

direction toward Formosa, crossing the southern part of this island in the afternoon of the 6th. At about midnight of the same day it entered China between Foochow and Formosa. The position of the center at 5 p. m. of the 6th was near 120° longitude E. and 23° 40' latitude N. From reports received from Taihoku Observatory, we know that the minimum barometric reading observed in Formosa during the typhoon was 731.5 millimeters (28.80 inches) as recorded at Taito, a station on the southeastern coast of the island. The losses caused by the storm throughout the island were: Persons killed 3, injured 28; houses totally wrecked 1,029, partly wrecked 2,890.

The typhoon of the Loochoos and China, August 6 to 14.—This typhoon was shown in our weather maps as forming on the 6th to 7th to the NW. of Guam near 142° longitude E. and 16° latitude N. It moved first almost due W. for two days, then northward for nearly two days until in the afternoon of the 10th it took again a westerly direction toward China. The center passed on the evening of the 10th very close to Naha, Okinawa Island, where the barometer fell to 721.4 millimeters (28.40 inches) at 6 p. m. of that day. Great damage was done to the island according to telegraphic reports received at Formosa. It took over two days for the typhoon to cross the Eastern Sea and reach the China coast, from the afternoon of the 11th to the early morning of the 14th. The approximate position of the center at 6 a. m. of the 14th was 120° 35' longitude E. and 27° 55' latitude N.

The steamship *Shinano Maru*, which had left Keelung on the 11th, encountered this typhoon in the Eastern Sea; she reached Moji a day and a half later after experiencing a heavy storm. Hurricane easterly winds were also experienced on the 13th in the Eastern Sea by the steamship *Aki Maru*, on her way from Nagasaki to Hongkong, the

minimum barometric reading observed on board having been 28.91 inches.

The typhoon of the Bonins and China, August 10 to 21.—It is impossible in this case to ascertain whether this typhoon formed far to the east of the Ladrone Islands, as we have no observations from the Pacific to the E. or NE. of Guam. Our weather maps of the 10th showed this typhoon to the NE. or NNE. of Guam near 148° or 149° longitude E. and 18° latitude N. After moving slowly to WNW. and NW. from the 10th to 12th it took on the 13th a straight northerly direction toward the Bonin Islands which it reached in the early morning of the 15th. The barometer fell to 730.5 millimeters (28.76 inches) at Chichijima, at 6 a. m. of that day (we do not know as yet the exact minimum observed during the typhoon). The approximate position of the center at that time was 141° 45' longitude E. and 26° 30' latitude N. After traversing the Bonin Islands, the typhoon took suddenly and unexpectedly an approximate westerly direction, thus threatening again the Eastern Sea and the China coast near Shanghai. The approximate positions of the typhoon at 6 a. m. of the 18th, 19th, and 20th are as follows:

August 18, 6 a. m.: 130° longitude E., 29° 55' latitude N.

August 19, 6 a. m.: 127° 25' longitude E., 29° 45' latitude N.

August 20, 6 a. m.: 123° 15' longitude E., 29° 30' latitude N.

The typhoon seems to have entered China about 80 miles to the south of Shanghai. According to the telegraphic reports published in Manila papers, the Blue Funnel liner *Glaucus* and the Messageries Maritimes mail steamer *Cordillere* went aground in the Yangtse River near Shanghai during the typhoon.

NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

British Isles.—The rainfall of the month was below the average over practically the whole of the British Isles. * * * In London (Camden Square), the mean temperature was 60.5° F., or 2.8° F. above the average. This was the thirteenth successive month with mean temperature in excess of the average of the 60 years 1860–1919.—*Meteorological Magazine*, Oct., 1921, p. 276.

Portugal.—Lisbon, September 24: Another terrific thunderstorm swept Portugal yesterday, torrential rains falling in many parts of the country. * * * In some quarters of this city, the water was more than 10 feet deep, and the people living there were rescued with difficulty.

East of Lisbon incalculable damage was done in the agricultural provinces, especially in vineyard sections and several people were killed by lightning.—*New York Times*, Sept. 25, 1921.

Italy.—Rome, September 22: From depressing heat Rome has suddenly been transformed into a city of shivering cold. A cloudburst occurred yesterday, accompanied by a storm of hail which covered the streets in some places 6 inches deep.—*New York Evening Mail*, Sept. 23, 1921.

China.—Shanghai, September 6: China's third great disaster within a year has been recorded in Anhwei Province, where an area larger than the State of Connecticut has been flooded, with the loss of thousands of lives

and property damage conservatively estimated at \$80,000,000. The inundation occurred when Hungtze Lake and some of its tributary rivers overflowed.—*New York Evening World*, Sept. 27, 1921.

Japan.—Tokio, September 28: Several hundred persons have been killed by a typhoon in Central Japan centering upon Nagoya, on the island of Hondo, where a tidal wave destroyed crops and houses. Several steamers were sunk and many fishermen are missing.—*New York Journal of Commerce*, Sept. 29, 1921.

Argentina.—Buenos Aires, September 15: The unusual phenomenon of an almost unbroken winter-long drought, which caused serious concern for the crop prospects of Argentina, has been ended by good rains which fell yesterday and to-day in many sections of the country.—*Washington Star*, Sept. 17, 1921.

South Africa.—London, September 12: The worst blizzard in many years has been raging for some days over the greater part of the Orange Free State, Natal, and portions of Cape Colony and the Transvaal, says a dispatch from Capetown to-day.

Pietermaritzburg, capital of Natal, was cut off from rail, telegraph, and telephone communication with the north for some days. In some parts of the Transvaal, the snowfall lasted 15 hours, an unprecedented occurrence.—*Washington Post*, Sept. 13, 1921.