

caution was broadcast by wireless and placed vessel masters on the alert. The next morning the symptoms had developed and it was evident that there was a disturbance moving toward the Yucatan channel. It might keep a straight course, move to the right or the left, or describe a parabolic curve and strike anywhere on a fifteen hundred mile coast line from western Florida to southern Texas. For sixty hours, with only a few reports, none closer than 100 miles from the center of the disturbance, as a guide, the forecaster kept the people of the entire Gulf coast, who were in a fever of anxiety, in touch with the situation. When it finally struck, those in the danger zone were prepared, while hours before those in the other threatened districts had been relieved of their anxiety. The forecaster had diagnosed the case accurately. Like the physician, he spent many sleepless hours beside his charts and took only short periods of rest until the danger had passed.—*E. B. Calvert.*

LOCALIZED HURRICANE DAMAGE INLAND.

Although a West Indian hurricane is a good-sized storm, it is surprising at times to learn of cases of very localized damage such as is described by Mr. T. W. Forman in the following passage from a letter:

"When I went to Brownsville (Tex.) the last time, two days after the storm (of Sept. 1919), I noticed that the path of most destruction along the St. Louis, Brownsville and Mexico R. R., crossed the railroad north of Kingsville, in the vicinity of Bishop, Texas. In this section many buildings were unroofed and small ones completely demolished, while 15 or 20 miles either side of this strip you could not tell that anything had happened.

"The railroad officials of this same railroad reported that at a little station south of Kingsville, Armstrong, Texas, that the rainfall for the month of Sept., 1919, alone, was 53 inches. The make-up of the country in this vicinity is unlike any adjacent to it. The surface of the ground is several feet of hard-pan, covered with shifting sand that has formed into small dunes. It seems that the area covered by this hard-pan forms a basin, as it has no drainage, except evaporation. When we went down on the train, through that section the water was up to the steps on the cars, and remained that way for several months."—*T. W. Forman* (U. S. Engineer Office, Galveston, Tex.).

METEOROLOGICAL RESOLUTIONS ADOPTED AT THE FIRST SCIENTIFIC CONFERENCE OF THE PAN-PACIFIC UNION.

A general account of the Conference is published in the *Monthly Weather Review*, August, 1920, vol. 48, pp. 466, 467; the text of the general resolutions is to be found in *Science*, Sept. 24, 1920, pp. 286-287, and that of the special resolutions in subsequent issues of *Science*. An account of the origin of the Pan-Pacific Union and its relation to the Bishop Museum appeared in *Science*, July 23, 1920, pp. 74-76. The papers presented at the Conference will be published in the Proceedings of the Conference; and those of meteorological interest will probably appear in some form in the *Monthly Weather Review*.

METEOROLOGY.

Investigations in meteorology, or the physics of the atmosphere, designed to lead to an accurate, scientific knowledge of atmospheric phenomena are of recognized importance. Very little is known of the behavior of the upper air over the land, and still less over the ocean. The fundamental aspects of these phenomena are exhibited in their simplest manner over the greatest of oceans, the Pacific. Hence it is necessary to make meteorological observations over the Pacific for use in studying the more complex problems over the land.

Moreover, the collection, and prompt dissemination of marine meteorological