

the entire month above Leavenworth. The Mississippi river was filled with floating ice at Keokuk, from the 5th to the 13th, was closed from the 14th to the 15th. Ice disappeared on the 19th, and reappeared again on the 28th.

At St. Louis the river was closed from the 11th to the 15th, opened on the 18th and ice disappeared on the 27th.

At St. Paul it remained closed during the entire month.

Heavy freshets causing great loss of property have been reported from Buffalo.

FACTS AND METEOROLOGICAL PHENOMENA.

Meteorological observations have been continued at Pike's Peak during the month of January, the station being situated about 14,000 feet above the level of the sea. The monthly means, determined from the three daily observations taken, respectively, at 7 a. m., 2 and 9 p. m., are as follows:

Barometer, 29.80, mean.	30.16, highest.	27.32, lowest.
Temperature, 6°.1 "	23° "	—25° "
Relative humidity .53.		

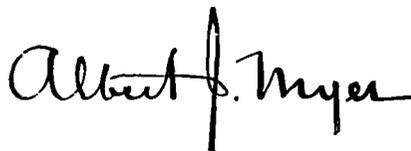
In comparing the oscillations of the barometer with the changes of temperature, it has been found that the temperature rises with an increase of pressure.

The observer reports peculiar bands of cirri at 4 p. m. on the 10th a little north of the zenith, extending from WNW to SSE, converging near the horizon and having a breadth of 5°. These remained stationary for about an hour, and were finally obscured by fine cirro-stratus clouds or haze.

Numerous auroral displays have been reported from stations north of the fortieth parallel of latitude, the time of occurrence being generally between 8 and 10 p. m. The frequency of these displays apparently depends upon the position of the station in the auroral zone. Those occurring at Boston, New York, Alpena, Duluth, and Breckenridge, between the 15th and 20th, are especially noted as peculiar and brilliant. The observer at Detroit reports evidences of the atmosphere having been charged with electricity on January 21st, the telegraphic instrument working with the batteries disconnected. The observer at Long Branch reports the appearance at 2:10, p. m., on the 4th, of a well-defined "Fog-bow" in the North. He says: "This bow was larger than the usual rainbow, and was perfectly white. It occupied the same position in the horizon that a rainbow would at that hour of the day." The observer at Boston reports that on the 15th light snow fell from a cloudless sky.

The lowest temperature reported from any station during the month was —33° at Breckenridge, Minnesota, on the 24th. The highest barometric reading telegraphically reported during the month was 30.98 inches at Pembina, D. T., January 29th, and the lowest 29.00 at Fort Garry, Manitoba, on the 17th.

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