

# MONTHLY WEATHER REVIEW,

## AUGUST, 1875.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

### INTRODUCTION.

In the compilation of this Review, besides the regular reports from the Signal Service, U. S. Army, Stations and telegraphic reports from the Canadian Stations, there have been examined monthly meteorological records from forty-eight (48) U. S. Army Post Surgeons, forwarded by the Surgeon General, and from two hundred and sixty-six (266) Volunteer Observers; also miscellaneous data.

The most noticeable features for the month are: first, the comparatively small number of areas of low and high barometer that could be traced; second, the heavy rain-falls and destructive floods in New Jersey, Massachusetts, Connecticut, Ohio, Indiana, and Illinois; third, the generally low mean temperature; fourth, the frequency of thunder storms.

### ATMOSPHERIC PRESSURE.

Chart No. II shows the general distribution of the atmospheric pressure, for the month, by the isobarometric lines in black. It will be observed that it is greatest along the coast from Florida to Nova Scotia, and least in the Northwest. When compared with August, 1873, the pressure is generally less. It is somewhat greater than for August, 1874, in the Southern States, Middle Atlantic States, New England and Lower Missouri valley, but decidedly less in the Lake region and Minnesota. The latter fact is due to two causes: first, that but two decided high pressure areas crossed those sections; second, that the low pressure areas generally affected the same districts. On the Pacific coast the pressure has been normal; at the Rocky Mountain stations, slightly below the mean, except at Fort Benton, Montana, where it was slightly above.

(1.) *Areas of High Barometer.*—During the month but two areas of high barometer have crossed the country, an unusually small number for August. They were extensive and well-defined, and had a marked effect upon the weather—especially in the northern half of the country east of the Rocky Mountains, where cool, northerly and easterly winds were experienced, with frequent and heavy rains.

No. I. By reference to the Weather Review for July, it will be seen that, at the close of that month, an area of high barometer had been felt over the Northwest and the Upper Lake region, in connection with an area of low barometer moving eastward over Missouri. This high pressure gradually extended over the Lower Lake region, Middle States and New England, on the 1st and 2d, producing cool weather in those sections, and, in connection with low barometer No. I, which, under its influence, moved very slowly, the heavy and continued rains from the Gulf and South Atlantic States to Missouri, the Lakes, Middle States and New England, except in portions of Tennessee and Kentucky. It disappeared to the eastward of Nova Scotia and New Brunswick on the