

## RIVERS AND FLOODS, JULY, 1912.

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About the only flood of consequence during the month of July was that which occurred in the Wisconsin River during the latter half of the month. It was one of the most destructive on record for that section of the country, conservative estimates placing the loss at more than half a million dollars. At Wausau, Wis., the crest stage was 15.3 feet, 1.8 feet higher than ever before recorded at that place.

High water occurred in the upper Arkansas River, and although considerable lowland was flooded the damage was not great.

The annual rise in the Columbia River receded during the early part of the month, without having caused any damage of consequence. The warnings issued by the Weather Bureau in connection with this rise were timely

and accurate, and resulted in the saving of considerable property.

A rise to slightly above flood stage occurred in the lower Ocmulgee River near the close of the month. Warnings were issued in ample time and no material losses resulted.

In the other rivers of the country about the usual summer stages prevailed.

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.

## 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 indicated by a ———.

**Aachen. Meteorologisches Observatorium.**

Deutsches meteorologisches Jahrbuch für 1910. Aachen. Jahrg. 16. Karlsruhe. 1912. 31 p. f°.

**Alsace-Lorraine. Meteorologische Landesanstalt.**

Deutsches meteorologisches Jahrbuch für 1906. Elsass-Lothringen. Strassburg. 1912. viii, 57 p. f°.

**Blinkenberg, Chr.**

The thunderweapon in religion and folklore. Cambridge. 1911. xii, 122 p. illus. map. 8°. [A Danish edition was published by Tillge, Copenhagen, in 1909.]

**Brand, W.**

Stündliche Werte des Luftdrucks und der Temperatur am Danmarks-Havn. København. 1912. [4,] [361]-445 p. 4°. (Danmarks-Eksped. til Grønlands Nordøstkyst 1906-1908, Bind 2, Nr. 5. Særtryk af Meddelelser om Grønland 42.)

**British East Africa. Department of agriculture.**

Meteorological records, 1909. 6th annual report. Nairobi. 1911. 38 p. 8°.

**Brotherus, V [iktor] F[erdinand].**

Pflanzenphänologische Beobachtungen in Finland, 1907. Helsingfors. 1911. 44 p. 8°. (Bidrag till kännedom af Finlands natur och folk, Finska vetenskaps-soc., H. 71, No. 1.)

**Cave, C[harles] J[ohn] P[hilip].**

The structure of the atmosphere in clear weather. A study of soundings with pilot balloons. Cambridge. 1912. xii, 144 p. illus. 4°.

**Coimbra. Observatorio meteorologico.**

Observações meteorológicas, magnéticas e sísmicas, 1911. v. 50. Coimbra. 1912. viii, 158 p. f°.

**Colegio Nuestra Señora de Montserrat, [Cienfuegos, Cuba]. Observatorio.**

Anales, No. 1. Observaciones meteorológicas de 1911. Habana. 1912. 33, [80] p. f°.

**Demtchinskiĭ, N. A.**

Météorologie dynamique. [Moskva. 1912.] 28 p. 4°. [French and German text.]

**Egypt. Survey department.**

Meteorological report for the year 1909. Part 1: Helwan observatory. Part 2: Climatological, rainfall and river gauge observations. Cairo. 1912. 2 pts. f°.

**[Finska vetenskaps-societeten.]**

Tables générales des publications de la Société des sciences de Finlande, 1838-1910. Helsingfors. 1912. 154 p. 8°. [Meteorology, p. 128-130.]

**Fröhlich, Otto.** [Stuttgart. 1912.] 253-256 p. 8°.

Klima und Fischereiertrag. (Sonderabdruck aus Fühlings landwirtschaftliche Zeitung [Stuttgart], 1912, 61. Jahrg., 1912, Heft 7.)

**Fröhlich, Otto.**

Das Wesen, die Methoden und allgemeinen Zwecke der Meteorologie. n. p. n. d. 223-232 p. 8°. (Kath. Schulblatt, Jahrg. 58.)

**Greifswald. Meteorologische Station.**

Die Ablesungen, 1. Januar-31. Dezember 1911, nebst Jahresübersicht über das Jahr 1911. Greifswald. 1912. 48 p. 8°.

**Haldane, J[ohn] S[cott].**

Methods of air analysis. London. 1912. x, 130 p. illus. plate. 12°.

**Hammel, Ludwig.**

Die Ausnutzung der Windkräfte unter besonderer Berücksichtigung der ländlichen Gemeinde-Wasser- und Elektrizitätsversorgung. Berlin. 1911. 127 p. illus. 8°.

**Hellmann, G[ustav].**

Regenkarten der Provinz Schlesien. 2te verm. Aufl. Berlin. 1912. 26 p. 2 plates. 4°. (Veröffentl., K. preuss. met. Inst., Nr. 247.)

**Hellmann, G[ustav].**

Regenkarten der Provinzen Westpreussen und Posen. 2te verm. Aufl. Berlin. 1912. 26 p. 2 plates. 4°. (Veröffentl., K. preuss. met. Inst., Nr. 248.)

**Inne, E[gon].**

Phaenologische Mitteilungen (Jahrgang 1911). Darmstadt. 1912. 44 p. 8°. (Arb. d. Landwirtschaftskammer f. d. Grossh. Hessen, Heft Nr. 11.)

**Japan. Central meteorological observatory.**

Annual report for the year 1910. Part 1: Meteorological observations in Japan. Part 2: On the barometric depressions in the year 1910. Tokio. 1912. 2 pts. 4°.

**Jurva, Risto.**

Öfver åskväden i Finland, 1906. Helsingfors. 1912. 154 p. 8°. (Bidrag till kännedom af Finlands natur och folk, Finska vetenskaps-soc., H. 71, No. 2.) [Published also in Finnish under the title "Ukonilmoista suomessa 1906."]

**Karsten, Hugo.**

Untersuchungen über die Eisverhältnisse im Finnischen Meerbusen und im nördlichen Teile der Ostsee. 1: Beobachtungen, 1897-1902. Helsingfors. 1911. 91 p. 5 charts. f°. [Finnlandische hydrograph.-biolog. Untersuch. No. 6.]

**Love, E. F. J. & Smeal, G.**

The psychrometric formula. [Melbourne.] 1912. 201-220 p. (Reprint: Proc. Roy. soc. Victoria, 1911, v. 24 (n. s.), pt. 2.)

**[Marriott, R. A.]**

An explanation of the Drayson theory giving additional proofs and facts confirmatory of the arguments contained in the pamphlet, "Why we may expect warmer winters." [Lewes. 1912.] 22 p. 8°.