and Mt. Washington, 76. *Dry stations*. Salt Lake City, averages 29 per cent.; Cheyenne, 38; Virginia City, 41; Denver, 42; Bismarck, North Platte and Malone, 59; Fort Sully and Albany, 61; Rochester, 62; Buffalo, 63; Dodge City and New York, 64.

WINDS.

Prevailing Winds.—The points of the compass from which the winds have blown most frequently during the month will be seen by examining chart No. II, the arrows flying with the wind. At Campo, Cal., the prevailing winds have been from the W.; Yuma, S.; Bismarck, NW.; Fort Sully, SE.; Smithville, N. C., SW.; Kitty Hawk, N. C., E.; Sandy Hook, SE.; Barnegat, E.; Atlantic City, NE.; Thatcher's Island, SW.

The *maximum velocities* are given in the description of the movements of the low-pressure areas. On the summit of Mt. Washington the highest velocities occurred on the 21st and 22nd, and on Pike's Peak on the 22nd.

Total Movements.—The largest total movements of the air during the month, independent of direction, have been recorded at the following stations, viz: Breckenridge, 11,323 miles; North Platte, 11,239; Fort Dodge, 11,196; Pike's Peak, 9,635; Cape May, 8,886; San Francisco, 8,790; Barnegat, 8,511; Fort Sully, 8,476; Sandy Hook, 8,140; Indianola, 7,910; Cheyenne, 7,870; Cape Lookout, 7,851. It has been impossible to obtain a continuous record on Mt. Washington. The smallest movements have occurred at Lynchburg, 1,807 miles; Savannah, 1,963; Augusta, 2,129; Louisville, 2,172; Morgantown, 2,208; Nashville, 2,279; Vicksburg, 2,302; Shreveport, 2,701; Memphis, 2,769; Springfield, 2,790; Savannah, 2,855; New London, 2,985; Cincinnati, 2,898.

VERIFICATIONS.

Probabilities.—As worked up three times daily and issued to the public, they have been carefully compared with the actual conditions during the succeeding twenty-four hours, and the following result obtained The percentage of verifications has averaged 86.13 for New England, 86.83 for the Middle States, 88.23 for the South Atlantic States, 87.68 for the Eastern Gulf States, 88 91 for the Western Gulf States, 86.52 for Tennessee and the Ohio valley, 88.60 for the Lower Lake region, 90.20 for the Upper Lake region, 86.99 for the Upper Mississippi valley, and 82.44 for the Lower Missouri valley. The average for the whole country is 87.25 per cent. For the weather, 85.88; wind direction, 92.33; temperature, 88.62; barometric changes, 82.20 per cent. have been obtained. There were four omissions to predict out of 3,720, or 0.1 per cent.

Cautionary Signals.—During the month fifty-two (52) signals were ordered to be displayed at the different stations along the South Atlantic and Middle Atlantic coasts, and the Lakes. Of these, one (1) was ordered late, thirty-four (34) have been reported as justified, and seventeen (17) not justified. Warnings were sent for two Canadian stations, along Lake Huron, on the 10th, but are believed to have been not justified. Thirty-four (34) cases have been reported, from scattered stations, where the wind-velocity reached twenty-five (25) miles, and over, per hour without the display of Signals, viz,—on the 1st, Cape Henry, N. E., 36 miles; Kittyhawk, E., 28; Cape Hatteras, S., 34; 2nd, Galveston, N. W., 29; Indianola, N., 44; 3rd, Mobile, S., 30; 6th, Key West, E., 25; 7th, St. Marks, S. W., 26, (squall:) 8th, Marquette, S., 30; 10th, Key West, E., 30; Cape Lookout, N. W., 26; 12th, Savannah, E. 40; 13th, Indianola, S., 27; 14th, Escanaba, N., 28; 18th, Cape Lookout, W., 30; 19th, Escanaba, N., 32; 20th, Sandy Hook, N., 32; Boston, N. W., 32; Thatcher's Island, N. W., 28; Portland, Me., N. W., 28; Port Huron, N. E., 25; 21st, Mobile, S. E., 29; Cape Lookout, N. E., 28; Cape Hatteras, N. E., 26; 22d, Boston, W., 26; 24th, Mobile, S. E., 28; 26th, Buffalo, W., 26; Alpena, NW., 28; 27th, Kittyhawk and Cape Hatteras, NE., 28; Cape May, N., 32; Sandy Hook, N. W., 29; Portland, Me., N. W., 26; 31st, Alpena, N. W., 28. In a great many cases they occurred during local thunder-storms, and were of short duration.

NAVIGATION.

Height of Rivers.—Upon chart No. III is printed a table giving the highest and lowest marks, with the dates upon which they occurred. In the Red river there has been a steady decline at Shreveport during the month, excepting a temporary rise of thirty inches on the 11th. The Missouri fell slowly at Fort Sully up to the middle of the month; after a sudden rise of one foot, it continued slowly falling till the 27th, then rose to its maximum on the 29th. At Yankton and Omaha it changed but slightly until reaching its maximum, after which the fall was quite regular until the minimum was reached, when a rise of a few inches closed the month. At Leavenworth it fell quite regularly up to the 20th; after a rise of one foot on the 21st, its decline was steady. The upper Mississippi continued quite low throughout the month. At Keokuk navigation was greatly impeded. At St. Louis, after falling steadily and reaching its minimum, it rose to 14 feet 4 inches on the 27th, and then continued slowly falling. The lower Mississippi fell quite steadily throughout the month, excepting slight rises at Cairo on the 13th and 24th, and at Memphis on the 17th and 26th. An immense sand-bar formed during the first week at the lower side of the "cut-off" below