began on the 19th. Lowest barometer 29.36 inches at 4 p. m. on the 19th; position 50° 54′ N., 20° 44′ W. End of gale on the 20th. Highest force of wind 10; shifts of wind SW.-W.-NW.

During the next 24 hours this depression remained nearly stationary, gradually filling in, as on the 21st. The American S. S. *Munra* was the only vessel to report winds of gale force. Her storm log is as follows: "Gale began on the 19th. Lowest barometer 29.59 inches at 4 a. m. on the 19th; position 48° 16′ N., 18° 00′ W. End of gale on the 21st. Highest force of wind, 8; shifts of wind, SW.-W." From the 22d to the 27th moderate conditions prevailed with the Azores HIGH well developed during the greater part of the period. On the 22d and 23d fog occurred off the Banks of Newfoundland and from the 24th to the 27th over the middle section of the southern steamer routes. On the 28th there was a LOW of considerable extent central somewhere near latitude 55° N., longitude 22° W. (see Chart XII); it was impossible, however, to locate it accurately on account of lack of observations up to date. The storm log from the Danish S. S. *Arkansas* is as follows: "Gale began on the 27th. Lowest barometer 29.40 inches at midnight on the 27th; position, 53° 30′ N., 28° 55′ W. End of gale on the 28th. Highest force of wind 10; shifts of wind W.-WNW." This disturbance apparently moved but little during the next 24 hours, decreasing in intensity, and on the 30th only light to moderate winds were reported, with fog in mid-ocean.

NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

British Isles.—"* * * conspicuous events were the frequent thunderstorms which occurred between the 10th and 20th, and the almost entire absence of any very hot days.

"For the first time in 1920, the total monthly rainfall was generally deficient over the British Isles, exceeding the average only in small isolated areas, particularly in the south of England and Wales. * * *

"The general rainfall expressed as a percentage of the average was: England and Wales, 99; Scotland, 65; Ireland, 78. * * *

"In London (Camden Square) the mean temperature was 61.5° F., or 1.3° F. above the average. * * *"[1]

Mediterranean region.—"Very high temperatures were experienced [during the middle and latter half of the month]. * * *"[1]

India.—"In India the southwest monsoon set in on June 2 in Malabar and penetrated inland a few days later. It was weak at first in most parts (except Burma, Assam, and Central India)."[1]

Africa.—"The monsoon appears to have set in vigorously in Africa, for sudden rises of the Nile at Roseires and Mongalla have brought the water to its normal level."[1]

Australia.—"In Australia copious rains have continued to fall, and there is now a prospect of abundant herbage for stock. In the possible wheat belt of New South Wales the rain has enabled an unusually large acreage to be brought into cultivation. At the close of the month snow fell for the first time on record at Albany, in the interior of West Australia (latitude 35° south), probably in the rear of an Antarctic reversed V depression."[1]

[1] The Meteorological Magazine, July, 1920, pp. 133, 136.

DETAILS OF THE WEATHER OF THE MONTH IN THE UNITED STATES.

CYCLONES AND ANTICYCLONES.

By R. HANSON WEIGHTMAN, Meteorologist.

Cyclones.—Alberta LOWS were by far the most numerous and secondaries were infrequent. The table shows the number of LOWS by types.

LOWS.

	Alberta.	North Pacific.	South Pacific.	Northern Rocky Mountain.	Colorado.	Texas.	East Gulf.	South Atlantic.	Central.	Total.
June, 1920	7.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	13.0
Average number 1892-1912	3.3	0.8	0.4	0.8	1.2	0.4	0.2	0.3	1.1	8.4

Anticyclones.—The number of HIGHS was slightly below the average. The number of HIGHS by types is shown in the table.

HIGHS.

	North Pacific.	South Pacific.	Alberta.	Plateau and Rocky Mountain region.	Hudson Bay.	Total.
June, 1920	2.0	0.0	3.0	0.0	0.0	5.0
Average number 1892-1912	1.6	0.6	1.9	0.9	0.5	5.5

THE WEATHER ELEMENTS.

By P. C. DAY, Climatologist and Chief of Division.

[Weather Bureau, Washington, Aug. 2, 1920.]

PRESSURE AND WINDS.

The pressure during June exhibited the stagnant condition usual to the warmer months of the year, and the cyclonic and anticyclonic movements were in the main but poorly defined (See Charts II and III). As is usual in June, pressure was moderately high over the southeastern districts and in the far Northwest (See Chart VII), but this distribution varied materially during the month. The first week had rather low pressure with rain over much of the East and Southeast, particularly near the Atlantic coast, high pressure prevailing at the same time in the Central Valleys and far western districts. The high pressure drifted slowly into the more eastern States overspreading the Southeast during the latter part of the first and the early part of the second decades. At the same time there was a general reduction in pressure over the interior portions of the country where temperatures had very generally risen to or above the normal for the season.

During the latter part of the second decade pressure increased in the far Northwest and there was a change to lower barometer readings over the Gulf and Atlantic coast districts with local storm areas and very general precipitation in the districts from the Mississippi Valley eastward. During the greater part of the last decade the HIGH over the North Pacific coast was maintained but