

RELATIVE HUMIDITY.

The relative humidity for the month averages, on the New England, New Jersey and South Atlantic coasts, 75 per cent.; in the interior portions of the New England, Middle and Southern States, 70; on the Gulf coast, 78; Ohio valley, 67; Lower Lake region, 69; Upper Lake region and Northwest, 72. The lowest means are, as usual, reported from the Rocky mountain stations, being 64 per cent., at Colorado Springs; 57, at Cheyenne; 56, at Santa Fé; 51, at Denver, and 31, at Salt Lake City.

WINDS.

The prevailing winds for the month are shown by the arrows on Chart No. II. It will be seen that they are mostly from the northeast in the Gulf and South Atlantic States; from the south or southwest in the Northwest, the Middle Atlantic States and New England, while in Tennessee, the Ohio valley and the Lake region they vary from northwest to southwest. The total movement of the air during the month, independent of direction, averages, in New England, 4,810 miles; on the New Jersey coast, 7,750; in the Middle States, 4,410; south Atlantic coast, 5,115; Gulf coast, 6,800; interior of the Southern States, 2,890; Ohio valley, 3,640; Lower Lake region, 6,610; Upper Lake region, 6,800; Northwest, 5,190. The following are some of the largest total movements: Sandy Hook, 10,247 miles; Cape Hatteras, 10,243; Galveston 9,300; Cleveland, 8,928; Erie, 8,351; Pike's Peak, 8,136; Peck's Beach, 8,124. The smallest movements occurred at the following stations: Lynchburg, 2,014 miles; Nashville, 2,316; Augusta, 2,414; Albany, 2,639; Vicksburg, 2,731; Shreveport, 2,863; Cairo, 2,883.

TEMPERATURE OF THE WATER.

A table of the maximum and minimum temperatures of water for the month at the different stations on the coast, lakes and rivers, will be found on Chart No. II. A comparison of the mean temperatures of water with those of the air shows that at nearly all points the air has been much cooler than the water at the corresponding points. On the coast of Maine, however, the reverse is the case, the air temperatures averaging three degrees higher than the water temperatures. In the Upper Lake region the two have been nearly equal. On the Atlantic coast, from Cape Cod to Florida, the water has been about three degrees warmer than the air, and on the Gulf coast two degrees, while along the western rivers this difference amounts to an average of five degrees, and on Lake Erie, seven.

NAVIGATION.

On Chart No. III will be found a table giving the highest and lowest water-marks, with the dates on which they occurred, at the stations on the principal Western rivers. The Red river rose steadily at Shreveport from the 10th to the 20th, after which it declined slowly. The Missouri fell almost continuously after the first few days of the month, but the depth of water has remained sufficient for navigation. The rise, which began in the upper Mississippi in August, continued until about the middle of September, the freshet-wave gradually extending itself downward, until its crest reached Memphis on the 27th. At Vicksburg and New Orleans the high water of August steadily subsided until towards the close of the month, when a slight rise occurred. The Ohio remained low during the month, changing but little. A rise of ten feet was experienced in the Cumberland, at Nashville, on the 21st, but the water subsided rapidly during the