	.....	19.0	29.8	13.1	14.5	18.3	22.5	51.2	57.3	.....	.....
Pikes Peak	.....	.....	.....	.....	.....	.....	.....	.....	751.0	331.4	.....
Pueblo	.....	.....	.....	.....	.....	.....	.....	.....	.....	25.5	28.2
Connecticut.											
New Haven	29.6	21.1	39.4	64.8	14.4	26.4	30.5	30.6	74.2	65.8	47.7
New London	38.2	44.9	27.5	35.0	13.3	34.2	27.6	21.3	51.3	57.0	25.6
Delaware.											
Del. Breakwater	8.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dist. of Columbia.											
Washington	24.5	20.2	44.6	25.9	12.5	6.5	37.1	41.7	31.0	25.4	24.8
Florida.											
Jacksonville	.....	.....	.....	.....	.....	.....	.....	.....	T.	0	T.
Pensacola	.....	.....	1.5	.....	.....	.....	.....	0.5	T.	T.	3.0
Georgia.											
Atlanta	4.7	0.8	6.9	T.	7.5	0.1	1.0	1.3	10.6	6.0	13.2
Augusta	T.	T.	1.1	0	6.0	0.8	0	0.5	4.7	0	4.1
Savannah	0	T.	0	0	T.	T.	0	0	1.0	0	1.8
Idaho.											
Boise City	48.9	18.0	11.8	9.2	12.2	35.4	.....	.....	.....	.....	.....
Idaho Falls	.....	.....	.....	.....	.....	.....	.....	.....	72.3	45.9	29.1
Illinois.											
Cairo	7.1	23.7	7.3	7.4	8.1	2.5	8.2	28.7	22.4	11.1	27.4
Chicago	53.5	46.6	35.2	32.7	22.7	21.3	21.6	33.5	31.5	44.4	47.2
Springfield	40.5	30.8	12.7	9.6	18.7	20.0	9.7	20.0	12.0	25.5	12.7
Indiana.											
Indianapolis	37.5	26.5	24.9	6.4	16.2	11.5	32.1	18.0	36.0	9.7	29.9
Indian Territory.											
Fort Reno	.....	14.7	T.	4.8	7.5	0	0.8	.....	.....	.....	.....
Fort Sill	4.8	3.4	0.6	1.2	1.6	T.	3.0	.....	.....	.....	.....
Fort Supply	.....	39.6	3.0	5.9	6.5	6.7	.....	.....	.....	.....	.....
Iowa.											
Davenport	40.3	41.2	27.6	47.1	19.7	14.8	20.3	21.4	41.3	28.8	16.3
Des Moines	41.7	70.9	46.9	27.4	21.3	32.7	28.4	31.9	31.0	43.5	24.4
Dubuque	38.8	56.3	63.2	57.0	24.6	30.0	43.5	29.5	51.5	41.9	21.0
Keokuk	55.8	54.7	33.5	22.6	20.5	20.1	17.1	19.1	28.5	24.0	18.8
Sioux City	.....	.....	.....	.....	.....	59.8	42.3	27.2	22.1	17.2	11.1
Kansas.											
Concordia	.....	47.3	5.8	14.4	14.0	19.0	38.5	16.5	19.2	16.8	12.3
Dodge City	13.8	17.1	11.2	13.6	4.4	14.5	33.2	21.8	16.5	14.4	27.2
Kansas.											
Leavenworth	26.9	23.7	26.6	26.2	20.0	17.6	27.3	21.0	35.2	.....	.....
Topeka	.....	.....	.....	9.2	17.3	4 2	5.7	13.1	34.0	9.5	10.0
Wichita	.....	.....	.....	..	16.9	15.4	15.0	11.8	18.7	12.9	15.0
Kentucky.											
Lexington	.....	.....	.....	.....	11.8	25.7	10.3	21.5	30.7	29.9	34.1
Louisville	11.9	22.3	21.9	10.7	1.9	6.5	8.5	13.3	16.8	12.6	38.1
Louisiana.											
Shreveport	3.7	T.	2.7	1.3	0	0	0	5.0	T.	3.2	1.8
Maine.											
Eastport	54.1	35.1	80.0	75.1	52.1	64.1	50.5	50.1	40.9	61.3	54.0
Portland	56.9	56.2	121.0	82.0	33.4	50.9	72.6	40.0	87.2	99.6	45.8
Maryland.											
Baltimore	31.4	30.3	25.6	32.1	9.0	4.9	35.9	44.3	30.3	21.0	17.9
Massachusetts.											
Boston	23.0	40.5	73.0	34.7	19.0	38.9	58.3	43.5	67.3	64.0	46.9
Edgartown	.....	.....	25.5	14.9	.....	.....	.....	.....	.....	.....	.....
Nantucket	.....	.....	16.4	11.2	18.5	26.5	14.6	15.5	33.6	19.8	27.8
Vineyard Haven	.....	.....	.....	.....	.....	.....	.....	.....	54.7	32.3	26.2
Woods Hole	.....	.....	.....	.....	.....	31.0	24.8	24.8	67.1	71.1	42.9
Michigan.											
Alpena	106.8	116.7	146.1	122.8	70.0	110.6	65.1	34.2	59.9	70.4	51.7
Detroit	56.5	58.9	60.5	39.0	24.3	15.7	27.0	39.4	59.7	45.5	43.6
Escanaba	68.7	95.8	51.1	83.9	.....	.....	.....	.....	76.0	51.6	.....
Grand Haven	68.1	54.2	53.9	45.7	36.8	44.3	37.9	48.2	66.7	60.2	48.4
Lansing	.....	.....	.....	47.4	37.8	23.0	38.0	.....	.....	.....	.....
Mackinaw City	108.2	83.6	81.2	74.3	.....	.....	.....	.....	.....	.....	.....
Manistee	.....	.....	.....	.....	.....	.....	.....	.....	65.6	.....	.....
Marquette	142.1	83.4	110.2	137.0	125.3	144.1	190.2	128.7	137.0	180.3	115.2
Port Huron	44.5	43.1	38.4	30.7	54.4	32.9	48.9	41.8	56.6	42.1	31.3
Minnesota.											
Duluth	45.7	69.9	76.8	76.2	41.0	59.2	74.6	48.6	75.2	80.2	30.3
Minneapolis	.....	.....	.....	.....	.....	.....	.....	.....	59.1	49.9	16.2
Moorhead	20.2	27.3	50.1	51.4	26.4	14.2	43.7	31.0	71.1	55.5	14.1
Red Wing	.....	.....	.....	.....	.....	.....	.....	16.5	66.3	.....	.....
St. Paul	32.3	39.4	61.7	46.2	14.4	36.3	32.7	28.5	60.6	40.7	19.8
St. Vincent	49.2	41.6	32.5	31.7	34.3	68.4	15.5	42.9	49.5	38.0	23.8
Mississippi.											
Meridian	.....	.....	.....	.....	.....	.....	.....	.....	2.1	T.	2.9
University	.....	.....	.....	0.7	0.2	0.5	1.5	5.6	13.6	.....	.....
Vicksburg	.....	.....	7.4	5.4	0.1	0	T.	5.0	3.4	T.	2.8

TABLE X.—*Total snowfall at Weather Bureau Stations.*—Continued.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Montana.											
Assiniboine	24.5	47.9	46.4	47.9	20.5	42.0	33.5	23.8	.....	.....	.....
Havre	.....	.....	.....	.....	.....	.....	.....	.....	55.1	32.9	33.4
Fort Benton	43.4	28.5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Custer	109.1	89.1	34.0	20.5	14.4	29.1	23.4	.....	.....	.....	.....
Helena	54.0	28.5	59.4	57.1	34.0	43.1	79.5	46.1	48.9	48.8	52.1
Fort Maginnis	7.0	60.8	78.9	141.5	66.5	.....	.....	.....	.....	.....	.....
Miles City	.....	.....	.....	.....	.....	.....	.....	.....	34.6	60.5	17.9
Poplar River	29.9	26.4	41.7	35.8	10.6	.....	.....	.....	.....	.....	.....
Fort Shaw	66.1	34.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Missouri.											
Columbia	.....	.....	.....	.....	.....	.....	.....	.....	9.3	14.3	24.5
Hannibal	.....	.....	.....	.....	.....	.....	.....	.....	15.8	16.3	20.6
Kansas City	.....	.....	.....	.....	10.1	14.3	26.3	20.6	33.3	24.5	13.7
Lamar	.....	33.4	9.0	6.2	.....	.....	.....	.....	.....	.....	.....
Springfield	.....	.....	.....	12.0	14.5	3.5	21.0	19.0	14.5	19.5	25.7
St. Louis	24.6	22.4	19.2	8.4	12.7	32.5	18.6	16.0	14.2	8.7	20.9
Nebraska.											
Crete	.....	.....	.....	14.2	20.2	21.5	32.3	32.2	22.8	.....	.....
North Platte	9.7	51.4	53.8	42.4	15.1	10.7	40.3	29.2	17.2	26.4	10.2
Omaha	18.0	30.3	32.9	22.3	15.8	23.9	30.5	20.5	34.7	21.1	16.3
Kearney	.....	.....	.....	.....	.....	.....	.....	.....	26.9	23.8	.....
Valentine	.....	38.6	40.8	26.2	34.7	45.1	57.7	70.9	33.4	36.9	.....
Nevada.											
Carson City	.....	.....	.....	22.4	13.7	118.4	37.0	26.0	60.8	41.0	27.7
Winnemucca	.....	18.7	35.2	24.3	10.9	75.0	21.4	33.8	52.3	28.4	45.9
New Hampshire.											
Manchester	.....	.....	.....	90.7	45.8	79.9	85.8	54.1	78.5	.....	.....
New Jersey.											
Atlantic City	24.5	20.0	19.0	21.5	10.3	8.8	8.7	5.4	34.0	8.7	.....
Cape May	29.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Brunswick	.....	.....	.....	.....	.....	.....	.....	.....	45.1	27.8	25.1
Sandy Hook	.....	40.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico.											
Santa Fe	40.2	35.9	18.6	14.6	30.4	18.1	41.2	36.4	12.9	28.2	42.7
Fort Stanton	.....	7.4	12.2	56.5	21.0	12.4	20.2	16.6	35.1	.....	.....
New York.											
Albany	56.3	39.9	95.0	110.0	29.4	27.0	67.9	26.2	57.6	55.7	68.4
Buffalo	64.0	114.6	88.3	53.5	70.9	19.6	55.8	79.9	74.3	89.9	73.7
New York	36.6	23.9	49.5	47.1	21.9	34.1	39.5	36.5	67.0	56.1	36.2
Oswego	97.2	54.5	125.7	102.0	92.1	51.7	68.7	96.1	89.9	86.5	80.0
Rochester	90.3	64.7	72.6	48.7	82.2	65.8	83.5	77.0	96.5	102.2	90.3
North Carolina.											
Charlotte	11.7	3.5	6.0	T.	8.0	1.0	T.	2.0	19.0	7.2	17.7
Hatteras	0	0	0	0	0	0.5	0	T.	T.	T.	10.3
Kittyhawk	0.2	1.0	0	T.	0	0	0	4.0	17.0	0.7	7.9
Raleigh	0	0	0	0.1	10.7	1.3	0.7	4.6	31.6	6.0	14.3
Southport	.....	.....	.....	.....	.....	.....	.....	.....	5.1	4.8	.....
Wilmington	0	0.2	0.2	0	3.5	0	0	0	2.0	3.2	0.5
North Dakota.											
Bismarck	34.1	34.2	45.7	33.1	37.3	25.7	26.6	47.7	39.1	42.3	14.9
Fort Buford	29.6	35.2	33.3	51.8	12.0	31.0	12.7	33.3	60.7	70.6	.....
Fort Totten	41.7	38.9	31.8	34.1	.....	.....	.....	.....	.....	.....	.....
Fort Yates	5.0	42.8	90.8	79.3	4.0	0.6	2.2	.....	.....	.....	.....
Ohio.											
Cincinnati	31.1	20.5	6.8	10.9	9.3	7.4	16.0	15.7	29.8	18.9	36.0
Cleveland	32.6	21.0	39.7	33.3	23.3	14.9	20.9	44.5	40.5	47.4	22.7
Columbus	20.9	34.7	31.9	21.3	16.3	21.4	33.9	18.8	38.1	19.3	44.8
Sandusky	51.8	28.9	44.0	22.0	19.7	8.2	22.1	22.6	58.9	38.0	24.5
Toledo	44.6	41.7	44.8	30.5	25.0	6.4	32.0	30.3	31.8	35.5	35.0
Oklahoma.											
Oklahoma City	.....	.....	.....	.....	.....	.....	.....	.....	14.1	7.9	9.3
Oregon.											
Ashland	5.1	4.7	26.9	9.0	.....	.....	.....	.....	.....	.....	.....
Astoria	0	6.0	17.5	7.0	0	25.0	2.0	1.0	31.3	15.5	3.8
Baker City	.....	.....	.....	.....	.....	51.9	54.4	59.2	49.9	66.5	53.1
Fort Klamath	.....	98.0	113.0	91.9	.....	.....	.....	.....	.....	.....	.....
Lakeview	7.9	31.0	62.7	47.7	.....	.....	.....	.....	.....	.....	.....
Linkville	.....	43.4	60.3	54.8	.....	.....	.....	.....	.....	.....	.....
Portland	35.6	9.3	18.2	14.0	1.3	41.6	13.0	0.7	60.9	16.5	30.4
Roseburg	0.5	0.7	34.2	17.2	1.8	12.4	3.6	0	17.7	16.1	1.5
Pennsylvania.											
Erie	97.1	72.1	83.5	54.2	34.0	15.5	38.7	43.5	65.1	59.7	49.8
Harrisburg	.....	.....	.....	.....	.....	.....	.....	.....	52.1	55.1	33.5
Philadelphia	23.8	21.4	25.0	30.0	6.2	7.4	15.2	19.9	36.8	20.3	22.8
Pittsburg	38.7	39.5	28.2	17.8	28.6	11.4	56.4	28.1	42.3	30.0	34.5
Rhode Island.											
Block Island	18.1	23.7	43.9	8.9	1.8	5.9	5.3	12.2	30.2	19.3	25.0
Narragansett Pier	3.0	28.5	52.5	22.5	8.0	26.5	22.0	26.2	50.0	40.0	22.6
South Carolina.											
Charleston	0	0	0	0	0	T.	0	T.	1.9	T.	T.
Columbia	.....	.....	.....	.....	.....	.....	.....	.....	2.0	11.3	15.6
South Dakota.											
Deadwood	98.3	105.1	173.9	.....	.....	.....	.....	.....	.....	.....	.....
Fort Sully	.....	27.7	2.0	21.6	23.1	18.3	26.2	.....	.....	.....	.....
Huron	8.3	10.6	24.2	35.0	27.4	24.5	39.4	26.2	34.5	31.9	16.1
Pierre	.....	.....	.....	.....	.....	.....	.....	.....	29.9	25.5	25.6
Rapid City	.....	.....	.....	.....	40.4	30.9	34.7	50.9	22.3	27.5	22.6
Yankton	20.6	48.4	42.3	47.8	10.2	28.3	38.5	33.6	24.8	20.0	.....
Tennessee.											
Chattanooga	6.4	2.6	15.2	0.5	0.5	1.2	8.1	12.0	16.1	11.6	22.1
Knoxville	10.0	12.9	27.4	3.6	2.5	1.5	7.7	5.4	11.1	9.0	41.6
Memphis	1.1	13.9	7.4	5.9	0.9	0.7	3.5	24.5	12.1	9.0	15.6
Nashville	0.4	26.5	4.6	11.2	3.2	5.0	2.6	21.8	7.9	12.4	27.7
Texas.											
Abilene	.....	0.1	T.	11.6	4.1	9.7	4.5	2.6	0.9	1.3	13.2
Amarillo	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.4	36.6
Brownsville	0	0	0	T.	0	0	0	0	0	0	0
Corpus Christi	.....	.....	.....	1.2	0	0	0	T.	0	0	4.3
El Paso	1.5	0	0	4.0	4.0	5.4	8.0	0	5.6	T.	2.6
Fort Davis	2.1	1.9	0	6.0	.....	.....	.....	.....	.....	.....	.....
Fort Elliott	12.8	12.6	0.2	4.3	9.3	7.2	.....	.....	.....	.....	.....
Galveston	0	6.0	0	1.5	0	0	0	0	0	0	15.4
Palestine	4.6	0.9	4.3	9.2	T.	0	T.	2.9	1.0	1.8	6.0
San Antonio	0	0.5	0	1.5	0	0	0	0	0	0	4.2
Utah.											
Fort Du Chesne	.....	.....	.....	10.1	15.1	16.8	14.8	.....	.....	.....	.....

TABLE X.—*Total snowfall at Weather Bureau stations*—Continued.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Utah—Cont'd.											
Frisco	.....	18.7	50.2	.....	.....	.....	.....	.....	.....	.....	.....
Salt Lake City	38.4	33.6	79.6	71.9	18.0	65.8	24.5	48.4	69.5	55.4	31.9
Vermont.											
Northfield	.....	.....	.....	191.2	88.2	56.8	92.7	50.3	63.0	85.3	88.1
Virginia.											
Cape Henry	6.4	3.5	7.0	4.0	2.0	2.5	T.	5.0	31.0	T.	7.0
Chincoteague	18.9	19.4	12.5	.....	.....	.....	.....	.....	.....	.....	.....
Lynchburg	18.4	28.0	28.7	6.6	19.7	6.0	28.3	29.6	15.3	14.9	45.4
Norfolk	12.7	4.0	14.6	2.5	2.0	3.6	1.0	6.7	33.3	7.4	14.6
Washington.											
East Clallam	.....	.....	.....	.....	.....	.....	.....	.....	1.2	25.0	20.5
Fort Canby	.....	.....	.....	.....	.....	24.0	0.9	0.0	17.9	14.9	1.5
Fort Spokane	0	9.3	34.3	.....	.....	.....	.....	.....	.....	.....	.....
Neah Bay	.....	.....	.....	.....	.....	.....	.....	.....	14.5	15.1	12.5
Olympia	0	9.5	8.3	10.5	0	20.0	6.5	1.8	40.3	21.5	17.0
Port Angeles	26.9	16.6	56.2	9.7	1.5	40.0	0	5.2	75.1	23.9	15.0
Port Crescent	.....	.....	.....	.....	.....	.....	.....	.....	50.7	29.9	.....
Spokane Falls	48.1	17.6	36.7	42.8	22.1	79.1	30.1	38.5	67.3	49.8	37.7
Tatoosh Island	9.7	0	25.8	9.2	3.6	0	0.8	0	35.8	5.4	5.9
Walla Walla	.....	.....	39.5	23.2	5.9	47.0	20.3	16.2	29.6	30.6	18.8
West Virginia.											
Parkersburg	.....	.....	.....	.....	15.3	10.2	15.7	47.4	47.7	41.1	43.9
Wisconsin.											
Green Bay	.....	.....	83.7	125.2	76.9	100.6	70.3	45.2	70.0	72.2	35.5
La Crosse	33.7	61.6	28.3	41.8	26.4	28.1	55.8	21.1	56.6	39.0	30.5
Milwaukee	11.3	109.8	74.1	51.5	28.9	39.8	40.8	33.8	37.4	40.5	40.4
Wyoming.											
Cheyenne	25.8	19.0	26.5	31.5	35.2	58.9	64.5	68.6	55.9	37.1	35.9
Fort Bridger	13.3	40.4	57.5	35.4	.....	.....	.....	.....	.....	.....	.....
Fort McKinney	.....	.....	.....	.....	19.8	36.5	61.7	.....	.....	.....	.....
Fort Washakie	.....	.....	.....	.....	29.1	32.7	27.1	.....	.....	.....	.....
Lander	.....	.....	.....	.....	.....	.....	.....	55.2	81.1	64.1	27.5

TABLE XI.—*Total snowfall at Canadian stations.*

Compiled by the Editor from data furnished by Prof. R. F. Stupart, director of the Meteorological Service, Dominion of Canada. The snowfall is given in inches for the respective snow years, July 1, 1884–June 30, 1885, etc.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Denbigh, Ont.	126.3	117.9	93.0	91.5	66.5	114.5	88.1	70.5	107.9	97.1	80.5
Scarboro, Ont.	49.8	52.3	86.4	33.5	44.5	27.4	44.7	41.3	48.3	37.3	41.3
Fredericton, N. B.	134.6	107.0	172.2	77.4	84.6	103.2	121.4	94.6	88.8	119.1	98.5
Chicoutimi, Que.	52.0	93.0	93.3	82.9	69.5	54.9	59.5	34.0	47.2	71.6	59.7
Cowal, Ont	62.7	45.3	76.4	33.2	48.3	19.5	47.8	31.5	79.5	27.6	44.0
St. George, Ont.	72.0	79.0	83.3	42.0	58.7	40.7	46.0	45.7	55.9	45.7	67.6
Sunshine, Ont.	76.8	95.7	179.8	90.5	107.7	38.8	75.6	69.8	97.3	91.6	95.3
Thedford, Ont.	75.3	68.5	92.5	40.0	77.5	37.5	57.5	63.5	106.3	46.0	72.0
St. Johns, N. F.	129.7	72.0	74.5	95.0	62.6	98.0	109.2	59.4	133.6	227.0	67.3
Bird Rocks, Que.	25.3	24.3	56.6	32.6	49.8	32.0	86.0	49.1	59.7	151.9	97.9
Regina, Assin.	40.0	12.0	10.5	30.1	20.3	28.3	21.4	30.8	33.8	26.0	16.5
Nicola Lake, B. C.	34.4	34.2	27.0	44.4	25.0	41.8	18.8	21.0	.....	.....	18.0
Presque Isle, Ont.	157.8	108.8	129.1	114.8	101.0	76.1	94.4	106.0	129.0	158.9	163.8
Goderich, Ont.	142.2	133.2	92.5	94.5	97.0	57.5	98.0	56.0	103.5	75.5	97.0

TABLE XI.—*Total snowfall at Canadian stations*—Continued.

Stations.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.
Sarnia, Ont.	63.3	47.5	27.9	36.8	41.7	21.5	35.5	60.0	68.5	27.1	33.0
Princeton, Ont.	63.5	69.0	67.0	62.6	61.8	37.7	41.7	49.0	74.0	49.0	74.3
Cottam, Ont.	64.2	51.6	54.0	32.7	28.2	17.4	37.4	36.4	70.8	45.4	32.5
Wilton Grove, Ont.	64.4	44.0	54.9	33.7	38.5	.....	.....	34.0	67.0	30.0	27.0
Aurora, Ont.	46.5	61.2	61.6	48.4	48.7	58.1	60.3	51.1	56.2	55.8	65.0
Birnam, Ont.	120.1	99.0	112.6	74.2	90.8	40.2	75.2	79.9	139.1	52.8	79.6
Brome, Que	55.0	53.0	90.8	.....	70.5	38.0	62.0	48.5	36.0	.....	51.0
Richmond, Que	115.4	93.8	171.4	143.5	108.6	96.9	127.7	92.2	94.2	95.3	84.5
C. Magdalene, Que	150.0	116.5	152.0	133.5	145.5	143.5	135.0	123.0	96.0	108.0	107.0
Montreal, Que	164.4	110.7	174.3	154.8	124.5	103.0	104.2	134.9	92.4	83.1	89.2
Dalhousie, N. B.	157.2	121.0	147.0	143.0	111.0	159.5	111.3	78.5	97.9	105.2	90.0
Orillia, Ont.	147.7	104.5	131.4	118.1	117.1	90.9	126.3	87.4	109.8	114.3	100.6
Point Clark, Ont.	97.0	111.0	119.0	78.0	96.0	33.0	30.0	51.0	93.0	75.0	116.0
St. John, N. B	121.1	90.6	113.9	60.8	51.9	71.8	92.7	53.5	79.4	113.2	77.7
Clontarf, Ont.	104.9	127.1	121.1	111.6	68.3	110.4	105.1	82.0	105.4	97.3	87.5
Ottawa, Ont.	120.7	115.3	182.4	99.1	54.5	61.6	85.9	93.8	92.4	94.5	90.9
Woodstock, Ont.	75.8	49.7	101.6	60.5	98.9	48.9	70.4	65.4	32.2	34.5	64.8
Truro, N. S.	121.3	55.9	87.1	62.4	37.9	62.4	108.6	73.2	96.8	131.4	99.1
Stoney Creek, Ont.	58.0	39.0	65.0	40.0	55.3	24.0	52.2	48.0	67.0	53.0	51.6
Durham, Ont.	213.0	157.0	149.0	122.0	28.2	104.0	184.0	81.0	145.0	179.0	185.9
Gravenhurst, Ont.	.....	89.0	125.8	123.6	88.5	83.5	89.0	66.8	105.7	94.1	94.5
Bala, Ont.	160.8	96.5	145.9	99.1	77.3	69.5	81.4	70.3	107.7	109.5	124.1
Bognor, Ont.	170.0	114.0	109.5	101.2	122.5	102.6	127.6	143.0	146.5	136.0	148.2
Paris, Ont	53.7	50.9	60.7	27.8	42.8	21.5	35.1	38.0	51.3	47.5	56.3
London, Middlesex	129.5	133.4	111.4	67.4	107.5	62.6	88.1	56.4	89.5	49.9	66.5
Esquimalt, B. C.	16.0	14.5	25.0	8.8	.....	4.2	11.4	1.0	57.6	42.9	28.4
Haliburton, Ont.	97.4	84.9	74.4	91.4	56.5	73.8	59.3	61.2	65.3	76.3	64.3
Deseronto, Ont.	83.6	70.7	90.8	39.9	60.8	55.9	60.0	54.6	67.3	71.9	73.0
Lindsay, Ont	101.4	101.8	129.7	95.4	79.4	84.8	100.4	88.6	90.9	100.1	94.4
Barrie, Ont	88.2	83.3	94.7	97.6	84.1	63.4	90.6	82.6	91.2	112.8	138.2
Edmonton, Alb.	35.0	53.3	22.1	47.8	9.2	31.3	27.2	29.2	45.6	49.6	46.0
Owen Sound, Ont.	170.8	88.5	134.0	89.5	93.1	102.3	98.1	105.7	147.0	125.5	144.4
Swift Current, As'n	.....	.....	45.7	39.0	36.7	44.4	41.4	77.7	84.2	45.1	26.0
White River, Ont.	.....	.....	.....	.....	.....	158.8	30.4	21.1	112.3	84.0	80.2
Winnipeg, Man.	47.6	37.4	46.1	55.6	49.3	61.8	28.8	51.8	71.3	76.5	54.0
Calgary, Alberta	.....	.....	37.4	52.7	54.0	50.6	22.5	12.0	34.2	43.2	40.7
Medicine Hat, As'n	23.9	.....	14.4	31.0	12.3	24.0	27.7	29.6	54.9	48.0	26.0
Port Arthur, Ont.	51.6	47.7	46.6	84.3	36.1	56.4	26.0	27.8	65.7	43.3	42.8
Minnedosa, Man.	48.7	40.6	28.9	46.1	35.0	48.5	39.3	25.4	52.6	63.1	32.6
Qu'Appelle, Assin.	48.9	40.2	28.6	41.0	28.4	77.2	37.2	39.5	49.5	49.7	45.0
St. Andrews, N. B.	113.1	99.6	130.0	89.4	85.9	74.9	105.2	86.4	85.4	124.6	91.8
Yarmouth, N. S.	121.8	89.0	117.3	95.9	50.7	76.9	68.0	82.8	116.9	87.5	79.7
Grand Manan, N. B	59.0	36.3	76.1	71.7	79.2	45.1	69.3	56.9	64.7	92.6	79.2
S.W.P. Anticosti, Q	69.1	70.3	104.7	109.8	66.0	80.7	94.9	86.5	68.0	75.2	106.5
Halifax, N. S	99.7	65.0	85.5	66.2	30.0	59.7	69.2	83.6	116.7	119.8	95.6
Sydney, N. S	106.7	73.6	87.2	81.5	47.9	67.4	80.2	63.3	.....	.....	77.9
Father Point, Que.	138.4	155.6	143.7	148.5	144.3	101.2	144.2	110.5	98.7	89.9	98.7
Chatham, N. B	168.0	138.3	183.0	112.9	124.6	163.3	123.3	90.6	97.9	105.8	108.0
Rockliffe, Ont.	111.7	103.8	93.3	102.3	70.9	70.8	118.7	59.3	82.0	89.1	80.0
Quebec, Que	187.0	116.8	155.1	175.6	151.6	132.9	121.7	84.4	74.0	147.1	86.0
Port Stanley, Ont.	64.8	86.7	56.9	51.6	61.2	31.1	76.4	56.6	114.5	54.4	74.3
Kingston, Ont.	117.6	103.8	116.2	77.9	82.2	69.7	70.3	65.6	68.8	68.5	63.6
Parry Sound, Ont.	115.6	101.9	118.4	123.4	71.4	94.0	108.0	124.1	130.0	160.5	178.0
Sangeen, Ont.	159.9	112.9	149.3	129.7	110.9	92.8	105.4	111.2	147.9	125.0	156.2
Dealtown, Ont	48.4	47.4	29.6	30.3	18.3	6.8	23.8	22.4	48.5	27.0	14.9
Blenheim, Ont.	52.3	64.5	55.0	44.0	33.5	13.5	47.1	34.5	116.5	37.5	45.5
Orangeville, Ont.	77.4	69.0	91.1	97.4	77.0	55.0	82.6	58.9	130.7	90.0	88.0
Sprucedale, Ont.	147.9	82.1	122.0	120.0	63.9	91.0	77.3	76.6	107.0	105.0	101.0
Olivers Ferry, Ont.	85.8	58.8	90.9	38.3	34.8	56.2	48.3	47.0	41.0	41.0	50.0
Ennismore, Ont.	75.2	75.0	85.8	63.3	56.0	68.0	58.0	39.5	58.0	56.5	54.0