

distance of nearly a mile. At Vicksburg, Miss., a very violent thunder-storm occurred on the 5th. The wind shifted to north and northeast, and attained the velocity of forty miles per hour. On the 14th, at Corsicana, Texas, during the heavy thunder-storm the lightning was fearful, and 3.90 inches of water fell. The creeks overflowed their banks and carried away houses, &c. Spartanburg, S. C., was visited on the same date by a severe wind, rain and hail-storm, damaging buildings and crops.

United States steamer Rio Bravo encountered a heavy southerly gale during the night of the 13th, fifteen miles from Sabine light, on the coast of Texas. The vessel was badly damaged and run ashore. A schooner was struck by lightning on the 16th off Sandy Hook, N. J. Off Chatham, New Brunswick, a schooner was damaged by a whirlwind.

### TEMPERATURE OF THE AIR.

The isothermal lines for the month appear on Chart No. II, while in the left-hand lower corner of the same is a table giving the average temperatures, by districts, for the month. In all the districts, excepting New England, the weather has been cooler than usual, especially from the Gulf coast to the Upper Lake region and the Northwest. The difference is greatest in the upper Mississippi and lower Missouri valleys. It has been slightly warmer than August, 1873, in New England and eastern New York, but otherwise generally cooler. Compared with August of last year, the temperature averages a little higher in New England, eastern New York, New Jersey and on the Pacific coast. In the other sections it averages lower, especially in the Southwest, where the difference is as much as 8°. The following are the minimum temperatures for the several districts: Escanaba, 38°; Pembina, 26°; Pike's Peak, 24°; Cleveland and Buffalo, 48°; Mt. Washington, 28°; Burlington, Vt., 46°; New York, 55°; Wytheville, Va., 48°; Charleston, 67°; Bismarck, D. T., 39°; Virginia City, M. T., 33°; Dubuque, 41°; St. Louis, 55°; Memphis, 63°; Corsicana and Shreveport, 64°; Montgomery, 65°; Key West, 73°. Maximum temperatures—Bismarck, 91°; St. Paul and Dubuque, 90°; Milwaukee, 89°; Erie, 87°; Mt. Washington, 61°; Burlington, Vt., 87°; Portland, Me., 90°; Wood's Hole, Mass., and Newport, 81°; New York, 90°; Wilmington, N. C., 92°; Key West and Augusta, Ga., 91°; Jacksonville, 95°; Montgomery, 94°; Shreveport, 104°; Nashville, 89°; Louisville, 88°; Leavenworth, 90°; Denver, 96°; Pike's Peak, 55°. The greatest range of temperature (59°) was at Pembina, D. T., and the least (18°) at Key West.

*Frost.*—Light frosts were reported to have occurred on the 1st in northeastern Pennsylvania; the 19th in Iowa; 20th in Ohio; 23d, 24th and 25th in New York; 27th in New York, Pennsylvania and Wyoming Territory; 28th in Iowa; 29th in Minnesota; heavy and destructive frosts on the 21st in Minnesota; the 22d in Illinois, Iowa, Michigan, Wisconsin and Minnesota; the 23d in Wisconsin, Michigan, Iowa, Illinois, Indiana and Ohio. Some of the above have been spoken of in connection with the movement of areas of high barometer.

### PRECIPITATION.

Chart No. III shows the distribution of the rain-fall. The table upon the same, giving the average by districts, furnishes the means of comparing it with the average for years. It shows that the precipitation has been above the average, excepting in the St. Lawrence valley, Tennessee and the Ohio valley, and on the Pacific coast. The very large excess in the Middle Atlantic States is due principally to the storms of the 2d and 3d; the 7th; 11th, 12th and 13th; and the 17th and 18th. The rain-fall has also been heavier than for August, 1874, in the St. Lawrence valley, Middle Atlantic States, South Atlantic States, East Gulf States, West Gulf States, Lake region, upper Mississippi and lower Missouri valleys and Minnesota.