

Droughts.—Houston, Fla., month very dry, impeding the growth of vegetation.

High Tides.—15th, Atlantic City, N. J., severe NE. gale; high tide, sweeping railroad track. 16th, Charleston, unusually high tides. Cape Lookout, very high tide. 30th, Sandy Hook, very high tides, injured jetties.

Hail.—2d, Tex. Kan.; 3d, Wy. T., Ohio; 4th, Ohio; 5th, Ohio, N. C., Va.; 6th, N. C.; 7th, Kan., Neb., Ind. T., Tex., Tenn., Ill., Iowa; 8th, Wy. T., Tex., Ill., La., Miss.; 9th, Mich., Pa.; 10th, Col., Wy. T., Minn., Ohio, Mich., Ind., Pa.; 11th, Col., W. Va., Ohio, N. Y., Va., R. I., Conn., Wy. T., Ill., Mass., N. J., Pa., Vt.; 12th, Ind., Neb., N. H., N. Y.; 13th, Mass., Me., N. Y., Vt.; 15th, Col.; 16th, Fla.; 17th, Col., Mo., Neb.; 18th, Col., Tex., Miss., Iowa, Ark., Kan., N. J.; 19th, Kan., Iowa, Mich., Minn., Ill., Ky., Wis.; 20th, W. Va., N. Y., Pa.; 21st, Va., Wy. T., N. J., Pa.; 22d, Neb.; 23d, Minn., Ind. T., Ill., Iowa, Kan.; 24th, Va., Wis.; 25th, N. M., Iowa, Ky., Me., Vt.; 26th, Tex., N. H., Me., N. Y., Vt.; 27th, Me., Vt.; 28th, Kan., Iowa, Mass., Neb.; 29th, Kan.; 30th, Neb., Iowa, Md.; 31st, Fla., Iowa, Mo.

Rainy Days.—The number of days on which rain or snow has fallen varies as follows: New England, 6 to 21; Middle Atlantic States, 12 to 17; South Atlantic States, 5 to 13; Gulf States, 5 to 11; Ohio valley and Tennessee, 12 to 18; Lower Lake region, 11 to 19; Upper Lake region, 10 to 18; Upper Mississippi valley, 11 to 21; Lower Missouri valley, 11 to 15; Northwest, 10 to 19; Western Plains, 8 to 15; Rocky Mountains, 6 to 23, and Pacific coast, 3 to 11.

Cloudy Days.—For New England, the number varies from 6 to 21; Middle Atlantic States, 5 to 14; South Atlantic States, 2 to 9; Gulf States, 4 to 13; Ohio valley and Tennessee, 3 to 11; Lower Lake region, 7 to 13; Upper Lake region, 7 to 12; Upper Mississippi valley, 7 to 17; Lower Missouri valley, 14 to 16; Northwest, 10 to 21; Western Plains, 13 to 18; Rocky Mountains, 2 to 8, and Pacific coast, 3 to 17.

Snow fell as follows: New Hampshire, 12th, 13th; Vermont, 12th, 14th; Massachusetts, 11th, 13th, 14th; Connecticut, 15th; New York, 12th; New Jersey, 11th; Pennsylvania, 11th; Ohio, 10th; Michigan, 4th, 10th to 12th, 14th, 15th; Wisconsin, 4th, 11th; Minnesota, 3rd, 10th; Iowa, 3rd, 11th, 12th; Nebraska, 11th, 12th, 17th; Dakota, 2nd, 3rd, 11th, 12th; Wyoming, 2nd, 6th to 8th, 16th to 19th; and, in Colorado, on Pike's Peak, 1st to 3rd, 6th, 7th, 12th, 14th, 15th, 18th to 21st, 24th, 25th; snow on summit, at end of month, 30 inches, and in gulches 60 feet deep; New Mexico, 17th; Utah, 16th, 17th; Nevada, 12th to 14th, 20th, 21st, 22nd, 28th, 31st.

RELATIVE HUMIDITY.

The average percentage of relative humidity for the month ranges as follows: New England, 59 to 78; Middle Atlantic States, 60 to 77; South Atlantic States, 59 to 80; East Gulf States, 67 to 75; West Gulf States, 61 to 77; Lower Lake region, 61 to 71; Upper Lake region, 64 to 75; Ohio valley and Tennessee, 58 to 67; Upper Mississippi valley, 57 to 70; Lower Missouri valley, 63 to 65; Red River of the North valley, 59 to 67; Eastern slope, from Dakota to interior of Texas, 45 to 72; Western plateau, 34 to 50; California, 48 to 75. High stations report the following: Mt. Washington, 91; Pike's Peak, 63; Cheyenne, 58; Denver, 47; Santa Fe, 24.

WINDS.

The prevailing winds at Signal Service stations are shown by arrows, flying with the wind on chart No. II. East of the Mississippi the prevailing direction is westerly; in the Southwest, southerly, and in the Northwest, northwesterly. The maximum velocities have already appeared under the description of storm-areas.

Total Movements of the Air.—The following are the *largest* monthly movements as recorded at the Signal Service stations, viz: Pike's Peak, 20,276 miles; Cape Lookout, 11,918; North Platte, 11,055; Cape May, 10,467; Kittyhawk, 10,465; Indianola, 10,454; Breckenridge, 10,134; Dodge City, 10,064; Sandusky, 9,839; Sandy Hook, 9,764; Decatur, 9,742, and Cape Hatteras, 9,741. The total movements is not recorded on Mt. Washington, but velocities exceeding 70 miles per hour occurred on six days. The *smallest* are: Deadwood, Dak., 2,226 miles; Campo, 2,378; Lynchburg, 2,499; Roseburg, 2,759; Visalia, Cal., 2,892; Boerne, Tex., 2,981; Brackettville, Tex., 3,354; Nashville, 3,425; Augusta, 3,450; Los Angeles, 3,459; Shreveport, 3,479; Montgomery, 3,520; Knoxville, 3,770; Springfield, Mass., 3,925.

Tornadoes, accompanying storm-area No. XII. The following notes on the severe tornado of the 23rd, in southern Wisconsin, will serve to show the course of the storm. It was probably first noticed by an observer situated in a valley about ten miles west of Mineral Point, who states, "that he saw the cyclone traveling at the rate of about five miles an hour—it seemed to gather strength as it moved—when it struck the hill it shot off in the direction of Mineral Point, and after it had passed him he could hear it roar miles away." Prof. Hinrich's reports, "tornado-cloud observed during p. m., 23d, in Jones Co., Iowa," and states in Iowa Monthly Weather Review, "probably the same which, a few hours later, came down to earth's surface in Wisconsin, near Mineral Point." The storm entered Mineral Point, Iowa Co., from the SW., and passed along a ridge of ground extending over $\frac{1}{2}$ of a mile in width; it then struck a two-story frame house, containing 13 rooms, completely demolished it, and carried one of the inmates 400 feet in the air, and then dashed her to the ground dead; a rafter from this house was found one mile distant, driven over five feet in the ground. A large barn 300 feet NW. of this house was also demolished, and carried in an opposite direction to the passage of the cy-