

Dutch S. S. *Nickerie*:

Gale began on the 19th, wind S. Lowest barometer 29.74 inches at 7 a. m. on the 20th, wind SSE., in latitude 29° 11' N., longitude 23° W. End on the 20th, wind SW. Highest force of wind 9, S.; shifts S.-SSE.

On the 20th and 21st the second severe "norther" of the month occurred in the Gulf of Mexico; this reached its greatest intensity on the 21st, and the daily weather map for that date shows a barometric reading of 30.58 inches at Galveston and 29.92 inches at Swan Island. While the gradient between these two stations was not as steep as on the 6th, the force of the wind was apparently as high. The Greenwich mean noon observations from a number of vessels give northerly winds, force 7-9, with barometric readings ranging from 30.14 to 30.44 inches.

Storm log:**American S. S. *Pennsylvania*:**

Gale began on the 20th, wind NE. Lowest barometer 30.01 inches at 6 a. m. on the 20th, wind NE. 8, in latitude 23° 35' N., longitude 88° 20' W. End on the 22d, wind N. Highest force of wind 9, N.; shifts NE.-N.

On the 25th New York was near the center of a disturbance that moved northeastward, and on the 27th was central in the vicinity of St. Johns, Newfoundland; during this period gales were reported by vessels west of the 50th meridian, as shown by following storm log:

American S. S. *Lightburn*:

Gale began on the 25th, wind SW. Lowest barometer 29.45 inches at 7 a. m. on the 25th, wind SSW. 10, in latitude 39° 38' N., longitude 69° 54' W. End on the 27th, wind NW. Highest force of wind 10, SSW.; shifts 6 points.

On the 25th and 26th there was a shallow depression near latitude 35° N., longitude 35° W., with gales in the westerly quadrants. Storm log:

British S. S. *Bloomfield*:

Gale began on the 24th, wind ESE. Lowest barometer 29.86 inches at 2 p. m. on the 25th, wind W., in latitude 36° 10' N., longitude 36° 42' W. End on the 26th, wind NNW. Highest force of wind 9, NW.; shifts WNW.-NW.-NNW.

On the 29th and 30th an area of low pressure was evidently central somewhere in the vicinity of Iceland, although it was impossible to locate it accurately on account of lack of observations. On the 29th westerly to southerly gales swept the steamer lanes east of the 50th meridian, while by the 30th the storm area had contracted considerably.

On the 31st Bermuda was about 10° west of the center of a LOW, and vessels between the 45th and 60th meridians reported unusually heavy winds.

Storm log:**British S. S. *Caldy Light*:**

Gale began on the 30th, wind SE. Lowest barometer 29.60 inches at 3 p. m. on the 31st, wind SE. 10, in latitude 36° 04' N., longitude 51° 05' W. End on February 1, wind NW. Highest force of wind 10, SE.; shifts SSE.-S.-SW.

SOUTH ATLANTIC OCEAN.

By ALBERT J. McCURDY, Jr.

Weather reports received from vessels that were in the South Atlantic Ocean in January, 1924, indicate that stormy conditions prevailed off the coast of Brazil in the first and middle decades of the month.

The Dutch S. S. *Poeldijk*, Captain Yaski, proceeding from Rotterdam to Buenos Aires, encountered on January 8, while off the southern coast of Brazil, fresh to strong gales with overcast weather and rough seas.

Mr. P. Smit, observer, states that the lowest pressure observed was 756 mm. (29.76 inches), this occurring at 4 p. m. in 26° 40' S., 47° 41' W. The wind at the time was SSW., force 8, increasing at 1 p. m. to force 9, followed by a heavy rain shower. Gale ended on the 9th, wind SW.

On the same date the American S. S. *F. Q. Barstow*, Capt. H. Wallace, New York toward Buenos Aires, experienced a moderate gale with rough seas in 35° S., 54° 30' W. Observer H. C. Strong reports that the lowest pressure, 29.97 inches (corrected), was observed at 8:24 a. m., at which time the wind was SSW., force 7.

On January 9 a fresh gale was encountered by the Dutch S. S. *Bellatrix*, Capt. C. Spuy, Cardiff toward Buenos Aires. Second Officer A. Barendrecht reports that at 9:15 a. m., while in 22° 45' S., 41° 15' W., the barometric reading was 29.76 inches (corrected); wind S., force 5, increasing to a fresh gale after sunset. The lowest pressure observed was 29.47 inches (corrected). This occurred at 10 p. m. and was followed by a heavy thunderstorm. The weather cleared on the morning of the 10th.

On the 15th the American S. S. *Kenowis*, Capt. E. A. Schaefer, proceeding from Port Arthur to Montevideo, experienced winds of gale force off the southern coast of Brazil. Second Officer William McFaul reports rough northeast seas with overcast and squally weather. The lowest pressure, 29.81 inches (corrected), was observed at 8:43 a. m. 29° 20' S., 49° 10' W. The wind at this time was NE., force 7.

551.506 (265.2)

NORTH PACIFIC OCEAN.

By WILLIS E. HURD.

The weather over the North Pacific Ocean during January, 1924, exhibited wide extremes of intensity, as noticed by mariners during entire transoceanic voyages. On the one hand, Mr. C. H. Moen, observer and fourth officer on board the American S. S. *President Jefferson*, Capt. F. R. Nichols, Seattle to Yokohama from the 23d to the 31st of the month, has the following to remark:

This has been a most remarkable voyage. We made the run in 10 days and 5 hours, arriving in Yokohama over 12 hours ahead of schedule. It is rare to find no storm, no fog, and smooth seas for this time of the year. A few snow squalls were encountered, but they never lasted more than a few minutes at the most.

On the other hand is the record of strong gales to hurricane winds, and the violent seas which caused more than one stout vessel to heave to for hours at a time, awaiting an abatement of the storm.

The pressure system showed the Aleutian LOW to be existent throughout the month, although fluctuating considerably in area and intensity. The eastern North Pacific HIGH seems to have been less well developed than usual, and persisted on few consecutive days. Two storms from low latitudes entered the area between Hawaii and California, and southward extensions of the Aleutian cyclone occupied much of the usual high pressure region during most of the last decade. However, at the close of the month the HIGH was becoming well established along the 30th parallel to the eastward of the 160th meridian of west longitude. A strong anticyclone overlay northern Alaska from the 20th to the 25th.

In east longitudes high pressure prevailed over the China coast, and the northeast monsoon seems to have been active. No reports of typhoons are at hand. Greater storm activity, however, occurred in east than in west longitudes during January, and moderate to dangerous gales were of frequent occurrence over the