

MONTHLY WEATHER REVIEW.

Editor: Prof. CLEVELAND ABBE.

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INTRODUCTION.

The REVIEW for February, 1896, is based on 2,757 reports from stations occupied by regular and voluntary observers, classified as follows: 149 from Weather Bureau stations; 35 from U. S. Army post surgeons; 2,395 from voluntary observers; 32 from Canadian stations; 96 received through the Southern Pacific Railway Company; 30 from U. S. Life-Saving stations; 20 from Mexican stations. International simultaneous observations are received from a few stations and used together with trustworthy newspaper extracts and special reports.

The WEATHER REVIEW is prepared under the general editorial supervision of Prof. Cleveland Abbe. Unless otherwise specifically noted, the text is written by the Editor, but the statistical tables are furnished by Mr. A. J. Henry, Chief of the Division of Records and Meteorological Data. Special acknowledgment is made of the hearty cooperation of Prof. R. F. Stupart, Director of the Meteorological Service of the Dominion of Canada, Mr. Curtis J. Lyons, Honolulu, Meteorologist to the Government Survey, and of Dr. Mariano Bircena, Director of the Central Meteorological Observatory of Mexico.

CLIMATOLOGY OF THE MONTH.

GENERAL CHARACTERISTICS.

The month was characterized by an excess of pressure over the Rocky Mountain and Pacific Coast regions; by low temperatures throughout the Atlantic and Gulf States, but an excess in the Plateau Region and the northern Slope; an excess of precipitation on the coasts of Washington and Oregon, the lower Lake Region, New England, the Middle States, North and South Carolina.

ATMOSPHERIC PRESSURE.

[In inches and hundredths.]

The distribution of mean atmospheric pressure reduced to sea level, as shown by mercurial barometers, not reduced to standard gravity, and as determined from observations taken daily at 8 a. m. and 8 p. m. (seventy-fifth meridian time), is shown by isobars on Chart IV. That portion of the reduction to standard gravity that depends on latitude is shown by the numbers printed on the right-hand border.

The *mean pressures* during the current month were highest in northern Utah and Nevada and southern Idaho, and lowest in eastern Newfoundland. The highest were: Salt Lake City, 30.27; Idaho Falls, 30.25; Winnemucca and Carson City, 30.24; Roseburg, 30.21. The lowest were: St. Johns, N. F., 29.61; Sydney, 29.71; Charlottetown, 29.74; Chatham, 29.76; Yarmouth, 29.78; Eastport, 29.79.

As compared with the normal for February, the mean pressure was in excess throughout the Rocky Mountain and Pacific Coast regions, but deficient throughout the interior and the Atlantic States. The greatest excesses were: Fort Canby, 0.23; Eureka, 0.13; Portland, Oreg., and Roseburg, 0.10. The greatest deficits were: St. Johns, N. F., 0.31; Yarmouth, 0.26; Sydney, 0.24; Nantucket, 0.23; New Haven, Chatham, New York, Kingston, Oswego, and Harrisburg, 0.22.

As compared with the preceding month of January, the pressures reduced to sea level show a decided rise on the coasts

of Washington, Oregon, and northern California, but an unusual fall throughout Quebec and Ontario, the Middle and Eastern States. The greatest rises were: Roseburg, 0.28; Fort Canby, 0.27; Tatoosh Island, 0.26; Eureka, 0.25; Portland, Oreg., 0.24; Port Angeles, 0.23. The greatest falls were: Father Point, 0.37; Montreal and Quebec, 0.36; Chatham, 0.34; Portland, Me., and Northfield, 0.33; Eastport, Boston, Albany, and Kingston, 0.32.

AREAS OF HIGH AND LOW PRESSURE.

By Prof. H. A. HAZEN.

During the month fourteen low and seven high areas have been sufficiently well defined to be projected upon Charts I and II, respectively. In addition to these tracks there was an area of high pressure in the middle Plateau Region that continued from the 17th to the end of the month. The following brief description will supplement the information given by the table and charts:

LOW AREAS.

I.—Was first noted at the west end of Lake Superior on the last day of January; its motion was nearly due east, and it disappeared off Newfoundland a. m. of 3d.

II.—First noted in the west Gulf a. m. of 1st; its motion was northerly, and it was last observed, a. m. of 6th, over Lake Superior. Precipitation in twenty-four hours of 2.86 inches at Shreveport, and 2.60 at Vicksburg, was measured a. m. of 2d.

III.—This was the most notable storm of the month and gave rise to Storm Bulletin No. 1 of 1896. It was first noted in the west Gulf, a. m. of 4th, with a pressure of 29.70 at Corpus Christi. Its intensity rapidly increased, and on the evening of 6th it was central over New York, with a pressure of 28.70 at New York City and a wind velocity of 70 miles per hour. It was last seen in the Gulf of St. Lawrence p. m.