

MONTHLY WEATHER REVIEW,

MAY, 1880.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this REVIEW the following data, received up to June 15th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 139 Signal Service stations and 13 Canadian stations, as telegraphed to this office; 147 monthly journals and 153 monthly means from the former, and 13 monthly means from the latter; reports from 27 Sunset stations; 209 monthly registers from Voluntary Observers; 28 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Service of, Missouri; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

The general distribution of the atmospheric pressure for the month of *May*, 1880, over the United States and Canada is shown by isobaric lines on chart No. II. At a few outlying stations the barometric means are given in figures (English inches.) The regions of highest pressure are found to cover the Middle and South Atlantic States and North Pacific coast region, the maximum means being reported from stations along the immediate coast of North Carolina. The region of lowest pressure covers the Red River of the North valley, the minimum mean for the whole country being reported by Pembina, Dak.

Departures from the Normal Values for the Month.—By comparison with the average of the means for the months of May for the past eight years, those for the present month (May, 1880) show a decided excess of pressure over the region of highest barometer along the Atlantic coast, and a large deficiency over Dakota, Minnesota and northern Wisconsin, or the region of lowest barometer. The deviations have ranged about as follows: an excess of from 0.04 inch at Jacksonville to 0.11 inch at Cape Hatteras in the South Atlantic States; from 0.07 to 0.02 from New England and the Middle States to the Ohio valley and Eastern Gulf States; and from 0.01 at Portland, Oregon and San Diego to 0.07 at San Francisco. Elsewhere a general deficiency has occurred, amounting to about 0.04 in the Southwest, along the eastern slope of the Rocky Mountains and in the Upper Lake region, and which gradually increased toward the region of lowest pressure until it reaches 0.13 at Breckenridge and 0.18 at Pembina.

Barometric Ranges.—As reduced to sea-level the total monthly range of the barometer gradually increases from south to north. It amounts to 0.40 inch at Key West and Indianola and 0.38 at Santa Fe, N. M., and Los Angeles, California; 0.55 on the North Carolina coast, 0.78 at Cairo, 0.68 at Denver and 0.47 at San Francisco; 0.66 at New York, 1.00 at Chicago and 0.86 at Roseburg, Oregon; and 0.84 at Eastport, 1.05 at Alpena, 0.92 at Breckenridge and 0.98 at Olympia.

This Paper is furnished by the Government of the United States, without charge to the Co-operating Observers acting with the Signal Office in the collection of Simultaneous Reports.