

WEATHER OF THE MONTH.

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS.

NORTH PACIFIC OCEAN.

By F. G. TINGLEY.

Atmospheric conditions over the North Pacific Ocean during April were marked by an almost complete absence of any strong air movement. So far as reports at hand show, no storms of importance occurred. There were but few occasions during the month when the wind reached the force of a gale. One of these was from the 8th to the 12th, when a fresh to whole gale was experienced over a limited region in the Gulf of Alaska; another from the 15th to the 20th, when moderate to strong northwesterly gales prevailed along the middle North American coast, extending as far south as the 20th parallel.

On the Asiatic side cyclonic disturbances, apparently of only moderate intensity, occurred during the 1st, 2d, and 3d, the 19th and 20th, and the 29th and 30th. Shipping within the regions affected received wireless warnings of these depressions from Asiatic meteorological services.

Considerable fog prevailed along the northern steamer route. The observer on the U. S. Army transport, *Mount Vernon*, from Vladivostok for San Francisco, commenting on the weather experienced during the voyage, stated that a report of conditions "could be summed up as follows: Continuous fog, dense most of the time, with intervals clear for short periods, but accompanied by light rain squalls."

NORTH ATLANTIC OCEAN.

By F. A. YOUNG.

The average pressure for the month was considerably below the normal at land stations along the American and northern European coasts, and in the Azores, while it was slightly above in the West Indies and Bermuda.

As far as could be judged from reports received, the number of days on which gales were observed over the steamer lanes was not far from the normal, while they were somewhat more frequent than usual in the vicinity of Cape Hatteras.

Fog was apparently less prevalent than usual during the month, especially on the Banks of Newfoundland, where the maximum amount usually occurs; off Nantucket Shoals it was reported on five days, which is not far from the normal.

On the 1st and 2d moderate to strong gales, accompanied by hail and snow, prevailed over a limited region between the 35th and 43d parallels and the 45th and 60th meridians. On the 3d and 4th the weather conditions were comparatively moderate, although on the 4th, a few vessels in the western section of the steamer lanes reported northwesterly gales.

On the 5th, as shown on Chart IX, a low was central near latitude 45°, longitude 37°, with moderate to strong northwest gales in the southwesterly quadrants, the storm area extending as far south as the 32d parallel. On the same day there was a second disturbance central near Norfolk, while southerly winds of gale force were reported from a limited area between the 70th meridian and the Carolina coast.

The storm log of the Italian S. S. *Argentina* is as follows: "Gale began on April 4. Lowest barometer, 29.03 inches at 10 p. m. on the 4th; position, 40° 36' N., 43° 59' W. End of gale on the 5th. Highest force of wind, 11; shifts of wind, SE.-S.-NW."

The observer on the American S. S. *Munra* reports as follows: "Gale began on the 5th. Lowest barometer, 29.48 inches at 4 p. m. on the 5th; position, 32° 30' N., 73° 55' W. End of gale on the 7th. Highest force of wind, 11; shifts of wind, SW.-WNW. At 4 p. m. on the 5th sea increasing; at 10 p. m. ship hove to, very heavy sea running." On the 8th and 9th moderate to strong westerly gales were prevalent over the area between the 35th and 42d parallels and the 50th and 60th meridians, and on the former date easterly winds of about 40 miles an hour were reported from the eastern section of the steamer lanes.

Charts XI to XV, covering the period from April 10 to 14, inclusive, show the progress of an exceptionally well-developed and severe disturbance. That on the 10th was central near latitude 48°, longitude 27°; it drifted slowly eastward and on the 13th the center was near the south coast of Ireland. This storm reached its greatest intensity on the 12th, as shown by the following extracts from storm reports. British S. S. *Lepanto*: "Gale began on the 11th. Lowest barometer, 28.31 inches; position, 49° 43' N., 9° 45' W. End of gale on the 13th. Highest force, 11; shifts of wind, SSE.-S.-SW.-W.-WNW.-W. The observer on the American S. S. *New York City* reports that on the 12th the barometer reading at 1 a. m. was 28.10 inches, wind SE., force 6, and rain. The barometer fell slowly, reaching its lowest reading of 27.98 inches between 3 and 4 a. m.; at the latter hour the wind was from the west, force 4, accompanied by heavy confused sea. At 10 a. m. the barometer had risen to 28.13 inches, and the wind had increased to gale force. The position of the vessel at Greenwich mean noon was given as 50° 56' N., 14° 35' W."

From the 12th to the 14th, as shown on Charts XIII to XV, inclusive, there was a second disturbance of less intensity than the first, that covered a limited area in midocean. The storm log from the American steamship *West Isleta* is as follows: "Gale began on the 13th. Lowest barometer, 29.06 inches, at noon on the 13th; position, 44° 53' N., 36° 45' W. End of gale on the 15th. Highest force of wind, 10; shifts of wind, SW.-N.-NW.-N.-NW."

On the 15th a few reports were received denoting westerly to southwesterly gales between the 10th meridian and the French coast, and the observer at Horta, Azores, reported a northwest gale of over 50 miles, although vessels in the region north of the 40th parallel and between the 15th and 35th meridians experienced moderate weather. From the 16th to 18th a few reports were received from vessels in widely scattered sections of the ocean that had encountered moderate gales, though these were an exception to the general rule.

On the 19th the British steamship *Turcoman*, while about 200 miles west of the south coast of Ireland, encountered a strong westerly gale. The storm log is as follows: "Gale began at 4 a. m. on the 19th. Lowest barometer, 29.22 inches, at 8 a. m. on the 19th; position, 50° 52' N.,