VERIFICATION OF "PROBABILITIES" AND CAUTIONARY SIGNALS.

The customary comparison of the published Probabilities with the weather of the following twenty-four hours shows that on an average for all the districts of the United States 84.12 per cent. of the predictions have been verified. During the month 148 displays have been made of Cautionary Signals at the United States stations, of which 85 were reported by the observers as verified by measured wind velocities of 25 miles or more during the display. In 13 of the remaining 63 cases storms have prevailed within one hundred miles that justified the signal although no strong winds were felt at the stations. Of 69 cases of brisk winds that were not signalled about one-half were westerly winds.

ATMOSPHERIC ELECTRICITY.

Thunder storms were reported as follows: On the 3d in Texas; 4th, Arkansas; 6th, Illinois, Indiana, Kentucky, Mississippi and Ohio; 7th, Indiana; 11th, Georgia and South Carolina; 12th, North Carolina; 13th, Kansas; 16th, Alabama, Louisiana and Mississippi; 20th, Kansas, Louisiana and Texas; 21st, Louisiana, Mississippi and Texas; 23d, Kansas, Tennessee and Texas; 24th, Alabama, Kentucky and Mississippi; 25th, Alabama, New York and Tennessee; 26th, Alabama, Arkansas, Georgia, Illinois, Indiana, Kentucky, Louisiana, Maine, Massachusetts, Mississippi, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Vermont and Virginia; 27th, Georgia, Louisiana, Maine, Massachusetts, Mississippi, New Jersey, North Carolina, Ohio, South Carolina and Virginia; 28th, Alabama, Georgia, Louisiana, Mississippi, Nebraska and Texas; 29th, Georgia, Iowa, Michigan, North Carolina and Texas; 30th, Indiana, Iowa, Kansas and Wisconsin; 31st, Illinois, Indiana and Texas.

Auroras have been very indefinite, and rarely reported, and the displays have sometimes been of a doubtful character. They were observed on the 7th at Gardiner, Me. and Carthagena, Ohio; 19th, Woodstock, Vt. and Bismarck, D. T.; 24th, Minneapolis, Minn.; 25th, Alpena, Mich. and Malone, N. Y.; 26th, Pembina, Minn.; 28th, Detroit, Mich.

OPTICAL PHENOMENA.

Solar Halos were observed as follows: On the 1st in Connecticut; 2d, Iowa, New York and Virginia; 3d, New Jersey and New Hampshire; 4th, New Hampshire, New York and Virginia; 5th, New Jersey, Massachusetts, New York, Ohio and Vermont; 6th, Dakota Territory, Maine, New Hampshire and Virginia, 7th, Minnesota; 8th, Minnesota and New Jersey; 9th, Alabama; 10th, Dakota Territory and Ohio; 11th, Kansas, Maine, Massachusetts and North Carolina; 12th, Wisconsin; 13th, Illinois, Iowa and Ohio; 14th, Dakota Territory, Iowa and Tennessee; 15th, New Jersey, New York and Tennessee; 16th, Dakota Territory, Minnesota, New York, Virginia and Wisconsin; 17th, Iowa and Tennessee; 18th, Dakota Territory, Kansas and Wisconsin; 19th, Wisconsin; 20th, Georgia and New Hampshire; 21st, Iowa, Minnesota, New Jersey, New York, (anthelia at Springfield, Mass.,) and Virginia; 22d, Connecticut, Georgia and Maine; 23d, Illinois, Iowa, Minnesota and Virginia; 24th, Connecticut, Illinois, Kansas, Maine, Massachusetts, North Carolina, New Hampshire, New York, Vermont and Wisconsin; 25th, Georgia, Minnesota and Wisconsin; 26th, Kansas and Virginia; 27th, California; 28th, Georgia and Minnesota; 29th, New York.

Lunar Halos were observed on the 4th in New York and Rhode Island; 5th, Maine, Massachusetts, Alabama, New York, Florida and Minnesota; 6th, Illinois, Kansas, Nevada, Massachusetts and Rhode Island; 7th, Nebraska; 8th, Iowa, Maine, Colorado, Alabama, Rhode Island, Indian Territory, New Hampshire and California; 9th, Alabama, Colorado, Kansas, Pennsylvania, Iowa, Maine and New Hampshire; 10th, Alabama, Colorado, Iowa, Louisiana, New Jersey, Pennsylvania, North Carolina, Virginia, Utah, Kansas, Mississippi and Dakota Territory; 11th, Alabama, Illinois, Iowa, Tennessee, Vermont, Virginia, Colorado, North Carolina, Minnesota, Maine and New Hampshire; 12th, Alabama, Ohio, Tennessee, Virginia, North Carolina, Connecticut and Pennsylvania; 13th, Alabama, Dakota Territory, Indiana, Kentucky, Tennessee, Michigan, North Carolina and Maine; 14th, Alabama, Iowa, New York, North Carolina, Ohio, Tennessee and Colorado; 15th, Iowa, Maine, Wisconsin, Tennessee, North Carolina, New Jersey, Michigan and Ohio; 16th Iowa, Massachusetts, New York, North Carolina and Maine; 17th, Georgia and New York; 21st, Ohio; 31st Massachusetts.

Mirage was observed on the 1st at Atlantic City, N. J.; 1st, 2nd, 20th, New London, Conn.; 12th, 13th, 15th, 20th, 22nd, Breckenridge, Minn.; 14th, 15th, 19th, 21st, 28th, 29th, Ellenwood, Kan.; 15th, 16th, 17th, 18th, Atlanta, Kan.; 28th, Moorhead and St. Paul, Minnesota.

MISCELLANEOUS PHENOMENA.

Polar Bands were recorded on the 13th, 14th, 15th, 24th, 27th at Iowa City, Iowa; 20th, King's Mountain, Ky.; 2nd, Freehold, N. J.; 25th, 27th, Carthagine, Ohio; 6th, 25th, Wytheville, Va.; 21st, Richmond, Va.; 13th, Fort Sully, Dakota Territory.

Plants.—On 23rd, at Brownsville, Penn., dandelions in bloom; 24th, at Brookhaven, Miss., pinks and