98°, St. Marks; 99°, Jacksonville, Norfolk, Savannah; 100°, Mobile, Charleston, Montgomery; 101°, San Antonio; 108°, Rio Grande. Minimum temperatures below 35°: 34°, Bismarck, North Platte; 33°, Santa Fe; 32°, Cheyenne; 30°, Breckenridge; 25°, Mt. Washington; 10°, Pike's Peak. The interval from Friday, June 8th, to Tuesday, June 12th, was marked by excessively high temperatures in southern California—said to have been the highest, in fact, that have been reported since the memorable summer of 1859, when the maximum temperatures for June were, Fort Yuma, 117°, San Diego, 102°, and later in the summer of the same year there were reported, at San Bernardino, 133°, the old placer belt, 117° to 119°. During the present June the maxima have been: Yuma, A. T., 114°, Stanwix, 110°, Maricopa Wells, 110°, Wickenburg, 108°, Camp Verde, 104°, Campo, Tucson, 102°, Phoenix and Florence, 100°, on the 12th; San Francisco, 92°, 11th; San Diego, 93°, 9th; Los Angeles, 101°, 8th; 103°, 9th; 104°, 10th; 112°, 11th; Cajon Rancho, 112°, 9th; 107°, 10th; Holloway's, 105°, 11th; Spring Valley, 111 to 122, 11th; Campo, 101°, 11th; Stanwix, 108, 11th.

Ranges of Temperatures.—The largest diurnal ranges have been: 37°, St. Marks, 2d; 38°, Bismarck, 9th, Virginia City, 15th, and Burlington, Vt., 24th; 39°, Breckenridge, 22d; 40°, Cheyenne, 16th and 27th, Santa Fe, 7th; 41°, Mason, Tex., —; 44°, Denver, 27th. The largest monthly ranges have been: 50°, Dubuque and Omaha; 51°, Alpena; 53°, Bismarck; 55°, Cheyenne; 56°, Denver, Dodge City and Mason; 57°, Santa Fe; 59°, Breckenridge; 61°, North Platte.

Frosts were observed as follows: 1st, Vermont. 2d, Wyoming Ter. 8th, Iowa, Missouri and Texas. 9th, Dakota, Iowa, Minnesota and Nebraska. 10th, Iowa, Texas, (severe.) Minnesota and Nebraska. 11th, New York, Ohio and Virginia. 12th, Minnesota and Vermont. 20th, Maine. 23d, Maine, Michigan, New York, Ohio and Vermont. 30th, entire month at Summit, Colorado.

The formation of *Ice*, rather than frosts, was reported from Rockford, Iowa, on the 10th; Moorehead, Minn., 9th; thin coating of ice formed upon the barrels of water at Camp Sheridan, Neb., 10th, morning; on the 9th, ice formed at Cheyenne and North Platte.

PRECIPITATION.

In General.—The general distribution of rain for June is shown on chart No. III, from which it will be seen that the region of largest rain-fall extends from western Tennessee to Indian Territory and thence northward over Illinois, Iowa and the lower portion of the Ohio valley. Rather heavy rains have also fallen at a few points on the South Atlantic coast. Light rains have fallen in Canada, and almost none in California. This distribution of rain over the country east of the Rocky Mountains may be described as being almost directly the inverse of the distribution for June, 1874. The table of comparative values given on chart No. III shows a very large excess of rain in the South Atlantic States, Tennessee, Upper Mississippi valley, Lower Missouri valley and Minnesota.

Special Heavy Rains.—The following are the most notable cases of heavy rains that have been reported: On the 1st and 2nd at St. Louis 3.32 inches. 4th, Denison, Texas, 2 inches in twenty minutes. 6th, Kingston, R. I., estimated 10 inches; 6th and 7th, New London, 4.37; Independence, Kansas, 2.62 inches in 40 minutes. 7th and 8th, Leavenworth, 3.83. 8th and 9th, Memphis, 13.37. 10th, 11th and 12th, Kittyhawk, 7.33. 11th and 12th, Cape Hatteras, 5.85; Wilmington, 4.86. 11th, 12th and 13th, Smithville, N. C., 4.46; and Jacksonville, 5.73. 12th, Savannah, 4.80; Cape Hatteras, 3.94; Charleston, 3.96. 12th and 13th, Tybee Island, 4.14. 14th, Mobile, 4.37. 19th, 20th and 21st, Keokuk, 3.63. 21st, 22nd and 23rd, St. Marks, 3.08. 29th, Breckenridge, 3.28; St. Paul, 3.48, (of which 2.41 fell in 1 hour.) 30th, Vevay, Ind., at the close of the remarkably violent storm a heavy shower, lasting five minutes, fell from an apparently cloudless sky, drops were of large size, and, as caught on a sheet of blotting paper, made circles 2½ inches in diameter. On the 8th and 9th the rain at Memphis was, at times, a steady pour at the rate of 4 inches per hour; on the same days remarkable rains took place at Helena, Ark.—where, from 2½ p. m. on the 7th to 2 p. m. on the 8th about 12 inches fell, one half of which was lost by the overflow of the gauge, and similarly from 11 p. m. of the 8th to 7 a. m. of the 9th over 11 (and possibly 13) inches fell, one-half being lost by overflow. The entire surrounding country was of course flooded with water in a manner never before known.

Small Monthly Rain-falls.—The following stations report less than 0.5 of an inch; the stations in California and Arizona generally report rain-fall zero or inappreciable; Griffin, Texas, 0.49 inch; Santa Fé 0.13.

Large Monthly Rain-falls.—Rain-falls to the amount of 10 inches or more, were reported as follows: Charleston, S. C., 10.31; Kittyhawk, 10.97; Leavenworth, 10.00; Memphis, 18.16; Fort Snelling, Minn., 10.69; St. Mary's Ga., 11.39; Fort Madison, Iowa, 11.56; Springfield, Mo., 15.20; Helena, Ark., (23 ?); Urbana, O., 12.34; Bellefontaine, O., 10.91; Carthagena, O., 17.33; Louisburg, O., 10.60; Jackson, Tenn., 12.01.

Droughts.—Droughts, injurious to vegetation, have been reported as follows; Connecticut, drought, lasting six weeks, ended on the 8th. Maine, Gardner, May and June both very dry; severe drought now prevails. Michigan, Northport, vegetation only partially recovered from the drought of May. North Carolina, Attaway, severe drought ended on the 9th. Vermont, West Charlotte, severe drought much relieved by rain of the 16th and 30th; hay crops will be one-third of the average. Florida, Pensacola, no rains for a month.

Hail-storms.—Hail storms have been reported as follows: 1st, Wis.; 2nd, Kan., Mt. Washington; 4th, Kan.; 5th, Neb., Pike's Peak; 6th, Kan., Neb.; 7th, Tenn., Ind.; 9th, Ill., Mo.; 10th, Dak., Mo., Pike's Peak; 11th, Ill, Ind., Kan., Mich., Dak.; 12th, Iowa, Dak., Mich.; 13th, Ind.; 14th, Neb., N. Y.; 15th, Iowa, Neb.; 16th, N. Y., Pike's Peak; 17th, Iowa; 18th, Pike's Peak; 19th, Iowa, Neb.; 20th, Ohio, Fla.; 22nd, Vt.; 23rd, Kan., Neb.; 24th, Neb.; 25th, Neb., Iowa, Ind.; 26th, Kan., N. C.; 28th, Nev., W. Va., (near Morgantown, breadth of storm one-half to three-quarters of a mile;) 29th, Minn., Wis., Neb., N. Y.; 30th, Ind., Neb., N. Y., Ohio, Wis.

Large Hail-stones.—30th, Genoa, Neb., diameter from half inch to 1 inch; 29th, Nilesville, Wis., diameter half inch, width of storm-track 10 miles; 25th, Dubuque, Iowa, large as quails' eggs; 11th, terrific hail, Leroy, Ill.; 30th, Fort Wayne, Ind., flat disks half inch diameter.

Snow fall.—At Summit, Col., the observer reports snow prevalent in first part of the month, and all traveling done on snow shoes. On Pike's Peak snow fell on the 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 11th, 29th. On Mt. Washington sleet was reported on the 22nd.

Rainy Days.—The number of days on which rain has fallen, as recorded by Signal Service observers, ranges as follows: New England, 11 to 20 days; Middle Atlantic, 10 to 17; South Atlantic, 10 to 16; East Gulf, 9 to 13; West Gulf, 7 to 14; Tennessee and Ohio valley, 13 to 20; Lower Missouri, 15 to 22; Upper Mississippi, 11 to 19; Upper Lake region, 10 to 20; Lower Lake region, 14 to 20; Rocky Mountain stations, 5 to 7.

Cloudy Days.—The number of cloudy days reported during the month, by Voluntary Observers and Army Surgeons, ranges about as follows: New England, 7 to 15; Middle Atlantic States, 4 to 15; South Atlantic States, 6 to 12; East Gulf States, 8 to 18; West Gulf States, 0 to 8; Tennessee and Ohio valley, 7 to 14; Lower Missouri valley, 2 or 3; Upper Mississippi valley, 5 to 12; Lake region, 5 to 17.

RELATIVE HUMIDITY.

The average relative humidity for the month ranges about as follows: New England, 61 to 79; Middle Atlantic States, 67 to 84; South Atlantic States, 70 to 80; East Gulf States, 65 to 80; West Gulf States, 61 to 74; Tennessee and Ohio valley, 68 to 72; Lower Missouri valley, 68 to 71; Upper Mississippi valley, 64 to 71; Upper Lakes, 67 to 74; Lower Lakes, 65 to 74; San Francisco, 66. High stations, uncorrected for altitude, report as follows: Mount Washington, 83; Cheyenne, 38; Salt Lake City, 30; Santa Fe, 20; Pike's Peak, 76; North Platte, 54; Dodge City, 66; Virginia City, 44.

WINDS.

In General.—The prevailing winds at Signal Service stations are shown by arrows on chart No. II, from which it will be seen that, with scarcely an exception, south and southwest winds have been most numerous at all stations east of the Rocky Mountain slope. Northerly winds have prevailed in Oregon and California.

Total Movements.—The largest total movements are as follows: Breckenridge, 9, 205 miles; Cape Hatteras, 9,463; Cape Lookout; 10,378; Dodge City, 9,940; Indianola, 10,735; Kitty Hawk, 9,184; North Platte, 10,712; Pike's Peak, 18,894.

Smallest Movements.—Augusta, 2,418; Lynchburg, 2,446; Nashville, 2,891; Shreveport, 3,099.

Highest Velocities in miles per hour, have been: 6th, Dodge City, 60; — Indianola, 60; 18th and 25th, Indianapolis, 50; 25th, Chicago, 50; 19th, Mount Washington, 72; 22d, North Platte, 86; Pike's Peak, 87; 27th, Fort Whipple, 96.

Local Storms, Tornadoes, &c., have been reported as follows: unless specially noted, it is to be understood that the following list of high winds include only local storms, and not such gales as prevailed simultaneously over a large region. 4th, Mt. Carmel, Ill., and Mattoon, Ill., 5:45 p. m., track 1 mile long and 100 feet wide. 5th, waterspout in Elkhorn Valley, Neb.; terrific wind and rain, Charleston, Ill. 6th, Chambersburg, Pa,, waterspout. 7th, peculiar hot, dry violent wind, Stockton, Cal. 9th, 5 miles north of Gainesville, Ga., heavy thunder-storm. 14th, Tornado at Rosemont, Dakota Co., and at Langdon, 12 miles