

As the month opened a storm of considerable strength had developed over the Grand Banks; it advanced for a day or more slowly toward the east-northeastward, then turned more to northward, as high pressure moved in behind it. Several vessels met fresh to strong gales during these early days of June from the vicinity of the Grand Banks eastward to beyond mid-ocean.

The fortnight from the 4th to 17th furnished almost no gale reports. During much of this period pressure was a little higher than normal over the region of Bermuda and to the eastward. Trade winds to the southward and southwestward were somewhat intensified, and two instances were reported from the Caribbean—one near the western end and one near the eastern—of winds attaining force 8.

About the 17th a belt of low pressure became established nearly along the 60th parallel of latitude, extending from the vicinity of Norway to or beyond northern Hudson Bay. Within this belt some lows were well marked for a few days, especially one which was near the southern tip of Greenland on the 17th and thereafter moved slowly eastward. From the 18th to the 21st some vessels on northern routes, when near or to northward of the 55th parallel and to eastward of the 35th meridian, noted strong to whole gales; the Belgian motorship *Lubrafol* recorded force 11, the only reported instance of such force this month over Atlantic waters. About the 22d there was a weakening of the low pressure centers over the ocean and no further gales in connection with them are of record.

On the 26th a center of low pressure appeared between Ireland and southern Greenland and gained force rapidly, moving toward the east-northeast. There were four

reports of whole or strong gales on the 28th over waters to the southwestward of Ireland.

Just afterward there occurred the only noteworthy June storm activity close to the eastern United States coast. A less energetic low than the one that had just passed the British Isles, moved slowly eastward off the middle and north Atlantic coast, but was vigorous enough to cause strong gales southeast of New England on the 30th. This low soon turned northward till it was once more over the land.

Fog.—Fog was plentiful from near Delaware Bay northeastward and eastward to the southern part of the Grand Banks area and on to about the 35th meridian. Nearly throughout this stretch the occurrence was greater than usual in June, and in the 5° square, 40° to 45° North, 65° to 70° West, there were no less than 25 days with fog, every day from the 15th to the 29th inclusive furnishing reports. Near the tail of the Grand Banks the square 40° to 45° N., 45° to 50° W. had fog on 19 days. For a moderate distance to southeastward of Nova Scotia and for a greater distance directly to eastward of Newfoundland, including the northern portion of the Grand Banks, fog was somewhat less prevalent than normally in June, and the period from 8th to 19th inclusive embraced a very large part of the fog reports from these regions.

Between the 35th and the 15th meridians, fog was almost completely absent to southward of 45° N., while to northward it was less frequent than usual in June. However, between the 15th and 5th meridians, in the latitude of the Bay of Biscay and the western end of the English Channel fog was noted as more prevalent than usual with nearly all of it during the period from the 14th to the 26th.

OCEAN GALES AND STORMS, JUNE 1938

Vessel	Voyage		Position at time of lowest barometer		Gale began June—	Time of lowest barometer June—	Gale ended June—	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN													
Black Hawk, Am. S. S.	Antwerp	New York	44 27 N.	46 10 W.	1	4p, 1	2	29.05	ESE	SW, 7	NNW	NW, 9	SSW-WNW.
American Importer, Am. S. S.	Belfast	Boston	45 20 N.	42 10 W.	1	9p, 1	2	29.10	SE	SW, 9	WNW	SW, 9	SW-WSW.
Pres. Harding, Am. S. S.	Cobh	New York	44 30 N.	41 34 W.	1	10p, 1	2	29.09	SSE	SW, 9	SW	WSW, 9	SSW-NW.
American Banker, Am. S. S.	London	Boston	45 30 N.	36 30 W.	1	11p, 1	2	29.32	S	SW, 9	WSW	SW, 9	SW-W.
City of Hamburg, Am. S. S.	Norfolk	Havre	43 42 N.	39 39 W.	1	Mdt, 1	2	29.44	SW	SW, 9	W	WSW, 9	SW-WSW.
Boschdyk Du. S. S.	New Orleans	London	43 09 N.	36 03 W.	2	4a, 2	2	29.62	SW	SW, 8	NW	WSW, 8	SW-W.
Winkler, Pan. M. S.	Birkenhead	Philadelphia	48 04 N.	27 27 W.	2	Noon, 2	3	29.32	SW	SSW, 7	WNW	SSW, 8	SSW-WNW.
Spaarndam, Du. S. S.	Rotterdam	New York	47 01 N.	30 34 W.	2	Noon, 2	3	29.39	SW	SW, 8	WNW	SW, 8	S-NW.
Sarcoxie, Am. S. S.	Havre	do	49 00 N.	27 40 W.	1	4p, 2	3	29.33	S	SSW, 7	WNW	NW, 8	SSW-WNW.
Sangstad, Nor. M. S.	Leith	Savannah	57 14 N.	25 55 W.	2	7a, 3	4	29.05	S	SW, 8	SE	W, 8	S-W-SE.
Cefalu, Hond. S. S.	Havana	Cristobal	9 30 N.	80 00 W.	5	7a, 7	6	29.86	E	SE, 3	E	E, 8	NE-SE.
Tynefield, Br. M. S.	Newcastle	Las Piedras	13 16 N.	67 47 W.	13	7a, 14	14	29.91	ESE	ESE, 6	ESE	ESE, 8	SSE-ESE.
Mormacsun, Am. S. S.	Viborg	Philadelphia	54 08 N.	32 08 W.	18	5a, 18	18	29.70	NW	NW, 7	W	NW, 9	WSW-NW.
Svanhild, Dan. S. S.	New York	Copenhagen	55 20 N.	25 15 W.	18	8p, 18	19	29.70	W	W, 9	W	W, 9	W.
Scanyork, Am. S. S.	Copenhagen	New York	56 30 N.	18 18 W.	20	4p, 20	21	29.42	S	WSW	WNW	WSW, 9	S-WSW.
Lubrafol, Belg. M. S.	Gothenburg	Corpus Christi	58 40 N.	14 42 W.	20	4a, 21	21	29.12	WSW	SW, 10	WNW	WNW, 11	SW-W.
Svanhild, Dan. S. S.	New York	Copenhagen	59 26 N.	8 45 W.	21	10a, 21	22	29.21	SW	SSW, 9	W	SSW, 10	W.
Chattanooga City, Am. S. S.	Avonmouth	Portland, Maine	51 30 N.	22 31 W.	27	4a, 28	28	29.14	SSW	WSW, 10	NW	WSW, 10	SW-WNW.
Boston City, Br. S. S.	Swansea	Montreal	52 30 N.	18 20 W.	28	8a, 28	28	29.03	SSW	S, 9	NW	W, 10	S-NW.
Black Eagle, Am. S. S.	Antwerp	New York	49 30 N.	13 00 W.	28	11a, 28	28	29.50	WSW	WSW, 8	WNW	WSW, 9	W.
Pipestone County, Am. S. S.	Havre	do	49 42 N.	15 30 W.	28	11a, 28	28	29.53	W	W, 8	WNW	WNW, 9	W-WNW.
Collamer, Am. S. S.	Bordeaux	do	40 48 N.	65 10 W.	29	1a, 30	30	29.71	SSW	S, 9	NNW	S, 9	S-NNW.
Padnsay, Am. S. S.	St. Vincent, C. V. I.	Boston	41 14 N.	64 16 W.	29	2a, 30	30	29.69	SSW	SW, 9	NE	SW, 9	S-NW.
NORTH PACIFIC OCEAN													
R. J. Hanna, Am. S. S.	Los Angeles	Balboa	14 38 N.	95 42 W.	2	4a, 2	2	29.81	NE	NE, 7	NE	NE, 8	N-NW.
Hamakua, Am. S. S.	Hilo	San Francisco	37 18 N.	124 18 W.	2	3p, 2	2	29.96		NW, 5		NNW, 8	
Honolulu, Am. S. S.	San Francisco	Portland, Oreg.	41 42 N.	124 30 W.	3	4a, 3	3	29.95	NNW	NNW, 7	NNW	NNW, 8	
Toorak, Br. S. S.	Shanghai	Los Angeles	36 00 N.	123 48 W.	8	4a, 9	8	29.87		NW, 7		N, 8	
Pres. Cleveland, Am. S. S.	Honolulu	San Francisco	37 41 N.	123 00 W.	8	4a, 9	8	29.73	N	NNW, 6	NNW	NNW, 8	
Solana, Am. S. S.	Manila	do	17 52 N.	122 24 W.	8	4a, 10	9	29.84	N	SW, 3	NW	NNW, 8	NW-SW.
Makiki, Am. S. S.	Hilo	do	17 39 N.	122 56 W.	8	8a, 10	10	29.92	NW	NW, 6	NW	N, 8	
Chickasaw City, Am. S. S.	do	Balboa	17 30 N.	125 42 W.	15	5p, 15	15	28.84	NNE	ESE, 5	S	NNE, 11	NNE-ESE-S.
Nako Maru, Jap. M. S.	Yokohama	Los Angeles	46 12 N.	168 48 W.	17	Noon, 17	18	29.48	W	W, 8	WSW	W, 9	W-SW.
Honolulu, Am. S. S.	Los Angeles	Balboa	21 10 N.	107 55 W.	22	7a, 22	22	29.59	E	SE, 8	SSE	SE, 8	ESE-SSE.
Helen Whittier, Am. S. S.	do	do	15 47 N.	98 55 W.	25	12 1/2 p, 26	26	29.14	E	Lt. var	SSW	SW, 11	NE-calm-WSW-SW.
Bengalen, Du. M. S.	Manila	Portland, Oreg.	30 00 N.	135 50 E.	29	2a, 29	30	29.36	SSE	SE, 4	SSW	SSW, 10	E-SE.

1 Position approximate.

2 Barometer uncorrected.