Rainy Days—The average number of days on which rain or snow fell in December is, for the upper Mississippi valley, 11; lower Mississippi, 12. Westward of this river, the number diminishes very regularly to 2 in Colorado. Going eastward, the number increases to from 10 to 19 on Lake Michigan; from 12 to 17 in the Ohio valley; from 11 to 16 in the Eastern Gulf States; from 8 to 13 in the South Atlantic States; from 14 to 20 in the Middle Atlantic States; from 17 to 24 in the Lower Lakes; from 10 to 15 in northern New England.

Small regions of droughts are shown in New England.

Foggy Days.—From 4 to 11 foggy days are reported from Cape Cod to Cape Hatteras, the majority of which occured during the last week in the month. At other stations the reports were: Wilmington and La Crosse, 9 days; Wytheville, Salt Lake City and St. Paul, 7; Galveston, 8; St. Louis and Cleveland, 6. The largest number of foggy days are: Washington, New York and Philadelphia, 10 or 11.

RELATIVE HUMIDITY.

The mean relative humidity for the month ranges between 51 at Cheyenne, 56 at Virginia City, and 63 at Yankton, up to 85 at Albany, 84 at Indianola, 82 at Marquette, 84 at Peck's Beach, and 81 at San Francisco. For the summit of Mt. Washington the average is 89, uncorrected for elevation.

WINDS.

The prevailing wind directions for the month have been: In the Gulf States, southerly; in the South Atlantic States, the Ohio valley and Lower Lake region, southwest; in the Northwest and Upper Lake region, northwest; in the Middle and Eastern States, northwest to northeast.

The *total movements* of the air for the month, independent of direction, have been: at Breckenridge, 10,914; Cheyenne, 11,049; Erie, 10,682; Grand Haven, 10,470; Indianola, 10,313; Long Branch, 11,182; Sandy Hook, 12,545; Augusta, 2,776; Baltimore, 2,948; Lynchburg, 2,800, and Salt Lake City, 2,031 miles.

Maximum wind velocities exceeding 45 miles were reported as follows: Erie, south, 52 miles; Long Branch, on 13th, northwest, 56; Grand Haven, 12th, east, 45; Mt. Washington, northwest, 108; Malone, west, 50; Sandy Hook, 13th, west, 52.

WATER TEMPERATURES.

The monthly maximum and minimum temperatures of water at the river and coast stations are given in a table on Chart No. II. A minimum of 31° or 32° has been recorded at Buffalo, Chicago, Cleveland, Detroit, Duluth, Escanaba, Keokuk, Leavenworth, Marquette, Milwaukee, Pittsburgh, St. Louis and Wood's Hole.

NAVIGATION.

The table on Chart No. III gives the highest and lowest readings of the river gauges during the month, from which it will be seen that the Mississippi from Davenport to New Orleans rose with some variations, until at the close of the month it was from four to fifteen feet higher than at the middle of the month. A sudden rise accompanied by occasional destructive floods occurred in the Ohio and its tributaries during the last five days of the month. In the Middle States the early closing of canals and rivers, was followed by one or more subsequent openings and closings; Boston Bay, temporarily frozen over on the 19th; the Hudson at West Point, covered with floating ice on the 19th; Sacketts Harbor, N. Y., frozen on the 1st, thick enough to bear travel, but ice all cleared away on the 11th; at Muscatine, Iowa, ice broke up on the 4th, closed again on the 18th and opened again on the 21st; at Trenton, N. J., the canal was frozen over on the 1st; the lower Susquehanna, in Maryland, closed on the 2d, opened on the 5th, closed on the 18th and opened on 26th; the Hudson at Garrisons, N. Y., was closed on the 19th, but opened subsequently; the upper Susquehanna opened on the 6th and 7th, closed on the 19th and opened on the 22nd; the Delaware closed at Trenton on the 2nd, opened on the 4th, closed on the 29th and opened again on the 24th; the upper Susquehanna at Tioga, Penn., closed on the 3rd, opened on the 8th, closed on 21st, opened on the 26th; the Lake and river at Cleveland, well filled with ice, 20th; at La Crosse and St. Paul river frozen during month; at Davenport floating ice 3rd, 17th, 18th, 20th, 27th and 28th; at Barnegat ice in bay 20th, broke up 22nd; at Morgantown, floating ice 18th and 19th, river closed 20th, opened 22nd; at Portland, Me., harbor frozen 20th; at Philadelphia, river frozen 19th, broken ice in river 21st and 22nd; at Buffalo ice in river 17th and 18th, Lake frozen 20th, ice breaking up 21st, Lake almost clear of ice 22nd; at Atlantic City, floating ice in sea 20th; at Detroit, floating ice in river 1st; at Albany, canal opened 14th, river 23rd; at Springfield, river frozen over 21st; at Burlington, Vt., floating ice in Lake 22nd; at Sandy Hook, bay partly covered with floating ice 21st; at Rochester, ice went out of river 23rd; navigation closed on the 13th at Milwaukee, on the 2nd at Duluth and on the 14th at Alpena; at Omaha river closed during the month; at Keokuk floating ice on the 6th, 7th, 12th, 17th and 20th.