The following extracts relating to the general weather conditions in the several States and Territories are taken from the monthly reports of the respective sections of the Climate and Crop Service. The name of the section director is given after each summary.

Rainfall is expressed in inches.

Alabama.—The mean temperature was 53.4°, or 3.2° below normal; the highest was 75°F, at Prattville on the 11th, and the lowest, 19°F, at Madison on the 10th. The average precipitation was 5.42, or 0.31 below normal; the greatest monthly amount, 9.64, occurred at Enfants, and the least, 0.03, at Winfield. While the rainfall for the entire State was slightly below the normal, the rains were so frequent and heavy as to seriously retard all farm work.—P. F. Chaffee.

Arizona.—The mean temperature was 59.1°, or 3.7° above normal; the highest was 101°F, at Fort Mohave on the 11th, and the lowest, 20°F, at Snowflake on the 21st. The average precipitation was 0.64, or 0.34 below normal; the greatest monthly amount, 5.94, occurred at Mount Huachuca, while none fell at several stations.—W. G. Burns.

Arkansas.—The mean temperature was 51.3°, or 0.3° above normal; the highest was 90°F, at Prescott and Washington on the 12th and at Rison on the 13th, and the lowest, 72°F, on Pond on the 1st. The average precipitation was 2.50, or 2.56 below normal; the greatest monthly amount, 5.55, occurred at Blanchard, and the least, 0.76, at Silver Springs.—E. S. Richardson.

California.—The mean temperature for the State, obtained by weighting the reports from 193 stations, so that equal areas have about equal weight, was 55.7°F, which was 3.9°F above the March normal for the State, as determined from 161 records; the highest recorded temperature was 105°F, at Ogilby, San Diego County, on the 10th; the lowest, 5°F below zero, at Bodie, Mono County, on the 6th. The average precipitation for the State, as determined from the records of 195 stations, was 2.38; the deficiency, as indicated by reports from 164 stations which have normal, was 0.74; the greatest monthly amount was 12.54, at La Porte, Plumas County, while none fell at several stations in southern California.—Alexander G. McAuley.

Colorado.—The mean temperature was 39.6°, or 5.2° above normal; the highest was 85°F, at Lamar on the 10th, and the lowest, 18°F below zero, at Troutvale on the 6th. The average precipitation was 0.47, or 0.86 below normal; the greatest monthly amount, 1.43, occurred at Ruby, and the least, trace, at Perrypark, Saguache, and Vilas.—F. H. Brandsen.

Florida.—The mean temperature was 63.6°, or 2.1° below normal; the highest was 93°F, at Brooksville on the 23rd, and the lowest, 23°, at Stephensville on the 21st. The average precipitation was 6.82, or 3.69 above normal; the greatest monthly amount occurred at McHenry, and the least, 2.40, at Clermont.—A. J. Mitchell.

Georgia.—The mean temperature was 53.2°, or 2.7° below normal; the highest was 88°F, at Maysville on the 12th and at Valona on the 14th, and the lowest, 5°F below zero, at Dahlonega and Dinwiddie on the 14th. The average precipitation was 5.43, or practically normal; the greatest monthly amount, 5.12, occurred at Americus, and the least, 3.40, at Covington.—J. B. Marbury.

Idaho.—The mean temperature was 42.0°, or 6.9° above normal; the highest was 86°F, at Hagerman on the 31st, and the lowest, 5° below zero, at Marysville on the 28th. The average precipitation was 1.16, or 0.44 below normal; the greatest monthly amount, 4.02, occurred at Fort Sherman, while none fell at Blackfoot and Downey.—E. M. Blandford.

Illinois.—The mean temperature was 34.4°, or 3.1° below normal; the highest was 62°F, at St. John on the 12th, and the lowest, 4° below zero, at Scale Mound on the 17th. The average precipitation was 3.82, or 1.52 below normal, the greatest monthly amount, 4.02, occurred at Palestine, and the least, 0.12, at Monticello.—M. E. Bystone.

Indiana.—The mean temperature was 35.6°, or 2.8° below normal; the highest was 75°F, at Bedford on the 11th, and the lowest, 0° below zero, at Angola on the 16th. The average precipitation was 2.06, or 1.61 below normal; the greatest monthly amount, 3.46, occurred at Logansport, and the least, 0.74, at Winamac.—C. F. R. Wappenhans.

Kentucky.—The mean temperature was 42.5°, or 1.8° above normal; the highest was 81°F, at Wapello on the 22nd, and the lowest, 15° below zero, at Osage on the 16th. The average precipitation was 2.06, or 0.31 below normal; the greatest monthly amount, 5.15, occurred at Fords, and the least, 0.17, at Bedford, at 11th, and at the lowest, 5° below zero, at Emporia and Marion on the 1st. The average precipitation was 4.25, or 2.3° below normal; the highest was 94°F, at Englewood on the 12th, and the lowest, 7° below zero, at Emporia and Marion on the 1st. The average precipitation was 3.09, or 2.3° below normal; the highest was 79°F, at Bedford on the 11th, and the lowest, 6° below zero, at Wakeena, and the least, trace, at Hays and Winona.—T. B. Jennings.

Louisiana.—The mean temperature was 56.3°, or 2.3° below normal; the highest was 93°F, at Monroe on the 13th, and the lowest, 24°, at the greatest monthly amount, 5.49, or 0.69 above normal; the greatest monthly amount, 3.85, occurred at Venice, and the least, 3.22, at Cheneyville.—W. T. Biggs.

Maryland and Delaware.—The mean temperature was 30.9°, or 4.4° below normal; the highest was 78°F, at Newark on the 7th, and the lowest, 5° below zero, at Dottchtville, Md., on the 18th. The average precipitation was 3.22, or 0.36 below normal; the greatest monthly amount, 5.06, occurred at Sunnyside, Md., and the least, 1.31, at Denton, Md.—R. J. Wallis.

Michigan.—The mean temperature was 22.8°, or 5.4° below normal; the highest was 50°F, at St. Joseph on the 30th, and the lowest, 29° below zero, at Humboldt on the 23d. The average precipitation was 1.89, or 0.54 below normal; the greatest monthly amount, 4.66, occurred at Fitchburg, and the least, 0.57, at Sault Ste. Marie.

Minnesota.—The mean temperature was 23.4°, or about normal; the highest was 69°F, at Cambridge on the 12th, and the lowest, 30° below zero, at Tower on the 4th. The average precipitation was 1.30, or 1.46 below normal, the greatest monthly amount, 2.91, occurred at St. Peter and Worthington, and the least, 0.15, at Mount Iron.—T. S. Outom.

Mississippi.—The mean temperature was 53.8°, or about 3° below normal; the highest was 90°F, at Natchez on the 13th and at Fort Gibson on the 11th, and the lowest, 30° below zero, at Verona on the 21st. The average precipitation was 4.77, or about 1.00 below normal; the greatest monthly amount, 8.84, occurred at Columbus, and the least, 2.20, at Austin.—H. E. Wilkins.

Missouri.—The mean temperature was 40.4°, or 1.4° below normal; the highest was 88°F, at Wylie on the 11th, and the lowest, 4° below zero, at Marysville and Conception on the 16th. The average precipitation was 1.48, or 1.98 below normal; the greatest monthly amount, 3.46, or 3.00 below normal, occurred at Venice, and the least, 0.37, at Landstien.—A. E. Boshart.

Nebraska.—The mean temperature was 55.5°, or 1° below normal; the highest was 65°F, at Alsea on the 10th and 11th, and the lowest, 11°F below zero, at Lewis Ranch on the 10th. The average precipitation was 0.63, or 0.51 below normal; the greatest monthly amount, 2.34, occurred at Hartington, and the least, trace, at Lodgepole and Merriman.—G. A. Loveland.

New Hampshire.—The mean temperature was 44.2°, or about 6° above normal; the highest was 81°F, at Candelaria on the 12th, and the lowest, 3°, at Empire Ranch on the 6th. The average precipitation was 0.51, or about 0.80 below normal; the greatest monthly amount, 2.41 occurred at Lebanon, and the least, 0.17, at Medora on the 18th. Exceptionally mild weather prevailed throughout the month. It was the warmest and driest March in the past twelve years. Over the greater part of the State plowing and seeding proceeded during the entire month.—J. H. Smith.
New Jersey.—The mean temperature was 35.8°, or 2.8° below normal; the highest was 67°, at Bridgeport and Cape May C. H. on the 23d, and the lowest, 9° below zero, at Deckertown on the 18th. The average precipitation was 3.51, or 0.33 below normal; the greatest monthly amount, 7.93, occurred at Ocean City, and the least, 2.48, at Friedburg.—E. W. McCann.

New Mexico.—The mean temperature was 47.4°, or 2.2° above normal; the highest was 88°, at Roswell on the 12th, and the lowest, 4° at Albuquerque on the 13th. The average precipitation was 4.08, or 1.07 above normal; the greatest monthly amount, 10.47, occurred at North Lake, and the least, 1.01, at Lyndyond.—R. G. Allen.

North Carolina.—The mean temperature was 47.0°, or 1.5° below normal; the highest was 79°, at Cherryville and Henritta on the 11th, and the lowest, 5°, at Atkins on the 17th. The average precipitation was 4.88, or 0.16 below normal; the greatest monthly amount, 7.00, occurred at Linville, and the least, 2.48, at Wilminton.—C. F. von Hermann.

North Dakota.—The mean temperature was 21.0°, or 0.7° above normal; the highest was 77°, at Medora on the 11th, and the lowest, 24° below zero, at Towner on the 1st. The average precipitation was 1.09, or 0.13 above normal; the greatest monthly amount, 2.65, occurred at Edinboro, the highest was 95°, at Merlin on the 13th, and the lowest, 11°, at Lakeview on the 26th. The average precipitation was 4.63, or 0.21 below normal; the greatest monthly amount, 11.90, occurred at Glenora, and the least, 0.15, at Prineville.—E. A. Baile.

Pennsylvania.—The mean temperature was 31.2°, or 3.6° below normal; the highest was 66°, at Coatesville on the 23d, and the lowest, 25° below zero, at Dyberry on the 18th. The average precipitation was 3.01, or 0.46 above normal; the greatest monthly amount, 7.31, occurred at Somerset, and the least, 2.55, at Lyippus.—T. F. Townsend.

South Carolina.—The mean temperature was 51.6°, or 3.1° below normal; the highest was 79°, at Charleston and Yemassee on the 20th, and the lowest, 22° below zero, at Spartanburg on the 17th. The average precipitation was 4.22, or 0.66 above normal; the greatest monthly amount, 7.08, occurred at Greenville, and the least, 0.96, at Pinopolis.—J. J. S. Yamasaki.

South Dakota.—The mean temperature was 20.6°, or about 1° above normal; the highest was 78°, at Cherry Creek on the 10th and at Interi on the 11th, and the lowest, 19° below zero, at Wessington Springs on the 18th. The average precipitation was 1.66, or about 0.88 above normal; the greatest monthly amount, 3.89, occurred at DeSmet, and the least, 0.20, at Interior.—S. W. Glenn.

Tennessee.—The mean temperature was 46.5°, or about 2.0° below normal; the highest was 81°, at Memphis on the 11th, and the lowest, 61° below zero, at Nashville on the 17th. The average precipitation was 3.66, or about 2.00 below normal; the greatest monthly amount, 6.82, occurred at Oak Hill, and the least, 1.33, at Trenton.—H. C. Bate.

Texas.—The mean temperature, determined by comparison of 47 stations, was 55.8°, or about 1.33 below normal; the highest was 80°, at Galveston on the 11th, 13th, and 31st, and the least, 0.03, at Edmond.—C. W. Mann.

Utah.—The mean temperature was 43.8°, or 7.0° below normal; the highest was 88°, at St. George on the 12th, 13th, and 31st, and the lowest, 6°, at Pinto on the 5th and Soldier Summit on the 6th. The average precipitation was 0.19, or 1.41 below normal; the greatest monthly amount, 1.50, occurred near Marysvale, while none fell at six stations. It was the clearest, driest, and warmest March on record for this State.—L. H. Meredith.

Virginia.—The mean temperature was 41.9°, or about 3° below normal; the highest was 75°, at Farmville on the 24th, and the lowest, 3° below zero, at Freefield on the 16th. The average precipitation was 3.73, or 0.12 above normal; the greatest monthly amount, 6.17, occurred at Freeling, and the least, 1.36, at Manassas.—E. J. Balis.

West Virginia.—The mean temperature was 40.5°, or 0.6° above normal, and the warmest March on record; the highest was 85°, at Southbranch on the 30th, and the lowest, 2.7°, at Northport on the 2d. The average precipitation was 3.94, or 1.08 above normal; the greatest monthly amount, 25.7°, occurred at Union, and the least, trace, at Loomis. On the account of the exceptional mildness of the month, the weather conditions were extremely favorable for the growth of the staple crops and the development of fruit. More than the usual amount of apples and peaches occurred near Union, and the least, trace, at Loomis. Fall savour wheat is in splendid condition, and the pastures are as far advanced as is usual in May.—O. N. Salisbury.

West Virginia.—The mean temperature was 38.5°, or 3.5° below normal; the highest was 78°, at Madison on the 13th, and the lowest, 8° below zero, at Burlington on the 18th. The average precipitation was 3.79, or 0.06 below normal; the greatest monthly amount, 6.48, occurred at Bluefield, and the least, 2.86, at Parkersburg.—R. C. Vose.

Wisconsin.—The mean temperature was 24.7°, or about 3.0° below normal; the highest was 62°, at Spooner on the 31st, and the lowest, 24° below zero, at Butternut on the 16th. The average precipitation was 2.36, or 0.67 below normal; the greatest monthly amount, 2.06, occurred at Pepin, and the least, 0.46, at Stevens Point.—W. M. Wilson.

Wyoming.—The mean temperature was 35.1°, or 6.1° above normal; the highest was 107°, at Rawlins on the 20th, and the lowest, 73° below zero, at Douglas on the 11th. The average precipitation was 24.7°, or about 3.0° below normal; the highest was 62°, at Spooner on the 31st, and the lowest, 24° below zero, at Butternut on the 16th. The average precipitation was 2.36, or 0.67 below normal; the greatest monthly amount, 2.06, occurred at Pepin, and the least, 0.46, at Stevens Point.—W. M. Wilson.

SPECIAL CONTRIBUTIONS.

COMPARATIVE THERMOMETER READINGS AT NEW YORK, N. Y.

By Alfred J. Henry, Professor of Meteorology.

In the Monthly Weather Review for October, 1898, Vol. XXVI, page 455, an account is given of the removal of the Weather Bureau office in New York, N. Y., from the Manhattan Building, No. 66 Broadway, to the American Surety Building, No. 100 Broadway. The roof of the last-named building is flat and appears to offer exceptionally good exposures for the various meteorological instruments. The presence of an exhaust pipe to the southeastward of the thermometer shelter was noted as an objectionable feature at the time of removal, but it was believed it would only affect the thermometer readings when the wind was from the southeast. The experience of a single winter was, however, sufficient to convince the official in charge of the station that artificial heat was being communicated to the thermometers, not only by the exhaust pipe above referred to, but by a number of ventilating shafts that discharged hot air at varying distance from the thermometers.

Acting on Mr. Emery's recommendation, an instrument shelter was erected on the roof of the adjoining premises—the Schenckhorn Building—at a point slightly over 200 feet below the shelter on the American Surety Building but still about 110 feet above the street. The roof of the Schenckhorn Building is 101.5 feet above the Broadway sidewalk. The floor of the instrument shelter was placed 6.3 feet above the roof of the building and the thermometers were placed on cross pieces about a foot higher.

Comparative readings between thermometers in the two shelters were made from October 27 to November 6, and from November 11 to December 31. The mean results for the first period showed that the temperatures in the two shelters were