

1 p. m., with a maximum velocity of 38 mi/hr, then SExE till 10, with a maximum of 41 mi/hr. At 10:25 the wind swung from SSE to W, then to NWxN at midnight, the velocity continuing at 25-30 mi/hr. By 3 a. m., however, the direction had backed to WNW and the velocity had risen to 38 mi/hr. At 4 a. m. it reached its maximum, 47 mi/hr. The rainfall, which at Blue Hill was 3.68 inches, ceased at 10:25 p. m. At 8 a. m. the temperature was 61, at 2 p. m. 63.8 and at 8 p. m., 65°F. Dense fog (cloud) enveloped the hill throughout the day.

The weather maps of the mornings of Sept. 16 and 17, 1932, are strikingly similar to those of the mornings of Nov. 3 and 4, 1927, except that the low centers are about 200 miles farther east and the pressures are not quite so low. There was the same strong high pressure area over the ocean to the east, and the same double-centered low with south-north axis,³ favoring a great flow of warm moist oceanic air into New England and its precipitation over a relatively narrow belt.—*Charles F. Brooks.*

TWENTY-ONE INCHES IN TEN HOURS

According to letters received from R. W. Gray and W. J. Bennett, of the U. S. Weather Bureau, Harold Rosenberg, Postmaster at Canal Point, Fla., on the southeast shore of Lake Okechobee, reported to the Weather Bureau that from midnight of November 6 to 9:30 a. m. Nov. 7, 21.85 inches of rain were recorded. From 9:30 a. m. to noon of the 7th, 0.07 inch fell, making a total of 21.92 inches in a period of twelve hours.

Mr. Rosenberg stated that the rain was measured in a "Government standard rain-gage" (undoubtedly an 8-inch gage), at the Government Cane Experiment Station, located one-eighth mile north of the Palm Beach Canal, near Canal Point. He states further that the rain was measured and the gage emptied once during the progress of the rain-storm.

Pahokee and Belle Glade, near Canal Point, reported 18 and 10.40 inches, respectively. The whole southeastern region went under water and all truck crops (principally beans) were destroyed. Moore Haven on the southwest shore had only 2.46 inches and Okeechobee City, at the head of the lake, only 0.60 inch.

The 21.85 inches (555 mm.) of rainfall in 9½ hours, and perhaps the 21.92 inches (557 mm.) in twelve hours, seem to be new world's records for these periods. However, when it rained 45.99 inches (1168 mm.) in Baguio, P. I., July 14-15, 1911, in 24 hours, there may have been a period of 9 or 12 hours with more than these new amounts in Florida. The nearest approach to these figures in the United States seems to be a rainfall of 16 inches (406 mm.) in three hours, at Concord, Pennsylvania, Aug. 5, 1843, and the approximately 30-inch (760 mm.) rainfall in 15 hours near Taylor, Texas, the night of Sept. 9-10, 1921.¹ Another rainfall of note was that at Montell, Texas, June 28-9, 1913, in which 20.6 inches (523 mm.) fell in 18½ hours.² Still another phenomenal rainfall occurred at New Smyrna, Fla., in 22 hours from 3 p. m. of Oct. 9 to 1 p. m. of Oct. 10, 1924, when 23.22 inches (590 mm.) of rain fell.

U. S. WEATHER BUREAU

Appropriation to be reduced.—The total appropriation for the Weather Bureau for the fiscal year beginning next July 1, as given in the Bill

³ Cf. J. H. Weber and C. F. Brooks, The weather-map story of the flooding rain-storm of New England and adjoining regions, November 3-4, 1927. Jour. New England Water Works Assn., Mar., 1928, vol. 42, pp. 91 fig., reprinted in same journal, Mar., 1930, vol. 44, pp. 106-118, 6 figs.

¹ J. P. McAuliffe, Excessive Rainfall and Flood at Taylor, Texas. Mo. Weather Rev., Sept., 1921, 49:497.

² See also A. G. McAdie, Rainfall of California. Univ. of Calif. Publications in Geog., Berkeley. 1914, vol. 1, No. 4, pp. 127-240, pp. 21-28, esp. p. 173 footnote, Table of World Records by C. F. Brooks.