

## SEVERE LOCAL STORMS.

(The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the annual report of the chief of bureau.)

| Place.                  | Date. | Time.      | Width of path (yards). | Loss of life. | Value of property destroyed. | Character of storm.       | Remarks.   | Authority.  |
|-------------------------|-------|------------|------------------------|---------------|------------------------------|---------------------------|--|---|
| Elizabethton, Tenn..... | 7     |            |                        |               |                              | Wind, rain, and hail.     | Houses blown from foundations; trees and telephone poles blown down.                                 | Official, U. S. Weather Bureau.                             |
| Duval County, Fla.....  | 17-18 |            |                        |               |                              | Northeast gale.....       | High tides and waves on coast destroy bulkheads and damage cottages and piers.                       | Florida Times-Union (Jacksonville).                         |
| Connecticut coast.....  | 23    | P. m.      |                        |               |                              | Thundersquall, with hail. | Church steeple and barn wrecked and windows blown in at Milford; minor damage elsewhere along coast. | Courant (Hartford, Conn.); Republican (Springfield, Mass.). |
| New York, N. Y.....     | 26    | 4.40 p. m. |                        | 1             |                              | Wind.....                 | Heavy sign blown down; 5 people injured.....   | New York Herald (N. Y.).                                    |

## STORMS AND WEATHER WARNINGS.

## WASHINGTON FORECAST DISTRICT.

Unsettled weather conditions prevailed over the Gulf of Mexico and the northwestern Caribbean during a large portion of the month and several disturbances of importance were charted, in contrast to the lesser activity on the Atlantic seaboard.

At 10 p. m. of the 2d northeast storm warnings were displayed on the east Gulf coast from Bay St. Louis, Miss., to Cedar Keys, Fla., in connection with a disturbance of moderate intensity that developed over the northeastern Gulf of Mexico and moved slowly westward. It gradually lost intensity and apparently dissipated on the 4th. The lowest barometer reading reported was 29.72 inches at Burrwood, La., and the highest wind velocity, 32 miles an hour from the east at Pensacola, Fla.

On the evening of the 7th a disturbance of marked intensity was central over Lake Erie, moving northeastward, and storm warnings were ordered displayed at 10 p. m. from Delaware Breakwater to Eastport, Me. The following morning the storm warnings were changed to small-craft warnings, the storm having decreased in intensity during the night. The highest wind velocity reported was 48 miles an hour from the south at Atlantic City, N. J.

Small-craft warnings were displayed from Delaware Breakwater to Nantucket, Mass., on the 10th; from Baltimore, Md., to Eastport, Me., on the 23d; from Delaware Breakwater at Eastport, Me., on the 25th; and from Cape Hatteras to Nantucket, Mass., on the 26th.

At 9:30 p. m. of the 12th the first advisory warning was issued regarding the disturbance that formed east of Swan Island in the northwestern Caribbean Sea and moved slowly northwestward during the 12th-17th, inclusive. Frequent special observations by radio from the S. S. *Chalmette* on the 15th were of great assistance in locating the center of the disturbance on that date. Storm warnings in connection with this disturbance were displayed as follows: 9 p. m. of the 13th, Punta Gorda to Jupiter, Fla.; 8 a. m. of the 14th, north of Punta Gorda to Tarpon Springs, Fla.; 10 p. m. of the 14th, Cedar Keys, Fla., to Bay St. Louis, Miss. The highest wind velocity at a land station was 32 miles an hour from the east at Key West, Fla., on the 14th; while the S. S. *Ellis* reported 48 miles from the northeast on the 14th in latitude 25° 12' N., longitude 85° 42' W., and the S. S. *Chalmette* reported 48 miles from the west on the 15th in latitude 26° 00' N., longitude 85° 42' W. After its center reached latitude 28° N., this disturbance turned toward the northwest and decreased in intensity, passing inland between Pensacola, Fla., and Mobile, Ala., as a very slight disturbance, on the morning of the 17th.

On the evening of the 15th the first advisory warnings were issued in connection with another tropical disturbance that apparently developed immediately southwestward of Jamaica on the 14th and moved slowly west-northwestward to the northern portion of the Yucatan Peninsula, thence southwestward over the extreme eastern portion of the Gulf of Campeche to the Mexican coast in the vicinity of Frontera, where it was apparently central on the morning of the 21st. This storm dissipated after moving inland, but heavy rains continued for a day or two longer over the eastern States of Mexico.

The lowest barometer reading reported during this storm was 29.06 inches, by the S. S. *Criba*, in latitude 20° 12' N., longitude 87° 6' W., on the morning of the 18th, at which time the wind was blowing 64 miles an hour from the south. On the 20th the S. S. *Hibueras*, in latitude 20° 10' N., longitude 92° 06' W., reported a wind of force 12 from the northeast. The lowest barometer reading reported by this vessel was 29.42 inches.

The following press dispatch from Mexico City, dated October 22, was published in the morning papers of October 23.

Reports received here from Vera Cruz, Progreso, Tampico, Tuxpan, and other ports indicated that the storm which has swept the Gulf of Mexico in these regions during the past few days has done considerable damage to shipping. Several small vessels were sunk. The Ward liners *Esperanza* and *Morro Castle* are still outside Vera Cruz unable to enter the harbor after having fought the waves for two days.

Later press reports refer to an urgent call for help having been received from the governor of Quintana Roo, eastern Province of Yucatan, who telegraphed that the entire coast had been lashed by a severe storm, destroying property and crops and causing some loss of life. The islands of Mujeres and Cozumel, off the northeastern coast of Yucatan, were reported to have been swept bare. Newspaper dispatches from Yucatan reported the foundering of several small vessels.

The fishing smack *Ida S. Brooks* was caught in the storm north of Cozumel Island, the eye of the storm passing very nearly over her, as indicated by the distinct lull noted between a whole gale to hurricane from the north, shifting to a full hurricane velocity from the southeast. The sloop was carried northward over the reefs, bumping many times, and finally wrecked on Contoy Island, where the crew managed to get ashore. They were taken off three days later by the S. S. *Hibueras*, which had ridden out the storm in the Gulf of Campeche.

The following letter, dated October 27, 1922, from the manager of the Marine Department, Standard Oil Co. of New Jersey, tells of the use made by that corporation of the advices issued by the Weather Bureau in connection with the storm of the 14th-21st.

During the hurricane in the Yucatan Channel and the Gulf of Mexico last week a number of our steamers were in close proximity to the center of this disturbance.