

## 551.506 (261.1) WEATHER OF NORTH AMERICA AND ADJACENT OCEANS.

### NORTH ATLANTIC OCEAN.

By F. A. YOUNG.

The average pressure for the month was considerably lower than usual at St. Johns, Newfoundland, while at all other land stations on the American coast it was not far from the normal, the same conditions holding true at the Azores, Bermudas, and British Isles; except at Lerwick, Scotland, and London, England, where the departures were positive.

Comparatively few reports of fogs were received from vessels in the vicinity of the Grand Banks and steamer lanes, while it was observed frequently at land stations in Great Britain.

The number of days with winds of gale force was somewhat greater than usual; especially over the central and western sections of the ocean.

On the 1st there was a fairly well-developed LOW of limited extent in mid-ocean, with moderate gales between the thirty-fifth meridian, and coast of Newfoundland. Storm log follows:

#### American S. S. *City of Philadelphia*:

Gale began on the 1st, wind SSE. Lowest barometer 29.24 inches at 6 a. m. on the 1st, wind SSE., in latitude 46° 15' N., longitude 39° 32' W. End on the 1st, wind SSE. Highest force of wind 8. SSE.; steady from SSE.

This disturbance moved in a northeasterly direction, gradually increasing in force, as on the 2d only light to moderate winds were reported, with fog in the southeast quadrants. On the 2d, Halifax, Nova Scotia, was near the center of a second LOW, which moved very slowly toward the northeast, reaching a point near St. Johns, Newfoundland, on the 4th. On the 5th and 6th it remained nearly stationary, increasing in force, and on the latter date the storm area extended between the thirty-fifth and fiftieth parallels, west of the fifty-fifth meridian. On the 6th there was also a disturbance off the British coast. Storm logs follow from vessels in different localities, and covering the period from the 2d to the 7th.

#### Belgian S. S. *Kremlin*:

Gale began on the 1st, wind SW. Lowest barometer 29.67 inches at 9 p. m. on the 1st, wind SW., 9, in latitude 39° 19' N., longitude 43° 52' W. End on the 4th. Highest force of wind, 10; shifts NW.-SW.

#### American S. S. *Finland*:

Gale began on the 4th, wind SE. Lowest barometer 29.32 inches at 4.30 p. m. on the 4th, wind SE., 7, in latitude 42° 49' N., longitude 56° 38' W. End 7 p. m. on the 4th, wind NNW. Highest force of wind, 9; shifts SE.-NNW.

#### British S. S. *Kabinga*:

Gale began on the 5th, wind W. Lowest barometer 29.63 inches at midnight on the 5th, wind NW., 10, in latitude 40° 02' N., longitude 58° 35' W. End on the 6th, wind WNW. Highest force of wind, 10. NW.; shifts SSW.-W.-NW.-WNW.

#### Norwegian S. S. *Ranenfjord*:

Gale began on the 5th, wind SE. Lowest barometer 29.38 inches at 1.30 a. m. on the 6th, wind SW., 10, in latitude 50° 18' N., longitude 46° 24' W. End midnight on the 6th, wind SW. Highest force of wind, 10; steady from SW.

#### American S. S. *Mount Clay*:

Gale began on the 6th, wind N. E. Lowest barometer 28.78 inches at midnight on the 6th, wind NW., 10, in latitude 52° 56' N., longitude 4° 05' E. End on the 7th, wind NW. Highest force of wind, 11. NW.; steady from NW.

On the 8th still another disturbance appeared off the Newfoundland coast, which was, however, of moderate intensity and extent; this moved rapidly northeastward, and on the 10th the center was apparently not far from Iceland. On the 10th there was a LOW off Nantucket that moved slowly up the coast, and on the 11th it was

near St. Johns, Newfoundland; it then curved toward the east, and moving rapidly, was in British waters by the 13th. Storm logs follow:

#### British S. S. *Kenbane Head*:

Gale began on the 8th. Lowest barometer 28.72 inches at 4 p. m. on the 8th, wind N., 10, in latitude 53° N., longitude 50° W. End at noon on the 10th. Highest force of wind, 10; shifts, 2 points (at intervals).

#### French S. S. *Roma*:

Gale began on the 10th, wind SE. Lowest barometer 29.84 inches at 5.44 p. m. on the 10th, wind SW., 9, in latitude 37° 44' N., longitude 59° 08' W. End on the 11th, wind WSW. Highest force of wind 9, SW.; steady from SW.

#### British S. S. *Alpine Range*:

Gale began on the 10th, wind SE. Lowest barometer 29.20 inches at 4 p. m. on the 11th, wind NW., 9, in latitude 50° 20' N., longitude 46° W. End on the 12th, wind NW. Highest force of wind, 10; shifts SW.-N.-W. by N.

#### Dutch S. S. *Nieuw Amsterdam*:

Gale began on the 12th, wind SSW. Lowest barometer 29.46 inches at 4 p. m. on the 13th, wind WSW., 11, in latitude 47° 56' N., longitude 36° 42' W. End on the 15th, wind NW. Highest force of wind, 12. WSW.; shifts WSW.-NW.

#### American S. S. *Quistconck*:

Gale began on the 12th, wind SSW. Lowest barometer 29.39 inches on the 12th, wind SSW., 10, in latitude 55° 06' N., longitude 14° 30' W. End on the 13th, wind SSW. Highest force of wind, 10, SSW.; steady from SSW.

#### Belgian S. S. *Eylantier*:

Gale began on the 12th, wind S. Lowest barometer 29.11 inches at 4 a. m. on the 15th, wind SSW., 9, in latitude 51° 15' N., longitude 21° 10' W. End on the 17th, wind SSW. Highest force of wind, 10; shifts SSW.-WSW.-W.-WNW.

Charts IX, X, XI, and XII show the conditions on the 14th, 15th, 16th, and 17th, respectively, when the greater portion of the steamer lanes was swept by heavy gales, which on the first three days extended to the British coast. Storm logs follow:

#### American S. S. *Glen Ridge*:

Gale began on the 13th, wind SW. Lowest barometer 29.68 inches on the 16th, wind S., 10, in latitude 48° N., longitude 32° W. End on the 16th, wind SW. Highest force of wind 10, S.; shifts S.-WSW.

#### American S. S. *W. M. Burton*:

Gale began on the 15th, wind SW., 4. Lowest barometer 29.37 inches at 6 a. m. on the 16th, wind W., in latitude 45° 20' N., longitude 55° 20' W. End of gale on the 17th, wind NNW., 5. Highest force of wind 9, W.; shifts SW.-W.

#### British S. S. *Randa*:

Gale began on the 15th, wind S. Lowest barometer 29.74 inches at 2 a. m. on the 15th, in latitude 58° 40' N., longitude 2° 40' W. End on the 17th, wind SE. Highest force of wind 9; shifts ESE.-SE.

#### American S. S. *City of Freeport*:

Gale began on the 17th, wind S., 7. Lowest barometer 29.89 inches at 8 a. m. on the 17th, wind SSW., 9, in latitude 50° 30' N., longitude 23° 55' W. End on the 17th, wind SSW. Highest force of wind 9, SSW.; shifts SW.-SSW.

On the 19th there was a LOW near Porto Rico that moved westward with all the characteristics of a tropical hurricane, which was most unusual for so late in the season. On the 23d and 24th the center was in the western Caribbean Sea, and on the latter date it began to fill in, as by the 25th it had practically disappeared. This was a moderate depression and limited in extent, as only one of the many vessels that were in its path reported winds of gale force. Storm log follows.

#### American S. S. *Mexican*:

Gale began on the 20th, wind NE. Lowest barometer 29.74 inches, wind NE., 7, in latitude 23° 40' N., longitude 74° 22' W. End on the 22d, wind NE. Highest force of wind 10. NE.; steady from NE.

On the 19th there was also a disturbance central near latitude 44° N., longitude 21° W., and northerly gales

covered a limited area in the westerly quadrants, as shown by following storm logs.

**British S. S. *Arkansas*:**

Gale began on the 17th, wind NW. Lowest barometer 29.70 inches at 5 p. m. on the 20th, wind N., 10, in latitude 42° 30' N., longitude 30° 31' W. End of the 22d, wind NNE. Highest force of wind 10; shifts NNW.-NNE.

**Danish S. S. *Virginia*:**

Gale began on the 19th, wind NNE. Lowest barometer 29.63 inches at 2 p. m. on the 19th, wind NNE., 10, in latitude 44° 38' N., longitude 33° 10' W. End on the 19th, wind NNE. Highest force of wind 10, NNE.; steady from NNE.

This disturbance increased considerably in extent during the next three days, and on the 21st and 22d a number of vessels in the southeastern division of the ocean reported moderate to strong gales. Storm log follows:

**American S. S. *Pioneer*:**

Gale began on the 20th, wind NNE. Lowest barometer 29.82 inches at 11 a. m. on the 20th, wind NE., 7, in latitude 35° 15' N., longitude 41° 48' W. End on the 22d, wind NNE. Highest force of wind 8, NNE.; steady from NNE.

On the 22d there was a LOW of limited extent off the south coast of Newfoundland. Storm log follows.

**British S. S. *Comeric*:**

Gale began on the 22d, wind NW. Lowest barometer 29.86 inches at 5 a. m. on the 22d, wind NW., 9, in latitude 41° 30' N., longitude 55° W. End on the 22d, wind N. Highest force of wind 9; shifts S.-NNW.

This disturbance remained nearly stationary during the next two days, varying in intensity, and by the 24th it was of exceptional severity, as shown by following storm logs.

**Belgian S. S. *Eglantier*:**

Gale began on the 23d, wind WNW. Lowest barometer 28.96 inches at 11 a. m. on the 25th, wind N., 8, in latitude 44° 38' N., longitude 54° 40' W. End of gale on the 26th, wind W. Highest force of wind 12; shifts, NW.-S.-SE.-N.-NW.-W.-WSW.

**American S. S. *City of Freeport*:**

Gale began on the 23d, wind NNW., 7. Lowest barometer 29.39 inches at 8 a. m. on the 25th, wind W., 10, in latitude 42° 35' N., longitude 57° 10' W. End of gale on the 26th, wind WNW. Highest force of wind 11, W.; steady from W.

From the 25th to the 26th this Low moved rapidly in a northeastward direction, as on the latter date the center was near latitude 49° N., longitude 38° W. Storm logs follows.

**British S. S. *Parthenia*:**

Gale began on the 25th, wind SSE. Lowest barometer 29.30 inches at 3 p. m. on the 26th, wind SSE., 9, in latitude 53° 50' N., longitude 28° 42' W. End of gale on the 26th, wind SSE. Highest force of wind 10, SSE.; shifts not given.

On the 28th and 29th there was a disturbance of limited area near Hatteras, in which only one vessel reported heavy weather. Storm log follows:

**American S. S. *W. G. Warden*:**

Gale began on the 27th, wind S. Lowest barometer 29.76 inches at 9.50 p. m. on the 28th, wind WSW., 10, in latitude 32° N., longitude 78° 26' W. End of gale on the 29th. Highest force of wind 11; shifts SSW.-WSW.-W. by N.

On the 30th there were two well-defined LOWS on the Atlantic; one central near Sydney, Nova Scotia, and the other near latitude 51° N., longitude 20° W. Gales were reported by vessels in widely scattered sections of the ocean, as shown by the following storm logs.

**British S. S. *Navarino*:**

Gale began on the 30th, wind SSW. Lowest barometer 29.50 inches at midnight on the 30th, wind SW., 8, in latitude 38° 34' N., longitude 50° 40' W. End of gale on December 3, wind NW. Highest force of wind 9, NW.; shifts SW.-WSW.-W.-NW.

**Dutch S. S. *Eibergen*:**

Gale began on the 29th, wind SE. Lowest barometer 29.20 inches at 7 a. m. on the 30th, wind S., 10, in latitude 50° 52' N., longitude

11° W. End of gale on the 30th, SW., 4. Highest force of wind 10; shifts SE.-S.-SW.

**American S. S. *H. M. Flagler*:**

Gale began on the 30th, wind SW. Lowest barometer 29.80 inches on the 30th, wind SW., 7, in latitude 36° 15' N., longitude 7° 18' W. End of gale on December 1, wind W. Highest force of wind 9, SW.; shifts SW.-S.

551.506 (265.2)  
NORTH PACIFIC OCEAN.

By F. G. TINGLEY.

At all three island stations in the eastern part of the North Pacific Ocean pressure during November was below normal by small amounts, as follows: Dutch Harbor, -0.19 inch; Midway Island, -0.04 inch; Honolulu, -0.02 inch. At the first-named station there were two major depressions, one reaching a minimum of 28.82 inches on the 8th, the other a minimum of 28.52 inches on the 27th. The highest pressure was 30.02 inches on the 13th. At Midway Island the lowest pressure, 29.80 inches, occurred on the 14th and the highest, 30.26 inches, on the 19th, 21st, and 22d. At Honolulu the lowest and highest pressures, with dates, were, respectively, 29.79 inches on the 16th, 30.13 inches on the 23d. Along the American coast from Cape Mendocino northward pressure was slightly below normal; to the southward of that point it was somewhat above normal.

Considering the ocean as a whole the month must be regarded as stormy, no less than 30 reporting vessels on trans-Pacific routes having experienced gales on one or more days, although during the first half of the month relative quiet prevailed east of the 165th meridian, E. longitude. West of this meridian numerous gales occurred, centering chiefly around the periods 4th-10th and 18th-23d.

On the 21st an unusually severe storm prevailed on the Oregon and British Columbian coasts. It accompanied a deep depression which formed on the southwestern side of an extensive area of high pressure that developed between Alaska and Hudson Bay on the 19th and 20th. In this storm the American tug *Sea Eagle*, bound from San Francisco to Astoria, and carrying a crew of 12 men, was lost with all hands off Peacock Spit.

From the 24th to the 27th vessels on the eastern part of the northern steamer route experienced fresh to strong southerly to westerly gales.

Representative storm logs for November are as follows:

American S. S. *Abercos*, Capt. Olaf H. Hansen, Observer C. D. Felter, Portland for Panama. Gale began on 3d in latitude 14° 18' N., longitude 96° 07' W., wind NE.; lowest barometer 29.89 inches at 4 a. m., same date; highest force of wind, 8, NE.; shifts, NE., E., NE., NNE.; ended on 4th.

American schooner *Melrose*, Capt. F. K. Klebingat, Hilo for Port Angeles. Gale began on 3d, wind SE.; lowest barometer, 29.56 inches at 4 a. m. of the 4th in latitude 47° 55' N., longitude 129° 04' W.; highest force of wind, 11, SSE.; shifts, SSE., S., W.

British S. S. *Empress of Japan*, Capt. A. V. R. Lovegrove, R. N. R., Observer G. Clarke, Vancouver for Yokohama. Gale began on 1st, wind S.; lowest barometer, 29.08 inches, at 8 p. m., same date in latitude 50° N., longitude 173° 30' E., with wind WSW., 7; gale ended on 3d; highest wind force, 10; shifts, S., WSW.

Average weather for voyage, moderate gales from W. and NW.; high westerly seas; clear weather; occasional snow squalls.

British S. S. *Melville Dollar*, Capt. Wm. Wright, Observer W. A. Gosse, Vancouver for Yokohama. Gale began on the 10th, wind SW. by W.; lowest barometer, 28.41 inches at 8 p. m. of 9th in latitude 49° 05' N., longitude 171° 35' E., highest force, 10; W. by N.; shifts of wind, SW. by W. by N.; end of gale on 12th.

Dutch S. S. *Silvanus*, Capt. H. J. van Hal., Nagasaki for Vancouver. Gale began on 22d, wind ENE.; lowest barometer, 28.59 inches at 7:45 p. m. same date in latitude 50° 16' N., longitude 176° 57' W., wind N., 12; gale ended on 23d, wind NNW. Very high sea.

Japanese S. S. *Honolulu Maru*, Capt. K. Hirano, Observer S. Fuji-kawa, Yokohama for San Francisco. Gale began on 8th, wind SE.; lowest barometer 28.86 inches at 11 p. m. of 9th in latitude 42° 30' N.,