intimately connected with and accounted for by the deficiency in atmospheric pressure, producing southerly winds. On the Pacific coast the mean temperature is 2.°2 below the average.

Frosts occurred on the 3d, 4th and 5th in New York and New Jersey; on the 7th in Massachusetts; on the 17th in New Hampshire; on the 23d, 24th, 25th, 26th, 27th and 28th in Connecticut, New York, Vermont, New Hampshire, Massachusetts and Maine.

PRECIPITATION.

Chart No. III illustrates the distribution of the rain-fall for the month. The districts in which there has been an excess or a deficiency is apparent from an examination of the table upon the same. The decided excess for New England is principally due to the very heavy rains on the southern coast, produced by low barometer No. II. The deficiency in the Lower Lake region and the Ohio valley gave rise to droughts during the latter part of the month. In the Gulf States the deficiency, with the heat, was sufficient in a great measure to injure the crops. From northern Texas northward to Nebraska and Iowa the extreme dryness, excessive heat and grasshoppers at many places destroyed all vegetation. On the Pacific coast the rain-fall has been about the average.

The number of days on which rain fell during the month averages: in New England, eight; in the Middle Atlantic States, nine; in the South Atlantic States, eleven; in the Gulf States, eight; in the Lower Lake region, five; in the Upper Lake region, nine; in the Ohio valley and Tennessee, eight; in the upper Mississippi valley, eleven; in the lower Missouri valley, nine; in Minnesota, fifteen.

Hail fell at Troy, N. Y., on the 2nd; on the "divide," between Denver and Colorado Springs, Colorado, as large as walnuts, on the 3d; at Jamestown, N. Y., on the 7th; at Indianapolis, Ind., on the 7th and 9th; at Spartanburg, S. C., Weldon and Mount Pleasant, N. C., on the 8th; at Greensboro, N. C., Rochester and Benton Centre, N. Y., on the 12th; at Lunenburg, Vt., on the 12th and 30th; at Mount Solon, Va., on the 21st; at Pomaria, S. C., on the 24th; at Castalian Springs, Tenn., on the 29th. On Pike's Peak, Colorado, rain, hail, sleet and snow fell frequently, and often during the same storm, in succession.

HUMIDITY.

The percentages of relative humidity for the various sections average as follows: on the Gulf and South Atlantic coasts, .73; on the New England coast, .74; on the New Jersey coast, .77; in the interior of the Middle States, .66; in the Lower Lake region, .65; in the Upper Lake region, .72; in the Ohio valley, Tennessee and the Mississippi valley, from Dubuque to Vicksburg, .60; in the Lower Missouri valley, .61; in Minnesota, .74; at the Rocky Mountain stations, (excepting Pikes's Peak,) .38.

WINDS.

The arrows upon chart No. II show the prevailing winds for the month. As usual, they are from the high towards the low barometer. It is most perceptible in the Mississippi valley and westward, where the barometric gradient is the steepest, and no effect from land and sea breezes. On the Atlantic coast the prevailing winds have been from the north and east. As the high winds and gales have accompanied the movement of low barometers, they are spoken of under that heading.

The average total atmospheric movement, independent of direction, has been as follows in the several districts: New England, 4,180 miles; Middle Atlantic coast, 7,360;