RELATIVE HUMIDITY.

The percentage of mean relative humidity for the month ranges as follows: New England, 68 to 77; Middle Atlantic States, 54 to 77; South Atlantic States, 54 to 80; Eastern Gulf States, 55 to 70; Western Gulf States, 57 to 71; Ohio Valley and Tenuessee, 57 to 72; Lower Lake region, 76 to 81; Upper Lake region, 73 to 82; Upper Mississippi valley, 63 to 75; Missouri valley, 65 to 75; Red River of the North valley, 74 to 85; Texas, 33 to 73; Middle Plateau, 29 to 65; Southern Plateau, 27 to 49; California, 60 to 73; Oregon, 64 to 76; Washington Territory, 70 to 82. *High stations* report the following percentages not corrected for altitude: Pike's Peak, 65.7; Santa Fe, 48.7; Cheyenne, 52.9; Denver, 56.2; Mt. Washington, 86.3.

WINDS.

The prevailing winds during the month of March, 1881, at Signal Service Stations, are shown on chart No. II, by arrows which fly with the wind. Throughout the country, east of the 97th meridian, the winds, with hardly an exception, were from *west* to *northwest*. Throughout the Rio Grande valley *southeasterly*. Along the Eastern Rocky Mountain Slope *north* to *northwest*. In central Texas and the Plateau regions, *variable* In the Middle and Southern Pacific coast regions, *northerly*, and in the Northern Pacific coast region, *southerly*.

Total Movements of the Air.—The following are the largest total movements at the Signal Service stations: Mt. Washington, 20,547 miles; Pike's Peak, 18,620; Cape May, 16,243; Delaware Breakwater, 15,132; Portsmouth, 13,575; Cape Hatteras, 13,479; Chincoteague, 13,168; New Shoreham, 12,451; Wood's Holl, 12,397; Sandy Hook, 12,294; Barnegat, 12,136; Champaign, Ill, 12,100; Kittyhawk, 11,997; Eastport, 11,499; Philadelphia, 11,174; Sandusky, 11,152; Cape Henry, 10,906; Dodge City, 10,590; Indianola, 10,422; Punta Rassa, 10,394; Ft. Myer, Va., 10,339; Cheyenne, 10,326; Cedar Keys, 10,298; New York City, 9,848; Ft. Macon, N. C., 9,847; Boston, 9,826; Decatur, Tex., 9,622; Atlanta, Ga., 9,548; St. Louis, 9,528. The *smallest* are: La Mesilla, 1,603 miles; Phœnix, 1,992; Roseburg, 2,132; Lewiston, 2,182; Florence, 2,531; Ft. Missoula, 2,542; Visalia, 2,863; Deadwood, 2,971; Tuscon, 3,231; Uvalde, 3,462; Olympia, 3,472; Bismarck, 3,614; Portland, Or., 3,656; San Antonio, 3,666; Lynchburg, 3,733.

High Winds.—Winds of 50 miles and over were reported as follows: On summit of Mount Washington, 1st to 4th, 9th, 10th, 19th, 20th, 23rd to 31st; on seven of these dates the wind reached a velocity of 100 miles or over; maximum wind velocity, 132 miles NW., on the 27th. On summit of Pike's Peak, 1st, 2nd, 4th, 15th, 20th to 22nd; maximum wind velocity, 64 miles NW. on the 1st. Thatcher's Island, 66 NW., 11th; 65 NE., 30th Sandusky, 54 NW., 30th. Barnegat, 52 E., 30th. Cape May, 52 NW., 1st; 51 NW., 2nd; 50 NW., 26th, 27th. Kittykawk, 52 NE., 26th; 55 W., 31st. New Shoreham, 52 NE., 30th. Cape Hatteras, 58 SW., 30th. Dodge City, 55 NW., 2nd; 56 NW., 11th. Delaware Breakwater, 50 SW., 4th; 70 NE., 9th. Portsmouth, N. C., 72 SW., 30th.

Local Storms.—Near Fayette, Jefferson Co., Miss., 18th, 2:30 p. m., violent tornado passed from SW. to NE., a distance of about five miles; width of storm-track about 100 yards, over which every moveable object was swept away. The Natchez and Jackson railroad bridges across Colle's and Ball's Creeks were nearly demolished, cutting off communication for several days. This tornado developed in connection with the passage of low-area No. VII northeastward from the Rio Grande valley across the northwestern portions of the States of Louisiana and Mississippi. On the afternoon of the 18th cold northwesterly winds prevailed to the northward of the low-area, in Arkansas, Indian Territory and Missouri, while to the southward along the western Gulf coast, opposing warm southerly winds obtained, presenting a contrast in temperature of from 20° to 30°. Galena, Cherokee Co., Kan., 16th, a. m., most violent storm that has ever visited this section. In its appearance it was described as very similar to the terrible tornado that devasted Marshfield, Mo., in April, 1880. Direction of storm-path SW. to NE., width of track about 300 yards. Every moveable object in the storms path was carried away with irresistable force, but fortunately its course was turned aside from the more densely populated portion of the city, which prevented very serious disasters. This tornado developed in the southwest quadrant of an area of low barometer, described as No. VI, on chart No. I. On the afternoon of the 16th, this low pressure extended from the Lower Missouri valley northeastward to the Upper Lake region. In rear of this area cold northwesterly winds, with snow, prevailed, opposed in the West Gulf States by warm southerly winds, which presented a contrast in temperature of from 20° to 30°. Sumterville, Sumter Co., Ala., 23rd, 5 p. m., very violent tornado passed a little north of station. Direction of storm-path SW. to NE.; width of track about 40 yards. Several large buildings and many outhouses, stables, &c., were demolished. Heavy objects were transported considerable distances, and in some instances chickens were carried over a quarter of a mile. The appearance of the storm-cloud was described as fearful, resembling huge volumes of black smoke ascending and whirling in the form of a funnel, accompanied in its passage by a heavy rumbling noise. This tornado developed in connection with the passage of low area No. VIII over the northern portion of