RIVERS AND FLOODS, NOVEMBER, 1910.

By Prof. H. C. Frankenfield, in charge of River and Flood Division.

November, 1910, was preeminently a month of low water except in the Missouri Valley and the North Pacific States, and in many portions of the country the stages were the lowest of record. The deficiency in water supply was most pronounced in the upper Mississippi and lower Arkansas rivers, the Red River of the North, the upper Red River of the South, and in the rivers of California. More detailed accounts of the low waters will be found in the reports of the various district editors.

There were no floods during the month except a moderate one in the Willamette River and its tributaries during the closing days. The rise was caused by persistent and substantial rains from November 17 to 30, inclusive, but, owing to the moderate stages reached, no damage was done so far as is known. At the end of the month the crest of the rise had not reached Portland, Ore.

Running ice appeared in the Missouri River at Bismarck, N. Dak., on November 6, and the river closed on November 19. Ice was first observed at Sioux City, Iowa, on November 19, but none was seen very far below that city. The Milk River froze over at Havre, Mont., on November 18, and the James River at Huron, S. Dak., on November 28. The St. Croix River at Stillwater, Minn., and the Wisconsin River at Muscoda, Wis., closed on November 17 and 18, respectively. Floating ice was first observed at the Missouri River at St. Paul, Minn., on November 28, and on November 30 the main channel was blocked at Robert street. No ice was observed south of Muscatine, Iowa, where it was first observed on the last day of the month.

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock on the Arkansas; and Shreveport, on the Red.

Special papers on general meteorology.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

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The following have been selected from among the titles of books recently received, as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Anonymous publications are represented by a ——.


RECENT PAPERS BEARING ON METEOROLOGY AND SEISMOLOGY.

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The subjoined titles have been selected from the contents of the periodicals and serials recently received in the Library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science.


Hinsdale, Guy. The meteorologic and hygienic relations of the floods in France in 1910. p. 32-54.


Chamberlain, James F. Climate as related to industry and commerce. p. 93-98.


Barnes, H. T. Marine microthermograms and the influence of icebergs on the temperature of the sea. p. 137-138. (Dec. 1.)

Shaw, W. N. The new meteorological office. p. 151-153. (Dec. 8.)


— The specter of the Brocken. p. 494.

— The invention of the microphone. p. 504.


Pickels, A. C. Waterpout. [Also published in the N. Pacific chart for February, 1911.]


Loisel, J. Le spectre du Brocken. p. 33-35. [Includes photograph of Brocken specter seen from Pic du Midi.]


Teisserenc de Bort, L. La circulation de l'atmosphère, d'après les observations des nuages et les sondages aériens. p. 329-338.