

MONTHLY WEATHER REVIEW,

JULY, 1873.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

STORMS.

During the month of July, 1873 thirteen areas of low barometer have been recorded on the daily weather maps of the Signal Office; the tracks pursued by these will be found on the accompanying map No. 1; they have in general passed centrally over the extreme northern limit of the United States. This feature has indeed been this year rather more noticeable than in former years, as is seen from the following statement:

July, 1871.	The mean latitude of the tracks of 15 centres of low barometer; was	45°.
" 1872.	" " " " 14 " "	44°.
" 1873.	" " " " 13 " "	47°.

As in former years during this month, so in the present year, with scarcely an exception, the areas of low pressure first became apparent in or beyond Dakota and Manitoba. On most occasions the appearance of a low barometer in the Northwest has been preceded by slight barometric depressions on the coasts of Oregon and California, but it has been impossible to decide whether the disturbances have passed from the Pacific Ocean eastward or have originated in the Rocky Mountains of British America.

The numerous local storms that are experienced during the summer months have a certain relation to the large areas of high and low barometer, to the topography of the country, the position of the ocean and other bodies of water, &c. &c., all of which may be better understood from map No. 2, on which are drawn with some approach to correctness the lines of equal storm frequency for the month of July. The local storms (which are almost invariably attended with lightning &c.) have been most numerous in Florida, on the west and southwest side of the area of high barometer that prevails during July on the Atlantic, between the latitudes of 12° and 30° north. The region of next greatest frequency is in Ohio and western Pennsylvania, where the south and southwest winds attending the areas of low pressure rise up over the high country of those States. The storm frequency diminishes as we proceed from the Gulf coast northward over the low, flat country and northwestward toward the high arid plains; on the other hand it increases as we proceed from the middle and east Atlantic coasts westward up a rapid slope to the summit of the Appalachian range. The local storms are least frequent on the dry plains west of the valley of the Mississippi river, and there are indications of a region of diminished frequency in the northern part of the Province of Ontario, though this may possibly be due to the scarcity of our stations in that region.

WINDS.

No winds of special severity have been reported during this month, except the tornado of July 3, at Indianapolis. The winds have reached the limit of *high* (a velocity of thirty miles an hour) only twice in the Middle Atlantic States and thrice in Dakota